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# Actifio RESTful API Reference

For CDS & Sky Appliances

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# Contents

<b>Preface</b> .....	<b>ix</b>
The ActifioNOW Customer Portal.....	ix
Actifio Support Centers .....	ix
<b>Chapter 1 - Introduction</b> .....	<b>1</b>
Commands Supported by Actifio API .....	1
Operational Hints and Tips .....	4
<b>Chapter 2 - User Management Commands</b> .....	<b>5</b>
mkuser .....	6
lsuser .....	8
chuser .....	11
rmuser .....	13
mkrole .....	14
lsrights .....	15
roleaddrights .....	17
roledelrights .....	19
lsrole .....	21
mkuserrole .....	24
lsuserrole .....	25
chrole .....	27
rmuserrole .....	28
rmrole .....	29
mkorg .....	30
mkorgresource .....	32
lsorg .....	34
chorg .....	36
lsorgresource .....	38
rmorgresource .....	40
rmorg .....	41
mkldapserver .....	42
testldapserver .....	44
lsldapserver .....	45
chldapserver .....	46
mkldapgroup .....	48
lsldapgroup .....	49
mkldapgrouprole .....	51
lsldapgrouprole .....	52
mkldapgrouporg .....	54
lsldapgrouporg .....	56
rmlldapgrouporg .....	58

rmldapgrouprole .....	59
rmldapgroup .....	60
rmldapserver .....	61
getauthservice .....	62
lsstorage .....	63
<b>Chapter 3 - Host Management Commands .....</b>	<b>65</b>
mkhost .....	66
lshost .....	69
chhost .....	72
rmhost .....	75
chproxyhost .....	76
addroutetohost .....	78
removeroutefromhost .....	80
setautodiscovery .....	82
getautodiscovery .....	84
lsetchosts .....	86
mketchosts .....	87
rmetchosts .....	89
getsysteminfo .....	90
configdns .....	91
lsdns .....	93
testdns .....	94
configinterface .....	95
configipfailover .....	97
lsipfailover .....	99
iscsitest .....	100
configchap .....	102
lsdatastore .....	104
lsssd .....	107
lsnasshare .....	109
nfstest .....	111
<b>Chapter 4 - Appliance Management Commands .....</b>	<b>113</b>
addcluster .....	119
synccluster .....	121
lscluster .....	122
chcluster .....	125
chappcluster .....	128
lsappcluster .....	130
lsclustermember .....	132
rmapcluster .....	134
rmclustermember .....	135
rmcluster .....	136
lsjob .....	138
lsjobhistory .....	143
lsjobwarnings .....	147
chjob .....	149
setschedule .....	151
getschedule .....	153
setgcschedule .....	155
getgcschedule .....	157

rmgcschedule .....	159
addssd .....	160
rmssd .....	162
setarchiveconfig .....	163
setparameter .....	165
getparameter .....	167
lsaudit .....	172
lsmetricstat .....	175
runpreflight .....	178
lssystemdetail .....	180
mkdiskpool .....	183
lsdiskpool .....	185
lsvaulttype .....	188
lsvaultstat .....	190
chdiskpool .....	192
rmdiskpool .....	194
lsdeduppoolstat .....	195
lsdiskpoolstat .....	198
lssnappoolstat .....	201
lsdedupefficiency .....	204
getdedupsafelimits .....	206
getdedupstats .....	208
lsdeduploadstat .....	210
mkslp .....	212
lsslsp .....	214
chslp .....	216
rmslp .....	218
chauthservice .....	219
configresourcewarning .....	220
getresourcewarning .....	222
mkarray .....	224
lsarray .....	226
lsarrayoption .....	228
charray .....	231
rmarray .....	233
lsappstorage .....	234
lsversion .....	236
lsupdate .....	238
uploadupdate .....	239
installupdate .....	240
setremotesupport .....	241
getremotesupport .....	242
<b>Chapter 5 - License Management Commands .....</b>	<b>243</b>
getlicenseinfo .....	244
lslicense .....	246
rmlicense .....	248
<b>Chapter 6 - Application Management Commands .....</b>	<b>249</b>
mkapplication .....	251
lsapplication .....	253
chapplication .....	257

