Actifio RESTful API Reference
For CDS & Sky Appliances
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Preface

The Actifio RESTful API Reference provides instructions on how to use the Actifio application programmers interface (API). This document assumes that you are familiar with Actifio and Actifio product suite.

Note: The content and examples in this document are specific to Actifio appliances, unless specified otherwise.

The ActifioNOW Customer Portal

During the configuration and initialization of your Actifio appliance, your Actifio representative provided you with a user name and password for the ActifioNOW customer portal.

From the customer portal you can obtain detailed reports about your Actifio appliance as well as search the portal’s knowledge base for answers to specific questions.

To log into the ActifioNOW customer portal:

1. Go to: https://now.actifio.com
2. When prompted, enter the user name and password provided by your Actifio representative.

Actifio Support Centers

To contact an Actifio support representative, you can:

- Send email to: support@actifio.com
- Call:
  
  **From anywhere:** +1.315.261.7501
  
  **US Toll-Free:** +1.855.392.6810
  
  **Australia:** 0011 800-16165656
  
  **Germany:** 00 800-16165656
  
  **New Zealand:** 00 800-16165656
  
  **UK:** 0 800-0155019
Using the Actifio RESTful API Reference, a system administrator, programmer, or other qualified personnel can access, configure, and monitor an Actifio appliance or node. The Actifio RESTful API works with Java Script Object Notation (JSON) data. Errors are returned using standard HTTP error code syntax. All features and functionality supported by the Actifio Desktop are also available in the Actifio API.

**Note:** The content and examples in this document are specific to Actifio appliances, unless specified otherwise.

This chapter describes:
- Commands Supported by Actifio API on page 1
- Authentication or Login on page 1
- Operational Hints and Tips on page 5

## Commands Supported by Actifio API

The Actifio API supports the following command types:

- **login** - Use this command to initiate a session. For more information, see Authentication or Login on page 1.
- **info** - Use this command to retrieve information, for example to retrieve a list of running jobs, a list of connectors, etc. For more information, see Info Commands on page 3.
- **task** - Use this command to configure or update configuration of an Actifio appliance. For more information, see Task Commands on page 4.
- **logout** - Use this command to end your API session. For more information, see Logout Command on page 4.

## Authentication or Login

All requests to the Actifio API require that you have the proper permissions to access the requested data. This section describes how to login to an Actifio appliance and obtain a session ID, which is then used to call all the other REST endpoints. In addition, you will also need the Actifio vendor key information.

This section includes:
- Prerequisite
- Request Details
- Example
Prerequisite
Before you begin, verify that you have the Actifio vendor key. Contact Actifio Support to get the key and for details.

HTTP Authorization Header
The HTTP Authorization Header section contains information that will generate your session ID. It includes the login credentials, that is the username and password.

Authorization: Basic {Base64-encoded octet sequence of {credentials}}

where credentials is {name:password}

Combine the userid and password into a single string using a colon (:) separator. Then use either UTF-8 or ISO-8859-1 encoding to generate the octet representation of the userid:password credentials. Generate a Base64 encoding of the octet sequence to include in the authorization header. See RFC7617, Section 2 for more information.

Request Details

URL
POST https://{Actifio_API_HOST}/actifio/api/login?vendorkey={KEY}

HTTP Request Header
Authorization: Basic {Base64-encoded octet sequence of {username}:{password}}

Example

Request
POST https://{Actifio_API_HOST}/actifio/api/login?vendorkey={AssignedVendorKey}

HTTP Request Header
Authorization: Basic amRvZTpwYXNzd29yZDEyMw==

Response
{
"rights": [
"Access Application Manager",
"Access Domain Manager",
"Access SLA Architect",
"Access System Monitor",
"Application Manage",
"Backup Manage",
"CLI Usage",
"Clone Manage",
"Host Manage",
"Join Appliance",
"LiveClone Manage",
"Mirroring Manage",
"Mount Manage",
"Restore Manage",
"SLA Assign",
"SLA Manage",
"SLA View",
"Storage Manage",
"Storage View",
"System Manage",
"System View",
"Test-Failover",
"WorkFlow Manage",
"WorkFlow Run",
]
Info Commands

The info commands retrieve information from an Actifio appliance. The following example displays a list of previously created organizations:

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsorg

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
    "result": [
        {
            "createdate": "2015-05-19 18:28:29.245",
            "description": "ALL organization, all objects be...",
            "id": "3",
            "modifydate": "",
            "name": "ALL"
        },
        {
            "createdate": "2015-05-19 18:28:29.252",
            "description": "PUBLIC organization, every objec...",
            "id": "5",
            "modifydate": "",
            "name": "PUBLIC"
        },
        {
            "createdate": "2015-07-02 03:22:48.442",
            "description": "These are the application server...",
            "id": "17600",
            "modifydate": "2015-07-02 03:24:38.370",
            "name": "DevelopmentOrganization"
        },
        {
            "createdate": "2017-02-23 10:30:43.977",
            "description": "New organization description",
            "id": "164816",
            "modifydate": "",
            "name": "Organization_3"
        },
        {
            "createdate": "2017-04-13 10:21:40.095",
            "description": "newdesc",
            "id": "179297",
            "modifydate": "2017-04-20 11:42:40.200",
            "name": "Organization_4"
        }
    ],
    "status": 0
}
**Task Commands**

The **task** commands like backup and cloneimage make configuration changes to an Actifio appliance.

*Note:* Typically no message is returned if the command succeeds; however, helpful messages may be returned for certain commands.

For example, the following task command creates a new SNMP server configuration named Default-SNMP.

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/mksnmpconfig?name=Default-SNMP&ipaddress={SNMP_HOST}&error=on&warning=off&info=off

**HTTP Request Header**

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

```json
{
    "result": "Default-SNMP",
    "status": 0
}
```

**Logout Command**

The logout command ends a session.

**Obtaining RestAPI Help**

Use the below API endpoints to obtain the help for the RestAPI commands.

**Info Command list**

To get a list of all info commands, use the API endpoint as:

https://{Actifio_API_HOST}/actifio/api/info/help

**Task Command list**

To get a list of all task commands, use the API endpoint as:

https://{Actifio_API_HOST}/actifio/api/task/help

**Info help**

To get the help for a info command, use the API endpoint as:

https://{Actifio_API_HOST}/actifio/api/info/help/<task command>

For instance:

https://{Actifio_API_HOST}/actifio/api/info/help/lsversion

**Task help**

To get the help for a task command, use the API endpoint as:

https://{Actifio_API_HOST}/actifio/api/task/help/<task command>

For instance:

https://{Actifio_API_HOST}/actifio/api/task/help/mountimage
Operational Hints and Tips

`delim` and `nohdr` Parameters
Unlike the Actifio CLI, no `nohdr` and `delim` parameters are supported.

Using the `filtervalue` Parameter
When specifying `filtervalue`, all attribute=value arguments must be URL encoded. This means that the special symbols like equal to (=), less than or greater than (< or >), ampersand (&), space, and double quotes must be replaced by the %HH format where the HH represents the hexadecimal value of that character. Use the ASCII table for reference.

`apistart` and `apilimit` Parameters
When using the get or list commands, you may get a large number of objects depending on your configuration. Results of objects returned are numbered from 0 to n-1. By specifying different `apistart` and `apilimit`, results are returned in chunks. Starting with `apistart` of 0, and `apilimit` of 100, the first 100 results are returned. Next with `apistart` of 100, and `apilimit` of 100, next 100 rows are returned. The end is reached when returned result is less than the specified `apilimit`. For example:

GET https://{Actifio_API_HOST}/actifio/api/info/lsapplication
2 User Management Commands

These commands are for user management.

Managing Users

User Commands
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- lsuser on page 10
- chuser on page 13
- rmuser on page 15

Role Commands
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- lsrights on page 17
- roleaddrights on page 19
- roledelrights on page 21
- lsrole on page 23
- mkuserrole on page 26
- lsuserrole on page 27
- chrole on page 29
- rmuserrole on page 30
- rmrole on page 31

Org Commands
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- mkorgresource on page 34
- lsorg on page 36
- chorg on page 38
- lsorgresource on page 39
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LDAP Commands
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- testldapserver on page 45
- lsldapserver on page 46
- chldapserver on page 48
- mkldapgroup on page 50
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- mkldapgrouprole on page 53
- lsldapgrouprole on page 54
- mkldapgrouporg on page 55
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- rmldapgroup on page 60
- rmldapserver on page 61
User Commands

**mkuser**

*About mkuser Command on page 8*

*mkuser Request Details on page 9*

*mkuser Example on page 9*

**About mkuser Command**

**Description**

Use this command to create a user.

**Rights**

You must have the 'System Manage' right to create a user.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>comments=string</td>
<td>Optional. Specifies the comments for the user.</td>
</tr>
<tr>
<td>email=string</td>
<td>Optional. Specifies an email address for the user.</td>
</tr>
<tr>
<td>firstname=string</td>
<td>Optional. Specifies the first name.</td>
</tr>
<tr>
<td>lastname=string</td>
<td>Optional. Specifies the last name.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the user, which should be unique within the appliance.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization id or organization name that the user should be added to after creation. Use lsorg to retrieve organization information.</td>
</tr>
<tr>
<td>password=string</td>
<td>Required. Specifies the password for the user.</td>
</tr>
<tr>
<td>timezone=string</td>
<td>Optional. Specifies a time zone.</td>
</tr>
</tbody>
</table>
| denylogin=boolean | Optional. Specifies the login access for a user. Options include:  
|                     | • false - This user will be allowed to login. This is the default value.  
|                     | • true - This user will be restricted from being able to login. An error message appears when this user attempts to login. |

*Note: Set this to true only under the direction of a Support representative.*
mkuser Request Details
Your mkuser request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkuser</td>
<td>name, password</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

mkuser Example

**Request**
POST https://{Actifio_API_HOST}/actifio/api/task/mkuser
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**
Request success
{
    "result": "329754",
    "status": 0
}
Isuser

About lsuser Command on page 10
lsuser Request Details on page 10
lsuser Example on page 11

About lsuser Command

Description
Use this command to retrieve details of users. The reserved user ‘admin’ has full privileges. The ‘admin’ user cannot be deleted nor can the name be modified.

Rights
You must have the ‘System View’ or ‘System Manage’ right to use this command.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attribute %3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for lsuser are:  
   • comments  
   • clienabled [true | false]  
   • email  
   • firstname  
   • isprotected [true | false] (deprecated)  
   • lastname  
   • name  
   • timezone  
   The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with ‘&’ character. For example, to match users with the username that begins with ‘foo’, use filtervalue=name%3Dfoo. |
| argument=string | Optional. Specifies the name or ID of the user. |

Isuser Request Details

Your lsuser request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsuser</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*
Isuser Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsuser
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response

```json
{
    "result": [
        {
            "crienabled": "true",
            "isprotected": "true",
            "firstname": "System",
            "denylogin": "false",
            "comments": "admin",
            "dataaccesslevel": "0",
            "timezone": "",
            "name": "admin",
            "externalid": "",
            "id": "1",
            "email": "",
            "lastname": "Admin"
        },
        {
            "crienabled": "false",
            "isprotected": "false",
            "firstname": "",
            "denylogin": "false",
            "comments": "",
            "dataaccesslevel": "0",
            "timezone": "",
            "name": "newuser4",
            "externalid": "",
            "id": "121582",
            "email": "foo@gmail.com",
            "lastname": ""
        },
        {
            "crienabled": "true",
            "isprotected": "false",
            "firstname": "JIta",
            "denylogin": "false",
            "comments": "",
            "dataaccesslevel": "0",
            "timezone": "US/Eastern",
            "name": "jita_user",
            "externalid": "",
            "id": "180912",
            "email": "",
            "lastname": "Chatterjee"
        },
        {
            "crienabled": "false",
            "isprotected": "false",
            "firstname": "",
            "denylogin": "false",
            "comments": ""
        }
    ]
}
```
"dataaccesslevel": "0",
"timezone": "",
"name": "james",
"externalid": "",
"id": "329754",
"email": "",
"lastname": ""
]

"status": 0
}
chuser

About chuser Command on page 13
chuser Request Details on page 14
chuser Examples on page 14

About chuser Command

Description
Use this command to modify the details of a user. Use the lsuser command to obtain the ID or name of the user.

Rights
You must have the 'System Manage' right to modify the details of a user.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>comments=string</td>
<td>Optional. Specifies a comment.</td>
</tr>
<tr>
<td>email=string</td>
<td>Optional. Specifies an email address.</td>
</tr>
<tr>
<td>firstname=string</td>
<td>Optional. Specifies the first name.</td>
</tr>
<tr>
<td>lastname=string</td>
<td>Optional. Specifies the last name.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies a unique name for the user.</td>
</tr>
<tr>
<td>password=string</td>
<td>Optional. Specifies a password.</td>
</tr>
<tr>
<td>timezone=string</td>
<td>Optional. Specifies a timezone.</td>
</tr>
<tr>
<td>denylogin=boolean</td>
<td>Optional. Specifies the login access for a user. Options include:</td>
</tr>
<tr>
<td></td>
<td>• false - This user will be allowed to login. It is the default state.</td>
</tr>
<tr>
<td></td>
<td>• true  - This user will be restricted from being able to login and access the Actifio Desktop. An error message appears when this user attempts to login to the Actifio Desktop of an appliance.</td>
</tr>
<tr>
<td>-argument=string</td>
<td>Required. Specifies the ID or name of the user whose details should be modified.</td>
</tr>
</tbody>
</table>

Note: Set this to true only under the direction of a Support representative.
chuser Request Details

Your chuser request must have a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chuser</td>
<td>argument</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

chuser Examples

The following example changes a user's email address.

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/chuser?id=329754&email=james@foo.com

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

```json
{
    "status": 0
}
```
About rmuser Command

Description
Use this command to delete a user.

Rights
You must have the "System Manage" right to delete a user.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the user to be removed. Use lsuser to get the ID or name of the user.</td>
</tr>
</tbody>
</table>

rmuser Request Details
Your rmuser request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmuser</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmuser Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/rmuser?argument=329754
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
  "status": 0
}

Role Commands

mkrole

About mkrole Command on page 16
mkrole Request Details on page 16
mkrole Example on page 16

About mkrole Command

Description
Use this command to create a new role object.

Rights
You must have the 'System Manage' right to create a role.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies a description for the role.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies a name. The role name should be unique within the VDP appliance.</td>
</tr>
</tbody>
</table>

mkrole Request Details

Your mkrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkrole</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkrole Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/mkrole?name=myrole
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response

```
{
    "result": "1660761",
    "status": 0
}
```
Isrights

About Isrights Command on page 17
Isrights Request Details on page 35
Isrights Example on page 17

About Isrights Command

Description
Use this command to display a concise list of all rights available with the VDP appliance or the rights of a role.

Rights
You must have the 'System View' or 'System Manage' right to use this command.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>role=string</td>
<td>Optional. Specifies the role name or role ID. When you use this parameter, the rights of the role are listed. Use lsuserrole to get the ID or name of the role.</td>
</tr>
</tbody>
</table>

Isrights Request Details

Your mkrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

Method | URI | Required Parameters
--- | --- | ---
GET | /actifio/api/info/lsrights | None

Note: See the Parameters section for a list of supported parameters and their description.

Isrights Example

Request

GET https://{Actifio_API_HOST}/actifio/api/info/lsrights
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
```
"Host Manage",
"LiveClone Manage",
"Mount Manage",
"Restore Manage",
"SLA View",
"Storage Manage",
"Storage View"
],
"status": 0
}
About roleaddrights Command

Description
Use this command to add rights to a role. The user-to-role mapping ID can be obtained using the lsuserrole command.

Rights
You must have the 'System Manage' right to add rights to a role.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>role=string</td>
<td>Required. Specifies the ID or name of the role to add rights to.</td>
</tr>
<tr>
<td>rights=string</td>
<td>Required. Specifies the rights to be added. The list should be colon-separated if more than one right is specified. The rights are:</td>
</tr>
<tr>
<td>- Access Application Manager</td>
<td></td>
</tr>
<tr>
<td>- Access Domain Manager</td>
<td></td>
</tr>
<tr>
<td>- Access SLA Architect</td>
<td></td>
</tr>
<tr>
<td>- Access System Monitor</td>
<td></td>
</tr>
<tr>
<td>- Application Manage</td>
<td></td>
</tr>
<tr>
<td>- Backup Manage</td>
<td></td>
</tr>
<tr>
<td>- CU Usage</td>
<td></td>
</tr>
<tr>
<td>- Clone Manage</td>
<td></td>
</tr>
<tr>
<td>- Host Manage</td>
<td></td>
</tr>
<tr>
<td>- Join Appliance</td>
<td></td>
</tr>
<tr>
<td>- LiveClone Manage</td>
<td></td>
</tr>
<tr>
<td>- Mirroring Manage</td>
<td></td>
</tr>
<tr>
<td>- Mount Manage</td>
<td></td>
</tr>
<tr>
<td>- Restore Manage</td>
<td></td>
</tr>
<tr>
<td>- SLA Assign</td>
<td></td>
</tr>
<tr>
<td>- SLA Manage</td>
<td></td>
</tr>
<tr>
<td>- SLA View</td>
<td></td>
</tr>
<tr>
<td>- Storage Manage</td>
<td></td>
</tr>
<tr>
<td>- Storage View</td>
<td></td>
</tr>
<tr>
<td>- System Manage</td>
<td></td>
</tr>
<tr>
<td>- System View</td>
<td></td>
</tr>
<tr>
<td>- Test-Failover</td>
<td></td>
</tr>
<tr>
<td>- WorkFlow Manage</td>
<td></td>
</tr>
<tr>
<td>- WorkFlow Run</td>
<td></td>
</tr>
<tr>
<td>- WorkFlow View</td>
<td></td>
</tr>
</tbody>
</table>
roleaddrights Request Details

Your roleaddrights request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/roleaddrights</td>
<td>rights role</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

roleaddrights Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/roleaddrights?role=myrole&rights="Host Manage"
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
{
    "status": 0
}
```
roledelrights

About roledelrights Command on page 21
roledelrights Request Details on page 22
roledelrights Example on page 22

About roledelrights Command

Description
Use this command to delete rights from a role.

Rights
You must have the 'System Manage' right to delete rights from a role.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>role=string</td>
<td>Required. Specifies the ID or name of the role to delete the rights from.</td>
</tr>
<tr>
<td>rights=string</td>
<td>Required. Specifies the rights to be deleted. The list should be colon-separated if more than one right is specified. The rights are:</td>
</tr>
<tr>
<td></td>
<td>• Access Application Manager</td>
</tr>
<tr>
<td></td>
<td>• Access Domain Manager</td>
</tr>
<tr>
<td></td>
<td>• Access SLA Architect</td>
</tr>
<tr>
<td></td>
<td>• Access System Monitor</td>
</tr>
<tr>
<td></td>
<td>• Application Manage</td>
</tr>
<tr>
<td></td>
<td>• Backup Manage</td>
</tr>
<tr>
<td></td>
<td>• CLI Usage</td>
</tr>
<tr>
<td></td>
<td>• Clone Manage</td>
</tr>
<tr>
<td></td>
<td>• Host Manage</td>
</tr>
<tr>
<td></td>
<td>• Join Appliance</td>
</tr>
<tr>
<td></td>
<td>• LiveClone Manage</td>
</tr>
<tr>
<td></td>
<td>• Mirroring Manage</td>
</tr>
<tr>
<td></td>
<td>• Mount Manage</td>
</tr>
<tr>
<td></td>
<td>• Restore Manage</td>
</tr>
<tr>
<td></td>
<td>• SLA Assign</td>
</tr>
<tr>
<td></td>
<td>• SLA Manage</td>
</tr>
<tr>
<td></td>
<td>• SLA View</td>
</tr>
<tr>
<td></td>
<td>• Storage Manage</td>
</tr>
<tr>
<td></td>
<td>• Storage View</td>
</tr>
<tr>
<td></td>
<td>• System Manage</td>
</tr>
<tr>
<td></td>
<td>• System View</td>
</tr>
<tr>
<td></td>
<td>• Test-Failover</td>
</tr>
<tr>
<td></td>
<td>• Workflow Manage</td>
</tr>
<tr>
<td></td>
<td>• Workflow Run</td>
</tr>
<tr>
<td></td>
<td>• Workflow View</td>
</tr>
</tbody>
</table>
roledelrights Request Details

Your roledelrights request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/roledelrights</td>
<td>rights, role</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

roledelrights Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/roledelrights?role=myrole&rights="Host Manage"

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
{
    "status": 0
}
```
About lsrole Command

Description

Use this command to retrieve the details of roles. A role is made up of one or more rights. The reserved role 'administrator' has all privileges. The 'administrator' role cannot be deleted or modified. To retrieve the rights of a role use the lsrights command.

Rights

You must have the 'System View' or 'System Manage' right to use this command.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue  | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attribute for the lsrole command is: name. For string type of filters, the only operator allowed is '='. You can also use the wildcard character '*'. For example, to match roles with name begins with 'foo', use filtervalue=name=%3Dfoo*.
| argument     | Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument parameter, a concise view of all objects matching the filter criteria is displayed.

lsrole Request Details

Your lsrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsrole</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsrole Examples

Fetching roles by id.

Request

GET https://{Actifio_API_HOST}/actifio/api/info/lsrole?argument=203
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response
{
  "result": {
    "id": "203",
    "name": "Storage Admin"
  },
  "status": 0
}

Fetching all roles.

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsrole
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
  "result": [
    {
      "name": "Administrator",
      "description": "System Administrator role",
      "id": "2"
    },
    {
      "name": "Basic",
      "description": "Basic role",
      "id": "4"
    },
    {
      "name": "Compliance Admin",
      "description": "Compliance Admin role",
      "id": "202"
    },
    {
      "name": "Storage Admin",
      "description": "Storage Admin role",
      "id": "203"
    },
    {
      "name": "Backup Admin",
      "description": "Backup Admin role",
      "id": "204"
    },
    {
      "name": "App Admin",
      "description": "App Admin role",
      "id": "205"
    },
    {
      "name": "cdsRDrole",
      "description": "for RD test",
      "id": "477557"
    },
    {
      "name": "rd-cds-role-s2",
      "description": "Enter description",
      "id": "477558"
    }
  ]
}
"id": "482481"
},
],
"status": 0
}
About mkuserrole Command

Description
Use this command to add a role to a user.

Rights
You must have the 'System Manage' right to assign a role to a user.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>roleid</td>
<td>integer</td>
</tr>
<tr>
<td>userid</td>
<td>integer</td>
</tr>
</tbody>
</table>

mkuserrole Request Details

Your mkuserrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkuserrole</td>
<td>roleid, userid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkuserrole Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/mkuserrole?roleid=2&userid=17510
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
{
    "result": 261651,
    "status": 0
}
Isuserrole

About lsuserrole Command

Description

Use this command to retrieve the details of user-to-role mappings.

Rights

You must have the 'System View' right to see all role mappings. Only a user with 'System Manage' right can create or delete the mappings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Optional. Specifies the userid of a particular user for which the role mapping is displayed. To learn userid, use lsuser.</td>
</tr>
</tbody>
</table>

Isuserrole Request Details

Your lsuserrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsuserrole</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isuserrole Example

Request

GET https://{Actifio_API_HOST}/actifio/api/info/lsuserrole HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```
{
    "result": [
        {
            "rolename": "Basic",
            "roleid": "4",
            "id": "17512",
            "userid": "17510",
            "username": "User"
        }
    ]
}
```


```json
{
    
    "rolename": "Basic",
    "roleid": "4",
    "id": "17779",
    "userid": "17777",
    "username": "DevelopmentUser"
},

{
    "rolename": "Basic",
    "roleid": "4",
    "id": "121584",
    "userid": "121582",
    "username": "newuser4"
},

{
    "rolename": "Administrator",
    "roleid": "2",
    "rights": "",
    "id": "252672",
    "userid": "180912",
    "username": "jita_user"
}

"status": 0
}
```
About chrole Command

Description
Use this command to change the name or description attributes of a role. Use lsrole to obtain ID or name of the role.

Rights
You must have the 'System Manage' right to change the attributes of a role.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies new description for the role.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies the new name for the role, which should be unique.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the role object to modify, either by ID or by name.</td>
</tr>
</tbody>
</table>

chrole Request Details

Your chrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chrole</td>
<td>argument</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

chrole Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/chrole?argument=181128&description=storageadmin

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
   "status": 0
}
rmuserrole

About rmuserrole Command on page 30
rmuserrole Request Details on page 30
rmuserrole Example on page 30

About rmuserrole Command

Description
Use this command to delete a user-to-role mapping. The user-to-role mapping ID can be obtained using the lsuserrole command.

Rights
You must have the 'System Manage' right to delete a user-to-role mapping.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>integer</td>
</tr>
</tbody>
</table>

rmuserrole Request Details

Your rmuserrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmuserrole</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmuserrole Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/rmuserrole?argument=261677
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
{
  "status": 0
}
```
rmrole

About rmrole Command

Description
Use this command to delete a role.

Rights
You must have the "System Manage" right to delete a role.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the role to be removed. Use lsrole to locate the ID or name of the role.</td>
</tr>
</tbody>
</table>

rmrole Request Details

Your rmrole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmrole</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmrole Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/rmrole?argument=myrole
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response

{ "status": 0 }

actifio
Org Commands

mkorg

About mkorg Command

Description
Use this command to create a new organization object. An organization determines a user's access to organizational resources. An organization is effective after organizational resources are added to the organization.

Rights
You must have the 'System Manage' right to create an organization.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Describes the organization.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies a name for the organization. The name should be unique.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which the organization should be added to after creation. Use lsorg to retrieve organization information.</td>
</tr>
</tbody>
</table>

Note: To use this option user needs the 'System Manage' right.

mkorg Request Details

Your mkorg request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkorg</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkorg Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/mkorg?name=org1
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
{
   "result": 261533,
   "status": 0
}

**mkorgresource**

**About mkorgresource Command**

**Description**

Use this command to add a resource to an organization. An organization consists of resources and users. It allows the member users to access all its resources. An organization can contain one or more organizations as its members.

**Rights**

You must have the 'System Manage' right to add a resource to an organization.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>org=string</td>
<td>Required. Specifies the ID or name of the organization. Use lsorg to retrieve organization information.</td>
</tr>
<tr>
<td>resources=string</td>
<td>Required. Specifies the resource names or IDs to add to the organization. If there is more than one resource, they should be separated by a comma (,). Use the lsorgresource command to locate the ID of the organization resource by displaying a list of organization-to-resource mappings.</td>
</tr>
<tr>
<td>type=string</td>
<td>Required. Specifies the type of resource to be added to an organization. <strong>Note:</strong> For information on adding an appliance to an organization through specification of -type cluster to define multi-tenancy access, see Enabling Multi-Tenancy with Organizations in NOW.</td>
</tr>
</tbody>
</table>

**mkorgresource Request Details**

Your mkorgresource request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkorgresource</td>
<td>type org resources</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**mkorgresource Example**

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/mkorgresource?type=user&org=Org1

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
    "status": 0
}
Isorg

About Isorg Command

Description
Use this command to retrieve the details of organizations. There are two reserved organizations, 'all', which includes all objects within the system; and 'public', which includes objects that are viewable by everyone. The 'all', and 'public' organizations cannot be deleted or modified.

Rights
You must have the 'System View' or 'System Manage' right to use this command.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=attribute%3Dvalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attribute for the Isorg command is: name. A filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with the ampersand (&amp;) character (%26 in hexadecimal). For string type of filters, the only operator allowed is ‘='. You can also use wild card character '*'.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the ID or name, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isorg Request Details

Your Isorg request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsorg</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isorg Example

Request

GET https://{Actifio_API_HOST}/actifio/api/info/lsorg
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
{
    "result": [
        {
            "id": "3",
            "modifydate": "",
            "description": "ALL organization, all objects be...",
            "name": "ALL",
            "createdate": "2015-05-19 18:28:29.245"
        },
        {
            "id": "17600",
            "modifydate": "2015-07-02 03:24:38.370",
            "description": "These are the application server...",
            "name": "DevelopmentOrganization",
            "createdate": "2015-07-02 03:22:48.442"
        },
        {
            "id": "164816",
            "modifydate": "",
            "description": "New organization description",
            "name": "Organization_3",
            "createdate": "2017-02-23 10:30:43.977"
        },
        {
            "id": "179297",
            "modifydate": "",
            "description": "New organization description",
            "name": "Organization_4",
            "createdate": "2017-04-13 10:21:40.095"
        }
    ],
    "status": 0
}
About chorg Command

Description
Use this command to change the attributes of an organization object.

Rights
You must have the 'System Manage' right to change the attributes of an organization.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies a description for the organization.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies a unique name for the organization, name must be unique.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the organization object to modify, either by ID or by name. Use lsorg to obtain the ID or name of the organization.</td>
</tr>
</tbody>
</table>

chorg Request Details

Your chorg request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chorg</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chorg Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/chorg?argument=179297&description=SalesOrg
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```
{
    "status": 0
}
```
**lsorgresource**

*About lsorgresource Command on page 39*
*lsorgresource Request Details on page 39*
*lsorgresource Example on page 39*

**About lsorgresource Command**

**Description**

Use this command to retrieve the details of resource-to-organization mappings.

**Rights**

You must have the 'System View' or 'System Manage' right to use this command.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attribute%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the lsorgresource command are:
  - orgid
  - resourceid
  - typecode [ app | host | org | slp | slt | user ]
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with `&` character. Some filters allow only predefined constants. For example, typecode allows only app, host, org, slp, slt and user. |
| argument=integer | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument parameter, a concise view of all objects matching the filter criteria is displayed. |

**lsorgresource Request Details**

Your lsorgresource request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsorgresource</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

**lsorgresource Example**

**Request**

GET https://{Actifio_API_HOST}/actifio/api/info/lsorgresource

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575c6f5d43
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
  "result": [
    {
      "typecode": "host",
      "resourceid": "8759",
      "id": "17622",
      "orgid": "17600"
    },
    {
      "typecode": "host",
      "resourceid": "6853",
      "id": "17623",
      "orgid": "17600"
    },
    {
      "typecode": "host",
      "resourceid": "6855",
      "id": "17624",
      "orgid": "17600"
    },
    {
      "typecode": "host",
      "resourceid": "6820",
      "id": "17625",
      "orgid": "17600"
    },
    {
      "typecode": "host",
      "resourceid": "6861",
      "id": "17626",
      "orgid": "17600"
    },
    {
      "typecode": "user",
      "resourceid": "180912",
      "id": "180981",
      "orgid": "3"
    }
  ],
  "status": 0
}
About rmorgresource Command

Description
Use this command to delete a resource from an organization.

Rights
You must have the "System Manage" right to delete a resource-to-organization mapping.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID of the resource-to-organization mapping to be deleted. Use the Isorgresource command to get the ID or name of the organization resource.</td>
</tr>
</tbody>
</table>

rmorgresource Request Details

Your rmorgresource request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

Method | URI | Required Parameters |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmorgresource</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmorgresource Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/rmorgresource?argument=180981
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
  "status": 0
}
rmorg

About rmorg Command

Description
Use this command to delete an organization.

Rights
You must have the 'System Manage right to delete an organization.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the organization to be deleted. Use the lsorg command to get the ID or name of the organization.</td>
</tr>
</tbody>
</table>

rmorg Request Details

Your rmorg request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmorg</td>
<td>argument</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

rmorg Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/rmorg?argument=181389

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
{
  "status": 0
}
```
LDAP Commands
mkldapserver

About mkldapserver Command
Description
Use this command to configure an LDAP server for authentication.

Rights
You must have the 'System Manage' right to configure an LDAP server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ip=string</td>
<td>Required. Specifies the IP address for the server.</td>
</tr>
<tr>
<td>port=string</td>
<td>Required. Specifies the port for the server.</td>
</tr>
<tr>
<td>basedn=string</td>
<td>Required. Specifies the basedn for the LDAP lookups.</td>
</tr>
<tr>
<td>userattribute=string</td>
<td>Required. Specifies the attribute to use as the username.</td>
</tr>
<tr>
<td>lookupuser=string</td>
<td>Optional. Specifies the user to perform the LDAP lookups.</td>
</tr>
<tr>
<td>lookuppassword=string</td>
<td>Optional. Specifies the password for the lookup user.</td>
</tr>
<tr>
<td>nossl=boolean</td>
<td>Optional. When set, SSL is not used to connect to the LDAP server.</td>
</tr>
<tr>
<td>fallback=boolean</td>
<td>Optional. When true, cached credentials will be used if the LDAP server is unavailable.</td>
</tr>
<tr>
<td>uniqueldname=string</td>
<td>Optional. Specifies unique object attribute name to identify LDAP objects.</td>
</tr>
</tbody>
</table>

mkldapserver Request Details
Your mkldapserver request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkldapserver</td>
<td>ip, port, basedn, userattribute</td>
</tr>
</tbody>
</table>
**Note:** See the Parameters section for a list of supported parameters and their description.

### mkldapserver Example

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/mkldapserver?ip={LDAP_IP}&port=389&nossl=true&basedn=CN%3DUsers%2CDC%3Drtad%2CDC%3Dcom&userattribute=cn&fallback=true

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

```json
{
    "status": 0
}
```
testldapserver

About testldapserver Command on page 45

testldapserver Request Details on page 45

testldapserver Example on page 45

About testldapserver Command

Description

Use this command to test the LDAP configuration.

Rights

You must have “System Manage” right to test the LDAP configuration.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>user=string</td>
<td>Required. The username with which to test.</td>
</tr>
<tr>
<td>password=string</td>
<td>Required. The password associated with the user.</td>
</tr>
</tbody>
</table>

testldapserver Request Details

Your testldapserver request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/testldapserver</td>
<td>user, password</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

testldapserver Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/testldapserver?user=Administrator&password={PASSWORD}

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
{
  "result": "Success",
  "status": 0
}
```
Isldapserver

About Isldapserver Command on page 46
Isldapserver Request Details on page 46
Isldapserver Example on page 46

About Isldapserver Command

Description
Use this command to list LDAP server settings.

Rights
You must have the 'System View' right is allowed to view the LDAP server configuration.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>delim</strong>=string</td>
<td>Optional. By default, all columns of data are separated by a tab in the concise view. In the detailed view, each column of data is displayed in a separate row and if the headers are displayed, the header is separated from the data by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one byte character. To display the data, use a comma (',') for list view, and equal ('=') for detail view.</td>
</tr>
<tr>
<td><strong>nohdr</strong>=string</td>
<td>Optional. By default, headings are displayed for each column of data in a concise view, and for each item of data in a detailed view. The -nohdr parameter suppresses the display of these headings. If there is no data to be displayed, headings are not displayed.</td>
</tr>
</tbody>
</table>

Isldapserver Request Details

Your lsldapserver request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsldapserver</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isldapserver Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsldapserver
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "address": "LDAP_SERVER_IP",
      "basedn": "CN=Users,DC=SQA,DC=actifio,DC=com",
      "fallback": "false",
      "lookuppassword": "******",
      "lookupuser": "CN=Administrator,CN=Users,DC=SQA,DC=actifio,DC=com",
      "port": "389",
      "uniqueidname": "objectGUID",
      "userattribute": "SamAccountName",
      "usessl": "false"
    }
  ],
  "status": 0
}
About chldapserver Command

Description
Use this command to change the configuration of an LDAP server.

Rights
User must have 'System Manage' right to change the configuration of an LDAP server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>basedn=string</td>
<td>Optional. Specifies the Base DN for the LDAP lookups.</td>
</tr>
<tr>
<td>fallback=boolean</td>
<td>Optional. When set, cached credentials will be used if the LDAP server is unavailable.</td>
</tr>
<tr>
<td>ip=string</td>
<td>Optional. Specifies the IP address of the server.</td>
</tr>
<tr>
<td>lookuppassword=string</td>
<td>Optional. Specifies the password for the lookup user.</td>
</tr>
<tr>
<td>lookupuser=string</td>
<td>Optional. Specifies the user to perform the LDAP lookups.</td>
</tr>
<tr>
<td>port=string</td>
<td>Optional. Specifies the port for the server.</td>
</tr>
<tr>
<td>ssl=boolean</td>
<td>Optional. When set, the LDAPS protocol is used instead of LDAP.</td>
</tr>
<tr>
<td>uniquedname=string</td>
<td>Optional. Specifies unique object attribute name to identify LDAP objects for an VDP Appliance.</td>
</tr>
<tr>
<td>userattribute=string</td>
<td>Optional. Specifies the attribute to use as the username.</td>
</tr>
</tbody>
</table>

chldapserver Request Details

Your chldapserver request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chldapserver</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
chldapserver Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/chldapserver?fallback=false
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
   "status": 0
}

**About mkldapgroup Command**

**Description**

Use this command to create an LDAP group object. This group must already exist in the LDAP server. Once the LDAP group is added with this command, use `mkldapgrouprole` to create the mapping.

**Rights**

You must have the 'System Manage' right to create an LDAP group.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>dn</code>=string</td>
<td>Required. Specifies the Distinguished Name (DN) of the LDAP group.</td>
</tr>
</tbody>
</table>

**mkldapgroup Request Details**

Your `mkldapgroup` request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkldapgroup</td>
<td><code>dn</code></td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**mkldapgroup Example**

**Request**

```
POST https://{Actifio_API_HOST}/actifio/api/task/mkldapgroup?dn=CN=testgroup02,CN=Users,DC=SQA,DC=actifio,DC=com
```

HTTP Request Header

```
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
```

where `92929a8b-a413-476f-a624-5b575cff54d3` is the session ID.

**Response**

```
{
    "result": "5265494",
    "status": 0
}
```
Isldapgroup

About Isldapgroup Command

Description
Use this command to retrieve details of LDAP groups.

Rights
You must have the 'System View' or 'System Manage' right to view the LDAP groups.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=attribute%3Dvalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attribute for the lsldapgroup command is: name. For string filters, the only operator allowed is '='. You can use the wildcard '*'.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument parameter, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isldapgroup Request Details

Your lsldapgroup request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsldapgroup</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

Isldapgroup Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsldapgroup
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
```json
{
    "result": [
        {
```
"dn": "CN=testgroup01,CN=Users,DC=sqa,DC=actifio,DC=com",
"guid": "a915013c-8902-3264-a9bc-88cc4b87f56f",
"id": "5215712",
"name": "testgroup01"
},
"status": 0
}
**mkldapgrouprole**

**About mkldapgrouprole Command**

**Description**

Use this command to add a new LDAP group role mapping. An LDAP group can map to multiple roles. A user that belongs to the LDAP group automatically has the roles specified in the mapping. Use `lsldapgroup` to obtain ID of the LDAP group. Use `lsrole` to obtain the ID of the role.

**Rights**

You must have the 'System Manage' right to add a new LDAP group role mapping.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>groupid</td>
<td>Required. Specifies the LDAP group ID.</td>
</tr>
<tr>
<td>roleid</td>
<td>Required. Specifies the role ID to be assigned to the LDAP group.</td>
</tr>
</tbody>
</table>

**mkldapgrouprole Request Details**

Your `mkldapgrouprole` request must pass a valid session ID. For information on how to obtain a session ID, see [Authentication or Login](#) on page 1.

**Method**

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
</table>
| POST   | /actifio/api/task/mkldapgrouprole | groupid
|        |                         | roleid             |

**Note:** See the Parameters section for a list of supported parameters and their description.

**mkldapgrouprole Example**

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/mkldapgrouprole?groupid=5215712&roleid=205

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

**Response**

```
{  
  "result": 5265216,  
  "status": 0  
}
```
lsldapgrouprole

About lsldapgrouprole Command on page 54
lsldapgrouprole Request Details on page 54
lsldapgrouprole Example on page 54

About lsldapgrouprole Command

Description

Use this command to retrieve LDAP group role mappings, for all LDAP groups or for a specific LDAP group.

Rights

You must have the 'System View' or 'System Manage' right to view role mappings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Optional. Specifies the ID of an LDAP group role object, to show the role mapping for a particular LDAP group role.</td>
</tr>
</tbody>
</table>

lsldapgrouprole Request Details

Your lsldapgrouprole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsldapgrouprole</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsldapgrouprole Example

Request

GET https://{Actifio_API_HOST}/actifio/api/info/lsldapgrouprole
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```json
{
  "result": [
    {
      "groupid": "5215712",
      "id": "5215714",
      "roleid": "203"
    }
  ],
  "status": 0
}
```
mkldapgrouporg

About mkldapgrouporg Command on page 55
mkldapgrouporg Request Details on page 55
mkldapgrouporg Example on page 55

About mkldapgrouporg Command

Description
Use this command to add a new LDAP group organization mapping. An LDAP group can map to multiple organizations. A user that belongs to the LDAP group automatically has the organizations specified in the mapping. Use lsldapgroup to obtain ID of the LDAP group. Use lsorg to obtain ID of the organization.

Rights
You must have ‘System Manage’ right to add new LDAP group organization mapping.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>groupid=integer</td>
<td>Required. Specifies the LDAP group ID.</td>
</tr>
<tr>
<td>orgid=integer</td>
<td>Required. Specifies the organization id to be assigned to the LDAP group.</td>
</tr>
</tbody>
</table>

mkldapgrouporg Request Details

Your mkldapgrouporg request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkldapgrouporg</td>
<td>groupid, orgid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkldapgrouporg Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/mkldapgrouporg?groupid=5215712&orgid=3
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
    "result": 5265064,
    "status": 0
}
About lsldapgrouporg Command

Description
Use this command to retrieve LDAP group organization mappings, for all LDAP groups or for a specific LDAP group.

Rights
You must have ‘System View’ or ‘System Manage’ rights to view the organization mappings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Optional. Specifies the ID of an LDAP group organization object.</td>
</tr>
</tbody>
</table>

lsldapgrouporg Request Details

Your lsldapgrouporg request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsldapgrouporg</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsldapgrouporg Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsldapgrouporg
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c5f54d3

where 92929a8b-a413-476f-a624-5b575c5f54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "groupid": "5215712",
            "id": "5265064",
            "orgid": "3"
        }
    ]
}
"status": 0
}

**rmldapgrouporg**

**About rmldapgrouporg Command**

**Description**

Use this command to delete an LDAP group organization mapping. The group organization ID can be obtained using `lsldapgrouporg` command.

**Rights**

You must have “System Manage” right to delete an LDAP group org mapping.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID of the LDAP group organization mapping to be removed.</td>
</tr>
</tbody>
</table>

**rmldapgrouporg Request Details**

Your `rmldapgrouporg` request must pass a valid session ID. For information on how to obtain a session ID, see [Authentication or Login](#) on page 1.

**Method**

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/</td>
<td>argument</td>
</tr>
<tr>
<td></td>
<td>rmldapgrouporg</td>
<td></td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

**rmldapgrouporg Example**

**Request**

```plaintext
POST https://{Actifio_API_HOST}/actifio/api/task/rmldapgrouporg?argument=5265064
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

**Response**

```
{
   "status": 0
}
```
rmldapgrouprole

About rmldapgrouprole Command

Description
Use this command to delete an LDAP group role mapping.

Rights
You must have the 'System Manage' right to delete an LDAP group role mapping.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>integer</td>
</tr>
</tbody>
</table>

rmldapgrouprole Request Details

Your rmldapgrouprole request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmldapgrouprole</td>
<td>argument</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

rmldapgrouprole Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/rmldapgrouprole?argument=5265216

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```json
{
   "status": 0
}
```
About rmldapgroup Command

Description
Use this command to delete an LDAP group, including all of the mapping to roles.

Rights
You must have the 'System Manage' right to delete an LDAP group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the LDAP group to be removed.</td>
</tr>
</tbody>
</table>

rmldapgroup Request Details

Your rmldapgroup request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmldapgroup</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmldapgroup Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/rmldapgroup?argument=5265494
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
rmldapserver

About rmldapserver Command

Description
Use this command to remove the LDAP server configuration.

Rights
You must have "System Manage" right to remove the LDAP configuration.

rmldapserver Request Details

Your rmldapserver request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmldapserver</td>
<td>None</td>
</tr>
</tbody>
</table>

rmldapserver Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/rmldapserver
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}


3 Host Management Commands

These commands are used for managing hosts and appliances.

**Managing Hosts**

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<thead>
<tr>
<th>Host Commands</th>
<th>Other Commands</th>
</tr>
</thead>
<tbody>
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<td>getsysteminfo on page 89</td>
</tr>
<tr>
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<td>configdns on page 90</td>
</tr>
<tr>
<td>chhost on page 70</td>
<td>lsdns on page 92</td>
</tr>
<tr>
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<td>testdns on page 93</td>
</tr>
<tr>
<td>chproxyhost on page 74</td>
<td>configinterface on page 95</td>
</tr>
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<td>addroutetohost on page 76</td>
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</tr>
<tr>
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</tr>
<tr>
<td>getautodiscovery on page 82</td>
<td>lsdatastore on page 105</td>
</tr>
<tr>
<td>lsetchosts on page 84</td>
<td>lsssd on page 108</td>
</tr>
<tr>
<td>mketchosts on page 85</td>
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</tr>
<tr>
<td>rmetchosts on page 87</td>
<td>nfstest on page 112</td>
</tr>
<tr>
<td></td>
<td>lsipfailover on page 99</td>
</tr>
</tbody>
</table>
Host Commands

mkhost

About mkhost Command

Description

Use this command to create a new host object. The ID is displayed when the command completes. For generic or Hewlett Packard Unix (HP-UX) or Target Port Group Support (TPGS) or OpenVMS host, hostname must start with a letter, and can only use letter, digit or '_'. This is generally the DNS name for a host. For vCenter host, you may also use IP address of the host as the hostname.

Rights

You must have the 'Host Manage' right to create a host.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alternateip</td>
<td>Optional. Specifies the alternate IP address of the host. Multiple alternateip can be specified in a comma-delimited list.</td>
</tr>
<tr>
<td>description</td>
<td>Optional. Specifies the description of the host.</td>
</tr>
<tr>
<td>diskpref</td>
<td>Optional. Specifies preference (BLOCK or NFS) for presenting the staging disk. Default value is BLOCK.</td>
</tr>
<tr>
<td>dbauthentication</td>
<td>Optional. For VDP appliance only, specifies whether the Oracle database running on this host should be using DB Authentication or Host authentication.</td>
</tr>
<tr>
<td>friendlypath</td>
<td>Optional. Specifies the friendly name for the host.</td>
</tr>
<tr>
<td>hbawwpn</td>
<td>Required for generic/HP-UX/TPGS/openvms hosts when an iSCSI name is not specified. Multiple hbawwpn can be specified in a comma-delimited list. Not allowed for virtual machine hosts. You can get a list of potential port names with usvcinfo lshbaportcandidate. Specifies one or more host bus adapter (HBA) worldwide port names (WWPNs) to add to the specified host. For generic/HP-UX/TPGS hosts, at least one WWPN or iSCSI name should be specified. You cannot use this parameter with the iscsiname parameter.</td>
</tr>
<tr>
<td>hostname</td>
<td>Required. Specifies the name of the host.</td>
</tr>
<tr>
<td>iogrp</td>
<td>Optional. Not allowed for virtual machine hosts. Specifies a set of one or more I/O groups that the host can access the VDisks from. I/O groups are specified using their names or IDs separated by a colon. Names and IDs can be mixed in the list. If this parameter is not specified, the host is associated with all I/O groups.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ipaddress</td>
<td>Optional. Specifies IP address of the host. A DNS lookup will be attempted if this is not specified.</td>
</tr>
<tr>
<td>iscsiname</td>
<td>Required for generic/HP-UX/TPGS/openvms hosts. At least one WWPN or iSCSI name should be specified. You cannot use this parameter with the hbawwpn parameter. Multiple iscsiname can be specified in a comma-delimited list. However, this parameter is not allowed for virtual machine hosts.</td>
</tr>
<tr>
<td>mask</td>
<td>Optional for generic/HP-UX/TPGS hosts. However, not allowed for virtual machine hosts. Specifies which node target ports the host can access. The port mask is four binary bits and is made up of a combination of zeros and ones, where 0 indicates that the corresponding target port cannot be used and 1 indicates that it can be used. The right-most bit in the mask corresponds to the lowest numbered target port (1 not 4) on a node. Valid mask values range from 0000 (no ports enabled) to 1111 (all ports enabled). For example, a mask of 0011 enables port 1 and port 2. The default value is 1111 (all ports enabled).</td>
</tr>
<tr>
<td>nfsoption</td>
<td>Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon (;). For example: “server:writedelay=true,subtreecheck=false;client:retrans=2”.</td>
</tr>
<tr>
<td>org</td>
<td>Optional. Specifies the ID or name of a default organization in which the host should be added to after creation. To use this option user needs to have ‘System Manage’ right. If a default organization is not specified, an organization that the user belongs to is used.</td>
</tr>
<tr>
<td>password</td>
<td>Required for vCenter type. Specifies the password to access the Actifio Connector of the host.</td>
</tr>
<tr>
<td>port</td>
<td>Optional. Specifies the agent port number for the host. The default is 5106 for generic/hpux/tpgs/openvms hosts, and 0 for VM related hosts.</td>
</tr>
<tr>
<td>svcname</td>
<td>Optional. Specifies the SVC host name, which limits to 15 characters, first character cannot be a number, and no space, or ‘.’ is allowed.</td>
</tr>
<tr>
<td>type</td>
<td>Required for vCenter or HMC type. Specifies the type of the new host: generic, hmc, hpux, hyperv, isilon, netapp svm, netapp 7 mode, openvms, tpgs, or vcenter. The tpgs type enables extra target port unit attentions. With the vcenter type, discovery (see uds task vmdiscovery) allows Virtual Machines to be discovered isilon, netapp svm and netapp 7 mode hosts are used with the NAS Director. hyperv and isilon types are for VDP only. A host can be of more than one type, one of generic/hpux/tpgs/openvms, and of vcenter. Separate the two types with a colon, ‘:’, if the vCenter also has access to storage configured.</td>
</tr>
<tr>
<td>username</td>
<td>Required for vCenter. Specifies the username to access the Actifio Connector running on the host.</td>
</tr>
<tr>
<td>transport</td>
<td>Optional. Specifies the transport option for host. This is applicable only for VMware vCenters and manually discovered ESX hosts.</td>
</tr>
</tbody>
</table>
mkhost Request Details

Your mkhost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkhost</td>
<td>hostname=&lt;name of host&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

mkhost Example

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/mkhost?hostname=shark-linux&type=generic&ipaddress={IP_ADDRESS}

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

{  
    "result": "154829",
    "status": 0
}
Ishost

About Ishost Command on page 67
Ishost Request Details on page 68
Ishost Example on page 68

About Ishost Command

Description

Use this command to display a concise list of hosts or a detailed view of a host. There are various types of hosts that exist within the system. They can be divided into two types in general: Virtual Machine related hosts and non-Virtual Machine related.

Non-Virtual Machine related hosts have applications running on the host with primary storage connected.

Virtual Machine related hosts can be the vCenter type, which manage Virtual Machines. Virtual Machines are discovered through the vCenter hosts. There are also ESX servers as well as the actual Virtual Machines.

Rights

No rights are required for Ishost.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the Ishost command are:</td>
</tr>
</tbody>
</table>
| attrib%3Dvalue  | • alternateip
|                 | • description
|                 | • diskpref
|                 | • friendlypath
|                 | • hasagent
|                 | • hostname
|                 | • hosttype
|                 | • isclusterhost
|                 | • ipaddress
|                 | • isesxhost
|                 | • isvcenterhost
|                 | • isvm
|                 | • originalhostid
|                 | • osrelease
|                 | • ostype
|                 | • osversion
|                 | • sourcecluster
|                 | • svcname
|                 | • uniquename
|                 | • vcenterhostid
|                 | • cloudcredentialid

The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with ‘&’ character. For string type of filters, the only operator allowed is ‘='. You can also use the wild card character ‘*’. For example, to match users with the username that begins with ‘foo’, use filtervalue username=foo*.
lshost Request Details

Your lshost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lshost</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

lshost Example

Request

GET https://{Actifio_API_Server}/actifio/api/info/lshost?argument=44758
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```json
{
    "result": {
        "uniquename": "466cf196-c15b-4555-879d-0e1197b1a49c",
        "ipaddress": "172.28.6.20",
        "svcname": "h006020_0004475",
        "vsphereagent.username": "administrator@dev.actifio.com",
        "hosttype": "vcenter",
        "friendlypath": "172.28.6.20",
        "isvcenterhost": "true",
        "type": "vcenter",
        "vsphereagent.port": "0",
        "hasagent": "true",
        "ismv": "false",
        "hostname": "172.28.6.20",
        "modifydate": "2019-01-16 07:51:59.840",
        "dbauthentication": "false",
        "isproxyhost": "false",
        "sourcecluster": "142021223569",
        "id": "4475",
        "isesxhost": "false",
        "maxjobs": "0",
        "vsphereagent.password": "******",
        "transport": "NFS",
        "isclusterhost": "false",
        "diskpref": "BLOCK",
        "originalhostid": "0",
    }
}```
"guestvmiscsi": "false",
"properties": "0"
},
"status": 0
### chhost

**About chhost Command**

Use this command to change the attributes of a host.

**Rights**

You must have the 'Host Manage' right to change the attributes of a host.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alternateip=string</td>
<td>Optional. Specifies the alternate IP address of the host. Multiple alternateip values can be specified in a comma-delimited list.</td>
</tr>
<tr>
<td>connect2actip=string</td>
<td>(Optional) Comma-separated list of IP address that can be used for iSCSI communication. The list of IP address should be prepended with the protocol, for example, iscsi:10.10.111.111,iscsi:10.10.112.112</td>
</tr>
<tr>
<td>clearconnector=boolean</td>
<td>(Optional) Clears udagent information for the host if the connector has been already uninstalled from the host. Use it cautiously.</td>
</tr>
<tr>
<td>forceclearconnector=boolean</td>
<td>Optional. If forceclearconnector flag is used with the clearconnector, then udagent (connector) information for the host will be removed from the database regardless of its installation status on the host. Use it cautiously.</td>
</tr>
<tr>
<td>dbauthentication=boolean</td>
<td>Optional. Specifies whether Oracle database running on this host should be using DB Authentication or Host authentication.</td>
</tr>
<tr>
<td>description=string</td>
<td>Optional. Specifies a description of the host.</td>
</tr>
<tr>
<td>diskpref=string</td>
<td>Optional. Specifies preference (BLOCK or NFS) for presenting the staging disk. Default value is BLOCK.</td>
</tr>
<tr>
<td>friendlypath=string</td>
<td>Optional. Specifies a new friendly name for the host. Change of friendly path of a VM is not allowed.</td>
</tr>
<tr>
<td>hostname=string</td>
<td>Optional. Specifies the new host name for the host.</td>
</tr>
<tr>
<td>ipaddress=string</td>
<td>Optional. Specifies an IP address of the host.</td>
</tr>
<tr>
<td>iscsiname=string</td>
<td>Optional. Specifies the comma-separated list of iSCSI names for the host, replacing existing iSCSI names.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>hbawwpn</td>
<td>Optional. Specifies the comma-separated list of WWPN names for the host, replacing existing WWPN names.</td>
</tr>
<tr>
<td>mask</td>
<td>Optional. Specifies the node target ports that the host can access. The port mask has four binary bits and is made up of a combination of zeros and ones, where 0 indicates that the corresponding target port cannot be used and 1 indicates that it can be used. The right-most bit in the mask corresponds to the lowest numbered target port on a node. Valid mask values range from 0000 (no ports enabled) to 1111 (all ports enabled). For example, a mask of 0011 enables port 1 and port 2. The default value is 1111 (all ports enabled).</td>
</tr>
<tr>
<td>maxjobs</td>
<td>Optional. Max number of jobs allowed, 0 to use system default.</td>
</tr>
<tr>
<td>nfsoption</td>
<td>Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semicolon (;). For example: &quot;server:writedelay=true,subtreecheck=false;client:retrans=2&quot;.</td>
</tr>
<tr>
<td>password</td>
<td>Optional. Specifies the password to start the Actifio Connector running on the host.</td>
</tr>
<tr>
<td>properties</td>
<td>Optional. Enables/disables various properties of the host. - guestvmiscsi: true to map lun to VM directly, false to map through hypervisor</td>
</tr>
<tr>
<td>port</td>
<td>Optional. Specifies a port for the Actifio Connector running on the host.</td>
</tr>
<tr>
<td>svcname</td>
<td>Optional. Specifies the SVC host name. The name should not exceed 15 characters. The first character should not be a number. The name should not contain the space (&quot; &quot;) or period (&quot;.&quot; ) characters. Note: The -svcname parameter is not supported for Sky.</td>
</tr>
<tr>
<td>type</td>
<td>Optional. This is required if the host has multiple usernames, passwords, or ports with different type of connections. This can happen when a vCenter also has connector installed. In which use -type to specify the correct username, password, and port to be changed.</td>
</tr>
<tr>
<td>username</td>
<td>Optional. Specifies the user name to start the Connector running on the host.</td>
</tr>
<tr>
<td>blockcbt</td>
<td>Optional. Activates/deactivates CBT tracking for the application connector of a Linux host.</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the ID of the host to be modified.</td>
</tr>
</tbody>
</table>
chhost Request Details

Your chhost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>transport</td>
<td>Optional. Specifies the transport option for host. This is applicable only for VMware vCenters and manually discovered ESX hosts. GUESTVMISCSI is only applicable for VMware VM.</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chhost Example

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/chhost?
chhost?argument=154829&alternateip={ALTERNATE_IP}

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
   "result": "154829",
   "status": 0
}
```
**rmhost**

About rmhost Command on page 73

rmhost Request Details on page 73

rmhost Example on page 73

About rmhost Command

**Description**

Use this command to delete a host.

**Rights**

You must have the ‘Host Manage’ right to delete a host.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID of the host to be deleted.</td>
</tr>
</tbody>
</table>

**rmhost Request Details**

Your rmhost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmhost</td>
<td>argument=&lt;ID of host&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**rmhost Example**

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/rmhost?argument=154829

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

**Response**

Request success

```
{
  "status": 0
}
```
chproxyhost

About chproxyhost Command on page 74
chproxyhost Request Details on page 75
chproxyhost Example on page 75

About chproxyhost Command

Description
Use this command to configure the proxy host server. It allows a proxy host server to:
• Join an ADS or NT Domain membership.
• Leave from an ADS or NT Domain membership.

Applicability of this Command
This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director  | - |

Rights
You must have the ‘Host Manage’ right to configure a proxy host server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>domain=string</td>
<td>Optional. Specifies the name of the domain to be joined. Required when the joindomain option is specified.</td>
</tr>
<tr>
<td>joindomain=boolean</td>
<td>Optional. If specified, adds the membership to an ADS or NT Domain. KDC details are automatically determined by the ads net lookup command.</td>
</tr>
<tr>
<td>leavedomain=boolean</td>
<td>Optional. If specified, removes the membership from an ADS or NT Domain.</td>
</tr>
<tr>
<td>username=string</td>
<td>Optional. Specifies the user name to authenticate to join/leave an ADS or NT Domain. Required when either the joindomain or leavedomain option is specified.</td>
</tr>
<tr>
<td>password=string</td>
<td>Optional. Specifies the password of the user to authenticate to join/leave an ADS or NT domain. Required when either the joindomain or leavedomain option is specified.</td>
</tr>
<tr>
<td>port3ip=string</td>
<td>Optional. Specifies the IP address for the port 3 interface.</td>
</tr>
<tr>
<td>port3netmask=integer</td>
<td>Optional. Specifies the netmask for the port 3 interface.</td>
</tr>
</tbody>
</table>
chproxyhost Request Details

Your chproxyhost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>port3mtu=integer</td>
<td>Optional. Specifies the MTU value for the port 3 interface. Setting an incorrect MTU value can result in serious networking issues. If port3ip and port3netmask are not being set and are not currently set, trying to set port3mtu will result in an error. Setting the value to an empty string (&quot;&quot;) will remove an existing MTU setting.</td>
</tr>
<tr>
<td>port4ip=string</td>
<td>Optional. Specifies the IP address for the port 4 interface.</td>
</tr>
<tr>
<td>port4netmask=integer</td>
<td>Optional. Specifies the netmask for the port 4 interface.</td>
</tr>
<tr>
<td>port4mtu=integer</td>
<td>Optional. Specifies the MTU value for the port 4 interface. Setting an incorrect MTU value can result in serious networking issues. If port4ip and port4netmask are not being set and are not currently set, trying to set port4mtu will result in an error. Setting the value to an empty string (&quot;&quot;) will remove an existing MTU setting.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the object id or name of the proxy host. To see the proxy host server details refer to.</td>
</tr>
</tbody>
</table>

chproxyhost Example

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/chproxyhost?argument=120620&joindomain=true&domain=actifio.com&username=Administrator&password={PASSWORD}

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "status": 0
}
```
addroutetohost

About addroutetohost Command on page 76
addroutetohost Request Details on page 76
addroutetohost Example on page 77

About addroutetohost Command

Description
Use this command to add a network route to a host to route traffic over a specified interface. You may want to do this based on your network configurations and different network hardware on your host.

This command will connect to the host and update its routing table based on the given parameters. This command will return an error if the host with the provided host ID is not a Proxy Host (BDD).

Note: Changing network routing can have significant consequences including loss of connectivity so be sure you understand the consequences before making changes to the host’s routing tables.

Applicability of this Command

This command can be used on:

CDS appliance | ✓
---|---
Sky appliance | -
NAS Director | -

Rights
You must have the ‘Host Manage’ right to add a network route to a host.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>route=string</td>
<td>Required. The route to apply to the host. It can be a single IP address or a network range in CIDR notation.</td>
</tr>
<tr>
<td>gateway=string</td>
<td>Required. The gateway to use for this route.</td>
</tr>
<tr>
<td>interface=string</td>
<td>Required. The network interface on the host to which this routing should apply.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. The host to which this route should be applied.</td>
</tr>
</tbody>
</table>

addroutetohost Request Details

Your addroutetohost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: See the Parameters section for a list of supported parameters and their description.

**addroutetohost Example**

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/addroutetohost?argument=83098&route={ROUTE_IP_ADDRESS}&gateway={GATEWAY_IP_ADDRESS}&interface=eth2

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "status": 0
}
```
removeroutefromhost

About removeroutefromhost Command on page 78
removeroutefromhost Request Details on page 78
removeroutefromhost Example on page 79

About removeroutefromhost Command

Description
Use this command to remove a network route to a host. The route to be removed is based on an exact match of the interface, route, and gateway parameters. If no matching route can be found, this command will return an error saying that the route could not be found. This command will connect to the host and update its routing table based on the given parameters.

_Note:_ Changing network routing can have significant consequences including loss of connectivity so be sure you understand the consequences before making changes to the host’s routing tables.

Applicability of this Command

This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | - |
| NAS Director  | - |

Rights

You must have the ‘Host Manage’ right to remove a network route to a host.

Parameters

removeroutefromhost Request Details

Your removeroutefromhost request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/removeroutefromhost</td>
<td>route=&lt;IP address of route&gt; gateway=&lt;IP address of gateway&gt; interface=&lt;network interface&gt; argument=&lt;host ID&gt;</td>
</tr>
</tbody>
</table>

_Note:_ See the Parameters section for a list of supported parameters and their description.
removeroutefromhost Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/removeroutefromhost?argument=83098&route={ROUTE_IP_ADDRESS}&gateway={GATEWAY_IP_ADDRESS}&interface=eth2
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "status": 0
}
setautodiscovery

About setautodiscovery Command on page 80
going discovery Request Details on page 80
setautodiscovery Example on page 81

About setautodiscovery Command

Description

Use this command to configure/remove a host from the auto-discovery list. For a vCenter, an auto-discovery automatically adds all discovered VMs. For non-vCenter, all discovered applications are added.

For VDP appliances only: use setschedule to set the schedule for autodiscovery. By default, autodiscovery is performed once a day at 3 am.

Applicability of this Command

This command can be used on:

Rights

You must have the “Application Manage”, “Host Manage”, or “System Manage” right to add or remove a host to the auto-discovery host list.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clear=boolean</td>
<td>Optional. Specifies the host to be removed from the auto-discovery list.</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Specifies the name or ID of the host. Use lshost to locate the ID or name of the host.</td>
</tr>
</tbody>
</table>

setautodiscovery Request Details

Your setautodiscovery request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/setautodiscovery</td>
<td>host=&lt;name or ID of host&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
setautodiscovery Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/setautodiscovery?host=154908&clear=true
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}

getautodiscovery

About getautodiscovery Command on page 82
getautodiscovery Request Details on page 82
getautodiscovery Example on page 83

About getautodiscovery Command

Description

Use this command to return a concise list of hosts to perform auto-discovery on a schedule. For a vCenter, an auto-discovery automatically adds all discovered VMs. For non-vCenter, all discovered applications are added.

>Note: For VDP appliances only, by default, the schedule runs once a day at 3 am.

Applicability of this Command

This command can be used on:

Rights

You must have ‘System View’ or ‘System Manage’ or ‘Application Manage’ or ‘Host Manage’ right to perform auto-discovery on a schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>hostid=int</td>
<td>Optional. For VDP appliances only, it specifies the ID of the host to get its hostname if autodiscovery is set.</td>
</tr>
</tbody>
</table>

getautodiscovery Request Details

Your getautodiscovery request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getautodiscovery</td>
<td>None</td>
</tr>
</tbody>
</table>

>Note: See the Parameters section for a list of supported parameters and their description.
getautodiscovery Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/getautodiscovery
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{  "result": [  {   "hostname": "APPLE-PI"  }  ],  "status": 0  }
Isetchosts

About Isetchosts Command

Description
Use this command to retrieve contents of /etc/hosts.

Applicability of this Command
This command can be used on:

Rights

| CDS appliance | ✓ |
| VDP appliance | ✓ |
| NAS Director | - |

You must have ‘System View’ or ‘System Manage’ right to view contents of /etc/hosts.

Isetchosts Request Details

Your Isetchosts request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsetchosts</td>
<td>None</td>
</tr>
</tbody>
</table>

Isetchosts Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsetchosts
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
    "result": [
    {
        "ipaddress": "172.31.296.2",
        "hostname": "esxhost",
        "alias": "e..."
    }
    ],
    "status": 0
}
mketchosts

Description
Use this command to add an entry to /etc/hosts.

Applicability of this Command
This command can be used on:

Rights

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director | - |

You must have 'System Manage' right to add a host into /etc/hosts.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>alias=string</td>
<td>Optional. Specifies the alias of the host (comma separated if more than one alias). Each alias has to be unique.</td>
</tr>
<tr>
<td>ipaddress=string</td>
<td>Required. Specifies the unique IP address of the host to be added.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the host. The name has to be unique.</td>
</tr>
</tbody>
</table>

mketchosts Request Details

Your mketchosts request must have a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mketchosts</td>
</tr>
</tbody>
</table>

Required Parameters

- name=<host name>
- ipaddress=<IP address>

Note: See the Parameters section for a list of supported parameters and their description.
mketchosts Examples

Request
POST https://{Actifio_API_HOST}/actifio/api/task/mketchosts?ipaddress={IP_ADDRESS}&name={HOSTNAME}&alias=esx1
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
rmetchosts

About rmetchosts Command on page 87
rmetchosts Request Details on page 87
rmetchosts Examples on page 87

About rmetchosts Command

Description
Use this command to delete an entry from /etc/hosts.

Applicability of this Command
This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director  | - |

Rights
You must have 'System Manage' right to delete a host from /etc/hosts.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the host to be removed from /etc/hosts.</td>
</tr>
</tbody>
</table>

rmetchosts Request Details

Your rmetchosts request must have a valid session ID. For information on how to get a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmetchosts</td>
<td>name</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

rmetchosts Examples

Request

POST https://{Actifio_API_HOST}/actifio/api/task/rmetchosts?name={HOSTNAME}
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
Request success
{
    "status": 0
}

Other Commands

getsysteminfo

About getsysteminfo Command on page 89

getsysteminfo Request Details on page 89

getsysteminfo Example on page 89

About getsysteminfo Command

Description

Use this command to return a unique fingerprint of the VDP appliance. This fingerprint is used when applying an VDP software license. A software license is required by some VDP products, such as the appliance.

Applicability of this Command

This command can be used on:

Rights

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>-</td>
</tr>
</tbody>
</table>

You should have the 'System View' or 'System Manage' right to execute this command.


getsysteminfo Request Details

Your getsysteminfo request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getsysteminfo</td>
<td>None</td>
</tr>
</tbody>
</table>


getsysteminfo Example

Request

GET https://{Actifio_API_HOST}/actifio/api/info/getsysteminfo

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

{"
"result": "1415056619:b930ad2c-70c5-362a-aff0-c263b384f494:6c3155ff",
"status": 0
}

actifio
configdns

About configdns Command

Description
Use this command to configure DNS settings.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>-</td>
</tr>
</tbody>
</table>

You must have ‘System Manage’ right to configure DNS settings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| type=string | Optional. Specifies the type of DNS settings to change:  
• servers: DNS servers, maximum of 3 servers are supported.  
• domain: DNS domain, system uses ‘local’ if no domain is specified.  
• search: search domain, set name to ‘disable’ to clear the search domain list. Maximum of 6 search domains are supported. |
| name=string | Required. Specifies server name or domain name (comma separated if more than one is needed). |

configdns Request Details

Your configdns request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/configdns</td>
<td>name=&lt;server_name,domain_name&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
configdns Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/configdns?name={server_name}
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c75f5d3

where 92929a8b-a413-476f-a624-5b575c75f5d3 is the session ID.

Response
Request success
{
    "status": 0
}

Isdns

About Isdns Command on page 92
Isdns Request Details on page 92
Isdns Example on page 92

About Isdns Command

Description
Use this command to retrieve a concise list of DNS servers.

Applicability of this Command
This command can be used on:

Rights

| CDS appliance | ‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍| Sky appliance | ‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍| NAS Director |
|---------------|-----------------|----------------|
| ‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍‍| ✔               | ✔               |

You must have ‘System View’ or ‘System Manage’ right to use this command.