rmapplication .....	260
mkgroup .....	261
lsgroup .....	263
chgroup .....	265
mkgroupmember .....	267
lsgroupmember .....	269
mkconsistgrp .....	271
lsconsistgrp .....	273
chconsistgrp .....	275
mkconsistgrpmember .....	277
rmconsistgrp .....	279
lsconsistgrpmember .....	280
rmconsistgrpmember .....	282
rmconsistgrp .....	283
rmgroupmember .....	284
rmgroup .....	285
appdiscovery .....	286
lsappvols .....	289
vmdiscovery .....	292
hmcdiscovery .....	295
failback .....	297
failover .....	298
testfailover .....	302
rmfailovertest .....	306
syncback .....	308
lsappclass .....	310
lsinstancemember .....	312
lsmdlstat .....	315
addvm .....	318
lsvm .....	320
prepmount .....	322
prepunmount .....	324
mountimage .....	326
verifyimage .....	333
cloneimage .....	334
replicateimage .....	337
replicatelog .....	339
exportimage .....	340
unexportimage .....	343
lsrestoreoptions .....	345
restoreimage .....	347
createliveclone .....	349
refreshliveclone .....	351
unmountimage .....	353
expireimage .....	355
deleteimage .....	357
cleanupmirroring .....	359
rmfailovertest .....	361
lsbackup .....	363
backup .....	367
chbackup .....	369
lsvaultbackup .....	371
lsdevice .....	374

mkworkflow .....	376
lsworkflow .....	379
chworkflow .....	381
chflowtask .....	384
lsflowtask .....	389
runworkflow .....	391
rmworkflow .....	394
mksideband .....	395
<b>Chapter 7 - Policy and Schedule Commands .....</b>	<b>397</b>
mkslt .....	398
lsslt .....	400
chslt .....	403
rmslt .....	405
mksla .....	406
lssla .....	408
chsla .....	412
rmsla .....	415
mkpolicy .....	417
lspolicy .....	422
chpolicy .....	428
lssettableoption .....	433
mkpolicyoption .....	437
lspolicyoption .....	439
chpolicyoption .....	441
rmpolicyoption .....	443
rmpolicy .....	445
lsinterface .....	447
lsconfiguredinterface .....	449
lsnetworkcapability .....	451
configoutboundpolicy .....	452
lsoutboundpolicy .....	454
configntp .....	455
lsntp .....	456
testconnection .....	457
showroute .....	459
showrouting .....	460
showtracepath .....	461
mkbandwidthschedule .....	463
lsbandwidthschedule .....	465
chbandwidthschedule .....	467
rmbandwidthschedule .....	469
export .....	470
import .....	472
<b>Chapter 8 - Job Event and Notification Commands .....</b>	<b>475</b>
mksnmpconfig .....	476
configsnmpagent .....	478
lssnmpconfig .....	480
chsnmpconfig .....	481
lssnmpevent .....	483
rmsnmpconfig .....	488

mkmonitoreddevice .....	489
lsmonitoreddevice .....	491
chmonitoreddevice .....	493
rmmonitoreddevice .....	495
configemailserver .....	496
getemailserverconfig .....	498
configserviceemail .....	499
getserviceemailconfig .....	501
configeventemail .....	502
geteventemailconfig .....	504
emaillogs .....	505
rmeventemail .....	507
rmemailserverconfig .....	508
configcallhome .....	509
getconfigcallhome .....	510
<b>Chapter 9 - Actifio Connector Support Commands .....</b>	<b>511</b>
lsavailableconnector .....	512
upgradehostconnector .....	516
abortupgradehostconnector .....	518
rmavailableconnector .....	519
fetchconnectorlogs .....	520
<b>Appendix A - Advanced Protection Settings with mkpolicyoption Command .....</b>	<b>523</b>
Advanced Settings for Out-of-Band File Systems .....	523
Advanced Settings for Oracle Databases .....	524
Advanced Settings for VM in an ESX Datastore .....	526
Overriding ScriptTimeout Settings for the Actifio Connector .....	527
<b>Appendix B - Managing Jobs and Job Slots .....</b>	<b>529</b>
On-demand Jobs .....	529
Queuing of On-Demand Backup Jobs .....	532
Relaunching Jobs .....	532
<b>Appendix C - Configuring Image Preservation .....</b>	<b>533</b>
Image Preservation Overview .....	533
Modifying Image Preservation Settings On a System-wide Application Level .....	534
Disabling Image Preservation Mode On A Per Application Basis .....	537
Alerts and Warnings .....	540
<b>Appendix D - List of Parameters Used With getparameter and setparameter .....</b>	<b>543</b>
<b>Appendix E - List of Policy Options .....</b>	<b>567</b>
<b>Appendix F - List of Restore Options .....</b>	<b>589</b>



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# Preface

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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.

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

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## 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](mailto: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



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## Alphabetical Index of Commands

**abortupgradehostconnector 518**  
**addcluster 119**  
**addroutetohost 78**  
**addssd 160**  
**addvm 318**  
**appdiscovery 286**  
**backup 367**  
**certexchange 115**  
**chappcluster 128**  
**chapplication 257**  
**charray 231**  
**chauthservice 219**  
**chbackup 369**  
**chbandwidthschedule 467**  
**chcluster 125**  
**chconsistgrp 275**  
**chdiskpool 192**  
**chflowtask 384**  
**chgroup 265**  
**chhost 72**  
**chjob 149**  
**chldapserver 46**  
**chmonitoreddevice 493**  
**chorg 36**  
**chpolicy 428**  
**chpolicyoption 441**  
**chproxyhost 76**  
**chrole 27**  
**chsla 412**  
**chslp 216**  
**chslt 403**  
**chsnmpconfig 481**  
**chuser 11**  
**chworkflow 381**  
**cleanupmirroring 359**  
**cloneimage 334**  
**configcallhome 509**  
**configchap 102**  
**configdns 91**  
**configemailserver 496**  
**configeventemail 502**  
**configinterface 95**  
**configipfailover 97**  
**configntp 455**  
**configoutboundpolicy 452**  
**configresourcewarning 220**  
**configserviceemail 499**  
**configsnmpagent 478**  
**createliveclone 349**  
**deleteimage 357**  
**emaillogs 505**  
**expireimage 355**  
**export 470**  
**exportimage 340**  
**failback 297**  
**failover 298**  
**fetchconnectorlogs 520**  
**getauthservice 62**  
**getautodiscovery 84**  
**getconfigcallhome 510**  
**getdedupsafelimits 206**  
**getdedupstats 208**  
**getemailserverconfig 498**  
**geteventemailconfig 504**

**getgcschedule 157**  
**getlicenseinfo 244**  
**getparameter 167**  
**getremotesupport 242**  
**getresourcewarning 222**  
**getschedule 153**  
**getserviceemailconfig 501**  
**getsysteminfo 90**  
**hmcdiscovery 295**  
**import 472**  
**installupdate 240**  
**iscsitest 100**  
**joincluster 117**  
**lsappclass 310**  
**lsappcluster 130**  
**lsapplication 253**  
**lsappstorage 234**  
**lsappvols 289**  
**lsarray 226**  
**lsarrayoption 228**  
**lsaudit 172**  
**lsavailableconnector 512**  
**lsbackup 363**  
**lsbandwidthschedule 465**  
**lscluster 122**  
**lsclustermember 132**  
**lsconfiguredinterface 449**  
**lsconsistgrp 273**  
**lsconsistgrpmember 280**  
**lsdatastore 104**  
**lsdedupefficiency 204**  
**lsdeduploadstat 210**  
**lsdeduppoolstat 195**  
**lsdevice 374**  
**lsdiskpool 185**  
**lsdiskpoolstat 198**  
**lsdns 93**  
**lsetchosts 86**  
**lsflowtask 389**  
**lsgroup 263**  
**lsgroupmember 269**  
**lshost 69**  
**lsinstancemember 312**  
**lsinterface 447**  
**lsipfailover 99**  
**lsjob 138**  
**lsjobhistory 143**  
**lsjobwarnings 147**  
**lsldapgroup 49**  
**lsldapgrouporg 56**  
**lsldapgrouprole 52**  
**lsldapserver 45**  
**lslicense 246**  
**lsmdlstat 315**  
**lsmetricstat 175**  
**lsmonitoreddevice 491**  
**lsnasshare 109**  
**lsnetworkcapability 451**  
**lsntp 456**  
**lsorg 34**  
**lsorgresource 38**  
**lsoutboundpolicy 454**  
**lspolicy 422**  
**lspolicyoption 439**  
**lsrestoreoptions 345**  
**lsrights 15**  
**lsrole 21**  
**lssettableoption 433**  
**lssla 408**  
**lsslpl 214**  
**lssl 400**  
**lssnappoolstat 201**  
**lssnmpconfig 480**  
**lssnmpevent 483**  
**lsssd 107**  
**lsstorage 63**  
**lssystemdetail 180**  
**lsupdate 238**  
**lsuser 8**  
**lsuserrole 25**