Isdns Request Details

Your Isdns request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsdns</td>
<td>None</td>
</tr>
</tbody>
</table>

Isdns Example

Request

GET https://{Actifio_API_HOST}/actifio/api/info/lsdns
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```json
{
  "result": [
    {
      "dnsserver": "172.123.456.789"
    }
  ],
  "status": 0
}
```
testdns

About testdns Command on page 93
testdns Request Details on page 93
testdns Example on page 93

About testdns Command

Description
Use this command to test the name or IP address of a host.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>Optional. Specifies the either the host name or the IP address to lookup.</td>
</tr>
<tr>
<td>value</td>
<td>Required. Specifies the host name or IP address to lookup.</td>
</tr>
</tbody>
</table>

Rights
You must have 'System View' or 'System Manage' right to use this command.

testdns Request Details
Your testdns request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/testdns</td>
<td>value</td>
</tr>
</tbody>
</table>

Response
Request success
{
    "result": [
    ]
}
"value": "172.123.456.789"
About configinterface Command

Description
Use this command to set an IP address on an interface on the appliance.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>–</td>
</tr>
</tbody>
</table>

Rights
You must have the 'System Manage' right to be able to set IP address.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress=string</td>
<td>Required. Specifies the IP address to assign. To remove an IP address, specify ‘0.0.0.0’ and select the node, interface and type.</td>
</tr>
<tr>
<td>mask=integer</td>
<td>Optional. (required except with ipaddress of ‘0.0.0.0’). Specifies subnet mask or prefix length. For example 255.255.255.0 (subnet mask) or 24 (prefix length).</td>
</tr>
<tr>
<td>dhcp=string</td>
<td>Optional. Specifies whether DHCP is used to configure a node.</td>
</tr>
<tr>
<td>gateway=string</td>
<td>Optional. Specifies the default gateway for the interface. Must be a valid IP address that’s within the network described by ipaddress and mask. Optional, to support the case of non-routed subnets. Specify ‘0.0.0.0’ to remove an existing gateway.</td>
</tr>
<tr>
<td>interface=string</td>
<td>Required. Specifies the interface.</td>
</tr>
<tr>
<td>node=string</td>
<td>Optional. Specifies the node name (panelname), blank, or &quot;peer&quot; to automatically select the &quot;CLU&quot; (secondary) node.</td>
</tr>
<tr>
<td>Note: This option is not valid on Sky appliances.</td>
<td></td>
</tr>
<tr>
<td>mtu=integer</td>
<td>Optional. Specifies the maximum transmit unit for the interface. Can only be set on the node IP, but affects all IPs on the interface. Minimum legal value is 84 (but not recommended). Maximum legal value is dependent upon the interface hardware. Specify ‘default’ to revert to the default value of 1500.</td>
</tr>
</tbody>
</table>
configinterface Request Details

Your configinterface request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type=string</td>
<td>Optional. Specifies type of IP: node, iscsi, or cluster. Sky appliances only support type 'node'. Type 'cluster' may only be specified with interface eth0 or eth1. Default to node if not specified. Only node is allowed for DHCP.</td>
</tr>
</tbody>
</table>

configinterface Example

Request

POST https://{Actifio_API_HOST}/actifio/api/task/configinterface?ipaddress={IP_ADDRESS}&interface=eth0

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
   "status": 0
}

Note: See the Parameters section for a list of supported parameters and their description.
configfailover

About configfailover Command on page 97
configfailover Request Details on page 97
configfailover Example on page 98

About configfailover Command

Description
Use this command to configure or remove IP fail-over interface pair. This puts the node IP on the alternate port if the primary port goes down. Associations are mutual; that is, if interface1 goes down, interface2 takes over, and vice versa.

Applicability of this Command
This command can be used on:

Rights

You must have the 'System Manage' right to configure or remove IP fail-over interface pair.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clear</td>
<td>Optional. Specifies that the IP fail-over interface pair to be removed. Otherwise, the interface pair is added.</td>
</tr>
<tr>
<td>interface1</td>
<td>Required. Specifies the first interface in the pair.</td>
</tr>
<tr>
<td>interface2</td>
<td>Optional, but required for configuration. Specifies the second interface in the pair.</td>
</tr>
</tbody>
</table>

configfailover Request Details

Your configfailover request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/configfailover</td>
<td>interface1</td>
</tr>
</tbody>
</table>
configipfailover Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/configipfailover?interface1=eth1&interface2=eth2
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success

{  "status": 0
}

Note: See the Parameters section for a list of supported parameters and their description.
**Isipfailover**

*About Isipfailover Command on page 99*

*Isipfailover Request Details on page 99*

*Isipfailover Example on page 100*

**About Isipfailover Command**

**Description**

Use this command to retrieve a concise list of IP fail-over interface pairs. This command is supported only on CDS appliances. If you run this command on a Sky appliance, you will see the error: “Command lsipfailover not supported.”

**Applicability of this Command**

This command can be used on:

<table>
<thead>
<tr>
<th>Device</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>-</td>
</tr>
<tr>
<td>NAS Director</td>
<td>-</td>
</tr>
</tbody>
</table>

**Rights**

You must have the 'System View' or 'System Manage' right to view IP fail-over interface pairs.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>--delim delimiter</code></td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The <code>--delim</code> parameter overrides this behavior. Valid input for the <code>--delim</code> parameter is a one byte character. To display the data, use a comma (',') for list view, and equal (=) for detail view. If you enter <code>--delim:</code> on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur.</td>
</tr>
<tr>
<td><code>--nohdr</code></td>
<td>Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The <code>--nohdr</code> parameter suppresses the display of these headings. <em>Note: If there is no data to be displayed, headings are not displayed.</em></td>
</tr>
</tbody>
</table>

**Isipfailover Request Details**

Your `lsipfailover` request must pass a valid session ID. For information on how to get a valid session ID, see *Authentication or Login* on page 1.
### Lsipfailover Example

**Request**

GET https://{Actifio_API_HOST}/actifio/api/info/lsipfailover

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
iscsitest

About iscsitest Command on page 101
iscsitest Request Details on page 101
iscsitest Example on page 102

About iscsitest Command

Description

Use this command to determine if the iSCSI configuration is properly set up in the appliance and host. The iSCSI test can be performed on the generic host and ESX hosts. It also recommends users with corrective action.

Applicability of this Command

This command can be used on:

Rights

You must have the 'Host Manage' rights to perform iSCSI test.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>host=string</td>
<td>Required. Specifies the host on which the iSCSI test is to be performed, either the source ID or name of the host is required. Use lshost to locate the ID or name of the host.</td>
</tr>
<tr>
<td>port=integer</td>
<td>Optional. Specifies the port that the Actifio Connector is running on. The default is 5106.</td>
</tr>
<tr>
<td>iscsiports=integer</td>
<td>Optional. Specifies the iSCSI port on which the test needs to be performed. If you do not specify this option, the test will be run for all iSCSI ports.</td>
</tr>
</tbody>
</table>

iscsitest Request Details

Your iscsitest request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

Method | URI | Required Parameters
POST /actifio/api/task/iscsitest | host=<name or ID of host>

Note: See the Parameters section for a list of supported parameters and their description.
iscsitest Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/iscsitest?host=198180
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "iSCSIport": "iqn.1991-05.com.microsoft:taupoexch16-s06.taupo.local",
      "Status": "Passed",
      "Test": "Host iSCSI initiator installed and configured"
    },
    {
      "iSCSIport": "iqn.1991-05.com.microsoft:taupoexch16-s06.taupo.local",
      "Status": "Passed",
      "Test": "Appliance has valid IQN"
    },
    {
      "iSCSIport": "iqn.1991-05.com.microsoft:taupoexch16-s06.taupo.local",
      "Status": "Passed",
      "Test": "Host has logged into the Appliance iSCSI target"
    },
    {
      "iSCSIport": "iqn.1991-05.com.microsoft:taupoexch16-s06.taupo.local",
      "Status": "Passed",
      "Test": "Mapping disk from Appliance to host"
    }
  ],
  "status": 0
}
About configchap Command

Description

Use this command to configure or remove a CHAP secret for authentication between iSCSI initiators and iSCSI target.

Applicability of this Command

This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Application</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>-</td>
</tr>
</tbody>
</table>

You must have the 'System Manage' right to configure or clear the CHAP secret.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clear=boolean</td>
<td>Optional. Specifies that the CHAP secret is to be cleared. This effectively disables CHAP authentication.</td>
</tr>
<tr>
<td>password=string</td>
<td>Optional. Specifies the password for CHAP authentication, the value must be between 12 and 16 characters. For CDS, this is the chap secret for the host.</td>
</tr>
<tr>
<td>username=string</td>
<td>Optional. Specifies the username for CHAP authentication. The limit is a maximum of 16 characters for Sky. For CDS, username is not supported.</td>
</tr>
<tr>
<td>host=string</td>
<td>Optional. Specifies the host name or ID for the CHAP authentication to be configured. If host is not specified, the loopback CHAP authentication is configured for Sky. For CDS, host is required.</td>
</tr>
</tbody>
</table>

configchap Request Details

Your configchap request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/configchap</td>
<td>None</td>
</tr>
</tbody>
</table>
configchap Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/configchap?username=Administrator&password={PASSWORD}

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}

Note: See the Parameters section for a list of supported parameters and their description.
lsdatastore

About lsdatastore Command

Description
Use this command to retrieve a concise list of data stores that the specified vCenter and ESX host can reference.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>–</td>
</tr>
</tbody>
</table>

Rights
You must have ‘System View’ or ‘System Manage’ right to use this command.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>esxhost</td>
<td>Required. ESX host that data stores can reference.</td>
</tr>
<tr>
<td>vcenter</td>
<td>Required. vCenter host that data stores can reference.</td>
</tr>
</tbody>
</table>

lsdatastore Request Details

Your lsdatastore request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lidatastore</td>
<td>esxhost vcenter</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.
Isdatastore Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsdatastore?esxhost=esx02.doc.actifio.com&vcenter=6820

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575ccf54d3

where 92929a8b-a413-476f-a624-5b575ccf54d3 is the session ID.

Response
Request success
"result": [
  {
    "name": "NetApp-NFS",
    "freespace": "171573866496",
    "type": "NFS",
    "capacity": "429496729600"
  },
  {
    "name": "esx02_local",
    "freespace": "71125958656",
    "type": "VMFS",
    "capacity": "137975824384"
  },
  {
    "name": "v3700_doc_disk_1",
    "freespace": "72089600000",
    "type": "VMFS",
    "capacity": "4397778075648"
  }
],
"status": 0

Example for returning datastore for virtual machine, where vm can be an application ID, host ID, hostname or host UUID.

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsdatastore?vm=84363

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575ccf54d3

where 92929a8b-a413-476f-a624-5b575ccf54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "isrdmsupported": "true",
      "name": "Sky-Snap",
      "freespace": "10056728838144",
      "type": "VMFS",
      "capacity": "10994847842304"
    },
    {
      "isrdmsupported": "true",
      "name": "Sky-Snap",
      "freespace": "20113457702240",
      "type": "VMFS",
      "capacity": "21990232555520"
    }
  ]
}
"name": "datastore2",
"freespace": "3807630065664",
"type": "VMFS",
"capacity": "5497289703424"
},
{
"isrdmsupported": "true",
"name": "datastore1",
"freespace": "289962721280",
"type": "VMFS",
"capacity": "290984034304"
},
{
"isrdmsupported": "false",
"name": "DVC",
"freespace": "118492901376",
"type": "NFS",
"capacity": "429126578176"
}
],
"status": 0
}
# lsssd

## About lsssd Command

### Description

Use this command to retrieve a concise list of SSD (Solid State Disk) devices, or a detailed view of an SSD device.

### Applicability of this Command

This command can be used on:

### Rights

- **CDS appliance**: ✓
- **Sky appliance**: ✓
- **NAS Director**: ✗

You must have 'System View', or 'System Manage' right to view SSDs.

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ssdname</td>
<td>Optional. Specifies the name of the SSD device to get detailed information.</td>
</tr>
</tbody>
</table>

## lsssd Request Details

Your lsssd request must pass a valid session ID. For information on how to get a valid session ID, see *Authentication or Login* on page 1.

### Method

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsssd</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

## lsssd Example

### Fetching ssd details from a CDS appliance.

**Request**

GET https://{Actifio_API_HOST}/actifio/api/info/lsssd
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response
Request success
{
    "result": [
        {
            "id": "1",
            "slot": "2",
            "status": "managed",
            "wwid": "scsi-3500117310031efb0"
        },
        {
            "id": "2",
            "slot": "3",
            "status": "managed",
            "wwid": "scsi-3500117310031f6f0"
        }
    ],
    "status": 0
}
Isnashare

About Isnashare Command

Description
Use this command to return a concise list of NAS shares as well as their details.

Rights
You must have the 'System Manage', or 'System View' rights to be able to retrieve NAS share data.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned. If you do not specify the parameter, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isnashare Request Details

Your Isnashare request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsnashare</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isnashare Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsnashare
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success

```json
"result": [
{
"modifydate": "",
"fileripspace": "1xx.xxx.xxx.xxx",
"hostid": "33945",
"shareuid": "/vol/deepdir_vol_500g",
"id": "35008",
```
"sharetype": "2",
"sharedesc": "/vol/deepdir_vol_500g : /vol/deepdir_vol_500g",
"exportpath": "/vol/deepdir_vol_500g",
"filerpath": "/vol/deepdir_vol_500g",
"snapshotpath": "deepdir_vol_500g"
},
{
  "modifydate": "",
  "fileripspace": "1xx.xxx.xxx.xxx",
  "hostid": "33924",
  "shareuid": "sush_CIFS_testing",
  "id": "41092",
  "sharetype": "3",
  "sharedesc": "sush_CIFS_testing",
  "exportpath": "sush_CIFS_testing",
  "filerpath": "/ifs/sush_CIFS_testing",
  "snapshotpath": "/ifs/sush_CIFS_testing"
}
{
  "modifydate": "",
  "fileripspace": "1xx.xxx.xxx.xxx",
  "hostid": "34950",
  "shareuid": "/KT_CIFS",
  "id": "205727",
  "sharetype": "3",
  "sharedesc": "/KT_CIFS : KT_CIFS",
  "exportpath": "KT_CIFS",
  "filerpath": "/KT_CIFS",
  "snapshotpath": "/KT_CIFS"
}
],
"status": 0
}
About nfstest Command

Description
Use this to test NFS configuration in the appliance and host. The NFS test can be performed on generic hosts and ESX hosts.

Rights
You must have the ‘Host Manage’ right to run NFS test.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>host=string</td>
<td>Required. Specifies the host in which NFS test to be performed, either ID or name of the host is needed. Use 'lshost' to locate the ID or name of the host.</td>
</tr>
<tr>
<td>port=string</td>
<td>Optional. Specifies the port that the Actifio Connector is running on, defaults to 56789.</td>
</tr>
<tr>
<td>options=string</td>
<td>Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon (;).</td>
</tr>
</tbody>
</table>

nfstest Request Details

Your nfstest request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/nfstest</td>
<td>host</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

nfstest Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/nfstest?host=254339
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
Note: 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Sky/CDS error:10017 Host 172.27.26.21 of type esxhost does not support nfs
Request error
null
4 Appliance Management Commands

These commands are used for managing hosts and appliances.

### Managing Appliances

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<th>Cluster Commands</th>
<th>Schedule Commands</th>
<th>Cloud Commands</th>
<th>Other Commands</th>
</tr>
</thead>
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<td><code>setschedule</code> on page 153</td>
<td><code>mkcloudcredential</code> on page 161</td>
<td><code>addssd</code> on page 176</td>
</tr>
<tr>
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<td><code>getschedule</code> on page 155</td>
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<td><code>rmssd</code> on page 178</td>
</tr>
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<td><code>setgcschedule</code> on page 157</td>
<td><code>lscloudcredential</code> on page 165</td>
<td><code>setarchiveconfig</code> on page 179</td>
</tr>
<tr>
<td><code>addcluster</code> on page 120</td>
<td><code>chcluster</code> on page 125</td>
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<tr>
<td><code>lscluster</code> on page 123</td>
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</tr>
<tr>
<td><code>Isclustermember</code> on page 131</td>
<td><code>lsappcluster</code> on page 133</td>
<td><code>lsresourcehistory</code> on page 170</td>
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<td><code>lssystemdetail</code> on page 197</td>
</tr>
<tr>
<td><code>rmappcluster</code> on page 133</td>
<td><code>lsclustermember</code> on page 135</td>
<td><code>lscloudcredential</code> on page 165</td>
<td><code>lsresourcehistory</code> on page 170</td>
<td><code>lssystemimages</code> on page 200</td>
</tr>
<tr>
<td><code>rmcluster</code> on page 136</td>
<td><code>lsclustermember</code> on page 135</td>
<td><code>lsresourcehistory</code> on page 170</td>
<td><code>lsresourcehistory</code> on page 170</td>
<td><code>lssystemimages</code> on page 200</td>
</tr>
</tbody>
</table>

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**Dedup Load Factor Commands**

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### Managing Pools

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<th>SLP Commands</th>
<th>Other Commands</th>
</tr>
</thead>
<tbody>
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</tr>
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</tr>
<tr>
<td>lsvaultstat on page 210</td>
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<td>getresourcewarening on page 243</td>
</tr>
<tr>
<td>chdiskpool on page 212</td>
<td></td>
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</tr>
<tr>
<td>rmdiskpool on page 214</td>
<td></td>
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</tr>
<tr>
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<td></td>
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<tr>
<td>lsdiskpoolstat on page 217</td>
<td></td>
<td>charray on page 252</td>
</tr>
<tr>
<td>lsnappoolstat on page 220</td>
<td></td>
<td>rmarray on page 254</td>
</tr>
</tbody>
</table>

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| lsdeduploadstat on page 229       |                      |                               |

### Auto Update and Remote Setup Commands

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<th></th>
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<td>mkiprestriction on page 273</td>
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</tr>
<tr>
<td>rmiprestriction on page 275</td>
<td></td>
</tr>
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</table>
Certificate Command
installtrustedcertificate

About installtrustedcertificate command on page 115
installtrustedcertificate Request Details on page 115
installtrustedcertificate Examples on page 115

About installtrustedcertificate command

Description
The installtrustedcertificate command installs/replaces a SSL server certificate on the appliance. The certificate and key files have to be in "/home/admin/upload".

The installtrustedcertificate also restarts Tomcat, and all active GUI sessions will be lost.

If the certificate is not a wildcard certificate, this command also updates the GUI links to have consistent hostname as the one defined in certificate’s Subject attribute. Please make sure the certificate has the correct hostname that resolves to the IP address of the appliance.

Rights
There are no specific rights associated with this operation. Admin/User with 'administrator' role can install the trusted certificate on to the appliance server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>certfile</td>
<td>Required. Specifies the filename of the certificate(s). The certificate(s) should be in PEM formats. All certificates that build up the trust chain need to be concatenated together in this file. Typically they include one SSL certificate, an intermediate CA certificate and a root CA certificate. If any of the certificates is missing, the command will fail.</td>
</tr>
<tr>
<td>keyfile</td>
<td>Required. Specifies the filename of the private key. The key should be in raw format (not encrypted).</td>
</tr>
</tbody>
</table>

installtrustedcertificate Request Details

Your installtrustedcertificate request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/installtrustedcertificate</td>
<td>certfile, keyfile</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

installtrustedcertificate Examples

POST https://{Actifio_API_Server}}/actifio/api/task/installtrustedcertificate?certfile={cert.pem}&keyfile={key.pem}&sessionid={SESSIONID}
Request success
{
    "result": "Install of Certificate Complete",
    "status": 0
}
**certexchange**

**About certexchange command**

**Description**

Use this command to exchange certificates with a remote VDP appliance to establish a trusted relationship for SSL.

**Rights**

You must have the 'System Manage' right to exchange certificates.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>string</td>
</tr>
<tr>
<td></td>
<td>Required. Specifies the IP address of the remote VDP appliance.</td>
</tr>
<tr>
<td>password</td>
<td>string</td>
</tr>
<tr>
<td></td>
<td>Optional. Specifies the password for the user on the remote VDP appliance.</td>
</tr>
</tbody>
</table>

**certexchange Request Details**

Your certexchange request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login](#) on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/certexchange</td>
<td>ipaddress</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

**certexchange Example**

**Request**

POST https://{Actifio_API_Server}/actifio/api/task/certexchange?ipaddress={IP_ADD} &password={PW}

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
    "result": "xJob Completed",
    "status": 0
}
```


Cluster Commands
joincluster

About joincluster command

Description
Use this to join two VDP appliances. Prior to joining, the two VDP appliances must exchange security certificates to allow secure communication between them.

When a VDP appliance joins another appliance, the former becomes the slave and the latter, the master. The slave appliance takes on the shared data of the master appliance. The shared data includes users, roles, organizations, and templates. You may want to review the shared data on the slave, as it may be removed after joining the master, if it is not present on the master already.

Example: When the joincluster command is executed on the 'seattle' appliance to join the 'boston' appliance, the 'boston' appliance becomes the master and 'seattle', the slave. After the join operation, both 'seattle' and 'boston' appliance will contain the same shared data, that is, users, roles, organizations, and templates.

Note: Before running this command use the certexchange command to exchange certificates between the EM server and the target cluster.

Rights
You must have the 'System Manage' right to join two VDP appliances.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>string Required. Specifies the IP address of the appliance to join to.</td>
</tr>
</tbody>
</table>

joincluster Request Details

Your joincluster request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/joincluster</td>
<td>ipaddress</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

joincluster Example

Request
POST https://{Actifio_API_Server}}/actifio/api/task/joincluster?ipaddress={IP_ADD}&password={PW}
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "result": "xJob Completed",
   "status": 0
}
addcluster

About addcluster Command on page 120
addcluster Request Details on page 120
addcluster Examples on page 120

About addcluster Command

Description
Use this command to add an appliance, either as part of a domain (which shares all appliance specific
data, such as organizations, templates, roles, and users), or to be used as a dedup-only VDP appliance
(which allows for remote deded or dedup-async target).

Note: Before adding two VDP appliances, the appliances must exchange certificates to communicate
securely. Before running this command use the cerntxchange command to exchange certificates
between the EM server and the target cluster.

Rights
You must have 'System Manage' right to add two VDP appliances.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>Required. Specifies the IP address of the appliance to be added.</td>
</tr>
</tbody>
</table>
| deduponly     | Optional. Specifies whether the added appliance is used for dedup-only. The
default value is false. |

addcluster Request Details

Your addcluster request must pass a valid session ID. For information on how to get a valid session ID, see
Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/addcluster</td>
<td>ipaddress</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

addcluster Examples

Add an Actifio appliance as part of the domain

Request
POST https://{Actifio_API_Server}}/actifio/api/task/addcluster?ipaddress={IP_ADD}
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c5fd5f4d3
where 92929a8b-a413-476f-a624-5b575c5fd5f4d3 is the session ID.
Request
POST https://{Actifio_API_Server}}/actifio/api/task/addcluster?ipaddress={IP_ADD}&dedup=true
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c6f54d3

where 92929a8b-a413-476f-a624-5b575c6f54d3 is the session ID.

Response
Request success
{
    "result": "xJob Completed",
    "status": 0
}

Add an Actifio cluster for dedup-only.

Request
POST https://{Actifio_API_Server}}/actifio/api/task/addcluster?ipaddress={IP_ADD}&dedup=true
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c6f54d3

where 92929a8b-a413-476f-a624-5b575c6f54d3 is the session ID.

Response
Request success
{
    "result": "xJob Completed",
    "status": 0
}
**synccluster**

**About synccluster Command** on page 122

**synccluster Request Details** on page 122

**synccluster Example** on page 122

### About synccluster Command

#### Description

Use this command to trigger a synchronization between joined VDP appliances. All of the shared data between the appliances is resynchronized. The command triggers the sync from the master so that all joined appliances will be synced regardless of whether a slave or the master initiates the command.

#### Rights

You must have the 'System Manage' right to synchronize the persistent data between VDP appliances.

### synccluster Request Details

Your `synccluster` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/synccluster</td>
<td>None</td>
</tr>
</tbody>
</table>

### synccluster Example

POST https://{Actifio_API_Server}}/actifio/api/task/synccluster

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

#### Response

Request success

```json
{
    "result": "xJob Completed",
    "status": 0
}
```
lscluster

About lscluster Command

Description

Use this command to retrieve details of an appliance. There is only one VDP appliance that describes the local appliance with the name 'thisisme'. All other appliances are added or joined from remote appliances. Use the addcluster or joincluster command to add an appliance to an existing appliance.

Rights

You must have the 'System View' or 'System Manage' right to retrieve details of an appliance.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=attrib%3Dvalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for lscluster are:</td>
</tr>
<tr>
<td></td>
<td>• clusterid</td>
</tr>
<tr>
<td></td>
<td>• bandwidth</td>
</tr>
<tr>
<td></td>
<td>• dedupid</td>
</tr>
<tr>
<td></td>
<td>• defaultdiskpool</td>
</tr>
<tr>
<td></td>
<td>• description</td>
</tr>
<tr>
<td></td>
<td>• ipaddress</td>
</tr>
<tr>
<td></td>
<td>• masterid</td>
</tr>
<tr>
<td></td>
<td>• name</td>
</tr>
<tr>
<td></td>
<td>• streamsnapbw</td>
</tr>
<tr>
<td></td>
<td>• thisisme</td>
</tr>
</tbody>
</table>

The filter is formed with an attribute and a value. When specifying more than one filter, the filters must be combined with the '& character. For string type of filters, the only operator allowed is '='. You can also use wild card character '*'. For example, to match users with the username that begins with 'foo', use filtervalue username=foo*.

| parameter=string | Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

lscluster Request Details

Your lscluster request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lscluster</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
Iscluster Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/iscluster
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
  {
    "bandwidth": "0",
    "bwschedule": "true",
    "clusterid": "1415017322",
    "datastore": "",
    "dedupid": "1415017322",
    "defaultdiskpool": "act_per_pool000",
    "description": "",
    "disabled": "false",
    "esxhost": "",
    "id": "11",
    "ipaddress": "172.27.26.103",
    "location": "",
    "masterid": "1415017322",
    "name": "JitaSky2",
    "operativeip": "172.24.28.11",
    "override": "false",
    "props": "sharing",
    "readyvm": "false",
    "thisisme": "true",
    "vcenter": ""
  },
  {
    "bandwidth": "0",
    "bwschedule": "true",
    "clusterid": "1415017327",
    "datastore": "",
    "dedupid": "1415017327",
    "defaultdiskpool": "act_per_pool000",
    "description": "",
    "disabled": "false",
    "esxhost": "",
    "id": "4548",
    "ipaddress": "172.24.28.12",
    "location": "",
    "masterid": "1415017322",
    "name": "JitaSky1",
    "operativeip": "172.27.26.102",
    "override": "false",
    "props": "sharing",
    "readyvm": "false",
    "thisisme": "false",
    "vcenter": ""
  }
  ],
  "status": 0
}
chcluster

About chcluster Command on page 125
chcluster Request Details on page 126
chcluster Example on page 126

About chcluster Command

Description

Use this command to change the properties of an appliance.

Rights

You must have the 'System Manage' right to modify the attributes of an appliance.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bandwidth=integer</td>
<td>Optional. Specifies out-going bandwidth limit used by dedup for the appliance, in Mb/s. Enter 0 to indicate unlimited bandwidth.</td>
</tr>
<tr>
<td>bwschedule=boolean</td>
<td>Optional. Specifies whether bandwidth schedule for the appliance should be enabled. Setting this to false will suspend the bandwidth schedule for the appliance.</td>
</tr>
<tr>
<td>datastore=string</td>
<td>Optional. Specifies data store to be used when replicating VM to a data store during dedup-async operation. This applies to Virtual Machine replication if readyvm is true. For multiple datastores, use a comma ',' to separate them, if a datastore has a comma ',' or backslash '' in its name, it needs to be escaped with ''.</td>
</tr>
<tr>
<td>defaultdiskpool=string</td>
<td>Optional. Specifies the default disk pool name for the specified appliance. This is the pool to be used for remote target (such as dedup-async) appliance.</td>
</tr>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description of the appliance.</td>
</tr>
<tr>
<td>esxhost=string</td>
<td>Optional. Specifies ESX host to be used when replicating VM to a data store during dedup-async operation. This applies to VM replication if readyvm is true.</td>
</tr>
<tr>
<td>location=string</td>
<td>Optional. Specifies the location of the appliance.</td>
</tr>
<tr>
<td>operativeip=string</td>
<td>Optional. Specifies the IP address for communication with remote VDP appliance, typically the same as IP address.</td>
</tr>
<tr>
<td>ipaddress=string</td>
<td>Optional. Specifies the new IP address for the cluster. Note that for SVC, cluster IP of port 1 is also changed, if applicable. This requires scheduler to be turned off, and no jobs running before the cluster IP address can be changed. (Deprecated) this option is not supported for Sky appliance, please use udstask configinterface to change ipaddress on Sky appliance.</td>
</tr>
<tr>
<td>streamsnapbw=integer</td>
<td>Optional. Specifies outgoing bandwidth limit (in Mb/s) to the specified appliance for StreamSnap replication. Enter 0 to indicate unlimited bandwidth.</td>
</tr>
</tbody>
</table>
chcluster Request Details

Your chcluster request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>timezone</td>
<td>Optional. Specifies a new timezone.</td>
</tr>
<tr>
<td></td>
<td>• For the Sky appliance, the timezone entry must be a valid timezone path (for example, “America/Chicago”).</td>
</tr>
<tr>
<td></td>
<td>• For the CDS appliance, the timezone must be a valid timezone value.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Use the lstimezones command to find the appropriate timezone for the appliance.</td>
</tr>
<tr>
<td>name</td>
<td>Optional. Specifies a new name for the appliance CDS/Sky.</td>
</tr>
<tr>
<td>vcenter</td>
<td>Optional. Specifies vCenter to be used when replicating VM to a datastore during dedup-async operation. This applies to VM replication if readyvm is true.</td>
</tr>
<tr>
<td>readyvm</td>
<td>Optional. Specifies whether a VM should be ready to fail-over for dedup-async replication. It is applied to Virtual Machine dedup-async replication only, if set to true. It affects only the first subsequent dedup-async replication.</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the appliance to be changed. Use lscluster to retrieve the ID or name of the appliance.</td>
</tr>
</tbody>
</table>

**Method**

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chcluster</td>
<td>argument</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

chcluster Example

**Request**

POST https://{Actifio_API_Server}/actifio/api/task/chcluster?bandwidth=2&bwschedule=true&argument=4611

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "xJob Completed",
    "status": 0
}
```
chappcluster

About chappcluster Command on page 127
chappcluster Request Details on page 127
chappcluster Example on page 128

About chappcluster Command

Description
Use this command to change the property of an application-to-node mapping.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>-</td>
</tr>
</tbody>
</table>

You must have ‘Application Manage’ or ‘Host Manage’ right to change the property of an application to node mapping.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>noprotection=boolean</td>
<td>Optional. Specifies whether the node is used for protection for this application.</td>
</tr>
<tr>
<td>ordering=integer</td>
<td>Optional. Specifies order of protection.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the application mapping to be changed. Use lsappgroup to locate the ID.</td>
</tr>
</tbody>
</table>

chappcluster Request Details

Your chappcluster request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chappcluster</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
chappcluster Example

Request
POST https://{Actifio_API_Server/actifio/api/task/chappcluster?ordering=2&argument=165416
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": "xJob Completed",
    "status": 0
}

Isappcluster

About lsappcluster Command

Description
Use this command to retrieve details of application-to-node mappings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for lsappcluster are:</td>
</tr>
<tr>
<td></td>
<td>• nodeid</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with <code>&amp;</code> character.</td>
</tr>
<tr>
<td>argument</td>
<td>Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isappcluster Request Details

Your lsappcluster request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsappcluster</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isappcluster Example

Request
GET https://{Actifio_API_Server/actifio/api/task/lsappcluster
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c8f54d3
where 92929a8b-a413-476f-a624-5b575c8f54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            
```
"active": "false",
"appid": "165415",
"id": "165416",
"nodeid": "165404",
"noprotection": "false",
"ordering": "0"
},
{
"active": "true",
"appid": "165415",
"id": "165417",
"nodeid": "83040",
"noprotection": "false",
"ordering": "0"
},
],
"status": 0
}
Isclustermember

About Isclustermember Command on page 131
Isclustermember Request Details on page 131
Isclustermember Example on page 132

About Isclustermember Command

Description
Use this command to retrieve details of a concise list of node to appliance mappings, or a detailed view of node to appliance mapping.

Applicability of this Command
This command can be used on:

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or all of the valid filter attributes. The valid filter attributes for lsappcluster are: nodeid, appid. The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with '&amp;' character.</td>
</tr>
<tr>
<td>argument</td>
<td>Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isclustermember Request Details

Your lsclustermember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/isclustermember</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
Isclustermember Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/isclustermember
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "id": "6854",
      "clusterid": "6852",
      "nodeid": "6853"
    },
    {
      "id": "6856",
      "clusterid": "6852",
      "nodeid": "6855"
    }
  ],
  "status": 0
}
About rmappcluster Command

Description
Use this command to remove an application-to-node mapping. Use `lsappcluster` to locate the ID of the mapping.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>✓</td>
</tr>
</tbody>
</table>

You must have 'Application Manage' or 'System Manage' right to remove an application-to-node mapping.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the application to node mapping to be removed. Use <code>lsappgroup</code> to locate the ID.</td>
</tr>
</tbody>
</table>

rmappcluster Request Details

Your rmappcluster request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmappcluster</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmappcluster Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/rmappcluster?argument=4001
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
    "result": "xJob Completed",
    "status": 0
}
rmclustermember

About rmclustermember Command on page 135
rmclustermember Request Details on page 135
rmclustermember Example on page 135

About rmclustermember Command

Description
Use this command to remove a node from an appliance. Use lsclustermember to locate the ID of the node to appliance mapping.

Rights
You must have ‘System Manage’ right to remove a node from an appliance.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>string</td>
</tr>
</tbody>
</table>

Required. Specifies the ID of the node to appliance mapping to be removed.

rmclustermember Request Details

Your rmclustermember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmclustermember</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmclustermember Example

Request

POST https://{Actifio_API_Server/actifio/api/task/rmclustermember?argument=84318
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c55f54d3
where 92929a8b-a413-476f-a624-5b575c55f54d3 is the session ID.

Response

Request success
{
  "result": "xJob Completed",
  "status": 0
}
About rmcluster Command

Description

Use the `rmcluster` command to delete an appliance. Use the `lscluster` command to retrieve the ID or name of the appliance. You cannot delete an appliance when the appliance is a member of an SLP unless the `-force` flag is set. When a appliance is removed, the corresponding certificate for that appliance is also removed. In addition, an attempt is made to remove the entry for this appliance from the other appliance. An explicit `rmcluster` must be performed on the other appliance to completely dissolve the two appliances.

Rights

You must have the 'System Manage' right to delete a VDP appliance.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>force</code>=boolean</td>
<td>Optional. When set, this removes an appliance even if the appliance is used in an SLP.</td>
</tr>
<tr>
<td><code>argument</code>=string</td>
<td>Required. Specifies the ID or name of the appliance to be removed. Use <code>lscluster</code> to retrieve the appliance name or ID to help you identify the correct appliance to remove.</td>
</tr>
</tbody>
</table>

rmcluster Request Details

Your `rmcluster` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmcluster</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmcluster Example

Request

POST https://[Actifio_API_Server/actifio/api/task/rmcluster?argument=8437
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c7f54d3

where 92929a8b-a413-476f-a624-5b575c7f54d3 is the session ID.
Response
Request success
{
    "result": "xJob Completed",
    "status": 0
}

Job Commands

lsjob

About lsjob Command on page 138
lsjob Request Details on page 140
lsjob Examples on page 140

About lsjob Command

Description

Use this command to retrieve a concise list of jobs, or a detailed view of a job.

Rights

For Sky appliance, you only require access to the System Monitor. You can only view jobs for applications that in your organizations, unless you are in the ALL Org.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
<tr>
<td>=string</td>
<td></td>
</tr>
</tbody>
</table>
**filtervalue**

=attrib%3Dvalu

Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for a job are:

- appid
- appname
- component
- enddate
- errorcode
- expirationdate
- hostname
- immutabilitydate
- isscheduled [true | false]
- jobclass [snapshot | dedup | expiration | gc | mount | unmount | clone | restore | delete | syncback | unmount-delete | remote-dedup | remote-restore | remote-clone | remote-mount | logreplicate | createliveclone | refreshliveclone | failover | failovertest | deletetest | failback | directdedup | seedin | seedout | verification | rollbackliveclone | OnVault | StreamSnap | LogReplicate | reprovision]
- jobname
- jobtag
- parentid
- policynname
- priority
- progress
- date
- relativesize
- retrycount
- sltname
- startdate
- status [running | queued | paused | interrupted | stalled]
- sourceid
- virtualsize

When you specify more than one filter, they must be combined with ‘&’ character. For string type of filters, the only operator allowed is ‘=’. You can also use wild card character ‘*’. For example, to list all jobs with a job name that begins with ‘Job_0001’, use ‘filtervalue jobname=Job_0001*’.

Some filters allow only predefined constants. For example, status allows only running, queued, paused, interrupted, or stalled. To match job status that is running, used ‘filtervalue status=running’.

For number and date types, allowed operators are: =, >, >=, <, <=. For example,

- `filtervalue=errorcode > 0`
- `filtervalue=errorcode >= 0`
- `filtervalue=errorcode <= 0`

The expirationdate, date, startdate, and enddate parameters can also use these operators. For example:

- `filtervalue=startdate>2010-09-28`
- `filtervalue=expirationdate>2010-09-28 6:50:00`

Note that a job may have sub-jobs. To filter out sub-jobs, it is common to use `filtervalue parentid=0` to list the top level jobs.
Isjob Request Details

Your lsjob request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsjob</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

Isjob Examples

Request

GET https://{Actifio_API_Server}/actifio/api/info/lsjob

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```json
{  
    "result": [  
        {  
            "jobcount": "1",  
            "retrycount": "0",  
            "flags": "0",  
            "sltname": "Tier-4 - Local Protection Only",  
            "description": "",  
            "pid": "0",  
            "startdate": "",  
            "parentid": "0",  
            "jobtag": "",  
            "hostname": "w2k8.doc.actifio.com",  
            "appname": "w2k8.doc.actifio.com",  
            "relativesize": "100",  
            "id": "334643",  
            "jobname": "Job_0334643",  
            "errorcode": "0",  
            "sourceid": "",  
            "changerequest": "IGNORE",  
            "date": "2017-12-12 00:00:00.000",  
            "jobclass": "snapshot",  
            "expirationdate": "2017-12-14 00:00:00.000",  
            "priority": "medium",  
            "targethost": "",  
            "enddate": "",  
            "isscheduled": "true",  
            "appid": "6862",  
            "progress": "0",  
            "policyname": "Daily snap",  
            "virtualsize": "100",  
            "consistencydate": "2017-12-12 00:00:01.000",  
            "status": "d"  
        },  
        {  
            
        }  
    ]
}
```
"jobcount": "1",
"retrycount": "0",
"flags": "0",
"sltname": "Tier-4 - Local Protection Only",
"description": "",
"pid": "0",
"startdate": "",
"parentid": "0",
"jobtag": "",
"hostname": "ctos6.4wp-13",
"appname": "/boot",
"relativesize": "100",
"id": "334654",
"jobname": "Job_0334654",
"errorcode": "0",
"sourceid": "",
"changeproject": "IGNORE",
"date": "2017-12-12 00:00:00.000",
"jobclass": "dedup",
"expirationdate": "2017-12-26 00:00:00.000",
"priority": "medium",
"targethost": "",
"enddate": "",
"isscheduled": "true",
"appid": "198376",
"progress": "0",
"policyname": "Daily dedup",
"virtualsize": "100",
"consistencydate": "2017-12-12 00:00:03.000",
"status": "d"

],
"status": 0
}

View details of a specific job

Request

GET https://{Actifio_API_Server}/actifio/api/info/lsjob?argument=Job_22179743

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfc54d3

where 92929a8b-a413-476f-a624-5b575cfc54d3 is the session ID.

Response

Request success

{  "result": {  "progress": "9",
"virtualsize": "100",
"date": "2015-11-27 00:08:12.328",
"currentstep": "0",
"jobname": "Job_22179743",
"expirationdate": "2015-12-04 00:00:03.000",
"appid": "21681349",
"parentid": "0",
"policyname": "Daily Dedup",
"originaljobclass": "dedup",
"id": "22179743"  }}
"jobcount": "2",
"priority": "high",
"changerequest": "IGNORE",
"isscheduled": "true",
"jobclass": "dedup",
"flags": "0",
"relativesize": "100",
"status": "running",
"hostname": "oracle-rac-1",
"pid": "23720",
"consistencydate": "2015-11-27 00:05:56.000",
"startdate": "2015-11-27 00:08:12.328",
"retrycount": "0",
"sltname": "Gold-LogSmart",
"totalsteps": "0",
"sourcecluster": "590021596788",
"appname": "racbigdb",
"sourceid": "Image_22179670,Image_22174655",
"errorcode": "0"
}
Isjobhistory

About lsjobhistory Command

Description

Use this command to retrieve a list of jobs details and their details based on a filter or the detailed view of a job.

Rights

For Sky appliance, you only require access to the System Monitor. You can only view jobs for applications that in your organizations, unless you are in the ALL Org.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>
Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for `lsjobhistory` are:

- `appid`
- `appname`
- `enddate` [usage: ‘enddate since 24 hours’ for jobs started since last 24 hours, ‘enddate before 7 days’ for jobs started older than 7 days]
- `errorcode`
- `expiration`
- `hostname`
- `immutabilitydate`
- `isscheduled` [true | false]
- `isexpired` [true | false]
- `jobclass` [snapshot | dedup | expiration | gc | mount | unmount | clone | restore | delete | syncback | unmount-delete | remote-dedup | remote-restore | remote-clone | remote-mount | liveclone | refreshliveclone | failover | failovertest | deletetest | failback | directdedup | seedin | seedout | verification | rollbackliveclone | dedupasync | OnVault | StreamSnap | LogReplicate | prep-mount | prep-unmount | cleanupmirroring | filebrowse | Clone (Mount) | Restore (Mount) | Clone (Migrate) | Restore (Migrate) | Restore (ASM Rebalance) | Restore (ASM Switch)]
- `jobname`
- `jobtag`
- `policyname`
- `priority`
- `relativesize`
- `sitename`
- `sourceid`
- `status` [succeeded | failed | canceled | succeeded with warning | retry | notrun]
- `startdate` [usage: ‘startdate since 24 hours’ for jobs started since last 24 hours, ‘startdate before 7 days’ for jobs started older than 7 days]

The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with the ‘&’ character.

For string type of filters, the only operator allowed is ‘='. You can also use the wild card character ‘*’.

For example, to list all jobs with a jobname that begins with ‘Job_0001’, use 'filtervalue jobname=Job_0001*.

Some filters allow only predefined constants. For example, status allows only running, d, paused, interrupted, or stalled. To match job status that is running, use 'filtervalue status=running'.

For number and date types, allowed operators are: =, >, >=, <, <=:

- `filtervalue=errorcode\>0`
- `filtervalue=errorcode\>0`
- `filtervalue=errorcode\>0`

Date parameters `startdate`, `enddate` and `expiration` can also use these operators. For example:

- `filtervalue=startdate\>2010-01-01 00:00:00`
- `filtervalue=startdate\>2010-01-01`
Example to get the YAML code details:

```yaml
udsinfO lsjobhistory Job_0011504
originatinguds 143086340917
constraintdetail
retrycount 0
sourcepoolname
originaljobclass snapshot
stlname logsmart
flags 2305843009482129424
hostid 0
sourcepoolid 0
startdate 2020-05-04 07:49:53.813
sourceuds 143086340917
jobtag
hostname 172.16.202.235
appname mysqld_3306
policyid 7320
isexpired false
beginpit
poolid 0
sourcecluster 143086340917
id 11519
jobname Job_0011504
errorcode 0
targetpoolname
sourceid Image_0010786,Image_0011007,Image_0011504,Image_0011506
queuedate 2020-05-04 07:49:52.983
apptype MYSQLInstance
lastconstraintdate 2020-05-04 07:49:52.983
jobclass mount
label
priority medium
message Success
immutabilitydate
targetuds 143086340917
enddate 2020-05-04 07:50:34.000
isscheduled false
depd
appid 7178
policyname Production to Snap 1
expiration 2100-01-01 00:00:00.000
constraintinfo
virtualsize 35437674496
GET https://{Actifio_API_Server}/actifio/api/info/lsjobhistoryconsistencydate 2020-05-04 06:44:07.000
status succeeded
transport NFS to guest
duration 00:00:40
Application size (GB) 30.000
Number of volumes 1
migratevm false

Yaml Details:
#Copy and paste the following volumeMounts declaration within your container definition
#Copy and paste the following volumes definition below your container definition
containers:
volumeMounts:
- name: vdp-mysqld-3306-logs
  mountPath: /vdp_mnt/7178_TransactionLog
```
- name: vdp-mysqld-3306-dev-mysqlvg-mysqllv
  mountPath: /vdp_mnt/dev/mysqlvg/mysqllv
volumes:
- name: vdp-mysqld-3306-logs
  nfs:
  server: 172.29.11.20
  path: /tmp/cmounds/act15885311137434_1588578615367_act_staging_vol_Job_0011504
- name: vdp-mysqld-3306-dev-mysqlvg-mysqllv
  nfs:
  server: 172.29.11.20
  path: /tmp/cmounds/act15885311137434_1588578615367_act_staging_vol_Job_0011504

HTTP Request
Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session id.

Response
Request Success

{ "result": [

,
]
Isjobhistory Request Details
Your lsjobhistory request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsjobhistory</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

Isjobhistory Example

**Request**
GET https://{Actifio_API_Server}/actifio/api/info/lsjobhistory
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**
Request Success
{
"result": [
{
"sourceid": "Image_0285950",
"originatinguds": "1415056619",
"retrycount": "0",
"date": "2017-10-15 02:04:04.627",
"flags": "16",
"sltname": "Tier-4 - Local Protection Only",
"jobclass": "cleanup",
"startdate": "2017-10-15 02:04:04.627",
"priority": "",
"sourceuds": "1415056619",
"targetuds": "1415056619",
"jobtag": "",
"hostname": "ctos6.4wp-13",
"targethost": "",
"enddate": "2017-10-15 02:04:15.374",
"appname": "/",
"appid": "198375",
"expiration": "2017-10-15 02:03:53.262",
"policyname": "Daily snap",
"id": "286048",
}]}
"jobname": "Job_0286047",
"consistencydate": "2017-10-15 02:04:04.627",
"status": "failed"
},
{
"sourceid": "Image_0316610",
"originatinguds": "1415056619",
"retrycount": "0",
"date": "2017-11-23 15:10:06.951",
"flags": "16",
"sltname": "Tier-4 - Local Protection Only",
"jobclass": "cleanup",
"startdate": "2017-11-23 15:10:06.951",
"priority": "",
"sourceuds": "1415056619",
"targetuds": "1415056619",
"jobtag": "",
"hostname": "ctos6.4wp-13",
"targethost": "",
"enddate": "2017-11-23 15:10:17.684",
"appname": "/",
"appid": "198375",
"expiration": "2017-11-23 15:09:55.520",
"policyname": "Daily snap",
&id": "317084",
"jobname": "Job_0317083",
"consistencydate": "2017-11-23 15:10:06.951",
"status": "failed"
}
"status": 0
}
About lsjobwarnings Command

Description
Use this command to retrieve details of warnings for jobs with a status of “succeeded with warnings”. If the image created by a job is removed, the list of warnings are no longer be available.

If a job has no warning, the command returns an empty list.

Rights
User with ‘administrator’ role can retrieve a list of job warnings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

lsjobwarnings Request Details

Your lsjobwarnings request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsjobwarnings</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

lsjobwarnings Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsjobwarnings
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": {
        "volumefile": "reason"```
{
  "status": 0
}
}
chjob

About chjob Command

Description
Use this command to change the attribute of a running job. Use lsjob to obtain the ID or name of the job.

Rights
You must have the 'System Manage', or 'Application Manage' or 'Host Manage' right to change the attribute of a job.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>changerequest</td>
<td>Optional. Specifies a change request for a job. For VDP appliances, the allowed value is cancel.</td>
</tr>
<tr>
<td>priority</td>
<td>Optional. Specifies the priority of a job.</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the job to be modified.</td>
</tr>
</tbody>
</table>

chjob Request Details

Your chjob request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chjob</td>
<td>name id</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chjob Examples

Request
POST https://{Actifio_API_Server}/actifio/api/task/chjob?argument=Job_0334654&changerequest=pause
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{


"status": 0
}

Schedule Commands

**setschedule**

*About setschedule Command on page 153*

*setschedule Request Details on page 153*

*setschedule Example on page 154*

**About setschedule Command**

**Description**

Use this command to change/create various administrative schedule for appliance maintenance.

**Rights**

You must have the 'System Manage' right to configure a schedule.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>day=integer</td>
<td>Optional. Specifies the day of the frequency, 0- based. For weekly frequency, 0 indicates Sunday, and 1 is Monday, etc. For monthly, 0 is first day of the month, and 1 is 2nd day of the month. This is ignored for SLA analysis.</td>
</tr>
<tr>
<td>frequency=string</td>
<td>Optional. Specifies the frequency of the schedule. This is ignored for SLA analysis.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the schedule.</td>
</tr>
<tr>
<td>op=string</td>
<td>Optional. Specifies operation for the schedule. Specifying now for the operation, results in the schedule being run immediately. This is ignored for SLA analysis.</td>
</tr>
<tr>
<td>repeatinterval=integer</td>
<td>Optional. Specifies the repeat interval of the schedule, default to 1, which means every week or every month, depending on the frequency. This is ignored for SLA analysis.</td>
</tr>
<tr>
<td>time=string</td>
<td>Optional. Specifies the time of the schedule.</td>
</tr>
</tbody>
</table>

**setschedule Request Details**

Your setschedule request must pass a valid session ID. For information on how to get a valid session ID, see *Authentication or Login on page 1.*

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/setschedule</td>
<td>name</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*
setschedule Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/setschedule?name=archive&frequency=monthly
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
getschedule

About getschedule Command

Description
Use this command to display a schedule.

Rights
You must have the 'System View' or 'System Manage' right to view the schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
</tr>
</tbody>
</table>

Required. Specifies the name of the schedule to display.

getschedule Request Details

Your getschedule request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getschedule</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

getschedule Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/getschedule?name=archive
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```
{  
    "result": {  
        "dataage": "12",  
        "measure": "weeks",  
        "filename": "archive",  
        "filepath": "/act/pg/archive",  
        "time": "02:00 AM",  
        "day": "0",  
        "frequency": "weekly",  
        "delim": ","  
    }  
}  
```
{"status": 0}
About setgcschedule Command

Description
Use this command to create, modify, or run a garbage collection schedule. There are four types of garbage collection tasks:

- **gc**: Performs full GC mark to mark unreferenced objects so the space can be reclaimed during the sweep phase.
- **sweep**: Performs a full GC sweep to reclaim space marked in the gc phase.
- **igc**: Incremental GC has been deprecated. Due to GC performance improvements, it is no longer needed.
- **isweep**: Incremental GC has been deprecated. It is no longer needed.

If a sweep schedule is not set up, a sweep is performed at the end of the corresponding gc phase.

Rights
You must have the 'System Manage' right to configure the garbage collection schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>day</strong>=integer</td>
<td>Optional. Specifies the day of the frequency. For weekly frequency, 0 indicates that the schedule should run on Sunday, 1 indicates Monday, and so on. For monthly frequency, 0 indicates that the schedule should run on the first day of a month, and 1 indicates the second day of the month, and so on.</td>
</tr>
<tr>
<td><strong>duration</strong>=min</td>
<td>Optional. Specifies the duration (in minutes), for the sweep or isweep phase. The phase runs as long as necessary if duration is not specified.</td>
</tr>
<tr>
<td><strong>frequency</strong>=string</td>
<td>Optional. Specifies the frequency of the schedule.</td>
</tr>
</tbody>
</table>
| **op**=string | Optional. Specifies whether the operation should run immediately or delete the schedule type.  
- now: runs scheduled operation right away, using saved options  
- delete: deletes specified schedule type, for VDP appliances gc cannot be deleted |
| **repeatinterval**=integer | Optional. Specifies the repeat interval of the schedule (default of 1), which means every week or every month depending on the schedule frequency. |
| **time**=string | Optional. Specifies the time of the schedule, in 24-hour format. |
| **type**=string | Required. Specifies the type of the GC schedule to be created or modified. |
setgcschedule Request Details

Your setgcschedule request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/setgcschedule</td>
<td>type</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

setgcschedule Example

**Request**

POST https://{Actifio_API_Server}/actifio/api/task/setgcschedule?type=gc&frequency=monthly

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "status": 0
}
```
About getgcschedule Command

Description
Use this command to display specific garbage collection schedules.

Rights
You must have the 'System View' or 'System Manage' right to view the garbage collection schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>string</td>
</tr>
</tbody>
</table>

getgcschedule Request Details

Your getgcschedule request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getgcschedule</td>
<td>type</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

getgcschedule Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/getgcschedule?type=gc
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": {
    "time": "01:00 AM",
    "day": "6",
    "repeatinterval": "4",
    "frequency": "weekly"
  },
  "status": 0
}
rmgcschedule

About rmgcschedule Command on page 160
rmgcschedule Request Details on page 160
rmgcschedule Example on page 160

About rmgcschedule Command

Description
Use this command to delete GC schedules. The following GC schedule types can be deleted:

- **sweep**: Performs a full GC sweep to reclaim space marked in the gc phase.
- **igc**: Incremental GC has been deprecated. Due to GC performance improvements, it is no longer needed.
- **isweep**: Incremental GC has been deprecated. It is no longer needed.

Rights
You must have the 'System Manage' right to delete a GC schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>type</strong> = string</td>
<td>Required. Specifies the type of GC schedule to delete.</td>
</tr>
</tbody>
</table>

rmgcschedule Request Details

Your rmgcschedule request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmgcschedule</td>
<td>type</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

rmgcschedule Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/rmgcschedule?type=sweep
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
   "status": 0
}

actifio
Cloud Commands
mkcloudcredential

About mkcloudcredential Command on page 161
mkcloudcredential Examples on page 162

About mkcloudcredential Command

Description
Use this command to create a new cloud credential.

Rights
You must have ‘System Manage’ right to create a cloud credential.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>credentialjson=string</td>
<td>Optional. Specifies the JSON text for the service account with the access credentials. This is applicable to GCP cloud.</td>
</tr>
<tr>
<td>endpoint=string</td>
<td>Optional, required for GCP. Specifies the endpoint for the GCP cloud credential.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies a friendly name that has been assigned.</td>
</tr>
<tr>
<td>clientid=string</td>
<td>Optional, required for Azure. Signifies the Client Id for the Azure cloud.</td>
</tr>
<tr>
<td>domain=string</td>
<td>Optional, required for Azure. Signifies the Domain or Tenant Id for the Azure cloud.</td>
</tr>
<tr>
<td>secretkey=string</td>
<td>Optional, required for Azure. Signifies the Secret Key for the Azure cloud.</td>
</tr>
<tr>
<td>subscriptionid=string</td>
<td>Optional, required for Azure. Signifies the Subscription Id for the Azure cloud.</td>
</tr>
<tr>
<td>privatekey=string</td>
<td>Optional, required for AWS. Signifies the Secret Key for the AWS cloud.</td>
</tr>
<tr>
<td>publickey=string</td>
<td>Optional, required for AWS. Signifies the Access Key for the AWS cloud.</td>
</tr>
<tr>
<td>region=string</td>
<td>Required. Signifies a location, which is completely isolated from each other.</td>
</tr>
</tbody>
</table>

mkcloudcredential Request Details
Your mkcloudcredential request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
Note: See the Parameters section for a list of supported parameters and their description.

mkcloudcredential Examples

Request

POST https://{Actifio_API_HOST}/actifio/api/task/mkcloudcredential&name=my-aws-creds&cloudtype=AWS&region=us-east-1&publickey=AKIAV7YCEC4VSGJNOU&privatekey=tMzht%2BISpHQZ1ZawnyUEQ%2Bbrk1WTzUuVmzLdYm

HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```json
{
  "result":1125848,
  "status":0
}
```
chcloudcredential

About chcloudcredential Command on page 163
chcloudcredential Request Details on page 163
chcloudcredential Examples on page 164

About chcloudcredential Command

Description
Use this command to change the attributes or properties of a cloud credential.

Rights
You must have ‘System Manage’ right to change a cloud credential.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>credentialjson=string</td>
<td>Optional. Specifies the JSON text for the service account with the access credentials. This is applicable to GCP cloud.</td>
</tr>
<tr>
<td>endpoint=string</td>
<td>Optional. Specifies the endpoint for the cloud credential.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies a friendly name that has been assigned.</td>
</tr>
<tr>
<td>clientid=string</td>
<td>Optional. Signifies the Client Id for the Azure cloud.</td>
</tr>
<tr>
<td>domain=string</td>
<td>Optional. Signifies the Domain or Tenant Id for the Azure cloud.</td>
</tr>
<tr>
<td>secretkey=string</td>
<td>Optional. Signifies the Secret Key for the Azure cloud.</td>
</tr>
<tr>
<td>subscriptionid=string</td>
<td>Optional. Signifies the Subscription Id for the Azure cloud.</td>
</tr>
<tr>
<td>privatekey=string</td>
<td>Optional. Signifies the Secret Key for the AWS cloud.</td>
</tr>
<tr>
<td>publickey=string</td>
<td>Optional. Signifies the Access Key for the AWS cloud.</td>
</tr>
<tr>
<td>region=string</td>
<td>Required. Signifies a location, which is completely isolated from each other.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the cloud credential data to be changed.</td>
</tr>
</tbody>
</table>

chcloudcredential Request Details

Your chcloudcredential request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### chcloudcredential Examples

**Request**

POST https://{Actifio_API_HOST}/actifio/api/task/chcloudcredential

private and public key for AWS

argument = ID or name of the cloud credential

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "xJob Completed",
    "status": 0
}
```
About lscloudcredential Command

Description

Use this command to retrieve details of cloud credentials. There are potentially multiple type of clouds that exist within the appliance, such as AWS, and GCP.

Rights

You must have ‘System View’ to list cloud credential.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>delim=string</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
</tbody>
</table>
| filtervalue=string | Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for the ‘udsinfo lscloudcredential’ command are:  
  • name  
  • cloudtype  
  • endpoint  
  • availabilityzone  
  The filter will be formed with an attribute and a value. When user specifies more than one filter, they must be combined with ‘&’ character (which needs to be escaped with ‘\’). For string type of filters, the only operator allowed is ‘=’. One can also use wildcard character ‘*’. For example, to match cloudcredentials with name begins with ‘foo’, use ‘-filtervalue name=foo*’. |
| nohdr=string | Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The -nohdr parameter suppresses the display of these headings.  
  Note: If there is no data to be displayed, headings are not displayed. |
| argument=string | Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the -filtervalue parameter is ignored. If you do not specify the object_id parameter, the concise view of all objects matching the filtering requirements are displayed. |
lscloudcredential Request Details

Your lscloudcredential request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lscloudcredential</td>
<td>none</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

lscloudcredential Examples

**Request**

GET https://{Actifio_API_HOST}/actifio/api/info/lscloudcredential

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
    "result": [
        {
            "cloudtype": "AWS",
            "id": "820632",
            "name": "qa-aws-cloudsnap",
            "region": "us-east-1"
        },
        {
            "cloudtype": "AWS",
            "id": "1125891",
            "name": ",",
            "region": "us-east-1"
        },
        {
            "cloudtype": "AWS",
            "id": "1125899",
            "name": ",",
            "region": "us-east-1"
        }
    ],
    "status": 0
}
```
rmcloudcredential

About rmcloudcredential Command on page 167
rmcloudcredential Request Details on page 167
rmcloudcredential Examples on page 167

About rmcloudcredential Command

Description
Use this command to delete a cloud credential.

Rights
You must have 'System Manage' right to delete a cloud credential.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>string</td>
</tr>
</tbody>
</table>

rmcloudcredential Request Details

Your rmcloudcredential request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmcloudcredential</td>
<td>argument = ID or name of the cloud credential</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmcloudcredential Examples

Request

POST https://{Actifio_API_HOST}/actifio/api/task/rmcloudcredential&argument=1125848

HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffffffd3

where 92929a8b-a413-476f-a624-5b575cffffffd3 is the session ID.

Response

Request success

```json
{
    "result": "xJob Completed",
    "status": 0
}
```
**testcredential**

About testcredential Command on page 168

testcredential Request Details on page 168

testcredential Examples on page 169

### About testcredential Command

**Description**

Use this command to test the cloud credential. This command tests the cloud credential by connecting to the respective cloud and returns the associated privileges.

**Rights**

You must have ‘System Manage’ right to test the cloud credential.

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Optional. Specifies a friendly name that has been assigned.</td>
</tr>
<tr>
<td>credentialjson=string</td>
<td>Optional. Specifies the JSON text for the service account with the access credentials. This is applicable to GCP cloud.</td>
</tr>
<tr>
<td>privatekey=string</td>
<td>Optional, required for AWS. Signifies the Secret Key for the AWS cloud.</td>
</tr>
<tr>
<td>publickey=string</td>
<td>Optional, required for AWS. Signifies the Access Key for the AWS cloud.</td>
</tr>
<tr>
<td>clientid=string</td>
<td>Optional, required for Azure. Signifies the Client Id for the Azure cloud.</td>
</tr>
<tr>
<td>domain=string</td>
<td>Optional, required for Azure. Signifies the Domain or Tenant Id for the Azure cloud.</td>
</tr>
<tr>
<td>secretkey=string</td>
<td>Optional, required for Azure. Signifies the Secret Key for the Azure cloud.</td>
</tr>
<tr>
<td>subscriptionid=string</td>
<td>Optional, required for Azure. Signifies the Subscription Id for the Azure cloud.</td>
</tr>
<tr>
<td>region=string</td>
<td>Required. Signifies a location, which is completely isolated from each other.</td>
</tr>
<tr>
<td>cloudcredential=string</td>
<td>Optional. Specifies the cloud credential to perform the test on, either ID or name is needed. Use ‘udsinfo lscloudcredential’ to locate the ID or name of the cloud credential.</td>
</tr>
</tbody>
</table>

### testcredential Request Details

Your testcredential request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
**Note:** See the Parameters section for a list of supported parameters and their description.

### testcredential Examples

#### Request

GET https://{Actifio_API_Server}/actifio/api/info/testcredential&cloudcredential=820632

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

#### Response

Request success

```
{
  "result": {
    "default-vpc": "vpc-07c096b9e9be14ec8",
    "max-elastic-ips": "5",
    "max-instances": "20",
    "supported-platforms": "VPC",
    "vpc-max-elastic-ips": "5",
    "vpc-max-security-groups-per-interface": "5"
  },
  "status": 0
}
```
**lsresourcehistory**

*About lsresourcehistory Command on page 170*  
*lsresourcehistory Request Details on page 171*  
*lsresourcehistory Examples on page 171*

**About lsresourcehistory Command**

**Description**  
Use this command to retrieve details of resource history. The lsresourcehistory command returns a concise list of resource history, or a detailed view of a resource history.

**Rights**  
You must have 'System View' to list resource history.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>delim</code>=string</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The <code>delim</code> parameter overrides this behavior. Valid input for the <code>delim</code> parameter is a one-byte character. If you enter <code>delim</code> on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
</tbody>
</table>

| `filtervalue`=string | Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for the 'udsinfo lsresourcehistory' command are:  
- `appid`  
- `poolid`  
- `issuedate`  
- `resourcetype`  
- `operation`  
- `uniqueuname`  
- `resourceclass`  
- `resourcedetailstr`  
- `jobname`  
- `imagename`  
- `magnitude`  
- `resourcedetailint`  

The filter will be formed with an attribute and a value. When user specifies more than one filter, they must be combined with `&` character (which needs to be escaped with `\`). For string type of filters, the only operator allowed is `=`. One can also use wildcard character `*`. For example, to match `cloudcredentials` with name begins with 'foo', use `-filtervalue name=foo*`. |
lsresourcehistory Request Details

Your lsresourcehistory request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>nohdr=string</td>
<td>Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The -nohdr parameter suppresses the display of these headings.</td>
</tr>
</tbody>
</table>

**Note:** If there is no data to be displayed, headings are not displayed.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the -filtervalue parameter is ignored. If you do not specify the object_id parameter, the concise view of all objects matching the filtering requirements are displayed.</td>
</tr>
</tbody>
</table>

Isresourcehistory Request Examples

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/lsresourcehistory

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{  
  "result": [  
    {  
      "id": "731829",  
      "imagename": "Image_0731827",  
      "issuedate": "2020-03-13 08:20:07.852",  
      "jobname": "Job_0731827",  
      "magnitude": "10737418240",  
      "operation": "create",  
      "resourceclass": ",",  
      "resourcedetailint": "0",  
      "resourcetype": "cloud-snapshot",  
      " uniquename": "snapshot-actifio-demo-2-971"  
    },  
    {  
      "id": "752110",  
      "imagename": "Image_0731827",  
      "issuedate": "2020-03-16 12:12:22.627",  
      "operation": "create",  
      "resourceclass": "",  
      "resourcedetailint": "0",  
      "resourcetype": "cloud-snapshot",  
      " uniquename": "snapshot-actifio-demo-2-971"  
    }  
  ]
```
"jobname": "Job_0752109",
"magnitude": "0",
"operation": "delete",
"resourceclass": "",
"resourcedetailint": "0",
"resourcetype": "cloud-snapshot",
"uniquename": "snapshot-actifio-demo-2-971"
},
{
"id": "861021",
"imagename": "Image_0861017",
"issuedate": "2020-04-22 19:00:06.078",
"jobname": "Job_0861017",
"magnitude": "10737418240",
"operation": "create",
"resourceclass": "",
"resourcedetailint": "0",
"resourcetype": "cloud-snapshot",
"uniquename": "snap-0fe8e1f8989680ef4"
}
],
"status": 0
}
About lscloudvm Command

Description
Use this command to discover all the instances, managed by a cloud credential on cloud provider.

Rights
You must have ‘System Manage’ right to perform the discovery.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>credential=string</td>
<td>Required. Specifies the cloud credential to perform the discovery on, either ID or name is needed. Use ‘udsinfo lscloudcredential’ to locate the ID or name of the cloud credential.</td>
</tr>
<tr>
<td>sortby=string</td>
<td>Optional. Signifies sorting order. The default is ASC.</td>
</tr>
<tr>
<td>sortkey=integer</td>
<td>Optional. Signifies the key that instance results to be sorted by. By default, they are sorted by instanceid.</td>
</tr>
</tbody>
</table>
| filtervalue=string | Optional. Specifies that you want your results to display any or all of the list of valid filter attributes. The valid filter attributes for the ‘udsinfo lscloudvm’ command are:  
  - instanceid  
  - vmname  
  - vmstate  
  - vmttype  
  - privateip  
  - publicip  
  For string type of filters, the only operator allowed is ‘='. Empty string can be also matched by using ‘-filtervalue name='. |
| operation=string | Optional. Signifies the operation that is performed between any filters. For example, ‘-operation AND’ would consider the intersection of filter results. The default is ‘-operation OR’ which performs the union of results. |
| modes=string | Optional. Specifies that the instance results to be filtered with Actifio mode. |
| region=string | Optional. Signifies a location, which is completely isolated from each other. |
| offset=integer | Optional. Signifies the offset to serve the instance results. Default: 0. |
| limit=integer | Optional. Signifies the max results that returns. Default: 10. |
lscloudvm Request Details

Your lscloudvm request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>delim=string</td>
<td>Optional. The delimiter to be used when displaying results.</td>
</tr>
<tr>
<td>nohdr=string</td>
<td>Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The nohdr parameter suppresses the display of these headings. Note: If there is no data to be displayed, headings are not displayed.</td>
</tr>
</tbody>
</table>

Iscloudvm Examples

Request

GET https://{Actifio_API_Server}/actifio/api/info/lscloudvm&cloudcredential=820632

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

{  
  "result": [
    
    "availabilityzone": "us-east-1b",
    "bootdisk": "/dev/xvda",
    "createdtimestamp": "1588709278000",
    "instanceid": "i-00c3f2d8ae2a43a99",
    "privateip": "10.7.0.249",
    "project": "null",
    "publicip": "",
    "securitygroups": "sg-03097571423af4b43",
    "serviceaccount": "null",
    "sourceimageid": "ami-0a887e401f7654935",
    "subnet": "subnet-09b963f73528625f2",
    "tag": "{Project=Cloud-Snapshots, actifio-role=managed-1415082932, contact=actifio, Name=mgm-aws-1}",
    "totalcount": "10",
    "vmname": "mgm-aws-1",
    "vmstate": "running",
    "vmttype": "t2.micro",
  
  ]

Note: See the Parameters section for a list of supported parameters and their description.
{"volume": "null",
"vpcname": "vpc-0f8e7dfdb6b05118e"
},
{
"availabilityzone": "us-east-1b",
"bootdisk": "/dev/sda1",
"createdtimestamp": "1590175919000",
"instanceid": "i-0ea77eab631caaf5c",
"privateip": "10.7.0.170",
"project": "null",
"publicip": "",
"securitygroups": "sg-03097571423af043",
"serviceaccount": "null",
"sourceimageid": "ami-0bbae8bd5a242ee8c",
"subnet": "subnet-09b963f7352862f2",
"tag": "{Project=Cloud-Snapshots, Owner=qa@actifio.com,
actifio-info=144612475251-job_0273769-image_0273769,
actifio-role=unmanaged-144612475251, Name=kt-aws-rh-1-mount}\}
,"totalcount": "10",
"vmname": "kt-aws-rh-1-mount",
"vmstate": "running",
"vmtype": "t1.micro",
"volume": "null",
"vpcname": "vpc-0f8e7dfdb6b05118e"
}
,"status": 0
}
About addssd Command

Description
Use this command to add SSD devices to the appliance.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>✓</td>
</tr>
</tbody>
</table>

You must have the ‘System Manage’ right to add SSD devices.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>component</td>
<td>Optional. Specifies the pool name or adhd (dedup) to add the SSD device(s) to the Sky appliance. If a component is not specified, the specified devices is designated as an SSD device, which is used for a virtual SSD device that cannot be automatically detected. For the CDS appliance, the SSD device is added to the dedup engine only.</td>
</tr>
<tr>
<td>argument</td>
<td>Required. For the Sky appliance, this is a comma (,) separated list of devices to be added. For the CDS appliance, only one device can be specified.</td>
</tr>
</tbody>
</table>

addssd Request Details

Your addssd request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/addssd</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
addssd Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/addssd?argument=pci-0000:03:00.0-scsi-0:0:3:0
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c0f54d3
where 92929a8b-a413-476f-a624-5b575c0f54d3 is the session ID.

Response
Request success
{
    "status": 0
}


About rmssd Command

Description
Use this command to remove SSD devices from the appliance.

Rights
You must have the 'System Manage' right to remove SSD devices.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. For the Sky appliance, this is a comma (,) separated list of devices to be removed. For the CDS appliance, only one device can be specified.</td>
<td>argument=string</td>
<td>argument=string</td>
</tr>
</tbody>
</table>

rmssd Request Details

Your rmssd request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmssd</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmssd Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/rmssd?argument=pci-0000:03:00.0-scsi-0:0:3:0
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success

```json
{
    "status": 0
}
```
**setarchiveconfig**

**About setarchiveconfig Command** on page 179

**setarchiveconfig Request Details** on page 179

**setarchiveconfig Example** on page 180

---

**About setarchiveconfig Command**

**Description**

Use this command to configure historical data archive attributes. The appliance archives historical data, job histories, and event (traps) data into archived files. This data that is archived is removed from the persistent storage. These archived files can then be downloaded (through UI) for future references.

**Rights**

You must have the 'System Manage' right to configure the archiving of historical data.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dataage=integer</td>
<td>Optional. Specifies the data age for job history and event data before they are archived. The default value is set to 12 (weeks). Data older than this age is archived to a file and removed from the appliance persistent data storage. Units for the age depends on the 'measure' value.</td>
</tr>
<tr>
<td>retention=integer</td>
<td>Optional. Specifies the retention age for archived job history and event data. The default value is set to 6 (weeks). Archives created older than this age are discarded. Units for the age depends on the 'measure' value.</td>
</tr>
<tr>
<td>measure=string</td>
<td>Optional. Specifies the period to store data before it is archived. The default value is weeks.</td>
</tr>
<tr>
<td>filepath=string</td>
<td>Optional. Specifies the file path to store the archive files. The default file path is /act/pg/archive</td>
</tr>
<tr>
<td>outputfile=string</td>
<td>Optional. Specifies the output file name to store the archived data in. The default name is 'archive'.</td>
</tr>
</tbody>
</table>

**setarchiveconfig Request Details**

Your `setarchiveconfig` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/setarchiveconfig</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.
setarchiveconfig Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/setarchiveconfig?dataage=24&retention=12&measure=weeks&filepath=/act/pg/archive&outputfile=archive
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
setparameter

About setparameter Command on page 181
setparameter Request Details on page 181
setparameter Example on page 181

About setparameter Command

Description
Use this command to set a new system parameter value for the VDP appliance. You can set the appliance system parameters listed under lsaudit on page 188. See Appendix D, List of Parameters Used With getparameter and setparameter for more information. Prior to changing any system parameters, please consult your customer support representative.

Rights
You must have the 'System Manage' right to set a new parameter value.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>param=string</td>
<td>Required. Specifies the name of the parameter to be set. Use getparameter to retrieve the name and range of values for the parameter. setparameter uses the parameters detailed in Appendix D, List of Parameters Used With getparameter and setparameter.</td>
</tr>
<tr>
<td>value=string</td>
<td>Required. Specifies the value of the parameter.</td>
</tr>
</tbody>
</table>

setparameter Request Details

Your setparameter request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/setparameter</td>
<td>param, value</td>
</tr>
<tr>
<td>PUT</td>
<td>/actifio/saml/idp/metadata</td>
<td>None</td>
</tr>
<tr>
<td>DELETE</td>
<td>/actifio/saml/idp/metadata</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

setparameter Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/setparameter?param=gcmintreshold&value=70
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe5d3
where 92929a8b-a413-476f-a624-5b575c4f5d3 is the session ID.

Response
Request success
{
   "status": 0
}

getparameter

About getparameter Command

Description

Use this command to display the appliance system parameters. These system parameters are detailed in Appendix D, List of Parameters Used With getparameter and setparameter.

*Note:* Prior to changing any system parameters, please consult your customer support representative.

Rights

You must have the 'System Manage' or 'System View' right to view the appliance parameters.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>param</strong>=string</td>
<td>Optional. Specifies the name of the parameter to retrieve the value. If you do not use this option, it displays all the appliance parameters with their values.</td>
</tr>
<tr>
<td><strong>type</strong>=backup</td>
<td>Optional. Specifies the type of system parameter.</td>
</tr>
<tr>
<td>dedup</td>
<td></td>
</tr>
<tr>
<td>psrv</td>
<td></td>
</tr>
<tr>
<td>udppm</td>
<td></td>
</tr>
</tbody>
</table>

getparameter Request Details

Your getparameter request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getparameter</td>
<td>None</td>
</tr>
<tr>
<td>GET</td>
<td>/actifio/saml/sp/metadata</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

getparameter Example

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/getparameter

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response

Request success

{
  "result": {
    "PreserveDedupsOfPriority": "low",
    "enableStreamsnap": "1",
    "firstBackupWholeVmddk": "1",
    "disable.TLSv1.0": "false",
    "enableindexing": "false",
    "wmnocbtdcompare": "1",
    "wmconsolidatedisks": "fail",
    "streamSnapDmNetAlertTime": "900",
    "http.concurrentsession.allow": "true",
    "reservedDedupslots": "3",
    "schedulerrددupperiodPercentage": "90",
    "checkpoolspace": "0",
    "default.ssh.session.timeout": "60",
    "removeduplicateevents": "false",
    "OracleChildLimit": "0",
    "auditchanges": "true",
    "sweepthreshold": "50",
    "onejobperhostoverride": "none",
    "ignoredtraps": "0",
    "datastoreutilizationpollfrequinmins": "15",
    "schedulerinterval": "10",
    "networkinterfacecheck": "none",
    "ldap.referral.support": "false",
    "streamSnapDConnectionTimeout": "60",
    "vmLowSplashWithCbt": "never",
    "enableExpiration": "1",
    "default.v3700.ssh.connect.timeout": "60",
    "apminshrinksizefornewestagingdsk": "34359738368",
    "rfcSsnappooloverallocationpercent": "20",
    "liveCloneRefreshCreateReference": "0",
    "daronrampslots": "0",
    "default.ssh.connect.timeout": "60",
    "truepathdefaultdriveletter": "1",
    "SQLServerChildLimit": "0",
    "maxVaultSlots": "4",
    "EnableMountToVirtualSqlCluster": "false",
    "snmp.community.string": "public",
    "GC_ZTR_PARALLEL_MAX_WORKERS": "-1",
    "reservedondemandslots": "3",
    "licensedcapacity": "1",
    "reservedsnapslots": "3",
    "reservedDedupslots": "3",
    "vmExistingsnapshotswarning": "0",
    "vmOriggenericbackupupdatetimechange": "1",
    "dontexpireDupsDuringGc": "0",
    "slaAnalysis.analysisType": "version1",
    "reservedStreamsnapslots": "2",
    "hostheartbeattimeoutinmins": "60",
    "vmDataTableFullwarnthreshold": "80",
    "vixDiskLibDebuglevel": "4",
    "changeratedb": "6",
    "enableSnapshots": "1",
    "expireRestorecount": "2500",
    "retriesonFailure": "3",
    "streamSnapDmillisertick": "1000",
    "vmtaskcompletiontimeout": "60"
  }
}
<table>
<thead>
<tr>
<th>Configuration Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>critical.events.exclude</td>
<td>&quot;10011,10013,10023,10025,10039&quot;</td>
</tr>
<tr>
<td>https.request.timeout</td>
<td>&quot;420000&quot;</td>
</tr>
<tr>
<td>limiteddupexpiration</td>
<td>&quot;2&quot;</td>
</tr>
<tr>
<td>preflight.default.timeout</td>
<td>&quot;5&quot;</td>
</tr>
<tr>
<td>GC_ZTR_PARALLEL_ACTIVE_WORKERS</td>
<td>&quot;-1&quot;</td>
</tr>
<tr>
<td>streamsnapreconnectdelay</td>
<td>&quot;100&quot;</td>
</tr>
<tr>
<td>maxesxscans</td>
<td>&quot;10&quot;</td>
</tr>
<tr>
<td>secureconnect.proxy_server</td>
<td>&quot;false&quot;</td>
</tr>
<tr>
<td>https.socket.timeout</td>
<td>&quot;420000&quot;</td>
</tr>
<tr>
<td>streamsnapdmaxxportconnections</td>
<td>&quot;50&quot;</td>
</tr>
<tr>
<td>firewall.icmp.redirect.drop.threshold</td>
<td>&quot;5000&quot;</td>
</tr>
<tr>
<td>dontfullingestedupsduringgc</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>auditage</td>
<td>&quot;90&quot;</td>
</tr>
<tr>
<td>maxiscssessionspertarget</td>
<td>&quot;15&quot;</td>
</tr>
<tr>
<td>snmptablesize</td>
<td>&quot;500&quot;</td>
</tr>
<tr>
<td>streamsnapdmaxserverconnections</td>
<td>&quot;320&quot;</td>
</tr>
<tr>
<td>streamsnapdmaxsslconnections</td>
<td>&quot;160&quot;</td>
</tr>
<tr>
<td>deduprehydratedimageexpirationinhours</td>
<td>&quot;24&quot;</td>
</tr>
<tr>
<td>netapp.enable</td>
<td>&quot;0&quot;</td>
</tr>
<tr>
<td>websvcr.TLS.protocols</td>
<td>&quot;TLSv1,TLSv1.1,TLSv1.2&quot;</td>
</tr>
<tr>
<td>secureconnect.server</td>
<td>&quot;secureconnect2.actifio.com&quot;</td>
</tr>
<tr>
<td>delegatingpoolstatecachetimeout</td>
<td>&quot;5&quot;</td>
</tr>
<tr>
<td>session-timeout-minutes</td>
<td>&quot;60&quot;</td>
</tr>
<tr>
<td>ExpirerEventLogFrequency</td>
<td>&quot;86400&quot;</td>
</tr>
<tr>
<td>maxvmrmtreeftime</td>
<td>&quot;6000&quot;</td>
</tr>
<tr>
<td>readyvmtargetlowspash</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>systemcontact</td>
<td>&quot;false&quot;</td>
</tr>
<tr>
<td>retrydecay</td>
<td>&quot;400&quot;</td>
</tr>
<tr>
<td>scheduleroptimizations</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>template.agm.lock</td>
<td>&quot;true&quot;</td>
</tr>
<tr>
<td>enableremotededups</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>enablerereplicationscripts</td>
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</tr>
<tr>
<td>streamsnapdmaxwindowsize</td>
<td>&quot;64&quot;</td>
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<tr>
<td>streamsnapdmaxrampslots</td>
<td>&quot;0&quot;</td>
</tr>
<tr>
<td>preservelastimage</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>slaAnalysis.notificationtype</td>
<td>&quot;warning&quot;</td>
</tr>
<tr>
<td>systemlocation</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>expirerretryretrylocked</td>
<td>&quot;60&quot;</td>
</tr>
<tr>
<td>maxvmrmtreeftimecount</td>
<td>&quot;10&quot;</td>
</tr>
<tr>
<td>vmlowspashwithcbthreshold</td>
<td>&quot;50&quot;</td>
</tr>
<tr>
<td>ldeduprampslots</td>
<td>&quot;2&quot;</td>
</tr>
<tr>
<td>genericappfalloffconnectorerror</td>
<td>&quot;false&quot;</td>
</tr>
<tr>
<td>maxrdedupslots</td>
<td>&quot;6&quot;</td>
</tr>
<tr>
<td>disablebvdmbackups</td>
<td>&quot;false&quot;</td>
</tr>
<tr>
<td>hourlystateexpirationindays</td>
<td>&quot;14&quot;</td>
</tr>
<tr>
<td>ChildLimit</td>
<td>&quot;5&quot;</td>
</tr>
<tr>
<td>prefernbdsssl</td>
<td>&quot;false&quot;</td>
</tr>
<tr>
<td>reservedvaultslots</td>
<td>&quot;4&quot;</td>
</tr>
<tr>
<td>vmfilestreshold</td>
<td>&quot;32&quot;</td>
</tr>
<tr>
<td>default.v3700.ssh.session.timeout</td>
<td>&quot;60&quot;</td>
</tr>
<tr>
<td>expirerjobspercycle</td>
<td>&quot;10&quot;</td>
</tr>
<tr>
<td>copywarninglimit</td>
<td>&quot;14&quot;</td>
</tr>
<tr>
<td>enabledupasynclimit</td>
<td>&quot;1&quot;</td>
</tr>
<tr>
<td>maxondemandslots</td>
<td>&quot;6&quot;</td>
</tr>
<tr>
<td>dosnapshotonreplicationfailure</td>
<td>&quot;true&quot;</td>
</tr>
<tr>
<td>streamsnapdheartbeattimeout</td>
<td>&quot;60&quot;</td>
</tr>
<tr>
<td>PreserveSnapsOfPriority</td>
<td>&quot;low&quot;</td>
</tr>
<tr>
<td>enabledlocaldedups</td>
<td>&quot;1&quot;</td>
</tr>
</tbody>
</table>

---

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"scriptexecutetimeout": "60",
"EnableGenericLVM": "false",
"rdeduponrampslots": "2",
"vmdatasetstorefullcriticalthreshold": "95",
"maxexpireslots": "10",
"DBAuthentication": "false",
"maptoallnodesincluster": "1",
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"maxdarslots": "3",
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"autoconfigsanports": "1",
"enableesxmount": "false",
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"maxconcurrentvaultsubjobs": "12",
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"retrydelay": "240",
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"schedulerldedupperiodpercentage": "90",
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"streamnapprogressupdateinterval": "5",
"enablecompressedreplication": "1",
"reservedlogreplicateslots": "2",
"maxlogreplicateslots": "6",
"missed.cluster.ping.threshold": "-1",
"maxldedupslots": "8",
"streamnapmaxmemorysize": "4",
"GC_ZTR_PARALLEL_HI_PRIO": "10",
"maxconnectorupgradetimeout": "10",
"nasserversnapexpirationindays": "3",
"expirerrefailure": "3600",
"delegatingpoolstatecachesize": "30",
"expirerreloadinterval": "900",
"backupjobsperhost": "1",
"authentication.method": "database",
"ignore.schedule.off.violation": "0",
"bdd.ip.test.timeout": "30",
"zpoolcompression": "on",
"enablevaults": "1",
"schedulerjobspercycle": "4",
"changeratenondb": "3",
"operatingwindowintonextday": "1",
"maxsnapslots": "6",
"remotepsvrequesttimeout": "5",
"slaAnalysis.enable": "true",
"maptoallesxincluster": "1",
"streamnapnetworkretrytime": "5",
"streamnapnoss": "0",
"maxoutofbandappsize": "14073748835328",
"minlaststagingdisksize": "274877906944",
"secureconnect.proxy_port": "0",
"reservedexpiryslots": "3",
"secureconnect.port": "1194",
"maxldapresults": "500000",
"ldap.user.autocreate": "false",
"unreservedslots": "12",
"maxstreamsnapslots": "6"
"critical.events.include": "9052,999999999,45005",
"stagingdiskgranularity": "1099511627776",
"createmultiplestagingdisks": "1 [0..1]",
"enablenasserversnapexpiration": "1",
"enablestreamingreplication": "1",
"expirerinterval": "5 [1..120]",
"streamsnapdmaxreservedconnections": "10 [5..256]",
"sla.tolerance": "0",
"enablescheduler": "1",
"gcminthreshold": "65 [1..100]",
"scriptinittimeout": "300 [1..600]"
},
"status": 0
}
Isaudit

About Isaudit Command on page 188
Isaudit Request Details on page 189
Isaudit Example on page 189

About Isaudit Command

Description
Use this command to retrieve a concise list of system audit trail data, or a detailed view of a system audit trail data.

Rights
You must have ‘System Manage’, or ‘System View’ rights to be able to retrieve audit trail data.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for Isaudit are:  
  - command  
  - component  
  - ipaddress  
  - issuedate [usage: ‘issuedate since 24 hours’ for audited logs since last 24 hours, ‘issuedate before 7 days’ for audited logs older than 7 days]  
  - status  
  - username  
  
The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with ‘&’ character. For string type of filters, the only operator allowed is ‘=’. You can also use the wildcard character ‘*’. For example, to match disk pools with name begins with ‘foo’, use ‘filtervalue name=foo*’. For numbers and date types, allowed operators are: =, >, >=, <, <=. For example:  
  - filtervalue=status>0  
  - filtervalue=status>0  
  - filtervalue=status>0  
  
  Date parameter issuedate can also use these operators, for example,  
  - filtervalue=issuedate>2010-09-28  
  - filtervalue=issuedate>2010-09-28 6:50:00 |
| argument=string | Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |
Isaudit Request Details

Your lsaudit request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsaudit</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isaudit Example

Request

GET https://{Actifio_API_Server}/actifio/api/info/lsaudit
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c9f54d3

where 92929a8b-a413-476f-a624-5b575c9f54d3 is the session ID.

Response

Request success

{  "result": [  {   "privileged": "false",   "proxy": ",   "ipaddress": "1xx.xxx.xxx.xxx",   "component": "udstask",   "id": "284610",   "issuedate": "2017-10-13 04:34:09.046",   "command": "debug sy",   "username": "admin",   "status": "0"  },  {   "privileged": "false",   "proxy": ",   "ipaddress": "1xx.xxx.xxx.xxx",   "component": "udsinfo",   "id": "284611",   "issuedate": "2017-10-13 04:34:09.061",   "command": "getsysteminfo",   "username": "admin",   "status": "0"  },  {   "privileged": "false",   "proxy": ",   "ipaddress": "1xx.xxx.xxx.xxx",   "component": "udsinfo",   "id": "354263",   "issuedate": "2017-12-31 22:34:09.130",   "command": "lsversion",   "username": "admin",   "status": "0"  }  ]}
{
    "privilege": "false",
    "proxy": "",
    "ipaddress": "1xx.xxx.xxx.xxx",
    "component": "udsinfo",
    "id": "354264",
    "issuedate": "2017-12-31 22:34:19.904",
    "command": "lsjobhistory -filtervalue jobhistory since 12 hours&status=failed",
    "username": "admin",
    "status": "0"
}
"status": 0
}
**Ismetricstat**

*About Ismetricstat Command* on page 191  
*Ismetricstat Request Details* on page 193  
*Ismetricstat Example* on page 193

**About Ismetricstat Command**

**Description**

Use this command to retrieve a concise list of stats, or a detailed view of stats that are collected for each application or for a group of resources.

**Applicability of this Command**

This command can be used on:

- **CDS appliance**: ✓
- **Sky appliance**: ✓
- **NAS Director**: ✓

**Rights**

You must have 'System Manage', or 'System View' rights to be able to view details of metric statistics.
### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for lsmetricstat are:</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>• appname</td>
</tr>
<tr>
<td></td>
<td>• hostid</td>
</tr>
<tr>
<td></td>
<td>• hostname</td>
</tr>
<tr>
<td></td>
<td>• jobclass</td>
</tr>
<tr>
<td></td>
<td>• stattype</td>
</tr>
<tr>
<td></td>
<td>• clusterid</td>
</tr>
<tr>
<td></td>
<td>• poolid</td>
</tr>
<tr>
<td></td>
<td>• poolname</td>
</tr>
<tr>
<td></td>
<td>• jobname</td>
</tr>
<tr>
<td></td>
<td>• metricname</td>
</tr>
<tr>
<td></td>
<td>• status</td>
</tr>
<tr>
<td></td>
<td>• starttime</td>
</tr>
<tr>
<td></td>
<td>• endtime</td>
</tr>
<tr>
<td></td>
<td>• stattime</td>
</tr>
<tr>
<td></td>
<td>• grouptype</td>
</tr>
<tr>
<td></td>
<td>The filter will be formed with an attribute and a value. When user specifies more than one filter, they must be combined with <code>&amp;</code> character.</td>
</tr>
<tr>
<td></td>
<td>For string type of filters, the only operator allowed is <code>=</code>. One can also use wildcard character <code>*</code>. For example, to match metric stats with jobname begins with <code>Job_0001</code>, use <code>filtervalue jobname=Job_0001*</code>.</td>
</tr>
<tr>
<td></td>
<td>Some filters allow only predefined constants. For example, stattype allows only Daily or Hourly stats, to match metrics with stattype <code>Daily</code> use <code>filtervalue stattype=Daily</code>.</td>
</tr>
<tr>
<td></td>
<td>For number and date types, allowed operators are: <code>=, &gt;, &gt;=, &lt;, &lt;=</code>. Use URL-encoded values for these operators. For example: <code>filtervalue=appid%3E0</code></td>
</tr>
<tr>
<td></td>
<td>Date parameters startdate, enddate and expiration can also use these operators, for example,</td>
</tr>
<tr>
<td></td>
<td>• <code>filtervalue=starttime%3E2010-01-01+00:00:00</code></td>
</tr>
<tr>
<td></td>
<td>• <code>filtervalue=starttime%3E2010-01-0</code></td>
</tr>
<tr>
<td>argument</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the filtervalue parameter is ignored.</td>
</tr>
<tr>
<td></td>
<td>If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>
### ls metricstat Request Details

Your ls metricstat request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/ls metricstat</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

### ls metricstat Example

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/ls metricstat

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffi54d3

where 92929a8b-a413-476f-a624-5b575cffi54d3 is the session ID.

**Response**

Request success

```
{

"result": [

{

"poolname": "act_per_pool000",
"apptype": "",
"hostid": "164687",
"endtime": "2017-11-12 03:00:00.091",
"clusterid": "0",
"jobclass": "unknown",
"starttime": "2017-11-11 03:00:00.091",
"metricvalue": "4",
"hostname": "ctos6.4wp-13",
"grouptype": "application",
"appname": "CTOS6.4WP-13",
"appid": "164689",
"stattype": "Daily",
"poolid": "73",
"stattime": "2017-11-12 03:00:00.098",
"id": "308105",
"metricname": "vdiskcount",
"jobname": "",
"valueunit": "Number"
},

{

"poolname": "",
"apptype": "",
"hostid": "0",
"endtime": "2018-01-11 03:00:00.097",
"clusterid": "1415056619",
"jobclass": "unknown",
"starttime": "2018-01-10 03:00:00.097",
"metricvalue": "4824566988",
"hostname": "",
"grouptype": "clusterid",
"appname": "",
```

"appid": "0",
"stattrtype": "Daily",
"poolid": "0",
"stattrtime": "2018-01-11 03:00:00.116",
"id": "364185",
"metricname": "totalused",
"jobname": "",
"valueunit": "Bytes"
}
],
"status": 0
}
runpreflight

About runpreflight Command on page 195
runpreflight Request Details on page 195
runpreflight Example on page 195

About runpreflight Command

Description
Use this command to run preflight to look for updates that are available for installation on the appliance. This command also checks if the system is in a good state to apply the available update.

Rights
User must have 'administrator' role and privileges.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>string</td>
</tr>
</tbody>
</table>

runpreflight Request Details

Your runpreflight request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/runpreflight</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

runpreflight Example

Request

POST https://{Actifio_API_Server}/actifio/api/task/runpreflight?runpreflight?name=patch-SKY8.0.0.100

HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfcf54d3

where 92929a8b-a413-476f-a624-5b575cfcf54d3 is the session ID.

Response

Request success

{ "result": "Preflight check for update patch-SKY8.0.0.1578 type patch completed successfully with warnings.\nWARNING: One or more other type of images are mounted. Please contact Actifio support.\nINFO: Dedup is actively running with version: 7.1.8.811\nINFO: Running Actifio Preflight check version: 1.0\nINFO: Appliance configuration has expiration enabled (1).\nINFO: Appliance configuration has scheduler enabled (1).\nINFO: / has..." }
enough space for upgrade: available: 4666 MB free: 51%.
INFO: /var has enough space for upgrade: available: 1749 MB free: 91%.
INFO: /var/log has enough space for upgrade: available: 1810 MB free: 94%.
INFO: /tmp has enough space for upgrade: available: 3690 MB free: 96%.
INFO: /dumps has enough space for upgrade: available: 286517 MB free: 99%.
INFO: /home has enough space for upgrade: available: 1847 MB free: 96%.
INFO: /act has enough space for upgrade: available: 4666 MB free: 51%.
INFO: /act/pg has enough space for upgrade: available: 91144 MB free: 95%.
INFO: No active running jobs.
INFO: No mount job or restore job is currently in progress.
INFO: No backup job is currently in progress.
INFO: No ESX server with version 6.0.0 require upgrade.
INFO: Permissions on 1 VCenter hosts are ok.
INFO: There are no appaware SQL clustered images active or mounted.
INFO: There are no appaware SQL images active or mounted.
INFO: There are no appaware Oracle images active or mounted.
INFO: There are no VMware or Hyper-V images active or mounted.
INFO: Actifio preflight check completed successfully.

"status": 0
}
}
**Issystemdetail**

*About Issystemdetail Command on page 197*

*Issystemdetail Request Details on page 197*

*Issystemdetail Example on page 198*

**About Issystemdetail Command**

**Description**

Issystemdetail returns the system properties information used in the systemprops argument of mountimage when doing a systemstate recovery in a cloud. For more information, refer [mountimage](#).

**Rights**

User must have 'administrator' role and privileges.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>clouptype=string</td>
<td>Required. To get the parameters needed for systemstate recovery in the required cloud.</td>
</tr>
<tr>
<td>image=string</td>
<td>Optional. Based on the imagename/id, get the sourceimage default values like cpu, memory and ostype, and show them under default header of display.</td>
</tr>
<tr>
<td>structure=string</td>
<td>Optional. To fetch the subproperties of a structure.</td>
</tr>
<tr>
<td>subselect=string</td>
<td>Optional. Name for the subselect type. This property is related to the selectvalue property. For a selectvalue, return the properties for the subselect.</td>
</tr>
</tbody>
</table>

*Note:* subselect property is related to the selectvalue property. For a selected value, there would be a subselect list. If the output contains a value for the subselect property, it indicates that one more call is needed to fetch the subselect list for the selected value.

| selectvalue=string | Optional. Value to be used for the subselect.                                |

**Issystemdetail Request Details**

Your Issystemdetail request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login on page 1](#).

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/1ssystemdetail</td>
<td>clouptype</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.
**Issystemdetail Example**

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/issystemdetail?cloudtype=AWS

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{  
  "result": [  
    {  
      "default": "",  
      "min": "",  
      "selection": "",  
      "name": "CPU",  
      "description": "Number of CPU",  
      "type": "number",  
      "value": "",  
      "required": "",  
      "multi": ""  
    },  
    {  
      "default": "",  
      "min": "",  
      "selection": "",  
      "name": "Memory",  
      "description": "Memory in GB",  
      "type": "number",  
      "value": "",  
      "required": "",  
      "multi": ""  
    },  
    {  
      "default": "",  
      "min": "",  
      "selection": "",  
      "name": "OSType",  
      "description": "OS Type",  
      "type": "string",  
      "value": "",  
      "required": "",  
      "multi": ""  
    },  
    {  
      "default": "AWS",  
      "min": "",  
      "selection": "true",  
      "name": "CloudType",  
      "description": "Cloud type",  
      "type": "string",  
      "value": "AWS,VMware",  
      "required": "true",  
      "multi": ""  
    }  
  ]
}
```
"selection": "",
"name": "AccessKeyID",
"description": "Access Key ID",
"type": "string",
"value": "",
"required": "true",
"multi": ""
},
{
  "default": "",
  "min": "",
  "selection": "",
  "name": "SecretKey",
  "description": "Secret Access Key",
  "type": "string",
  "value": "",
  "required": "true",
  "multi": ""
},
{
  "default": "",
  "min": "",
  "selection": "",
  "name": "NICInfo",
  "description": "Amazon NIC Details",
  "type": "structure",
  "value": "",
  "required": "true",
  "multi": "true"
},
{
  "default": "",
  "min": "",
  "selection": "",
  "name": "BootDiskSize",
  "description": "Boot Disk Size in GB",
  "type": "number",
  "value": "",
  "required": "",
  "multi": ""
}]
"status": 0
**Issystemimages**

*About Issystemimages Command on page 200*  
*Issystemimages Request Details on page 200*  
*Issystemimages Example on page 201*

**About Issystemimages Command**

**Description**

Use this command to retrieve the images required for SystemstateRecovery. The Issystemimages command returns the default source image value for performing the systemstate recovery in a cloud.

**Rights**

You must have ‘System View’ right to retrieve the images required for SystemstateRecovery.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>cloudtype</code> = string</td>
<td>Required. Target cloud type to get the parameters needed for systemstaterecovery, such as AWS, GCP, AZURE.</td>
</tr>
<tr>
<td><code>delim</code> = string</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The <code>-delim</code> parameter overrides this behavior. Valid input for the <code>-delim</code> parameter is a one-byte character. If you enter <code>-delim:</code> on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur.</td>
</tr>
</tbody>
</table>
| `nohdr` = string | Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The `-nohdr` parameter suppresses the display of these headings.  
**Note:** If there is no data to be displayed, headings are not displayed. |

**Issystemimages Request Details**

Your Issystemimages request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login on page 1](#).

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/issystemimages</td>
<td><code>cloudtype</code></td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.
**Issystemimages Example**

**Request**
GET https://{Actifio_API_Server}//api/info/issystemimages&cloudtype=aws
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**
Request success

```json
{  
  "result": [
    {
      "image": "ami-03dffc617ae0522d",
      "ostype": "windows",
      "region": "us-east-1"
    },
    {
      "image": "ami-029da94da5ed8f4e8",
      "ostype": "windows",
      "region": "us-east-2"
    },
    {
      "image": "ami-0f0d0acde273338f",
      "ostype": "windows",
      "region": "ap-southeast-1"
    },
    {
      "image": "ami-069a048c49c695924",
      "ostype": "linux",
      "region": "ap-northeast-2"
    }
  ],
  "status": 0
}
```
Disk Commands
mkdiskpool

About mkdiskpool Command

Description
Use this command to create a new disk pool object.

Rights
You must have the 'Storage Manage' right to create a new disk pool.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>array=string</td>
<td>Optional. Specifies the external array where the pool storage is from.</td>
</tr>
<tr>
<td>cloudcredential=string</td>
<td>Optional. Specifies the ID or name of the cloud credential.</td>
</tr>
<tr>
<td>ext=integer</td>
<td>Optional. Specifies the size of the extents for this disk pool in MB. The extent_size parameter must be one of the following values: 16, 32, 64, 128, 256, 512, 1024, or 2048 (MB). If not specified, the default size of 512 MB is used.</td>
</tr>
<tr>
<td>mdisk=string</td>
<td>Optional. Specifies a colon-separated list of managed disks to add to the disk pool. The mdisks added to the performance pool should be named as 'act_per_mdknnnn', where nnnn is a 4-digit number. Similarly, the mdisks added to the primary pool should be named as 'act_pri_mdknnnn', where nnnn is a 4-digit number. Their mdisk name will be renamed if they do not follow this convention. Once added to the pool, they cannot be removed from the pool. Note: To change the name of a managed disk, use usvctask chmdisk ~name new_name old_name. Use the usvctask addmdisk command to add mdisks to a diskpool.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies the name for the disk pool.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization to which the disk pool should be added. To use this option you must have the 'System Manage' right.</td>
</tr>
</tbody>
</table>
mkdiskpool Request Details

Your mkdiskpool request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>properties=string</td>
<td>Optional. Specifies properties for vault type of pools, comma (,) separated name value pair. Use lsvaulttype to view a list of available properties for a specific type of vault pool. For example, &quot;properties &quot;bucket=mybucket,accessId=myid&quot;. Special characters ‘;’ and ‘=' must be escaped, by repeating the same character. For (‘xx=x’) -properties &quot;bucket=mybucket,accessKey=xx,,==x&quot;.</td>
</tr>
<tr>
<td>safepct=string</td>
<td>Optional. Specifies the safe percentage for the disk pool. When the disk usage exceeds this value, some operations are turned off and attention is required, such as adding more storage to the pool or expiring some backup images. The value should be between 10 and 99%.</td>
</tr>
<tr>
<td>type=string</td>
<td>Required. Specifies the type of pool (performance/primary/vault) to create. Pool of ‘performance’ type is used for snapshot backup images, and ‘ext_snapshot’ is for pool on external arrays.</td>
</tr>
<tr>
<td>warnpct=string</td>
<td>Optional. Specifies the warning percentage for the disk pool. The value must be between 10 and 99. The value of warnpct should be equal to or less than that of safepct. When the disk usage exceeds this percentage, a warning event is raised. For a dedup disk pool, the warnpct cannot be more than 75%.</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

mkdiskpool Example

**Request**

POST https://[Actifio_API_Server]/actifio/api/task/mkdiskpool?name=mktpool&warnpct=70&type=perf&mdisk=mdisk3

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

{...}
"result": "328581",
"status": 0
}
**Isdiskpool**

*About Isdiskpool Command* on page 205

Isdiskpool Request Details on page 206

Isdiskpool Example on page 206

**About Isdiskpool Command**

**Description**

Use this command to retrieve the details of disk pools. vDisks reside in a disk pool. VDP maintains three reserved diskpools: ‘act_per_pool000’ to store the snapshot backup images, ‘act_ded_pool000’ to store the dedup images, and ‘act_pri_pool000’ to store some internal metadata as well as the cloned images.

Each diskpool maintains two thresholds, warnpct and safepct. When the diskpool usage exceeds warnpct, more storage can be added, or some obsolete backup images can be expired. When the usage exceeds the safepct, relevant backup schedule is turned off immediately. For example, when the safepct of act_ded_pool000 is exceeded, dedup schedule is turned off. No more dedup is allowed, until the usage drops below the safepct.

For act_ded_pool000, perform a garbage collection to reclaim space in the dedup diskpool with setschedule -name gc -op now. Note that warnpct should be less than safepct for each diskpool. For ‘act_ded_pool000’, safepct cannot be more than 75%.

Each OnVault diskpool has an unique id generated, using pool credentials and cloud type to uniquely identify an OnVault diskpool. This unique id, udsuid, is reserved for other pool types.

**Rights**

You must have ‘Storage View’, ‘Storage Manage’, ‘SLA View’, ‘SLA Assign’, or ‘SLA Manage’ rights to be able to retrieve disk-pool data.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-delim delimiter</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
</tbody>
</table>
lsdiskpool Request Details

Your lsdiskpool request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for lsdiskpool are:  
  - name  
  - safepct  
  - warnpct  
  - udsuid  
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with ‘&’ character.  
  For string type of filters, the only operator allowed is ‘=’. You can also use wild card character ‘*’. For example, to match disk pools with name begins with ‘foo’, use ‘filtervalue name=foo*’.  
  For number types, allowed operators are: =, >, >=, <, <=. Use the URL-encoded value of these operators.  
  For example:  
  - filtervalue warnpct>=80  
  - filtervalue "warnpct>=80"  
  - filtervalue `warnpct>=80`  
  - filtervalue=warnpct%3E%3D80 |
| -nohdr | Optional. By default, headings are displayed for each column of data in the concise view, and for each item of data in the detailed view. The -nohdr parameter suppresses the display of headings. If there is no data to display, headings are not displayed. |
| argument=string | Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

Isdiskpool Request Details

Your lsdiskpool request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsdiskpool</td>
<td>None</td>
</tr>
</tbody>
</table>

Isdiskpool Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsdiskpool  
HTTP Request Header  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3  
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{  "result": [
    {  "id": "71",
        "mdiskgrp": "act_pri_pool000",
        "modifydate": "2018-01-09 10:08:39.056",
        "name": "act_pri_pool000",
        "pooltype": "primary",
        "safepct": "90",
        "warnpct": "80"
    },
    {  "id": "72",
        "mdiskgrp": "act_ded_pool000",
        "modifydate": "2018-01-09 10:08:39.056",
        "name": "act_ded_pool000",
        "pooltype": "dedup",
        "safepct": "100",
        "warnpct": "88"
    },
    {  "id": "73",
        "mdiskgrp": "act_per_pool000",
        "modifydate": "2018-01-09 10:08:39.056",
        "name": "act_per_pool000",
        "pooltype": "perf",
        "safepct": "90",
        "warnpct": "80"
    },
    {  "id": "328581",
        "mdiskgrp": "act_per_pool001",
        "name": "jitapool1",
        "pooltype": "perf",
        "safepct": "90",
        "warnpct": "80"
    }
],
  "status": 0
}
Isvaulttype

About Isvaulttype Command on page 208
Isvaulttype Request Details on page 208
Isvaulttype Example on page 208

About Isvaulttype Command

Description
Use this command to provide a list of available OnVault types or provide details of parameters required to specify a OnVault, when a OnVault type name is specified.

Rights
You must have ‘System View’, ‘System Manage’, ‘Storage View’, or ‘Storage Manage’ rights to view OnVault type information.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Optional. The OnVault type name (Google, Amazon, and so on).</td>
</tr>
</tbody>
</table>

Isvaulttype Request Details

Your Isvaulttype request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsvaulttype</td>
<td>None</td>
</tr>
</tbody>
</table>

Isvaulttype Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsvaulttype
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c9f54d3

where 92929a8b-a413-476f-a624-5b575c9f54d3 is the session ID.

Response
Request success

"result": [  
  {  
    "label": "Cloud - Amazon S3 Standard",
    "name": "Amazon"
  },  
  {  
    "label": "Cloud - Amazon S3 Standard - IA (Infrequent Access)",
    "name": "AmazonS3IA"
  },  
  {  
    "label": "Cloud - Google Nearline Storage",
    "name": "GoogleNearlineStorage"
  }]}
"name": "Google",
},
{
  "label": "Cloud - Microsoft Azure",
  "name": "Microsoft"
},
{
  "label": "Self Managed - IBM Cloud Object Storage (Cleversafe)",
  "name": "Cleversafe"
},
{
  "label": "Self Managed - Other Amazon S3 compatible object storage",
  "name": "S3compatible"
},
"status": 0
}
lsvaultstat

About lsvaultstat Command

Description
Use this command to provide a list of vault pool stats for each application and pool.

Rights
You must have ‘System View’, ‘System Manage’ rights to retrieve lsvaultstat data.

lsvaultstat Request Details

Your lsvaultstat request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsvaultstat</td>
<td>None</td>
</tr>
</tbody>
</table>

lsvaultstat Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsvaultstat
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "label": "Cloud - Amazon S3 Standard",
      "name": "Amazon"
    },
    {
      "label": "Cloud - Amazon S3 Standard - IA (Infrequent Access)",
      "name": "AmazonS3IA"
    },
    {
      "label": "Cloud - Google Nearline Storage",
      "name": "Google"
    },
    {
      "label": "Cloud - Microsoft Azure",
      "name": "Microsoft"
    },
    {
      "label": "Self Managed - IBM Cloud Object Storage (Cleversafe)",
      "name": "Cleversafe"
    }
  ]
}
"label": "Self Managed - Other Amazon S3 compatible object storage",
"name": "S3compatible"
]}
"status": 0
}
About chdiskpool Command

Description

Use this command to change the attributes of a disk pool. Use lsdiskpool to obtain the ID or name of the disk pool.

When the disk usage exceeds warnpct, a warning event is generated.

When the disk usage exceeds safepct, some operations are disabled based on the type of disk pool and an error is raised. For example, when a performance pool’s safe percentage is exceeded, access to snapshots is disabled. To change the name of a managed disk, use svctask chmdisk.

Rights

You must have the 'Storage Manage' right to change the attributes of a disk pool.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>adddevice=string</td>
<td>Optional. For specifies a colon (:) separated list of managed disks to be naming convention. For disk pool of type 'perf', the mdisk to be added has to be named as 'act_per_mdknnnn', where nnnn is a 4-digit number. The same is true for 'primary' pool mdisks, which should be named as 'act_pri_mdknnnn'. And 'act_ded_mdknnnn' for dedup pool mdisks. Their mdisk name will be renamed if they do not follow this convention. Once added to the pool, they cannot be removed from the pool. For Sky appliance specifies the device name to be added to the disk pool.</td>
</tr>
<tr>
<td>cloudcredential=string</td>
<td>Optional. Specifies the ID or name of the cloud credential.</td>
</tr>
<tr>
<td>nocache=string</td>
<td>Optional. Enable/Disable the cache mode for volumes created on this disk pool. Setting this to true (which disables cache) improves performance for pool made up of flash storage on .</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies a name for the disk pool.</td>
</tr>
<tr>
<td>safepct=integer</td>
<td>Optional. Specifies the safe percentage for the disk pool. Disk usage exceeding this value results in some operations getting suspended. Immediate attention is required, such as adding more storage to the pool or expiring some backup images. The value must be between 10 and 100. For dedup pool, the safepct is 100 and cannot be modified.</td>
</tr>
<tr>
<td>warnpct=string</td>
<td>Optional. Specifies warning percentage for the disk pool. The value must be between 10 and 100. The value for warnpct must be less than or equal to that of safepct.</td>
</tr>
</tbody>
</table>
For a CDS appliance:
$ udstask chdiskpool -warnpct 60 pool1
$ udstask chdiskpool ?warnpct 60 ?addmdisk mdisk1:mdisk2 act_ded_pool000

For a CDS appliance:
$ udstask chdiskpool -warnpct 60 pool1
$ udstask chdiskpool -warnpct 60 -adddevice mdisk1:mdisk2 act_ded_pool000

chdiskpool Request Details
Your chdiskpool request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**Note:** See the Parameters section for a list of supported parameters and their description.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>properties</td>
<td>Optional. Specifies properties for vault type of pools, comma (,) separated name value pair. Use lsvaulttype to view a list of available properties for a specific type of vault pool. Use the URL-encoded format of special characters. For example: to specify 'bucket=mybucket,access=myid', pass the information as properties=bucket%3Dmybucket%2CaccessId%3Dmyid. (VDP appliances only.)</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the diskpool to be modified.</td>
</tr>
</tbody>
</table>

**chdiskpool Example**

**Request**
POST https://{Actifio_API_Server}/actifio/api/task/chdiskpool?argument=328581&name=TestDiskPool&warnpct=70
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**
Request success
{
  "result": "328581",
  "status": 0
}
rmdiskpool

About rmdiskpool Command

Description
Use this command to delete a disk pool.

Rights
You must have the 'Storage Manage' right to delete a disk pool.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the diskpool to be deleted. Use lsdiskpool to locate the ID or name of the disk pool.</td>
</tr>
<tr>
<td>force</td>
<td>Optional. Forces the removal of an OnVault storage pool. The force argument applies only to an OnVault pool. VDP appliances only)</td>
</tr>
</tbody>
</table>

rmdiskpool Request Details

Your rmdiskpool request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmdiskpool</td>
<td>argument</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

rmdiskpool Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/rmdiskpool?argument=81251
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
  "result": "1",
  "status": 0
}
About lsdeduppoolstat Command

Description
Use this command to retrieve statistics of deduppool usage for each protected application. The statistics are collected once a day.

Rights
You must have 'System View' or 'System Manage' rights to be able to retrieve deduppoolstat data.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for lsdeduppoolstat are:  
  - stattime  
  - sourcecluster  
  - appid  
  - hostname  
  - appname  
  - dedupusage  
  - totalappsize  
  - appsize  
  - newsize  
  - dedupsizes  
  - compresssize  
  - dedupcount  
  
  The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with '&' character.  
  
  For string type of filters, the only operator allowed is '='. You can also use the wildcard character '*'. For example, to match disk pools with name begins with 'foo', use 'filtervalue name=foo*'.  
  
  For number types, allowed operators are: =, >, >=, <, <=. For example:  
  
  filtervalue=dedupcount\>=80  
  filtervalue=dedupcount\=80  
  filtervalue=dedupcount\=<80 |

| argument=integer | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

lsdeduppoolstat Request Details

Your lsdeduppoolstat request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
Isdeduppoolstat Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsdeduppoolstat
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "dedupusage": "19221118976",
            "totalappsize": "124554051584",
            "newsize": "0",
            "hostname": "ctos6.4wp-13",
            "appname": "CTOS6.4WP-13",
            "dedupcount": "0",
            "compresssize": "0",
            "appid": "164689",
            "dedupsiz": "0",
            "stattime": "2017-10-12 03:00:00.104",
            "appsize": "124554051584",
            "sourcecluster": "1415056619",
            "id": "283782"
        },
        {
            "dedupusage": "19221118976",
            "totalappsize": "124554051584",
            "newsize": "0",
            "hostname": "ctos6.4wp-13",
            "appname": "CTOS6.4WP-13",
            "dedupcount": "0",
            "compresssize": "0",
            "appid": "164689",
            "dedupsiz": "0",
            "stattime": "2017-10-13 03:00:00.104",
            "appsize": "124554051584",
            "sourcecluster": "1415056619",
            "id": "284562"
        }
    ],
    "status": 0
}
**lsdiskpoolstat**

*About lsdiskpoolstat Command on page 217*  
*lsdiskpoolstat Request Details on page 218*  
*lsdiskpoolstat Example on page 218*

**About lsdiskpoolstat Command**

**Description**

Use this command to retrieve statistics of deduppool usage for each protected application. The statistics are collected once a day.

Use this command to retrieve statistics of an appliance’s disk pools. The stats shows disk’s capacity, used space and free space by pool type. The statistics are collected once a day. To see the details on disk pools use  `diskpool` command.

**Rights**

You must have ‘System View’ or ‘System Manage’ rights to be able to retrieve diskpoolstat data.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>delim=string</code></td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed, the data is separated from the header by a space. The <code>-delim</code> parameter overrides this behavior. Valid input for the <code>-delim</code> parameter is a one-byte character. If you enter `-delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
<tr>
<td><code>nohdr=string</code></td>
<td>Optional. By default, headings are displayed for each column of data in the concise view, and for each item of data in the detailed view. The <code>-nohdr</code> parameter suppresses the display of headings. If there is no data to display, headings are not displayed.</td>
</tr>
<tr>
<td><code>argument=integer</code></td>
<td>Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the <code>filtervalue</code> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>
lsdiskpoolstat Request Details

Your lsdiskpoolstat request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=attrib%3Dvalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for lsdiskpoolstat are:</td>
</tr>
<tr>
<td></td>
<td>• stattime</td>
</tr>
<tr>
<td></td>
<td>• poolname</td>
</tr>
<tr>
<td></td>
<td>• pooltype</td>
</tr>
<tr>
<td></td>
<td>• capacity</td>
</tr>
<tr>
<td></td>
<td>• used</td>
</tr>
<tr>
<td></td>
<td>The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with ‘&amp;’ character (which needs to be escaped with ‘\’).</td>
</tr>
<tr>
<td></td>
<td>For string type of filters, the only operator allowed is ‘=’. You can also use the wildcard character ‘<em>’. For example, to match disk pools with names that begin with ‘foo’, use ‘filtervalue name=foo</em>’.</td>
</tr>
<tr>
<td></td>
<td>For number types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. For example:</td>
</tr>
<tr>
<td></td>
<td>• filtervalue=pooltype&gt;=1</td>
</tr>
<tr>
<td></td>
<td>• filtervalue=pooltype&gt;1</td>
</tr>
<tr>
<td></td>
<td>• filtervalue=pooltype&gt;=1</td>
</tr>
</tbody>
</table>

Isdiskpoolstat Example

Request

GET https://{Actifio_API_Server}/actifio/api/info/lsdiskpoolstat
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success

```{result: [
  {
    "poolname": "act_pri_pool000",
    "stattime": "2017-11-18 03:00:00.345",
    "id": "8408",
    "used": "7371309056",
    "pooltype": "1",
    "capacity": "105688035328"
  }
]}```


```
{
  "poolname": "act_ded_pool000",
  "stattime": "2017-11-18 03:00:00.345",
  "id": "8409",
  "used": "15388901376",
  "pooltype": "2",
  "capacity": "1865519045017"
},
{
  "poolname": "act_per_pool000",
  "stattime": "2017-11-18 03:00:00.345",
  "id": "8410",
  "used": "47244640256",
  "pooltype": "3",
  "capacity": "2196875771904"
},
{
  "poolname": "act_per_pool000",
  "stattime": "2018-01-31 03:00:00.321",
  "id": "254935",
  "used": "397284474880",
  "pooltype": "3",
  "capacity": "2196875771904"
}
],
"status": 0
}
```
About lssnappoolstat Command

Description

Use this command to retrieve statistics of snapshot pool usage for each protected application in the appliance. The statistics are collected once a day.

Rights

You must have ‘System View’ or ‘System Manage’ rights to be able to retrieve snappoolstat data.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>argument</strong>=string</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the <strong>filtervalue</strong> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>
| **filtervalue**=attrib%3Dvalue | Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for lssnappoolstat are:  
  - sourcecluster  
  - appid  
  - hostname  
  - appname  
  - appsize  
  - vdiskcount  
  - totalused  
  - totalstaging  
  
The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with ‘&’ character (which needs to be escaped with ‘\’).  
  
  For string type of filters, the only operator allowed is ‘='. You can also use the wildcard character ‘*’. For example, to match disk pools with name begins with ‘foo’, use ‘-filtervalue name=foo*’.  
  
  For number types, allowed operators are:  =, >, >=, <, <=. These must be escaped with ‘\’ or enclosed in ‘’ or “”, as required by shell. For example:  
  
  - -filtervalue vdiskcount\>=10  
  - -filtervalue "vdiskcount\>=10"  
  - -filtervalue ‘vdiskcount\>=10’ |

Issnappoolstat Request Details

Your lssnappoolstat request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
### Issnappoolstat Example

#### Request

**GET** https://{Actifio_API_Server}/actifio/api/info/lssnappoolstat

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

#### Response

Request success

```
{  
  "result": [  
    {  
      "hostname": "EXCH10W2K8-N1.AUTO2010.ACTIFIO.COM",  
      "appname": "hfdb7",  
      "totalstaging": "158732800",  
      "vdiskcount": "12",  
      "appid": "7373",  
      "totalused": "177209344",  
      "stattime": "2017-11-18 03:00:00.449",  
      "appsize": "238236467200",  
      "sourcecluster": "590021132826",  
      "id": "8411"  
    },  
    {  
      "hostname": "Exchg_2016_standalone",  
      "appname": "hfdb4",  
      "totalstaging": "177209344",  
      "vdiskcount": "8",  
      "appid": "5043",  
      "totalused": "217317376",  
      "stattime": "2017-11-18 03:00:00.449",  
      "appsize": "90022346752",  
      "sourcecluster": "590021132826",  
      "id": "8414"  
    },  
    {  
      "hostname": "Isilon",  
      "appname": "test_isilon_cifs_all",  
      "totalstaging": "3778019328",  
      "vdiskcount": "3",  
      "appid": "73324",  
      "totalused": "3783262208",  
      "stattime": "2018-01-31 03:00:00.645",  
      "appsize": "63157829632",  
      "sourcecluster": "590021132826",  
      "id": "255027"  
    },  
    {  
      "hostname": "Isilon",  
      "appname": "CIFS_rename",  
      "totalstaging": "3163291648",  
      "vdiskcount": "12",  
      "appid": "73324",  
      "totalused": "3163291648",  
      "stattime": "2018-01-31 03:00:00.645",  
      "appsize": "63157829632",  
      "sourcecluster": "590021132826",  
      "id": "255027"  
    }  
  ]
```
"vdiskcount": "3",
"appid": "68217",
"totalused": "6318718976",
"stattime": "2018-01-31 03:00:00.645",
"appsize": "6312427520",
"sourcecluster": "590021132826",
"id": "255030"
},
],
"status": 0
}
Dedup Load Factor Commands

lsdedupefficiency

About lsdedupefficiency Command

Description
Use this command to retrieve dedup efficiency statistics for a list of applications with successful local dedup, direct dedup, or dedup-async jobs. The average FIDI and IIDI are average values for all applications in the system. The statistics are collected once a day and are also updated when this command is run.

Applicability of this Command
This command can be used on:

Rights
You must have 'System View' or 'System Manage' rights to view the dedup efficiency data.

lsdedupefficiency Request Details

Your lsdedupefficiency request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

lsdedupefficiency Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsdedupefficiency
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "baseappsize": "6427.00",
      "avgIIDI": "0.000000",
      "lastjobenddate": "2017-12-11 23:59:01",
      "appid": "164689",
      ...
About getdedupsafelimits Command

Description
Use this command to retrieve the safe limits for the various dedup load metrics.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>✓</td>
</tr>
</tbody>
</table>

You must have the 'System View' or 'System Manage' right to view safe limit for dedup load metrics.

getdedupsafelimits Request Details
Your getdedupsafelimits request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getdedupsafelimits</td>
<td>None</td>
</tr>
</tbody>
</table>

getdedupsafelimits Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/getdedupsafelimits
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cffe5d3
where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

Response
Request success
{
  "result": [ 
    { 
      "metricname": "dedup max load", 
      "value": "16.0"
    }, 
    { 
      "metricname": "dedup datamovement safelimit",
      "value": "9.6"
    }
  ]
}
{ "metricname": "dedup max uniqueblocks", "value": "268435456" },
{ "metricname": "dedup ingest throughput safelimit", "value": "0.0" },
"status": 0 }
getdedupstats

About getdedupstats Command on page 227
getdedupstats Request Details on page 228
getdedupstats Example on page 228

About getdedupstats Command

Description
Use this command to retrieve statistics for an identified dedup load metric (uniqueblocks, ingestdata, or dedupload).

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>

- **startdate**=DateTime
  - Optional. Specifies the start date value of the date range window. Date format can be in `yyyy-MM-dd` or in `yyyy-MM-dd HH:mm:ss`. If you do not specify the `-startdate` argument, the appliance assumes 30 days earlier from the end date (the `enddate` argument).

- **enddate**=DateTime
  - Optional. Specifies the end date value of the date range window. Date format can be in `yyyy-MM-dd` or in `yyyy-MM-dd HH:mm:ss`. If you do not specify the `enddate` argument then the end date would be set to the current appliance system date.

- **metricname**=string
  - Required. Specifies the name of dedup metric whose statistics need to be retrieved. Choices include:
    - `uniqueblocks` - Lists a summary of unique blocks information.
    - `ingestdata` - Lists a summary of ingest data metrics.
    - `dedupload` - Lists a summary of dedup slot utilization metrics.

- **units**=string
  - Optional. Specifies the units parameter to display the ingested data in the output. By default, data is displayed in bytes. You can specify KB, MB, GB, or TB to display the data in a specific unit format.

You must have the 'System View' or 'System Manage' right to view statistics for dedup load metrics.
getdedupstats Request Details
Your getdedupstats request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getdedupstats</td>
<td>metricname</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

getdedupstats Example

**Request**
GET https://{Actifio_API_Server}/actifio/api/info/getdedupstats?metricname=ingestdata
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575caff54d3

where 92929a8b-a413-476f-a624-5b575caff54d3 is the session ID.

**Response**
Request success
{
  "result": [
    {
      "value(bytes)": "0.000",
      "metricname": "dedup ingest throughput safelimit"
    },
    {
      "value(bytes)": "0.000",
      "metricname": "dedup average ingest data per day"
    },
    {
      "value(bytes)": "0.000",
      "metricname": "95thpercentile"
    }
  ],
  "status": 0
}
**Isdeduploadstat**

*About Isdeduploadstat Command on page 229*
*Isdeduploadstat Request Details on page 229*
*Isdeduploadstat Example on page 230*

**About Isdeduploadstat Command**

**Description**

Use this command to retrieve details of dedup load stats.

**Applicability of this Command**

This command can be used on:

**Rights**

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director | ✓ |

You must have the 'System View' or 'System Manage' right to list statistics for dedup load metrics.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>startdate</code>=DateTime</td>
<td>Optional. Specifies the start date value of the date range window. Date format can be in <code>yyyy-MM-dd</code> or in <code>yyyy-MM-dd HH:mm:ss</code>. If you do not specify the <code>startdate</code> argument, the appliance assumes 30 days earlier from the end date (the <code>enddate</code> argument).</td>
</tr>
<tr>
<td><code>enddate</code>=DateTime</td>
<td>Optional. Specifies the end date value of the date range window. Date format can be in <code>yyyy-MM-dd</code> or in <code>yyyy-MM-dd HH:mm:ss</code>. If you do not specify the <code>enddate</code> argument, then it is set to the current appliance system date.</td>
</tr>
</tbody>
</table>

**Isdeduploadstat Request Details**

Your `lsdeduploadstat` request must pass a valid session ID. For information on how to get a valid session ID, see *Authentication or Login on page 1*.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td><code>/actifio/api/info/lsdeduploadstat</code></td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*
Isdeduploadstat Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/isdeduploadstat
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
"result": [
{
"backgroundload": "0.000",
"datamovementload": "0.000",
"stattime": "2018-01-01 04:11:31",
"totalload": "0.000",
"id": "142310"
},
{
"backgroundload": "0.000",
"datamovementload": "0.000",
"stattime": "2018-01-01 04:26:31",
"totalload": "0.000",
"id": "142352"
},
{
"backgroundload": "0.000",
"datamovementload": "0.000",
"stattime": "2018-01-01 04:41:31",
"totalload": "0.000",
"id": "142389"
},
{
"backgroundload": "0.000",
"datamovementload": "0.000",
"stattime": "2018-01-01 04:56:31",
"totalload": "0.000",
"id": "142438"
},
{
"backgroundload": "0.000",
"datamovementload": "0.000",
"stattime": "2018-01-31 03:52:05",
"totalload": "0.000",
"id": "255238"
}
],
"status": 0
}
SLP Commands

mkslp

About mkslp Command

Description
Use this command to create a new server level profile (SLP) object.

Rights
You must have the 'SLA Manage' right to create a profile.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>dedupasyncnode</code></td>
<td>Optional. Specifies the name of the remote dedup-async node. The remotenode is used if not specified</td>
</tr>
<tr>
<td><code>description</code></td>
<td>Optional. Specifies the description for new profile.</td>
</tr>
<tr>
<td><code>name</code></td>
<td>Required. Specifies the name for new profile. The name must be unique within the appliance.</td>
</tr>
<tr>
<td><code>org</code></td>
<td>Optional. Specifies a default organization in which the profile should be added after creation. To use this, you must have 'System Manage' right.</td>
</tr>
<tr>
<td><code>performancepool</code></td>
<td>Required. Specifies the name of the performance pool.</td>
</tr>
<tr>
<td><code>primarystorage</code></td>
<td>Optional. Specifies the name of the primary storage.</td>
</tr>
<tr>
<td><code>remotenode</code></td>
<td>Optional. Specifies the name of the remote appliance node.</td>
</tr>
<tr>
<td><code>vaultpool</code></td>
<td>Note: Optional. Specifies the name or ID of the OnVault storage pool.</td>
</tr>
</tbody>
</table>

mkslp Request Details

Your mkslp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkslp</td>
<td>performancepool, name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
**mkslp Example**

**Request**

POST https://{Actifio_API_Server}/actifio/api/task/mkslp?name=slp1&performancepool=mktpool

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": 364648,
    "status": 0
}
```
**isslp**

**About isslp Command on page 233**

**isslp Request Details on page 233**

**isslp Example on page 233**

**About isslp Command**

**Description**

Use this command to retrieve details of profiles (SLPs). A profile (SLP) specifies mapping of a name in a policy to an actual resource in the appliance.

**Rights**

You must have the 'SLA View', 'SLA Assign', or 'SLA Manage' right to view the details of profiles.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue= attrib%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for *isslp* are:
  - name
  - localnode
  - performancepool
  - primarystorage
  - remotenode
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '|' character.
  For string type of filters, the only operator allowed is '='. You can also use wild card character '*'. For example, to list all profiles (SLPs) with a name that begins with 'foo', use 'filtervalue name=foo*'. |
| argument=string | Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

**isslp Request Details**

Your *isslp* request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**isslp Example**

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/isslp

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
Request success
{
  "result": [
    {
      "primarystorage": "",
      "remotenode": "",
      "name": "LocalProfile",
      "performancepool": "act_per_pool000",
      "localnode": "Waltham",
      "description": "Local profile",
      "id": "51"
    },
    {
      "primarystorage": "",
      "remotenode": "none",
      "name": "New Profile0",
      "performancepool": "act_per_pool000",
      "localnode": "Waltham",
      "description": "New Profile Description",
      "id": "121674"
    },
    {
      "primarystorage": "",
      "remotenode": "none",
      "name": "New Profile1",
      "performancepool": "none",
      "localnode": "Waltham",
      "description": "New Profile Description",
      "id": "164152"
    }
  ],
  "status": 0
}
About chslp Command

Description
Use this command to change the properties of a profile. Use lsslp to obtain the ID or name of the profile.

Rights
You must have the 'SLA Manage' right to modify a profile.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies new description for the SLP.</td>
</tr>
<tr>
<td>dedupasyncnode=string</td>
<td>Optional. Specifies the name of the remote dedup-async node, remote node is used if not specified.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies new name for the SLP.</td>
</tr>
<tr>
<td>performancepool=string</td>
<td>Optional. Specifies new performance pool for the SLP.</td>
</tr>
<tr>
<td>primarystorage=string</td>
<td>Optional. Specifies new primary storage for the SLP.</td>
</tr>
<tr>
<td>remotenode=string</td>
<td>Optional. Specifies new remote appliance node for the SLP.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the profile (SLP) to be changed.</td>
</tr>
<tr>
<td>vaultpool=string</td>
<td>Optional. Specifies the name or ID of the OnVault pool. Use 0 to clear the OnVault pool of the profile.</td>
</tr>
</tbody>
</table>

chslp Request Details
Your chslp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chslp</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
chslp Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/chslp?argument=slp1&description=salespool
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
  "status": 0
}

About rmslp Command

Description
Use this command to delete a profile.

Rights
You must have the 'SLA Manage' right to delete a profile.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the profile to be deleted.</td>
</tr>
</tbody>
</table>

rmslp Request Details

Your rmslp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmslp</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmslp Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/rmslp?argument=slp1
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}


Other Commands

chauthservice

About chauthservice Command

Description
Use this command to change the authentication service in use.

Rights
You must have ‘System Manage’ right to change the authentication service.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type</td>
<td>string</td>
</tr>
</tbody>
</table>

Required. Specifies the new authentication service to use. Either LDAP or database.

chauthservice Request Details

Your chauthservice request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/chauthservice</td>
<td>type</td>
</tr>
<tr>
<td>PUT</td>
<td>/actifio/config/auth</td>
<td>none</td>
</tr>
<tr>
<td>GET</td>
<td>/actifio/config/auth</td>
<td>none</td>
</tr>
<tr>
<td>GET</td>
<td>/actifio/config/authinfo</td>
<td>none</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chauthservice Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/chauthservice?type=database
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c7f54d3
where 92929a8b-a413-476f-a624-5b575c7f54d3 is the session ID.

Response
Request success
```json
{
   "status": 0
}

PUT https://{Actifio_API_Server}/actifio/config/auth/chauthservice?type=database
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "method": <string, mandatory, ‘database’ | ‘ldap’ | ‘saml’>
   "available_method": [ List of string, outbound only ]
}

GET https://{Actifio_API_Server}/actifio/config/auth/chauthservice?type=database
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "sso": <boolean>,
   "sso_url": <string, href to SP SSO endpoint, available only if sso=true>
}
```
getauthservice

About getauthservice Command

Description
Use this command to retrieve the name of the authentication service in use. The value will be either 'database' or 'ldap'.

Rights
User with 'System View' right is allowed to see the service in use. Only user with 'System Manage' right can change the authentication service.

getauthservice Request Details
Your getauthservice request must pass a valid session ID. For information on how to obtain a session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getauthservice</td>
<td>None</td>
</tr>
</tbody>
</table>

gethauthservice Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/getauthservice
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": "database",
  "status": 0
}
About configresourcewarning Command

Description
Use this command to configure the warning level for a system resource within the appliance. To view the existing configuration, use the getresourcewarning command.

Rights
You must have the 'System Manage' right to configure the warning level for a resource.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the resource to set the warning level. The supported resources and the permitted resources are:</td>
</tr>
<tr>
<td></td>
<td>• vdisk: You can configure a maximum of 2048 virtual disks for one iogrp.</td>
</tr>
<tr>
<td></td>
<td>• copy: You can create a maximum of 256 copies per VDisk.</td>
</tr>
<tr>
<td></td>
<td>• snap: snapshot bitmap memory (pre-configured)</td>
</tr>
<tr>
<td></td>
<td>• remote: remote copy memory (pre-configured)</td>
</tr>
<tr>
<td></td>
<td>• mirror: mirror copy memory (pre-configured)</td>
</tr>
<tr>
<td>warnpct=integer</td>
<td>Optional. Specifies the warning percentage for the resource, between 10 and 99. The default warning percentage is 90%.</td>
</tr>
</tbody>
</table>

configresourcewarning Request Details

Your configresourcewarning request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/configresourcewarning</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

configresourcewarning Examples

Request
POST https://{Actifio_API_Server}/actifio/api/task/configresourcewarning?name=vdisk&warnpct=80
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfeed3
where 92929a8b-a413-476f-a624-5b575cfeed3 is the session ID.
Response
Request success
{
   "status": 0
}

getresourcewarning

About getresourcewarning Command on page 243
getresourcewarning Request Details on page 243
getresourcewarning Example on page 243

About getresourcewarning Command

Description
Use this command to fetch the warning level for the system resource within your appliance. This is a percentage for resource usage and the warning is generated when usage crosses the warning threshold set in configresourcewarning on page 241.

Rights
You must have ‘System View’ or ‘System Manage’ right to view the warning threshold of a resource.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the resource to configure the warning level for. You can configure a warning level for the following resources:</td>
</tr>
<tr>
<td></td>
<td>• vdisk: You can create a maximum of 2048 VDisks on a VDP appliance.</td>
</tr>
<tr>
<td></td>
<td>• copy: You can create a maximum of 256 copies per VDisk.</td>
</tr>
<tr>
<td></td>
<td>• snap: Snapshot bitmap memory. This is pre-configured.</td>
</tr>
<tr>
<td></td>
<td>• remote: Remote copy memory. This is pre-configured.</td>
</tr>
<tr>
<td></td>
<td>• mirror: Mirror copy memory. This is pre-configured.</td>
</tr>
</tbody>
</table>

getresourcewarning Request Details

Your getresourcewarning request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getresourcewarning</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

getresourcewarning Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/getresourcewarning?name=vdisk
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{

actifio
"result": "90",
"status": 0
}
About mkarray Command

Description
Use this command to create a new array object, which represents external storage for external snapshot pools.

Rights
You must have 'Storage Manage' right to create a new array.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>arraytype</td>
<td>Required. Specifies type of array. The valid array types are:</td>
</tr>
<tr>
<td>ipaddress</td>
<td>Required. Specifies the UI/Management IP.</td>
</tr>
<tr>
<td>name</td>
<td>Required. Specifies the name for the array. It has to be unique within the appliance.</td>
</tr>
<tr>
<td>properties</td>
<td>Required. Specifies properties for the array. Each property is a comma (,) separated name value pair. For a list of available properties for a specific type of array, use lsarrayoption command.</td>
</tr>
</tbody>
</table>

Note: When using PureStorage_Flash array, the British Pound Sterling character (£) is not supported in the password.

mkarray Request Details

Your mkarray request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/mkarray</td>
<td>arraytype, ipaddress, name, properties</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
mkarray Example

Request
POST https://{API_HOST}/actifio/api/task/mkarray?arraytype=IBM_Storwize&ipaddress=1.2.3.4&properties=username%3Dusername,password%3Dpassword&name=mystore
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": 156726,
    "status": 0
}
Isarray

About Isarray Command on page 247
Isarray Request Details on page 247
Isarray Example on page 247

About Isarray Command

Description
Use this command to retrieve details of attached arrays. An array is an external storage that is available to the appliance for snapshot management.

Rights
You must have 'Storage View' right to see array details.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for lsarray are:  
  - arraytype  
  - name  
  - status  
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with `&` character.  
  For string type of filters, the only operator allowed is `=`. You can also use wild card character `*`. For example, to list all profiles (SLPs) with a name that begins with 'foo', use 'filtervalue name=foo*'. |
| argument=string          | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

Isarray Request Details

Your lsarray request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsarray</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isarray Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsarray

actifio
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [],
    "status": 0
}
Isarrayoption

About Isarrayoption Command

Description
Use this command to return a concise list of options for arrays; needed when creating a new array object. Two types of options are available, property and threshold. The property option is needed for setting up an array, while threshold is for setting threshold limits for disk pools on the array.

Rights
You must have 'Storage View' right to retrieve array options.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>arraytype</td>
<td>Optional. Specifies the type of array to retrieve the options.</td>
</tr>
<tr>
<td>IBM_Storage</td>
<td>PureStorage_Flash array</td>
</tr>
</tbody>
</table>

Isarrayoption Request Details

Your Isarrayoption request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsarrayoption</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isarrayoption Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/lsarrayoption
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "valuetype": "string",
      "optiontype": "property",
    }
  ]
}
"arraytype": "IBM_Storwize",
"max": "null",
"name": "username",
"updatable": "false",
"label": "Superuser username",
"required": "true"
},
{
"valuetype": "string",
"optiontype": "property",
"arraytype": "IBM_Storwize",
"max": "null",
"name": "password",
"updatable": "false",
"label": "Superuser password",
"required": "true"
},
{
"valuetype": "number",
"optiontype": "threshold",
"arraytype": "IBM_Storwize",
"max": "null",
"name": "vdisklimit",
"updatable": "false",
"label": "Number of vdisks can be used for the pool",
"required": "false"
},
{
"valuetype": "number",
"optiontype": "threshold",
"arraytype": "IBM_Storwize",
"max": "100",
"name": "vdiskwarn",
"updatable": "false",
"label": "Percentage of vdisk used for warning",
"required": "false"
},
{
"valuetype": "string",
"optiontype": "property",
"arraytype": "PureStorage_Flasharray",
"max": "null",
"name": "username",
"updatable": "false",
"label": "Username",
"required": "true"
},
{
"valuetype": "string",
"optiontype": "property",
"arraytype": "PureStorage_Flasharray",
"max": "null",
"name": "password",
"updatable": "false",
"label": "Password",
"required": "true"
}
"status": 0
**charray**

About charray Command on page 252

charray Request Details on page 252

charray Example on page 252

---

**About charray Command**

**Description**

Use this command to modify an array object.

**Rights**

You must have 'Storage Manage' right to modify an array.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>Optional. Specifies the IP address for the array</td>
</tr>
<tr>
<td>name</td>
<td>Required. Specifies the name for the array. It has to be unique within the appliance.</td>
</tr>
<tr>
<td>properties</td>
<td>Required. Specifies properties for the array. Each property is a comma (,) separated name value pair. For a list of available properties for a specific type of array, use lsarrayoption command. Not all properties can be changed for an array.</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the array object to modify, either by ID or by name.</td>
</tr>
</tbody>
</table>

**charray Request Details**

Your charray request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
</table>
| POST   | /actifio/api/task/charray | Name
|        |                 | array_id | array_name |

**Note:** See the Parameters section for a list of supported parameters and their description.

**charray Example**

**Request**

POST https://{Actifio_API_Server}/actifio/api/task/charray?ipaddress=1.2.3.4&name=mystore

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response

Request success
{
    "status": 0
}

About rmarray Command

Description
Use this command to delete an array.

Rights
You must have 'Storage Manage' right to remove an array.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the ID or name of the array to be removed.</td>
</tr>
</tbody>
</table>

rmarray Request Details

Your rmarray request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/rmarray</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmarray Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/rmarray?name=mystore
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
Isappstorage

**About lsappstorage Command** on page 255
lsappstorage Request Details on page 255
lsappstorage Example on page 255

**About lsappstorage Command**

**Description**

Use this command to retrieve details of application storage layout, which indicates disk groups of an application occupies. When application shares same disk groups, they can be, and should be grouped together in a consistency group for protection.

**Rights**

User must have 'Storage View', or 'Application Manage' right to see application storage details.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for lsarray are:</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>• appname</td>
</tr>
<tr>
<td></td>
<td>• hostid</td>
</tr>
</tbody>
</table>
|               | The filter is formed with an attribute and a value. When specifying more than one filter, the filters must be combined with the ‘&’ character. For string type of filters, the only operator allowed is ‘='. You can also use wild card character ‘*’. For example, to match users with the username that begins with 'foo', use filtervalue username=foo*.

**lsappstorage Request Details**

Your lsappstorage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsappstorage</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**lsappstorage Example**

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/lsappstorage

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575c7f54d3

where 92929a8b-a413-476f-a624-5b575c7f54d3 is the session ID.
Isstorage

About lsstorage Command

Description
Use this command to retrieve details of application storage layout which indicates the disk groups of an application occupies. When application shares same disk groups, they can be, and should be grouped together in a consistency group for protection.

Rights
You must have ‘Storage View’ or ‘Application Manage’ right to view the details of job.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib=value | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for lsarray are:  
  • appid  
  • appname  
  • hostid  
  The filter will be formed with an attribute and a value. When you specify more than one filter, they must be combined with ‘&’ character (which needs to be escaped with ‘\’).  
  For string type of filters, the only operator allowed is ‘=’. One can also use wildcard character ‘*’. For example, to match disk pools with name begins with ‘foo’, use ‘-filtervalue name=foo*’.

lsstorage Request Details

Your lsstorage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsstorage</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsstorage Example

GET https://{Actifio_API_Server}/actifio/api/info/lsstorage
Auto Updates Commands

**lsversion**

About lsversion Command on page 257
lsversion Request Details on page 257
lsversion Example on page 257

**About lsversion Command**

**Description**

Use this command to retrieve installed appliance version, including any installed hot-fix.

**Rights**

There are no specific rights associated with this operation. User with ‘administrator’ role can retrieve the release note.

**lsversion Request Details**

Your lsversion request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/lsversion</td>
<td>None</td>
</tr>
</tbody>
</table>

**lsversion Example**

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/lsversion

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
   "result": [
      {
         "installed": "2017-12-14 00:41:29",
         "component": "CDS",
         "version": "8.0.2.189"
      },
      {
         "installed": "2018-01-16 00:50:07",
         "component": "connector-linux",
         "version": "hf-CDS8.0.2.1354"
      }
   ],
   "status": 0
}
```
**lsupdate**

**About lsupdate Command on page 258**

**lsupdate Request Details on page 258**

**lsupdate Exampl on page 258**

---

### About lsupdate Command

**Description**

Use this command to retrieve a list of updates available to be installed onto the VDP appliance.

**Rights**

There are no specific rights associated with this operation. Admin/User with 'administrator' role can retrieve a list of updates available to be installed onto the VDP appliance.

**Parameters**

### lsupdate Request Details

Your `lsupdate` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**Note:** See the Parameters section for a list of supported parameters and their description.

### lsupdate Exampl

**Request**

GET https://{Actifio_API_Server}/actifio/api/info/lsupdate

HTTP Request Header

Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
"result": [
{
"update": "patch-SKY7.1.1.740"
}
],
"status": 0
}
```
uploadupdate

About uploadupdate Command

Description
Use this command to upload a VDP-provided update file. The file must be copied (scp) to /home/admin/upload directory before you can run this command.

Rights
Admin/User with 'administrator' role can upload VDP update file.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>string</td>
</tr>
</tbody>
</table>

Required. Specifies the name of the file to be uploaded.

uploadupdate Request Details

Your uploadupdate request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/uploadupdate</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

uploadupdate Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/uploadupdate?argument=patch-SKY8.0.0.100
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
   "result": "xJob Completed",
   "status": 0
}
installupdate

About installupdate Command

Description
Use this command to install all Actifioprovided update files. Use udsinfo lsupdate to view a list of files to be installed. Use udsinfo getreleasenote to view the release note for each update.

Applicability of this Command
This command can be used on:

Rights

There are no specific rights associated with this operation. A user with 'administrator' role can install all Actifio provided update files.

Parameters

installupdate Request Details
Your installupdate request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

Note: See the Parameters section for a list of supported parameters and their description.

installupdate Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/installupdate?force
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cfe54d3
where 92929a8b-a413-476f-a624-5b575cfe54d3 is the session ID.
Response
Request success
{
    "result": "Install of updates completed",
    "status": 0
}

configloginbanner

About configloginbanner Command

Description
The configloginbanner command configures login banner for GUI.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Device</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actifio CDS</td>
<td>x</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

User must have ‘System Manage’ right to configure login banner.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cli=string</td>
<td>Optional. Specifies a text file that contains the login banner. The file has to have been copied (scp) to /home/admin/upload directory previously by a valid user with CLI access.</td>
</tr>
<tr>
<td>ui=string</td>
<td>Optional. Specifies an HTML file that contains the login banner. The file has to have been copied (scp) to /home/admin/upload directory previously by a valid user with CLI access.</td>
</tr>
</tbody>
</table>

configloginbanner Request Details

Your configloginbanner request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configloginbanner</td>
<td>none</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
configloginbanner Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/configloginbanner
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": "xJob Completed",
    "status": 0
}
Remote Setup Commands

setremotesupport

About setremotesupport Command on page 264
setremotesupport Request Details on page 264
setremotesupport Example on page 264

About setremotesupport Command

Description
Use this command to set administrative support for SecureConnect remote support.

Rights
You must have ‘System Manage’ right to be able to configure SecureConnect remote support.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>restricted</td>
<td>Optional. Enables/disables VDP remote access.</td>
</tr>
<tr>
<td>secureconnect</td>
<td>Optional. Enables secure connect.</td>
</tr>
</tbody>
</table>

setremotesupport Request Details

Your setremotesupport request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/setremotesupport</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

setremotesupport Example

Request
POST https://{Actifio_API_Server}/actifio/api/task/setremotesupport?secureconnect=off
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}
getremotesupport

About getremotesupport Command on page 265
getremotesupport Request Details on page 265
getremotesupport Example on page 265

About getremotesupport Command

Description
Use this command to display remote support.

Rights
You must have ‘System View’ or ‘System Manage’ right to view remote support.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-delim delimiter</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
<tr>
<td>-nohdr</td>
<td>Optional. By default, headings are displayed for each column of data in a concise view, and for each item of data in a detailed view. The -nohdr parameter suppresses the display of these headings.</td>
</tr>
</tbody>
</table>

getremotesupport Request Details

Your getremotesupport request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>/actifio/api/info/getremotesupport</td>
<td>None</td>
</tr>
</tbody>
</table>

getremotesupport Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/getremotesupport
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    
```
"type": "restricted",
"enabled": "off"
},
{
  "type": "secureconnect",
  "enabled": "off"
},
{
  "type": "securitycode",
  "enabled": "A1-null-00000000"
}
],
"status": 0
}
Isinboundiprestrictionstatus

About Isinboundiprestrictionstatus Command

Description
Use this command to retrieve IP restriction status.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>Actifio CDS</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

Rights
User must have 'System View' or 'System Manage' right to view IP restriction status.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-delim=string</td>
<td>Optional. By default, all columns of data are separated by a tab in the concise view. In the detailed view, each column of data is displayed in a separate row and if the headers are displayed, the header is separated from the data by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur.</td>
</tr>
</tbody>
</table>
| -nohdr=string | Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The -nohdr parameter suppresses the display of these headings. 

Note: If there is no data to be displayed, headings are not displayed. |

Isinboundiprestrictionstatus Request Details

Your Isinboundiprestrictionstatus request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsinboundiprestrictionstatus</td>
<td>none</td>
</tr>
</tbody>
</table>
Note: See the Parameters section for a list of supported parameters and their description.

Isinboundiprestrictionstatus Example

Request
GET https://{Actifio_API_Server}/actifio/api/info/isinboundiprestrictionstatus
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success

```
{
    "result": [
        {
            "filtering": "false",
            "type": "actifio"
        },
        {
            "filtering": "false",
            "type": "iscsi"
        },
        {
            "filtering": "false",
            "type": "nfs"
        },
        {
            "filtering": "false",
            "type": "snmp"
        }
    ],
    "status": 0
}
```
configinboundiprestriction

Description
Use this command to configure source-based restrictions for network traffic on specific TCP ports.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>Actifio CDS</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

Rights
User must have 'System Manage' right to configure IP filtering.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>type</strong> = actifio</td>
<td>Required. Specifies type of port groups to enable or disable. The following table details the port restrictions based on type:</td>
</tr>
<tr>
<td>iscsi</td>
<td>vdp TCP 5103</td>
</tr>
<tr>
<td>nfs</td>
<td>vdp TCP 5107</td>
</tr>
<tr>
<td>snmp</td>
<td>snmp UDP 161</td>
</tr>
<tr>
<td>nfs</td>
<td>snmp UDP 162</td>
</tr>
<tr>
<td>iscsi</td>
<td>iscsi TCP 3205</td>
</tr>
<tr>
<td>nfs</td>
<td>iscsi TCP 3260</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs UDP 4045</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs TCP 4045</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs UDP 2049</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs TCP 2049</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs UDP 111</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs TCP 111</td>
</tr>
<tr>
<td>nfs</td>
<td>nfs TCP 756</td>
</tr>
</tbody>
</table>

| value=boolean | Required. Specifies whether to enable (true) or disable (false) IP filtering for the port group. When filtering is enabled, inbound traffic is only permitted from IPs or subnets specified in IP filters. See udstask mkiprestriction command for additional information. |
configinboundiprestriction Request Details

Your configinboundiprestriction request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
</table>
| POST   | //api/task/configinboundiprestriction | type  
|        |                                | value |

*Note:* See the Parameters section for a list of supported parameters and their description.

configinboundiprestriction Example

**Request**

POST https://{Actifio_API_Server}/actifio/api/task/configinboundiprestriction?type=iscsi&value=true

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

Len = 0, no data

{
  "result": "",
  "status": 0
}
Isiprestitution

About Isiprestitution Command on page 271
Isiprestitution Request Details on page 271
Isiprestitution Example on page 272

About Isiprestitution Command

Description
Use this command to retrieve IP restriction filters.

Applicability of this Command

This command can be used on:

<table>
<thead>
<tr>
<th>Actifio CDS</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>x</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

Rights
User must have 'System View' or 'System Manage' right to view IP restriction status.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>delim=string</td>
<td>Optional. By default, all columns of data are separated by a tab in the concise view. In the detailed view, each column of data is displayed in a separate row and if the headers are displayed, the header is separated from the data by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur.</td>
</tr>
<tr>
<td>nohdr=string</td>
<td>Optional. By default, headings are displayed for each column of data in a concise view, and for each item of data in a style view. The -nohdr parameter suppresses the display of these headings.</td>
</tr>
</tbody>
</table>

Isiprestitution Request Details

Your Isiprestitution request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsiprestitution</td>
<td>none</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
Isipreiction Example

Request
GET https://{Actifio_API_HOST}/actifio/api/info/lsipreiction
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "allowedsource": "172.27.59.249",
            "id": "1",
            "type": "actifio"
        }
    ],
    "status": 0
}
**mkiprestriction**

**About mkiprestriction Command on page 273**

**mkiprestriction Request Details on page 273**

**mkiprestriction Example on page 274**

---

**About mkiprestriction Command**

**Description**

Use this command to configure an IP restriction filter. Returns the ID number of the saved restriction filter.

**Applicability of this Command**

This command can be used on:

<table>
<thead>
<tr>
<th>Actifio CDS</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

**Rights**

User must have 'System Manage' right to configure IP restriction filter.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>type</strong> =actifio</td>
<td>Required. Specifies type of port groups to be configured.</td>
</tr>
<tr>
<td>iscsi</td>
<td></td>
</tr>
<tr>
<td>nfs</td>
<td></td>
</tr>
<tr>
<td>snmp</td>
<td></td>
</tr>
<tr>
<td><strong>allowedsource</strong> =string</td>
<td>Required. Specifies IP address or subnet for the IP restriction. For type vdp and snmp, only a single IP address is allowed. For nfs and snmp, a single IP address or subnet is allowed. When subnets are specified in the following format: aaa.bbb.ccc.ddd/mmm.mmm.mmm.mmm.</td>
</tr>
</tbody>
</table>

**mkiprestriction Request Details**

Your mkiprestriction request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mkiprestriction</td>
<td>type&lt;br&gt;allowedsource</td>
</tr>
</tbody>
</table>
mkiprestricition Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/mkiprestricition?type=actifio&allowedsource=IP address
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "result": "2",
   "status": 0
}
rmiprestitution

About rmiprestitution Command on page 275
rmiprestitution Request Details on page 275
rmiprestitution Example on page 275

About rmiprestitution Command

Description
Use this command to remove an IP restriction filter.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>Actifio CDS</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

Rights
User must have 'System Manage' right to remove an IP restriction filter.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id=integer</td>
<td>Required. Specifies the ID of the filter to be removed.</td>
</tr>
</tbody>
</table>

rmiprestitution Request Details
Your rmiprestitution request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmiprestriction</td>
<td>argument=id of the IP to be restricted.</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmiprestitution Example

Request
POST https://{Actifio_API_HOST}/actifio/api/task/rmiprestriction?argument=id
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response
Request success
{
   "result": "1",
   "status": 0

}
5 License Management Commands

These commands are for a Sky appliance license management.

Managing License

Commands

- getlicenseinfo on page 278
- lslicense on page 280
- rmlicense on page 282
getlicenseinfo

About getlicenseinfo Command on page 278
getlicenseinfo Request Details on page 278
getlicenseinfo Example on page 278

About getlicenseinfo Command

Description
Use this command to display licensing information. If no option is supplied, a summary of all installed licenses is provided.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Rights</th>
<th>CDS appliance</th>
<th>Sky appliance</th>
<th>NAS Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rights</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

You must have 'System View' or 'System Manage' role.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>licensekey=string</td>
<td>Optional. Specifies the license key.</td>
</tr>
<tr>
<td>licensefile=string</td>
<td>Optional. Specifies the file that contains license key.</td>
</tr>
<tr>
<td>id=integer</td>
<td>Optional. Specifies the ID of the license key.</td>
</tr>
</tbody>
</table>

getlicenseinfo Request Details

Your getlicenseinfo request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/getlicenseinfo</td>
<td>none</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

getlicenseinfo Example

Fetching license details using the license Id.
Request
GET https://{_API_HOST}//api/info/getlicenseinfo?id=83005
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
    "result": "License Detail: Installed. Type: [PRODUCT] Customer: [] Product Version: [Sky]
    Issue Date: [2018-02-08 15:03:27.542] Ins
tall Date: [2018-02-08 15:05:27.459138] Variables: [MDL:5,dedupPoolSize:5],
    "status": 0
}

lslicense

About lslicense Command on page 280
lslicense Request Details on page 280
lslicense Examples on page 280

About lslicense Command

Description
Use this command to retrieve a concise list of all installed license keys, or a detailed view of an installed license key.

Applicability of this Command
This command can be used on:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id=integer</td>
<td>Optional. Specifies the ID of an object.</td>
</tr>
</tbody>
</table>

Rights
You must have ‘System View’ or ‘System Manage’ rights to retrieve license key info.

Parameters

lslicense Request Details
Your lslicense request must have a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lslicense</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

lslicense Examples

**Fetching a list of all installed license keys.**

**Request**
GET https://{_API_HOST}//api/info/lslicense
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c5f54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success
```
{  
  "result": {  
    "invaliddate": "",
    "createdate": "2017-08-30 14:30:50.027"
  
    "id": "83005",
    "licensekey": "G...A"
  },
  "status": 0
}
```

**Fetching details of license id 83005.**

**Request**

GET https://{API_HOST}//api/info/lslicense?id=83005

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success
```
{  
  "result": {  
    "invaliddate": "",
    "createdate": "2018-02-08 15:05:27.459",
    "id": "83005",
    "licensekey": "G...A"
  },
  "status": 0
}
```
rmlicense

About rmlicense Command on page 282
rmlicense Request Details on page 282
rmlicense Example on page 282

About rmlicense Command

Description

Use this command to uninstall a license key.

Note: It is not mandatory to remove an installed license key that is no longer valid. The use of the rmlicense command is optional.

Applicability of this Command

This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID of the license key to be removed.</td>
</tr>
</tbody>
</table>

rmlicense Request Details

Your rmlicense request must have a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmlicense</td>
<td>licenseid=&lt;license id&gt;</td>
</tr>
</tbody>
</table>

rmlicense Example

Uninstalling a license key.

Request

POST https://{_API_HOST}//api/task/rmlicense?licenseid=91005
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}

6 Application Management

These commands are for application management.

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<th>Discovery Commands</th>
<th>Other Commands</th>
</tr>
</thead>
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<td></td>
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<td></td>
<td>lsmdlstat on page 348</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>lsgroupmember on page 303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mkconsistgrp on page 305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsconsistgrp on page 307</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chconsistgrp on page 309</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmconsistgrp on page 316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mkconsistgrpmember on page 311</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsconsistgrpmember on page 313</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmconsistgrpmember on page 315</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmconsistgrp on page 316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmgrouppmember on page 317</td>
<td></td>
<td></td>
</tr>
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<td>rmgroup on page 318</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td></td>
</tr>
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<tr>
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</tr>
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</tr>
<tr>
<td>prepmount on page 354</td>
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<td></td>
</tr>
<tr>
<td>prepunmount on page 356</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mountimage on page 358</td>
<td></td>
<td></td>
</tr>
<tr>
<td>verifyimage on page 366</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cloneimage on page 367</td>
<td></td>
<td></td>
</tr>
<tr>
<td>replicateimage on page 370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>replicatelog on page 373</td>
<td></td>
<td></td>
</tr>
<tr>
<td>exportimage on page 375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unexportimage on page 378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsrestoreoptions on page 380</td>
<td></td>
<td></td>
</tr>
<tr>
<td>restoreimage on page 382</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsvolumeuserinfo on page 385</td>
<td></td>
<td></td>
</tr>
<tr>
<td>createliveclone on page 388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>refreshliveclone on page 390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unmountimage on page 392</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unmountactiveimages on page 394</td>
<td></td>
<td></td>
</tr>
<tr>
<td>expireimage on page 395</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deleteimage on page 397</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cleanupmirroring on page 399</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dedup Drive Seeding Commands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsdevice on page 415</td>
<td></td>
<td></td>
</tr>
<tr>
<td>initializedevice on page 417</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workflow Commands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mkworkflow on page 418</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsworkflow on page 420</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chworkflow on page 422</td>
<td></td>
<td></td>
</tr>
<tr>
<td>chflowtask on page 425</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lsflowtask on page 430</td>
<td></td>
<td></td>
</tr>
<tr>
<td>runworkflow on page 432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmworkflow on page 435</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Command</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mksideband on page 436</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Application Commands

mkapplication

About mkapplication Command on page 287
mkapplication Request Details on page 287
mkapplication Example on page 288

About mkapplication Command

Description
Use this command to create a generic application object.

Rights
You must have the ‘Application Manage’ or ‘Host Manage’ right to create a generic application.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appname=string</td>
<td>Required. Specifies the name.</td>
</tr>
<tr>
<td>appversion=string</td>
<td>Optional. Specifies the version.</td>
</tr>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description.</td>
</tr>
<tr>
<td>apptype=string</td>
<td>Optional. Specifies the application type of the application. For generic out-of-band application, the type should be ‘LVM Volume’. Otherwise, a ‘generic’ in-band application is created. This parameter applies to VDP Appliance.</td>
</tr>
<tr>
<td>hostid=string</td>
<td>Required. Specifies the host ID where the application runs.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which the application should be added after creation. If a default organization is not specified, an organization that the user belongs to is used.</td>
</tr>
<tr>
<td>volumes=string</td>
<td>Required. Specifies the names of the VDisks allotted to the application. Multiple VDisk names should be separated with a colon (:).</td>
</tr>
</tbody>
</table>

mkapplication Request Details

Your mkapplication request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mkapplication</td>
<td>appliance, hostid, volumes, appname</td>
</tr>
</tbody>
</table>
Note: See the Parameters section for a list of supported parameters and their description.

mkapplication Example

Request
POST https://{API_HOST}//api/task/mkapplication
mkapplication?hostid=84313&appliance=Solar.System&volumes=ACT_PRI_POOL000&appname=BackupApp
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
   "result": 156726,
   "status": 0
}
**Isapplication**

**About Isapplication Command**

**Description**

Use this command to display a concise list of applications or a detailed view of an application. Use the `apppdiscovery` command to discover applications on non-VMs and use `vmdiscovery` to discover applications running on the virtual machines. Generic applications (not supported by the Connector) can be created using `mkapplication`.

**Rights**

You must have the ‘Application Manage’ or ‘Host Manage’ right to create a generic application.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>filtervalue</code></td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. Valid filter attributes for <code>lsapplication</code> are:</td>
</tr>
<tr>
<td></td>
<td>• appname</td>
</tr>
<tr>
<td></td>
<td>• apptype</td>
</tr>
<tr>
<td></td>
<td>• appversion</td>
</tr>
<tr>
<td></td>
<td>• auxinfo</td>
</tr>
<tr>
<td></td>
<td>• description</td>
</tr>
<tr>
<td></td>
<td>• friendlytype</td>
</tr>
<tr>
<td></td>
<td>• hostid</td>
</tr>
<tr>
<td></td>
<td>• hostname</td>
</tr>
<tr>
<td></td>
<td>• id</td>
</tr>
<tr>
<td></td>
<td>• ignore</td>
</tr>
<tr>
<td></td>
<td>• isclustered</td>
</tr>
<tr>
<td></td>
<td>• networkip</td>
</tr>
<tr>
<td></td>
<td>• networkname</td>
</tr>
<tr>
<td></td>
<td>• originalappid</td>
</tr>
<tr>
<td></td>
<td>• pathname</td>
</tr>
<tr>
<td></td>
<td>• protectable [ NONE</td>
</tr>
<tr>
<td></td>
<td>• sourcecluster</td>
</tr>
</tbody>
</table>

The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with ‘&’ character.

For string type of filters, the only operator allowed is ‘='. You can also use wild card character '*'. For example, to list applications beginning with 'foo', use `filtervalue=name=%3Dfoo`. Some filters allow only predefined constants. For example, `protectable` allows only NONE, FULLY, or FULLY. To list applications that are protected FULLY, use `filtervalue=protectable=FULLY`.

| argument      | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the `filtervalue` parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is shown. |

---

Actifio  

289
lsapplication Request Details

Your lsapplication request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsapplication</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

lsapplication Example

List all applications.

**Request**

```
GET https://{API_HOST}//api/info/lsapplication
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

```
Request success
{
  "result": [
    {
      "appclass": "",
      "appname": "TP-Linux",
      "apptype": "VMBackup",
      "appversion": "",
      "auxinfo": "1xx.xxx.xxx.xxx",
      "description": "",
      "failoverstate": "normal",
      "friendlytype": "VMBackup",
      "hostid": "84361",
      "id": "84363",
      "ignore": "false",
      "isclearedid": "false",
      "lastfailover": "",
      "morecredentials": "",
      "networkip": "",
      "networkname": "",
      "originalappid": "0",
      "pathname": "",
      "protectable": "FULLY",
      "sensitivity": "0",
      "sourcecluster": "1415036377",
      "username": "",
      "volumes": ""
    },
    {
      "appclass": "",
      "appname": "/",
      "apptype": "FileSystem",
      "appversion": "",
      "auxinfo": "",
    }
  ]
}
```
"description": "",
"failoverstate": "normal",
"friendlytype": "FileSystem",
"hostid": "84361",
"id": "100625",
"ignore": "false",
"isclustered": "false",
"lastfailover": "",
"morecredentials": "",
"networkip": "",
"networkname": "",
"originalappid": "0",

"pathname": "",
"protectable": "FULLY",
"sensitivity": "0",

"sourcecluster": "1415036377",
"username": "",
"volumes": "",
}

{
"appclass": "",
"appname": "Jita1",
"apptype": "VMBackup",
"appversion": "",

"auxinfo": "1xx.xxx.xxx.xxx",
"description": "",
"failoverstate": "normal",
"friendlytype": "VMBackup",
"hostid": "120620",

"id": "120621",
"ignore": "false",
"isclustered": "false",
"lastfailover": "",

"morecredentials": "",
"networkip": "",
"networkname": "",
"originalappid": "0",

"pathname": "",
"protectable": "FULLY",
"sensitivity": "0",

"sourcecluster": "1415036377",
"username": "",

"volumes": "",
}

{
"appclass": "",
"appname": "BackupApp",
"apptype": "Generic",
"appversion": "",

"auxinfo": "",
"description": "",
"failoverstate": "normal",
"friendlytype": "Generic",
"hostid": "84313",

"id": "156726",
"ignore": "false",
"isclustered": "false",
"lastfailover": "",

"morecredentials": "",
"networkip": "",

"networkname": "",
"originalappid": "0",

"pathname": "",
"protectable": "FULLY",
"sensitivity": "0",

"sourcecluster": "1415036377",
"username": "",

"volumes": "",
}
List applications by filtering on an application's Id.