lsvaultbackup 371  
lsvaultstat 190  
lsvaulttype 188  
lsversion 236  
lsvm 320  
lsworkflow 379  
mkapplication 251  
mkarray 224  
mkbandwidthschedule 463  
mkconsistgrp 271  
mkconsistgrpmember 277  
mkdiskpool 183  
mketchosts 87  
mkgroup 261  
mkgroupleader 267  
mkhost 66  
mkldapgroup 48  
mkldapgrouporg 54  
mkldapgrouprole 51  
mkldapserver 42  
mkmonitoreddevice 489  
mkorg 30  
mkorgresource 32  
mkpolicy 417  
mkpolicyoption 437  
mkrole 14  
mksideband 395  
mksla 406  
mkslp 212  
mkslt 398  
mksnmpconfig 476  
mkuser 6  
mkuserrole 24  
mkworkflow 376  
mountimage 326  
nfstest 111  
prepmount 322  
prepunmount 324  
refreshliveclone 351  
removeroutefromhost 80  
replicateimage 337  
replicatelog 339  
restoreimage 347  
rmappcluster 134  
rmapplication 260  
rmarray 233  
rmavailableconnector 519  
rmbandwidthschedule 469  
rmcluster 136  
rmclustermember 135  
rmconsistgrp 279  
rmconsistgrp 283  
rmconsistgrpmember 282  
rmdiskpool 194  
rmailserverconfig 508  
rmethosts 89  
rmeventemail 507  
rmfailovertest 306  
rmfailovertest 361  
rmgcschedule 159  
rmgroup 285  
rmgroupmember 284  
rmhost 75  
rmldapgroup 60  
rmldapgrouporg 58  
rmldapgrouprole 59  
rmldapserver 61  
rmlicense 248  
rmmonitoreddevice 495  
rmorg 41  
rmorgresource 40  
rmpolicy 445  
rmpolicyoption 443  
rmrole 29  
rmsla 415  
rmslp 218  
rmslt 405  
rmsnmpconfig 488  
rmsd 162  
rmuser 13

**rmuserrole 28**  
**rmworkflow 394**  
**roleaddrights 17**  
**roledelrights 19**  
**runpreflight 178**  
**runworkflow 391**  
**setarchiveconfig 163**  
**setautodiscovery 82**  
**setgcschedule 155**  
**setparameter 165**  
**setremotesupport 241**  
**setschedule 151**  
**showroute 459**  
**showrouting 460**  
**showtracepath 461**  
**syncback 308**  
**synccluster 121**  
**testconnection 457**  
**testdns 94**  
**testfailover 302**  
**testldapserver 44**  
**unexportimage 343**  
**unmountimage 353**  
**upgradehostconnector 516**  
**uploadupdate 239**  
**verifyimage 333**  
**vmdiscovery 292**

# 1 Introduction

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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.

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

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This chapter describes:

- [Commands Supported by Actifio API](#) on page 1
- [Authentication or Login](#) on page 1
- [Operational Hints and Tips](#) on page 4

## Commands Supported by Actifio API

The Actifio API supports the following command types:

- o **login** - Use this command to initiate a session. For more information, see [Authentication or Login](#) on page 1.
- o **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.
- o **task** - Use this command to configure or update configuration of an Actifio appliance. For more information, see [Task Commands](#) on page 3.
- o **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}](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}](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",
    "WorkFlow View"
  ],
  "sessionid": "92929a8b-a413-476f-a624-5b575cff54d3",
  "status": 0
}
```



## 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/lisorg
```

### 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

**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

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

#### Logout Command

The logout command ends a session.