Request
GET https://{API_HOST}//api/info/lsapplication?argument=100626
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c654d3

where 92929a8b-a413-476f-a624-5b575c654d3 is the session ID.

Response
Request success
{
    "result": {
        "appname": "/boot",
        "apptype": "FileSystem",
        "depth": "0",
        "failoverstate": "normal",
        "friendlytype": "FileSystem",
        "frommount": "false",
        "hostid": "84361",
        "id": "100626",
        "ignore": "false",
        "isclustered": "false",
        "originalappid": "0",
        "parentappid": "0",
        "protectable": "FULLY",
        "sensitivity": "0",
        "sourcecluster": "1415036377"
    },
    "status": 0
}
chapplication

About chapplication Command on page 293
chapplication Request Details on page 294
chapplication Example on page 295

About chapplication Command

Description
Use this command to change the attributes of an application.

Rights
You must have the ‘Application Manage’ or ‘Host Manage’ right to change an application.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appname=string</td>
<td>Optional. Specifies a new name for the application. This cannot be changed for a discovered application.</td>
</tr>
<tr>
<td>appclass=string</td>
<td>Optional. Specifies the application class for the application. An app class dictates the type of option allowed for recovery operations.</td>
</tr>
<tr>
<td>applysensitivity=string</td>
<td>Optional. Applies the sensitivity of the application to all existing local backup images.</td>
</tr>
<tr>
<td>appversion=string</td>
<td>Optional. Specifies the version of the application.</td>
</tr>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description of the application.</td>
</tr>
<tr>
<td>friendlytype=string</td>
<td>Optional. Specifies friendly type for the application.</td>
</tr>
<tr>
<td>ignore=boolean</td>
<td>Optional. Specifies whether an application should be ignored. A protected application cannot be ignored.</td>
</tr>
</tbody>
</table>
### chapplication Request Details

Your chapplication request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login](#) on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>volumes=string</td>
<td>Optional. For VDP Appliance, depending on the type of application:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Generic Applications</strong> - Specifies the VDisk names of the application. Multiple VDisk names should be separated by a colon (:).</td>
</tr>
<tr>
<td></td>
<td>• <strong>VM Applications</strong> - Specifies VMDK files to be excluded or included during data capture, or simply the boot VMDK. The syntax for VM VMDK is:</td>
</tr>
<tr>
<td></td>
<td>- boot</td>
</tr>
<tr>
<td></td>
<td>- include:&lt;VMDK file list delimited by ,&gt;</td>
</tr>
<tr>
<td></td>
<td>- exclude:&lt;VMDK file list delimited by ,&gt;</td>
</tr>
<tr>
<td></td>
<td>- If the VMDK file contains a comma (',') , it must be escaped with &quot;&quot;. For example: &quot;exclude:[datastore_remus] tndvm1/test.vmdk&quot;</td>
</tr>
<tr>
<td></td>
<td>• <strong>SQL Instances</strong> - Specifies SQL Server databases to be excluded or included during data capture. The syntax for SQL Server database is:</td>
</tr>
<tr>
<td></td>
<td>- include:&lt;SQL Server database list delimited by ,&gt;</td>
</tr>
<tr>
<td></td>
<td>- exclude:&lt;SQL Server database list delimited by ,&gt;</td>
</tr>
<tr>
<td></td>
<td>- If the database contains a comma (',') it needs to be escaped with &quot;&quot;.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the application to be modified. Use lsapplication to retrieve the ID.</td>
</tr>
<tr>
<td>networkip=string</td>
<td>Optional. Specifies the network IP of the application.</td>
</tr>
<tr>
<td>isclustered=string</td>
<td>Optional. Specifies if the application is part of an appliance.</td>
</tr>
<tr>
<td>sensitivity=integer</td>
<td>Optional. Specifies if the application is sensitive (a backup image has restricted access before scrubbing of sensitive data), specify 1 for sensitive application, 0 for non-sensitive. This parameter applies to VDP Appliance.</td>
</tr>
<tr>
<td>networkname = string</td>
<td>Optional. Specifies the network name of the application.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which the application should be added after creation. Use lsorg to locate the ID or name of the organization.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> To use this option a user must have 'System Manage' right.</td>
</tr>
<tr>
<td>pathname=string</td>
<td>Optional. Specifies the path name of the application.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chapplication</td>
<td>argument</td>
</tr>
</tbody>
</table>
Note: See the Parameters section for a list of supported parameters and their description.

chapapplication Example

Request
POST https://{API_HOST}//api/task/chapplication?argument=156726&description=Application%20for%20running%20backups
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}
**About rmapplication Command**

**Description**
Use this command to delete an application.

**Rights**
You must have the 'Application Manage' or 'Host Manage' right to delete an application.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID of the application to be removed. Use lsapplication to retrieve the application ID.</td>
</tr>
</tbody>
</table>

**rmapplication Request Details**
Your rmapplication request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**Method | URI | Required Parameters**
--- | --- | ---
POST | //api/task/rmapplication | argument

*Note: See the Parameters section for a list of supported parameters and their description.*

**rmapplication Example**

**Request**

POST https://{API_HOST}//api/task/rmapplication?argument=22375678

HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c5f54d3

where 92929a8b-a413-476f-a624-5b575c5f54d3 is the session ID.

**Response**

Request success

```json
{
   "status": 0
}
```
Group Commands

mkgroup

About mkgroup Command on page 297
mkgroup Request Details on page 297
mkgroup Example on page 297

About mkgroup Command

Description

Use this command to create a new group. Applications can be added to or deleted from the group using the mkgroupmember and rmgroupmember commands. All applications of a group should be protected by the same template and profile. Note that when an application is removed from the group, it retains the protection.

To protect all applications in a group, use the mksla command with the group parameter.

Rights

You must have the ’Application Manage’ or ’Host Manage’ right to create a group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the group. The name should be unique.</td>
</tr>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description for the group.</td>
</tr>
</tbody>
</table>

mkgroup Request Details

Your mkgroup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/mkgroup</td>
<td>name</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkgroup Example

Request

POST https://{API_HOST}//api/task/mkgroup?apistart=0&apilimit=100&name=backupapps-group&description=Manage+Backups&appliance=Solar.System

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{  "result": 156836,
  "status": 0
}

## lsigroup

### About lsigroup Command

**Description**

Use this command to display a concise list of application groups or a detailed view of an application group. You can protect the members of a group using a single policy template.

**Rights**

You must have the 'System View' or 'System Manage' right to display a list of groups.

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| `filtervalue` | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the `lsigroup` command are:  
  - `name`  
  - `description`  
  
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with `&` character. For string type of filters, the only operator allowed is `=`. You can also use wild card character `*`. For example, to list all consistency groups with a name that begins with 'foo', use `filtervalue=name%3Dfoo` |
| `argument` | Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the `filtervalue` parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

### lsigroup Request Details

Your `lsigroup` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsigroup</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

### lsigroup Example

**List all groups.**

**Request**

```
GET https://(API_HOST)//api/info/lsigroup
```
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "description": "Manage Backups",
      "id": "156836",
      "modifydate": "2017-11-29 23:41:16.500",
      "name": "backupapps-group"
    },
    {
      "description": "Manage Dedups",
      "id": "156864",
      "modifydate": "2017-11-29 23:46:12.862",
      "name": "dedupapps-group"
    }
  ],
  "status": 0
}

List groups filtering by object Id.

Request
GET https://{API_HOST}//api/info/lsgroup?argument=156836

HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "description": "Manage Backups",
      "id": "156836",
      "modifydate": "2017-11-29 23:41:16.500",
      "name": "backupapps-group"
    }
  ],
  "status": 0
}
chgroup

About chgroup Command

Description
Use this command to change the attributes of a group. Use the lsgroup command to obtain a list of groups with IDs and names.

Rights
You must have the 'Application Manage' or 'Host Manage' right to modify a group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies the name.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the group to be modified.</td>
</tr>
</tbody>
</table>

chgroup Request Details

Your chgroup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chgroup</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chgroup Example

Request

POST https://{API_HOST}//api/task/chgroup?argument=mktgroup
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
    "status": 0
}
About mkgroupmember Command

Description
Use this command to add an application to a group.

Rights
You must have the "Application Manage" or "System Manage" or "SLA Assign" right to add an application to a group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appid=integer</td>
<td>Required. Specifies the ID of an application to add to a group. Use lsapplication to retrieve the application ID.</td>
</tr>
<tr>
<td>groupid=integer</td>
<td>Required. Specifies the ID of the group to add the application to. Use lsconsistgrp command to obtain the ID of the consistency group.</td>
</tr>
</tbody>
</table>

mkgroupmember Request Details
Your mkgroupmember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mkgroupmember</td>
<td>appid, groupid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkgroupmember Example

Request
POST https://{API_HOST}//api/task/mkgroupmember?appid=33450&groupid=338654
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": 403775,
    "status": 0
}
**Isgroupmember**

**About Isgroupmember Command**

**Description**

Use this command to display a concise list of groups or a detailed view of the grouping of applications.

**Rights**

You must have the 'System View' or 'System Manage' or 'SLA Assign' right to list group members.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for Isgroupmember are:
  - groupid
  - appid
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with `&` character. |
| argument=string | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

**Isgroupmember Request Details**

Your Isgroupmember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsgroupmember</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**Isgroupmember Example**

**Request**

GET https://{API_HOST}//api/info/lsgroupmember

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response

Request success
{
"result": [ 
{
"modifydate": "",
"appid": "334050",
"groupid": "333846",
"id": "385474"
};
],
"status": 0
}
About mkconsistgrp Command

Description

Use this command to create a new consistency group object. A consistency group is more than a logical grouping of applications. A consistency group is used to group applications with data that should be protected together when taking a snapshot. All applications of a consistency group should be located on the same host.

Rights

You must have the 'Application Manage' or 'Host Manage' or 'SLA Assign' right to create a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=str</td>
<td>Optional. Specifies the description for consistency group.</td>
</tr>
<tr>
<td>hostid=string</td>
<td>Required. Specifies the host ID of the consistency group for the VDP appliance.</td>
</tr>
<tr>
<td>groupname=str</td>
<td>Required. Specifies the name of the consistency group. The name should be unique.</td>
</tr>
</tbody>
</table>

mkconsistgrp Request Details

Your mkconsistgrp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mkconsistgrp</td>
<td>groupname  hostid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkconsistgrp Example

Request

POST https://{API_HOST}//api/task/mkconsistgrp?hostid=198180&groupname=mygroup2
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfe54d3

where 92929a8b-a413-476f-a624-5b575cfe54d3 is the session ID.
Response
Request success
{
   "result": 333957
   "status": 0
}

lsconsistgrp

About lsconsistgrp Command on page 307
lsconsistgrp Request Details on page 307
lsconsistgrp Example on page 308

About lsconsistgrp Command

Description
Use this command to display a concise list of all consistency groups created on the appliance or a detailed view of a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>filtervalue</strong></td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <code>lsconsistgrp</code> command are:</td>
</tr>
<tr>
<td></td>
<td>- groupname</td>
</tr>
<tr>
<td></td>
<td>- originalappid</td>
</tr>
<tr>
<td></td>
<td>The filter is formed with an attribute and a value. When user specifies more than one filter, they must be combined with the <code>&amp;</code> character. For string type of filters, the only operator allowed is <code>=</code>. You can also use wild card character <code>*</code>. For example, to list all consistency groups with a name that begins with <code>foo</code>, use <code>^filtervalue groupname=foo*</code>.</td>
</tr>
<tr>
<td></td>
<td>For number types, allowed operators are: <code>=</code>, <code>&gt;</code>, <code>&lt;</code>, <code>&lt;=</code>, <code>&gt;=</code>. To use <code>&lt;</code>, <code>&lt;=</code>, or <code>&gt;</code>, they need to be escaped with <code>\</code> or enclosed in ``, as required by shell. For example,</td>
</tr>
<tr>
<td></td>
<td><code>^filtervalue originalappid\&gt;80</code></td>
</tr>
<tr>
<td></td>
<td><code>^filtervalue originalappid\&gt;=80</code></td>
</tr>
<tr>
<td></td>
<td><code>^filtervalue originalappid\&gt;=80</code></td>
</tr>
<tr>
<td><strong>argument</strong></td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the <code>filtervalue</code> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

lsconsistgrp Request Details

Your `lsconsistgrp` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsconsistgrp</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
lsconsistgrp Example

Request
GET https://{API_HOST}//api/info/lsconsistgrp
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "originalappid": "0",
      "protectable": "FULLY",
      "networkip": "",
      "isclustered": "false",
      "apptype": "ConsistGrp",
      "appclass": "",
      "volumes": "",
      "lastfailover": "",
      "hostid": "198180",
      "description": "",
      "appversion": "",
      "groupname": "mygroup2",
      "pathname": "",
      "failoverstate": "0",
      "morecredentials": "",
      "networkname": "",
      "ignore": "false",
      "sourcecluster": "1415056619",
      "id": "333957",
      "sensitivity": "0",
      "auxinfo": "",
      "username": "",
      "friendlytype": "ConsistGrp"
    }
  ],
  "status": 0
}
About chconsistgrp Command

Description
Use this command to change the attributes of a consistency group. A consistency group is more than a logical grouping of applications. It is used to group applications to create a crash consistent backup image when creating a backup. Use lsconsistgrp command to obtain the ID or name of the consistency group.

Rights
You must have the ‘Application Manage’ right to change the attributes of a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description.</td>
</tr>
<tr>
<td>groupname=string</td>
<td>Optional. Specifies new name of the consistency group.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the consistency group ID to be modified.</td>
</tr>
</tbody>
</table>

chconsistgrp Request Details

Your chconsistgrp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chconsistgrp</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chconsistgrp Example

Request
POST https://{_API_HOST}//api/task/chconsistgrp?argument=154829
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
"status": 0
}
About mkconsistgrpmember Command

Description
Use this command to add an application to a consistency group.

Rights
You must have the ‘Application Manage’ right to add an application to a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appid=string</td>
<td>Required. Specifies the ID of the application to be added to a consistency group. Use lsapplication to retrieve the application ID.</td>
</tr>
<tr>
<td>groupid=string</td>
<td>Required. Specifies the ID of the consistency group to add the application to. Use lsconsistgrp command to obtain the ID of the consistency group</td>
</tr>
</tbody>
</table>

mkconsistgrpmember Request Details

Your mkconsistgrpmember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/mkconsistgrpmember</td>
<td>appid, groupid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

mkconsistgrpmember Example

Request
POST https://{API_HOST}//api/task/mkconsistgrpmember?appid=333957&groupid=334089
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": 385474,
    "status": 0
}

actifio
About rmconsistgrp Command

Description
Use this command to delete a consistency group.

Rights
You must have the 'Application Manage' or 'Host Manage' right to delete a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the consistency group ID to be removed. Use lsconsistgrp command to obtain the ID or name of the consistency group.</td>
</tr>
</tbody>
</table>

rmconsistgrp Request Details

Your rmconsistgrp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/rmconsistgrp</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmconsistgrp Example

Request
POST https://{API_HOST}//api/task/rmconsistgrp?argument=333957
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cf54d3

where 92929a8b-a413-476f-a624-5b575cf54d3 is the session ID.

Response
Request success
{
  "status": 0
}

### About lsconsistgrpmember Command

**Description**

Use this command to display a concise list of applications-to-consistency-group mapping or a detailed view of a consistency group.

**Rights**

You must have the 'System View' right to retrieve consistency group (consistgrp) mappings.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the lsconsistgrpmember command are:  
  - groupid  
  - appid  
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with `&` character (which should be escaped with `\`). |
| argument=string | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed. |

### lsconsistgrpmember Request Details

Your lsconsistgrpmember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsconsistgrpmember</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

### lsconsistgrpmember Example

**Request**

GET https://{API_HOST}//api/info/lsconsistgrpmember?appid=333957&groupid=334089

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575c0f54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
   "result": [
      {
         "modifydate": "",
         "appid": "334050",
         "groupid": "371554",
         "id": "407411"
      }
   ],
   "status": 0
}
```
About rmconsistgrpmember Command

Description
Use this command to delete an application from a consistency group. Use lsconsistgrpmember to locate the ID of a consistency group member.

Rights
You must have the 'Application Manage' or 'Host Manage' or 'SLA Manage' right to delete an application from a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the application to be deleted from a consistency group.</td>
</tr>
</tbody>
</table>

rmconsistgrpmember Request Details

Your rmconsistgrpmember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmconsistgrpmember</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmconsistgrpmember Example

Request
POST https://{API_HOST}//api/task/rmconsistgrpmember?argument=333957
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
About rmconsistgrp Command

Description
Use this command to delete a consistency group.

Rights
You must have the 'Application Manage' or 'Host Manage' right to delete a consistency group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the consistency group ID to be removed. Use lsconsistgrp command to obtain the ID or name of the consistency group.</td>
</tr>
</tbody>
</table>

rmconsistgrp Request Details

Your rmconsistgrp request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/rmconsistgrp</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmconsistgrp Example

Request
Request success
POST https://{API_HOST}//api/task/rmconsistgrp?argument=156726
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "status": 0
}

**About rmgroupmember Command**

**Description**

Use this command to delete an application from a group. Use lsgroupmember to list the ID of the Rights You must have the 'Application Manage' or 'System Manage' or 'SLA Assign' right to delete an application from a group.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the ID of the group mapping to be removed.</td>
</tr>
</tbody>
</table>

**rmgroupmember Request Details**

Your rmgroupmember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmgroupmember</td>
<td>argument</td>
</tr>
</tbody>
</table>

**rmgroupmember Example**

**Request**

Request success

POST https://{API_HOST}//api/task/rmgroupmember?argument=156726
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c9f54d3

where 92929a8b-a413-476f-a624-5b575c9f54d3 is the session ID.

**Response**

Request success

```
{
    "status": 0
}
```
rmgroup
About rmgroup Command on page 318
rmgroup Request Details on page 318
rmgroup Example on page 318

About rmgroup Command
Description
Use this command to delete a group.

Rights
You must have the 'Application Manage' or 'Host Manage' or 'System Manage' right to delete a group.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the group to be deleted. Use lsgroup to obtain the ID or name of a group.</td>
</tr>
</tbody>
</table>

rmgroup Request Details
Your rmgroup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmgroup</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmgroup Example
Request
POST https://{API_HOST}//api/task/rmgroup?argument=333850
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

Response
Request success
{
  "status": 0
}

Discovery Commands

appdiscovery

About appdiscovery Command on page 319
appdiscovery Request Details on page 319
appdiscovery Example on page 320

About appdiscovery Command

Description
Use this command to discover applications on a host. This applies to non Virtual Machine applications discovery. For Virtual Machines, use vmdiscovery. Use ‘udsinfo lshost’ command to locate ID or name of the host.

Rights
You must have the ‘Host Manage’ or ‘Application Manage’ right to perform application discovery.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>apps=string</td>
<td>Optional. Applications to be added to the appliance. Specify application names to add, comma separated. By default all applications are added.</td>
</tr>
<tr>
<td>apptype=string</td>
<td>Optional. Specifies type of applications to be discovered.</td>
</tr>
<tr>
<td>host=string</td>
<td>Optional. Specifies the host to perform discovery on, either ID or name of the host is needed. Use lshost to locate the ID/SRCID or name of the host.</td>
</tr>
<tr>
<td>ipaddress</td>
<td>Optional. Specifies the IP address of a host to perform discovery on.</td>
</tr>
<tr>
<td>listonly</td>
<td>Optional. Discover the applications on a given host only, don’t add the applications to the appliance.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which a new application should be added after discovery. To use this option user needs to have ‘System Manage’ right. If a default organization is not specified, an organization that the user belongs to is used.</td>
</tr>
<tr>
<td>port=integer</td>
<td>Optional. Specifies the port that the Connector is running on, the default value is 56789.</td>
</tr>
<tr>
<td>versiononly</td>
<td>Optional. Specifies if only the version should be discovered for this host. By default versiononly is set to false.</td>
</tr>
</tbody>
</table>

appdiscovery Request Details

Your appdiscovery request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
</table>

actr.io
Note: See the Parameters section for a list of supported parameters and their description.

**appdiscovery Example**

**Request**

POST https://{API_HOST}//api/task/appdiscovery?host=198180

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{  
    "result": [  
        {  
            "new": "true",  
            "appname": "F:\",  
            "missing": "false",  
            "exists": "false",  
            "id": "334037"
        },  
        {  
            "new": "true",  
            "appname": "E: \",  
            "missing": "false",  
            "exists": "false",  
            "id": "334038"
        },  
        {  
            "new": "true",  
            "appname": "C:\",  
            "missing": "false",  
            "exists": "false",  
            "id": "334039"
        },  
        {  
            "new": "true",  
            "appname": "ProdMB04",  
            "missing": "false",  
            "exists": "false",  
            "id": "334040"
        },  
        {  
            "new": "true",  
            "appname": "ProdPF05-Sky",  
            "missing": "false",  
            "exists": "false",  
            "id": "334041"
        },  
        {  
            "new": "true",  
            "appname": "ProdPF04-Sky",  
            "missing": "false",  
            "exists": "false"}
```

"id": "334042"
},
{
  "new": "true",
  "appname": "ProdMB05-Sky",
  "missing": "false",
  "exists": "false",
  "id": "334043"
},
{
  "new": "true",
  "appname": "ProdMB04-Sky",
  "missing": "false",
  "exists": "false",
  "id": "334044"
},
{
  "new": "true",
  "appname": "ProdMB31",
  "missing": "false",
  "exists": "false",
  "id": "334045"
},
{
  "new": "true",
  "appname": "ProdPF05",
  "missing": "false",
  "exists": "false",
  "id": "334046"
},
{
  "new": "true",
  "appname": "ProdMB05",
  "missing": "false",
  "exists": "false",
  "id": "334047"
},
{
  "new": "true",
  "appname": "ProdMB32",
  "missing": "false",
  "exists": "false",
  "id": "334048"
},
{
  "new": "true",
  "appname": "ProdPF04",
  "missing": "false",
  "exists": "false",
  "id": "334049"
},
{
  "new": "true",
  "appname": "MailboxDatabase1340163881",
  "missing": "false",
  "exists": "false",
  "id": "334050"
}
],
"status": 0


}
Isappvols

About lsappvols Command on page 323
lsappvols Request Details on page 323
lsappvols Example on page 323

About lsappvols Command

Description

Use this command to discover LVM volumes from the Actifio Connector on a Linux host. Generic out-of-band applications can then be added based on the selected LVM volumes. The lsappvols command is supported only by the appliances.

Rights

You must have the 'Host Manage' or 'Application Manage' right to perform application discovery.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>host=string</td>
<td>Required. Specifies the Linux host with a Actifio Connector to perform application discovery using either host ID or name. Use lshost to locate the host ID or name.</td>
</tr>
</tbody>
</table>

lsappvols Request Details

Your lsappvols request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsappvols</td>
<td>host</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsappvols Example

Request

GET https://{API_HOST}//api/info/lsappvols?host=198180
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response

Request success
{
    "result": [
        {
            "size": "0",
            "name": "F:\",
            "lvmuuid": "null"
        },
        {
            "size": "0",
            "name": "C:\",
            "lvmuuid": "null"
        }
    ]
}
"name": "E: \",
"lvmuuid": "null"
},
{
"size": "0",
"name": "C:\",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdMB04",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdPF05-Sky",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdPF04-Sky",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdMB05-Sky",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdPF04-Sky",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdMB31",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdPF05",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdMB05",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdMB05",
"lvmuuid": "null"
},
{
"size": "0",
"name": "ProdMB32",
"lvmuuid": "null"
},
{
"size": "0",
"name": "MailboxDatabase1340163881",
"lvmuuid": "null"
}
],
"status": 0
About vmdiscovery Command

Description
The vmdiscovery command discovers Virtual Machines managed by a vCenter or an SCVMM server, which then allows the discovered Virtual Machines to be protected by the appliance.

Rights
You must have the ‘Host Manage’ right to discover virtual machines.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>addall=string</td>
<td>Optional. Specifies that all Virtual Machines discovered in the specified cluster (with -cluster) are to be added to the appliance. Valid only for -discovervms parameter.</td>
</tr>
<tr>
<td>addvms=string</td>
<td>Optional. Virtual Machines to be added to the appliance. Specify the VM name, UUID of the VM to add.</td>
</tr>
<tr>
<td>cluster=string</td>
<td>Optional. Specifies cluster name or Hyper-V server that the Virtual Machines should be discovered. Required for -discovervms and -addvms.</td>
</tr>
<tr>
<td>discoverclusters=string</td>
<td>Optional, but required to discover clusters on a vCenter or Hyper-V server on SCVMM.</td>
</tr>
<tr>
<td>discovervms=string</td>
<td>Optional, but required to discover virtual machines. Discover Virtual Machines on the specified cluster or Hyper-V server (with -cluster).</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Specifies the vCenter host or SCVMM host to perform discovery on, either id or name of the vCenter or SCVMM (of type vCenter) host is required. Use ‘udsinfo lshost’ to locate the ID or name of the vCenter or SCVMM host. The vCenter or SCVMM host should have been added to the appliance with ‘udstask mkhost’ command.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which the new VM should be added after discovery. To use this option user needs to have ‘System Manage’ right. If a default organization is not specified, an organization that the user belongs to is used.</td>
</tr>
<tr>
<td>vms=string</td>
<td>Optional. Virtual machines to be added to an appliance. The list of virtual machines should be separated by a colon (:). Required when using addvms.</td>
</tr>
</tbody>
</table>

vmdiscovery Request Details
Your vmdiscovery request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
Note: See the Parameters section for a list of supported parameters and their description.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/vmdiscovery</td>
<td>host=&lt;id</td>
</tr>
</tbody>
</table>

vmdiscovery Example

Request
POST https://{API_HOST}//api/task/vmdiscovery?discovervms&host=4322&cluster=ENG_CLUSTER
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfd54d3
where 92929a8b-a413-476f-a624-5b575cfd54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "esxhostname": "Box1.qa.com",
      "exists": "false",
      "folder-path": "ENG_Data:/Discovered virtual machine/2008 Server",
      "hostname": ",",
      "ipaddress": ",",
      "osname": "Microsoft Windows Server 2008 (32-bit)",
      "status": "1",
      "uuid": "5025e9b4-83bc-a092-fe6d-bf6339adce65",
      "vmname": "2008 Server"
    },
    {
      "esxhostname": "Box2.qa.com",
      "exists": "false",
      "folder-path": "ENG_Data:/Discovered virtual machine/20GB_Win7_25_Drives",
      "hostname": "20GB_Win7_25_Drives",
      "ipaddress": ",",
      "osname": "Microsoft Windows 7 (64-bit)",
      "status": "1",
      "uuid": "503d6417-fcbd-44a5-7a16-5a4b8c677b59",
      "vmname": "20GB_Win7_25_Drives"
    }
  ],
  "status": 0
}
**hmcdiscovery**

**About hmcdiscovery Command**

**Description**

Use this command to discover VIOs and LPARs on an HMC host.

**Applicability of this Command**

This command can be used on:

**Rights**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>host=string</td>
<td>Optional. Specifies the host to perform HMC discovery on. The host has to be an HMC host. This is used when the HMC host already exists in the appliance.</td>
</tr>
<tr>
<td>ipaddress=string</td>
<td>Optional. Specifies the IP address of the HMC host, required when the HMC host does not exist in the appliance.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which VIO or LPAR hosts should be added after discovery. To use this option user needs 'System Manage' right. If a default organization is not specified, an organization the user belongs to is used.</td>
</tr>
<tr>
<td>password=string</td>
<td>Optional. Specifies the password of the HMC host, required when the HMC host does not exist in the appliance.</td>
</tr>
<tr>
<td>port=integer</td>
<td>Optional. Specifies the port to be used for discovery, default to 22.</td>
</tr>
<tr>
<td>username=string</td>
<td>Optional. Specifies the username of the HMC host, required when the HMC host does not exist in the appliance.</td>
</tr>
</tbody>
</table>

You must have the 'Host Manage' rights to perform HMC discovery.

**Parameters**

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/hmcdiscovery</td>
<td>None</td>
</tr>
</tbody>
</table>
Note: See the Parameters section for a list of supported parameters and their description.

hmcdiscovery Example

Request
POST https://{API_HOST}//api/task/hmcdiscovery?ipaddress={HMC_IP}&username=name&password=pw
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.
Other Commands

failback

About failback Command on page 330
failback Request Details on page 330
failback Example on page 330

About failback Command

Description

Use this to fail back an application that is protected by a Dedup Async or StreamSnap policy, from the remote appliance to the primary appliance. Prior to failing an application back, you should synchronize the application's data on the remote appliance with that of the primary appliance using the syncback command.

Rights

You must have the 'Host Manage' or 'Application Manage' or 'Mirroring Manage' right to fail back an application.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance</td>
<td>Required. Specifies ID of the application, or consistgrp to be fail-back, the application or consistgrp must have already been protected by a dedup-async policy, and is in failed-over state.</td>
</tr>
</tbody>
</table>

failback Request Details

Your failback request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/failback</td>
<td>id</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

failback Example

POST https://{API_HOST}//api/task/failback?id=34118
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
    "result": "Failback job Job_0041610 completed",
    "status": 0
}
failover

About failover Command

Description

Use this command to fail-over a dedup-async protected application. This command is issued on the remote appliance when the application on the primary appliance is failed.

Rights

You must have the ‘Host Manage’ or ‘Application Manage’ right to fail over an application.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>accessmode</td>
<td>Optional, valid only for export to CIFS type for VDP appliance. Specifies the type of access that is allowed for the specified user (in user). Allowed types are:</td>
</tr>
<tr>
<td></td>
<td>• ro: read-only</td>
</tr>
<tr>
<td></td>
<td>• rw: read-write</td>
</tr>
<tr>
<td></td>
<td>• deny: no access allowed</td>
</tr>
<tr>
<td></td>
<td>• root: has full access to all the files in the share even if ACLs do not.</td>
</tr>
<tr>
<td>allvolumes</td>
<td>Optional. The flag specifies whether to export all volumes in the backup for VDP appliance. Use exportobjectid to specify a specific volume to be exported.</td>
</tr>
<tr>
<td>id</td>
<td>Required. Specifies the ID/SRCID or consistgrp of the application to fail over. The application or consistgrp should be protected by a dedup-async policy.</td>
</tr>
<tr>
<td>datastore</td>
<td>Optional for applications on hosts other than virtual machines but required for VMware Virtual Machine applications. Specifies the data store to be used for fail-over.</td>
</tr>
<tr>
<td>diskpool</td>
<td>Optional for VM applications and required only for non-VM applications. Specifies the disk-pool to be used for fail-over.</td>
</tr>
<tr>
<td>exportedname</td>
<td>Optional. Specifies the exported name of the backup image, valid only for CIFS for VDP appliance.</td>
</tr>
<tr>
<td>exportedpath</td>
<td>Optional. Specifies sub-directory within the mount volume to be exported for VDP appliance.</td>
</tr>
<tr>
<td>exporthost</td>
<td>Optional. Specifies the ID or name of host(s) to which the backup image is to be exported for VDP appliance. If ID is used, the host must already exist in the appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>exportobjectid=string</td>
<td>Optional. Specifies the object id of the individual volume within the mounted image to be exported for VDP appliance.</td>
</tr>
<tr>
<td>exportobjectype=string</td>
<td>Optional. Specifies the object type of the individual volume within the mounted image to be exported for VDP appliance.</td>
</tr>
<tr>
<td>exportoption=string</td>
<td>Optional. Specifies the export option, a name/value list, separated by equal (=) for VDP appliance. Multiple options are separated by comma (,). An example is, &quot;readonly=true,writedelay=false&quot;. The following option is allowed for NFS: • readonly=&quot;true</td>
</tr>
<tr>
<td>exporttype=string</td>
<td>Optional. Specifies protocol for VDP appliance, cifs for CIFS, and nfs for NFS. Default to the protocol the backup was created.</td>
</tr>
<tr>
<td>group=string</td>
<td>Optional, valid only for export to CIFS type for VDP appliance. Specifies a list of domain groups that are allowed to map the share, separated by a comma (,).</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Specifies the host ID for VDP appliance or host name or the name of the virtual machine to fail-over to. For a regular host, the host has to exist already.</td>
</tr>
<tr>
<td>hypervisor=string</td>
<td>Optional (required for Virtual Machine applications for VDP appliance). Specifies the hypervisor on which to failover to. This is the ESX host for VMware, and Microsoft Hyper-V Server for Hyper-V.</td>
</tr>
<tr>
<td>label=string</td>
<td>Optional. Specifies label for the fail-over image.</td>
</tr>
<tr>
<td>mgmtserver=string</td>
<td>Optional. Required for Virtual Machine applications for VDP appliance. Specifies the management server, ID or name, to be used for test failover. This is the vCenter host for VMware and Microsoft System Center Virtual Machine Manager for Hyper-V.</td>
</tr>
<tr>
<td>nowait=string</td>
<td>Optional. The flag specifies not to wait for the completion of the command.</td>
</tr>
<tr>
<td>path=string</td>
<td>Optional, valid only for Hyper-V Virtual Machine backup image for VDP appliance. Specifies the path to be used for failover to a new Hyper-V Virtual Machine.</td>
</tr>
</tbody>
</table>
For an Actifio appliance:

### failover Request Details

Your failover request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>poweroffvm</td>
<td>(Optional) By default, failover of VM image is powered on automatically. Specifying 'poweroffvm' will leave the VM in the powered off state.</td>
</tr>
<tr>
<td>rdmmodem</td>
<td>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>• dependentvirtual</td>
</tr>
<tr>
<td></td>
<td>• independentvirtual (default)</td>
</tr>
<tr>
<td></td>
<td>• physical</td>
</tr>
<tr>
<td></td>
<td>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> dependentvirtual is rarely used.</td>
</tr>
</tbody>
</table>

If there is an SLA assigned to the VM to which these volumes are mounted, they will be captured and will be counted towards MDL usage.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>restoreoption</td>
<td>Optional. A comma delimited list of restore options where each restore option is a name-value pair. See Appendix F, List of Restore Options for a summary of the supported restore options for this command.</td>
</tr>
<tr>
<td>script</td>
<td>Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and arguments are optional. Syntax for each phase is: name=&lt;name&gt;:phase={INIT</td>
</tr>
<tr>
<td>user</td>
<td>Optional, valid only for export to CIFS type for VDP appliance. Specifies a list of domain users that are allowed to map the share, separated by a comma (,). Also allowed are local user (with specified password), use colon (:) to separate user name and password. The local user does not need to exist in Windows Domain or the appliance, but has to be unique.</td>
</tr>
</tbody>
</table>

For an Actifio appliance:

**failover Request Details**

Your failover request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/failover</td>
<td>id</td>
</tr>
<tr>
<td></td>
<td></td>
<td>host</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.
failover Example

Request
POST https://{REMOTE_APPLIANCE_HOST}//api/task/failover?appid=17027&diskpool=act_per_pool000&host=2008 server&label=REST_failover_img&allvolumes=true
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": "failover job Job_0020689 completed",
  "status": 0
}
About testfailover Command

Description
Use this command to test a Dedup Async protected application for fail-over.

Rights
You must have the ‘Host Manage’ or ‘Application Manage’ right to test an application.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id=string</td>
<td>Required. Specifies the ID for VDP appliance of the application or consistency group to be tested. The application should be protected with a dedup-async policy.</td>
</tr>
</tbody>
</table>
| accessmode=string | Optional, valid only for export to CIFS type for VDP appliance. Specifies the type of access that is allowed for the specified user (in user). Allowed types are:  
  • ro: read-only  
  • rw: read-write  
  • deny: no access allowed  
  • root: has full access to all the files in the share even if ACLs do not |
| allvolumes=string | Optional. The flag specifies whether to export all volumes in the backup for VDP appliance. Use exportobjectid to specify a specific volume to be exported. |
| datastore=string | Optional. Required for VMware (VDP appliance). Specifies the datastore to be used to test the fail-over. |
| host=string     | Required. Specifies the host source ID, name, or the name of the virtual machine to fail over to. For a regular host, the host should exist already. |
| hypervisor=string | Optional. required for Virtual Machine applications for VDP appliance. Specifies the hypervisor to be used for the test failover. This is the ESX host for VMware, and Microsoft Hyper-V Server for Hyper-V. |
| label=string    | Optional. Specifies label for the test failover image. |
| mgmtserver=string | Optional. required for Virtual Machine applications for VDP appliance. Specifies the management server to be used for test fail-over. This is the vCenter host for VMware and Microsoft System Center Virtual Machine Manager for Hyper-V. |
| nowait=boolean  | Optional. Specifies not to wait for the completion of the command. |
### Parameter | Description
--- | ---
path=string | Optional. Valid only for Hyper-V Virtual Machine backup image for VDP appliance. Specifies the path to be used for test fail-over to a new Hyper-V Virtual Machine.
rdmmode | Optional. Specifies Raw Device Mapping (RDM) mode for a VM. Valid values are:
- dependentvirtual
- independentvirtual (default)
- physical
Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots

**Note:** dependentvirtual is rarely used.
If there is an SLA assigned to the VM to which these volumes are mounted, they will be captured and will be counted towards MDL usage.

restoreoption=string | Optional. A comma delimited list of restore options where each restore option is a name–value pair. See Appendix F, List of Restore Options for a summary of the supported restore options for this command.

script=string | Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional.
Syntax for each phase is:
name=<name>:phase={INIT|PRE|POST|FINAL|ABORT}:[timeout=<timeout>]:[args=arg1,arg2]. Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"

exportedname=string | Optional. Specifies the exported name of the backup image, valid only for CIFS for VDP appliance.

exportedpath=string | Optional. Specifies sub-directory within the mount volume to be exported for VDP appliance.

exporthost=string | Optional. Specifies the ID or name of host(s) to which the backup image is to be exported for VDP appliance. If ID is used, the host has to already exist in the appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).

exportobjectid=string | Optional. Specifies the objectid of the individual volume within the mounted image to be exported for VDP appliance.

exportobjecttype=string | Optional. Specifies the objecttype of the individual volume within the mounted image to be exported for VDP appliance.

poweroffvm=boolean | Optional. By default, testfailover of VM image is powered on automatically. By specifying true, the VM will be left in the powered off state.
**testfailover Request Details**

Your `testfailover` request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login](#) on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>exportoption=string</code></td>
<td>Optional. Specifies the export option for VDP appliance, a name/value list, separated by equal (=). Multiple options are separated by commas (,). An example is: <code>readonly=true,writedelay=false</code>&lt;br&gt;The following options are allowed for NFS:&lt;br&gt;• `readonly=true</td>
</tr>
<tr>
<td><code>exporttype=string</code></td>
<td>Optional. Specifies protocol for VDP appliance, <code>cifs</code> for CIFS, and <code>nfs</code> for NFS. Default to the protocol the backup was created.</td>
</tr>
<tr>
<td><code>group=string</code></td>
<td>Optional, valid only for export to CIFS type for VDP appliance. Specifies a list of domain groups that are allowed to map the share, separated by a comma (,).</td>
</tr>
<tr>
<td><code>user=string</code></td>
<td>Optional, valid only for export to CIFS type for VDP appliance. Specifies a list of domain users that are allowed to map the share, separated by comma (,). Also allowed are local user (with specified password), use colon (:) to separate username and password. The local user does not need to exist in Windows Domain or the appliance, but it has to be unique.</td>
</tr>
</tbody>
</table>

**testfailover Example**

**Request**

```
POST https://{REMOTE_APPLIANCE}//api/task/testfailover?id=17027&allvolumes=true&host=2008
```

HTTP Request Header

```
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success
"result": "testfailover job Job_0020689 completed",
"status": 0
}
rmfailovertest

About rmfailovertest Command

Description

Use this command to delete a test failover image. Use lsbackup command to locate the backup images to be deleted.

Rights

You must have the ‘Host Manage’ or ‘Application Manage’ rights to delete a image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>image=string</td>
<td>Required. Specifies the ID for VDP appliance or name of the backup image to be deleted. Use lsbackup to locate the ID/SRCID or name for the image.</td>
</tr>
</tbody>
</table>
| script=string | Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase may have a timeout, name of the script, and argument list. The name of the script is required, timeout and args are optional. Syntax for each phase is: name=<name>:phase={INIT|PRE|POST|FINAL|ABORT}:[timeout=<timeout>]:[args=arg1,arg2] Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"

rmfailovertest Request Details

Your rmfailovertest request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmfailovertest</td>
<td>image</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmfailovertest Example

Request

POST https://{API_HOST}//api/task/rmfailovertest?image=Image_0024650
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response

Request success
{ "result": "Job_0025468 to rmfailovertest Image_0024650 completed", "status": 0 }
syncback

About syncback Command

Description
Use this command to synchronize a failed-over dedup-async or StreamSnap-protected application back to the original appliance.

This command can be issued only on the failed-over VDP appliance. It merges all changes made to the failed over application on the remote appliance back to the original appliance, in preparation for the eventual fail-back. When an application, protected with a Dedup Async or StreamSnap policy, fails over to a remote appliance, the application data is modified on the remote appliance. However, failing the application back to the primary appliance requires synchronization of the application’s data between the remote and primary appliances using the sync-back command.

Rights
You need the 'Host Manage' or 'Application Manage' or 'Mirroring Manage' right to sync-back a failed-over application.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id=string</td>
<td>Required. Specifies the ID for VDP appliance to be synchronized back from the previously failed over application or consistency group. Use lsapplication or lsconsistgrp for the ID/SRCID.</td>
</tr>
<tr>
<td>label=string</td>
<td>Optional. Specifies label for the newly created sync-back image.</td>
</tr>
</tbody>
</table>

syncback Request Details

Your syncback request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/syncback</td>
<td>id</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

syncback Example

Request
POST https://{REMOTE_APPLIANCE_HOST}//api/task/syncback?appid=17027&label=syncback_image_1 HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
Request success
{
    "result": "syncback job Job_0020708 completed",
    "status": 0
}
Isappclass

About lsappclass Command

Description
Use this command to list all the available application classes or provide detailed information (provisioning options) for a specific application class. If appclassname is provided instead of the other parameters, it will display detailed information about the given Appclass.

Applicability of this Command
This command can be used on:

Rights

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>ü</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>ü</td>
</tr>
<tr>
<td>NAS Director</td>
<td>ü</td>
</tr>
</tbody>
</table>

You must have the 'System Manage' or 'System View' right to view the application class information.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Optional. The case sensitive Appclass name (MS-SQL Server, Oracle, EBiz, and so on).</td>
</tr>
</tbody>
</table>

lsappclass Request Details

Your lsappclass request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsappclass</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isappclass Example

Request
GET https://{API_HOST}//api/info/lsappclass
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "friendly name": "SQL Server Group",
            "name": "SQLServerGroup",
            "description": "Consistency group including SQL Server Databases and optionally one or more filesystem applications"
        },
        {
            "friendly name": "SQL Server",
            "name": "SQLServer",
            "description": "SQL Server database"
        },
        {
            "friendly name": "Oracle Group",
            "name": "OracleGroup",
            "description": "Consistency group including one Oracle Database and optionally one or more filesystem applications"
        },
        {
            "friendly name": "Oracle",
            "name": "Oracle",
            "description": "Oracle Database"
        }
    ],
    "status": 0
}

Filtering the Output Using the Appclass Oracle.

Request
GET https://{API_HOST}//api/info/lsappclass?name=Oracle
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "friendly name": "Oracle",
            "name": "Oracle",
            "description": "Oracle Database"
        }
    ],
    "status": 0
}
lsinstancemember

About lsinstancemember Command on page 345
lsinstancemember Request Details on page 345
lsinstancemember Example on page 346

About lsinstancemember Command

Description
Use this command to retrieve a concise list of application-to-database instance mappings, or a detailed view of application-to-database instance mappings.

Applicability of this Command
This command can be used on:

Rights

| CDS appliance | ü |
| Sky appliance | ü |
| NAS Director  | ü |

There are no specific rights associated with this operation. User with 'administrator' role can retrieve the list of application-to-database instance mappings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| filtervalue=attrib%3Dvalue | Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the lsinstancemember command are:  
  • instanceid  
  • appid  
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '*' character (which needs to be escaped with '\'). |
| argument=string | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument parameter, a concise view of all objects matching the filter criteria is shown. |

lsinstancemember Request Details

Your lsinstancemember request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
Isinstancemember Example

Request
GET https://{API_HOST}//api/info/Isinstancemember
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "appid": "82233",
      "id": "82557",
      "instanceid": "81916"
    },
    {
      "appid": "82234",
      "id": "82558",
      "instanceid": "81916"
    },
    {
      "appid": "82235",
      "id": "82559",
      "instanceid": "81916"
    },
    {
      "appid": "82236",
      "id": "82560",
      "instanceid": "81916"
    },
    {
      "appid": "82237",
      "id": "82561",
      "instanceid": "81916"
    },
    {
      "appid": "82238",
      "id": "82562",
      "instanceid": "81916"
    },
    {
      "appid": "82239",
      "id": "82563",
      "instanceid": "81916"
    }
  ]
}
{"appid": "82241",
"id": "82565",
"instanceid": "81916"
},
{"appid": "82242",
"id": "82566",
"instanceid": "81916"
},
{"appid": "82243",
"id": "82567",
"instanceid": "81916"
},
{"appid": "82244",
"id": "82568",
"instanceid": "81916"
},
{"appid": "82245",
"id": "82569",
"instanceid": "81916"
},
{"appid": "82246",
"id": "82570",
"instanceid": "81916"
},
{"appid": "82247",
"id": "82571",
"instanceid": "81917"
},
{"appid": "82248",
"id": "82572",
"instanceid": "81917"
},
{"appid": "82249",
"id": "82573",
"instanceid": "81917"
},
{"appid": "82250",
"id": "82574",
"instanceid": "81917"
}
  
"status": 0
}
About lsmdlstat Command

Description

Use this command to retrieve statistics of MDL (Managed Data License) usage for each protected application in the appliance. The statistics are collected once a day.

When the appid statistic is 0, it contains the total MDL of all applications that this appliance manages.

Rights

You must have ‘System View’ or ‘System Manage’ rights to be able to retrieve MDL data.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=attrib=value</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for <code>lsmdlstat</code> are:</td>
</tr>
<tr>
<td></td>
<td>• allocated</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>• appname</td>
</tr>
<tr>
<td></td>
<td>• appreserved</td>
</tr>
<tr>
<td></td>
<td>• appsize</td>
</tr>
<tr>
<td></td>
<td>• capacity</td>
</tr>
<tr>
<td></td>
<td>• devsize</td>
</tr>
<tr>
<td></td>
<td>• hostname</td>
</tr>
<tr>
<td></td>
<td>• manageddata</td>
</tr>
<tr>
<td></td>
<td>• sourcecluster</td>
</tr>
<tr>
<td></td>
<td>• stattime</td>
</tr>
<tr>
<td></td>
<td>The filter will be formed with an attribute and a value. Multiple filters must be combined with ‘&amp;’ character (which must be escaped with ‘\’).</td>
</tr>
<tr>
<td></td>
<td>For string type of filters, the only operator allowed is ‘=’. You can also use the wildcard character ‘<em>’. For example, to match an application with appname beginning with ‘foo’, use ‘-filtervalue appname=foo</em>’.</td>
</tr>
<tr>
<td></td>
<td>For number types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. To use &lt;, &lt;=, &gt;, or &gt;=, they need to be escaped with ‘\’ or enclosed in ‘’ or “”, as required by shell. For example:</td>
</tr>
<tr>
<td></td>
<td>-filtervalue vdiskcount\geq=10</td>
</tr>
<tr>
<td></td>
<td>-filtervalue “vdiskcount&gt;=10”</td>
</tr>
<tr>
<td></td>
<td>-filtervalue ‘vdiskcount&gt;=10’</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the filtervalue parameter is ignored.</td>
</tr>
<tr>
<td></td>
<td>If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>
lsmdlstat Request Details

Your lsmdlstat request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsmdlstat</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsmdlstat Example

Request
GET https://{API_HOST}//api/info/lsmdlstat
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c6f54d3

where 92929a8b-a413-476f-a624-5b575c6f54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "manageddata": "6739197952",
      "hostname": "ctos6.4wp-13",
      "appname": "CTOS6.4WP-13",
      "appid": "164689",
      "stattime": "2017-11-21 03:00:00.112",
      "appsize": "4652531712",
      "sourcecluster": "1415056619",
      "id": "315150",
      "devsize": "124554051584",
      "appreserved": "6739197952",
      "capacity": "1",
      "allocated": "4652531712"
    },
    {
      "manageddata": "6739197952",
      "hostname": "",
      "appname": "",
      "appid": "0",
      "stattime": "2018-02-19 03:00:00.117",
      "appsize": "4652531712",
      "sourcecluster": "1415056619",
      "id": "403151",
      "devsize": "124554051584",
      "appreserved": "6739197952",
      "capacity": "1",
      "allocated": "4652531712"
    }
  ],
  "status": 0
}
Virtual Machine Commands

addvm

About addvm Command on page 350
addvm Request Details on page 351
addvm Example on page 351

About addvm Command

Description
Use this command to add a Virtual Machines that are managed by a management server (VCenter for VMware, and SCVMM for Hyper-V), which then allows the added Virtual Machines to be protected by the appliance.

Applicability of this Command
This command can be used on:

Rights
You must have ‘System Manage’ right to add a Virtual Machine.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>addall=boolean</td>
<td>Optional. Specifies that all Virtual Machines discovered are to be added to the appliance.</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Specifies the management server host to perform discovery on, either id or name of host is needed. Use lshost to locate the ID or name of the management server host.</td>
</tr>
<tr>
<td>org=string</td>
<td>Optional. Specifies a default organization in which the new VM should be added after discovery. To use this option user needs to have 'System Manage' right. If a default organization is not specified, an organization that the user belongs to is used. Use lsorg to locate the ID or name of the organization.</td>
</tr>
<tr>
<td>vms=string</td>
<td>Optional. Virtual Machines, colon (:) separated, to be added to the appliance.</td>
</tr>
<tr>
<td>cloudcredential=string</td>
<td>Optional. This is required field for adding cloud instances. Specifies the cloud credential to perform the discovery on, either ID or name is needed. Use 'udsinfo lscloudcredential' to locate the ID or name of the cloud credential.</td>
</tr>
</tbody>
</table>
addvm Request Details
Your addvm request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>region=string</td>
<td>Optional. This is applicable for adding cloud instances. Signifies a location, which is completely isolated from each other.</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

addvm Example

Request
POST https://{API_HOST}//api/task/addvm?host=bub.sqa..com&vms=2008vm2x86-juice-p:2008vm1x86-70spsky-p
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
{
   "status": 0
}

**lsvm**

About lsvm Command on page 352  
lsvm Request Details on page 352  
lsvm Example on page 352

**About lsvm Command**

**Description**

Use this command to discover Virtual Machines managed by a management server, vCenter for VMware, and SCVMM for Hyper-V which then allows the Virtual Machines to be added to the appliance.

**Applicability of this Command**

This command can be used on:  

**Parameters**

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>ü</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>ü</td>
</tr>
<tr>
<td>NAS Director</td>
<td>ü</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>host=string</td>
<td>Required. Specifies the management server host to perform discovery on, either id or name of host is needed. Use lshost to locate the ID or name of the management server host.</td>
</tr>
</tbody>
</table>

**lsvm Request Details**

Your lsvm request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsvm</td>
<td>host=&lt;name or id of host&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**lsvm Example**

**Request**

GET https://{API_HOST}//api/info/lsvm?host={VCENTER_HOSTNAME}  
HTTP Request Header  
Authorization: 92929a8b-a413-476f-a624-5b575c345d43  
where 92929a8b-a413-476f-a624-5b575c345d43 is the session ID.
Response

Request success

```json
{
  "result": [
    {
      "ipaddress": "172.16.113.54",
      "osname": "CentOS 4/5/6/7 (64-bit)",
      "uniquename": "50140db4-7d79-e4f6-31ce-4c4df2cc1ebf",
      "vmname": "agm80up81"
    },
    {
      "ipaddress": "172.16.113.52",
      "osname": "CentOS 4/5/6/7 (64-bit)",
      "uniquename": "501476bd-4803-5999-2bf2-820e305c3a03",
      "vmname": "agmsky81"
    },
    {
      "ipaddress": "172.16.113.51",
      "osname": "CentOS 4/5/6/7 (64-bit)",
      "uniquename": "5014b645-7dfb-0280-1231-75764311c441",
      "vmname": "agm_vmdk"
    },
    {
      "ipaddress": "172.16.203.230",
      "osname": "CentOS 4/5/6/7 (64-bit)",
      "uniquename": "5014d0f8-8e4f-3c99-b3ab-6c16450ca365",
      "vmname": "ARM-7.0.4.42"
    },
    {
      "ipaddress": "172.16.113.102",
      "osname": "Microsoft Windows 7 (64-bit)",
      "uniquename": "503566ff-9a6f-a5b9-574a-a132668e9165",
      "vmname": "Windows7Client"
    }
  ],
  "status": 0
}
```
### Mount Commands

**prepmount**

**About prepmount Command on page 354**

**prepmount Request Details on page 355**

**prepmount Example on page 355**

---

#### About prepmount Command

**Description**

Use this command to prep-mount a LiveClone image to a host to allow prep operation to be performed.

**Rights**

You must have ‘Host Manage’ or ‘Application Manage’ rights to prep-mount a LiveClone image.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appaware=boolean</td>
<td>Optional. The flag specifies whether the mount is to create an app-aware application from the prep-mount for VDP Appliances.</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Specifies the ID or name of an existing host to which the LiveClone image is to be prep-mounted.</td>
</tr>
<tr>
<td>nfsoption</td>
<td>Optional. Uses comma (,) separated nfs options, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon ( ; ), for example, &quot;server:writedelay=true,subtreecheck=false;client:retrans=2&quot;.</td>
</tr>
<tr>
<td>image=string</td>
<td>Required. Specifies the LiveClone image to be mounted. Either image ID for or image name is allowed, which can be retrieved from 1sbackup.</td>
</tr>
<tr>
<td>nowait=boolean</td>
<td>Optional. The flag specifies whether to wait for the completion of the command.</td>
</tr>
<tr>
<td>rdmmode</td>
<td>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>• dependentvirtual</td>
</tr>
<tr>
<td></td>
<td>• independentvirtual (default)</td>
</tr>
<tr>
<td></td>
<td>• physical</td>
</tr>
<tr>
<td></td>
<td>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</td>
</tr>
</tbody>
</table>

**Note:** dependentvirtual is rarely used.

If there is an SLA assigned to the VM to which these volumes are mounted, they will be captured and will be counted towards MDL usage.

| recoverytime=string | Optional. Valid only for database applications for VDP appliance. Specify the point-in-time for recovery, by applying log backups to roll forward to the specified time of the host. The time should be within the range set by hostbeginpit and hostendpit when displayed using 1sbackup xxxx for that image. The time format should be either: yyyy-MM-dd HH:mm:ss or yyyy-MM-dd HH:mm:ss.SSS. |
prepmount Request Details

Your prepmount request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>restoreoption</td>
<td>Optional. A comma delimited list of restore options where each restore option is a name=value pair.</td>
</tr>
<tr>
<td>script=string</td>
<td>Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is: name=&lt;name&gt;:phase={INIT</td>
</tr>
<tr>
<td>queue</td>
<td>Optional. The flag provides an option to queue prepmount job and run the job when we have slots available.</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

**prepmount Example**

**Request**

POST https://{API_HOST}//api/task/prepmount?image=Image_0006285&host=rh74vm1

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```javascript
{
"result": "Job_0006299 to prepmount Image_0006285 completed",
"status": 0
}
```
**prepunmount**

**About prepunmount Command on page 356**

**prepunmount Request Details on page 356**

**prepunmount Example on page 357**

### About prepunmount Command

**Description**

Use this command to prep-unmount and optionally discard a prep-mounted LiveClone image. This command optionally discards the prep-mounted LiveClone image after it is prep-unmounted.

**Rights**

You must have ‘Host Manage’ or ‘Application Manage’ rights to prep-unmount a prep-mounted LiveClone image.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>discard</td>
<td>Optional. The flag specifies whether to discard the prep-mounted LiveClone image, after it is unmounted.</td>
</tr>
<tr>
<td>image</td>
<td>Required. Specifies the LiveClone image to be prep-unmounted, either image ID for or image name is allowed, which can be retrieved from lsbackup. The LiveClone image has to be already prep-mounted.</td>
</tr>
<tr>
<td>nowait</td>
<td>Optional. The flag specifies whether to wait for the completion of the command.</td>
</tr>
<tr>
<td>script</td>
<td>Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is: name=&lt;name&gt;:phase={INIT</td>
</tr>
</tbody>
</table>

### prepunmount Request Details

Your prepunmount request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/prepunmount</td>
<td>image</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.
prepunmount Example

Request
POST https://{API_HOST}//api/task/prepunmount?image=Image_0006285
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfc54d3

where 92929a8b-a413-476f-a624-5b575cfc54d3 is the session ID.

Response
Request success
{
  "result": "Job_0006401 to prepunmount Image_0006285 completed",
  "status": 0
}
### About mountimage Command

**Description**

Use this command to mount a backup image to a host.

**Rights**

You must have the ‘Host Manage’ or ‘Application Manage’ or ‘Mount Manage’ rights to mount a backup image.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>accessmode=str</strong></td>
<td>Optional, valid only for export to CIFS type. Specifies the type of access that is allowed for the specified user (in user). Allowed types are:</td>
</tr>
<tr>
<td></td>
<td>• ro: read-only</td>
</tr>
<tr>
<td></td>
<td>• rw: read-write</td>
</tr>
<tr>
<td></td>
<td>• deny: no access allowed</td>
</tr>
<tr>
<td></td>
<td>• root: has full access to all the files in the share even if ACLs do not</td>
</tr>
<tr>
<td><strong>allvolumes=boolea</strong></td>
<td>Optional. The flag specifies whether to export all volumes in the backup. Use exportobjectid to specify a specific volume to be exported.</td>
</tr>
<tr>
<td><strong>appid=string</strong></td>
<td>Optional. Use the latest snapshot backup image of the application, specified by the appid for the mount. Use lsapplication to retrieve the application ID.</td>
</tr>
<tr>
<td><strong>appaware=boolean</strong></td>
<td>Optional. The flag specifies whether the mount is to create an app-aware application from the mount.</td>
</tr>
<tr>
<td><strong>container=string</strong></td>
<td>Optional. The flag specifies whether the mount is to perform mount of an application to Kubernetes container.</td>
</tr>
<tr>
<td><strong>datastore=string</strong></td>
<td>Optional. Valid only for VMware or Virtual Machine backup image. Specifies the datastore to be used for mounting the image. Use this option if a different datastore should be used for the mount. Use of this option is not typical.</td>
</tr>
<tr>
<td><strong>diskpool=string</strong></td>
<td>Optional. Specifies the disk pool to be used for mount.</td>
</tr>
<tr>
<td><strong>diskpref=string</strong></td>
<td>Optional. Specifies preference for presenting disk, BLOCK or NFS, default to BLOCK.</td>
</tr>
<tr>
<td><strong>exportedname=string</strong></td>
<td>Optional. Specifies the exported name of the backup image Valid only for CIFS.</td>
</tr>
<tr>
<td><strong>exportedpath=string</strong></td>
<td>Optional. Specifies sub-directory within the mount volume to be exported.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>exporthost=string</td>
<td>Optional. Specifies the ID or name of host(s) to which the backup image is to be exported. If ID is used, the host has to already exist in the appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).</td>
</tr>
<tr>
<td>host=string</td>
<td>Optional, Required for non-Virtual Machine applications. Specifies the ID or name of an existing host to which the backup image is to be mounted. If a new Virtual Machine is to be created for Virtual Machine backup. Use -vmname to specify the new Virtual Machine name.</td>
</tr>
<tr>
<td>exportobjectid=string</td>
<td>Optional. Specifies the object ID of the individual volume within the mounted image to be exported.</td>
</tr>
<tr>
<td>exportobjecttype=string</td>
<td>Optional. Specifies the object type of the individual volume within the mounted image to be exported.</td>
</tr>
</tbody>
</table>
| exportoption=string | Optional. Specifies the export option, a name/value list, separated by equal (=). Multiple options are separated by comma (,). An example is: "readonly=true,writedelay=false"  
The following option is allowed for NFS,  
  • readonly="true | false"  
  • writedelay="true | false"  
  • rootsquash="true | false"  
  • allsquash="true | false"  
  • anonuid=0 | "1"  
  • insecurelocks="true | false"  
The following option is allowed for CIFS:  
  • readonly="true | false"  
  • allowguest="true | false" |
<p>| exporttype=string  | Optional. Specifies protocol, cifs for CIFS, and nfs for NFS. Default to the protocol the backup was created.                                                                                                    |
| esxhost            | Optional, Required when mounting to a new VM. Specifies the ID or name of the ESX host. When mounting a Virtual Machine backup image to a different (from the Virtual Machine that the backup is taken) Virtual Machine, use this switch to specify a new hypervisor to use. Otherwise, hypervisor associated with the Virtual Machine host is used. This is the ESX host for VMWare, and Microsoft Hyper-V Server for Hyper-V. |
| group=string       | Optional, valid only for export to CIFS type. Specifies a list of domain groups that are allowed to map the share, separated by a comma (,).                                                                           |
| exporthost=string  | Optional. Specifies the ID or name of host(s) to which the backup image is to be exported for VDP appliance. If ID is used, the host has to already exist in the appliance. Name can contain wild characters. More than one host can be specified separated by a comma (,). |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>image=string</strong></td>
<td>Required. Specifies the image to be mounted, either image ID or image name is allowed, which can be retrieved from 'udsinfo lsbackup'.</td>
</tr>
<tr>
<td><strong>label=string</strong></td>
<td>Optional. Specifies label for the mounted image.</td>
</tr>
<tr>
<td><strong>instantmount=string</strong></td>
<td>Optional. Specifies whether to instant mount a dedup backup image.</td>
</tr>
<tr>
<td><strong>nowait=boolean</strong></td>
<td>Optional. The flag specifies not to wait for the completion of the command.</td>
</tr>
<tr>
<td><strong>nfsoption=string</strong></td>
<td>Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon (;). For example, &quot;server:writedelay=true,subtreecheck=false;client:retrans=2&quot;.</td>
</tr>
</tbody>
</table>
| **parts=string** | Optional. Specifies list of restorable objects or individual volumes to be mounted. Restorable objects or individual volumes can be retrieved from 'udsinfo lsbackup', and use the entry in restorableobject for the object(s) you want to mount. A restorable object can be a volume name, VMDK name, or an application name (in the case of an application in a consistency group, or SQL DB in an SQL Instance), which is shown in the details of a backup. For Virtual Machines, a different datastore is allowed for each VMDK; as to non-Virtual Machines, a different pool is allowed. To specify a different pool or datastore, use an sign '@', after the restorableobject name or volume. Special characters must be properly escaped:  
  - double quote ("): needs to be escaped with '\" (shell)  
  - comma (,): needs to be escaped with two commas (,,)  
  - colon (:): needs to be escaped with two colons (::)  
Example: "my,,vm.vmdk:poolname,your::vm.vmdk". |
<p>| <strong>path=string</strong> | Optional, valid only for Hyper-V Virtual Machine backup image, specifies the path to be used for mounting a new Hyper-V Virtual Machine. |
| <strong>queue=string</strong> | Optional. Specifies whether mount should be queued (otherwise will fail) when resource is not available for mount to proceed. |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>rehydrationmode</td>
<td>Optional. Specifies rehydration mode for OnVault backup image when mounting. Available options are:</td>
</tr>
<tr>
<td></td>
<td>• Balanced: Read objects from the OnVault pool will be cached in the local snapshot pool so subsequent reads of the same blocks will be fulfilled locally. Writes will go to the local snapshot pool. Use this option when local storage is available and high I/O performance is not required.</td>
</tr>
<tr>
<td></td>
<td>• MaximumPerformance: All blocks will be read to the local snapshot pool to create a full local copy and only then will the image be mounted. Use this option when peak performance from local storage is required for all application I/O, and any read latency from the OnVault pool will be unacceptable, thereby making it undesirable to give the application access to data before a full local copy is established.</td>
</tr>
<tr>
<td></td>
<td>• PerformanceOptimized: Read blocks will be cached in the local snapshot pool so subsequent reads of the same blocks will be fulfilled locally. In addition, all blocks will be read in the background to the local snapshot pool to create a full local copy. Writes will go to the local snapshot pool. Use this option when both fast access to the data as well as high I/O performance are needed.</td>
</tr>
<tr>
<td></td>
<td>• StorageOptimized: Read blocks will come from the snapshot pool when possible, otherwise they will come directly from the OnVault pool across the network. Writes will go to the local snapshot pool. Use this option to minimize local storage consumption.</td>
</tr>
<tr>
<td></td>
<td>Default is to use the value set for system parameter, OnVaultRehydrationDefault.</td>
</tr>
<tr>
<td>mgmtserver=string</td>
<td>Optional, valid only for VM backup image. Specifies the management server (name or ID, previously added to the appliance), if the new image is to be mounted to a new management server. This is the vCenter host for VMware and Microsoft System Center Virtual Machine Manager for Hyper-V.</td>
</tr>
<tr>
<td>migratevm=string</td>
<td>Optional, valid only for Systemstate and VMWare VM Backup images. This option can be used to migrate all the disks to cloud native storage and make instance to run independent of the appliance.</td>
</tr>
<tr>
<td>poweronvm=string</td>
<td>Optional. By default, mount of a new VM image is in the power off state. By specifying ‘-poweronvm’ will power on the VM.</td>
</tr>
</tbody>
</table>
**Parameter** | Description
--- | ---
**rdmmode**=string  
dependentvirtual | independentvirtual |  
physical | nfs  
Optional. Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:  
• dependentvirtual  
• independentvirtual (default)  
• physical  
Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots  

**Note:** Dependentvirtual is rarely used.

If there is an SLA assigned to the VM to which these volumes are mounted, they will be captured and will be counted towards MDL usage.

**recoverytime**=string  
Optional. Valid only for database applications. Specify the point-in-time for recovery, by applying log backups to roll forward to the specified time. The time should be within the range set by hostbeginpit and host endpit when displayed using `udsinfo lsbackup <image>` for that image. The format should be either: "yyyy-MM-dd HH:mm:ss" or "yyyy-MM-ddHH:mm:ss.SSS".
### Parameter | Description
--- | ---
`restoreoption=string` | Optional. A comma delimited list of restore options where each restore option is a name-value pair. See Appendix F, List of Restore Options for a summary of the supported restore options for this command. To perform an app-aware mount to a new application, additional restore options can be provided through the `lsappclass` command. Keep in mind that these provisioning options must adhere to the rules of the appclass of the backup. In addition, the app-aware mounted application can also be optionally protected, with a new, or existing SLT and SLP, if so desired. The existence of `provisioningoptions` indicates that this is an app-aware mount, regardless of the `-appaware` flag. For example,

```
restoreoption=provisioningoptions=<provisioningoptions>
    <databasesid>foodb1</databasesid>
    <orahome>/u01/app/oracle/product/11.2.0/db_1</orahome>
    <utlfiledirectory>/home/oracle</utlfiledirectory>
    <username>devuser</username>
</provisioningoptions>,reprotect=true
```

This string needs to be URL encoded as

```
restoreoption=provisioningoptions%3D%3Cprovisioningoptions%3E%3Cdatabasesid%3Efoodb1%3C%2Fdatabasesid%3E%3E%20%20%20%20%3C%2Forahome%3E%2Fu01%2Fapp%2Foracle%2Fproduct%2F11.2.0%2Fd%3E%3C%2Forahome%3E%20%20%20%20%20%20%20%3C%2Futlfiledirectory%3E%3C%2Futlfiledirectory%3E%3C%2Fusername%3Edevuser%3E%3C%2Fusername%3E%3E%20%20%20%20%20%20%3C%2Fprovisioningoptions%3E%3C%2Creprotect%3Dtrue
```

Included below is an example for SQL:

```
https://{API_HOST}//api/task/mountimage?image=Image_22196358&host=demo-sql-4&restoreoption=mountpointperdisk-dasvol:S:\C:\Test%jsontest.provisioningoptions=%3Cprovisioning-options%3E%3Csqlinstance>DEMO-SQL-4%3C%2Fsqlinstance%3E%3Cdbname>jsontest</dbname%3E%3Crecover>true</recover%3C%2Fprovisioningoptions%3E
```

This string needs to be URL encoded as

```
https://{API_HOST}//api/task/mountimage?image=Image_22196358&host=demo-sql-4&restoreoption=mountpointperdisk-z
```

`script=string` | Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is:

```
name=<name>:phase={INIT|PRE|POST|FINAL|ABORT}:[timeout=<timeout>][args=arg1, arg2] Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"
```
mountimage Request Details

Your mountimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>systemprops=string</td>
<td>Optional. A comma delimited list of system properties where each system property is a name/value pair. For available system properties, use 'udsinfo Issystemdetail'. If property has sub-element, it needs to be  appended with a number (starting with 0) to indicate which NIC. For a property that supports multiple values, it needs to be enclosed with [' and '], separated by a comma. For more details on systemprops, refer lssystemdetail.</td>
</tr>
<tr>
<td>user=string</td>
<td>Optional. Valid only for export to CIFS type. Specifies list of domain users that are allowed to map the share, separated by comma (,). Also allowed are local user (with specified password), use colon (:) to separate username and password. The local user does not need to exist in Windows Domain or the appliance, but it has to be unique.</td>
</tr>
<tr>
<td>vmname=string</td>
<td>Optional. Valid only for a virtual machine backup image. Specifies the new Virtual Machine name to be mounted as.</td>
</tr>
<tr>
<td>queue=string</td>
<td>Optional. The flag provides an option to queue mount job and run the job when we have slots available.</td>
</tr>
</tbody>
</table>

mountimage Example

**Request**

POST https://{API_HOST}//api/task/mountimage?image=Image_0023767&host=rh74vm1&allvolumes=true&label=MyMountedImage

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575c75f4d3

where 92929a8b-a413-476f-a624-5b575c75f4d3 is the session ID.

**Response**

Request success
Example of an app-aware mountimage.

**Request**

POST https://{API_HOST}//api/task/mountimage?host={TARGET_HOST}&image=Image_0061358&label=MyAppAwareImage&recoverytime={RECOVERY_TIME}&restoreoption=mountpointperimage%3D%2Fhome%2Fmntdir

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

**Response**

Request success

```json
{
"result": "Job_0024652 to mount Image_0061358 completed",
"status": 0
}
```
verifyimage

About verifyimage Command

Description
Use this command to verify a dedup backup image.

Rights
You must have the ‘Host Manage’ or ‘Application Manage’ or ‘Backup Manage’ rights to verify a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>image=string</td>
<td>Required. Specifies the image to be verified, either image ID for VDP appliance or image name is allowed, which can be retrieved using the lsbackup command. Only dedup image verification is supported.</td>
</tr>
<tr>
<td>nowait=boolean</td>
<td>Optional. The flag specifies not to wait for the completion of the command.</td>
</tr>
</tbody>
</table>

verifyimage Request Details

Your verifyimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/verifyimage</td>
<td>image</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

verifyimage Example

Request
GET https://{API_HOST}//api/info/verifyimage
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "result": "Job_0403279 to verifyImage_0178986 completed",
   "status": 0
}
cloneimage

About cloneimage Command on page 367
cloneimage Request Details on page 369
cloneimage Example on page 369

About cloneimage Command

Description
Use this command to make a completely independent untracked full clone of a backup image. The cloned image is considered a fully operational application that uses the primary storage in case of a non-virtual machine backup image.

Note: Unlike mountimage, cloneimage does not leave a record in lsbackup.

Rights
You must have the 'Host Manage' or the 'Application Manage' or 'Clone Manage' rights to clone a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>datastore=string</td>
<td>Optional. (Valid only for VMware or Virtual Machine backup images). Specifies the datastore to be used for cloning. Use this option if a different datastore should be used for the clone.</td>
</tr>
<tr>
<td>diskpool=string</td>
<td>Optional, valid only for a non-virtual machine backup image. Specifies the diskpool to be used for storing the cloned image.</td>
</tr>
<tr>
<td>hypervisor=string</td>
<td>Optional. (Valid only for Virtual Machine backup image for VDP appliance). Specifies the hyper visor on which clone should happen. Use this option if a different hyper-visor should be used for the clone. This is the ESX host for VMware, and Microsoft Hyper-V Server for Hyper-V.</td>
</tr>
<tr>
<td>host=string</td>
<td>Optional. For non-VM backup image, host specifies the ID or name of the host to which the backup image should be cloned. Use the lshost command to locate the ID or name of the host.</td>
</tr>
<tr>
<td>image=string</td>
<td>Required. Specifies the image to be cloned, either the image ID for VDP appliance or image name is allowed, which can be retrieved from lsbackup.</td>
</tr>
<tr>
<td>label=string</td>
<td>Optional. Specifies label for the cloned image.</td>
</tr>
<tr>
<td>nfsoption=string</td>
<td>Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon (;). For example: “server:writedelay=true,subtreecheck=false;client:retrans=2”.</td>
</tr>
<tr>
<td>nowait=boolean</td>
<td>Optional. The flag specifies not to wait for the completion of the command.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>parts=string</td>
<td>Optional. Specifies list of logical volumes to be cloned. Logical names of the restorable objects can be retrieved from <code>lsbackup</code>, and is one of:</td>
</tr>
<tr>
<td></td>
<td>• vdisk UID name for generic applications</td>
</tr>
<tr>
<td></td>
<td>• file system or device name for discovered applications</td>
</tr>
<tr>
<td></td>
<td>• VMDK path name for Virtual Machines</td>
</tr>
<tr>
<td></td>
<td>For Virtual Machines, a different datastore is allowed for each VMDK, to specify a different pool or datastore, use a colon <code>:</code>, after the logical volume name.</td>
</tr>
<tr>
<td></td>
<td>Special characters need to be properly escaped:</td>
</tr>
<tr>
<td></td>
<td>• double quote (<code>\</code>) needs to be escaped with <code>\</code> (shell)</td>
</tr>
<tr>
<td></td>
<td>• comma (<code>,</code>) needs to be escaped with two commas (<code>,</code>)</td>
</tr>
<tr>
<td></td>
<td>• colon (<code>:</code>) needs to be escaped with two colons (<code>::</code>)</td>
</tr>
<tr>
<td></td>
<td>Example: &quot;myvm.vmdk:ds,,name,yourvm.vmdk:ds::name&quot;</td>
</tr>
<tr>
<td>path=string</td>
<td>Optional, valid only for Hyper-V Virtual Machine backup image for VDP appliance. Specifies the path to be used for cloning to a new Hyper-V Virtual Machine.</td>
</tr>
<tr>
<td>restoreoption=string</td>
<td>Optional. A comma delimited list of restore options where each restore option is a name-value pair. See Appendix F, List of Restore Options for a summary of the supported restore options for this command.</td>
</tr>
<tr>
<td>script=string</td>
<td>Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is: name=&lt;name&gt;:phase={INIT</td>
</tr>
<tr>
<td>vmname=string</td>
<td>Optional, valid only for a virtual machine backup image. Specifies the new virtual machine name for the clone.</td>
</tr>
<tr>
<td>queue=string</td>
<td>Optional. Specifies whether clone should be queued (otherwise will fail) when resource is not available for clone to proceed.</td>
</tr>
<tr>
<td>poweronvm=boolean</td>
<td>Optional. By default, clone of VM image is in the power off state. By specifying poweronvm=true will power on the VM.</td>
</tr>
<tr>
<td>mgmtserver=string</td>
<td>Optional, valid only for Virtual Machine backup image for VDP appliance. Specifies the management server (name or ID, previously added to the appliance), if the new clone is to be clone to a new management server. This is the vCenter host for VMware and Microsoft System Center Virtual Machine Manager for Hyper-V.</td>
</tr>
<tr>
<td>cluster=string</td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to execute this command. All other parameters should use appliance-specific values.</td>
</tr>
</tbody>
</table>
**cloneimage Request Details**

Your cloneimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/cloneimage</td>
<td>image</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**cloneimage Example**

**Request**

POST https://{API_HOST}//api/task/cloneimage?image=Image_0023767&label=MyClonedImage&vcenter=bubbly.sqa.com&mgmtserver=bubbly.sqa.com&datastore=datastore1&vmname=my-new-vm

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "Job_0025318 to clone Image_0023767 completed",
    "status": 0
}
```
replicateimage

About replicateimage Command on page 370
replicateimage Request Details on page 371
replicateimage Example on page 371

About replicateimage Command

Description
Use this command to replicate (make a copy of) a dedup or directdedup backup image to a remote appliance.

When you use this method to replicate an image to the remote appliance or remote onVault pool, the following information about the image is sent along with the image:

- The Application ID of the application on the source appliance.
- The Application Name of the application on the source appliance.
- The Hostname of the host on the source appliance.
- The Source Appliance ID.
- The consistency date of the image (the point in time that the image is based on).

This information is sufficient to locate a particular application image and decide which image is the most appropriate based on the consistency date.

Note: The name of the policy that originally created this dedup backup image will not be recorded on the remote appliance. This occurs because the replicated image was not created by a policy but by manual replication.

We recommend that you use the label parameter to add any desired additional metadata such as source policy name.

Applicability of this Command

This command can be used on:

Rights

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>ü</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>ü</td>
</tr>
<tr>
<td>NAS Director</td>
<td>ü</td>
</tr>
</tbody>
</table>

You must have ‘Host Manage’ or ‘Application Manage’ or ‘Backup Manage’ rights to replicate a dedup or directdedup backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>image=string</td>
<td>Required. Specifies the image to be replicated, either image ID or image name is allowed, which can be retrieved from lsbackup.</td>
</tr>
</tbody>
</table>
Replicateimage Request Details

Your replicatimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>label=string</td>
<td>Optional. Specifies label for the mounted image.</td>
</tr>
<tr>
<td>inheritexpiration=bool</td>
<td>Optional. If specified, the expiration of the replicated image will be the same as the expiration of the source image. This flag cannot be set if retention is supplied.</td>
</tr>
<tr>
<td>neverexpire</td>
<td>Optional. If specified, the expiration of the replicated image will be set to infinite. This flag cannot be set if -retention or –inheritexpiration is supplied.</td>
</tr>
<tr>
<td>retention=integer</td>
<td>Optional. Specifies the retention period for the replicated dedup backup image. By default the replicated image will have the same expiration date as the original image.</td>
</tr>
<tr>
<td>retentionm=hours/days/weeks/months/years</td>
<td>Optional. Specifies the retention measurement type for the policy. Default is set to months.</td>
</tr>
<tr>
<td>targetcluster=cluster_name</td>
<td>Required. Target appliance to replicate the dedup backup image to.</td>
</tr>
<tr>
<td>targetpool</td>
<td>Required. Target vault pool to replicate the backup image to.</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

Replicateimage Example

**Request**
POST https://{API_HOST}//api/task/replicateimage?image=Image_0051453&label=DOC&targetcluster=1415010159
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**
Request success

```
{  
  "result": "Job_0025318 to replicate Image_0051453 completed",  
  "status": 0  
}  
```
replicatelog

About replicatelog Command on page 373
replicatelog Request Details on page 373
replicatelog Example on page 374

About replicatelog Command

Description

Use this command to replicate logs for an application, or a consistency group to remote appliance snapshot pool or to one or more OnVault pools. The application must have an SLA that includes database log management, and specifies either log replication to a remote appliance or log replication to OnVault.

Applicability of this Command

This command can be used on:

| CDS appliance | ü |
| VDP appliance | ü |
| NAS Director | ü |

Rights

You must have ‘Host Manage,’ or ‘Application Manage,’ or ‘Backup Manage’ rights to replicate logs.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id=appid</td>
<td>Required. Specifies ID of the application, or consistgrp to replicat log, the application or consistgrp must have already been protected with a log smart policy.</td>
</tr>
<tr>
<td>location=string</td>
<td>Optional. Specifies where to replicate the logs. By default logs are replicated to all the destinations defined in the profile. Supported locations are:</td>
</tr>
<tr>
<td></td>
<td>• snap - copy logs to the remote appliance snapshot pool</td>
</tr>
<tr>
<td></td>
<td>• cloud - copy logs to the OnVault pool(s) for the SLA</td>
</tr>
<tr>
<td></td>
<td>• all - copy logs to all destinations</td>
</tr>
<tr>
<td>queue=string</td>
<td>Optional. The flag provides an option to queue the job and run it when we have slots available.</td>
</tr>
</tbody>
</table>

replicatelog Request Details

Your replicatelog request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
replicatelog Example

Request

POST https://{API_HOST}//api/task/replicatelog?id=209789
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c1ff5d3

where 92929a8b-a413-476f-a624-5b575c1ff5d3 is the session ID.
exportimage

About exportimage Command on page 375
exportimage Request Details on page 376
exportimage Example on page 377

About exportimage Command

Description

Use this command to export a backup image to hosts. The backup image has to be mounted first. Optionally, the mounted image can also be exported for CIFS backup.

Applicability of this Command

This command can be used on:

Rights

| CDS appliance | ü |
| VDP appliance | ü |
| NAS Director  | ü |

You must have 'Host Manage' or 'Application Manage' rights to export a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>accessmode</td>
<td>Optional. Valid only for export to CIFS type. Specifies the type of access that is allowed for the specified user (in user). Allowed types are:</td>
</tr>
<tr>
<td></td>
<td>• ro: read-only</td>
</tr>
<tr>
<td></td>
<td>• rw: read-write</td>
</tr>
<tr>
<td></td>
<td>• deny: no access allowed</td>
</tr>
<tr>
<td></td>
<td>• root: has full access to all the files in the share even if ACLs do not</td>
</tr>
<tr>
<td>allvolumes</td>
<td>Optional. The flag specifies whether to export all volumes in the backup. Use objectid to specify a specific volume to be exported.</td>
</tr>
<tr>
<td>exportedname</td>
<td>Optional. Specifies the exported name of the backup image, valid only for CIFS.</td>
</tr>
<tr>
<td>exportedpath</td>
<td>Optional. Specifies sub-directory within the mount volume to be exported.</td>
</tr>
</tbody>
</table>
exportimage Request Details

Your exportimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| exportoption=string | Optional. Specifies the export option, a name/value list, separated by equal (=). Multiple options are separated by comma (,). An example is: "readonly=true,writedelay=false"
| The following options are allowed for NFS: |
| • readonly="true | false" |
| • writedelay="true | false" |
| • rootsquash="true | false" |
| • allsquash="true | false" |
| • anonuid=0 | 1 |
| • insecurelocks="true | false"
| The following option is allowed for CIFS: |
| • allowguest="true | false"
| exporttype =cifs | nfs |
| Optional. Specifies protocol, cifs for CIFS, and nfs for NFS. Default to the protocol the backup was created.
| group=string | Optional. Valid only for export to CIFS type. Specifies the list of domain groups that are allowed to map the share, separated by a comma (,). The group does not need to exist in Windows Domain or the appliance, but it has to be unique.
| host=string | Required. Specifies the ID or name of host(s) to which the backup image is to be exported. If ID is used, the host has to already exist in the appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).
| image=string | Required. Specifies the image to be exported, either image ID or image name is allowed, which can be retrieved from lsbackup.
| nowait=boolean | Optional. The flag specifies whether to wait for the completion of the command.
| objectid=integer | Optional. Specifies the object id of the individual volume within the mounted image to be exported.
| user=string | Optional. Valid only for export to CIFS type. Specifies the list of domain users that are allowed to map the share, separated by a comma (,). Also allowed are local user (with specified password), use colon (:) to separate user name and password. The local user does not need to exist in Windows Domain or the appliance, but it has to be unique.
| objecttype=string | Optional. Specifies the object type of the individual volume within the mounted image to be exported.

### Method

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/exportimage</td>
<td>image, host</td>
</tr>
</tbody>
</table>
Note: See the Parameters section for a list of supported parameters and their description.

exportimage Example

Request

POST https://{API_HOST}//api/task/rePLICATEIMAGE?EXPORTIMAGE?image=Image_0052605&host=172.16.113.50
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff4d3

where 92929a8b-a413-476f-a624-5b575cfff4d3 is the session ID.

Response

Request success
{
   "result": "Job_0052736 to export Image_0052605 completed",
   "status": 0
}

unexportimage

About unexportimage Command on page 378
unexportimage Request Details on page 378
unexportimage Example on page 379

About unexportimage Command

Description
Use this command to un-export an exported backup image.

Applicability of this Command
This command can be used on:

| CDS appliance | - |
| Sky appliance | ü |
| NAS Director  | - |

Rights
You must have 'Host Manage' or 'Application Manage' rights to un-export an exported backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>exporttype=\cifs</td>
<td>Optional. Specifies protocol, \cifs for CIFS, and \nfs for NFS. Default to the protocol the backup was created.</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Comma-separated list of hosts that the export should be removed from.</td>
</tr>
<tr>
<td>image=string</td>
<td>Required. Specifies the image to be un-exported, image ID or image name, which can be retrieved from \lsbackup. The backup image must be already exported.</td>
</tr>
<tr>
<td>nowait=boolean</td>
<td>Optional. The flag specifies whether to wait for the completion of the command.</td>
</tr>
</tbody>
</table>

unexportimage Request Details

Your unexportimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
</table>
| POST   | //api/task/unexportimage | image
                      |                     | host                 |

Note: See the Parameters section for a list of supported parameters and their description.
unexportimage Example

Request
POST https://{API_HOST}//api/task/
replicateimage?unexportimage?image=Image_0052605&host=172.16.113.50
HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
    "result": "Job_0025318 to unexport Image_0052605 completed",
    "status": 0
}
Isrestoreoptions

About lsrestoreoptions Command

Description

Use this command to list applicable restore options for a given restore action or provides detailed information for a specific restore option.

This command provides a list of restore options that are applicable for the given combination of application, restore action and target host. If a restore option name is provided instead of the other parameters it will display detailed information about the given restore option.

Applicability of this Command

This command can be used on:

Rights

<table>
<thead>
<tr>
<th>Platform</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>-</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>ü</td>
</tr>
<tr>
<td>NAS Director</td>
<td>-</td>
</tr>
</tbody>
</table>

You must have the “System View” or “System Manage” right to view the restore option information.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>applicationtype=string</td>
<td>Optional. The application type (SQL Server, Oracle, VM, and so on). See List of Restore Options on page 635 for a complete list of available application types.</td>
</tr>
<tr>
<td>action=string</td>
<td>Optional. The restore action to be taken: clone, mount, restore, prepmount, failover or failovertest. See List of Restore Options on page 635 for a complete list of available restore options.</td>
</tr>
<tr>
<td>targethost=string</td>
<td>Optional. The host ID of the target system. Use the lshost command to locate the ID.</td>
</tr>
</tbody>
</table>

Isrestoreoptions Request Details

Your lsrestoreoptions request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
Isrestoreoptions Example

GET https://{API_HOST}//api/info/
lsrestoreoptions?applicationtype=SQLServer&action=mount&targethost=20933867
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success

Response
Request success
{
    ["restoremacaddr",
    "mountdriveperdisk",
    "mountpointperimage",
    "slpid",
    "sltid",
    "mountpointperdisk",
    "reprotect",
    "mountdriveperimage",
    "mapdiskstoallclusternodes",
    "provisioningoptions"
]
}
About restoreimage Command

Description

Use this command to restore a backup image. Before the backup image is restored to the original host, the SLA that protects this application is disabled. The expiration of backup images for this application is also disabled.

Rights

You must have the ‘Host Manage’ or ‘Application Manage’ rights to restore a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>datastore=string</td>
<td>Optional. Valid only for VMware virtual machine backup image. Specifies the datastore to be used for restore. Use this option if a different datastore should be used for the restore.</td>
</tr>
<tr>
<td>disableschedule=Boolean</td>
<td>Optional. Specifies whether the schedule should be disabled. By default, schedule is automatically disabled. For SQL Server, schedule can be maintained by specifying 'false'.</td>
</tr>
<tr>
<td>image=string</td>
<td>Required. Specifies the image to be restored, either image id or image name is allowed, which can be retrieved from 'uds1info lsbackup'.</td>
</tr>
<tr>
<td>label=string</td>
<td>Optional. Specifies label for the mounted image of mount-migrate restore.</td>
</tr>
<tr>
<td>nowait=boolean</td>
<td>Optional. Specifies not to wait for the completion of the command.</td>
</tr>
<tr>
<td>nfsoption=string</td>
<td>Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon (;). For example: 'server:writedelay=true;subtreecheck=false;client:retrans=2'.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| parts=string      | Optional. Specifies list of restorable objects or individual volumes to be cloned. Restorable objects or individual volumes can be retrieved from 'udsinfo lsbackup', and use the entry in restorableobject for the object you tried to restore. Special characters needs to be properly escaped,  
* double quote (\): double quote needs to be escaped with \ (shell)  
* comma (,): needs to be escaped with two commas (,,)  
* at sign (@): needs to be escaped with two ats (@@)  
For example, for data stores with special characters, ',', and '@' below, you need to specify -parts with "myvm,,vmdk,yourvm@@vmdk". |
| poweroffvm=boolean | Optional. By default, restore of VM image is powered on automatically. By specifying **poweroffvm=true** will leave the VM in the powered off state.                                                                 |
| queue=string      | Optional. Specifies whether restore should be queued (otherwise will fail) when resource is not available for restore to proceed.                                                                           |
| restoreoption=string | Optional. A comma delimited list of restore options where each restore option is a name=value pair. For application types that support "Mount and Migrate", use "restoretype=mount" to invoke the functionality.  
See [Appendix F, List of Restore Options](#) for a summary of the supported restore options for this command. |
| password=string   | Optional. Valid only for database applications. Specify the password to use to apply the logs from log backup.                                                                                               |
| rdmmode = dependentvirtual | independentvirtual | physical | nfs | Optional. Specifies Raw Device Mapping (RDM) mode for VM, default to independentvirtual. Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots. Note dependentvirtual is rarely used. |
| recover=boolean   | Optional. Valid only for SQL Server. If this flag is set to true the database will be brought online and transaction log backups cannot be used to roll forward the database. |
| recoverytime=DateTime | Optional. Valid only for database applications. Specify the point-in-time for recovery, by applying log backups to roll forward to the specified time of the host.  
For VDP appliance, the time should be within the range set by **hostbeginpit** and **hostendpit** when displayed using lsbackup xxxx for that image. The time format should be either: **yyyy-MM-dd HH:mm:ss** or **yyyy-MM-dd HH:mm:ss.SSS**. |
**RestoreImage Request Details**

Your `restoreimage` request must pass a valid session ID. For information on how to get a valid session ID, see **Authentication or Login** on page 1.

### Method | URI | Required Parameters
--- | --- | ---
POST | //api/task/restoreimage | image

**Note:** See the Parameters section for a list of supported parameters and their description.

**RestoreImage Example**

**Request**

POST https://{LOCAL_APPLIANCE_HOST}//api/task/restoreimage?image=skytest5.sqa..com_Image_0041610

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

**Response**

Request success

```json
{
  "result": "Job_0042048 to restore skytest5.sqa..com_Image_0041610 completed",
  "status": 0
}
```
**Isvolumegroupinfo**

*About Isvolumegroupinfo Command* on page 385
*Isvolumegroupinfo Request Details* on page 385
*Isvolumegroupinfo Example* on page 386

**About Isvolumegroupinfo Command**

**Description**

Use this command to list all the volume group info for a host.

**Applicability of this Command**

This command can be used on:

<table>
<thead>
<tr>
<th>Sky appliance</th>
<th>ü</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

**Rights**

You must have the 'Host Manage' or 'Application Manage' or 'Backup Manage' rights to run a preflights check.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>host=string</strong></td>
<td>Required. Specifies ID or name of the host from which the volume group info is retrieved.</td>
</tr>
<tr>
<td><strong>delim=string</strong></td>
<td>Optional. By default, all columns of data are separated by a tab in the concise view. In the detailed view, each column of data is displayed in a separate row and if the headers are displayed, the header is separated from the data by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim on the command line, the colon character (:) separates all items of data in a concise view. Example: The spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
<tr>
<td><strong>nohdr=string</strong></td>
<td>Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The -nohdr parameter suppresses the display of these headings. <strong>Note:</strong> If there is no data to be displayed, headings are not displayed.</td>
</tr>
</tbody>
</table>

**Isvolumegroupinfo Request Details**

Your Isvolumegroupinfo request must pass a valid session ID, or information see Authentication or Login on page 1.
Method | URI | Required Parameters
---|---|---
GET | //api/info/lsvolumegroupinfo | host=<name or Id of host>

**Note:** See the Parameters section for a list of supported parameters and their description.

**lsvolumegroupinfo Example**

**Request**

GET https://{Actifio_API_HOST}/actifio/api/info/lsvolumegroupinfo

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
    "result": [
    {
        "extentsize": "4194304",
        "free": "4290772992",
        "total": "6383730688",
        "vgname": "testvg-2"
    },
    {
        "extentsize": "4194304",
        "free": "4290772992",
        "total": "6383730688",
        "vgname": "testvg-1"
    },
    {
        "extentsize": "4194304",
        "free": "148352532480",
        "total": "400010772480",
        "vgname": "sushperf_vg370gb"
    },
    {
        "extentsize": "4194304",
        "free": "530214551552",
        "total": "545251131392",
        "vgname": "susheelvg1"
    },
    {
        "extentsize": "4194304",
        "free": "383246139392",
        "total": "400010772480",
        "vgname": "sush_perf_370gb"
    },
    {
        "extentsize": "8388608",
        "free": "2357198848",
        "total": "10729029632",
        "vgname": "sush_8MBpe"
    }
],
```
About createliveclone Command

Description

Use this command to create a LiveClone. A LiveClone allows subsequent refresh from a new backup image.

Rights

You must have ‘Host Manage’ or ‘Application Manage’ to create a LiveClone.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>diskpool=string</td>
<td>Required. Specifies the name or ID of the diskpool to use for the LiveClone. If you do not specify cluster, use lsdiskpool for the ID. If you do specify cluster, then use the SRCID from the command output.</td>
</tr>
<tr>
<td>label=string</td>
<td>Required. Specifies label for LiveClone. Label must be unique in each application.</td>
</tr>
<tr>
<td>nowait</td>
<td>Optional. The flag specifies whether to wait for the completion of the command.</td>
</tr>
<tr>
<td>sourceimage=string</td>
<td>Required. Specifies ID for VDP appliance or name of the image to create the LiveClone from. If you do not specify cluster, use lsbackup for the SRCID. If you do specify cluster, then use the SRCID from the command output.</td>
</tr>
</tbody>
</table>

createliveclone Request Details

Your createliveclone request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/createliveclone</td>
<td>sourceimage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>diskpool</td>
</tr>
<tr>
<td></td>
<td></td>
<td>label</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

createliveclone Example

**Request**

POST https://{API_HOST}//api/task/createliveclone?sourceimage=Image_0022100&label=LiveClone-20180211&diskpool=act_per_pool000

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
Request success
{
  "result": "Job_0024427 to createliveclone Image_0022100 completed",
  "status": 0
}
refreshliveclone

About refreshliveclone Command on page 390
refreshliveclone Request Details on page 390
refreshliveclone Example on page 391

About refreshliveclone Command

Description
Use this command to refresh a LiveClone from a new backup image.

Rights
You must have ‘Host Manage’ or ‘Application Manage’ rights to refresh a LiveClone.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>label=string</td>
<td>Optional. Required if target image is not specified. Specifies label for the LiveClone to refresh to.</td>
</tr>
<tr>
<td>nowait</td>
<td>Optional. The flag specifies whether to wait for the completion of the command.</td>
</tr>
</tbody>
</table>
| options=string  | Optional. Specifies one or more options for on-demand backup. If more than one option is specified, they should be separated by a colon (:). Supported options are:  
  • nobitmap - Do not use a bitmap or extentlist  
  • noparent - No ancestor object, create a new independent object  
  • noseed - No hydroseeding image |
| sourceimage=strin g | Required. Specifies ID or name of the image with which to refresh the LiveClone. |
| targetimage=strin g | Optional. Specifies ID or name of the LiveClone to refresh. |

refreshliveclone Request Details

Your refreshliveclone request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/refreshliveclone</td>
<td>sourceimage</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
refreshliveclone Example

**Request**

POST https://{API_HOST}//api/task/refreshliveclone?sourceimage=Image_0022100&label=LiveClone-20180211

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "Job_0024559 to refreshliveclone Image_0024427 completed",
    "status": 0
}
```
unmountimage

About unmountimage Command on page 392
unmountimage Request Details on page 392
unmountimage Example on page 393

About unmountimage Command

Description
Use this command to unmount a mounted backup image, and optionally delete the image after it is unmounted.

Rights
You must have the 'Host Manage' or 'Application Manage' or 'Mount Manage' rights to unmount and delete a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>delete=string</td>
<td>Optional. The flag specifies whether to delete the backup image, after it is unmounted.</td>
</tr>
<tr>
<td>force=string</td>
<td>Optional. The flag specifies whether to ignore errors when unmapping disks from the host for VDP appliance.</td>
</tr>
</tbody>
</table>
| image=string | Required. Specifies the ID for VDP appliance or name of the image to be unmounted. The image name can be retrieved using lsbackup.  
  **Note:** The backup image has to be already mounted. |
| nowait=string | Optional. The flag specifies not to wait for the completion of the command. |
| script=string | Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of script is required, timeout and args are optional.  
  Syntax for each phase is:  
  name=＜name＞:phase={INIT|PRE|POST|FINAL|ABORT}:[timeout=＜timeout＞]:[args=arg1,arg2]  
  Multiple phases can be specified, separated by semi-colon (;), for example: "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE" |
| queue=string | Optional. Specifies whether unmount should be queued (otherwise will fail) when resource is not available for unmount to proceed. |

unmountimage Request Details

Your unmountimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/unmountimage</td>
<td>image</td>
</tr>
</tbody>
</table>
unmountimage Example

Request
POST https://{API_HOST}//api/task/unmountimage?force=true&delete=true&image=23232
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

Response
Request success
{
    "result": "Job_0023775 to unmount Image_0023224 completed",
    "status": 0
}"Note: See the Parameters section for a list of supported parameters and their description.
unmountactiveimages

About unmountactiveimages Command

**Description**

Use this command to unmount all mounted backup images. This command will not unmount system state images and test failover images.

**Rights**

You must have the 'Host Manage' or 'Application Manage' or 'Mount Manage' rights to unmount and delete a backup image.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>force=string</td>
<td>Optional. The flag specifies whether to ignore errors when unmapping disks from the host for Sky.</td>
</tr>
<tr>
<td>label=string</td>
<td>Optional. Specifies label for this operation</td>
</tr>
</tbody>
</table>

unmountactiveimages Request Details

Your unmountactiveimages request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login on page 1](#).

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/unmountactiveimages</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

unmountactiveimages Example

POST https://{API_HOST}//api/task/unmountactiveimages?sessionid={SESSIONID}
Request success
{
  "status": 0
}
expireimage

About expireimage Command

Description
Use this command to expire a backup image, a LiveClone or a syncback image.

Rights
You must have the 'Host Manage' or 'Application Manage' or 'Backup Manage' right to expire a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>force=string</td>
<td>Optional. The flag specifies whether to ignore errors when unmapping disks from the host for VDP appliance.</td>
</tr>
<tr>
<td>image=string</td>
<td>Required. Specifies the SRCID or name of the backup image to be expired. If you do specify cluster, then use the SRCID from the command output.</td>
</tr>
<tr>
<td>nowait=string</td>
<td>Optional. The flag specifies whether to wait for the completion of this command.</td>
</tr>
<tr>
<td>cluster=string</td>
<td>Optional. Specifies the name or ID of the target VDP appliance to execute this command. All other parameters should use appliance-specific values.</td>
</tr>
</tbody>
</table>

expireimage Request Details

Your expireimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/expireimage</td>
<td>image</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

expireimage Example

Request
POST https://{API_HOST}//api/task/expireimage?image=22375693
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{ "result": "Job_22375751 to expire Image_22375691 completed",
"status": 0
}
deleteimage

About deleteimage Command on page 397
deleteimage Request Details on page 397
deleteimage Example on page 397

About deleteimage Command

Description

Use this command to delete an unmounted backup image, a LiveClone image, a fail-over image, or a test fail-over image. Use `isbackup` command to locate the backup images to be deleted. Note that there are three images associated with each fail-over execution. Pick the one with name ending with ‘F’ to delete fail-over images. Fail-over images can only be deleted when the application is no longer in the fail-over state.

Rights

You must have the ‘Host Manage’ or the ‘Application Manage’ or ‘Mount Manage” right to delete an unmounted backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>image=string</code></td>
<td>Required. Specifies the ID for VDP appliance or name of the backup image to be deleted. Use <code>isbackup</code> to obtain the ID or name of the backup image. If you do not specify <code>cluster</code>, use <code>isbackup</code> for the SRCID. If you do specify <code>cluster</code>, then use the SRCID from the command output.</td>
</tr>
<tr>
<td><code>nowait=string</code></td>
<td>Optional. The flag specifies not to wait for the completion of this command.</td>
</tr>
</tbody>
</table>

deleteimage Request Details

Your deleteimage request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/deleteimage</td>
<td>image</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

deleteimage Example

Request

POST https://{API_HOST}//api/task/deleteimage?image=Image_0024650
HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response
Request success
{
    "result": "Job_0025468 to delete Image_0024650 completed",
    "status": 0
}
cleanupmirroring

About cleanupmirroring Command

Description

Use this command to delete the objects created on protecting an application or a consistency group with a dedup-async or StreamSnap policy.

Applicability of this Command

This command can be used on:

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td></td>
</tr>
<tr>
<td>NAS Director</td>
<td></td>
</tr>
</tbody>
</table>

Rights

You must have the 'Host Manage' or 'Application Manage' or 'Mirroring Manage' right to clean up artifacts from running previously enabled dedup-async or StreamSnap policy.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id=string</td>
<td>Required. Specifies the ID of the application or consistgrp that no longer has a dedup-async or StreamSnap policy running, to clean up any artifacts from the policy. Use the lsapplication or lsconsistgrp command for the ID.</td>
</tr>
<tr>
<td>all=boolean</td>
<td>Optional. Specifies whether all the images created by protecting the application with a dedup-async or StreamSnap policy should be deleted. If an application remains protected when using this command, use 'false'. Consequently, only failover, failovertest, and sync-back images are deleted. If the application is no longer protected with a dedup-async or StreamSnap policy, use true. The default value is false.</td>
</tr>
</tbody>
</table>

cleanupmirroring Request Details

Your cleanupmirroring request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/cleanupmirroring</td>
<td>id</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
cleanupmirroring Example

Request
POST https://{API_HOST}//api/task/cleanupmirroring?id=4111
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "status": 0
}
About rmfailovertest Command

Description
Use this command to delete a test failover image. Use lsbackup command to locate the backup images to be deleted.

Rights
You must have the ’Host Manage’ or ’Application Manage’ rights to delete a image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>image</td>
<td>Required. Specifies the ID for the appliance or name of the backup image to be deleted. Use lsbackup to locate the ID/SRCID or name for the image.</td>
</tr>
</tbody>
</table>
| script      | Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is: name=<name>:phase={INIT|PRE|POST|FINAL|ABORT}:[timeout=<timeout>]:[args=arg1,arg2] Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRES"

rmtestfailover Request Details

Your rmtestfailover request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmtestfailover</td>
<td>image</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmtestfailover Example

Request

POST  https://{API_HOST}//api/task/rmtestfailover?image=Image_0024650
HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
"result": "Job_0025468 to rmtestfailover Image_0024650 completed",
"status": 0
Image Management Commands

lsbackup

About lsbackup Command on page 403
lsbackup Request Details on page 405
lsbackup Example on page 405

About lsbackup Command

Description

Use this command to retrieve details of backup images. The concise view of a backup image shows only a subset of the attributes of the image. The detailed view of a backup image provides more details. Following are details about each attribute available with this command.

- **id**: Index of backup object.
- **appid**: Application object ID.
- **restore lock**: Flag value if it is being used for restore.
- **virtual size**: Backup object application size.
- **original backup id**: ID of dependent backup object from which it is generated.
- **policy name**: Name of the policy on which this object is created.
- **mounted host**: ID of host where backup image is mounted.
- **username**: Name of the user who created backup.
- **sourceimage**: Actual image name which is being backed up.
- **apptype**: Type of the application backed up.
- **mappedhost**: ID of the host to which backup image is mapped.
- **modifiedbytes**: No of bytes modified.
- **modifydate**: Date when backup image is last modified.
- **jobclass**: Type of the job that created this backup image.
- **originaljobclass**: Original backup type that this backup image is based on.
- **flags**: Backup data flag like in-band, out of band, SAN, NBD, readyVM, etc.
- **status**: Status of this backup image. Status like succeeded, failed, running, etc.
- **expiration**: Expiration date time when this should expire.
- **sourceuds**: Source appliance ID where this image is generated.
- **expirytries**: No of expire attempts made on this image.
- **hostname**: Host name of backup image where application was running.
- **label**: Friendly name of backup image.
- **consistencydate**: Application consistency time stamp.
- **backupdate**: Start date.
- **backupname**: Image name.
- **targetuds**: Target appliance ID to which image is replicated or remote copied.
- **sltname**: SLA template name used while creating this image.
- **slpname**: Profile name used while creating this image.
- **appname**: Application name.
- **prepdate**: Date when LiveClone image is prepped.
- **transport**: Transport medium used for this image (for example, SAN, NBD, and so on).
- **consistency-mode**: Consistency mode of image (for example, application consistent or crash consistent).
- **uniquehostname**: Unique host name for VDP appliance.
- **advancedoptions**: Policy options that is being used to create the backup for VDP appliance.
- **componenttype**: Primary or log backup of a DB/Exchange application type for VDP appliance.

**Rights**

You must have the 'Host Manage', and 'Application Manage' right to change the expiration time of a backup image.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the lsbackup command are:</td>
</tr>
<tr>
<td></td>
<td>- appid</td>
</tr>
<tr>
<td></td>
<td>- appname</td>
</tr>
<tr>
<td></td>
<td>- apptype</td>
</tr>
<tr>
<td></td>
<td>- backupdate [usage: 'backupdate since 24 hours' for backups started since last 24 hours, 'backupdate before 7 days' for backups started older than 7 days]</td>
</tr>
<tr>
<td></td>
<td>- backupname</td>
</tr>
<tr>
<td></td>
<td>- characteristic [PRIMAY</td>
</tr>
<tr>
<td></td>
<td>- consistencydate</td>
</tr>
<tr>
<td></td>
<td>- expiration</td>
</tr>
<tr>
<td></td>
<td>- hostid</td>
</tr>
<tr>
<td></td>
<td>- hostname</td>
</tr>
<tr>
<td></td>
<td>- jobclass [ [ snapshot</td>
</tr>
<tr>
<td></td>
<td>- label</td>
</tr>
<tr>
<td></td>
<td>- mappedhost</td>
</tr>
<tr>
<td></td>
<td>- mountedhost</td>
</tr>
<tr>
<td></td>
<td>- policymame</td>
</tr>
<tr>
<td></td>
<td>- prepdate</td>
</tr>
<tr>
<td></td>
<td>- slpname</td>
</tr>
<tr>
<td></td>
<td>- sltname</td>
</tr>
<tr>
<td></td>
<td>- sourceimage</td>
</tr>
<tr>
<td></td>
<td>- sourceuds</td>
</tr>
<tr>
<td></td>
<td>- targetuds</td>
</tr>
<tr>
<td></td>
<td>- virtualsize</td>
</tr>
</tbody>
</table>

The filter is formed with an attribute and a value. When more than one filter is specified, they must be delimited with the ‘&’ symbol (which should be escaped with ‘\’). For string type filters user can use the wild card character ‘*’. The only operator allowed for a string type filter is ‘=’.

For example, to match backup images with appname begins with 'foo', use ‘-filtervalue appname=foo*’. Some filters allow only predefined constants. For example, characteristic allows only PRIMARY, MOUNT, UNMOUNT, VDISK, or clone. Therefore, to list a backup image that is mounted, use ‘-filtervalue characteristic=_MOUNT’. For number and date types, the permitted operators are: =, >, >=, <, <=. The operators <, <=, or >= should be escaped with ‘\’ or enclosed in ‘’ or “”, as required by the shell.
Actifio appliances

lsbackup Request Details

Your lsbackup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| **filtervalue=**attrib%3Dvalue (continued) | Some examples:  
- `filtervalue virtualsize>128000000000`  
- `filtervalue "virtualsize>128000000000"`  
- `filtervalue 'virtualsize>128000000000'`  
The backupdate and expiration parameters can also use these operators. For example:  
- `filtervalue 'backupdate>2010-09-28'`  
- `filtervalue 'expiration>2010-09-28 6:50:00'` |
| argument=string | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is shown. |

**Note:** See the Parameters section for a list of supported parameters and their description.

Isbackup Example

**Request**

GET `https://{API_HOST}//api/info/lsbackup?applicationtype=SQLServer&action=mount&targethost=20933867`

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{   
   "result": [  

   {      
      "flags": "36",  
      "sltname": "Tier-4 - Local Protection Only",  
      "sourceuds": "1415056619",  
      "hostname": "ctos6.4wp-13",  
      "backupname": "Image_0178976",  
      "modifydate": "2017-04-12 09:36:53.333",  
      "appname": "CTOS6.4WP-13",  
      "slpname": "LocalProfile",  
      "id": "178977",  
```
**backup**

**About backup Command** on page 407
**backup Request Details** on page 408
**backup Example** on page 408

**About backup Command**

**Description**

Use this command to create an on-demand backup of an application or a consistency group that is running the specified policy immediately. If there is no slot to run the requested job, the request is queued.

Use the following commands to obtain the ID:

- udsinfo lsapplication command to obtain application ID
- udsinfo lsconsistgrp to obtain the consistency group ID
- udsinfo lspolicy to obtain policy ID

**Rights**

You must have the ‘Host Manage’ or ‘Application Manage’ to perform backup operation

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>app=string</strong></td>
<td>Required. Specifies the ID of the application or consistency group to back up. Use lsapplication or lsconsistgrp to obtain the ID.</td>
</tr>
<tr>
<td><strong>backuporder</strong></td>
<td>Optional. Only applicable for database log jobs. When specified, the log backup job will process databases in the order specified. If more databases are included in the application than the list provided, all unspecified databases will be processed after those specified. Use of this option does not reduce the scope for the job, it only prioritizes the order of processing. Typically used when it is important for some databases to have log backups performed first, for space management purposes.</td>
</tr>
<tr>
<td><strong>backuptype=</strong></td>
<td>Optional. Specifies the type of backup to perform. It is only valid for Log Protection-enabled database applications. Supported types are:</td>
</tr>
<tr>
<td></td>
<td>• log - backup log data only</td>
</tr>
<tr>
<td></td>
<td>• db - backup db data only</td>
</tr>
<tr>
<td></td>
<td>• dblog - backup both db and log data</td>
</tr>
<tr>
<td><strong>label=string</strong></td>
<td>Optional. Specifies the label for the newly created backup image.</td>
</tr>
<tr>
<td><strong>options=</strong></td>
<td>Optional. Specifies one or more options for the on-demand backup. If more than one option is specified, they should be separated by a colon (:). Supported options are:</td>
</tr>
<tr>
<td></td>
<td>• nobitmap: do not use a bitmap or extent list</td>
</tr>
<tr>
<td></td>
<td>• noparent: no ancestor object, create a new independent object</td>
</tr>
<tr>
<td></td>
<td>• noseed: no hydroseeding image</td>
</tr>
</tbody>
</table>
backup Request Details

Your backup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>policy=string</td>
<td>Required. Specifies the policy ID to be used for backup. The policy should be a part of the service level agreement (SLA) that protects the application.</td>
</tr>
<tr>
<td>script=string</td>
<td>Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. Each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is: name=&lt;name&gt;:phase={INIT</td>
</tr>
<tr>
<td>queue=string</td>
<td>Optional. The flag provides an option to queue backup job and run the job when we have slots available</td>
</tr>
<tr>
<td>sourceimage=string</td>
<td>Optional. Specifies the name or id of the source image. If no image is specified, automatically select the latest available image.</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

backup Example

**Request**

POST https://{API_HOST}//api/task/backup?app=164689&policy=141
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

**Response**

Request success
{
    "result": "Job_0403469",
    "status": 0
}
chbackup

About chbackup Command

Description
Use this command to change a backup image. Use the lsbackup to obtain the ID or name of the backup image.

Rights
You must have the 'Application Manage' or 'Host Manage' right to change the expiration time of a backup image.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>expiration</td>
<td>Optional. Specifies expiration time for the backup image. The format must be 'yyyy-mm-dd HHMMSS'.</td>
</tr>
<tr>
<td>immutability</td>
<td>Optional. Specifies immutability date for the backup image. The format must be 'yyyy-mm-dd HHMMSS', and can only be extended.</td>
</tr>
<tr>
<td>sensitivity</td>
<td>Optional. Specifies if the backup image is sensitive (a backup image has restricted access before scrubbing of sensitive data). Specify 1 for a sensitive application or 0 for a non-sensitive application.</td>
</tr>
<tr>
<td>label</td>
<td>Optional. Specifies a new label for the backup image. For LiveClone, this must be unique.</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the backup image object to modify, either by ID or by name.</td>
</tr>
</tbody>
</table>

chbackup Request Details

Your chbackup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/chbackup</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chbackup Example

Request
POST https://{API_HOST}//api/task/chbackup?argument=17897&label=newbackup
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}

Isvaultbackup

About Isvaultbackup Command on page 411
Isvaultbackup Request Details on page 411
Isvaultbackup Example on page 412

About Isvaultbackup Command

Description
Use this command to return a concise list of OnVault backup images of a particular OnVault pool.

Applicability of this Command
This command can be used on:

| CDS appliance | - |
| Sky appliance | ü |
| NAS Director  | - |

Rights
You must have the 'System View' or 'System Manage' right to view OnVault backups.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. Valid filter attributes for the Isvaultbackup command are:</td>
</tr>
<tr>
<td></td>
<td>• clusterid</td>
</tr>
<tr>
<td></td>
<td>• clustername</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>• appname</td>
</tr>
<tr>
<td></td>
<td>The filter is formed with an attribute and a value. When more than one filter is specified, they must be delimited with the <code>&amp;</code> symbol (which should be escaped with <code>\</code>). Note that only one of app.id or app.name can be specified, as is the case for cluster.id and clustername.</td>
</tr>
<tr>
<td></td>
<td>When filter is applied with application name or application ID, details of the backups associated with the application is displayed. Without filtering on application, backups are not included.</td>
</tr>
<tr>
<td>vaultpool=string</td>
<td>Required. Specifies the name or ID of the OnVault pool.</td>
</tr>
</tbody>
</table>

Isvaultbackup Request Details

Your Isvaultbackup request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
Isvaultbackup Example

Request
GET https://{API_HOST}//api/info/lsvaultbackup?vaultpool=AWS
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "hostname": "rh74vm1",
      "appname": "_boot",
      "clustername": "skytest5_sqa__com",
      "appid": "36781",
      "clusterid": "1415009633"
    },
    {
      "hostname": "Sanity1",
      "appname": "R__",
      "clustername": "Sky-7_1_3-source",
      "appid": "13191",
      "clusterid": "1415020666"
    },
    {
      "hostname": "Sanity1",
      "appname": "SQL_const_2",
      "clustername": "Sky-7_1_3-source",
      "appid": "13304",
      "clusterid": "1415020666"
    },
    {
      "hostname": "Sanity2",
      "appname": "SQL_Consistancy",
      "clustername": "Sky-7_1_3-source",
      "appid": "4968",
      "clusterid": "1415020666"
    },
    {
      "hostname": "Sanity1",
      "appname": "M__",
      "clustername": "sky711upg",
      "appid": "4596",
      "clusterid": "1415021867"
    },
    {
      "hostname": "Windows",
      "appname": "immutability_1",
      "clustername": "sky7_1_4-immut2",
      "appid": "37897",
      "clusterid": "1415020666"
    }
  ]
}
"clusterid": "1415035525"
},
{
  "hostname": "Windows",
  "appname": "E__",
  "clustername": "sky7_1_4-immut2",
  "appid": "4361",
  "clusterid": "1415035525"
},
{
  "hostname": "Windows",
  "appname": "Immut_4",
  "clustername": "sky7_1_4-immut2",
  "appid": "46402",
  "clusterid": "1415035525"
},
{
  "hostname": "vm_backup1",
  "appname": "VM_backup1",
  "clustername": "sky7_1_4-immut2",
  "appid": "4501",
  "clusterid": "1415035525"
},
{
  "hostname": "Linux",
  "appname": "_xfs",
  "clustername": "Sky7_0_8",
  "appid": "5254",
  "clusterid": "1415050691"
},
{
  "hostname": "vm_backup1",
  "appname": "VM_backup1",
  "clustername": "matrix",
  "appid": "14018",
  "clusterid": "590021132322"
},
{
  "hostname": "IOV_upgrade_catalog",
  "appname": "SQL_con_upgrade",
  "clustername": "matrix",
  "appid": "4888",
  "clusterid": "590021132322"
}
],
"status": 0
}
Dedup Drive Seeding Commands

The initial replication of a larger size dedup image to a remote system over a network can take hours or days depending on the amount of data and available bandwidth. Regardless of which transport mechanism you use, transferring large amount of data across the network can take hours. Actifio Copy Data Management supports an easy ‘seed-load’ technology, which allows the initial backup done on-site through an external USB drive. This drive is physically shipped to the remote storage location and copy the data it to the appropriate folder. This method saves lot time and bandwidth. Once the initial replication in place, the incremental changes are made over the network or Internet.

Use the following commands to perform the seeding operations:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>lsdevice</td>
<td>Displays a list of physical USB devices to perform seed-in or seed-out operations.</td>
</tr>
</tbody>
</table>
About lsdevice Command

Description
Use this command to display a concise list of physical USB devices, or a detailed view of a USB device, to be used for seedin or seedout.

The appliance supports only the use of USB2 devices that are at least 16 GB in size to perform seedout. Also when inserting a USB device for seed out, make sure no USB1 devices are attached to the appliance node at that time.

Applicability of this Command
This command can be used on:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Actifio CDS</td>
<td>X</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>Ù</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>X</td>
</tr>
</tbody>
</table>

Note:

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance=string</td>
<td>Required. Specifies the name or ID of the target Sky appliance to execute this command. Use the lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the appliance argument.</td>
</tr>
<tr>
<td>all</td>
<td>Optional. List all devices, in addition to those USB devices for seeding.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the name of the device to get detailed information.</td>
</tr>
</tbody>
</table>

lsdevice Request Details
Your lsdevice request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/actifio/api/task/lsdevice</td>
<td>appliance</td>
</tr>
</tbody>
</table>
Isdevice Example

Fetching device details.

Request
GET https://{API_HOST}/actifio/api/info/isdevice  
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575c5f54d3

where 92929a8b-a413-476f-a624-5b575c5f54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "device": "sdb",
      "initialized": "no",
      "location": "001:005",
      "name": "",
      "volume": ""
    }
  ],
  "status": 0
}
**initializedevice**

*About initializedevice Command* on page 417

*Workflow Commands* on page 418

**About initializedevice Command**

**Description**

Use this command to initialize a USB device for seeding.

**Note:** The appliance supports only the use of USB2 devices that are at least 16 GB in size to perform the seedout procedure. When inserting a USB device for seedout, make sure no USB1 devices are attached to the appliance at that time.

**Applicability of this Command**

This command can be used on:

<table>
<thead>
<tr>
<th>Actifio CDS</th>
<th>x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actifio Sky appliance</td>
<td>ū</td>
</tr>
<tr>
<td>Actifio NAS Director</td>
<td>x</td>
</tr>
</tbody>
</table>

**Rights**

You must have the 'System Manage' right to be able to initialize a device.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>force</td>
<td>Optional. Required if the device is previously initialized for seeding.</td>
</tr>
<tr>
<td>name</td>
<td>Required. Specifies the name of the device to be initialized with.</td>
</tr>
<tr>
<td>password</td>
<td>Optional. Specifies the password of the device to be initialized with.</td>
</tr>
<tr>
<td>appliance</td>
<td>Required. Specifies the name or ID of the target Sky appliance to execute this command. Use the <code>lscluster</code> command to retrieve the appliance name or ID to help you identify the correct appliance to include in the <code>appliance</code> argument.</td>
</tr>
<tr>
<td>volume</td>
<td>Optional. Specifies the volume number of the device to be initialized with. Default is 0, if not specified default value is used.</td>
</tr>
<tr>
<td>device_name</td>
<td>Optional. Specifies the name of the device to initialize.</td>
</tr>
</tbody>
</table>
Workflow Commands

mkworkflow

About mkworkflow Command

Description
Use this command to create a new workflow, which can be used to automate, for example, a Test and Development process by leveraging various appliance data protection features.

Rights
User must have 'WorkFlow Manage' right to be able to create any workflow.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the workflow.</td>
</tr>
<tr>
<td>appid=string</td>
<td>Required. Specifies the ID or name of the application for which you are creating the workflow. Use lsapplication to retrieve the application ID or name.</td>
</tr>
<tr>
<td>day=string</td>
<td>Deprecated] Use when instead. Required. Specifies the day of the frequency, 0-based. For weekly frequency, 0 indicates Sunday, and 1 is Monday, etc. For monthly frequency, 0 is first day of the month, 1 is second day of the month and so on.</td>
</tr>
<tr>
<td>type=liveclone</td>
<td>directmount</td>
</tr>
<tr>
<td>source=snap</td>
<td>streamsnap</td>
</tr>
<tr>
<td>frequency=hourly</td>
<td>daily</td>
</tr>
<tr>
<td>time=string</td>
<td>Required. Specifies the time of the schedule.</td>
</tr>
</tbody>
</table>
mkworkflow Request Details

Your mkworkflow request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>members=appid</td>
<td>appname[,appid</td>
</tr>
</tbody>
</table>
| when=integer                     | Optional. Specifies a 0-based number whose interpretation depends on the frequency.  
• For monthly frequency, 0 is first day of the month, and 1 is 2nd day of the month, and so on.  
• For weekly frequency, 0 indicates Sunday, 1 indicates Monday, and so on.  
• For daily frequency, represents the day intervals. For example, if you specify “2”, it indicates intervals of 2 days  
• For hourly frequency, indicates hourly intervals. For example, if you specify the value “3”, it means intervals of 3 hours.  |
| scheduletype=ondemand|scheduled | Required. Specifies whether the workflow will run on schedule or on demand. Scheduled workflows can also run on demand. |

**Note:** See the Parameters section for a list of supported parameters and their description.

mkworkflow Example

**Creating a workflow named wf_weekly.**

**Request**

https://{API_HOST}//api/task/mkworkflow

mkworkflow?name=wf_weekly&appid=84363&frequency=weekly&time=8:00&day=1

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
  "result": "201963",
  "status": 0
}
```
**lsworkflow**

*About lsworkflow Command on page 420
lsworkflow Request Details on page 420
lsworkflow Example on page 420*

**About lsworkflow Command**

**Description**

Use this command to retrieve details of a list of workflows, or a detailed view of a workflow. A workflow is a group of appliance commands, which can be scheduled to automate a business process, for example, a Test and Development process by leveraging various appliance data protection features like liveclone, prep-mount and mount operations.

**Rights**

User must have 'WorkFlow Manage' or 'WorkFlow View' right to be able to view workflows.

**Parameters**

```
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for lsworkflow are:</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>• scheduletype [On-Demand</td>
</tr>
<tr>
<td></td>
<td>For string type of filters, the only operator allowed is '='. You can also use wildcard character '*'.</td>
</tr>
<tr>
<td>argument</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>
```

**lsworkflow Request Details**

Your lsworkflow request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

```
<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsworkflow</td>
<td>None</td>
</tr>
</tbody>
</table>
```

*Note: See the Parameters section for a list of supported parameters and their description.*

**lsworkflow Example**

*Listing all available workflows.*

**Request**

```
https://{API_HOST}//api/info/lsworkflow
HTTP Request Header
```
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
  {
    "appaware": "false",
    "clearsensitiveflag": "false",
    "host": "",
    "id": "201963",
    "label": "mountimage1",
    "prepmount": "false",
    "reprotect": "false",
    "type": "mount",
    "workflowid": "201962",
    "workflowname": "worfflow2"
  },
  {
    "appaware": "false",
    "clearsensitiveflag": "false",
    "host": "84313",
    "id": "202933",
    "label": "WF3_Mount",
    "prepmount": "false",
    "reprotect": "false",
    "type": "mount",
    "workflowid": "202932",
    "workflowname": "WF3"
  },
  {
    "appaware": "false",
    "clearsensitiveflag": "false",
    "host": "84313,84317",
    "id": "282015",
    "label": "",
    "prepmount": "false",
    "reprotect": "false",
    "type": "mount",
    "workflowid": "282014",
    "workflowname": "morning-wf"
  }
  ],
  "status": 0
}
chworkflow

About chworkflow Command

Description

Use this command to modify the attributes of an existing workflow. Use `lsworkflow` to obtain the ID. Use “--disable” to de-schedule and reschedule a workflow. When changing a data flow schedule, all schedule parameters, day, time and frequency, should be specified.

Rights

User must have 'WorkFlow Manage' right to be able to change any workflow.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>day=string</td>
<td>Use when instead, Optional. Specifies the day of the frequency, 0-based. For weekly frequency, 0 indicates Sunday, and 1 is Monday, etc. For monthly, 1 is first day of the month, and so on.</td>
</tr>
<tr>
<td>type=liveclone</td>
<td>directmount</td>
</tr>
<tr>
<td></td>
<td>- liveclone: Creates a LiveClone, which allows you to use a script to perform an operation on the image before presenting it to the host. LiveClone workflows are commonly used for data masking: a database that contains sensitive data is mounted to a data masking server, where the sensitive data is scrubbed. Then the scrubbed database is mounted to the host.</td>
</tr>
<tr>
<td></td>
<td>- directmount: Mounts a selected snapshot image to a selected host exactly as it was snapped.</td>
</tr>
<tr>
<td>source=snap</td>
<td>policyid</td>
</tr>
<tr>
<td></td>
<td>- snap (default): use any image from snapshot policy.</td>
</tr>
<tr>
<td></td>
<td>- policid - use images from the specified policy. Supported image types are snap, streamsnap and DAR.</td>
</tr>
<tr>
<td>members=appid</td>
<td>appname[, appid</td>
</tr>
<tr>
<td>disable=boolean</td>
<td>Optional. Disables the workflow from being scheduled.</td>
</tr>
<tr>
<td>frequency=hourly</td>
<td>daily</td>
</tr>
<tr>
<td>name</td>
<td>Optional. Specifies new name for the workflow.</td>
</tr>
</tbody>
</table>
Your chworkflow request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>time=string</td>
<td>Optional. Specifies the time of the schedule.</td>
</tr>
<tr>
<td>when=integer</td>
<td>Optional. Specifies a 0-based number whose interpretation depends on the frequency.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Identifies the workflow object to modify by ID. Use lsworkflow to obtain the ID.</td>
</tr>
</tbody>
</table>

chworkflow Request Details

Note: See the Parameters section for a list of supported parameters and their description.

chworkflow Examples

Disabling a workflow using the disable parameter.

Request

POST https://{API_HOST}//api/task/chworkflow?argument=212027&disable=true
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
  "result": "212027",
  "status": 0
}

Updating a workflow to make it run on a weekly schedule instead of the daily schedule

Request

POST https://{API_HOST}//api/task/chworkflow?argument=282015&frequency=weekly&when=1&time=7:00&scheduletype=scheduled
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": "282015",
    "status": 0
}
# chflowtask

About chflowtask Command on page 425  
chflowtask Request Details on page 428  
chflowtask Example on page 429

## About chflowtask Command

### Description

Use this command to update or set attributes for a workflow. Use `lsflowtask` to obtain the flowtask ID. You will typically use `mkworkflow` to create a workflow and then use chflowtask to update each step in the workflow (based on the type flag during workflow creation). The chflowtask command will help you configure the actual settings to use for the step for scheduled workflows. Using the runworkflow command, you can override a subset of these items as necessary.

### Rights

User must have 'Workflow Run' or 'WorkFlow Manage' right to be able to change any flowtask.

### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>name=string</code></td>
<td>Required. Specifies the workflow object to modify by ID. Use <code>lsworkflow</code> to obtain the ID.</td>
</tr>
<tr>
<td>`type=liveclone</td>
<td>directmount`</td>
</tr>
</tbody>
</table>

The following parameters are applicable when the `type` is `liveclone`.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>appaware</code></td>
<td>Optional. Set this parameter to true to perform an application aware mount. This can only be specified for Oracle and SQL applications.</td>
</tr>
<tr>
<td><code>label</code></td>
<td>Optional, but required if no value was set previously. The label applied to the images.</td>
</tr>
<tr>
<td><code>diskpool</code></td>
<td>Optional, but required if no value was set previously. Specifies the diskpool name or ID used for the operation.</td>
</tr>
<tr>
<td><code>prepmount</code></td>
<td>Optional. Specifies whether to prep-mount a LiveClone image to a host.</td>
</tr>
<tr>
<td><code>clearsensitiveflag</code></td>
<td>Optional. Specifies whether to mark data as non-sensitive. Not allowed if prepmount is specified.</td>
</tr>
<tr>
<td><code>host</code></td>
<td>Required if prepmount is specified. Specifies the ID or name of a single host to which the backup image is to be prep-mounted.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>rdmmode</td>
<td><em>(Optional)</em> Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>• dependentvirtual</td>
</tr>
<tr>
<td></td>
<td>• independentvirtual <em>(default)</em></td>
</tr>
<tr>
<td></td>
<td>• physical</td>
</tr>
<tr>
<td></td>
<td>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> dependentvirtual is rarely used.</td>
</tr>
<tr>
<td></td>
<td>If there is an SLA assigned to the VM to which these volumes are mounted, they will be captured and will be counted towards MDL usage.</td>
</tr>
<tr>
<td>maptoallESX</td>
<td>Optional. Valid when the target host is a VMware VM. If there are multiple hosts, at least one must be VMware VM.</td>
</tr>
<tr>
<td>maptoallclusternodes</td>
<td>Optional. Valid only for cluster applications. Map backup image to all the nodes in the cluster.</td>
</tr>
<tr>
<td>mountlocation</td>
<td>Optional. Specifies a mountpoint for the volume on host. For example, /mnt/home</td>
</tr>
<tr>
<td>script</td>
<td>Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. For each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is:</td>
</tr>
<tr>
<td></td>
<td>name=&lt;name&gt;:phase={INIT</td>
</tr>
<tr>
<td></td>
<td>Multiple phases can be specified, separated by semi-colon (;), for example:</td>
</tr>
<tr>
<td></td>
<td>name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE</td>
</tr>
<tr>
<td>members</td>
<td>Optional. Specifies the applications to be included when the source is a group.</td>
</tr>
</tbody>
</table>
The following parameters are applicable when the type is mount.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>label</td>
<td>Optional. The label applied to the images.</td>
</tr>
<tr>
<td>diskpool</td>
<td>Optional. Specifies the diskpool name or ID used for the operation.</td>
</tr>
<tr>
<td>host</td>
<td>Optional. Specified comma-separated list of host IDs where the image is to be mounted. Only one host can be specified if appaware is true.</td>
</tr>
<tr>
<td>rdmmode</td>
<td>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values:</td>
</tr>
<tr>
<td></td>
<td>• dependentvirtual</td>
</tr>
<tr>
<td></td>
<td>• independentvirtual (default)</td>
</tr>
<tr>
<td></td>
<td>• physical</td>
</tr>
<tr>
<td></td>
<td>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> dependentvirtual is rarely used.</td>
</tr>
<tr>
<td></td>
<td>If there is an SLA assigned to the VM to which these volumes are mounted, they will be captured and will be counted towards MDL usage.</td>
</tr>
<tr>
<td>maptoallESX=true</td>
<td>false</td>
</tr>
<tr>
<td>maptoallclusternodes=true</td>
<td>false</td>
</tr>
<tr>
<td>mountlocation</td>
<td>Optional. Specifies a mountpoint for the volume on host. For example, /mnt/home.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>appaware</td>
<td>Optional. Set this parameter to true to perform an application aware mount. This can only be specified for Oracle and SQL Server applications.</td>
</tr>
</tbody>
</table>
| script        | Optional. Specifies a script during different phases of the operation. Five phases are supported, INIT, PRE, POST, FINAL, and ABORT. For each phase, a timeout, name of the script, and argument list can be specified. Name of the script is required, timeout and args are optional. Syntax for each phase is:  
  \[\text{name}=\text{name},\text{phase}=[\text{INIT}|\text{PRE}|\text{POST}|\text{FINAL}|\text{ABORT}]:[\text{timeout}=\text{timeout}]:[\text{args}=\text{arg1,arg2}]\]  
  Multiple phases can be specified, separated by semi-colon (;), for example:  
  \[\text{name}=\text{setup.sh}:\text{phase}=\text{INIT};\text{name}=\text{freeze.sh}:\text{phase}=\text{PRE}\] |
| provisioningoptions | Optional. Required if appaware is specified.  
  A comma delimited list of restore options where each option is a name=value pair. Use lsrestoreoptions to obtain a list of applicable restore options.  
  To perform app-aware mount to a new application, additional options can be provided through an XML content, which needs to adhere to the rules of the appclass of the application. In addition, the app-aware mounted new application can also be optionally protected, with a new, or existing SLT and SLP, if so desired. The existence of the provisioningoptions indicates that this is an app-aware mount, regardless of -appaware flag.  
  For example,  
  \[\text{provisioningoptions }"\text{<databasesid>foodb1</databasesid>}
  \text{<orahome>/u01/app/oracle/product/11.2.0/db_1</orahome>}
  \text{<utlfiledirectory>/home/oracle</utlfiledirectory>}
  \text{<username>oracle</username>}"\].  
  Use lsappclass to obtain a list of available appclass, and provisioning options for each appclass. |
| immediateunmount | Optional. Use it to unmount the image from target server, delete the snapshot of the selected image after the mount operation and the script execution have been successfully completed.  
  Cannot be specified if -reprotect is specified. |
| reprotect      | Optional. Specifies a new application to protect.  
  Cannot be specified if -immediateunmount is specified. |
| reprotectslt   | Required if reprotect is true. Specifies the template for the new application to protect. |
| reprotectslp   | Required if reprotect is true. Specifies the profile for the new application to protect. |

**chflowtask Request Details**

Your chflowtask request must pass a valid session ID. For information on how to get a valid session ID, see **Authentication or Login** on page 1.
chflowtask Example

Modify an existing workflow by adding some additional information/steps to the workflow.

Request

PUT https://{API_HOST}//api/task/chflowtask
chflowtask?argument=282015&type=mount&host=172.27.26.11,172.27.26.12&mountlocation=/home/jita

HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
   "result": "282015",
   "status": 0
}

Note: See the Parameters section for a list of supported parameters and their description.
Isflowtask

About Isflowtask Command on page 430
Isflowtask Request Details on page 430
Isflowtask Example on page 430

About Isflowtask Command

Description
Use this command to retrieve details of a list of flowtasks, or a detailed view of a flowtask. A flowtask is a step/task in a workflow.

Rights
User must have 'Workflow View' right to be able to view any flowtask.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type=liveclone</td>
<td>mount</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the name or ID of a flowtask object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isflowtask Request Details

Your Isflowtask request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsflowtask</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isflowtask Example

Request
GET https://{API_HOST}//api/info/lsflowtask
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
    "result": [}


```json
{
    "status": 0
}
```
**runworkflow**

*About runworkflow Command on page 432*

*runworkflow Request Details on page 433*

*runworkflow Example on page 433*

**About runworkflow Command**

**Description**

Use this command to trigger an on-demand execution of the workflow.

**Rights**

User must have ‘WorkFlow Run’ or ‘WorkFlow Manage’ right to be able to run a workflow.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>argument=string</strong></td>
<td>Required. Specifies the ID workflow object to be executed. Use lsworkflow to display detailed workflow information.</td>
</tr>
<tr>
<td><strong>norefreshliveclone=string</strong></td>
<td>Optional. When set, the LiveClone workflow will skip the LiveClone refresh operation.</td>
</tr>
<tr>
<td><strong>nocreateliveclone=string</strong></td>
<td>Optional. When set, the LiveClone workflow will skip the LiveClone mount operation.</td>
</tr>
<tr>
<td>**sourceimage= imageid</td>
<td>imagename**</td>
</tr>
<tr>
<td><strong>wait=boolean</strong></td>
<td>Optional. Specifies whether to wait for the completion of the command.</td>
</tr>
<tr>
<td><strong>ondemand</strong></td>
<td>(Optional) Specifies whether to run the workflow as on demand or scheduled. By default, the workflow is run as scheduled.</td>
</tr>
</tbody>
</table>

The following parameters are applicable only for mount operation (for LiveClone and Direct Mount workflows):

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>host=string</strong></td>
<td>Optional. Specifies a comma-separated list of hosts on which to mount. Use the lshost command to retrieve a list of all hosts and their IDs. <strong>Note:</strong> Only one host is supported for appaware mounts.</td>
</tr>
<tr>
<td>**maptoallESX=true</td>
<td>false**</td>
</tr>
<tr>
<td>**maptoallclusternodes=true</td>
<td>false**</td>
</tr>
<tr>
<td>**appaware=true</td>
<td>false**</td>
</tr>
</tbody>
</table>
runworkflow Request Details

Your runworkflow request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>recoverytime</td>
<td>[Applicable only for appaware mount] Valid only for database applications. Specify the point-in-time for recovery, by applying log backups to roll forward to the specified time of the host. The time should be within the range set by hostbeginpit and hostendpit when displayed using <code>udsinfo lsbackup &lt;image&gt;</code> for that image. The format should be either: &quot;yyyy-MM-dd HH:mm:ss&quot; or &quot;yyyy-MM-dd HH:mm:ss.SSS&quot;.</td>
</tr>
<tr>
<td>refreshexisting</td>
<td>[Applicable only for appaware mount] Specify the appname or appid to be refreshed. Cannot be specified if <code>provisioningoptions</code> is also specified. <strong>Note:</strong> It is mandatory to specify <code>appid</code> when there is more than one app with the same name in the Appliance.</td>
</tr>
<tr>
<td>provisioningoptions</td>
<td>[Applicable only for application aware mount] (Optional) A comma delimited list of restore options where each option is a name=value pair. For a list of available options, use <code>lsrestoreoptions</code>. To perform app-aware mount to a new application, additional options can be provided through an XML content, which needs to adhere to the rules of the appclass of the application. In addition, the app-aware mounted new application can also be protected, with a new or existing SLT and SLP. To find available appclass and provisioning options for each appclass use <code>lsappclass</code>.</td>
</tr>
</tbody>
</table>

**runworkflow Example**

POST https://{_API_HOST}//api/task/runworkflow?argument=212027
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

```json
{
    "result": "xJob Completed",
}```
"status": 0
}

rmworkflow

About rmworkflow Command

Description
Use this command to remove an existing workflow object. Use udsinfo lsworkflow to obtain the ID. If the specified workflow is running, it will continue until it is completed.

Rights
User must have 'WorkFlow Manage' right to be able to remove a workflow.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the workflow object to be removed. Use lsworkflow to obtain the ID.</td>
</tr>
<tr>
<td>force</td>
<td>Optional. Specifies whether to ignore errors when deleting the workflow.</td>
</tr>
</tbody>
</table>

rmworkflow Request Details

Your rmworkflow request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/rmworkflow</td>
<td>argument</td>
</tr>
</tbody>
</table>

rmworkflow Example

Request

POST https://{_API_HOST}//api/task/rmworkflow?argument=212030
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

```
{
    "result": "xJob Completed",
    "status": 0
}
```

Other Command
mksideband

About mksideband Command on page 436
mksideband Request Details on page 436
mksideband Example on page 437

About mksideband Command

Description
Use this command to mark an mdisk to be used for a sideband group.

Note: The mksideband command is supported by appliances only.

Applicability of this Command
This command can be used on:

| CDS appliance | ü |
| CDS appliance | ü |
| Sky appliance | x |
| NAS Director  | ü |

Rights
You must have ‘System Manage’ right to invoke this operation.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>mdisk=string</td>
<td>Required. Specifies the name of the mDisk.</td>
</tr>
</tbody>
</table>

mksideband Request Details
Your mksideband request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mksideband</td>
<td>mdisk</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
**mksideband Example**

**Request**

POST https://{API_HOST}//api/task/mksideband?mdisk=mdisk1  
HTTP Request Header  
Authorization:  92929a8b-a413-476f-a624-5b575c5f4d3

where 92929a8b-a413-476f-a624-5b575c5f4d3 is the session ID.
7 Policy and Schedule Commands

Use these commands for managing policies and schedules in your Service Level Agreements (SLAs).

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<th>Managing Schedules</th>
<th>Bandwidth Commands</th>
<th>Other Commands</th>
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</thead>
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<td>SLT Commands</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td>mkbandwidthschedule on page 507</td>
<td>lsinterface on page 490</td>
</tr>
<tr>
<td>lsslt on page 442</td>
<td></td>
<td>lsbandwidthschedule on page 509</td>
<td>lsconfiguredinterface on page 492</td>
</tr>
<tr>
<td>cloneslt on page 445</td>
<td></td>
<td>chbandwidthschedule on page 511</td>
<td>configoutboundpolicy on page 496</td>
</tr>
<tr>
<td>rmslt on page 448</td>
<td></td>
<td>rmbandwidthschedule on page 512</td>
<td>lsoutboundpolicy on page 498</td>
</tr>
<tr>
<td>SLA Commands</td>
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<td>configntp on page 499</td>
</tr>
<tr>
<td>mksla on page 449</td>
<td></td>
<td></td>
<td>lsntp on page 500</td>
</tr>
<tr>
<td>lssla on page 451</td>
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<td></td>
<td>testconnection on page 501</td>
</tr>
<tr>
<td>chsla on page 455</td>
<td></td>
<td></td>
<td>showroute on page 503</td>
</tr>
<tr>
<td>rmsla on page 458</td>
<td></td>
<td></td>
<td>showrouting on page 504</td>
</tr>
<tr>
<td>Policy Commands</td>
<td></td>
<td></td>
<td>showtracepath on page 505</td>
</tr>
<tr>
<td>mkpolicy on page 460</td>
<td></td>
<td></td>
<td>export on page 513</td>
</tr>
<tr>
<td>lspolicy on page 465</td>
<td></td>
<td></td>
<td>import on page 515</td>
</tr>
<tr>
<td>chpolicy on page 472</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lssettableoption on page 476</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mkpolicyoption on page 480</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lspolicyoption on page 482</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>chpolicyoption on page 484</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmpolicyoption on page 486</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rmpolicy on page 488</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SLT Commands

mkslt

About mkslt Command

Description
Use this command to create a new policy template.

Rights
You must have the 'SLA Manage' right to create a policy template.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>description=string</td>
<td>Optional. Specifies description of the SLA template.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies name of the SLA template; the name has to be unique within the appliance.</td>
</tr>
</tbody>
</table>
| org=string | Optional. Specifies a default organization to which the template is to be added after creation. Use the udsinfo lsorg command to locate the ID or name of the organization.  
**Note:** To use this option user needs to have 'System Manage' right. |
| override=boolean | Optional. Specifies whether policy option can be overridden. The default is true. |
| id=string | Optional. Use udsinfo lsslt to retrieve the SLA ID. |
| cluster=string | Optional. Specifies the name or ID of the target VDP Appliance to execute this command where the template should be pushed to. |

mkslt Request Details

Your mkslt request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mkslt</td>
<td>name=&lt;sla template name&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

mkslt Example

Creating a new template with a specific name.
Request
POST https://{API_HOST}//api/task/mkslt?name=Daily%20Task%20Template
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": 153121,
    "status": 0
}

Creating a new template with a specific name and description and associate with an org.

Request
POST https://{API_HOST}//api/task/
mkslt?name=Daily%20Task%20Template%202&description=A%20new%20template%20we%20will%20use&org=org5
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": 153184,
    "status": 0
}
Isslt

About Isslt Command on page 442
Isslt Request Details on page 442
Isslt Examples on page 442

About Isslt Command

Description

Use this command to retrieve the details of SLTs. A template (SLT) is made up of one or more policies that describe the data protection schedules.

Rights

You must have the 'SLA Manage', 'SLA View' or 'SLA Assign' right to view a list of SLTs.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance</td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to retrieve all objects in a list view. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the -appliance argument.</td>
</tr>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attribute for the Isslt udsinfo Isslt command is: name. For string type of filters, the only operator allowed is '='. You can also use wild-card character '<em>'. For example, to match template (SLT) with name begins with 'foo', use '-filtervalue name=foo</em>filtervalue=name%3Dfoo*'.</td>
</tr>
<tr>
<td>argument</td>
<td>Optional. Specifies the name or ID of an object. When you use this parameter, a detailed view of the object is returned and any value specified by the -filtervalue parameter is ignored. If you do not specify the ID or name, a concise view of all objects matching the filters is displayed.</td>
</tr>
</tbody>
</table>

Isslt Request Details

Your Isslt request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsslt</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

Isslt Examples

Fetching list of all templates.
Request
GET https://{API_HOST}//api/info/lsslt
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff4d3

where 92929a8b-a413-476f-a624-5b575cfff4d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "description": "Tier-4 - Local Protection Only",
            "id": "104",
            "name": "Tier-4 - Local Protection Only",
            "override": "true"
        },
        {
            "description": "Tier-0 App SLA - 4 HOUR RPO",
            "id": "106",
            "name": "Tier-0 - 4 HOUR RPO",
            "override": "true"
        },
        {
            "description": "Tier-1 App SLA - 12 HOUR RPO",
            "id": "107",
            "name": "Tier-1 - 12 HOUR RPO",
            "override": "true"
        },
        {
            "description": "Tier-2 App SLA - 24 HOUR RPO",
            "id": "108",
            "name": "Tier-2 - 24 HOUR RPO",
            "override": "true"
        },
        {
            "description": "Tier-3 - Application Data Vault",
            "id": "109",
            "name": "Tier-3 - Application Data Vault",
            "override": "true"
        },
        {
            "description": "new description",
            "id": "84331",
            "name": "TP-Template",
            "override": "true"
        },
        {
            "description": "",
            "id": "153121",
            "name": "Daily Task Template",
            "override": "true"
        }
    ],
    "status": 0
}
Fetching Template for a specific Object Id using the argument parameter.

Request
GET https://{API_HOST}//api/info/lsslt?argument=108
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": {
        "description": "Tier-2 App SLA - 24 HOUR RPO",
        "id": "108",
        "name": "Tier-2 - 24 HOUR RPO",
        "override": "true"
    },
    "status": 0
}

Fetching template with a specific name using filtervalue parameter.

Request
GET https://{API_HOST}//api/info/lsslt?filtervalue=name%3DTier-4+-+Local+Protection+Only
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "description": "Tier-4 - Local Protection Only",
            "id": "104",
            "name": "Tier-4 - Local Protection Only",
            "override": "true"
        }
    ],
    "status": 0
}
**cloneslt**

*About cloneslt Commands on page 445*

*cloneslt Request Details on page 445*

*cloneslt Example on page 445*

### About cloneslt Commands

#### Description

Use the cloneslt command to clone an slt. Use `udsinfo lsslt` to retrieve the ID of the slt.

#### Rights

User must have 'SLA Assign' right to clone a slt.

#### Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sltid=integer</td>
<td>Required. Specifies the ID of the slt to be cloned.</td>
</tr>
<tr>
<td>sltname=string</td>
<td>Required. Specifies the name of the slt to be cloned.</td>
</tr>
</tbody>
</table>

### cloneslt Request Details

Your cloneslt request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login on page 1](#).

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/cloneslt</td>
<td>sltid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>sltname</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

### cloneslt Example

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/cloneslt?argument=1199943
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

#### Response

```
Request success
{
   "result": "1",
   "status": 0
}
```
**chslt**

**About chslt Command on page 446**

**chslt Request Details on page 446**

**chslt Examples on page 446**

---

**About chslt Command**

**Description**

Use this command to change the attributes of a template (SLT). Use the `udsinfo lsslt` command to obtain the ID or name of the template (SLT).

**Rights**

You must have the 'SLA Manage' right to change a template.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>description</code>=string</td>
<td>Optional. Specifies a description for the template.</td>
</tr>
<tr>
<td><code>name</code>=string</td>
<td>Optional. Specifies a name for the template.</td>
</tr>
<tr>
<td><code>override</code>=boolean</td>
<td>Optional. Specifies whether policy option can be overridden.</td>
</tr>
<tr>
<td><code>promote</code></td>
<td>Optional. Promotes a replicated appliance template.</td>
</tr>
<tr>
<td><code>argument</code>=string</td>
<td>Required. Specifies the ID or name of the template to be modified.</td>
</tr>
</tbody>
</table>

---

**chslt Request Details**

Your `chslt` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chslt</td>
<td>argument=&lt;sla id</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

---

**chslt Examples**

**Update an existing template with a new description.**

**Request**

POST https://{_API_HOST}://api/task/chslt?argument=153121&description=New Description

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.
Update an existing template to change the override property of the template.

Request
POST https://{_API_HOST}//api/task/chslt?argument=153121&override=false
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
  "status": 0
}


rmslt

About rmslt Command on page 448
rmslt Request Details on page 448
rmslt Example on page 448

About rmslt Command

Description
Use this command to delete a template.

Rights
You must have the 'SLA Manage' right to delete a template.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>string</td>
</tr>
</tbody>
</table>

required. Specifies the ID or name of the template to be deleted. Use udsinfo lsslt to retrieve the SLT information.

rmslt Request Details

Your rmslt request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmslt</td>
<td>argument=&lt;sla id&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmslt Example

Delete an existing template.

Request
POST https://{_API_HOST}//api/task/rmslt?argument=153121
HTTP Request Header
Authorization: 02929a8b-a413-476f-a624-5b575c6f54d3
where 02929a8b-a413-476f-a624-5b575c6f54d3 is the session ID.

Response
Request success
{
    "status": 0
}
SLA Commands
mksla

About mksla Command
Description
Use this command to create new SLA objects. An SLA protects an application by combining a template (SLT) and a profile (SLP) to an application, a consistency group, or all applications/consistency groups in a group.

An SLA ID is returned when the command successfully completed, in protecting an application or a consistency group. To protect multiple applications in a group, use -group to specify the name or ID of the group. The group ID is returned when the command succeeds, as there are multiple SLAs created.

Rights
You must have the ‘SLA Assign’ right to create an SLA.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appid=integer</td>
<td>Required when protecting an application or consistency group. Specifies the application ID or the consistency group ID for the new SLA. Use uds info lsapplication or uds info lsconsistgrp to retrieve the application or consistency group ID.</td>
</tr>
<tr>
<td>description=string</td>
<td>Optional. Specifies the description for the new SLA.</td>
</tr>
<tr>
<td>group=string</td>
<td>Optional, required when protecting applications in the group. Specifies the ID or name of a group. Use uds info lsgroup to retrieve the group ID.</td>
</tr>
<tr>
<td>optionname=string</td>
<td>Optional. Specifies policy option name for the SLA. For policy option that can not be changed, it should be specified when SLA is created. See Appendix E, List of Policy Options for a complete list of supported policy options.</td>
</tr>
<tr>
<td>optionvalue=string</td>
<td>Optional. Specifies policy option value for the SLA.</td>
</tr>
<tr>
<td>scheduleoff=boolean</td>
<td>Optional. Specifies if the schedule should be turned off to start with when creating a new SLA for VDP appliance.</td>
</tr>
<tr>
<td>sourceuds=integer</td>
<td>Optional. Optional source cluster ID, to apply to remote replicate policy to a remote application for VDP appliance.</td>
</tr>
<tr>
<td>slp=integer</td>
<td>Required. Specifies the profile (SLP) ID or name for the new SLA. Use uds info lsslp to retrieve the SLA ID.</td>
</tr>
<tr>
<td>slt=integer</td>
<td>Required. Specifies the template (SLT) ID or name for the new SLA. Use uds info lsslt to retrieve the SLA ID.</td>
</tr>
</tbody>
</table>
mksla Request Details

Your mksla request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mksla</td>
<td>appid=&lt;appid</td>
</tr>
<tr>
<td></td>
<td></td>
<td>slp=&lt;slp id</td>
</tr>
<tr>
<td></td>
<td></td>
<td>slt=&lt;sltid or sltname&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

mksla Example

Creating a new SLA with minimum required information.

**Request**

POST https://{API_HOST}//api/task/mksla?appid=122844&slt=84331&slp=51

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "153829",
    "status": 0
}
```

A new SLA is created with ID 153829.
Issla

About Issla Command on page 451
Issla Request Details on page 452
Issla Examples on page 452

About Issla Command

Description
Use this command to retrieve a concise list of SLAs or a detailed view of an SLA. An SLA describes a template and a profile used to protect an application.

Rights
You must have the 'SLA Manage', 'SLA View', or 'SLA Assign' right to view SLAs.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance=string</td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to retrieve all objects in a list view. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the appliance argument.</td>
</tr>
<tr>
<td>delim delimeter</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
<tr>
<td>filtervalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the udsinfo lssla command are:</td>
</tr>
<tr>
<td></td>
<td>• appid</td>
</tr>
<tr>
<td></td>
<td>• dedupasyncoff [true</td>
</tr>
<tr>
<td></td>
<td>• expirationoff [true</td>
</tr>
<tr>
<td></td>
<td>• scheduleoff [true</td>
</tr>
<tr>
<td></td>
<td>• slpid</td>
</tr>
<tr>
<td></td>
<td>• sltid</td>
</tr>
<tr>
<td></td>
<td>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with ‘&amp;’ character (%26 in hexadecimal), which should be escaped with ‘\’.</td>
</tr>
<tr>
<td>nohdr</td>
<td>Optional. By default, headings are displayed for each column of data in the concise view, and for each item of data in the detailed view. The -nohdr parameter suppresses the display of headings. If there is no data to display, headings are not displayed.</td>
</tr>
</tbody>
</table>
Issla Request Details

Your Issla request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lssla</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

Issla Examples

**Fetching list of all SLAs.**

**Request**

GET https://{API_HOST}//api/info/lssla

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
  "result": [
    {
      "appid": "84363",
      "createdate": "",
      "dedupasyncoff": "false",
      "description": "newsla",
      "expirationoff": "true",
      "id": "84377",
      "modifydate": "2017-09-07 01:49:30.957",
      "scheduleoff": "false",
      "slpid": "51",
      "sltid": "84331"
    },
    {
      "appid": "100625",
      "createdate": "",
      "dedupasyncoff": "false",
      "description": "new sla",
      "expirationoff": "false",
      "id": "119240",
      "modifydate": "2017-09-11 11:48:06.569",
      "scheduleoff": "false",
      "slpid": "51",
      "sltid": "84331"
    }
  ]
}
```
"sltid": "84331"
],
{
  "appid": "100626",
  "createdate": "",
  "dedupasyncoff": "false",
  "description": "new sla",
  "expirationoff": "false",
  "id": "119692",
  "modifydate": "2017-09-11 14:14:45.899",
  "scheduleoff": "false",
  "slpid": "51",
  "sltid": "84331"
}
],
"status": 0
}

Fetching information by a specific SLA by ID.

Request
GET https://{API_HOST}//api/info/lssla?argument=153829
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
  "result": {
    "DisableDar": "false",
    "DisableLocalDedup": "false",
    "DisableRemoteDedup": "false",
    "DisableSnapshot": "false",
    "DisableStreamSnap": "false",
    "ProcessLatestDedup": "false",
    "ProcessLatestSnap": "false",
    "appid": "122844",
    "dedupasyncoff": "false",
    "description": "This SLA is latest",
    "expirationoff": "false",
    "flags": "0",
    "id": "153829",
    "modifydate": "2017-11-26 09:41:06.151",
    "scheduleoff": "true",
    "slpid": "51",
    "sltid": "84331"
  },
  "status": 0
}

Fetching information about SLAs where the image expiration property is disabled.

Request
GET https://{API_HOST}//api/info/lssla?filtervalue=expirationoff=true
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.
Response
Request success
{
  "result": [
    {
      "appid": "84363",
      "createdate": "",
      "dedupsyncoff": "false",
      "description": "newsla",
      "expirationoff": "true",
      "id": "84377",
      "modifydate": "2017-09-29 14:33:11.235",
      "scheduleoff": "true",
      "slpid": "51",
      "sltid": "84331"
    }
  ],
  "status": 0
}
**chsla**

*About chsla Command* on page 455

*chsla Request Details* on page 457

*chsla Example* on page 457

**About chsla Command**

**Description**

Use this command to change the attributes of an SLA.

**Rights**

You must have the 'SLA Assign' right to change the attributes of an SLA.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| complianceerrorthreshold=string | Optional. The error threshold to use for SLA compliance settings for VDP appliances. Valid values are whole numbers (greater than 0) followed by units (m for minutes, h for hours, d for days) and the strings 'default' and 'no analysis' (quotes required).  
  - 'default' specifies that the error threshold is calculated based on the characteristics of the policy.  
  - 'no analysis' specifies that there will be no alerting for these SLA compliance settings.  
  **Note:** The compliance error threshold must be higher than the warning threshold. |
| compliancewarnthreshold=string | Optional. The warning threshold to use for SLA compliance settings for VDP appliance. Valid values are whole numbers (greater than 0) followed by units (m for minutes, h for hours, d for days) and the string 'no warning' (quotes required).  
  'no warn' means that there will be no early warning before the warning threshold is reached.  
  **Note:** The compliance warning threshold must be lower that the error threshold. |
| dedupasyncoff boolean | Optional. Specifies whether asynchronous deduplication of this SLA should be turned off.                                                                                                                     |
| description=string | Optional. Specifies the new description for the SLA.                                                                                                                                                     |
| expirationoff=boolean | Optional. Specifies whether the expiration of this SLA should be turned off.                                                                                                                              |
| policyid=integer | Optional. When creating an SLA compliance override for VDP appliance using either the complianceerrorthreshold or compliancewarnthreshold parameter, the policy ID specifies the policy whose compliance settings you wish to override. Only one policy can be overridden in a single chsla command. |
| scheduleoff=boolean | Optional. Specifies whether scheduling of the SLA should be turned off.                                                                                                                                     |
### Parameter | Description
--- | ---
**slpid**=integer | Optional. Specifies the ID of the profile (SLP). Use udsinfo lsslp to display a list of profiles (SLPs).
**sltid**=integer | Optional. Specifies the ID of the SLA template. Use udsinfo lsslt to display a list of policy templates (SLTs).
**argument**=integer | Required. Specifies ID of the SLA to be changed. Use udsinfo lssla to retrieve the SLA ID.
**flag**=string | Optional. Configures the flag setting and associated value to disable/enable specific SLA operations on a single application, such as disabling image preservation of snapshots or dedup images on an application basis. You can also disable individual jobs for an application (snapshot, local dedup, remote dedup, StreamSnap, OnVault, or DAR jobs). This parameter is for VDP Appliances.

**Note:** For background on image preservation, including modifying settings, see Configuring Image Preservation on page 583.

Image preservation flag settings on a per-application basis:

Settings include:

- **OnVaultLatestSnap:**<true | false>
- **ProcessLatestSnap:**<true | false> — Instructs the appliance if it should change its default behavior and resume processing the most recent snapshot images and discard all of the preserved images for the application. By default, the system-wide PreserveSnapsOfPriority parameter in the setparameter command is set to all applications (low, medium, and high priority), which means that the ProcessLatestSnap flag is automatically disabled (set to ProcessLatestSnap:false). You can specify ProcessLatestSnap:true to disable catch-up mode for a specific application.

- **ProcessLatestDedup:**<true | false> — Instructs the appliance if it should change its default behavior and resume processing the most recent dedup images and discard all of the preserved images for the application. By default, the system-wide PreserveDedupsOfPriority parameter in the setparameter command is set to all applications (low, medium, and high priority), which means that the ProcessLatestDedup flag is automatically disabled (set to ProcessLatestSnap:false). You can specify ProcessLatestDedup:true to disable catch-up mode for a specific application.

**Note:** Once you set the flag ProcessLatestSnap or ProcessLatestDedup to true, the -flag option will remain set to true until the system is in process. The parameters will be reset back to the default state (false), once the process is completed.
chsla Request Details

Your chsla request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chsla</td>
<td>argument=&lt;sla id&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chsla Example

Updating an existing SLA to change description and turn initial schedule off.

Request

POST https://{API_HOST}//api/task/chsla
chsla?argument=153829&scheduleoff=true&description=Initial+schedule+stays+off

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575c9f54d3

where 92929a8b-a413-476f-a624-5b575c9f54d3 is the session ID.

Response

Request success

{  
  "status": 0
}
About rmsla Command

Description
Use this command to remove application protection by removing the SLA that protects the application(s), group, or consistency groups.

Rights
You must have the 'SLA Assign' right to delete the protection applied to applications.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the SLA to be removed or the ID or name of the group to be unprotected. Use udsinfo lssa to retrieve SLA information. Use udsinfo lsgroup to retrieve group information.</td>
</tr>
</tbody>
</table>

rmsla Request Details

Your rmsla request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmsla</td>
<td>argument=&lt;slaid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmsla Example

Deleting an existing SLA.

Request
POST https://{API_HOST}//api/task/rmsla?argument=153829
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": "",
    "status": 0
}
Verify that the SLA has been deleted.

GET https://{API_HOST}//api/info/lssla?argument=153829
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c7f54d3

where 92929a8b-a413-476f-a624-5b575c7f54d3 is the session ID.

Response
Sky/CDS error:10016 object not found: 153829
Policy Commands

mkpolicy

About mkpolicy Command

Description

Use this command to create a new policy.

Both the selection and the exclusion of a schedule are similar.

Four different types of selection or exclusion are supported:

- Months (months): jan | feb | mar | apr | may | jun | jul | aug | sep | oct | nov | dec
- Weeks (weeks): 1, 2, .. last
- Days of Month (daysofmonth): 1, 2, .. last
- Days Of Week (daysofweek): sun | mon | tue | wed | thu | fri | sat

For verification policies, only weekly and monthly schedules are allowed, and the start time is used to start the verification.

Rights

You must have the 'SLA Manage' right to create a policy.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| complianceerrorthreshold d= string | Optional. The error threshold to use for SLA compliance settings for VDP appliance. Valid values are whole numbers (greater than 0) followed by units (m for minutes, h for hours, d for days) and the strings 'default' and 'no analysis' (quotes required).
  - 'default' specifies that the error threshold is calculated based on the characteristics of the policy.
  - 'no analysis' specifies that there will be no alerting for these SLA compliance settings. |

**Note:** The compliance error threshold must be higher than the warning threshold.

| compliancewarnthreshold d= string | Optional. The error threshold to use for SLA compliance settings for VDP appliance. Valid values are whole numbers (greater than 0) followed by units (m for minutes, h for hours, d for days) and the string 'no warning' (quotes required). 'no warn' means that there will be no early warning before the error threshold is reached. |

**Note:** The compliance warning threshold must be lower than the error threshold.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| continuous=boolean | Optional. Defines a continuous image capture schedule for VDP appliance (for example, perform a capture job every 8 hours, starting the first job at 1 am). If value is set to true, the first job will be run at start time (default 00:00) and subsequent jobs will run based on last successful job start time and RPO value. Default is false.  
*Note: When this flag is set, specifying the -endtime, -exclusion, -repeatinterval, or -scheduletype options will result in an error.* |
| description=string | Optional. Specifies the description of the policy.                                                                                                                                                            |
| endtime=string     | Optional. Specifies the end time for the policy. End time of the day that this policy applies. The format is in 24-hour format, "hh:mm", For example, '17:00'. This parameter cannot be used if -continuous is set to true for VDP appliance. |
| exclusion=string   | Optional. Specifies the exclusion (calendar) for the policy.                                                                                                                                                   |
| exclusioninterval=integer | Required when the exclusion parameter is specified. Specifies the exclusion interval for the policy. An exclusion interval of 2 for weekly, means every two weeks.                                           |
| exclusiontype=string | Required when the exclusion parameter is specified. Specifies the exclusion type for the policy.                                                                                                           |
| name=string        | Required. Specifies the name of the policy. Name should be unique within the same template.                                                                                                                   |
| op=snap | cloud | dedup | directeddup | replicate | remotereplicate | Specifies the operation type of the policy. The op argument is required when you do not specify the policytype parameter.  
*Note: A direct-dedup policy conflicts with the snap, dedup, sync, async, dedup_async and stream_snap policy types.*  
In the op argument, the replicate option is for remote dedup and the remotereplicate option is for multi-hop. You cannot add a remotereplicate policy to a template that has any other policies.  
*Note: If you are defining a remote-to-mirror policy, do not specify a value for op.* |
| predecessor=integer | Optional. Specifies the predecessor policy ID for CDS/Sky. For example, a stream_snap policy requires a snap policy as a predecessor to work properly. In this case, you would specify the snap policy ID.  
*Note: Required for policies where policytype=streamsnap -policytype stream_snap is specified.* |
| priority=low | medium | high | Optional. Specifies a new priority for the policy. Applies only to the dedup, replicate, and dedup_async policies. Default is medium if not specified.                                                                |
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>remote.retention</td>
<td>remote.retention parameter configures StreamSnap remote retention for VDP appliance. It is required when <code>policytype=stream_snap</code> is specified. Valid options include:</td>
</tr>
<tr>
<td></td>
<td>- <code>custom</code> - Retain the remote snapshot image for a specific period of time (minutes, hours, days, weeks, months, or years). You define the time period to retain the image using the <code>retention</code> and <code>retentionm</code> parameters.</td>
</tr>
<tr>
<td></td>
<td>- <code>last</code> - Retain only the latest remote StreamSnap image. This is the default setting.</td>
</tr>
<tr>
<td></td>
<td>- <code>snap</code> - Use the same retention as the local (base) snapshot policy associated with this StreamSnap policy.</td>
</tr>
<tr>
<td>policytype</td>
<td>Defines the type of Production to Mirror policy or a dedup verification policy. <code>policytype</code> specifies which type of replication will be used or if this is to be a verify policy. If not specified, or if the default of <code>normal</code> is used, then a value for <code>-op</code> parameter must be provided.</td>
</tr>
<tr>
<td></td>
<td>- <code>policytype</code> is required when you do not specify the <code>-op</code> parameter. The default value for <code>-policytype</code> is <code>normal</code>, which includes the <code>snap</code>, <code>dedup</code>, and <code>replicate</code> policies.</td>
</tr>
<tr>
<td>retention</td>
<td>Specifies the retention period for the policy. It is required when you specify a <code>snap</code>, <code>directdedup</code>, <code>dedup</code>, <code>replicate</code>, or <code>cloud</code> policy. It is also required for a <code>stream_snap</code> policy if <code>-remoteretention</code> is set to <code>custom</code> for CDS/Sky.</td>
</tr>
<tr>
<td>retentionm</td>
<td>Specifies the retention measurement type for the policy. It is required when <code>retention</code> is specified.</td>
</tr>
<tr>
<td>rpo</td>
<td>Optional. Specifies the sets the frequency of jobs for the policy.</td>
</tr>
<tr>
<td>rpon</td>
<td>Specifies the measurement type for the policy. It is required when <code>rpo</code> is specified.</td>
</tr>
<tr>
<td>scheduletype</td>
<td>Required when the <code>-selection</code> parameter is specified. Specifies the schedule type for the policy.</td>
</tr>
<tr>
<td>selection</td>
<td>Optional. Specifies the selection (calendar) for the policy. <code>-selection</code> is relevant for the <code>snap</code>, <code>directdedup</code>, <code>dedup</code>, <code>replicate</code>, and <code>cloud</code> policies.</td>
</tr>
<tr>
<td>repeatinterval</td>
<td>Only valid when <code>-CDS/Sky</code> is specified. Specifies the repeat interval for the policy. A repeat interval of 2 in a week means repeating policy execution once in every two weeks.</td>
</tr>
<tr>
<td>sit</td>
<td>Required. Specifies the template id or name (VDP appliance) for the policy.</td>
</tr>
<tr>
<td>starttime</td>
<td>Required for the <code>snap</code>, <code>directdedup</code>, <code>dedup</code>, <code>dedup_async</code>, <code>replicate</code>, and <code>cloud</code> policies. Specifies the start time for the policy. Starting time of the day that this policy applies. The format is &quot;hh:mm&quot;, For example, &quot;09:00&quot;.</td>
</tr>
</tbody>
</table>
### mkpolicy Request Details

Your mkpolicy request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>truncatelog</code></td>
<td>Optional. Specifies that the logs should be truncated. The default value is false. This is applied to applications that support log truncation.</td>
</tr>
<tr>
<td><code>verifychoice</code></td>
<td>Optional. Specifies the choice of an image to verify. This is (only for verification policies).</td>
</tr>
<tr>
<td><code>appliance</code></td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to execute this command. All other parameters should use appliance-specific values. Use the <code>udsinfo iscluster</code> command to retrieve the appliance name or ID to help you identify the correct appliance to include in the <code>appliance</code> argument.</td>
</tr>
</tbody>
</table>

### mkpolicy Examples

**Creating a new policy with the set of required parameters.**

**Request**

POST https://{API_HOST}//api/task/mkpolicy

```plaintext
name=DailyBackupPolicy&policytype=normal&op=snap
```

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575c054d3

where 92929a8b-a413-476f-a624-5b575c054d3 is the session ID.

**Response**

Request success

```json
{
"result": "153288",
"status": 0
}
```

**Creating a new policy with different optional arguments.**

**Request**

POST https://{API_HOST}//api/task/mkpolicy

```plaintext
name=Jupiter+Snap+Policy&policytype=normal&op=snap&starttime=8:00&endtime=18:00&rpo=10&rpom=minutes&description=This+policy+will+apply+every+weekday&selection=daysofweek:mon,tue,wed,thu,fri&scheduletype=weekly&exclusion=daysofweek:sat,sun&exclusiontype=weekly
```

HTTP Request Header

**Note:** See the Parameters section for a list of supported parameters and their description.
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

Response
Request success
{
    "result": "153326",
    "status": 0
}
About Ispolicy Command

Description

Use this command to display a concise list of policies or the detailed view of a policy. A template (SLT) is made up of one or more policies.

Rights

You must have the 'SLA Manage', 'SLA View' or 'SLA Assign' right to view a list of policies.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance</td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to retrieve all objects in a list view. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the appliance argument.</td>
</tr>
<tr>
<td>delim</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
</tbody>
</table>
Your lspolicy request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

### lspolicy Request Details

Your lspolicy request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lspolicy</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.
Ispolicy Examples

Fetching list of all policies.

Request
GET https://{API_HOST}//api/info/lspolicy?apistart=0&apilimit=100
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
        {
            "description": "DedupAsync - 4 hours",
            "encrypt": "",
            "endtime": "",
            "exclusion": "",
            "exclusioninterval": "1",
            "exclusiontype": "none",
            "id": "161",
            "name": "DedupAsync",
            "policytype": "dedup_async",
            "priority": "medium",
            "repeatinterval": "1",
            "retention": "",
            "retentionm": "",
            "rpo": "4",
            "rpom": "hours",
            "scheduletype": "",
            "selection": "",
            "sltid": "106",
            "starttime": ""
        },
        {
            "description": "Dedup daily",
            "encrypt": "",
            "endtime": "23:59",
            "exclusion": "",
            "exclusioninterval": "1",
            "exclusiontype": "none",
            "id": "163",
            "name": "Daily dedup",
            "op": "dedup",
            "policytype": "normal",
            "priority": "medium",
            "repeatinterval": "1",
            "retention": "14",
            "retentionm": "days",
            "rpo": "24",
            "rpom": "hours",
            "scheduletype": "daily",
            "selection": "",
            "sltid": "106",
            "starttime": "00:00"
        },
        {
            "description": "Dedup monthly",
            "encrypt": "",
            "endtime": "",
            "exclusion": "",
            "exclusioninterval": "",
            "exclusiontype": "none",
            "id": "",
            "name": "",
            "op": "",
            "policytype": "",
            "priority": "",
            "repeatinterval": "",
            "retention": "",
            "retentionm": "",
            "rpo": "",
            "rpom": "",
            "scheduletype": "",
            "selection": "",
            "sltid": "",
            "starttime": ""
        }
    ]
}
"encrypt": "",  
"endtime": "23:59",  
"exclusion": "",  
"exclusioninterval": "1",  
"exclusiontype": "none",  
"id": "175",  
"name": "Monthly dedup",  
"op": "dedup",  
"policytype": "normal",  
"priority": "medium",  
"repeatinterval": "1",  
"retention": "3",  
"retentionm": "months",  
"rpo": "24",  
"rpom": "hours",  
"scheduletype": "monthly",  
"selection": "daysofmonth:2",  
"sltid": "107",  
"starttime": "00:00"
},
{
  "description": "Remote dedup daily",  
  "encrypt": "",  
  "endtime": "23:59",  
  "exclusion": "",  
  "exclusioninterval": "1",  
  "exclusiontype": "none",  
  "id": "176",  
  "name": "Daily remote dedup",  
  "op": "replicate",  
  "policytype": "normal",  
  "priority": "medium",  
  "repeatinterval": "1",  
  "retention": "14",  
  "retentionm": "days",  
  "rpo": "24",  
  "rpom": "hours",  
  "scheduletype": "daily",  
  "selection": "",  
  "sltid": "107",  
  "starttime": "00:00"
}

"status": 0

**Filtering out the result by fetching results for a single ID.**

**Request**

GET https://{API_HOST}//api/info/lspolicy?filtervalue=id%3D161

HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

{  
  "result": [  
  
}
Filtering out the result by fetching results for an option with a specific name.

Request
GET https://{API_HOST}//api/info/lspolicy?filtervalue=name%3DDedupAsync
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{"result": [
```
{
    "description": "DedupAsync - 4 hours",
    "encrypt": "",
    "endtime": "",
    "exclusion": "",
    "exclusioninterval": "1",
    "exclusiontype": "none",
    "id": "161",
    "name": "DedupAsync",
    "policytype": "dedup_async",
    "priority": "medium",
    "repeatinterval": "1",
    "retention": "",
    "retentionm": "",
    "rpo": "4",
    "rpom": "hours",
    "scheduletype": "",
    "selection": "",
    "sltid": "106",
    "starttime": ""
}
```

],
"status": 0
}
Filtering out the result by fetching results for a single ID using the argument option.

Request
GET https://{API_HOST}//api/info/lspolicy?argument=161
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": {
    "description": "DedupAsync - 4 hours",
    "exclusioninterval": "1",
    "exclusiontype": "none",
    "id": "181",
    "name": "DedupAsync",
    "priority": "medium",
    "repeatinterval": "1",
    "retention": "",
    "retentionm": "",
    "rpo": "24",
    "rpom": "hours",
    "sltid": "108",
    "starttime": ""
  }
}
"id": "161",
"name": "DedupAsync",
"policytype": "dedup_async",
"predecessor": "0",
"priority": "medium",
"repeatinterval": "1",
"rpo": "4",
"rpom": "hours",
"sltid": "106"
},
"status": 0
}
About chpolicy Command

Description

Use this command to change the attributes of a policy. Use udsinfo lspolicy command to obtain the ID of the policy. For both selection and exclusion, they are similar to a multiple selection of a calendar.

Four different types of selection or exclusion are supported:

- Months (months): jan | feb | mar | apr | may | jun | jul | aug | sep | oct | nov | dec
- Weeks (weeks):
- Days of month (daysofmonth):
- Days of week (daysofweek): sun | mon | tue | wed | thu | fri | sat

For verification type policies, only weekly and monthly schedules are allowed, and the start time is used to specify the time to start the verification.

Rights

You must have the ’SLA Manage’ right to change the attributes of a policy.

Parameters

The following table describes the attributes of a policy.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>complianceerrorthreshoid=string</td>
<td>Optional. The error threshold to use for SLA compliance settings for VDP appliance. Valid values are whole numbers (greater than 0) followed by units (m for minutes, h for hours, d for days) and the strings ‘default’ and ‘no analysis’ (quotes required).</td>
</tr>
<tr>
<td></td>
<td>• ’default’ specifies that the error threshold is calculated based on the characteristics of the policy.</td>
</tr>
<tr>
<td></td>
<td>• ’no analysis’ specifies that there will be no alerting for these SLA compliance settings.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The compliance error threshold must be higher than the warning threshold.</td>
</tr>
<tr>
<td>compliancewarnthreshoid=string</td>
<td>Optional. The warning threshold to use for SLA compliance settings for VDP appliance. Valid values are whole numbers (greater than 0) followed by units (m for minutes, h for hours, d for days) and the string ‘no warning’ (quotes required). ’no warn’ means that there will be no early warning before the warning threshold is reached.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> The compliance warning threshold must be lower than the error threshold.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>continuous</strong>=boolean</td>
<td>Optional. Defines a continuous image capture schedule for VDP appliance (for example, perform a capture job every 8 hours, starting the first job at 1 am). If value is set to true, first job will be run at start time (default 00:00) and subsequent jobs will run based on last successful job start time and RPO value. Default is false. <strong>Note:</strong> When this flag is set, specifying the endtime, exclusion, repeatinterval, or scheduletype options will result in an error.</td>
</tr>
<tr>
<td><strong>description</strong>=string</td>
<td>Optional. Specifies the description for the policy.</td>
</tr>
<tr>
<td><strong>endtime</strong>=string</td>
<td>Optional. Specifies the end time for the policy. The format is &quot;hh:mm&quot;, For example, &quot;17:00&quot;. This cannot be used if continuous is set to true.</td>
</tr>
<tr>
<td><strong>encrypt</strong>=boolean</td>
<td>Optional. Specifies the encryption for the policy</td>
</tr>
<tr>
<td><strong>exclusion</strong>=string</td>
<td>Optional. Specifies the exclusion (calendar) for the policy.</td>
</tr>
<tr>
<td><strong>exclusioninterval</strong>=integer</td>
<td>Required when the exclusion parameter is specified. Specifies the exclusion interval for the policy. An exclusion interval of 2 for weekly, means every two weeks.</td>
</tr>
<tr>
<td><strong>exclusiontype</strong>=daily</td>
<td>Required when the exclusion parameter is specified. Specifies the exclusion type for the policy.</td>
</tr>
<tr>
<td><strong>name</strong>=strings</td>
<td>Optional. Specifies the name for the policy. Name should be unique within the same template.</td>
</tr>
<tr>
<td><strong>repeatinterval</strong>=integer</td>
<td>Optional. Specifies the repeat interval for the policy. A repeat interval of 2 for weekly, means every two weeks.</td>
</tr>
<tr>
<td><strong>priority</strong>=low</td>
<td>medium</td>
</tr>
<tr>
<td><strong>remoteretention</strong>=custom</td>
<td>-remoteretention parameter configures StreamSnap remote retention for VDP appliance. It is required when -policytype stream_snap is specified. Valid options include:</td>
</tr>
<tr>
<td></td>
<td>• custom - Retain the remote snapshot image for a specific period of time (minutes, hours, days, weeks, months, or years). You define the time period to retain the image using the retention and retentionm parameters.</td>
</tr>
<tr>
<td></td>
<td>• last - Retain only the latest remote StreamSnap image. This is the default setting.</td>
</tr>
<tr>
<td></td>
<td>• snap - Use the same retention as the local (base) snapshot policy associated with this StreamSnap policy.</td>
</tr>
<tr>
<td><strong>retention</strong>=integer</td>
<td>Specifies the retention period for the policy. retention is required when you specify a snap, directdedup, dedup, replicate, or cloud policy. It is also required for a stream_snap policy if -remoteretention is set to custom for CDS/Sky.</td>
</tr>
</tbody>
</table>
### chpolicy Request Details

Your chpolicy request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>retentionm</td>
<td>Specifies the retention measurement type for the policy. retentionm is required when retention is specified.</td>
</tr>
<tr>
<td>rpo</td>
<td>Optional. Specifies the sets the frequency of jobs for the policy.</td>
</tr>
<tr>
<td>rpom</td>
<td>Specifies the measurement type for the policy. rpom is required when rpo is specified.</td>
</tr>
<tr>
<td>scheduletype</td>
<td>Required when the selection parameter is specified. Specifies the schedule type for the policy.</td>
</tr>
<tr>
<td>selection</td>
<td>Optional. Specifies the selection (calendar) for the policy. selection is relevant for the snap, directdedup, dedup, replicate, and cloud policies.</td>
</tr>
<tr>
<td>starttime</td>
<td>Required for the snap, directdedup, dedup, dedup Async, replicate, and cloud policies. Specifies the start time for the policy. Starting time of the day that this policy applies. The format is hh:mm“hh:mm”, For example, “08:00”.</td>
</tr>
<tr>
<td>verifychoice</td>
<td>Optional. Specifies selection choices of images to verify (only for verification policies).</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies the ID of the policy to be changed. Use udsinfo lspolicy to retrieve the ID.</td>
</tr>
</tbody>
</table>

### Method, URI, Required Parameters

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chpolicy</td>
<td>argument=&lt;policyid&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

### chpolicy Examples

**Updating an existing policy by changing the name and schedule of the policy.**

**Request**

POST https://{API_HOST}//api/task/chpolicy?argument=153326&name=Yearly+Snap+Policy&scheduletype=yearly&selection=months:jan,feb,mar,apr,may,jun,jul,aug,sep,oct,nov,dec&description=This+policy+will+run+every+month

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
Response
Request success
{
  "status": 0
}
This updated the policy with ID of 153326. Next, verify that the policy has been updated.

Request
GET https://{API_HOST}//api/info/lspolicy?argument=153326
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": {
    "description": "This policy will run every month",
    "endtime": "18:00",
    "exclusion": "daysofweek:sat,sun",
    "exclusioninterval": "1",
    "exclusiontype": "weekly",
    "id": "153326",
    "name": "Yearly Snap Policy",
    "op": "snap",
    "policytype": "normal",
    "predecessor": "0",
    "priority": "medium",
    "repeatinterval": "1",
    "rpo": "10",
    "rpom": "minutes",
    "scheduletype": "yearly",
    "selection": "months:jan,feb,mar,apr,may,jun,jul,aug,sep,oct,nov,dec;daysofmonth:1",
    "sltid": "153184",
    "starttime": "08:00"
  },
  "status": 0
}
About lssettableoption Command

Description
Use this command to display a concise list of policy options that can be set. See Appendix E, List of Policy Options for a complete list of supported policy options.

Rights
You must have the 'SLA Assign' or 'SLA Manage', or 'SLA View' right to list settable policy options.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance=string</td>
<td>Required. Specifies the name or ID of the target VDP Appliance to execute this command. All other parameters should use appliance-specific values. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the -appliance argument.</td>
</tr>
<tr>
<td>appid=integer</td>
<td>Optional. Specifies the application ID or consistency group ID that the options can be set. Use udsinfo lsapplication or udsinfo lsconsistgrp to retrieve the ID.</td>
</tr>
<tr>
<td>delim</td>
<td>Optional. By default in a concise view, all columns of data are space-separated. In a detailed view, each item of data has its own row, and if the headers are displayed the data is separated from the header by a space. The -delim parameter overrides this behavior. Valid input for the -delim parameter is a one-byte character. If you enter -delim: on the command line, the colon character (:) separates all items of data in a concise view; for example, the spacing of columns does not occur. In a detailed view, the data is separated from its header by the specified delimiter.</td>
</tr>
<tr>
<td>-nohdr</td>
<td>Optional. By default, headings are displayed for each column of data in a concise style view, and for each item of data in a detailed style view. The -nohdr parameter suppresses the display of these headings. If there is no data to be displayed, headings are not displayed.</td>
</tr>
<tr>
<td>policyid=integer</td>
<td>Optional. Specifies the policy ID that the options can be set. Use udsinfo ls_policy to retrieve the policy ID.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. For VDP appliances, it specifies the name of the option to retrieve the specific details, including the valid values.</td>
</tr>
<tr>
<td>slt=string</td>
<td>Optional. Specifies the SLT ID or name that the options can be set. For protected application that has an SLA, use the SLT ID or SLT name that protects the application to show the settable options. Use udsinfo lsslt to retrieve SLA information.</td>
</tr>
</tbody>
</table>
lssettableoption Request Details

Your lssettableoption request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**Note:** See the Parameters section for a list of supported parameters and their description.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lssettableoption</td>
<td>None</td>
</tr>
</tbody>
</table>

lssettableoption Examples

**Fetching information about a specific named policy option.**

**Request**

GET `https://{_API_HOST}//api/info/lssettableoption?argument=appconsistency`

HTTP Request Header

Authorization: `92929a8b-a413-476f-a624-5b575cff54d3`

where `92929a8b-a413-476f-a624-5b575cff54d3` is the session ID.

**Response**

Request success

```json
{
    "result": {
        "apptype": "VMBackup,Microsoft Hyper-V VSS Writer",
        "constant": "false",
        "default": "no",
        "desc": "Take application consistent snapshot for backup",
        "multi": "false",
        "name": "appconsistency",
        "select": "true",
        "type": "string",
        "value": [
            "no",
            "yes",
            "last"
        ]
    },
    "status": 0
}
```

**Get information about a set of policy options that are applicable to a particular policy.**

**Request**

GET `https://{API_HOST}//api/info/lssettableoption?policyid=161`

HTTP Request Header

Authorization: `92929a8b-a413-476f-a624-5b575cff54d3`

where `92929a8b-a413-476f-a624-5b575cff54d3` is the session ID.

**Response**

Request success
<table>
<thead>
<tr>
<th>apptype</th>
<th>constant</th>
<th>default</th>
<th>desc</th>
<th>multi</th>
<th>name</th>
<th>required</th>
<th>select</th>
<th>type</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMBackup,Microsoft Hyper-V VSS Writer</td>
<td>false</td>
<td>no</td>
<td>Take application consistent snapshot for backup</td>
<td>false</td>
<td>appconsistency</td>
<td>false</td>
<td>true</td>
<td>string</td>
</tr>
<tr>
<td>FileSystem,SqlServerWriter,Microsoft Exchange Writer,SharePoint Services Writer,VMBackup,Microsoft Hyper-V VSS Writer,Oracle,ConsistGrp,nas</td>
<td>false</td>
<td>yes</td>
<td>Out of band staging disk unmap</td>
<td>false</td>
<td>nounmap</td>
<td>false</td>
<td>true</td>
<td>string</td>
</tr>
<tr>
<td>Microsoft Hyper-V VSS Writer</td>
<td>false</td>
<td>no</td>
<td>Only the boot volume of VM is backed up</td>
<td>false</td>
<td>bootvolumesnapshot</td>
<td>false</td>
<td>true</td>
<td>string</td>
</tr>
<tr>
<td>SqlServerWriter,Microsoft Exchange Writer,SharePoint Services Writer,VMBackup,Microsoft Hyper-V VSS Writer,Oracle,ConsistGrp</td>
<td>false</td>
<td>no</td>
<td>Truncate log after backup for MSSQL/Exchange; Purge log after backup for Oracle</td>
<td>false</td>
<td>truncatelog</td>
<td>false</td>
<td>true</td>
<td>string</td>
</tr>
<tr>
<td>ConsistGrp</td>
<td>false</td>
<td>no</td>
<td>Ignore offline applications during backup</td>
<td>false</td>
<td>skipofflineappsincongrp</td>
<td>false</td>
<td>true</td>
<td>string</td>
</tr>
</tbody>
</table>
{
  "apptype": "FileSystem,SqlServerWriter,Microsoft Exchange Writer,SharePoint Services Writer,CIFS,NFS,ConsistGrp",
  "constant": "false",
  "default": "false",
  "desc": "Map staging disk to all ESX hosts in a cluster",
  "multi": "false",
  "name": "maptoallesxincluster",
  "required": "false",
  "select": "true",
  "type": "string"
},
{
  "apptype": "FileSystem,SqlServerWriter,Microsoft Exchange Writer,SharePoint Services Writer,Oracle,ConsistGrp",
  "constant": "false",
  "default": "false",
  "desc": "Backup Inband application using out-of-band mode",
  "multi": "false",
  "name": "forceoobbackup",
  "required": "false",
  "select": "false",
  "type": "boolean"
},
{
  "apptype": "VMBackup",
  "constant": "false",
  "default": "false",
  "desc": "Job behavior when target VM needs snapshot disk consolidation",
  "multi": "false",
  "name": "consolidatevmdisks",
  "required": "false",
  "select": "true",
  "type": "string"
},
{
  "apptype": "FileSystem,CIFS,NFS,ConsistGrp",
  "constant": "false",
  "default": "false",
  "desc": "The job will fail if a start path does not exist",
  "multi": "false",
  "name": "failonmissingstartpath",
  "required": "false",
  "select": "false",
  "type": "boolean"
}
],
"status": 0
}
About mkpolicyoption Command

Description
Use this command to create an option that changes the default behavior when performing backup operations. Use `udsinfo lssettableoption` to retrieve a list of options that are allowed. See Appendix E, List of Policy Options for a complete list of supported policy options.

At least one of SLA ID, SLP ID, or SLT ID parameters must be a valid ID.

After protecting an application or a file system, you can configure certain advanced protection settings with the `mkpolicyoption` command. See Appendix A, Advanced Protection Settings with mkpolicyoption Command.

Rights
You must have the 'SLA Assign' or 'SLA Manage' right to create the options for a policy.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appid=integer</td>
<td>Optional. Specifies the application or consistency group ID for VDP appliance. A non-zero value specifies that this option applies to this application or consistency group. Use <code>udsinfo lsapplication</code> or <code>udsinfo lsconsistgrp</code> to retrieve the application or consistency group ID.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies name of the policy option. See Appendix E, List of Policy Options for a complete list of supported policy options.</td>
</tr>
<tr>
<td>policyid=integer</td>
<td>Optional. Specifies the ID of the policy. A non-zero value specifies that this option applies to this specific policy. Use <code>udsinfo lspolicy</code> to retrieve the policy ID.</td>
</tr>
<tr>
<td>slaid=integer</td>
<td>Optional. Specifies an SLA ID. A non-zero value specifies that this option applies to this specific SLA. Use <code>udsinfo lssla</code> to retrieve the SLA ID.</td>
</tr>
<tr>
<td>sltid=integer</td>
<td>Optional. Specifies an SLT ID. A non-zero value specifies that this option applies to this specific SLT. Use <code>udsinfo lsslt</code> to retrieve the SLT ID.</td>
</tr>
<tr>
<td>value=string</td>
<td>Required. Specifies the value of the policy option identified by the -name parameter. Multiple values need to be separated by comma. For example, ',', (comma character), ',', needs to be escaped with two commas, %27%2C%27,&quot;.</td>
</tr>
</tbody>
</table>

mkpolicyoption Request Details

Your `mkpolicyoption` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.
mkpolicyoption Example

Creating a new policy option for specific policy.

Request

POST https://{API_HOST}/api/task/mkpolicyoption?policyid=189&name=appconsistency&value=no
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
    "result": 153544,
    "status": 0
}
A new policy option is created with an ID of 153544.

Note: See the Parameters section for a list of supported parameters and their description.
Ispolicyoption

About Ispolicyoption Command

Description

Use this command to retrieve a concise list of configured policy options or the detailed view of a policy option. See Appendix E, List of Policy Options for a complete list of supported policy options.

Rights

You must have the 'SLA Manage', 'SLA View', or 'SLA Assign' right to view a list of policies.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance=integer</td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to retrieve all objects in a list view. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the appliance argument.</td>
</tr>
</tbody>
</table>
| filtervalue=attribute%3Dvalue | Valid input for the -delim parameter is a one-byte character. To display the data, recommended delimiter to use is comma (',') for list view, and equal ('=') for detail view. Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the udsinfo lspolicyoption command are:  
  • name  
  • appid  
  • policyid  
  • slaid  
  • sltid  
  • value  
  The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&' character (which should be escaped with '\\'). |
| argument=integer | Optional. Specifies the ID of a policy. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the parameter, a concise view of all objects matching the filter criteria is displayed. |

Ispolicyoption Request Details

Your Ispolicyoption request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/task/lspolicyoption</td>
<td>None</td>
</tr>
</tbody>
</table>
Ispolicyoption Example

Fetching list of all policy options.

Request
GET https://{API_HOST}//api/info/lspolicyoption
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "appid": "0",
      "id": "153513",
      "modifydate": "2017-11-26 01:07:22.039",
      "name": "truncatelog",
      "policyid": "0",
      "slaid": "0",
      "sltid": "107",
      "value": "yes"
    },
    {
      "appid": "0",
      "id": "153544",
      "modifydate": "2017-11-26 01:13:29.272",
      "name": "appconsistency",
      "policyid": "189",
      "slaid": "0",
      "sltid": "108",
      "value": "no"
    }
  ],
  "status": 0
}
chpolicyoption

About chpolicyoption Command on page 484
chpolicyoption Request Details on page 484
chpolicyoption Example on page 485

About chpolicyoption Command

Description
Use this command to change a policy option.

Rights
You must have the 'SLA Assign' or 'SLA Manage' right to change the options of a policy.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appid=string</td>
<td>Optional. See Appendix E, List of Policy Options for a complete list of supported policy options.</td>
</tr>
<tr>
<td>policyid=string</td>
<td>Optional. A non-zero value specifies that this option applies to this specific policy. Use udsinfo lspolicy to retrieve the policy ID.</td>
</tr>
<tr>
<td>slaid=string</td>
<td>Optional. A non-zero value specifies that this option applies to this specific SLA. Use udsinfo lssla to retrieve the SLA ID.</td>
</tr>
<tr>
<td>sltid=string</td>
<td>Optional. A non-zero value specifies that this option applies to this specific SLT. Use udsinfo lsslt to retrieve the SLT ID.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the policy option to be changed. If multiple values are allowed, they need to be separated by a colon, &quot;:&quot;. Use udsinfo lspolicyoption command to obtain the ID of the policy option.</td>
</tr>
<tr>
<td>value=string</td>
<td>Optional. Specifies value of the option. If multiple values are allowed, they need to be separated by a comma. Comma character, &quot;,&quot;, needs to be escaped with two commas, &quot;,,&quot;. See List of Policy Options on page 613 for a complete list of policy options.</td>
</tr>
</tbody>
</table>

chpolicyoption Request Details

Your chpolicyoption request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chpolicyoption</td>
<td>argument=&lt;policy option Id/Ids&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
chpolicyoption Example

Request
POST https://{API_HOST}//api/task/chpolicyoption?argument=153544&value=yes
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c54d3

where 92929a8b-a413-476f-a624-5b575c54d3 is the session ID.

Response
Request success
{
  "result": "153544",
  "status": 0
}
**About rmpolicyoption Command**

**Description**
Use this command to delete an option associated with a policy.

**Rights**
You must have the 'SLA Assign' or 'SLA Manage' right to remove the options of a policy.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID of the policy option to be removed. Use udsinfo lspolicy to retrieve the policy ID.</td>
</tr>
</tbody>
</table>

**rmpolicyoption Request Details**

Your rmpolicyoption request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmpolicyoption</td>
<td>argument=&lt;policy option ID&gt;</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

**rmpolicyoption Example**

**Removing a specific policy option identified by its ID.**

**Request**

POST https://{_API_HOST}//api/task/rmpolicyoption?argument=153544  
HTTP Request Header  
Authorization:  92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success  
{
  "status": 0  
}

**Verifying that the policy option has been deleted.**

**Request**

GET https://{_API_HOST}//api/info/lspolicyoption?argument=153544  
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Sky/CDS error:10016 object not found: 15344
About rmpolicy Command

Description
Use this command to delete a policy.

Rights
You must have the 'SLA Manage' right to delete a policy.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>integer</td>
</tr>
<tr>
<td>Required. Specifies the ID of the policy to be removed. Use udsinfo lspolicy to retrieve the policy ID.</td>
<td></td>
</tr>
</tbody>
</table>

rmpolicy Request Details

Your rmpolicy request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

Note: See the Parameters section for a list of supported parameters and their description.

rmpolicy Example

Deleting a specific policy.

Request

POST https://{API_HOST}//api/task/rmpolicy?argument=153326
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
  "status": 0
}
This deletes the policy with ID of 153326. Next, verify that the policy has been deleted.
Request
GET https://{API_HOST}//api/info/lspolicy?argument=153326
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
Sky/CDS error:10016 object does not exist: 15332
Isinterface

About lsinterface Command on page 490
Isinterface Request Details on page 490
Isinterface Example on page 490

About lsinterface Command

Description
Use this command to display all ethernet ports and some information about each one, including hardware state and supported IP types. Interfaces are listed whether configured with an IP address or not.

Note: This command does not display non-ethernet devices, such as but not limited to, the loopback.

Rights
You must have the 'System View' or 'System Manage' right to run this command.

lsinterface Request Details

Your lsinterface request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsinterface</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

lsinterface Example

Request
GET https://{API_HOST}//api/info/lsinterface?
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "node": "Gangac",
      "supportnode": "yes",
      "supportcluster": "yes",
      "macaddress": "34:40:b5:d7:c8:08",
      "interface": "eth0",
      "supportiscsi": "yes",
      "speed": "1000Mb/s",
      "linkstate": "UP",
      "mtu": "1500"
    },
    {
      ...
    }
  ]
}
"node": "Gangac",
"supportnode": "yes",
"supportcluster": "yes",
"macaddress": "34:40:b5:d7:c8:0a",
"interface": "eth1",
"supportiscsi": "yes",
"speed": "Unknown!",
"linkstate": "DOWN",
"mtu": "1500"
},
{
"node": "Gangac",
"supportnode": "yes",
"supportcluster": "no",
"macaddress": "00:90:fa:42:94:d2",
"interface": "eth2",
"supportiscsi": "yes",
"speed": "Unknown!",
"linkstate": "DOWN",
"mtu": "1500"
},
{
"node": "Gangac",
"supportnode": "yes",
"supportcluster": "no",
"macaddress": "00:90:fa:42:94:d0",
"interface": "eth3",
"supportiscsi": "yes",
"speed": "Unknown!",
"linkstate": "DOWN",
"mtu": "1500"
}
],
"status": 0
}
Isconfiguredinterface

About lsconfiguredinterface Command on page 492
Isconfiguredinterface Request Details on page 492
Isconfiguredinterface Example on page 492

About lsconfiguredinterface Command

Description
Use this command to retrieve all configured IPv4 addresses, including node, iscsi, and cluster.

Rights
You must have the 'System View' or 'System Manage' right to display outbound policies.

Isconfiguredinterface Request Details

Your lsconfiguredinterface request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsconfiguredinterface</td>
<td>None</td>
</tr>
</tbody>
</table>

Isconfiguredinterface Example

Request
GET https://{API_HOST}//api/info/lsconfiguredinterface
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
"result": [ ]
}


"netmask": "2xx.xxx.xxx.xxx",
"interface": "eth0",
"type": "cluster",
"gateway": "1xx.xxx.xxx.xxx"
About Isnetworkcapability Command

**Description**
Use this command to display all network capabilities that the appliance supports.

**Applicability of this Command**
This command can be used on:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>−</td>
</tr>
</tbody>
</table>

**Rights**
You must have the 'System Manage', or 'System View' rights to display outbound policies.

Isnetworkcapability Request Details

Your Isnetworkcapability request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsnetworkcapability</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

Isnetworkcapability Example

**Request**
GET https://{_API_HOST}//api/info/lsnetworkcapability
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

**Response**
Request success
{  "result": [  {   "name": "isInCloud",   "value": "yes"  }  ]  }
},
  "status": 0
}


### About configoutboundpolicy Command

**Description**

Use this command to add/delete/update an outbound policy. This is used to direct traffic to originate from a specified port. All outbound traffic being directed by an outbound policy will originate from the 'node' IP on the specified interface. It can also be used to specify the system-wide outgoing default interface. Must specify one of -add, -delete, or -default.

**Rights**

You must have the 'System Manage' right to add/delete an outbound policy.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>add</strong>=boolean</td>
<td>Optional. To add an outbound policy. Requires -target and -from to also be specified. If specified target already exists, that policy will be updated.</td>
</tr>
<tr>
<td><strong>default</strong>=string</td>
<td>Optional. To set the system-wide outgoing default policy. Requires -from to also be specified.</td>
</tr>
<tr>
<td><strong>delete</strong>=boolean</td>
<td>Optional. To delete an outgoing policy. Requires -target to also be specified.</td>
</tr>
<tr>
<td><strong>target</strong>=string</td>
<td>Required. Specifies an IP, with or without a prefix or netmask. For example, 12.3.4, 12.3.4/32 (equivalent).</td>
</tr>
<tr>
<td><strong>from</strong>=string</td>
<td>Required (except when -delete specified). Specifies the port to use in the form of an 'ethN' specifier. The specified port must have a node IP assigned.</td>
</tr>
<tr>
<td><strong>gateway</strong>=string</td>
<td>Optional. Specifies the gateway this traffic should go through. For multiple gateways, separate them with comma (,), for example 192.168.2.3,192.168.3.4. If modifying an existing outbound policy with -add, gateway does not need to be specified (previous value will be retained).</td>
</tr>
<tr>
<td><strong>netmask</strong>=integer</td>
<td>Optional. Specifies the subnet mask to be used in conjunction with the specified target. Ignored if target specifies bit size.</td>
</tr>
<tr>
<td><strong>prio</strong>=integer</td>
<td>Optional. Specifies the priority of the outbound policy. Allowed values are 1 - 91. Default is 76. Outbound policies are evaluated in order by priority, allowing overlapping target ranges while providing granular control. If modifying an existing outbound policy with -add, priority must be specified or it will reset to the default of 76.</td>
</tr>
</tbody>
</table>

### configoutboundpolicy Request Details

Your configoutboundpolicy request must pass a valid session ID. or information see Authentication or Login on page 1.
### configoutboundpolicy Example

**Request**

POST https://{API_HOST}//api/task/configoutboundpolicy?add=true&from=eth0&target=1xx.xxx.xxx.xxx

HTTP Request Header

Authorization:  92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
   "status": 0
}
```
About lsoutboundpolicy Command

Description
Use this command to retrieve all outbound policies that have been configured on the system, including default outbound policies, if configured. It will have targetnetwork of '0.0.0.0/0' and will specify the default interface.

lsoutboundpolicy Request Details
Your lsoutboundpolicy request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsoutboundpolicy</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

lsoutboundpolicy Example

Request
GET https://{API_HOST}//api/info/lsoutboundpolicy
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
   "result": [
       {
           "targetnetwork": "172.16.126.118/62",
           "interface": "eth0",
           "prio": "76"
       },
       "status": 0
   ]
}
configntp

About configntp Command

Description
Use this command to configure NTP settings.

Rights
You must have the 'System Manage' right to configure NTP settings.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>server=string</td>
<td>Required. Specifies server names or IPs. Separated with comma (,) if more than one is needed. Only one supported on CDS, additional servers will be ignored.</td>
</tr>
</tbody>
</table>

configntp Request Details

Your configntp request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configntp</td>
<td>server</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

configntp Example

Request
POST https://{API_HOST}//api/task/configntp?server=0.centos.pool.ntp.org
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}


lsntp

About lsntp Command on page 500
lsntp Request Details on page 500
lsntp Example on page 500

About lsntp Command

Description
Use this command to retrieve a concise list of NTP settings.

Rights
You must have the 'System Manage' or 'System View' right to view NTP settings.

lsntp Request Details

Your lsntp request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsntp</td>
<td>None</td>
</tr>
</tbody>
</table>

lsntp Example

Request
GET https://{API_HOST}//api/info/lsntp
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "server": "time.com"
    }
  ],
  "status": 0
}
testconnection

About testconnection Command
Description
Use this command to test network connectivity via TCP or ICMP to a specified target. Type 'ping' runs a ping and returns the output as a plain text stream. Sends 4 pings. Type 'tcptest' attempts a TCP connection to the given target IP and port and returns success or failure status.

Rights
You must have the 'System Manage' right to test network connection.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type=string</td>
<td>Optional. Specifies type of test, ping or tcptest, default to ping.</td>
</tr>
<tr>
<td>targetip=string</td>
<td>Required. Specifies the target IP address.</td>
</tr>
<tr>
<td>targetport=integer</td>
<td>Optional (required for tcptest). Specifies the target port, as to be between 1 and 65534, inclusive</td>
</tr>
<tr>
<td>sourceip=string</td>
<td>Optional. Specifies the originating IP address. If specified, must be an IP assigned to an interface on the appliance. If not specified, outbound policies are used to select the source.</td>
</tr>
</tbody>
</table>

About testconnection Request Details
Your testconnection request must pass a valid session ID. For information see Authentication or Login on page 1.

Note: See the Parameters section for a list of supported parameters and their description.

testconnection Example
Request
POST https://{API_HOST}//api/task/testconnection?&targetip=1xx.xxx.xxx.xxx
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{

"result": "PING 172.27.0.204 (172.27.0.204) 56(84) bytes of data. 
64 bytes from 172.27.0.204: icmp_seq=1 ttl=63 time=0.167 ms 
64 bytes from 172.27.0.204: icmp_seq=2 ttl=63 time=0.149 ms 
64 bytes from 172.27.0.204: icmp_seq=3 ttl=63 time=0.166 ms 
64 bytes from 172.27.0.204: icmp_seq=4 ttl=63 time=0.186 ms 
--- 172.27.0.204 ping statistics --- 
4 packets transmitted, 4 received, 0% packet loss, 
time 3000ms 
rtt min/avg/max/mdev = 0.149/0.167/0.186/0.013 ms",
"status": 0}
showroute

About showroute Command

Description
Use this command to get the route to a particular IP address.

Rights
You must have the 'System Manage' right to get the route.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sourceip=string</td>
<td>Optional. Specifies the originating IP address. Must be one of the IP addresses defined on the appliance.</td>
</tr>
<tr>
<td>targetip=string</td>
<td>Required. Specifies the target IP address.</td>
</tr>
</tbody>
</table>

showroute Request Details

Your showroute request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/showroute</td>
<td>targetip</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

showroute Example

Request
GET https://{API_HOST}//api/info/showroute?targetip=1xx.xxx.xxx.xxx
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": "1xx.xxx.xxx.xxx via 1xx.xxx.xxx.xxx dev eth0 src 1xx.xxx.xxx.xxx \n    cache mtu 1500 hoplimit 64",
  "status": 0
}
showrouting

About showrouting Command

Description
Use this command to display all the currently installed routing tables and policy rules and advanced network troubleshooting. This command displays the combined output of ip rule show, and ip route show on all known tables, plus headers and whitespace that were added to identify each section.

Note: Use this command only when instructed to by Customer Support.

Rights
You must have the 'System View' or 'System Manage' right to display routing information.

showrouting Request Details

Your showrouting request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/showrouting</td>
<td>None</td>
</tr>
</tbody>
</table>

showrouting Example

Request
GET https://{API_HOST}//api/info/showrouting
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": "RULES:
0:	from all lookup local
101:	from 1xx.xxx.xxx.xxx lookup eth0_n
180:	from all to 1xx.xxx.xxx.xxx lookup eth0_n
197:	from all to 1xx.xxx.0.0/16 lookup
32766:	from all lookup main
32767:
tfrom all lookup main
\nTABLE main:
1xx.xxx.0.0/16 dev eth0 scope link metric 1002
1xx.xxx.xxx.xxx dev eth0 proto kernel scope link src
1xx.xxx.xxx.xxx default via 1xx.xxx.1.1 dev eth0
\nTABLE eth0_n:
1xx.xxx.0.0/16 dev eth0 proto static scope link src
1xx.xxx.xxx.xxx default via 1xx.xxx.1.1 dev eth0

  "status": 0
}
**showtracepath**

**About showtracepath Command**

**Description**

Use this command to trace the path to a given IP, and return the output as a plain text stream.

*Note:* This command can take 90 or more seconds to run.

**Rights**

You must have the ‘System View’ or ‘System Manage’ right to display tracepath information.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>port=integer</td>
<td>Optional. Specifies the target port, has to be between 1 and 65534, inclusive.</td>
</tr>
<tr>
<td>targetip=string</td>
<td>Required. Specifies the target IP address.</td>
</tr>
</tbody>
</table>

**showtracepath Request Details**

Your showtracepath request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/showtracepath</td>
<td>targetip</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

**showtracepath Example**

**Request**

GET https://{API_HOST}//api/info/showtracepath?targetip=1xx.xxx.xxx.xxx

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
"result": "traceroute to 1xx.xxx.xxx.xxx (1xx.xxx.xxx.xxx), 30 hops max, 60 byte packets
1 sqagw-ndmn9k02.sqa..com (1xx.xxx.xxx.xxx)  0.432
ms  0.470 ms  0.542 ms\n2 * * *\n3 * * *\n4 * * *\n5 * * *\n6 * * *\n7 * * *\n8 * * *
9 * * *\n10 * * *\n11 * * *\n12 * * *
```
Bandwidth Commands

**mkbandwidthschedule**

*About mkbandwidthschedule Command on page 507*

*mkbandwidthschedule Request Details on page 507*

*mkbandwidthschedule Example on page 508*

### About mkbandwidthschedule Command

**Description**

Use this command to create a new bandwidth schedule object. Which in effect sets the bandwidth limit for the specified appliance, at the designated scheduled time, which will limit the amount of network traffic to that appliance used by dedup.

**Rights**

You must have the 'System Manage' right to create a bandwidth schedule.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>appliance</strong></td>
<td>Required. Specifies the name or ID of the target VDP Appliance to execute this command. All other parameters should use appliance specific values. Use the udsinfo 1scluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the -appliance argument.</td>
</tr>
<tr>
<td><strong>bandwidth</strong></td>
<td>Optional. Specifies the maximum bandwidth allowed by dedup for the specified cluster (as indicated by the ID of the cluster object), in Mb. Default to 0; if not specified, bandwidth is unlimited.</td>
</tr>
<tr>
<td><strong>clusterid</strong></td>
<td>Required. Specifies the ID of the appliance for outgoing bandwidth to be enforced. Use udsinfo 1scluster to retrieve the appliance ID.</td>
</tr>
<tr>
<td><strong>replicationtype</strong></td>
<td>Optional. Specifies the type of the replication that the bandwidth schedule is assigned to for CDS/Sky. Valid values are DEDUP (default) and SNAP.</td>
</tr>
<tr>
<td><strong>scheduleday</strong></td>
<td>Optional. Specifies the day of the schedule to run. For 'monthly' schedule: valid values are 1-31, or 'last' (last day of month). For 'weekly' schedule: valid values are 'mon', 'tue', 'wed', 'thu', 'fri', 'sat', 'sun', 'weekday', or 'weekend'. This is not allowed for 'daily' or 'hourly' schedule.</td>
</tr>
<tr>
<td><strong>scheduletype</strong></td>
<td>Optional. Specifies the type of schedule.</td>
</tr>
<tr>
<td><strong>scheduletime</strong></td>
<td>Optional. Specifies the time of the schedule to run. The format is 'hh:mm', for 'monthly,' 'weekly,' or 'daily' schedules. For 'hourly' schedule, the format is 0-59.</td>
</tr>
</tbody>
</table>

### mkbandwidthschedule Request Details

Your mkbandwidthschedule request must pass a valid session ID. For information see Authentication or Login on page 1.
### mkbandwidthschedule Example

**Request**

```
POST https://{API_HOST}//api/task/mkbandwidthschedule?bandwidth=10&clusterid={CLUSTERID}&replicationtype=DEDUP&scheduleday=thu&scheudletype=weekly&scheudletime=01:00
```

HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success
```
{
    "result": "15359"
    "status": 0
}
```
Isbandwidthschedule

About Isbandwidthschedule Command on page 509
Isbandwidthschedule Request Details on page 509
Isbandwidthschedule Example on page 510

About Isbandwidthschedule Command

Description
Use this command to retrieve details of bandwidth schedules. A bandwidth schedule schedules changing of outgoing bandwidth value for the specified cluster, which is the maximum bandwidth (in Mb/s) allowed to that cluster for VDP appliance.

There are two types of replications that the bandwidth schedule can be assigned to for VDP appliances: DEDUP and SNAP.

Rights
You must have the 'System View' or 'System Manage' rights to retrieve details of bandwidth schedules.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>appliance=string</td>
<td>Optional. Specifies the name or ID of the target VDP Appliance to retrieve all objects in a list view. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the -appliance argument.</td>
</tr>
<tr>
<td>filtervalue=attribute%3Dvalue</td>
<td>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for the udsinfo lsbandwidthschedule command are: <em>clusterid The filter will be formed with an attribute and a value. When user specifies more than one filter, they must be combined with '&amp;' character (escaped with ''). For string type of filters, the only operator allowed is '='. You can also use wild-card character '</em>'. For example, to match profile (SLP) with name begins with 'foo', use -filtervalue name=foo*filtervalue=name%3Dfoo.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Optional. Specifies the ID of the bandwidth schedule. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the -filtervalue parameter is ignored. If you do not specify the objectid, the concise view of all objects matching the filter criteria is displayed.</td>
</tr>
</tbody>
</table>

Isbandwidthschedule Request Details

Your lsbandwidthschedule request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsbandwidthschedule</td>
<td>None</td>
</tr>
</tbody>
</table>
Isbandwidthschedule Example

Request
GET https://{API_HOST}//api/info/lsbandwidthschedule?argument=15359
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3
where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
  "result": [  
    {  
      "bandwidth": "10",  
      "clusterid": "13474",  
      "id": "13536",  
      "replicationtype": "DEDUP",  
      "scheduleday": "thu",  
      "scheduletime": "01:00",  
      "scheduletype": "weekly"  
    },  
    {  
      "bandwidth": "10",  
      "clusterid": "13474",  
      "id": "13539",  
      "replicationtype": "SNAP",  
      "scheduleday": "fri",  
      "scheduletime": "02:00",  
      "scheduletype": "weekly"  
    }  
  ],  
  "status": 0
}
chbandwidthschedule

About chbandwidthschedule Command on page 511
chbandwidthschedule Request Details on page 511
chbandwidthschedule Example on page 511

About chbandwidthschedule Command

Description
Use this command to change bandwidth value for a bandwidth schedule.

Rights
You must have the 'System Manage' right to change a bandwidth schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>bandwidth</td>
<td>Required. Specifies the bandwidth used by dedup for the appliance (in Megabytes).</td>
</tr>
<tr>
<td>argument</td>
<td>Required. Specifies ID of the bandwidth schedule to be modified.</td>
</tr>
</tbody>
</table>

chbandwidthschedule Request Details

Your chbandwidthschedule request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chbandwidthschedule</td>
<td>argument=&lt;bandwidth schedule ID&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

chbandwidthschedule Example

Change the day and time of day for the bandwidth schedule.

Request

POST https://{API_HOST}//api/task/chbandwidthschedule?argument=15359&scheduleday=fri&scheduletime=05:00
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response

Request success
{
    "status": 0
}
rmbandwidthschedule

About rmbandwidthschedule Command on page 512
rmbandwidthschedule Request Details on page 512
rmbandwidthschedule Example on page 512

About rmbandwidthschedule Command

Description
Use this command to delete a bandwidth schedule.

Rights
You must have the 'System Manage' right to delete a bandwidth schedule.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID of the bandwidth schedule to be removed. Use udsinfo lsbandwidthschedule to retrieve a bandwidth schedules.</td>
</tr>
</tbody>
</table>

rmbandwidthschedule Request Details

Your rmbandwidthschedule request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmbandwidthschedule</td>
<td>argument=&lt;bandwidth schedule ID&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmbandwidthschedule Example

Request
POST https://{API_HOST}//api/task/rmbandwidthschedule?argument=15359
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "status": 0
}

Other Commands

export

About export Command on page 513
export Request Details on page 513
export Example on page 513

About export Command

Description
Use this command to export all templates into a file. This file can be used to import templates using the udstask import command.

Rights
You must have the 'System View,' 'System Manage,' or 'SLA View' right to export templates.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filename=string</td>
<td>Required. Specifies the file name to export the templates to. The file path can be relative or absolute. Filename should always be under a subdirectory of the user's home directory, which is a subdirectory under /home.</td>
</tr>
<tr>
<td>appliance=string</td>
<td>Required. Specifies the name or ID of the target VDP Appliance to execute this command. Use the udsinfo lscluster command to retrieve the appliance name or ID to help you identify the correct appliance to include in the appliance argument.</td>
</tr>
</tbody>
</table>

export Request Details

Your export request must pass a valid session ID. For information see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/export</td>
<td>filename</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

export Example

Request
GET https://{API_HOST}//api/info/export?filename=/home/templates.xml
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{}
import

The `import` command imports templates from a file.

*About import Command on page 515*
*import Request Details on page 515*
*import Example on page 515*

### About import Command

**Description**

Use this command to import policy templates. The file should be exported using `udsinfo export` command.

**Rights**

You must have the ‘Application Manage’ or ‘Host Manage’ or ‘SLA Manage’ right to import templates.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>duplication=add</td>
<td>ignore</td>
</tr>
<tr>
<td>Optional. Indicates the course of action when the name of an imported template matches that of an existing template of the appliance. The option 'ignore' ignores the new templates, 'add' adds the templates with a new name, and 'replace' replaces the existing templates with the new templates. The default value is 'add'.</td>
<td></td>
</tr>
<tr>
<td>filename=string</td>
<td></td>
</tr>
<tr>
<td>Required. Specifies the name of the file to be imported. The file should be under /home or a subdirectory of /home.</td>
<td></td>
</tr>
<tr>
<td>appliance=string</td>
<td></td>
</tr>
<tr>
<td>Required. Specifies the name or ID of the target VDP appliance to execute this command. Use the <code>udsinfo lscluster</code> command to retrieve the appliance name or ID to help you identify the correct appliance to include in the <code>appliance</code> argument.</td>
<td></td>
</tr>
</tbody>
</table>

### import Request Details

Your `import` request must pass a valid session ID. For information see Authentication or Login on page 1.

**Method**

<table>
<thead>
<tr>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST //api/task/import</td>
<td>filename</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

### import Example

**Request**

POST https://{API_HOST}//api/task/import?filename=/home/templates.xml

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.
Response
Request success
{
    "status": 0
}

These commands are for the tools used in monitoring job events and notifications.

**Managing Job Event and Notifications**

**SNMP Commands**
- `mksnmpconfig` on page 518
- `configsnmpagent` on page 520
- `lssnmpconfig` on page 523
- `chsnmpconfig` on page 524
- `lssnmpevent` on page 526
- `rmsnmpconfig` on page 531

**Monitored Device Commands**
- `mkmonitoreddevice` on page 532
- `lsmonitoreddevice` on page 534
- `chmonitoreddevice` on page 536
- `rmmonitoreddevice` on page 538

**Email Server Commands**
- `configemailserver` on page 539
- `getemailserverconfig` on page 541
- `configserviceemail` on page 542
- `getserviceemailconfig` on page 544
- `configeventemail` on page 545
- `geteventemailconfig` on page 547
- `emaillogs` on page 548
- `rmeventemail` on page 550
- `rmemailserverconfig` on page 551
- `configcallhome` on page 552
- `getconfigcallhome` on page 553
SNMP Commands
mksnmpconfig

About mksnmpconfig Command

Description
Use this command to create a new SNMP server configuration.

Note: appliance supports SNMP v2 traps only.

Rights
You must have the 'System Manage' right to configure an SNMP server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>error=boolean</td>
<td>Optional. Enables or disables receiving 'error' traps.</td>
</tr>
<tr>
<td>info=boolean</td>
<td>Optional. Enables or disables receiving 'info' traps.</td>
</tr>
<tr>
<td>ipaddress=string</td>
<td>Required. Specifies the IP address of the SNMP server.</td>
</tr>
<tr>
<td>name=string</td>
<td>Required. Specifies the name of the SNMP server.</td>
</tr>
<tr>
<td>port=integer</td>
<td>Optional. Specifies the port of the SNMP server. The default value is 162.</td>
</tr>
<tr>
<td>warning=boolean</td>
<td>Optional. Enables or disables receiving 'warning' traps.</td>
</tr>
</tbody>
</table>

mksnmpconfig Request Details
Your mksnmpconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mksnmpconfig</td>
<td>ipaddress=&lt;IP address of SNMP server&gt; name=&lt;name of the SNMP config&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
mksnmpconfig Example

Request
POST https://{_API_HOST}//api/task/mksnmpconfig?name=Default-SNMP&ipaddress={SNMP_HOST}&error=on&warning=off&info=off
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": "Default-SNMP",
  "status": 0
}
About configsnmpagent Command

Description

Use this command to enable the SNMP agent in the appliance and to set the community string for SNMPv2 authentication by the SNMP agent and the management system. The appliance extends SNMPv2 support to the SNMP GET request process through the activation of an SNMP agent in the appliance to register all corresponding MIB classes to support the PULL/GET mechanism. The management system (the client) “pulls” data from the SNMP agent in the appliance. The SNMP agent service in the appliance is started as part of the PSRV service on port UDP-161 for SNMP messages.

The SNMP agent runs on the appliance as part of the PSRV service, and the SNMP agent serves all requests sent by any SNMP client or management system to monitor and manage appliance configurations, system statistics and performance, and so on. The SNMP agent integrates monitoring and management extensions into the appliance, and uses SNMPv2 GET requests to allow data to be pulled on-demand. You can integrate the SNMP GET operations with your existing management system.

**Note:** We recommend that you check if your management system is SNMP enabled. If the SNMP service does not exist, be sure to install SNMP. The VDP appliance does not support SNMP SET operations.

An SNMP GET request reads the value of SNMP objects and performs network monitoring through a set of predefined Object Identifiers (OIDs). OIDs uniquely identify managed objects in the MIB hierarchy. By using the MIBs, SNMP pulls specific objects to monitor and appliance configurations, system statistics and performance, and so on.

You can use the `setparameter` command to limit the number of records sent by the SNMP agent in the appliance to the management system (the client). When you set the `snmpTableSize` parameter, the SNMP agent retrieves only the specified number of records and sends those records to the respective SNMP clients. The range is 100 to 5000 records (default of 500).

The `configsnmpagent` command enables the SNMP agent in VDP appliances and specifies a community string for SNMPv2 authentication by the SNMP agent and the management system.

Applicability of this Command

This command can be used on:

<table>
<thead>
<tr>
<th>CDS appliance</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>✓</td>
</tr>
</tbody>
</table>

Rights

You must have the 'System Manage' right to activate the SNMP agent on the appliance to perform SNMP GET requests.
Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>communitystring</td>
<td>Optional. Sets the SNMPV2 community string for performing SNMP GET requests by the appliance. Enter an authentication pass phrase for connecting to the SNMP agent as the key.</td>
</tr>
<tr>
<td>enable</td>
<td>Optional. This value enables or disables the SNMP agent residing in the appliance. Value are:</td>
</tr>
<tr>
<td></td>
<td>• true—Enables the SNMP agent in the appliance</td>
</tr>
<tr>
<td></td>
<td>• false—Disables the SNMP agent in the appliance</td>
</tr>
</tbody>
</table>

**configsnmpagent Request Details**

Your `configsnmpagent` request must pass a valid session ID. For information on how to get a valid session ID, see [Authentication or Login](#) on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configsnmpagent</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

**configsnmpagent Examples**

**Configuring an SNMP Agent with a community string and enable the agent.**

**Request**

POST https://{_API_HOST}//api/task/configsnmpagent?communitystring=Team&enable=true

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575c7f54d3

where 92929a8b-a413-476f-a624-5b575c7f54d3 is the session ID.

**Response**

Request success

```json
{
  "result": "SNMP V2 communitystring is successfully updated. CDS SnmpAgent is enabled and successfully started.",
  "status": 0
}
```

**Disabling the SNMP Agent on the appliance.**

**Request**

POST https://{_API_HOST}//api/task/configsnmpagent?enable=false

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575c7f54d3

where 92929a8b-a413-476f-a624-5b575c7f54d3 is the session ID.
Request
Request success
{
    "result": "CDS SnmpAgent is disabled and successfully stopped.",
    "status": 0
}

Isslmpconfig

About Isslmpconfig Command on page 523
Isslmpconfig Request Details on page 523
Isslmpconfig Example on page 523

About Isslmpconfig Command

Description

Use this command to display the concise view of the SNMP server configuration.

*Note:* The VDP appliance supports SNMP v2 traps only.

Rights

You must have the ‘System View’ or ‘System Manage’ to view the configuration of an SNMP server.

Isslmpconfig Request Details

Your Isslmpconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsslmpconfig</td>
<td>None</td>
</tr>
</tbody>
</table>

Isslmpconfig Example

Fetching the SNMP config information from the appliance.

Request

GET https://{_API_HOST}//api/info/lsslmpconfig
HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response

Request success
{
    "error": "off",
    "info": "off",
    "ipaddress": "172.00.00.111",
    "port": "162",
    "servername": "tst_snmp_server",
    "warning": "off"
}
chsnmpconfig

About chsnmpconfig Command on page 524
chsnmpconfig Request Details on page 524
chsnmpconfig Example on page 525

About chsnmpconfig Command

Description
Use this command to change the attributes of an SNMP trap receiver configuration that receives the SNMP traps sent by the appliance.

*Note:* The VDP appliance supports SNMP v2 traps only.

Rights
You must have the 'System Manage' right to modify the configuration of an SNMP server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress=string</td>
<td>Optional. Specifies new IP address for the SNMP server.</td>
</tr>
<tr>
<td>port=integer</td>
<td>Optional. Specifies the remote port number for the SNMP server. It defaults to 162. This should be a value from 1 through 65535.</td>
</tr>
<tr>
<td>info=boolean</td>
<td>Optional. Specifies whether the server receives the 'information' notifications.</td>
</tr>
<tr>
<td>warning=boolean</td>
<td>Optional. Specifies whether the server receives the 'warning' notifications. When set to 'on', warning notifications are sent to the SNMP server. When set to 'off', warning notifications are not sent to the SNMP server.</td>
</tr>
<tr>
<td>error=boolean</td>
<td>Optional. Specifies whether the server receives the 'error' notifications. When set to 'on', error notifications are sent to the SNMP server. When set to 'off', error notifications are not sent to the SNMP server.</td>
</tr>
<tr>
<td>argument=string</td>
<td>Required. Specifies the SNMP configuration to be modified.</td>
</tr>
</tbody>
</table>

chsnmpconfig Request Details

Your chsnmpconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chsnmpconfig</td>
<td>argument</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.
**chsnmpconfig Example**

*Update an SNMP configuration by turning on traps for warning and info messages.*

**Request**

POST https://{_API_HOST}//api/task/chsnmpconfig?argument=Default-SNMP&warning=on&info=on

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "Default-SNMP",
    "status": 0
}
```
Issnmpevent

About Issnmpevent Command on page 526
Issnmpevent Request Details on page 526
Issnmpevent Examples on page 527

About Issnmpevent Command

Description
Use this command to display a concise list of SNMP events or a detailed view of an SNMP event.

Rights
You must have the 'System View' or 'System Manage' to view the SNMP events.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>filtervalue=attribute %s3Dvalue</td>
<td>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the Issnmpevent command are:</td>
</tr>
<tr>
<td></td>
<td>• clusternamex</td>
</tr>
<tr>
<td></td>
<td>• eventdate</td>
</tr>
<tr>
<td></td>
<td>• errorcode</td>
</tr>
<tr>
<td></td>
<td>• eventid</td>
</tr>
<tr>
<td></td>
<td>• messagetext</td>
</tr>
<tr>
<td></td>
<td>• notificationtype [ error</td>
</tr>
<tr>
<td></td>
<td>• objecttype [ adhd</td>
</tr>
</tbody>
</table>

The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with `&` character.

For string type of filters, the only operator allowed is `=`. You can also use wild card character `*`.

Some filters allow only predefined constants. For example, notificationtype allows only error, warning, or info.

For number and date types, allowed operators are: `=, >, >=, <, <=`.

| argument=integer | Optional. Specifies the ID of an object. When you use this parameter, a detailed view of the object is returned and any value that is specified by the filtervalue parameter is ignored. If you do not specify the argument parameter, a concise view of all objects matching the filter criteria is displayed. |

Issnmpevent Request Details

Your Issnmpevent request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

actrío
Issnmpevent Examples

Fetching all SNMP events from the appliance.

Request
GET https://{_API_HOST}//api/info/Issnmpevent
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "clustername": "localhost.localdom",
      "component": "CDS",
      "errorcode": "",
      "errormessage": "SLA violation(s) found for application TP-Linux on host tp-linux and template TP-Template\n\npolicy           Production to Snap 1\npolicy type normal\nstattime         2017-11-23 00:15:00.104\nvviolation time   2017-11-22 23:59:00.0\nvviolation type   scheduler off\njobs expected    3\njob tolerance    0\njobs succeeded   0\njobs failed      0\nerror code       0\nsource UDS       1415036377\njob id           0\njob class        snapshot\nmessage          At 2017-11-22 00:00:02-0500 scheduling for the application was disabled or snapshot scheduling was disabled for all applications.\n  "eventdate": "2017-11-23 00:15:00.116",
  "eventid": "10043",
  "eventstatus": "",
  "id": "151912",
  "notificationtype": "warning",
  "objectid": "1",
  "objecttype": "psrv",
  "requiresclearing": "false",
  "sequenceid": "0",
  "sourceeventdate": ""
    },
  {
    "clustername": "localhost.localdom",
    "component": "CDS",
    "errorcode": "",
    "errormessage": "SLA violation(s) found for application /boot on host tp-linux and template TP-Template\n\npolicy           Production to Snap 1\npolicy type normal\nstattime         2017-11-23 00:15:00.097\nvviolation time   2017-11-22 23:59:00.0\nvviolation type   scheduler off\njobs expected    3\njob tolerance    0\njobs succeeded   0\njobs failed      0\nerror code       0\nsource UDS       1415036377\njob id           0\njob class        snapshot\nmessage          At 2017-11-22 00:00:02-0500 scheduling for the application was disabled or snapshot scheduling was disabled for all applications.\n  "eventdate": "2017-11-23 00:15:00.128",
  "eventid": "10043",
  "eventstatus": "",
  "id": "151913",
  "notificationtype": "warning",

Note: See the Parameters section for a list of supported parameters and their description.
Fetching SNMP events with the specific Id.

Request
GET https://{_API_HOST}//api/info/lssnmpevent?argument=153448
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": {
        "clusternam": "localhost.localdom",
        "component": "CDS",
        "errormessage": "SLA violation(s) found for application /boot on host tp-linux and template TP-Template Production to Snap 1\n        policy type normal\nnstattime 2017-11-24 00:15:00.095\nvovation time 2017-11-23 23:59:00.0\nnjobs expected 3\nnjobs succeeded 0\nnjobs failed 0\nnerror code 0\nnsource UDS 1415036377\nnjob id 0\nnjob class snapshot\nmessag...2017-11-24 00:15:00.110",
        "eventid": "1043",
        "eventstatus": "",
        "id": "152349",
        "notificationtype": "warning",
        "objectid": "1",
        "objecttype": "psrv",
        "requiresclearing": "false",
        "sequenceid": "0",
        "sourceeventdate": ""
    },
    "status": 0
}


Fetching SNMP events filtered using the filtervalue argument. (Fetch all events that occurred after Nov 24, 2017.)

Request
GET https://{_API_HOST}//api/info/lssnmpevent?filtervalue=eventdate>2017-11-24
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff4d3
where 92929a8b-a413-476f-a624-5b575cfff4d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "clustername": "localhost.localdom",
      "component": "CDS",
      "errorcode": "",
      "errormessage": "SLA violation(s) found for application /boot on host tp-linux and template TP-Template\n\nproduction to Snap 1\n\nPolicy: Production to Snap 1\n\nPolicy type: normal\n\nStart time: 2017-11-25 00:15:00.106\n\nViolation time: 2017-11-24 23:59:00.0\n\nViolation type: scheduler off\n\nJobs expected: 3\n\nJobs succeeded: 0\n\nJobs failed: 0\n\nError code: 0\n\nSource UDS: 1415036377\n\nJob id: 0\n\nJob class: snapshot\n\nMessage: At 2017-11-24 00:00:03-0500 scheduling for the application was disabled or snapshot scheduling was disabled for all applications.\n\nEventdate: "2017-11-25 00:15:00.123",
      "eventid": "10043",
      "eventstatus": "",
      "id": "152720",
      "notificationtype": "warning",
      "objectid": "1",
      "objecttype": "psrv",
      "requiresclearing": "false",
      "sequenceid": "0",
      "sourceeventdate": ""
    },
    {
      "clustername": "localhost.localdom",
      "component": "CDS",
      "errorcode": "",
      "errormessage": "SLA violation(s) found for application TP-Linux on host tp-linux and template TP-Template\n\nproduction to Snap 1\n\nPolicy: Production to Snap 1\n\nPolicy type: normal\n\nStart time: 2017-11-26 00:15:00.097\n\nViolation time: 2017-11-25 23:59:00.0\n\nViolation type: scheduler off\n\nJobs expected: 3\n\nJobs succeeded: 0\n\nJobs failed: 0\n\nError code: 0\n\nSource UDS: 1415036377\n\nJob id: 0\n\nJob class: snapshot\n\nMessage: At 2017-11-24 00:00:03-0500 scheduling for the application was disabled or snapshot scheduling was disabled for all applications.\n\nEventdate: "2017-11-25 00:15:00.107",
      "eventid": "10043",
      "eventstatus": "",
      "id": "153448",
      "notificationtype": "warning",
      "objectid": "1",
      "objecttype": "psrv",
      "requiresclearing": "false",
      "sequenceid": "0",
      "sourceeventdate": ""
    }
  ],
  "status": 0
}
About rmsnmpconfig Command

Description
Use this command to delete an SNMP server configuration.

Rights
You must have the 'System Manage' right to delete the configuration.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument</td>
<td>Required. Specifies the name of the SNMP server to be deleted.</td>
</tr>
</tbody>
</table>

rmsnmpconfig Request Details

Your rmsnmpconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmsnmpconfig</td>
<td>argument</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

rmsnmpconfig Example

Deleting an SNMP config identified by name.

Request

POST https://{_API_HOST}//api/task/rmsnmpconfig?argument=Default-SNMP
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response

Request success
{
   "status": 0
}

Monitored Device Commands

**mkmonitoreddevice**

**About mkmonitoreddevice Command**

**Description**

Use this command to add a new device to monitor for connectivity. At regular intervals, the appliance pings the IP address to make sure that the device is still connected. A trap is sent if the ping fails.

**Rights**

You must have the 'System Manage' rights to add a new device to monitor for connectivity.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress</td>
<td>Required. Specifies the IP address for the host. The monitoring process does not rely on DNS lookups so names are not allowed.</td>
</tr>
<tr>
<td>name</td>
<td>Required. Specifies a name to identify the device. The name must be unique within the device type.</td>
</tr>
<tr>
<td>password</td>
<td>Optional. The password to use to connect to the device if required for the given device type for Sky appliance.</td>
</tr>
<tr>
<td>readonlyr</td>
<td>Optional. Choices are true or false. True specifies that the device hardware is not shipped by Actifio; False specifies that the device hardware is provided by Actifio.</td>
</tr>
<tr>
<td>type</td>
<td>Required. Specifies the type of device to monitor. Either a switch or a storage device.</td>
</tr>
<tr>
<td>username</td>
<td>Optional. The username to use to connect to the Sky appliance if required for the given device type.</td>
</tr>
</tbody>
</table>

**mkmonitoreddevice Request Details**

Your mkmonitoreddevice request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/mkmonitoreddevice</td>
<td>name, ipaddress, type</td>
</tr>
</tbody>
</table>
**Note:** See the Parameters section for a list of supported parameters and their description.

**mkmonitoreddevice Example**

*Creating a new monitored device, that is recorded as readonly.*

**Request**

POST https://{_API_HOST}//api/task/mkmonitoreddevice?name=UnderWatch&ipaddress={MONITOR_IP_ADDRESS}&type=switch&readonly=true

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
  "result": "154350",
  "status": 0
}
```
ismonitoreddevice

About ismonitoreddevice Command on page 534
ismonitoreddevice Request Details on page 534
ismonitoreddevice Example on page 534

About ismonitoreddevice Command

Description
Use this command to return a concise list of monitored devices, or a detailed view of a monitored device.

Rights
You must have 'System View' or 'System Manage' rights to view devices.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>type=string</td>
<td>Optional. Specifies the type of device to monitor. The type of device is either a switch or a storage device. If the type is omitted, both switches and storage devices are listed. If the ID of the device is specified, this value is ignored.</td>
</tr>
<tr>
<td>argument=integer</td>
<td>Optional. Specifies the ID of the device to get detailed information.</td>
</tr>
</tbody>
</table>

ismonitoreddevice Request Details

Your ismonitoreddevice request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

Method | URI | Required Parameters
---|---|---
GET | //api/info/ismonitoreddevice | None

Note: See the Parameters section for a list of supported parameters and their description.

ismonitoreddevice Example

Fetching list of monitored devices.

Request
GET https://{_API_HOST}//api/info/ismonitoreddevice
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": [
    {
        "address": "172.27.26.100",
    }]
"id": "154350",
"name": "UnderWatch",
"type": "switch"
}
],
"status": 0
}
chmonitoreddevice

About chmonitoreddevice Command

Description
Use this command to change the configured IP address or name of a monitored device. Once the IP address is configured, you cannot edit the device’s type. An error is returned if the IP address is not valid or a device with the given id does not exist.

Rights
You must have the 'System Manage' right to edit the IP address of a monitored device.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ipaddress=string</td>
<td>Optional. Specifies the new IP address to use for the given device. The monitoring process does not rely on DNS lookups so names are not allowed.</td>
</tr>
<tr>
<td>name=string</td>
<td>Optional. Specifies a name to identify the device. If id is not specified this value is required.</td>
</tr>
<tr>
<td>username=string</td>
<td>Optional. The name of the user who is to connect to the given device type for CDSSky.</td>
</tr>
<tr>
<td>password=string</td>
<td>Optional. The authentication password to connect to the given device type for CDSSky.</td>
</tr>
<tr>
<td>readonly=boolean</td>
<td>Optional. Choices are True or False for CDSSky. True specifies that the device hardware is not shipped by Actifio; False specifies that the device hardware is provided by Actifio.</td>
</tr>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID for an appliance Use lsmonitoreddevice to get the ID.</td>
</tr>
</tbody>
</table>

chmonitoreddevice Request Details

Your chmonitoreddevice request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/chmonitoreddevice</td>
<td>argument=&lt;id of the monitored device&gt;</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
chmonitoreddevice Examples

Update a monitored device by adding a username.

Request
POST https://{_API_HOST}//api/task/chmonitoreddevice?argument=154350&username=adminuser
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.

Response
Request success
{
    "status": 0
}
**rmmonitoreddevice**

**About rmmonitoreddevice Command**

**Description**

Use this command to stop monitoring connectivity to the device. An error is returned if a device with the given ID does not exist.

**Rights**

You must have the 'System Manage' rights to delete a monitored device.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=integer</td>
<td>Required. Specifies the ID to identify the device.</td>
</tr>
</tbody>
</table>

**rmmonitoreddevice Request Details**

Your rmmonitoreddevice request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmmonitoreddevice</td>
<td>argument</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

**rmmonitoreddevice Example**

**Stop monitoring device with id 154350.**

**Request**

POST https://{_API_HOST}//api/task/rmmonitoreddevice?argument=154350
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success
{
  "status": 0
}
Email Server Commands

configemailserver

About configemailserver Command on page 539
configemailserver Request Details on page 540
configemailserver Example on page 540

About configemailserver Command

Description

Use this command to configure the email server to allow the appliance to send emails.

Rights

You must have the 'System Manage' right to configure the email server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>emailserver</td>
<td>Optional. Specifies the host name or IP address of the email server. This</td>
</tr>
<tr>
<td></td>
<td>option is required when the email server is specified for the first time.</td>
</tr>
<tr>
<td>emailuser</td>
<td>Optional. Specifies the username to authenticate to the email server. This</td>
</tr>
<tr>
<td></td>
<td>option is required when the email server is specified for the first time.</td>
</tr>
<tr>
<td>messagelimit</td>
<td>Optional. Specifies the email size allowed by the email server. The email</td>
</tr>
<tr>
<td></td>
<td>size should suffixed with KB or MB. The default email size is 10MB.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Space between the number and units is not allowed, only KB and MB</td>
</tr>
<tr>
<td></td>
<td>are supported.</td>
</tr>
<tr>
<td>nopassword</td>
<td>Optional. Specifies that no authentication is required to send an email.</td>
</tr>
<tr>
<td></td>
<td>Using this option deletes the password if it is configured already. You</td>
</tr>
<tr>
<td></td>
<td>cannot use this option along with the password option.</td>
</tr>
<tr>
<td>password</td>
<td>Optional. Specifies the password of the email user.</td>
</tr>
<tr>
<td>port</td>
<td>Optional. Specifies the email server port. The default value is 25 for an</td>
</tr>
<tr>
<td></td>
<td>SMTP server and 465 for an SMTPS server.</td>
</tr>
<tr>
<td>ssl</td>
<td>Optional. Indicates whether the email should be sent using the SSL protocol.</td>
</tr>
<tr>
<td></td>
<td>For the ssl parameter value, note the following conditions:</td>
</tr>
<tr>
<td></td>
<td>•   true must be added if the email server is smtp.gmail.com.</td>
</tr>
<tr>
<td></td>
<td>•   false must be added if the email server is svn.com.</td>
</tr>
<tr>
<td>test</td>
<td>Optional. When set to true, sends out a test email.</td>
</tr>
<tr>
<td>emailfrom</td>
<td>Optional. Specifies the email address to use as the FROM address.</td>
</tr>
</tbody>
</table>
configemailserver Request Details

Your configemailserver request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configemailserver</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

configemailserver Example

Configuring new email server.

**Request**

POST https://{_API_HOST}//api/task/configemailserver?emailserver={EMAIL_HOST}&emailuser=admin@datainc.com&messagelimit=15MB

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
    "status": 0
}
```
getemailserverconfig

About getemailserverconfig Command on page 541
getemailserverconfig Request Details on page 541
getemailserverconfig Example on page 541

About getemailserverconfig Command

Description
Use this command to retrieve the email server configuration.

Rights
You must have the 'System View' or 'System Manage' right to view the email server configuration.

getemailserverconfig Request Details

Your getemailserverconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/getemailserverconfig</td>
<td>None</td>
</tr>
</tbody>
</table>

getemailserverconfig Example

Fetching information about the configured email server.

Request
GET https://{_API_HOST}//api/info/getemailserverconfig
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": {
        "emailserver": "{EMAIL_HOST}",
        "emailuser": "admin@abcde.com",
        "messagelimit": "15MB",
        "ssl": "false"
    },
    "status": 0
}


configserviceemail

About configserviceemail

Description
Use this command to configure service email to be sent.

Applicability of this Command
This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director | ✓ |

Rights
You must have the 'System Manage' right to be able to configure email server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>customername=string</td>
<td>Optional. Specifies customer name.</td>
</tr>
<tr>
<td>disable=boolean</td>
<td>Optional. Specifies whether to enable or disable the service email.</td>
</tr>
<tr>
<td>recipient=string</td>
<td>Optional. Specifies the recipient(s) for the service email. If there are more than one recipients, use comma (,) to separate them. This will replace any existing recipient(s) previously configured.</td>
</tr>
</tbody>
</table>

configserviceemail Request Details

Your configserviceemail request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configserviceemail</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
configserviceemail Examples

Configuring a service email.

Request
POST https://{_API_HOST}//api/task/configserviceemail?recipient=engineering@customer.com
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c0f54d3

where 92929a8b-a413-476f-a624-5b575c0f54d3 is the session ID.

Response
Request success
{
  "status": 0
}

Configuring a service email for another customer with customer name.

Request
POST https://{_API_HOST}//api/task/configserviceemail?customername=Data, Inc.&recipient=emailgroup@datainc.com
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c0f54d3

where 92929a8b-a413-476f-a624-5b575c0f54d3 is the session ID.

Response
Request success
{
  "status": 0
}
**getserviceemailconfig**

**About getserviceemailconfig Command**

**Description**

Use this command to retrieve the email server configuration.

**Rights**

You must have 'System View' or 'System Manage' right to view the configuration.

**getserviceemailconfig Request Details**

Your `getserviceemailconfig` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**getserviceemailconfig Example**

**Fetching information about the service email config without any arguments.**

**Request**

GET https://{_API_HOST}//api/info/getserviceemailconfig

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```
{
   "result": {
      "customername": "Data, Inc.",
      "disable": "false",
      "recipient": "emailgroup@datainc.com"
   },
   "status": 0
}
```
configeventemail

About configeventemail Command on page 545
configeventemail Request Details on page 545
configeventemail Example on page 545

About configeventemail Command

Description

Use this command to forward SNMP events using email.

Prior to using this command, an email server should be configured using the configemailserver command.

Rights

You must have the 'System Manage' right to configure event forwarding to an email server.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>addemail</td>
<td>Optional. Specifies an email address to be added to receive a notification from the SNMP server.</td>
</tr>
<tr>
<td>deleteemail</td>
<td>Optional. Specifies the email address that should no longer receive a notification from the SNMP server.</td>
</tr>
<tr>
<td>eventtype</td>
<td>Optional. Specifies the types of event (warning, error, or both) to begin event forwarding to the email address specified.</td>
</tr>
<tr>
<td>interval</td>
<td>Optional. Specifies the minimum interval (minutes) before email is forwarded, when a qualifying event (trap) occurs. This is to avoid flooding the email server. Default to 30 (minutes). To send event immediately, set this value to 0.</td>
</tr>
</tbody>
</table>

configeventemail Request Details

Your configeventemail request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configeventemail</td>
<td>None</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.

configeventemail Example

Configure a new email event.

Request

POST https://{_API_HOST}//api/task/configeventemail?addemail=customersupport@datainc.com&eventtype=error
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfc54d3

where 92929a8b-a413-476f-a624-5b575cfc54d3 is the session ID.

Response
Request success
{
    "status": 0
}

geteventemailconfig

About geteventemailconfig Command on page 547
geteventemailconfig Request Details on page 547
getteventemailconfig Example on page 547

About geteventemailconfig Command

Description
Use this command to display configuration for event (trap) forwarding to email.

Rights
You must have the 'System Manage' or 'System View' right to view the email server.

geteventemailconfig Request Details

Your geteventemailconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/geteventemailconfig</td>
<td>None</td>
</tr>
</tbody>
</table>

**Note:** See the Parameters section for a list of supported parameters and their description.

geteventemailconfig Example

Fetching information about the configured email server.

Request

GET https://{_API_HOST}//api/info/geteventemailconfig
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cfe54d3

where 92929a8b-a413-476f-a624-5b575cfe54d3 is the session ID.

Response

Request success

{
  "result": {
    "email": "customersupport@datainc.com",
    "eventtype": "error",
    "interval": "30"
  },
  "status": 0
}
About emaillogs Command

Description

Use this command to send various types of VDP appliance log files for further diagnosis.

To send the logs, the email server should be configured using the configemailserver command.

Rights

You must have the 'System Manage' right to email the appliance logs.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>logtype</code></td>
<td>Optional. Specifies the types of logs to be sent in email. Multiple types can be sent by separating each type with a colon (':'). Specify 'all' if all logs should be sent. The following types can be sent by separating each type with a colon (':'). Specify 'all' to email all types of logs: adhd, database, flasher, install, omd, patch, psrv and udppm.</td>
</tr>
<tr>
<td><code>filelimit</code></td>
<td>Optional. Specifies the maximum number of log files to be sent for each log. '0' indicates all of the log files.</td>
</tr>
</tbody>
</table>

emaillogs Request Details

Your emaillogs request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/emaillogs</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

emaillogs Example

**Sending a set of log files via email.**

**Request**

POST https://{_API_HOST}//api/task/emaillogs?logtype=adhd:database

HTTP Request Header

Authorization: 92929a8b-a413-476f-a624-5b575cffe54d3

where 92929a8b-a413-476f-a624-5b575cffe54d3 is the session ID.
Response
Request success
{
   "status": 0
}

Sending a limited set of log files via email.

Request
POST https://{_API_HOST}//api/task/emaillogs?logtype=adhd:database&filelimit=10
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c5f54d3
where 92929a8b-a413-476f-a624-5b575c5f54d3 is the session ID.

Response
Request success
{
   "status": 0
}
About rmeventemail Command

Description
Use this command to delete the event (trap) forwarding to email configuration.

Rights
You must have the 'System Manage' right to delete the event (trap) forwarding to email configuration.

rmeventemail Request Details

Your rmeventemail request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmeventemail</td>
<td>None</td>
</tr>
</tbody>
</table>

rmeventemail Example

Deleting the event (trap).

Request
POST https://{_API_HOST}//api/task/rmeventemail
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c5f54d3
where 92929a8b-a413-476f-a624-5b575c5f54d3 is the session ID.

Response
Request success
{
  "status": 0
}

About rmemailserverconfig Command

**Description**
Use this command to delete the email server configuration. This command takes no arguments.

**Rights**
You must have the 'System Manage' right to delete the email server configuration.

**rmemailserverconfig Request Details**
Your rmemailserverconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmemailserverconfig</td>
<td>None</td>
</tr>
</tbody>
</table>

**rmemailserverconfig Example**

**Delete email server configuration.**

**Request**
POST https://{_API_HOST}//api/task/rmemailserverconfig
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**
Request success
{
   "status": 0
}

configcallhome

About configcallhome Command

Description
Use this command to configures Call Home functionality, with HTTP or email.

Rights
You must have the 'System Manage' right to be able to configure email server.

configcallhome Request Details

Your configcallhome request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/configcallhome</td>
<td>None</td>
</tr>
</tbody>
</table>

configcallhome Example

Request
POST https://{_API_HOST}//api/task/configcallhomeconfig?customername=Engineering&mode=https
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}
getconfigcallhome

About getconfigcallhome Command

Description
Use this command to get call home functionality, with HTTP or email.

Rights
You must have the 'System Manage' right to get Call Home functionality.

getcallhomeconfig Request Details

Your getcallhomeconfig request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

getcallhomeconfig Example

Response
GET https://{_API_HOST}//api/info/getcallhomeconfig
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "result": {
        "mode": "https",
        "httpsendbaseurl": "https://callhome..net/generate-presigned-url",
        "customername": "-Engineering"
    },
    "status": 0
}
9 VDP Connector

These commands are for Actifio Connector specific to finding the available connectors and upgrading connectors.

**Managing the Connector**

Commands

- `lsavailableconnector` on page 556
- `upgradehostconnector` on page 560
- `abortupgradehostconnector` on page 562
- `rmavailableconnector` on page 563
- `fetchconnectorlogs` on page 565
Isavailableconnector

About Isavailableconnector Command on page 556
Isavailableconnector Request Details on page 557
Isavailableconnector Examples on page 557

About Isavailableconnector Command

Description
Use this command to return a concise list of available connectors, or a detailed view of an available connector.

Applicability of this Command
This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director  | ✓ |

Rights
You must have “System View” or ‘System Manage’ rights to view available connectors.
Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| `filtervalue=attribute%3Dvalue` | Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for the `lsavailableconnector` command are:  
  - name  
  - componentversion  
  - componentname  
  - displayname  
  - installtime [installtime%20since%2024%20hours for installtime started since last 24 hours, installtime%20before%207%20days for installtime started older than 7 days]  
  - latest  
  - ostype  
  - size  
  The filter will be formed with an attribute and a value. When user specifies more than one filter, they must be combined with `&` character (%26 in hexadecimal).  
  For string type of filters, the only operator allowed is `=`. You can also use wildcard character `*`. For example, to match disk pools with name begins with 'foo', use `filtervalue=name%3Dfoo*`.  
  For number and date types, allowed operators are: `=`, `>`, `<`, `<`. For RESTful API, the hexadecimal equivalent of these characters need to be used. For example,  
  
  filtervalue=size%3E280000000000  
  Date parameters installtime can also use these operators, for example,  
  filtervalue=installtime%3E2010-09-28  
  filtervalue=expiration%3E2010-09-28%206:50:00  
  Multiple filtervalues are allowed, with an `&` (%26 in hexadecimal),  
  filtervalue=installtime%3E2012-09-28%26size%3E280000000000

| argument=string | Optional. Specifies the ID of an object. When you use this parameter, the detailed view of the specific object is returned and any value that is specified by the `filtervalue` parameter is ignored. If you do not specify the parameter, the concise view of all objects matching the filter criteria is displayed. |

Isavailableconnector Request Details

Your `lsavailableconnector` request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>GET</td>
<td>//api/info/lsavailableconnector</td>
<td>None</td>
</tr>
</tbody>
</table>

*Note: See the Parameters section for a list of supported parameters and their description.*

Isavailableconnector Examples

Fecthing a list of all available connectors.
Request
GET https://{_API_HOST}//api/info/lsavailableconnector
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575c6f54d3
where 92929a8b-a413-476f-a624-5b575c6f54d3 is the session ID.

Response
Request success
{
  "result": [
    {
      "componentname": "",
      "componentversion": "",
      "displayname": "7.1.1.686",
      "id": "187505",
      "installtime": "2017-05-05 14:16:10.000",
      "latest": "true",
      "name": "connector-AIX-7.1.1.686.bff",
      "ostype": "aix",
      "size": "191861760"
    },
    {
      "componentname": "",
      "componentversion": "",
      "displayname": "7.1.1.686",
      "id": "187506",
      "installtime": "2017-05-05 14:15:58.000",
      "latest": "true",
      "name": "connector-Win32-7.1.1.686.exe",
      "ostype": "win32",
      "size": "32664872"
    },
    {
      "componentname": "",
      "componentversion": "",
      "displayname": "7.1.1.686",
      "id": "187507",
      "installtime": "2017-05-05 14:16:00.000",
      "latest": "true",
      "name": "connector-Linux-7.1.1.686.rpm",
      "ostype": "linux",
      "size": "79947398"
    },
    {
      "componentname": "",
      "componentversion": "",
      "displayname": "7.1.1.686",
      "id": "187508",
      "installtime": "2017-05-05 14:16:02.000",
      "latest": "true",
      "name": "connector-Solaris_SPARC-7.1.1.686.pkg",
      "ostype": "solaris_sparc",
      "size": "97480704"
    },
    {
      "componentname": "",
      "componentversion": "",
      "displayname": "7.1.1.686",
      "id": "187517",
      "installtime": "2017-05-05 14:16:03.000",
      "latest": "true",
      "name": "connector-AIX-7.1.1.686.bff",
      "ostype": "aix",
      "size": "191861760"
    }
  ]
}
"installtime": "2017-05-05 14:16:05.000",
"latest": "true",
"name": "connector-HPUX-7.1.1.686.depot",
"ostype": "hpux",
"size": "215132160"
},
{
"componentname": "",
"componentversion": "",
"displayname": "7.1.1.686",
"id": "187518",
"installtime": "2017-05-05 14:15:59.000",
"latest": "true",
"name": "connector-Solaris_x86-7.1.1.686.pkg",
"ostype": "solaris_x86",
"size": "95630848"
},
{
"componentname": "",
"componentversion": "",
"displayname": "7.1.1.686",
"id": "187519",
"installtime": "2017-05-05 14:16:02.000",
"latest": "true",
"name": "connector-Linux_x86-7.1.1.686.rpm",
"ostype": "linux_x86",
"size": "43362202"
}
,"status": 0

Fetching details of available Linux connector.

**Request**

GET https://{_API_HOST}//api/info/lsavailableconnector?filtervalue=ostype%3Dlinux_x86

HTTP Request Header

Authorization:  92929a8b-a413-476f-a624-5b575c0ff54d3

where 92929a8b-a413-476f-a624-5b575c0ff54d3 is the session ID.

**Response**

Request success

{  "result": [  {   "componentname": "",
"componentversion": "",
"displayname": "7.1.1.686",
"id": "187519",
"installtime": "2017-05-05 14:16:02.000",
"latest": "true",
"name": "connector-Linux_x86-7.1.1.686.rpm",
"ostype": "linux_x86",
"size": "43362202"
  },
  "status": 0
}
upgradehostconnector

About upgradehostconnector Command

Description
Use this command to upgrade the host with a specific version of the Actifio Connector the latest available connector from the appliance.

Applicability of this Command
This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director | ✓ |

Rights
You must be Admin or have 'Administrator' role to upgrade a connector on a host.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>hosts=string</td>
<td>Required. Specifies a colon (:) separated list of ID or name of the hosts for upgrade. Use udsinfo lshost to retrieve the ID or name.</td>
</tr>
<tr>
<td>force=boolean</td>
<td>Optional. When set, it will cancel any running jobs on the host so it can be upgraded.</td>
</tr>
<tr>
<td>version=string</td>
<td>Optional. Specifies the upgrade version of the Actifio Connector.</td>
</tr>
</tbody>
</table>

upgradehostconnector Request Details

Your upgradehostconnector request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/upgradehostconnector</td>
<td>hosts=&lt;hostid</td>
</tr>
</tbody>
</table>

Note: See the Parameters section for a list of supported parameters and their description.
upgradehostconnector Example

Upgrade the connector on a single host identified by its ID.

Request
POST https://{API_HOST}//api/task/upgradehostconnector?hosts=83040
HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
   "status": 0
}

Upgrade a connector using the force option.

Request
POST https://{_API_HOST}//api/task/upgradehostconnector?hosts=83040&force=true
HTTP Request Header
Authorization:  92929a8b-a413-476f-a624-5b575cfff54d3
where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

Response
Request success
{
   "status": 0
}
**abortupgradehostconnector**

About abortupgradehostconnector Command on page 562

abortupgradehostconnector Details on page 562

abortupgradehostconnector Example on page 562

**About abortupgradehostconnector Command**

**Description**

Use this command to abort an ongoing Actifio Connector upgrade.

**Applicability of this Command**

This command can be used on:

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDS appliance</td>
<td>✓</td>
</tr>
<tr>
<td>Sky appliance</td>
<td>✓</td>
</tr>
<tr>
<td>NAS Director</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Rights**

You must be Admin or have ‘Administrator’ role to abort the connector upgrade on a host.

**abortupgradehostconnector Details**

Your abortupgradehostconnector request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>/api/task/abortupgradehostconnector</td>
<td>none</td>
</tr>
</tbody>
</table>

**abortupgradehostconnector Example**

**Request**

POST https://{_API_HOST}//api/task/abortupgradehostconnector

HTTP Request Header

Authorization:  92929a8b-a413-476f-a624-5b575cfff54d3

where 92929a8b-a413-476f-a624-5b575cfff54d3 is the session ID.

**Response**

Request success

{   
"status": 0
}


**About rmavailableconnector Command**

**Description**

Use this command to delete an available connector from the appliance.

**Applicability of this Command**

This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director  | ✓ |

**Rights**

You must be Admin or have 'Administrator' role to delete a connector.

**Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>argument=string</td>
<td>Required. Specifies the ID or name of the Actifio Connector to be removed. Use lsavailableconnector for retrieving connector information.</td>
</tr>
</tbody>
</table>

**rmavailableconnector Request Details**

Your rmavailableconnector request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

<table>
<thead>
<tr>
<th>Method</th>
<th>URI</th>
<th>Required Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST</td>
<td>//api/task/rmavailableconnector</td>
<td>argument=&lt;objectid</td>
</tr>
</tbody>
</table>

*Note:* See the Parameters section for a list of supported parameters and their description.

**rmavailableconnector Example**

**Removing an available connector.**

**Request**

POST https://{_API_HOST}//api/task/rmavailableconnector?argument=48136
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

Response
Request success
{
    "status": 0
}

fetchconnectorlogs

About fetchconnectorlogs Command on page 565
fetchconnectorlogs Request Details on page 566
fetchconnectorlogs Request Details on page 566
fetchconnectorlogs Example on page 566

About fetchconnectorlogs Command

Description

Use this command to fetch log files from the host managed by the appliance. This command downloads connector logs, syslog, diagnostic and core files from the host into the appliance log directory (/dumps/tmp). Apart from Connector logs, for a Window host, the fetchconnectorlogs command will also fetch event logs and dump files. For a Linux host, this command downloads syslog and core files.

The fetchconnectorlogs command fetches diagnostic details from UNIX hosts by default. If it times out due to some blocking commands that are hung, use the option type=nonblocking to fetch diagnostic command output of nonblocking commands only.

You can also use this command to help facilitate troubleshooting issues when working with a support representative by directly downloading logs from your appliance to your computer.

Applicability of this Command

This command can be used on:

| CDS appliance | ✓ |
| Sky appliance | ✓ |
| NAS Director | ✓ |

Rights

You must have ‘Administrator’ role to run this command.

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>all=boolean</td>
<td>Optional. Specifying this flag will fetch all log types based on the limit specified.</td>
</tr>
<tr>
<td>host=string</td>
<td>Required. Specifies the host from which the logs are to be retrieved. Either the ID or name of the host is needed. Use udsinfo lshost to locate the ID or name of the host.</td>
</tr>
<tr>
<td>limit=integer</td>
<td>Optional. Specifies the number of log files to be downloaded from the host. Default value is set to 1.</td>
</tr>
<tr>
<td>type=syslog</td>
<td>core</td>
</tr>
</tbody>
</table>
Your fetchconnectorlogs request must pass a valid session ID. For information on how to get a valid session ID, see Authentication or Login on page 1.

**fetchconnectorlogs Request Details**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
</table>
| `startdate`  | Optional. By default, the appliance downloads logs from the last three (3) days (starting with the current date).
|              | To specify a particular date range from which you want to download logs for Sky appliance, use `startdate` to specify the start date of the time window to download the log files. The date format must be in 'yyyy-mm-dd'. If `startdate` is not specified, then the start date will automatically be set to the date that is three (3) days from the current date. |
| `enddate`    | Optional. Specifies the end date of the time window to download the log files. The date format must be in 'yyyy-mm-dd'. If `startdate` is specified but not an `enddate`, then the end date is automatically set to the current date. |

**fetchconnectorlogs Example**

**Fetch connector logs from a specific host.**

**Request**

POST https://{_API_HOST}//api/task/fetchconnectorlogs?host=4834763
HTTP Request Header
Authorization: 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.

**Response**

Request success

```json
{
    "result": "log files downloaded are:\n/dumps/tmp/Nike_Bug_Pfile/UDSAgent-20171228110741.log\n/dumps/tmp/Nike_Bug_Pfile/UDSAgent-20171226021534.log\n/dumps/tmp/Nike_Bug_Pfile/Setup Log 2017-10-24 #001.txt\n/dumps/tmp/Nike_Bug_Pfile/TANDB_rman.log.5\n/dumps/tmp/Nike_Bug_Pfile/Upgrade.log\n/dumps/tmp/Nike_Bug_Pfile/HFDB_rman.log\n/dumps/tmp/Nike_Bug_Pfile/Setup Log 2017-10-23 #001.txt\n/dumps/tmp/Nike_Bug_Pfile/Setup Log 2017-10-17 #002.txt\n/dumps/tmp/Nike_Bug_Pfile/Upgrade.log\n/dumps/tmp/Nike_Bug_Pfile/TANDB_rman.log.1\n/dumps/tmp/Nike_Bug_Pfile/ORCL_rman.log\n/dumps/tmp/Nike_Bug_Pfile/diag.log\n/dumps/tmp/Nike_Bug_Pfile/Setup Log 2017-12-01 #001.txt\n/dumps/tmp/Nike_Bug_Pfile/TANDB_rman.log.1\n/dumps/tmp/Nike_Bug_Pfile/TANDB_rman.log.2\n/dumps/tmp/Nike_Bug_Pfile/UDSAgent.log\n/dumps/tmp/Nike_Bug_Pfile/BUGDB_rman.log\n",
    "status": 0
}
Advanced Protection Settings with mkpolicyoption Command

This appendix describes the certain advanced protection settings by using the udstask mkpolicyoption command:

- Advanced Settings for Out-of-Band File Systems on page 570
- Advanced Settings for Oracle Databases on page 571
- Advanced Settings for VM in an ESX Datastore on page 574
- Overriding Script Timeout Settings for the Connector on page 575

Note: See List of Policy Options for a complete list of supported policy options that can be used with the mkpolicyoption command.
Advanced Settings for Out-of-Band File Systems

To configure the advanced protection settings for out-of-band file systems, use the udstask mkpolicyoption command as follows:

1. Provide the start paths (case-sensitive). This specifies the point in the file system where backup starts. If this path is not specified, backup starts at the root directory of the file system to be backed up.

   Example:
   ```
   $ udstask mkpolicyoption -slaid 3198 -sltid 86086 -name startpaths -value "c:\Program Files"
   ```

2. Provide the prune paths (case-sensitive). This specifies a point in the file system where directory traversal will stop. When protecting a Linux application, a value of /usr/local/lib will ensure that nothing below /usr/local/lib is copied, but all other directories and files in /usr/local are copied. If this field is left blank, the directory traversal descends into every subdirectory of the file system being backed-up.

   Example:
   ```
   $ udstask mkpolicyoption -slaid 3198 -sltid 86086 -name prunepaths -value "g:\d1\d2"
   ```

3. Provide the file extension to be excluded from backup using the excludepatterns option. The appliance offers the ability to exclude certain file types from the backup. Using this option, only the most crucial data is backed-up leaving aside the non-critical files.

   Example:
   ```
   $ udstask mkpolicyoption -slaid 3198 -sltid 86086 -name excludepatterns -value "*.sys"
   ```

   Guidelines for Exclude Patterns:
   - Using this option, only files are excluded, directories are not excluded.
   - A pattern can include wild-card characters, For example, an asterisk (*) or a question mark (?). To exclude all the files that contain .sys as extension, enter *.sys in EXCLUDEPATTERNS field.
   - In a Windows environment, files named pagefile.sys and hiberfil.sys that appear in the root directory of a drive are automatically ignored.

4. Choose the nounmap option if required. When this option is set, temporary staging disks mapped to the host and used during data movement remain mapped to the host. LUNs are mapped during the first job and all the subsequent jobs reuse the mapped LUN. By default, the nounmap option is set to ‘true’. You can configure this setting only through the CLI. This does not have any effect for Windows based out-of-band applications. Use the following command to set this policy option.

   ```
   $ udstask mkpolicyoption -sltid <SLTID> -name nounmap -value yes
   ```

5. If the protected application is within the appliance setup, then provide the appliance service IP Address.

   ```
   $ udstask mkpolicyoption -sltid <SLTID> -name serviceip -value <IP Address>
   ```
Advanced Settings for Oracle Databases

To configure the advanced protection settings for an Oracle database, use the udstask mkpolicyoption command.

1. Enter the number of RMAN channels. The number of channels should be configured based on # of cores available on the server, taking into account of other database backups configured to run in parallel. If the numberofchannels parameter is not defined, then the default number of channels will be one.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name numberofchannels -value 4

2. Enter the staging disk size. By default, the Actifio Connector calculates the max size of the database as configured. The STAGINGDISKSIZE option allows you to allocate a staging disk to hold backup and to allow future growth of the database.

   Example: Adding more table space, data files while the backup still maintains incremental behavior. This staging disk is thin provisioned. Another use case of this is staging disk size, after you have restored the whole database from a backup and when you open the database with reset log, you need to take a level '0' backup again. This is not done automatically by the Actifio Connector. To force a new level '0', you need to change the staging disk size and then save. The next backup will perform a new level '0'. The unit is in GB.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name stagingdisksize -value 5

3. Enter the RMAN log path in the RMAN LOG LOCATION field. This is the custom location (full path along with RMAN filename) where RMAN writes the logs while taking the backup. By default, the log file is located at /act/log/rman.log. If you want to change the default path, the option value must be in the form of /act/log/test/custom_rman.log.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name rmanloglocation -value "/act/log/rmantest.log"

4. Validate each backup before restoring it. RMAN provides restore validation for the backups. When this option is provided (true), the Actifio Connector invokes RMAN restore validate command for each backup.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name restorevalidate -value true

5. Enter the Oracle catalog database name if one is used. This field is used only when you are using a catalog database for an RMAN repository. By default, a control file is used.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name catalogdb -value oraprod

6. Enter the Oracle catalog database user name. This field is used only when you are using a catalog database for RMAN repository. By default, a control file is used.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name cataloguser -value catalog1

7. Enter the Oracle catalog database login password. This field is used only when you are using a catalog database for an RMAN repository. By default, a control file is used.

   Example:
   $ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name catalogpassword -value *****

8. To set whether or not skip backup of off line and inaccessible table space.
Example: not skip inaccessible table space:
$ udstask mkpolicyoption -sldid 31986 -slaid 32135 -name notskip -value inaccessible

Example: not skip offline table space:
$ udstask mkpolicyoption -sldid 31986 -slaid 32135 -name notskip -value offline

9. Oracle Service Name: Provides the ability to specify a new service name in tnsnames.ora file to be used by backup. If not specified then by default will use the Oracle sid name as the service name. Either new service name or default sid name must have an entry in tnsnames.ora file for to connect:

Example:
$ udstask udstask mkpolicyoption -sldid 31986 -slaid 32135 -name servicename -value <name of the service>

10. Specify the fail-over node choice in a Oracle RAC environment only.

Example:
$ udstask udstask mkpolicyoption -sldid 31986 -slaid 32135 -name clusternodes -value <Failover node IP:servicename:role>
11. Choose the “nounmap” option if required. When this option is set, temporary staging disks mapped to the host and used during data movement remain mapped to the host. LUNs are mapped during the first job and all the subsequent jobs reuse the mapped LUN. By default, “nounmap” is set to ‘true’. You can configure this setting only through the CLI. This does not have any effect for Windows-based out-of-band applications. Use the following command to set this policy option.

Example:

$ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name nounmap -value yes

12. Enter the Connector option information.

Example:

$ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name connectoroptions -value <Connector name>
Advanced Settings for VM in an ESX Datastore

The appliance provides an option to perform enhanced asynchronous replication to ‘VM in ESX datastore’. ‘VM in ESX datastore’ is an advanced asynchronous replication mechanism in which the data is directly replicated onto the datastore volumes that are configured for the remote virtual machine. This process allows you to use an existing or a new virtual machine as the replication target. When the source VM geometry is changed due to addition, deletion and resize of the VMDK volumes, then the remote VM configuration is automatically changed.

All enhanced asynchronous replication features such as forward replication, failover, syncback, failback and further rounds of replication POST failback are supported. When using the ‘VM in ESX datastore’ option to protect a VM, the data transfer happens on the network.

The ‘VM in ESX datastore’ introduces the following policy options:

$ udstask mkpolicyoption -sltid <sltid> -name readyvm -value yes
$ udstask mkpolicyoption -sltid <sltid> -name remotevcenter -value <vcenter hostname>
$ udstask mkpolicyoption -sltid <sltid> -name remoteesx -value <target ESX hostname>
$ udstask mkpolicyoption -sltid <sltid> -name remotedatastores -value <comma-separated list of datastores>

Follow these guidelines when using the ‘VM in ESX datastore’ option:

- When unprotecting a VM in ESX datastore, wait for dar-delete to clean up all the images, you must delete the remote VM manually from vCenter after unprotecting the application.
- Do not Power ON the remote VM manually. During the failover, the remote VM is automatically powered on and failback automatically does a power OFF. In order to validate the data integrity of the VM in the ESX datastore at the remote site without failover, you may need to perform a clone from the vCenter.
- When using the ‘VM in ESX datastore’ option, a remote VM named DR-<sourcevm> is created at the remote site.
- During the initial replication and the first replication after failback, the appliance performs a full ingest from the source VM to the remote VM. This can take several minutes to complete.
- Do not change the remote VM configuration after a failover; this leads to sync-back failures.
**Overriding Script Timeout Settings for the Connector**

To override the default script timeout values for the Connector, use the `udtask mkpolicyoption` command with these switches:

<table>
<thead>
<tr>
<th>Policy Option</th>
<th>Description</th>
<th>Example</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scriptinittimeout</td>
<td>This policy option specifies the timeout value (in seconds) for the init script completion. The init script is invoked with an init parameter when the backup is about to start.</td>
<td><code>udtask mkpolicyoption -slaid 3198 -sltid 86086 -name scriptinittimeout -value 200</code></td>
<td></td>
</tr>
<tr>
<td>Scriptfreezetimeout</td>
<td>This policy option specifies the timeout value (in seconds) for freeze script completion. The freeze script is invoked with a freeze parameter when the backup operation is just about to freeze the application.</td>
<td><code>udtask mkpolicyoption -slaid 3198 -sltid 86086 -name Scriptfreezetimeout -value 100</code></td>
<td></td>
</tr>
<tr>
<td>Scriptunfreezetimeout</td>
<td>This policy option specifies the timeout value (in seconds) for thaw script completion. The thaw script is invoked with a thaw parameter when the backup operation is just finished unreeling the application.</td>
<td><code>udtask mkpolicyoption -slaid 3198 -sltid 86086 -name Scriptunfreezetimeout -value 110</code></td>
<td></td>
</tr>
<tr>
<td>Scriptfinishtimeout</td>
<td>This policy option specifies the timeout value (in seconds) for finish script completion. The fini script is invoked with a fini parameter when the backup operation is about to complete.</td>
<td><code>udtask mkpolicyoption -slaid 3198 -sltid 86086 -name Scriptfinishtimeout -value 300</code></td>
<td></td>
</tr>
</tbody>
</table>
This appendix describes the list of jobs executed when creating the policies:

- **On-demand Jobs** on page 578
- **Queuing of On-Demand Backup Jobs** on page 581
- **Relaunching Jobs** on page 581

Applying policies to applications results in the creation of jobs. These jobs are executed as per the schedules configured when creating policies. The appliance reserves pools of slots for running the following types of jobs:

- Scheduled snapshot jobs
- Scheduled local dedup jobs
- Scheduled remote dedup jobs
- Scheduled dedup-async jobs
- Scheduled StreamSnap jobs
- Scheduled OnVault jobs
- Scheduled log replication jobs
- Scheduled expiration of jobs
On-demand Jobs

There may be times when you require on-demand job start functionality, such as for upcoming maintenance windows, software upgrades, and so on, and you want to ensure that you have a successful copy of the data created before you start your scheduled maintenance task. The on-demand jobs category includes all types of restore, clone, and mount jobs and jobs created when policies are applied on-demand. The appliance reserves a pool of slots for all the six categories of jobs. Also, there is an unreserved pool of slots. You can modify the number of slots allotted for each category as well as the unreserved pool of slots using the setparameter command.

Before starting a job, the appliance checks whether a slot corresponding to the job’s category is available to run the job. When a reserved slot is not available because all the slots of that category are running jobs, the appliance checks whether an unreserved slot is available. If an unreserved slot is available, the job is started. However, you can reserve the maximum number of slots that the jobs of a particular category can use from the unreserved pool. This measure limits the number of slots that jobs from a category can make use of from the unreserved pool.

**Note:** All restore operations such as mount, clone, failover, test failover, prep-mount, and restore do not depend on the availability of job slots, but they will consume an “On-demand Slot”.

The table below indicates the default, minimum, and maximum number of slots allotted to each category of jobs and the unreserved pool:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default no. of slots allotted</th>
<th>Min. no. of slots</th>
<th>Max. no. of slots</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>maxsnapslots</strong></td>
<td>Maximum number of scheduled snapshots.</td>
<td>6</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxstreamsnapslot</strong></td>
<td>Maximum number of scheduled stream snaps.</td>
<td>6</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxldedupslots</strong></td>
<td>Maximum number of scheduled local dedups.</td>
<td>8</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxrdedupslots</strong></td>
<td>Maximum number of scheduled remote dedups.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxdarslots</strong></td>
<td>Maximum number of scheduled dedup async.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxdataaccessslots</strong></td>
<td>Maximum number of mount, clone and restore jobs.</td>
<td>12</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxvaultslots</strong></td>
<td>Maximum number of scheduled vault jobs.</td>
<td>4*</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td><strong>maxconcurrentvaultsubjobs</strong></td>
<td>Maximum number of concurrent vault subjobs ingesting into the vault. Subjobs are flow-controlled such that at least one subjob per vault job is always allowed without throttling.</td>
<td>12*</td>
<td>4</td>
<td>1000</td>
</tr>
</tbody>
</table>
Note: *The default for maxconcurrentvaultsubjobs is 12 and the default for maxvaultslots is 4. In this case, there can be at any time a total of 4 top-level OnVault jobs running. To prevent starving OnVault jobs, a minimum of 1 slot each has been reserved for every OnVault job. Note that the first job cannot use all 12 slots; it can only use up to 9 slots, and will reserve 3 of the remaining slots for new OnVault jobs to ensure that all OnVault jobs can make progress.

The default, minimum, and maximum number of slots from the unreserved pool that can be allotted to each job category are:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default no. of slots allotted</th>
<th>Min. no. of slots</th>
<th>Max. no. of slots</th>
</tr>
</thead>
<tbody>
<tr>
<td>maxlogreplicateslots</td>
<td>Maximum number of scheduled stream snaps.</td>
<td>6</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>maxexpirationslots</td>
<td>Maximum number of scheduled expirations.</td>
<td>10</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>maxondemandslots</td>
<td>Maximum number of all types of on demand jobs.</td>
<td>6</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>unreservedslots</td>
<td>Number of additional slots available for any job type.</td>
<td>12</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>reservedsnapslots</td>
<td>Number of slots reserved for scheduled snapshots.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservedstreamsnapslots</td>
<td>Number of slots reserved for scheduled stream snapshots.</td>
<td>2</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservediddedupslots</td>
<td>Number of slots reserved for scheduled local dedups.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservedrdedupslots</td>
<td>Number of slots reserved for scheduled remote dedups.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservedddarslots</td>
<td>Number of slots reserved for scheduled dedup async.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reserveddataaccesslots</td>
<td>Number of slots reserved for mount, clone and restore jobs</td>
<td>6</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservedvaultslots</td>
<td>Number of slots reserved for scheduled vault jobs.</td>
<td>4</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservedlogreplicateslots</td>
<td>Number of slots reserved for scheduled stream snapshots.</td>
<td>2</td>
<td>0</td>
<td>1000</td>
</tr>
</tbody>
</table>
The maximum slots allowed for running a snapshot job is 1000 (indicated by `maxsnapslots`). In addition, a maximum of 1000 slots of the unreserved pool can be used by snapshot jobs (indicated by `reservedsnapslots`).

You can set the value of the `reservedsnapslots` parameter as shown below:

```bash
$ udstask setparameter -param reservedsnapslots -value 10 -appliance Appliance_C1
```

With the default configuration of 3 dedup-async slots and 12 unreserved slots, up to 15 dedup-async jobs can be started. Until these 15 jobs complete, no more than 3 jobs of any other type can be started. If, in this configuration, `maxdarslots` is set to 5, no more than 5 dedup-async jobs can be started. While these 5 jobs run, 10 unreserved slots are still available for other jobs.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default no. of slots allotted</th>
<th>Min. no. of slots</th>
<th>Max. no. of slots</th>
</tr>
</thead>
<tbody>
<tr>
<td>reservedexpirationslots</td>
<td>Number of slots reserved for scheduled expirations.</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
<tr>
<td>reservedondemandslots</td>
<td>Number of slots reserved for all types of on demand jobs</td>
<td>3</td>
<td>0</td>
<td>1000</td>
</tr>
</tbody>
</table>
Queuing of On-Demand Backup Jobs

The Actifio appliance supports queuing of on-demand jobs to provide you with the flexibility to create your backup images without concern for the number of on-demand job slots available to start the job. The queued on-demand job remains in the queued state until an on-demand job slot is available. When an on-demand slot opens, the job will progress to the running state. This occurs in the order that the job was submitted. However, if a particular on-demand job fails due to some reason and could not be completed, the Actifio appliance will attempt to run the next job in the queue. On-demand jobs use different job slots than scheduled jobs, so scheduled jobs may run before queued jobs.

While an on-demand job is in a queued state you can cancel the job or cancel protection for the application. The on-demand job will then appear in the job history table as a canceled job. The start time of the job and the end time of the job will be the time that the cancel request or the cancellation of application protection was acknowledged.

For example, if you attempt to initiate an on-demand backup and there are no available slots, the Actifio appliance will automatically the on-demand backup job:

$ udstask backup -app 18414 -policy 201304
ACTERR-043023 No available slots to run job

Using the appliance Desktop, you can view the queued jobs from Monitor > Jobs.

Relaunching Jobs

All scheduled jobs are automatically re-launched when they fail. The number of retries depends on the configuration value that is set in the appliance. Use the udsinfo getparameter command to know the default parameters. The default parameters are as follows:

- `retriesonfailure`: This parameter indicates the number of times the job must be retried in the event of a failed job. Example: `retriesonfailure` 3, this indicates the job retires 3 times after original attempt.
- `retrydelay`: This parameter indicates the number of seconds that the job should wait to retry after the original attempt. Example: `retrydelay` 240, this indicates, the first job retry happens after 240 seconds.
- `retrydecay`: This parameter indicates the % of delay to attempt further retries.
Configuring Image Preservation

This appendix describes the Image Preservation function and its configuration:

- Image Preservation Overview on page 584
- Modifying Image Preservation Settings On a System-wide Application Level on page 585
- Disabling Image Preservation Mode On A Per Application Basis on page 587

Use Image Preservation to preserve snapshot and local dedup images beyond their expiration dates to ensure that those images are properly processed.
Image Preservation Overview

Your appliance may encounter resource challenges that result in snapshot or local dedup jobs failing to execute in a timely manner. To enhance the success rate in which the appliance is able to complete snapshot and local dedup jobs, the appliance operates in an Image Preservation mode. Image Preservation enhances the scheduling features of the SLA policy manager to be able to ride through periods of high change rates, reduced dedup or replication throughput, and other transient or abnormal situations. Image Preservation delays snapshot and local dedup expirations in order to catch up with the transient system resource constraints. Images due for expiration will be held until they have been processed by the appliance as long as there is capacity to do so by the appliance.

Image Preservation operates on two types of images:

- **Preserve Snapshots**: When enabled, all dedupable snapshot images will be preserved until the local dedup system can process them. Older snapshot images will be processed first until images are caught up by the appliance. If VDisk counts or performance pool capacity thresholds are reached, then image expiration may occur prior to processing to ensure system stability.

- **Preserve Dedup Images**: When enabled, all local dedup images that are eligible for remote deduplication will be preserved until the remote deduplication system can process them. Older local dedup images will be processed first until images are caught up by the appliance. If capacity in the local dedup pool has reached the warning level, then image expiration may occur prior to processing to ensure system stability.

When the appliance attempts to preserve snapshot images or local dedup images, the appliance will run snapshot and local dedup jobs (images beyond their expiration date) continuously within the allowed window in an attempt to catchup on all image processing. In this case, the appliance will process the oldest unprocessed snapshot or local dedup images ahead of the latest images. Once a backlogged image is processed, the image is expired per the SLA schedule.

Preserved images will automatically be expired when pool space or VDisk count reaches the warning threshold levels. When the appliance reaches a warning threshold level, images will be expired based on application priority and age. Images for applications with lower priority will be expired ahead of applications with higher priority. Within a priority level, older images will be expired ahead of newer images. However, the last snapshot (or local dedup) image of any application will not be expired this way. Rather than expiring the most recent snapshot (or local dedup) of any application, an older snapshot of a different application or a snapshot (or local dedup) of a higher priority application will be expired.

If you find that you need to limit the scope of image preservation to exclude lower priority applications, you can:

- Change preserved snapshot settings through the `PreserveSnapsOfPriority` parameter in the `setparameter` command (see Modifying Preserve Snapshots Settings on page 585).

- Change preserved local dedup settings through the `PreserveLdedupsOfPriority` parameter in the `setparameter` command (see Modifying Preserve Local Dedup Mode on page 586).

In addition, if over a period of time you find that the appliance is unable to "catch-up" with backlogged local or remote dedup jobs, you can disable the ability to preserve snapshot and/or preserve local dedup images as follows:

- For all applications:
  - You can disable the Preserve Snapshot setting through the `PreserveSnapsOfPriority` parameter in the `setparameter` command (see Modifying Preserve Snapshots Settings on page 585).
  - You can disable the Preserve Local Dedup setting through the `PreserveLdedupsOfPriority` parameter in the `setparameter` command (see Modifying Preserve Local Dedup Mode on page 586).
For a specific application, you can disable Image Preservation for a specific application using the flags ProcessLatestSnap and ProcessLatestDedup options of the chsla command. When you enable a flag (set it to true), the appliance processes the most recent snapshot or dedup image for an application and allows the older images to expire.

Modifying Image Preservation Settings On a System-wide Application Level

You can modify Image Preservation priority settings for preserved snapshots jobs and/or local dedup jobs through the system-level setparameter command. Modifying the preserved snapshot and/or local dedup settings may be necessary when you need to:

- Change the global application priority of Preserve Snapshots or Preserve Dedup Images settings to limit the scope exclude applications of a certain priority setting. You can instruct the appliance to preserve images for only Medium and High Priority applications or to preserve images for only High Priority applications.
- Disable the Image Preservation function if the appliance is unable to “catch-up” with backlogged snapshot or local dedup images.

Note: If necessary, you can disable Image Preservation for a specific application using the flags ProcessLatestSnap and ProcessLatestDedup options of the chsla command. When you enable a flag (set it to true), the appliance processes the most recent snapshot or dedup image for an application and allows the older images to expire. See Disabling Image Preservation Mode On A Per Application Basis on page 587 for details.

This section includes the following procedures:

- Modifying Preserve Snapshots Settings on page 585
- Modifying Preserve Local Dedup Mode on page 586

Modifying Preserve Snapshots Settings

A dedupable snapshot is a snapshot image that would normally be deduped by the appliance based on the frequency, retention, start time, end time specified in the policy template for an application. At times, the appliance may start to lag behind in the snapshot to dedup jobs due to resource constraints. When this lag occurs, the setting of the PreserveSnapsOfPriority parameter in the setparameter command defines to the appliance how to preserve snapshot images that are due for expiration but not yet successfully deduped.

If necessary, you can change the application priority of the PreserveSnapsOfPriority parameter from low (the default setting) to high or medium. If you find that the appliance is unable to “catch-up” with backlogged local jobs, you can disable the function by setting the PreserveSnapsOfPriority parameter to none.

Options for the PreserveSnapsOfPriority parameter include:

- **low**: All applications (low, medium, and high priority) will have their snapshot images preserved. This is the default setting.
- **medium**: High and medium priority applications will have their snapshot images preserved.
- **high**: High priority applications will have their snapshot images preserved.
- **none**: No local snapshot images will be preserved even if the local dedup job has not run on those images. When the snapshot image reaches its expiration time, barring other dependencies, it will be expired.

The following example illustrates modifying the PreserveSnapsOfPriority parameter to preserve only high priority applications:

```bash
PUT https://{_API_Server}//api/task/setparameter?param=PreserveSnapsOfPriority&value=high
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
```
The following example illustrates disabling the Preserve Snapshot function:

```
PUT https://{_API_Server}//api/task/setparameter?param=PreserveSnapsOfPriority&value=none
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
```

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

Modifying Preserve Local Dedup Mode

Similar to dedupable snapshots, there are local dedup images that are candidates for remote deduplication based on the remote dedup policy template. At times, the appliance may start to lag behind in the local to remote deduplication jobs due to resource constraints. When this lag occurs, the setting of the `PreserveLdedupsOfPriority` parameter in the `setparameter` command defines to the appliance how to preserve local dedup images that are due for expiration but not yet successfully processed.

If necessary, you can change the application priority of Preserve Dedup Images from low (the default setting) to high or medium. If you find that the appliance is unable to “catch-up” with backlogged remote dedup jobs, you can disable the function by setting the `PreserveLdedupsOfPriority` parameter to `none`.

Options for the `PreserveLdedupsOfPriority` parameter include:

- **low**: All applications (low, medium, and high priority) will have their local dedup images preserved. This is the default setting.
- **medium**: High and medium priority applications will have their local dedup images preserved.
- **high**: High priority applications will have their local dedup images preserved.
- **none**: No local dedup images will be preserved. When the local dedup image reaches its expiration time, barring other dependencies, it will be expired.

The following example illustrates modifying the `PreserveLdedupsOfPriority` parameter to preserve only high priority applications:

```
PUT https://{_API_Server}//api/task/setparameter?param=PreserveLdedupsOfPriority&value=high
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
```

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

The following example illustrates disabling the Preserve Local Dedup function:

```
PUT https://{_API_Server}//api/task/setparameter?param=PreserveLdedupsOfPriority&value=none
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
```

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

The following commands set the `PreserveLdedupsOfPriority` parameter to medium so that no low priority application will have its images preserved:

```
PUT https://{_API_Server}//api/task/setparameter?param=PreserveLdedupsOfPriority&value=medium
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
```

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.

```
PUT https://{_API_Server}//api/task/setparameter?param=PreserverSnapsOfPriority&value=medium
Authorization: 92929a8b-a413-476f-a624-5b575cffe5d3
```

where 92929a8b-a413-476f-a624-5b575cffe5d3 is the session ID.
Disabling Image Preservation Mode On A Per Application Basis

If necessary, you can disable the preservation of specific applications as part of image preservation if the appliance is unable to “catch-up” with backlogged snapshot or dedup jobs for that application. When disabled, the appliance resumes processing the most recent snapshot or dedup image and discards all of the preserved images for the application.

Use the `-flags ProcessLatestSnap:true` and `ProcessLatestDedup:true` options of the `chsla` command to modify the attributes of an SLA to disable image preservation of snapshots or dedup images on an application basis for current in-process snapshot or dedup jobs.

Included below is the syntax for the `chsla` command.

The `flags` keyword of the `chsla` command modifies the image preservation behavior for an application as described below.

**Note:** For details on the other parameters used in `chsla`, see the `chsla` command discussion in this document.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>flags=boolean</td>
<td>Optional. Configures the flag setting to disable/enable the catch-up of snapshot or local dedup jobs for a specific application.</td>
</tr>
</tbody>
</table>

**Note:** Use `lssla` to retrieve the SLA ID of the SLA to be modified.

Settings include:

- **ProcessLatestSnap:** `true | false`: Instructs the appliance if it should change its default behavior and resume processing the most recent snapshot images and discard all of the preserved images for the application. By default, the system-wide `PreserveSnapsOfPriority` parameter in the `setparameter` command is set to all applications (low, medium, and high priority), which means that the `ProcessLatestSnap` flag is automatically disabled (set to `ProcessLatestSnap:false`). You can specify `ProcessLatestSnap:true` to disable catch-up mode for a specific application.

- **ProcessLatestDedup:** `true | false`: Instructs the appliance if it should change its default behavior and resume processing the most recent dedup images and discard all of the preserved images for the application. By default, the system-wide `PreserveDedupsOfPriority` parameter in the `setparameter` is set to all applications (low, medium, and high priority), which means that the `ProcessLatestDedup` flag is automatically disabled (set to `ProcessLatestDedup:false`). You can specify `ProcessLatestDedup:true` to disable catch-up mode for a specific application.

**Note:** Once you set the flags `ProcessLatestSnap` or `ProcessLatestDedup` to true, the flags option will remain set to true until the system is in process. The parameters will be reset back to the default state (false), once the process is completed.
The following example illustrates resuming processing the most recent dedup images and discarding the preserved images for SLA ID 205677:

The following example illustrates resuming processing the most recent snapshot images and discarding the preserved images for SLA ID 205677:

This example illustrates re-enabling image preservation for local dedup jobs for SLA ID 205677 to address backlogged local dedup jobs.

**Alerts and Warnings**

Use the `lsnsmpevent` command to monitor the various SNMP events that may appear when the appliance preserves snapshot and/or local dedup images. This section outlines the various alerts and warnings related to image preservation.

**Warning Level Alert—First Time the Snapshot Expiration Window is Reached**

A Warning level alert is generated (and posted to the event log) the first time the snapshot expiration window is reached for an application and the image is held by the appliance. A similar Warning level Alert also occurs for remote deduplication of local dedup images.

This Warning level alert is generated for the first snapshot for each application that has its expiration deferred. When the count of deferred expirations for an application goes to zero, the Warning alert trigger is reset. The next time there is a dedupable snapshot image that is held by the appliance an alert will be posted again. An example of this particular Warning alert message is shown below:

The snapshot image Image_0998496 for application mgm-win-1 hostname mgm-win-1 (appid 5577) was not expired even though expiration was due, since it has not been deduplicated. This is the first image that has not been expired in this manner for this application.

**Warning Level Alert—Snapshot Image Expired Because Threshold Limit Exceeded**

When an application has preserved snapshots, and a dedupable snapshot is expired because the appliance has exceeded the threshold limits (such as VDisk count or pool capacity), a Warning level alert indicating this condition is posted. This warning will be logged only for the first snapshot expired due to this situation. The same requirement applies to local dedup images with regard to remote dedup replication.

Included below is a summary of the Warning thresholds for VDisk and storage pools as specified through the `chdiskpool`, `configresourcwarning`, `mkdiskpool`, and `getresourcwarning` commands:

- The default Warning threshold for VDisks usage is 90%. The VDisk limit for the CDS appliance is 2048, and for the Sky appliance, the VDisk limit varies with the installed capacity license (1000, 3000, or 5000 VDisks).
- The default Warning level is 80% for the snapshot and primary pools and 75% for the deduplication pool. You set Safe Mode to an appropriate level of usage; the default value is 90% for the snapshot and primary pools.

**Daily Warning Level Event—Deferred Expirations for Snapshots**

A daily warning level event is generated when there are deferred expirations for snapshots. This daily warning includes a count of images for which expiration was deferred because these images are all candidates for deduplication. An example of such a daily warning level event is shown below:

The number of images not expired awaiting further processing is 2 images (2 snapshots, 0 dedups) from 1 unique applications. 2 snapshots and 0 dedups were added in the last period of 24 hours.
Daily Warning Level Event—Deferred Expirations Because Threshold Limit Exceeded

A daily warning level event is posted when a number of images that had deferred expirations were expired because the appliance has exceeded the threshold limits (such as VDisk count or pool capacity). The message includes a count of images expired in this fashion. An example of such an event is shown below:

The number of images awaiting further processing that had to be discarded is 5 images (3 snapshots, 2 dedups) from 3 unique applications in the last period of 24 hours.

Warning Level Alert—All Preserved Images Have Been Processed

When the number of preserved images drops to zero, the following alert will be generated similar to the example shown below:

All images that had been held from expiration for further processing now have been process or expired.

Weekly Error Level Event—Images Deduplicated or Remotely Replicated After 7 Days

When there are images that have not been deduplicated or remotely replicated for a period of 7 days, a weekly error level event of severity Error is raised. When the 7th day is reached an alert will be generated similar to the example shown below to inform you that the appliance has been in Preserve Mode for 7 days.

Still in preserved image mode after 7 days. The number of images not expired awaiting further processing is 486 images (486 snapshots, 0 dedups) from 1 unique applications. 0 snapshots and 0 dedups were added in the last 2555 seconds (0 hours 42 minutes).
This appendix describes the list of system parameters associated with the following commands:

- `getparameter` on page 183
- `setparameter` on page 181

You specify these parameters using the `param` keyword in these commands.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>appminshrinkefnewestagingdisk</td>
<td>String value for the minimum application shrink size threshold for creating new staging disks (defaults to 32GB).</td>
<td>34359738368</td>
<td>----------------------------</td>
</tr>
<tr>
<td>auditage</td>
<td>Number of days an audit is kept.</td>
<td>90</td>
<td>1-365</td>
</tr>
<tr>
<td>auditchanges</td>
<td>Audit of old and new values for privileged commands.</td>
<td>true</td>
<td>true or false</td>
</tr>
<tr>
<td>authentication.method</td>
<td>Determines which authentication method to use for UI login (database or LDAP authentication).</td>
<td>database</td>
<td>database or ldap</td>
</tr>
<tr>
<td>autoconfigsanports</td>
<td>If set to 1, support auto configuration is enabled.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>backupjobsperhost</td>
<td>The maximum number of snap, direct-dedup and dedup-async jobs to run at a time on a single host.</td>
<td>1</td>
<td>1 to 1000</td>
</tr>
<tr>
<td>bdd.ip.test.timeout</td>
<td>The time (in seconds) for the BDD server to wait before restoring the network configuration.</td>
<td>30</td>
<td>0 to 300</td>
</tr>
<tr>
<td>changeratedb</td>
<td>Change rate for DB application for Guardrails calculations.</td>
<td>6</td>
<td>0 to 100</td>
</tr>
<tr>
<td>changeratenondb</td>
<td>Change rate for non-database application .</td>
<td>3</td>
<td>0 to 100</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>checkpoolspace</td>
<td>Check pool space for rehydration.</td>
<td>0</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ChildLimit</td>
<td>Specifies the default database descendant level limit (children and the</td>
<td>5</td>
<td>Maximum value varies by environment</td>
</tr>
<tr>
<td></td>
<td>grandchildren) for all types of child database applications. The</td>
<td></td>
<td>and infrastructure</td>
</tr>
<tr>
<td></td>
<td>application-specific level limit (OracleChildLimit or</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SQLServerChildLimit), if specified, overrides the limit for that specific</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>database application.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>copywarninglimit</td>
<td>Modifies the default limit of 14 snapshot copies that will generate a</td>
<td>14</td>
<td>2 to 1000</td>
</tr>
<tr>
<td></td>
<td>warning if this limit is reached or exceeded based on SLA policy settings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The supported value range is from 2 to 1000.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>createmultiplestagingdisks</td>
<td>Create multiple staging disks for out of band applications:</td>
<td>1</td>
<td>0 to 1</td>
</tr>
<tr>
<td></td>
<td>• 0—Create a single staging disk for each application from now.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 1—Create multiple staging disks where applicable, based on threshold</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>parameters and connector capabilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>critical.events.exclude</td>
<td>The error level events to exclude from critical events.</td>
<td>10011,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10013,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10023,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10025,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10039,</td>
<td>Critical event ID</td>
</tr>
<tr>
<td>critical.events.include</td>
<td>The warning level events to include as critical events.</td>
<td>9052,</td>
<td>Event IDs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>99999999999</td>
<td></td>
</tr>
<tr>
<td>dailystateexpirationindays</td>
<td>Number of days the daily statistics are to be kept in the database.</td>
<td>60</td>
<td>30 to 360</td>
</tr>
<tr>
<td>daronrampslots</td>
<td>The number of slots reserved for dedup-async of new applications.</td>
<td>0</td>
<td>0 to 100</td>
</tr>
<tr>
<td>datastoreutilizationpollfreqinmins</td>
<td>The frequency at which datastore space utilization is checked during VM data-movement operation.</td>
<td>15</td>
<td>1 to 7200</td>
</tr>
<tr>
<td>DBAuthentication</td>
<td>Instructs the host to use DB Authentication for Oracle applications.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>deduprehydratedimageexpirationinhours</td>
<td>Controls the expiration duration for a rehydrated dedup image. The expiration duration is set in hours with a default of 24 hours.</td>
<td>24</td>
<td>0 to 100000</td>
</tr>
<tr>
<td>default.ssh.connect.timeout</td>
<td>Default connection timeout for SSH connections for the CDS appliance.</td>
<td>60</td>
<td>0 to 3000</td>
</tr>
<tr>
<td>default.v3700.ssh.connect.timeout</td>
<td>Default connection timeout for SSH connections for the v3700.</td>
<td>60</td>
<td>0 to 3000</td>
</tr>
<tr>
<td>default.ssh.connect.timeout</td>
<td>Default connection timeout for SSH connections for the Actifio appliance.</td>
<td>60</td>
<td>0 to 3000</td>
</tr>
<tr>
<td>default.v3700.ssh.session.timeout</td>
<td>Default session timeout for SSH connections for the v3700.</td>
<td>60</td>
<td>0 to 3000</td>
</tr>
<tr>
<td>delegatingpoolstatecachesize</td>
<td>Delegating service poolstate cache size.</td>
<td>30</td>
<td>10 to 200</td>
</tr>
<tr>
<td>delegatingpoolstatecachetimeout</td>
<td>Delegating service poolstate cache timeout (in minutes).</td>
<td>5</td>
<td>1 to 20</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
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<td>-------------</td>
</tr>
<tr>
<td>disable.TLSv1.0</td>
<td><strong>Note:</strong> The <code>disable.TLSv1.0</code> parameter has been deprecated. Instead, we recommend that you use the <code>webserver.TLS.protocols</code> parameter if it is necessary to define the allowed TLS versions. Please refer to the discussion of the <code>webserver.TLS.protocols</code> parameter later in this table for inclusive protocol control information. An advanced setting that disables Transport Layer Security (TLS) version 1.0 for backwards incompatibility with older operating systems, browsers, and Adobe Air clients. This feature should not be enabled without a complete understanding of the cryptographic capability of all management clients. • <code>true</code> disables the TLSv1.0 protocol on the tomcat server in the appliance. This setting automatically restarts the tomcat server on the appliance. • <code>false</code> re-enables the TLSv1.0 protocol on the tomcat server in the appliance. This setting automatically restarts the tomcat server on the appliance.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>disableguardrails</td>
<td>Turns off the “guardrails” function which is used to warn the user about possible impact on system resources when creating an SLA policy in SLA Architect and when assigning that SLA policy in Application Manager. Valid entries are ‘true’ and ‘false’. By default, this value is ‘false’ (the guardrails function is enabled).</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>disablenbdvmbackups</td>
<td>Fail VM backups if SAN mode data movement cannot be performed.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>DiscoveryAvoidEsxUuid</td>
<td>Do not use ESX UUID for resolution of ESX host during VM discovery.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>---------------------------------</td>
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</tr>
<tr>
<td>dontexpirededupsduringgc</td>
<td>If 1, do not expire dedup objects if GC job is less than 30% complete.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>dosnapshotonreplicationfailure</td>
<td>Continue with snapshot processing even if StreamSnap replication fails.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enable.password.complexity</td>
<td>Enforces the specification of complex local user or admin password that is to be used when a user logs into an appliance. A complex password can be composed of any combination of upper and lower case letters, numbers, and the following special characters: <code>!</code>, <code>@</code>, <code>#</code>, <code>$</code>, <code>%</code>, <code>^</code>, <code>&amp;</code>, <code>*</code>, <code>(</code>, <code>)</code> • true enforces the requirement to specify a complex local user or admin password. • false disables the requirement to specify a complex local user or admin password.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>enablecompressedreplication</td>
<td>If 1, implements compression for StreamSnap replication to the second appliance. Compression is required to increase efficiency of the StreamSnap replication to the second appliance when transferring data over the network. If compression is not a requirement for StreamSnap replication to the second appliance (for example, when replicating images and videos), specify 0. These settings may be overridden by the compressions settings in the StreamSnap policy option.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
</tbody>
</table>

**Note:** Enabling compression may not always provide the best results. Compression uses additional CPU cycles at the cost of saving network bandwidth. If the available network bandwidth is better than the system resources such as CPUs, it is advised to disable compression.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>enablededupasync</td>
<td>If 1, scheduling of dedup-async jobs is enabled.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enableesxmount</td>
<td>Enable mounting of generic backup to an ESX host.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>enableexpiration</td>
<td>If 1, scheduled expirations is enabled. Set to 0 to disable scheduled expirations.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>EnableGenericLVM</td>
<td>Enable the generic Logical Volume Management (LVM) functionality.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>enableindexing</td>
<td>Set to ‘true’ to enable global indexing and search.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>enablelocaldedups</td>
<td>If 1, scheduling of local dedup and direct-to-dedup jobs is enabled. Set to 0 to disable scheduling.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>EnableMountToVirtualSqlCluster</td>
<td>Enable mount to virtual SQL cluster.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>enablenasserversnapexpiration</td>
<td>Set to 0 to disable setting the expiration of NAS server snapshots. This system parameter allows the appliance to expire snapshots off the NAS server itself.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enableremotededups</td>
<td>If 1, scheduling of remote dedup jobs is enabled. Set to 0 to disable scheduling.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enablereplicationscripts</td>
<td>If 1, enable invoking user-defined scripts post replication.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enablescheduler</td>
<td>If 1, the global scheduler is enabled. Set to 0 to disable scheduling.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enablesnapshots</td>
<td>If 1, scheduling of snapshot jobs is enabled. Set to 0 to disable scheduling.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enablestreamingreplication</td>
<td>If 1, enables parallel replication with snapshot processing for VMware replication jobs. Set to 0 to disable parallel replication (only disable this function under direct guidance of Support).</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
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<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<td>-----------------</td>
</tr>
<tr>
<td>enablestreamsnap</td>
<td>If 1, enables the scheduling of StreamSnap jobs. Set to 0 to disable scheduling (only disable this function under direct guidance of Support).</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>enablevaults</td>
<td>If 1, enables the scheduling of OnVault jobs. Set to 0 to disable scheduling (only disable this function under direct guidance of Support).</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>ExpirerEventLogFrequency</td>
<td>The frequency of the event log expire in seconds.</td>
<td>88400</td>
<td>3600 to 86400</td>
</tr>
<tr>
<td>expirerinterval</td>
<td>The frequency of the expiration loop in seconds.</td>
<td>5</td>
<td>1 to 120</td>
</tr>
<tr>
<td>expirerjobspercycle</td>
<td>The maximum number of jobs to start in a expiration loop.</td>
<td>10</td>
<td>1 to 20</td>
</tr>
<tr>
<td>expirerloadcount</td>
<td>Minimum number of images the expire should consider for each pass.</td>
<td>2500</td>
<td>100 to 10000</td>
</tr>
<tr>
<td>expirerreloadinterval</td>
<td>The frequency of reloading the expiration in seconds.</td>
<td>900</td>
<td>20 to 3600</td>
</tr>
<tr>
<td>expirerrefailure</td>
<td>Retry for expiration on a failure in seconds.</td>
<td>3600</td>
<td>900 to 86400</td>
</tr>
<tr>
<td>expirerretrydependent</td>
<td>Retry for expiration deferred because of a unexpired dependent backup in seconds.</td>
<td>900</td>
<td>60 to 3600</td>
</tr>
<tr>
<td>expirerretrylocked</td>
<td>Retry for expiration deferred because of a lock in seconds.</td>
<td>60</td>
<td>30 to 900</td>
</tr>
<tr>
<td>firewall.icmp.redirect.drop.threshold</td>
<td>Our firewall drops ICMP redirect packets. This parameter defines a threshold. If today's drop count is beyond the threshold, an event is generated to warn about the potential network issue.</td>
<td>5000</td>
<td>1 to 1000000</td>
</tr>
<tr>
<td>firstbackupwholevmdk</td>
<td>If 1, change block tracking is ignored for first VM backup.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>GC_ZTR_PARALLEL_ACTIVE_WORKERS</td>
<td>The number of active (high-priority transaction) workers on zero-token resolution, must be a power of 2.</td>
<td>-1</td>
<td>1, 2, 4, 8, and 16</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
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<td>-------------</td>
</tr>
<tr>
<td>GC_ZTR_PARALLEL_HI_PRIO</td>
<td>The transaction priority to associate with high priority for zero-token resolution.</td>
<td>10</td>
<td>1 to 10</td>
</tr>
<tr>
<td>GC_ZTR_PARALLEL_MAX_WORKERS</td>
<td>Total number of workers on zero-token resolution (both active and inactive), must be a power of 2.</td>
<td>-1</td>
<td>1, 2, 4, 8, and 16</td>
</tr>
<tr>
<td>gcminthreshold</td>
<td>Minimum usage threshold (percentage) for dedup pool before gc schedule is enabled.</td>
<td>65</td>
<td>1 to 100</td>
</tr>
<tr>
<td>gcsafethreshold</td>
<td>The safe mode threshold (percentage) for dedup pool</td>
<td>85</td>
<td>1 to 100</td>
</tr>
<tr>
<td>genericappfailonconnecterror</td>
<td>Fail the backup job for a generic application if the Connector cannot be reached.</td>
<td>0</td>
<td>0 or 1</td>
</tr>
<tr>
<td>hostheartbeattimeoutinmins</td>
<td>Host heartbeat timeout in minutes.</td>
<td>60</td>
<td>0 to 43200</td>
</tr>
<tr>
<td>hourlystatexpirationindays</td>
<td>Number of days the hourly stats has to be kept in DB</td>
<td>14</td>
<td>0 to 360</td>
</tr>
<tr>
<td>http.concurrentsession.allow</td>
<td>Allow concurrent HTTP sessions for the same user.</td>
<td>true</td>
<td>true, false</td>
</tr>
<tr>
<td>https.request.timeout</td>
<td>Request timeout for https connections in milliseconds. The default value is 7 minutes, min 0, and max 30 minutes.</td>
<td>420000</td>
<td>0 to 1800000</td>
</tr>
<tr>
<td>https.socket.timeout</td>
<td>Socket timeout for https connections in milliseconds. default 7 minutes min 0, max 30 minutes.</td>
<td>420000</td>
<td>0 to 1800000</td>
</tr>
<tr>
<td>ignore.schedule.off.violation</td>
<td>When set to 1, specifies to ignore SLA violations when the scheduler is off.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>ignoredtraps</td>
<td>Identifies traps to be ignored (colon ‘:’, separated). You can customize the traps to ignore by event ID or by event ID associated with a specific component.</td>
<td>0</td>
<td>eventid or component name-eventid</td>
</tr>
<tr>
<td></td>
<td>• eventid (for example, ignoredtraps-value 43918)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• componentname-eventid (for example, ignoredtraps-value CDS-43918)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
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</tr>
<tr>
<td>ldap.referral.support</td>
<td>This is to specify whether to support LDAP referral.</td>
<td>false</td>
<td>true, false</td>
</tr>
<tr>
<td>ldap.user.autocreate</td>
<td>Automatically create LDAP users if they don’t exist.</td>
<td>false</td>
<td>true, false</td>
</tr>
<tr>
<td>ldeduponrampslots</td>
<td>The number of slots reserved for local dedups and direct-to-dedup of new applications.</td>
<td>0</td>
<td>0 to 100</td>
</tr>
<tr>
<td>licensedcapacity</td>
<td>Configured licensed capacity, in TB.</td>
<td>0</td>
<td>0 to 10240</td>
</tr>
<tr>
<td>limitdedupexpiration</td>
<td>The maximum number of scheduled dedup expirations.</td>
<td>2</td>
<td>0 to 25</td>
</tr>
<tr>
<td>liveclonerefreshcreate</td>
<td>When set to 1, create a reference object during a LiveClone refresh to revert back to in the case of a refresh failure.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>maptoallesxincluster</td>
<td>Map staging disk to all ESX hosts in a cluster.</td>
<td>1</td>
<td>0 or 1</td>
</tr>
<tr>
<td>maxconcurrentvaultsubjobs</td>
<td>Maximum number of concurrent OnVault subjobs ingested into the OnVault. Subjobs are flow-controlled such that at least one subjob per OnVault job is always allowed without throttling. Use this parameter when you need to limit the maximum number of OnVault subjobs.</td>
<td>12</td>
<td>4 to 1000</td>
</tr>
</tbody>
</table>

Note: The default for maxconcurrentvaultsubjobs is 12 and the default for maxvaultslots is 4. In this case, there can be at any time a total of 4 top-level OnVault jobs running. To prevent starving OnVault jobs, a minimum of 1 slot each has been reserved for every OnVault job. Note that the first job cannot use all 12 slots; it can only use up to 9 slots, and will reserve 3 of the remaining slots for new OnVault jobs to ensure that all OnVault jobs can make progress.
<table>
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<tr>
<th>Parameter</th>
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<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>maxconnectorupgradetimeout</td>
<td>Maximum connector upgrade Task timeout in minutes (default to 10 minutes).</td>
<td>10</td>
<td>5 to 60</td>
</tr>
<tr>
<td>maxdarslots</td>
<td>The maximum number of slots for enhanced asynchronous deduplication.</td>
<td>3</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxdataaccessslots</td>
<td>The maximum number of data access slots for mount, clone and restore jobs.</td>
<td>12</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxesxscans</td>
<td>The maximum number of ESX host parallel scans per job while mapping to an ESX cluster.</td>
<td>10</td>
<td>1 to 50</td>
</tr>
<tr>
<td>maxexpirationslots</td>
<td>The maximum number of expiration slots.</td>
<td>10</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxldapresults</td>
<td>The maximum number of objects processed from an LDAP query.</td>
<td>50000</td>
<td>————</td>
</tr>
<tr>
<td>maxidedupslots</td>
<td>The maximum number of local dedup slots allowed.</td>
<td>8</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxlogreplicateslots</td>
<td>The maximum number of log replication slots allowed.</td>
<td>6</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxondemandslots</td>
<td>The maximum number of slots for all types of on demand jobs.</td>
<td>6</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxoutofbandappsize</td>
<td>String value for maximum supported out-of-band application size, specified in bytes. This is a configuration parameter that is used to tune the maximum out-of-band application supported size (in bytes).</td>
<td>140737488355 328</td>
<td>————</td>
</tr>
<tr>
<td>MaxPsrvThreads</td>
<td>The maximum number of psrv threads allowed.</td>
<td>800</td>
<td>400 to 1200</td>
</tr>
<tr>
<td>maxrdedupslots</td>
<td>The maximum number of remote dedup slots allowed.</td>
<td>6</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxskyjoins</td>
<td>The maximum number of appliance pairings allowed for an Sky appliance.</td>
<td>50</td>
<td>————</td>
</tr>
<tr>
<td>maxsnapslots</td>
<td>The maximum number of snapshots slots.</td>
<td>6</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
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<td>-------------</td>
</tr>
<tr>
<td>maxstreamslotsnap</td>
<td>The maximum number of scheduled StreamSnap slots.</td>
<td>6</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxvaultslots</td>
<td>The maximum number of scheduled OnVault jobs. Use this parameter when you need to control the maximum slots for OnVault jobs.</td>
<td>4</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>maxvmtaskretrycount</td>
<td>The maximum VM task retry count.</td>
<td>10</td>
<td>1 to 100</td>
</tr>
<tr>
<td>maxvmtasktimeout</td>
<td>Maximum VM task timeout, in seconds.</td>
<td>600</td>
<td>60</td>
</tr>
<tr>
<td>minlaststagingdisksize</td>
<td>String value for minimum size of last staging disk for an application with multiple staging disks.</td>
<td>27487790694</td>
<td>----------</td>
</tr>
<tr>
<td>missed.cluster.ping.threshold</td>
<td>Threshold value for the number of missed cluster pings before raising a trap. -1 indicates never to alert.</td>
<td>-1</td>
<td>----------</td>
</tr>
<tr>
<td>nasserversnapexpirationindays</td>
<td>Expiration for NAS server snapshots, specified in days. This system parameter allows the appliance to expire snapshots off the NAS server, based on the specified number of days.</td>
<td>3</td>
<td>0 to 365</td>
</tr>
<tr>
<td>netapp.enable</td>
<td>Set to 1 to enable NetApp as a NAS server type.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>networkinterfacecheck</td>
<td>Specifies the network interface (Ethernet port) to monitor and sends the SNMP trap if it is down. Multiple interfaces are allowed; use a comma to separate them.</td>
<td>none</td>
<td>none, eth0, and eth1</td>
</tr>
<tr>
<td>onejobperhostoverride</td>
<td>Override the one-job-per-host limit on an HPUX or AIX host.</td>
<td>none</td>
<td>none, aix-only, hpux-only, and aix-and-hpux</td>
</tr>
<tr>
<td>operatingwindowintothe nextday</td>
<td>When set to 1, operating windows extend into the next day even if they were excluded.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>OracleChildLimit</td>
<td>Changes the app-aware mount Oracle database descendant level limit (children and grandchildren). By default (when set to 0), the ChildLimit parameter specifies the default database descendant level limit for all types of child database applications. The OracleChildLimit parameter allows you to override this default child level limit for Oracle databases.</td>
<td>0</td>
<td>Maximum value varies by environment and infrastructure</td>
</tr>
<tr>
<td>password.minlength</td>
<td>Specifies a minimum password length for the local user or admin when they log into an appliance.</td>
<td>6</td>
<td>6 to 1024</td>
</tr>
<tr>
<td>preferndssl</td>
<td>When set to 1, specifies to use NBD mode VM backups over SSL instead using plain (plaintext) NBD mode VM backups. The use of NBDSSL results in the data being encrypted in flight while performing the data transfer from the VMDK files into the appliance.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>preflight.default.timeout</td>
<td>Default timeout for the appliance preflight check (in minutes). You can run a preflight check for available update file on the appliance to check if the system is in a good state to apply the update.</td>
<td>5 minutes</td>
<td>5 to 30 minutes</td>
</tr>
<tr>
<td>preservelastimage</td>
<td>If 1, do not expire the last image of each type for any protected application.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
</tbody>
</table>
### PreserveLdedupsOfPriority

Defines how to preserve local dedup images that are due for expiration but not yet successfully processed. By default, all local dedup images are preserved until the remote deduplication system can catch up with the preserved local dedup images, or until the capacity in the local dedup pool has reached the warning level.

**Note:** For background on image preservation, including modifying settings, see Configuring Image Preservation on page 583.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreserveLdedupsOfPriority</td>
<td></td>
<td>low</td>
<td>none, high, medium, and low</td>
</tr>
</tbody>
</table>

### PreserveSnapsOfPriority

Defines how to preserve snapshot images that are due for expiration but not yet successfully deduped. By default, all applications (low, medium, and high priority) will have their snapshot images preserved until the local dedup system can catch up with the preserved snapshot images, or until VDisk counts or performance pool capacity thresholds are reached.

**Note:** For background on image preservation, including modifying settings, see Configuring Image Preservation on page 583.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreserveSnapsOfPriority</td>
<td></td>
<td>low</td>
<td>none, high, medium, and low</td>
</tr>
</tbody>
</table>

### rdeduponrampslots

The number of slots reserved for remote dedups of new applications. 0

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>rdeduponrampslots</td>
<td>The number of slots reserved for remote dedups of new applications.</td>
<td>0</td>
<td>0 to 100</td>
</tr>
</tbody>
</table>

### readyvmtargetlowsplash

Set to 1 to avoid writing zero blocks on target VMDK using low splash comparison by reading target VMDK. 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>readyvmtargetlowsplash</td>
<td></td>
<td>1</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

### remotepsrvrequesttimeout

Timeout for remote psrv requests. 5

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>remotepsrvrequesttimeout</td>
<td>Timeout for remote psrv requests.</td>
<td>5</td>
<td>5 to 30</td>
</tr>
</tbody>
</table>

### removeduplicateevents

Attempt to removed duplicate events from event emails. false

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>removeduplicateevents</td>
<td>Attempt to removed duplicate events from event emails.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>reserveddataaccessslots</td>
<td>The number of slots reserved for mount, clone and restore jobs.</td>
<td>6</td>
<td>0 to 1000</td>
</tr>
<tr>
<td>reservedexpirationslots</td>
<td>The number of slots reserved for scheduled expirations.</td>
<td>10</td>
<td>0 to 25</td>
</tr>
<tr>
<td>reserveddedupslots</td>
<td>The number of slots reserved for scheduled remote local deduplication jobs.</td>
<td>4</td>
<td>0 to 25</td>
</tr>
<tr>
<td>reservedlogreplicateslots</td>
<td>The number of slots reserved for log replication.</td>
<td>2</td>
<td>0 to 25</td>
</tr>
<tr>
<td>reservedondemandslots</td>
<td>The number of slots reserved for all types of on-demand jobs.</td>
<td>3</td>
<td>1 to 1000</td>
</tr>
<tr>
<td>reservedrdedupslots</td>
<td>The number of slots reserved for scheduled remote dedup jobs.</td>
<td>6</td>
<td>0 to 25</td>
</tr>
<tr>
<td>reservedsnapslots</td>
<td>The number of slots reserved for scheduled snapshots.</td>
<td>2</td>
<td>0 to 25</td>
</tr>
<tr>
<td>reservedstreamsnapslots</td>
<td>The number of slots reserved for scheduled StreamSnap slots.</td>
<td>2</td>
<td>0 to 25</td>
</tr>
<tr>
<td>reservedvaultslots</td>
<td>The number of slots reserved for scheduled OnVault jobs. Use this parameter when you need to limit the reserved slots for OnVault jobs.</td>
<td>4</td>
<td>0 to 25</td>
</tr>
<tr>
<td>retriesonfailure</td>
<td>The maximum number of times a failed scheduled job is retried. This parameter specifies the number of times the job must be retried in the event of a failed job. For example, retriesonfailure 3 specifies that the job retries three times after original attempt.</td>
<td>3</td>
<td>0 to 20</td>
</tr>
<tr>
<td>retrydecay</td>
<td>The delay for each subsequent retry in percent. This parameter specifies the % of delay to attempt further retries.</td>
<td>400</td>
<td>100 to 10000</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>retrydelay</td>
<td>The delay before the first retry of a failed job in seconds. This parameter specifies</td>
<td>240</td>
<td>30 to 3600</td>
</tr>
<tr>
<td></td>
<td>the number of seconds that the job should wait to retry after the original attempt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For example, retrydelay 240 specifies that the first job retry happens after</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>240 seconds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rfcsnappooloverallocationpercent</td>
<td>When doing an inband restore via RFC we check that the snap pool(s) will</td>
<td>20</td>
<td>0 to 1000</td>
</tr>
<tr>
<td></td>
<td>not be overfilled via RFC. Pad the calculated space required by this percent to</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>assure other concurrently running jobs will not exhaust the pool(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>schedule.watchdog.interval</td>
<td>Time interval in hours for Quartz hourly schedule watchdog. Set to 0 to disable.</td>
<td>3</td>
<td>1 to 24 (0 to disable)</td>
</tr>
<tr>
<td>schedulerinterval</td>
<td>The frequency of the scheduler in seconds.</td>
<td>10</td>
<td>1 to 120</td>
</tr>
<tr>
<td>schedulerjobspercycle</td>
<td>The maximum number of jobs to start in a scheduler loop.</td>
<td>4</td>
<td>1 to 20</td>
</tr>
<tr>
<td>schedulerfailedperiodpercentage</td>
<td>The percentage of Dedup policy RPO as the minimum separation of source snapshot images.</td>
<td>90</td>
<td>0 to 100</td>
</tr>
<tr>
<td>scheduleroptimizations</td>
<td>If 1, use optimizations to speed up scheduling.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>schedulerrdedupperiodpercentage</td>
<td>The percentage of remote dedup policy RPO as the minimum separation of source local</td>
<td>90</td>
<td>0 to 100</td>
</tr>
<tr>
<td></td>
<td>dedup images.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>scriptexectimeout</td>
<td>Timeout waiting for pre and post scripts called using the Connector.</td>
<td>60</td>
<td>1 to 120</td>
</tr>
<tr>
<td>scriptinittimeout</td>
<td>This policy option specifies the timeout value for the init script completion.</td>
<td>300</td>
<td>1 to 600</td>
</tr>
<tr>
<td>secureconnect.local</td>
<td>Local IP address for secureconnect to bind to.</td>
<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>secureconnect.port</td>
<td>Port to use for SecureConnect.</td>
<td>1194</td>
<td>1 to 65536</td>
</tr>
<tr>
<td>secureconnect.proto</td>
<td>Protocol to use for SecureConnect.</td>
<td>udp</td>
<td>udp and tcp</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------------</td>
</tr>
<tr>
<td>secureconnect.proxy_port</td>
<td>Port for SecureConnect proxy.</td>
<td>0</td>
<td>0 to 65536</td>
</tr>
<tr>
<td>secureconnect.proxy_server</td>
<td>Proxy server for SecureConnect</td>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>secureconnect.server</td>
<td>Server for SecureConnect.</td>
<td>secureconnect2.com</td>
<td></td>
</tr>
<tr>
<td>session-timeout-minutes</td>
<td>UI session timeout in minutes.</td>
<td>60</td>
<td>0 to 60</td>
</tr>
<tr>
<td>sla.tolerance</td>
<td>The maximum number of times that the scheduler can fail to meet the SLA criteria before considering a failure as SLA violation. By default, this setting is 0, indicating a failure to meet the SLA criteria will be considered an SLA violation.</td>
<td>0</td>
<td>0 and 1</td>
</tr>
<tr>
<td>slaAnalysis.analysisType</td>
<td>Specifies which SLA analysis method the appliance is to use:</td>
<td>basic</td>
<td>basic and advanced</td>
</tr>
<tr>
<td></td>
<td>• basic – Analyze the SLA based on counting the number of jobs (default behavior).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• advanced – Analyze the SLA based on time-based threshold values.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>slaAnalysis.enable</td>
<td>The setting to enable/disable SLA analysis. By default, this value is 'true'.</td>
<td>true</td>
<td>true and false</td>
</tr>
<tr>
<td>slaAnalysis.notificationtype</td>
<td>The notification type for SLA violation traps.</td>
<td>warning</td>
<td>warning, error, info</td>
</tr>
<tr>
<td>snapshotonrampslots</td>
<td>The number of slots reserved for snapshots of new applications.</td>
<td>0</td>
<td>0 to 100</td>
</tr>
<tr>
<td>snmp.community.string</td>
<td>The community string for sending SNMP traps.</td>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>snmptablesize</td>
<td>Limits the number of records sent by the SNMP agent to the appliance to the management system (the client). Whenever this parameter is set, the SNMP agent will retrieve only the specified number of records and send those records to the respective SNMP clients.</td>
<td>500</td>
<td>100 to 5000</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>SQLServerChildLimit</td>
<td>Changes the app-aware mount SQL server database descendant level limit (children and grandchildren). By default (when set to 0), the ChildLimit parameter specifies the default database descendant level limit for all types of child database applications. The SQLServerChildLimit parameter allows you to override this default child level limit for SQLServer databases.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Only change the SQLServerChildLimit system-level parameter under guidance of Support.</td>
<td>0</td>
<td>Maximum value varies by environment and infrastructure</td>
</tr>
<tr>
<td>stagingdiskgranularity</td>
<td>A string value indicating the size of each staging disk when multiple staging disks are used for an application.</td>
<td>--------</td>
<td>1099511627766</td>
</tr>
<tr>
<td>streamsnapdconnectiontimeout</td>
<td>Connection timeout in seconds for the streamsnapd daemon.</td>
<td>60</td>
<td>1 to 1200</td>
</tr>
<tr>
<td>streamsnapdheartbeattimeout</td>
<td>Time interval between heartbeat messages for the streamsnapd daemon.</td>
<td>60</td>
<td>1 to 1800</td>
</tr>
<tr>
<td>streamsnapdinternaltimeout</td>
<td>Internal connect/disconnect timeout for the streamsnapd daemon.</td>
<td>10</td>
<td>1 to 1800</td>
</tr>
<tr>
<td>streamsnapdmaxmemorysize</td>
<td>Maximum memory usage (in GB) for the streamsnapd daemon.</td>
<td>4</td>
<td>1 to 1024</td>
</tr>
<tr>
<td>streamsnapdmaxreservedconnections</td>
<td>Maximum number of simultaneous reserved SSL connections for a streamsnapd daemon reconnect.</td>
<td>10</td>
<td>5 to 256</td>
</tr>
<tr>
<td>streamsnapdmaxrunningjobs</td>
<td>Maximum number of jobs initiated and received by the streamsnapd daemon (both the source and target appliance).</td>
<td>90</td>
<td>1 to 1024</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>streamsnapdmaxserverconnections</td>
<td>Maximum number of simultaneous non-SSL connections for all internal communication by the streamsnapd daemon. The streamsnapd daemon listens on an internal port (7445).</td>
<td>150</td>
<td>5 to 1024</td>
</tr>
<tr>
<td>streamsnapdmaxsslconnections</td>
<td>Maximum number of simultaneous SSL connections for all inward and outward communication by the streamsnapd daemon. The streamsnapd daemon listens on an external SSL port (5107).</td>
<td>160</td>
<td>1 to 256</td>
</tr>
<tr>
<td>streamsnapdmaxtunnelconnections</td>
<td>Maximum number of simultaneous SSL tunnel connections for the streamsnapd daemon.</td>
<td>50</td>
<td>5 to 256</td>
</tr>
<tr>
<td>streamsnapdmaxwindowsize</td>
<td>Maximum number of outstanding packets in the streamsnapd pipe for each session.</td>
<td>64</td>
<td>8 to 1024</td>
</tr>
<tr>
<td>streamsnapdmillispertick</td>
<td>Number of milliseconds per tick for updating streamsnapd statistics.</td>
<td>1000</td>
<td>100 to 10000</td>
</tr>
<tr>
<td>streamsnapdnetalerttime</td>
<td>Network off detection timeout for the streamsnapd daemon.</td>
<td>900</td>
<td>1 to 10000</td>
</tr>
<tr>
<td>streamsnapdnetworkretries</td>
<td>Maximum number of network retries for the streamsnapd daemon.</td>
<td>5</td>
<td>1 to 1000</td>
</tr>
<tr>
<td>streamsnapdprogressupdateinterval</td>
<td>streamsnapd job progress update interval in seconds.</td>
<td>5</td>
<td>1 to 600</td>
</tr>
<tr>
<td>streamsnapdreconnectdelay</td>
<td>Minimum delay in milliseconds for reconnect in the streamsnapd daemon.</td>
<td>100</td>
<td>1 to 10000</td>
</tr>
<tr>
<td>streamsnaponrampslots</td>
<td>Number of slots reserved for StreamSnap replication of new applications.</td>
<td>0</td>
<td>0 to 100</td>
</tr>
<tr>
<td>sweepthreshold</td>
<td>Determines how aggressive the sweep process will be in reclaiming space from expired backups.</td>
<td>50</td>
<td>1 to 100</td>
</tr>
<tr>
<td>systemcontact</td>
<td>A string value that sets the sysContact Object Identifiers (OID) value as part of the SNMP system information for an appliance.</td>
<td>--------</td>
<td>-----------</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td>systemlocation</td>
<td>A string value that sets the sysLocation OID value as part of the SNMP system information for the appliance.</td>
<td>--------</td>
<td>---------------</td>
</tr>
<tr>
<td>template.agm.lock</td>
<td>When a template is managed by AGM, it is locked, so you cannot change the template on the appliance. This is a backdoor to allow you to modify it, but will cause discrepancy. So it affects the objects on the appliance, not AGM. Set to false to allow local modification for AGM managed templates and associated objects.</td>
<td>true</td>
<td>true or false</td>
</tr>
<tr>
<td>truepathdefaultdriveletter</td>
<td>Assign a drive letter to mounted volumes even if user did not specify a drive letter.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>unreservedslots</td>
<td>The number of additional slots available for any job type.</td>
<td>9</td>
<td>0 to 100</td>
</tr>
<tr>
<td>usegcjob</td>
<td>missed gc/sweep jobs to be rerun.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>usegcjobqueue</td>
<td>Queue missed gc/sweep jobs to be rerun.</td>
<td>false</td>
<td>true and false</td>
</tr>
<tr>
<td>v3700.pwd</td>
<td>The admin password for v3700 storage devices.</td>
<td>Contact your rep for the admin password.</td>
<td></td>
</tr>
<tr>
<td>vaultrehydratedimageexpirationinhours</td>
<td>Default expiration for the rehydrated OnVault image in hours (default to 24).</td>
<td>24</td>
<td>0 to 100000</td>
</tr>
<tr>
<td>vdisklimit</td>
<td>The maximum number of VDisks that can be used for the pool supported by a Sky appliance.</td>
<td>0</td>
<td>0 to 10000</td>
</tr>
<tr>
<td>vixdisklibdebuglevel</td>
<td>The debug level for the vixdisklib.</td>
<td>4</td>
<td>0 to 7</td>
</tr>
<tr>
<td>Parameter</td>
<td>Description</td>
<td>Default</td>
<td>Value Range</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| vmconsolidatedisks                               | Configure job behavior when target VM needs snapshot consolidation. If the VM requires consolidation:  
  fail - Fail the job: backup/DAR/direct-dedup jobs fail.  
  yes - Perform consolidation at the beginning of the job: Backup/direct-dedup/DAR jobs try to perform consolidation at the beginning of the job. If consolidation fails, the job fails with an error message.  
  no - Run the job without performing consolidation: All jobs run normally even if consolidation is pending. | fail    | fail, yes, no |
| vmdatastorefullcriticalthreshold                 | Critical threshold (percentage) for virtual machine’s datastore space usage, above which the virtual machine backup job is aborted and a critical event is logged.                                               | 95      | 80 to 100   |
| vmdatastorefullwarnthreshold                     | Warning threshold (percentage) for virtual machine’s datastore space usage, above which a critical event is logged.                                                                                         | 80      | 50 to 100   |
| vmexistingsnapshotwarning                        | Set to 1 to log a warning for existing snapshots for the VM being backed up.                                                                                                                                | 0       | 0 and 1     |
| vmfilestreshold                                  | Threshold for number of files inside a VM home directory, above which a warning event is logged.                                                                                                            | 32      | 5 to 100    |
| vmlowsplashwithcbt                               | Uses the following parameters:  
  • never - No low splash when CBT exists  
  • threshold - Low splash when CBT crosses vmlowsplashwithcbtthreshold percentage  
  • full - Always use low splash on full vmdk when CBT exists                                                                                                                                            | never   | never, threshold, and full |
<p>| vmlowsplashwithcbtthreshold                      | Percentage of bytes in CBT when low splash is used. Applicable when vmlowsplashwithcbt = threshold.                                                                                                          | 50      | 0 to 100    |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>vminocbtdocompare</td>
<td>Set to 1 to avoid overwriting blocks with same data from VMware snapshot to staging disk, when no changed extent list exists.</td>
<td>1</td>
<td>0 and 1</td>
</tr>
<tr>
<td>vmorgenericbackupmountpvidchang</td>
<td>Mount of VM/Generic backup to host without connector:</td>
<td>1</td>
<td>0 to 2</td>
</tr>
<tr>
<td>e</td>
<td>0 – Do not change LVM PV IDs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 – Change LVM PV IDs if VMware believes the OS is Linux.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 – Always change the LVM PV IDs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>vmtaskcompletiontimeout</td>
<td>VM Task completion timeout (in minutes). The VM Task completion timeout (default of 60 minutes) is used as timeout for task completion. All tasks except clone and recreatedisks honor this setting. This system parameter would be ineffective for clone task and recreatedisks tasks.</td>
<td>60</td>
<td>1 to 43200</td>
</tr>
</tbody>
</table>
webserver.TLS.protocols

This enables you to explicitly define all allowed TLS protocol versions in the format of a comma-separated TLS version list. The default setting is to support all three TLS versions. Changing this setting automatically restarts the Tomcat server on the appliance.

**Note:** A client machine using Microsoft Windows will require a Microsoft Internet Explorer configuration change for supported TLS protocol versions. Open Internet Explorer to the **Internet Options ->Advanced** tab and verify the corresponding TLS protocol versions. Make the necessary TLS version changes.

The TLS versions allowed by the Tomcat web server are determined by the following rules:

- If `disable.TLSv1.0` is set to `false`, TLS versions are the same as defined in `webserver.TLS.protocols`.
- If `disable.TLSv1.0` is set to `true`, TLS versions are those defined in `webserver.TLS.protocols` but excluding the TLSv1 protocol.

When configuring either the `webserver.TLS.protocols` or `disable.TLSv1.0` system parameter by the `setparameter` command, the TLS versions will be calculated. If the TLS versions are different than the Tomcat configuration, the Tomcat configuration will be modified and the Tomcat server will be restarted for the new settings to take effect.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>zpoolcompression</td>
<td>Enables the Zpool compression property.</td>
<td>on</td>
<td>on or off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
<th>Default</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>webserver.TLS.protocols</td>
<td>This enables you to explicitly define all allowed TLS protocol versions in the format of a comma-separated TLS version list. The default setting is to support all three TLS versions. Changing this setting automatically restarts the Tomcat server on the appliance.</td>
<td>TLSv1, TLSv1.1, TLSv1.2</td>
<td>TLSv1, TLSv1.1, TLSv1.2</td>
</tr>
</tbody>
</table>

| Note: A client machine using Microsoft Windows will require a Microsoft Internet Explorer configuration change for supported TLS protocol versions. Open Internet Explorer to the **Internet Options ->Advanced** tab and verify the corresponding TLS protocol versions. Make the necessary TLS version changes. | | | |

The TLS versions allowed by the Tomcat web server are determined by the following rules:

- If `disable.TLSv1.0` is set to `false`, TLS versions are the same as defined in `webserver.TLS.protocols`.
- If `disable.TLSv1.0` is set to `true`, TLS versions are those defined in `webserver.TLS.protocols` but excluding the TLSv1 protocol.

When configuring either the `webserver.TLS.protocols` or `disable.TLSv1.0` system parameter by the `setparameter` command, the TLS versions will be calculated. If the TLS versions are different than the Tomcat configuration, the Tomcat configuration will be modified and the Tomcat server will be restarted for the new settings to take effect.
List of Policy Options

This appendix is a complete list of policy options associated with the following commands:

- `chpolicyoption` (chpolicyoption on page 484)
- `lspolicyoption` (lspolicyoption on page 482)
- `mkpolicyoption` (mkpolicyoption on page 480)
- `rmpolicyoption` (rmpolicyoption on page 486)
- `lssettableoption` (lssettableoption on page 476)
<table>
<thead>
<tr>
<th>Policy Option</th>
<th>Description</th>
<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
</table>
| `appconsistency` | Takes an application consistent snapshot for a backup. | **yes** - Takes application-consistent backup; notifies the application to prepare for a backup. This option loses no data. It pauses application data I/O, completes in-flight transactions, and flushes memory to disk. On recovery, data is easily accessible. **no** - Takes crash consistent backup. Crash-consistent backup is a fast backup of application data in storage as if power were lost at that moment. It does not pause application data I/O. All data on disk are saved, and data in memory is lost. Incomplete transactions may be saved. **last** - Takes application consistent backups, but takes a crash consistent backup if an application consistent backup fails for any reason. Setting `appconsistency` to last is only honored for scheduled jobs. For example, when `appconsistency=last` for scheduled jobs:  
  - Job_1234567 will be appconsistent.  
  - Job_1234567a (1st retry) will be appconsistent.  
  - Job_1234567b (2st retry) will be appconsistent.  
  - Job_1234567c (last retry) will be crash consistent. | snap, directdedup, dedup_async | VMBackup, Microsoft Hyper-V, VSS Writer |
<table>
<thead>
<tr>
<th>Policy Option</th>
<th>Description</th>
<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
<tbody>
<tr>
<td>archivebackuptime</td>
<td>Instructs the appliance to backup the archivelog if it has not been backed up the specified number of times.</td>
<td>1 to 5</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>archivetnservice</td>
<td>Specifies the TNS service name for archivelog backup.</td>
<td>String</td>
<td>———</td>
<td>Oracle</td>
</tr>
<tr>
<td>asmraclist</td>
<td>IP addresses of the member nodes of a RAC database for ASM backup.</td>
<td>String</td>
<td>———</td>
<td>Oracle</td>
</tr>
<tr>
<td>ausize</td>
<td>Configures the ASM Diskgroup AU size, in MB</td>
<td>1, 2, 4, 8, 16, 32, or 64 MB</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>autodiscoverrac</td>
<td>Specifies to auto discover all members of a RAC database for ASM backup.</td>
<td>false (default) or true</td>
<td>———</td>
<td>Oracle</td>
</tr>
<tr>
<td>bootvolumesnapshot</td>
<td>Specifies to back up only the boot volume of the VM.</td>
<td>no, snap, dedup, dedup_async</td>
<td>———</td>
<td>VMBackup, Microsoft Hyper-V VSS Writer</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> When protecting VMs, if the application binaries are spread over multiple VMware VMDKs or the boot volume is not the first drive on the bus, then the entire boot volume may not be captured.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>catalogdb</td>
<td>Specifies the Oracle catalog database SID name. This is for the user environment where RMAN CATALOG DATABASE is set up for RMAN backup.</td>
<td>String</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>catalogpassword</td>
<td>Specifies the Oracle catalog database user login password.</td>
<td>String</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>cataloguser</td>
<td>Specifies the Oracle catalog database user name for RMAN backup.</td>
<td>String</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
<td>---------------</td>
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<td>---------</td>
</tr>
<tr>
<td>changerate</td>
<td>Daily change rate for the database, used to estimate staging disk size. The value must be between 0 and 100 percent.</td>
<td>0 to 100 percent (default is 10 percent)</td>
<td>snap</td>
<td>Oracle, SqlInstance, SqlServerWriter ConsistGrp</td>
</tr>
<tr>
<td>clusternodes</td>
<td>Enter the IP addresses of appliance nodes for fail-over choice in this format: 1:172.16.16.21:svc_orarac2_act:F [failover rank]:[failover node ip]:[servicename on failover node]:[role of member node] The role of member node by default should be F (failover). It can also be M (maintenance). When an appliance member role is specified as M, the Actifio Connector appliance uses it as the primary backup node instead of using the original protected node. (Oracle, Exchange).</td>
<td>Specify the failover node choice in a Oracle RAC environment in this way: Failover choice:Node IP:Servicename:Role Failover Choice - The order of node in which user wants to try the failover. Node IP - IP address of the node where you want the backup to run. Servicename - The name of the service created and specified in the tnsnames.ora for Actifio Connector RMAN backup. This can be a new dedicated service created for Actifio Connector backup or the SID name (instance name) of the database on that node. Role - Role can be either F (failover node) or M (maintenance node)</td>
<td>------</td>
<td>Oracle, Microsoft Exchange Writer, ConsistGrp</td>
</tr>
<tr>
<td>compressedblog</td>
<td>Flag to enable log backup compression. If selected, the database server performs the compression during the log backup.</td>
<td>true (default) or false</td>
<td>snap</td>
<td>SqlInstance, SqlServerWriter, Oracle, ConsistGrp</td>
</tr>
<tr>
<td>compressedreplication</td>
<td>Use compression for StreamSnap replication</td>
<td>yes - Use compression for StreamSnap replication (default) no - Do not use compression</td>
<td>stream_snap</td>
<td>Supports on all application types.</td>
</tr>
<tr>
<td>connectoroptions</td>
<td>Leave connectoroptions blank unless you are working with Support.</td>
<td>String</td>
<td>------</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>consolidatevmdisks</td>
<td>Specifies the appropriate job behavior when target VM needs snapshot disk consolidation.</td>
<td>Fail the job if VM needs consolidation - Backup/DAR/direct-dedup jobs fail (default). Run the job without performing consolidation - All jobs run normally even if consolidation is pending. Perform consolidation at the beginning of the job - Backup/direct-dedup/DAR jobs try to perform consolidation at the beginning of the job. If consolidation fails, the job fails with an error message.</td>
<td></td>
<td>VMBackup</td>
</tr>
<tr>
<td>crosscheckarchivelog</td>
<td>Performs a crosscheck of the archivelog before performing a backup.</td>
<td>false (default) or true</td>
<td></td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>crosscheckbackupofarchivelog</td>
<td>Performs a crosscheck of the backup of archivelog before performing an archivelog backup.</td>
<td>false (default) or true</td>
<td></td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>datasetsize</td>
<td>NAS dataset size (in GB), enter a staging disk size of 12 times the size of the protected dataset. An initial size for the staging disk that will be used to back up this application. The Actifio Connector appliance will allocate an initial disk (or multiple disks if larger than the system max staging vDisk setting) to equal this size. If the space in this disk is insufficient to backup the NAS Dataset, the staging disk will be expanded to accommodate the backup.</td>
<td>1 to 256000 (default = 1024)</td>
<td></td>
<td>NAS</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>-------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>dbbackupfreq</td>
<td>Performs a database backup every specified number of hours for log protection.</td>
<td>2 to 24 (hours)</td>
<td>dedup_async</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>dumpschedule</td>
<td>Performs a database dump every specified weekday.</td>
<td>String</td>
<td>———</td>
<td>SAP HANA</td>
</tr>
<tr>
<td>donotshowrecoveryrange</td>
<td>Indicates that log backup should not have recovery range.</td>
<td>true (default) or false</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>donotuncatalog</td>
<td>To keep RMAN backup cataloged after each backup. By default Actifio Connector appliance backup will be un-cataloged at the end of the backup and will be cataloged at the start of backup.</td>
<td>false (default) or true</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>enableindexing</td>
<td>Flag to control indexing</td>
<td>false (default) or true</td>
<td>———</td>
<td>NAS</td>
</tr>
</tbody>
</table>
| encryptdreplication     | Use encryption for StreamSnap replication                                      | yes - Use encryption for StreamSnap replication (default)  
no - Do not encrypt | stream_snap | Supports all application types. |
<table>
<thead>
<tr>
<th>Policy Option</th>
<th>Description</th>
<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
<tbody>
<tr>
<td>excludepatterns</td>
<td>Enter the file name pattern to be excluded from backup. The appliance offers the ability to exclude certain file types from the backup. Using this policy option, only the most crucial data is backed-up leaving a side the non-critical files. Guidelines for exclude patterns: Using excludepatterns, only files are excluded, directories are not excluded. A pattern can include wild-card characters, for example, an asterisk (*) or a question mark (?). To exclude all the files that contains .sys as extension, enter *.sys. On Windows, files named pagefile.sys and hiberfil.sys that appear in the root directory of a drive are automatically ignored.</td>
<td>String</td>
<td>————</td>
<td>FileSystem, CIFS, NFS, NAS</td>
</tr>
<tr>
<td>failonmissingstartpath</td>
<td>The SmartCopy job will fail if a start path does not exist.</td>
<td>false (default) or true</td>
<td>snap, directdedup, dedup_async</td>
<td>————</td>
</tr>
<tr>
<td>filesperset</td>
<td>Specifies the number of archive logs in a backups during archive log backup.</td>
<td>1 to 64 (default = 64)</td>
<td>————</td>
<td>Oracle</td>
</tr>
<tr>
<td>forceasm</td>
<td>If 'Yes' is selected and the source database is stored in filesystem format, the database copy stored on VDP will be in ASM format. This option requires ASM to be installed on the Oracle server.</td>
<td>false (default) or true</td>
<td>————</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>forcelevel0</td>
<td>Start a new level0 RMAN backup when the database is protected out-of-band.</td>
<td>false (default) or true</td>
<td>————</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>forceoobbackup</td>
<td>Forces the out-of-band backup when database datafiles are in-band.</td>
<td>false (default) or true</td>
<td>snap, directdedup, dedup_async</td>
<td>FileSystem, Sqlinstance, SqlServerWriter, Microsoft Exchange Writer, SharePoint Services Writer, Oracle, ConsistGrp</td>
</tr>
<tr>
<td>fsfreezetimeout</td>
<td>Timeout of a file system freeze in seconds for in-band backup jobs.</td>
<td>3 to 300 seconds (default = 30)</td>
<td>---</td>
<td>FileSystem, ConsistGrp</td>
</tr>
<tr>
<td>genericlvmscriptname</td>
<td>Freeze and thaw script name for Linux CBT filter driver</td>
<td>String</td>
<td>---</td>
<td>LVM Volume</td>
</tr>
<tr>
<td>immutabilitydays</td>
<td>Specifies the enforced retention period during which an image cannot be expired. An image created by a policy using this option will have an retention period calculated during image creation. It is always equal to or less than the retention period defined for the policy. Images with enforced retention cannot be expired before they reach the immutability date. You can create immutabilitydays policy option using the mkpolicyoption command. You can update an existing immutabilitydays policy using the chpolicyoption or remove an existing immutabilitydays policy option. You cannot shorten an existing retention period. only extend it.</td>
<td>0 to 36525 days</td>
<td>snap, directdedup, dedup, remotededup, stream_snap (for remote snapshot images), onvault, Not supported on Dedup-Async Replication (DAR) policies</td>
<td>Supports all application types.</td>
</tr>
</tbody>
</table>
Include patterns

Enter the file name pattern to be included in the backup. The Actifio Connector appliance offers the ability to include certain file types in the backup. Using this policy option, only the most crucial data is backed-up leaving aside the non-critical files. Guidelines for include patterns:

Using **includepatterns**, only files are included, directories are not included.

A pattern can include wild-card characters, for example, an asterisk (*) or a question mark (?). To include all the files that contain .sys as extension, enter *.sys.

On Windows, files named pagefile.sys and hiberfil.sys that appear in the root directory of a drive are automatically ignored.

<table>
<thead>
<tr>
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<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
<tbody>
<tr>
<td>includepatterns</td>
<td>Enter the file name pattern to be included in the backup. The Actifio Connector appliance offers the ability to include certain file types in the backup. Using this policy option, only the most crucial data is backed-up leaving aside the non-critical files. Guidelines for include patterns: Using <strong>includepatterns</strong>, only files are included, directories are not included. A pattern can include wild-card characters, for example, an asterisk (*) or a question mark (?). To include all the files that contain .sys as extension, enter *.sys. On Windows, files named pagefile.sys and hiberfil.sys that appear in the root directory of a drive are automatically ignored.</td>
<td>String</td>
<td>————</td>
<td>FileSystem, CIFS, NFS, NAS</td>
</tr>
<tr>
<td>logalterloc</td>
<td>Customized application log location.</td>
<td>String</td>
<td>————</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2Instance, DB2, SAPHANA, SYBASEINSTANCE, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>logbackupfreq</td>
<td>This Log Protection option defines the frequency for database transaction log backup. Frequency is set in minutes and must not exceed the database backup interval. This value must not exceed the database backup interval.</td>
<td>15 to 1440</td>
<td>snap</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>logbackupretention</td>
<td>Retain database log backup for the specified period. Retention period must be between 1 and 90 days.</td>
<td>1 to 90 days (the default is 2 days)</td>
<td>snap</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>logbackupunit</td>
<td>Log backup interval unit.</td>
<td><strong>Minute</strong> - Log backup in number of minutes  &lt;br&gt;<strong>Hour</strong> - Log backup in number of hours</td>
<td>snap, dedup_async</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>logpurgeretention</td>
<td>Log retention in hours before log purging.</td>
<td>1 to 720 (hours)</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>logpurgeretentionnum</td>
<td>Number of successful backups before log purging.</td>
<td>1 to 30</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>logpurgeretentunit</td>
<td>Retention period unit for log purging.</td>
<td><strong>Day</strong> - Log retention in days.  &lt;br&gt;<strong>Hour</strong> - Log retention in hours.</td>
<td>snap, dedup_async</td>
<td>Oracle, ConsistGrp</td>
</tr>
</tbody>
</table>
### logreplication

Replicate Oracle or Microsoft® SQL Server database transaction logs to a remote Actifio Connector appliance. You can use the logs at the remote site for any database image within the retention range of the replicated logs.

For a log replication job to run, there must be a replication policy (StreamSnap, Dedup-Async, or Remote Dedup) included in the template along with a resource profile that specifies a remote Actifio Connector appliance.

**Note:** Log replication does not occur until an Oracle or SQL Server database has been protected and the image replicated to the remote Actifio Connector appliance.

<table>
<thead>
<tr>
<th>Policy Option</th>
<th>Description</th>
<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
<tbody>
<tr>
<td>logreplication</td>
<td>Replicate Oracle or Microsoft® SQL Server database transaction logs to a remote Actifio Connector appliance. You can use the logs at the remote site for any database image within the retention range of the replicated logs. For a log replication job to run, there must be a replication policy (StreamSnap, Dedup-Async, or Remote Dedup) included in the template along with a resource profile that specifies a remote Actifio Connector appliance. <strong>Note:</strong> Log replication does not occur until an Oracle or SQL Server database has been protected and the image replicated to the remote Actifio Connector appliance.</td>
<td>true (default) or false</td>
<td>snap</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
</tbody>
</table>

### logretention

Retention percentage of log backup with regard to database backup.

<table>
<thead>
<tr>
<th>Policy Option</th>
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<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
<tbody>
<tr>
<td>logretention</td>
<td>Retention percentage of log backup with regard to database backup.</td>
<td>0 to 100%</td>
<td>snap, dedup_async</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailability Group, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
<td>-------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>logsizebuffer</td>
<td>Buffer space for log backups. The value must be between 1 and 10 days.</td>
<td>1 to 10 days (the default is 2 days)</td>
<td>snap</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailabilityGroup, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>logresizepercen</td>
<td>Grow the log staging disk by a specified percentage if needed. The value must be between 5 and 100 percent.</td>
<td>5 to 100 percent (the default is 50 percent)</td>
<td>snap</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailabilityGroup, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>logsmart</td>
<td>Flag indicating that Log Protection is enabled.</td>
<td>false (default) or true</td>
<td>snap</td>
<td>SqlServerWriter, SqlInstance, SQLServerAvailabilityGroup, DB2Instance, DB2, SAPHANA, SYBASEInstance, SYBASE, MYSQLInstance, MYSQL, MARIADBInstance, MARIADB, SYBASEIQ, MAXDB, ConsistGrp</td>
</tr>
<tr>
<td>logstagingdisksize</td>
<td>Enter a log staging disk size (in GB) to override the space automatically defined for database log backups.</td>
<td>1 to 4000</td>
<td>———</td>
<td>Oracle, SqlInstance, SQLServerAvailabilityGroup SqlServerWriter, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
<tr>
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</tr>
<tr>
<td>maptoallesxincluster</td>
<td>If your ESX servers are in a cluster, you can select this to ensure that the VMs are protected in case of failover during backup.</td>
<td>no – Do not map staging disk to all ESX hosts (default). yes – Map staging disk to all ESX hosts.</td>
<td>snaps, directdedup, dedup_async</td>
<td>FileSystem, SqlInstance, SqlServerWriter, Microsoft Exchange Writer, SharePoint Services Writer, CIFS, NFS, ConsistGrp</td>
</tr>
<tr>
<td>maxcorrupt</td>
<td>Maximum block corruption allowed during an RMAN backup.</td>
<td>0 (default) to 1000</td>
<td>————</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>minlaststagingdisksize</td>
<td>If an application requires multiple staging disks, enter the minimum size to be allocated for the staging disk used for the last part of that application</td>
<td>1 to 128000</td>
<td>————</td>
<td>Oracle, FileSystem, NFS, ConsistGrp</td>
</tr>
<tr>
<td>namedlistener</td>
<td>Oracle named listener. For more than one listener running on the database server specify the listener name.</td>
<td>String</td>
<td>————</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>notskip</td>
<td>By default, an Oracle backup skips offline tablespace and inaccessible (not physically existed) datafiles.</td>
<td>skip – Skip offline and inaccessible tablespace/datafiles (default). inaccessible – Do not skip inaccessible tablespace/datafiles. offline – Do not skip offline tablespace/datafiles.</td>
<td>————</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>nounmap</td>
<td>Specifies if you want to keep staging disks mapped to the host and used during data movement for backup to remain mapped to the host.</td>
<td>yes – Keep staging disks mapped between jobs (default). no – Unmap staging disks after each job.</td>
<td>snap, directdedup, dedup_async</td>
<td>FileSystem, SqlServerWriter, Microsoft Exchange Writer, SharePoint Services Writer, Microsoft Hyper-V VSS Writer, Oracle, CIFS, NFS, NAS, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
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<td>AppType</td>
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</tr>
<tr>
<td>numberofchannels</td>
<td>Configures RMAN channels based on specifics of the host computing power. Number of channels should be configured based on the # of cores available on the server, taking into account other database backups configured to run in parallel.</td>
<td>1 to 255</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>oraclechildbackup</td>
<td>Indicates this is a Oracle child backup</td>
<td>true (default) or false</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>password</td>
<td>Specifies the authentication password as part of the user credentials.</td>
<td>String</td>
<td>———</td>
<td>Oracle, CIFS, SqlInstance, SqlServerWriter, VMBackup, NAS, Microsoft Hyper-V VSS Writer, ConsistGrp</td>
</tr>
<tr>
<td>primarynodeservicename</td>
<td>Specifies the servicename configured on the Data Guard node that connects to the primary Actifio Connector node. This is required only when you are protecting data from Oracle Data Guard.</td>
<td>String</td>
<td>———</td>
<td>Oracle</td>
</tr>
<tr>
<td>proxyhostid</td>
<td>Proxy host used during NAS backup.</td>
<td>String</td>
<td>———</td>
<td>NAS</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
</tr>
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</tr>
<tr>
<td>prunepaths</td>
<td>Specifies a point where the directory traversal will stop. When protecting a Windows application, a value of <code>\SERVERNAME\SHARENAME\abc</code> will ensure that nothing below <code>\SERVERNAME\SHARENAME\abc</code> is copied, but all other directories and files in <code>\SERVERNAME\SHARENAME</code> are copied. If <code>prunepath</code> is left blank, the directory traversal descends into every subdirectory of the start paths being backed-up.</td>
<td>String</td>
<td>———</td>
<td>FileSystem, CIFS, NFS, NAS</td>
</tr>
<tr>
<td>readyvm</td>
<td>VM in ESX datastore dedup async replication.</td>
<td>no - VM in Performance pool snapshot (default) yes - VM in ESX datastore</td>
<td>———</td>
<td>VMBackup</td>
</tr>
<tr>
<td>remotedatastores</td>
<td>Remote datastores details for VM in ESX datastore dedup async replication.</td>
<td>String</td>
<td>———</td>
<td>VMBackup</td>
</tr>
<tr>
<td>remoteesx</td>
<td>Remote ESX server details for VM in ESX datastore dedup async replication.</td>
<td>String</td>
<td>———</td>
<td>VMBackup</td>
</tr>
<tr>
<td>remotemetadatastore</td>
<td>Remote metadata store details for VM in ESX datastore dedup async replication.</td>
<td>String</td>
<td>———</td>
<td>VMBackup</td>
</tr>
<tr>
<td>remotevcenter</td>
<td>Remote vCenter details for VM in ESX datastore dedup async replication.</td>
<td>String</td>
<td>———</td>
<td>VMBackup</td>
</tr>
<tr>
<td>restorevalidate</td>
<td>Provides restore validate for the Oracle backup. When this option is set to true the Actifio Connector will invoke RMAN restore validate for each backup. This validation will add time to the backup.</td>
<td>true or false (default)</td>
<td>———</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
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<tr>
<td>rmanloglocation</td>
<td>RMAN log path name. Enter the RMAN log path in the RMAN Log Location field. This is the custom location (full path along with RMAN filename) where RMAN writes the logs while taking the backup. For Linux - the default log location is: /act/log/&lt;sid&gt;_rman.log. If you change the path, the value must be in the form /act/log/test/custom_rman.log For Windows - the default log location is: C:\act_tmp\log&lt;sid&gt;_rman.log. If you change the path, be sure there are no spaces in the path.</td>
<td>String</td>
<td></td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>root</td>
<td>Root path of the NAS dataset. Browse through the directories of selected NAS Share to select a Root Path. Directories and files outside of this path will not be traversed for this dataset. You can leave this field blank to use the top level of the NAS share as the starting point.</td>
<td>String</td>
<td></td>
<td>NAS</td>
</tr>
<tr>
<td>schedulerdedupperiodpercentage</td>
<td>Percentage of Dedup policy RPO as the minimum separation of source snapshot images.</td>
<td>0 to 100</td>
<td></td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>schedulerddedupperiodpercentage</td>
<td>Percentage of remote dedup policy RPO as the minimum separation of source local dedup images.</td>
<td>0 to 100</td>
<td></td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>scriptfinishtimeout</td>
<td>Sets the script finish timeout setting (in seconds) for Actifio Connector.</td>
<td>1 to 86400</td>
<td></td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>scriptfreezetimeout</td>
<td>Sets the script freeze timeout setting (in seconds) for Actifio Connector.</td>
<td>1 to 86400</td>
<td></td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>Policy Option</td>
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<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
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</tr>
<tr>
<td>scriptinittimeout</td>
<td>Sets the script initialization timeout setting (in seconds) for Actifio Connector.</td>
<td>1 to 86400</td>
<td>————</td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>scriptpostrepllicationtimeout</td>
<td>Sets the user-defined script post replication timeout (in seconds).</td>
<td>1 to 86400</td>
<td>————</td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>scriptunfreezetimeout</td>
<td>Sets the script unfreeze timeout setting (in seconds) for Actifio Connector.</td>
<td>1 to 86400</td>
<td>————</td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>serviceip</td>
<td>Enter a service access point IP address to backup from an SQL availability cluster. Specify the IP address of the cluster node you want the database to be backed up from. This option is not required if you want the database to be backed up from the active node and it is not required for a failover cluster.</td>
<td>String</td>
<td>————</td>
<td>FileSystem, SqlInstance, SqlServerWriter, SharePoint Services Writer, ConsistGrp</td>
</tr>
<tr>
<td>servicename</td>
<td>Specifies the Oracle database service name. This is optional for a standalone instance but required for a RAC setup. (Oracle only).</td>
<td>String</td>
<td>————</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>shareid</td>
<td>ID address of the NAS share corresponding to the NAS application. Select one of the shares from the NAS server.</td>
<td>String</td>
<td>————</td>
<td>NAS</td>
</tr>
<tr>
<td>sharetype</td>
<td>Select either CIFS or NFS for the NAS dataset. If CIFS is selected, enter the username and password of the user that will mount the NAS share on the BDD and perform the backup.</td>
<td>NFS (default) or CIFS</td>
<td>————</td>
<td>NAS</td>
</tr>
<tr>
<td>skipofflineappsincongrp</td>
<td>Specifies how to handle offline applications in a consistency group.</td>
<td>no</td>
<td>————</td>
<td>ConsistGrp</td>
</tr>
<tr>
<td></td>
<td>yes - Skip offline applications during backup.</td>
<td>yes</td>
<td>————</td>
<td>ConsistGrp</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
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</tr>
<tr>
<td>sqlbackuppath</td>
<td>Defines a location for a temporary SQL backup. If the Actifio Connector takes a full, native backup of the SQL Server database, the backup will be saved in this directory. Ensure that there is enough free space on the volume hosting this directory to hold a full database backup.</td>
<td>String</td>
<td></td>
<td>SqlServerWriter, VMBackup, Microsoft Hyper-V VSS Writer, ConsistGrp</td>
</tr>
<tr>
<td>stagingdiskgranularity</td>
<td>If an application requires multiple staging disks, you can keep a small portion of an application from using a large staging disk. Enter the largest size of staging disks to be used.</td>
<td>1 to 128000</td>
<td></td>
<td>Oracle, FileSystem, NFS, ConsistGrp</td>
</tr>
<tr>
<td>stagingdiskmountpoint</td>
<td>Enter a staging disk mount point if you need the staging disk mounted to a particular location (Oracle, local filesystems, CIFS, NFS, SharePoint, SQL Server, Exchange)</td>
<td>String</td>
<td></td>
<td>Oracle, FileSystem, NFS, ConsistGrp</td>
</tr>
<tr>
<td>stagingdiskoverheadallocationpercentage</td>
<td>Staging vDisk desired size overhead allocation percentage. Used if the initial staging disk is too small to accommodate the data or if the amount of data increases beyond the staging disk capacity.</td>
<td>0 to 1000</td>
<td></td>
<td>Supports all application types.</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
<td>Policy Type</td>
<td>AppType</td>
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</tr>
<tr>
<td>stagingdisksize</td>
<td>Staging vDisk size for image copy backup (in GB). Enter a staging disk size of 1.2 times the size of the protected application. By default, the Actifio Connector uses the size of the protected application as the size of the staging disk. This setting allows the administrator to override this value if necessary, for example to allow for growth.</td>
<td>1 to 256000</td>
<td>————</td>
<td>Oracle,FileSyste m, CIFS, NFS, SharePoint Services Writer, SqlInstance, SqlServerWriter Microsoft Exchange Writer, Microsoft Hyper-V VSS Writer, ConsistGrp</td>
</tr>
<tr>
<td>stagingdisksizeincr</td>
<td>Enter a staging disk size of 1.2 times the size of the protected dataset. An initial size for the staging disk that will be used to back up this application. The appliance will allocate an initial disk (or multiple disks if larger than the system max staging vDisk setting) to equal this size. If the space in this disk is insufficient to backup the NAS Dataset, the staging disk will be expanded to accommodate the backup.</td>
<td>String</td>
<td>————</td>
<td>NAS</td>
</tr>
<tr>
<td>startpaths</td>
<td>Provides the start path names. <strong>startpath</strong> specifies the directory where backup starts. If <strong>startpath</strong> is left blank, backup starts at the root directory of the dataset to be backed-up. For example, a value of <code>\SERVERNAME\SHARENAME\abc</code> will back up the abc directory.</td>
<td>String</td>
<td>————</td>
<td>FileSystem, CIFS, NFS, NAS</td>
</tr>
<tr>
<td>streamingreplication</td>
<td>Stream snapshot data to the target appliance in parallel to data movement to the staging disks. <strong>yes</strong> - Stream snapshot data to the target VDP appliance (default) <strong>no</strong> - Do not stream snapshot data to the target VDP appliance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Value</th>
<th>Policy Type</th>
<th>AppType</th>
</tr>
</thead>
<tbody>
<tr>
<td>stream_snap</td>
<td>stream_snap</td>
<td>VMBackup</td>
</tr>
<tr>
<td>yes</td>
<td>stream_snap</td>
<td>VMBackup</td>
</tr>
<tr>
<td>no</td>
<td>stream_snap</td>
<td>VMBackup</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
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</tr>
<tr>
<td>tnsadmindir</td>
<td>Specifies the TNS_ADMIN network path.</td>
<td>String</td>
</tr>
<tr>
<td>truncatelog</td>
<td>Specifies whether to truncate the logs after every backup for Microsoft SQL Server or Exchange, or to purge logs after every backup for Oracle. When this is selected, application-related logs are truncated until the recent or current backup. The client cannot roll forward/back with logs because SQL opens the database in multi-user mode.</td>
<td>no - Do not truncate/purge log after backup (default) yes - Truncate/purge log after backup</td>
</tr>
<tr>
<td>useasm</td>
<td>If false the database will use filesystem.</td>
<td>true (default) or false</td>
</tr>
<tr>
<td>usegpfsv</td>
<td>Select to enable GPFS staging disk for performing a GPFS file system backup.</td>
<td>false (default) and true</td>
</tr>
<tr>
<td>username</td>
<td>Specifies the authentication user name as part of the user credentials.</td>
<td>String</td>
</tr>
<tr>
<td>userrole</td>
<td>Database user account for VDP RMAN backup. By default, userrole will use sysdba. For 12c sysbackup role please select the role using sysbackup.</td>
<td>sysdba - Role sysdba (default) sysbackup - Role sysbackup, applicable to 12c</td>
</tr>
<tr>
<td>usezpool</td>
<td>Use Zpool on the proxy host.</td>
<td>false (default) or true</td>
</tr>
<tr>
<td>vgsnapreservespace</td>
<td>Amount of space to reserve in the Volume Group as a percentage of Logical Volume size to hold snapshot data.</td>
<td>1 to 100. Default of 20.</td>
</tr>
<tr>
<td>Policy Option</td>
<td>Description</td>
<td>Value</td>
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</tr>
<tr>
<td>wallet</td>
<td>To backup any Oracle configuration files with Oracle OOB backup such as wallet for encryption support. This will need a full path name. If the folder name is specified then all files under that folder will be backed up. If a file name is specified then only the specified file will be backed up.</td>
<td>String</td>
</tr>
</tbody>
</table>
| zfscompression | Use ZFS compression on the proxy host. | off - Disable ZFS compression (default)  
on - Enable ZFS compression  
lzjb - lzjb compression algorithm  
gzip - gzip compression algorithm  
zle - zle compression algorithm  
lz4 - lz4 compression algorithm | ———- | NAS |
| zfsdedup      | Use in-line dedup on the proxy host. Enable in-line dedup for datasets where there are large numbers of duplicated blocks among the files and directories being protected, so the savings in storage make up for the extra processing required to deduplicate. | off - Disable in-line dedup (default)  
on - Enable in-line dedup | ———- | NAS |
List of Restore Options

This appendix is a complete list of restore options that you can specify when using the following commands:

- `failover` on page 331
- `testfailover` on page 335
- `lsappclass` on page 343
- `mountimage` on page 358
- `cloneimage` on page 367
- `lsrestoreoptions` on page 380
- `restoreimage` on page 382

You specify these options using the `-restoreoption` keyword in these commands.

<table>
<thead>
<tr>
<th>Restore Option</th>
<th>Description</th>
<th>Value</th>
<th>Restore Operation</th>
<th>App Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>asmracnodelist</td>
<td>Colon separated list of ASM RAC node IP addresses.</td>
<td>String</td>
<td>scrubmount, mount, clone, failover,</td>
<td>Oracle, ConsistentGroup</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>failovertest</td>
<td></td>
</tr>
<tr>
<td>compressstreamsnap</td>
<td>Use compression for StreamSnap replication.</td>
<td>true or false</td>
<td>syncback</td>
<td></td>
</tr>
<tr>
<td>encryptstreamsnap</td>
<td>Use encryption for StreamSnap replication.</td>
<td>true or false</td>
<td>syncback</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Only disable the `encryptstreamsnap` restore option under strict guidance of Support.
<table>
<thead>
<tr>
<th>Restore Option</th>
<th>Description</th>
<th>Value</th>
<th>Restore Operation</th>
<th>App Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>mapdiskstoallclusternodes</td>
<td>Maps disks to all Actifio appliance nodes. Only maps disks to all cluster nodes in a Microsoft cluster. The command does not map to ESX hosts when mounting to a VMware VM. To mount to a VMware VM, use mapdiskstoallesxhosts.</td>
<td>true or false (default)</td>
<td>scrubmount, mount, restore, clone, failover, failovertest</td>
<td>———— —</td>
</tr>
<tr>
<td>mapdiskstoallesxhosts</td>
<td>Map disks to all ESX hosts</td>
<td>true or false (default)</td>
<td>mount, restore, clone, failover, failovertest, scrubmount</td>
<td>———— —</td>
</tr>
<tr>
<td>maonly</td>
<td>Map only, do not mount</td>
<td>true or false</td>
<td>mount, clone</td>
<td>LVM Volme</td>
</tr>
<tr>
<td>mountdriveperimage</td>
<td>Specify drive letter for the first mount volume; consecutive free drive letters are assigned for other volumes</td>
<td>String</td>
<td>scrubmount, mount, clone, failover, failovertest</td>
<td>———— —</td>
</tr>
<tr>
<td>mountdriveperdisk</td>
<td>Specifies the drive letter for a specific volume. The mountdriveperdisk option requires the following format: option-&lt;unique volume id&gt;=value To properly specify the mountdriveperdisk restore option: 1. Use the udsinfo lsbackup command to locate the volume uuid. Every volume in the backup image has a unique volume identifier. 2. Specify mountdriveperdisk in the format: restoreoptionname-volumeuniqueid=restoreoptionvalue For example: $ udstask mountimage -image Image_0007344 -host oel65 -restoreoption mountdriveperdisk-dasvol:172.16.201.216:/myNFS=/mnt/test123</td>
<td>String</td>
<td>scrubmount, mount, clone, failover, failovertest</td>
<td>———— —</td>
</tr>
<tr>
<td>Restore Option</td>
<td>Description</td>
<td>Value</td>
<td>Restore Operation</td>
<td>App Type</td>
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</tr>
<tr>
<td>mountpointperdisk</td>
<td>Specifies a mount point for a specific volume. The mountpointperdisk option requires the following format: option-&lt;unique volume id&gt;=value</td>
<td>String</td>
<td>scrubmount, mount, clone, failover, failovertest</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To properly specify the mountpointperdisk restore option:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Use the udsinfo lsbackup command to locate the volume uuid. Every volume in the backup image has a unique volume identifier.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Specify mountpointperdisk in the format:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>restoreoptionname-volumeuniqueid=restoreoptionvalue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For example:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ udstask mountimage -image Image_0007344 -host oel65 -restoreoption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>mountpointperdisk-dasvol:172.16.201.216:/myNFS=/mnt/test123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mountpointperimage</td>
<td>Specifies the root directory for all mount points.</td>
<td>String</td>
<td>scrubmount, mount, clone, failover, failovertest</td>
<td></td>
</tr>
<tr>
<td>provisioningoptions</td>
<td>Specifies a path to an app-aware mount provisioning options. The provisioningoptions property indicates that this is an app-aware mount, regardless of the -appaware flag.</td>
<td>String</td>
<td>restore</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use the udsinfo lsappclass command to retrieve the supported appclass and its associated properties to include as the defined provisioning options.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restore Option</td>
<td>Description</td>
<td>Value</td>
<td>Restore Operation</td>
<td>App Type</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td><code>recover</code></td>
<td>Recovery option for SQL Server to bring the database online. The appliance restores/copies mdf/ldf files from the backup image and brings the SQL Server database online. Once the SQL Server database is online, Transaction logs cannot be applied to the database.</td>
<td>String</td>
<td>restore</td>
<td>SQL Server</td>
</tr>
<tr>
<td><code>reprotect</code></td>
<td>Directive in the provisioning options XML file to reprotect the application. Use the udsinfo lsappclass command to retrieve the supported appclass and its associated properties to include as the defined provisioning options.</td>
<td>Boolean</td>
<td>mount, mountstack</td>
<td></td>
</tr>
<tr>
<td><code>restoremacaddr</code></td>
<td>Restore the MAC address of the network card.</td>
<td>Boolean</td>
<td>mount,clone,failover</td>
<td>VMB backup</td>
</tr>
<tr>
<td><code>restorettype</code></td>
<td>Recovery option for Oracle ASM instance to allow a restore image to be ASM-rebalance capable. When performing a restore using an ASM switch, the backup image will be mounted using an ASM switch. After the job completes, the image will be mounted and locked with the rebalance capable flag set. The <code>restorettype</code> option requires the following format: <code>restorettype=asmswitch,volgroname=&lt;diskgroup name&gt;,asmracnodelist=&lt;node ip list&gt;</code> For example: $ udstask mountimage -image Image_3350783 -restoreoption restorettype=asmswitch,volgroname=ASMFSDG,asmracnodelist=172.16.16.20 -host orarac1</td>
<td>String</td>
<td>mount</td>
<td>Oracle, ConsistGrp</td>
</tr>
<tr>
<td>Restore Option</td>
<td>Description</td>
<td>Value</td>
<td>Restore Operation</td>
<td>App Type</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>slpid</td>
<td>Specifies the SLP ID to use for the mount operation.</td>
<td>String</td>
<td>mount, mountstack</td>
<td>——</td>
</tr>
<tr>
<td>sltid</td>
<td>Specifies the SLT ID to use for the mount operation.</td>
<td>String</td>
<td>mount, mountstack</td>
<td>——</td>
</tr>
<tr>
<td>vmdkprovisionformatper disk</td>
<td>Specifies the disk provisioning format for a specific volume</td>
<td>g Neville sourcevmdkformatat - Use same data format as the source vmdk. thinprovisioned thickprovisioned thickprovisioned</td>
<td>restore and clone</td>
<td>VMB ackup</td>
</tr>
<tr>
<td>vmdkprovisionformatper image</td>
<td>Specifies the disk provisioning strategy for all volumes</td>
<td>g Neville sourcevmdkformatat - Use same data format as the source vmdk. thinprovisioned thickprovisioned thickprovisioned</td>
<td>restore and clone</td>
<td>VMB ackup</td>
</tr>
<tr>
<td>volgroupname</td>
<td>Name of the volume group or storage pool to be used for discovered disks.</td>
<td>String</td>
<td>scrubmount, mount, clone, failover, failoverest</td>
<td>Oracle, Cons istGr p</td>
</tr>
</tbody>
</table>