## 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/lapplication
```

# 2 User Management Commands

These commands are used for user management. The GUI interface for these commands can be found in the Actifio Desktop.

For detailed information about Actifio appliance user management, refer to **Setting Up Users and Roles With the Domain Manager** in ActifioNOW.

**Note:** This chapter details the following user management commands:

## Managing Users

### User Commands

[mkuser](#) on page 6  
[lsuser](#) on page 8  
[chuser](#) on page 11  
[rmuser](#) on page 13

### Role Commands

[mkrole](#) on page 14  
[lsrights](#) on page 15  
[roleaddrights](#) on page 17  
[roledelrights](#) on page 19  
[lsrole](#) on page 21  
[mkuserrole](#) on page 24  
[lsuserrole](#) on page 25  
[chrole](#) on page 27  
[rmuserrole](#) on page 28

### Org Commands

[mkorg](#) on page 30  
[mkorgresource](#) on page 32  
[lsorg](#) on page 34  
[chorg](#) on page 36  
[lsorgresource](#) on page 38  
[rmorgresource](#) on page 40  
[rmorg](#) on page 41

### LDAP Commands

[mkldapserver](#) on page 42  
[testldapserver](#) on page 44  
[lsldapserver](#) on page 45  
[chldapserver](#) on page 46  
[mkldapgroup](#) on page 48  
[lsldapgroup](#) on page 49  
[lsldapgrouprole](#) on page 52  
[mkldapgrouporg](#) on page 54  
[lsldapgrouporg](#) on page 56  
[rmldapgrouporg](#) on page 58  
[rmldapgrouprole](#) on page 59  
[rmldapgroup](#) on page 60  
[rmldapserver](#) on page 61

### Other Commands

[getauthservice](#) on page 62

## User Commands

### mkuser

[About mkuser Command on page 6](#)

[mkuser Request Details on page 7](#)

[mkuser Example on page 7](#)

### About mkuser Command

#### Description

Use this command to create a user.

#### Rights

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

#### Parameters

Parameter	Description
<b>comments</b> =string	Optional. Specifies the comments for the user.
<b>email</b> string	Optional. Specifies an email address for the user.
<b>firstname</b> =string	Optional. Specifies the first name.
<b>lastname</b> =string	Optional. Specifies the last name.
<b>name</b> =string	Required. Specifies the name of the user, which should be unique within Actifio appliance.
<b>org</b> =string	Optional. Specifies a default organization id or organization name that the user should be added to after creation. Use <a href="#">lsorg</a> to retrieve organization information. <hr/> <b>Note:</b> To use this option, the user must have the 'System Manage' right. <hr/>
<b>password</b> =string	Required. Specifies the password for the user.
<b>timezone</b> =string	Optional. Specifies a time zone.

Parameter	Description
<b>denylogin</b> =boolean	<p>Optional. Specifies the Actifio Desktop login access for a user. Options include:</p> <ul style="list-style-type: none"> <li><b>false</b> -This user will be allowed to login and access the Actifio Desktop. This is the default value.</li> <li><b>true</b> -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.</li> </ul> <hr/> <p><b>Note:</b> Set this to true only under the direction of an Actifio Support representative.</p> <hr/>

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkuser	name password

---

**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
}
```

## lsuser

[About lsuser Command](#) on page 8

[lsuser Request Details](#) on page 8

[lsuser Example](#) on page 9

### 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

Parameter	Description
<b>filtervalue</b> =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 <a href="#">lsuser</a> are: <ul style="list-style-type: none"><li>• comments</li><li>• clienabled [true   false]</li><li>• email</li><li>• firstname</li><li>• isprotected [true   false] (<b>deprecated</b>)</li><li>• lastname</li><li>• name</li><li>• timezone</li></ul> 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.
<b>argument</b> =string	Optional. Specifies the name or ID of the user.

### lsuser 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsuser	None

---

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

---

## lsuser Example

### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/lsuser

HTTP Request Header

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

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

### Response

```
{
  "result": [
    {
      "clienabled": "true",
      "isprotected": "true",
      "firstname": "System",
      "denylogin": "false",
      "comments": "admin",
      "dataaccesslevel": "0",
      "timezone": "",
      "name": "admin",
      "externalid": "",
      "id": "1",
      "email": "",
      "lastname": "Admin"
    },
    {
      "clienabled": "false",
      "isprotected": "false",
      "firstname": "",
      "denylogin": "false",
      "comments": "",
      "dataaccesslevel": "0",
      "timezone": "",
      "name": "newuser4",
      "externalid": "",
      "id": "121582",
      "email": "foo@gmail.com",
      "lastname": ""
    },
    {
      "clienabled": "true",
      "isprotected": "false",
      "firstname": "JIIta",
      "denylogin": "false",
      "comments": "",
      "dataaccesslevel": "0",
      "timezone": "US/Eastern",
      "name": "jita_user",
      "externalid": "",
      "id": "180912",
      "email": "",
      "lastname": "Chatterjee"
    },
    {
      "clienabled": "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 11

[chuser Request Details](#) on page 12

[chuser Examples](#) on page 12

### 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

Parameter	Description
<b>comments</b> =string	Optional. Specifies a comment.
<b>email</b> =string	Optional. Specifies an email address.
<b>firstname</b> =string	Optional. Specifies the first name.
<b>lastname</b> =string	Optional. Specifies the last name.
<b>name</b> =string	Optional. Specifies a unique name for the user.
<b>password</b> =string	Optional. Specifies a password.
<b>timezone</b> =string	Optional. Specifies a timezone.
<b>denylogin</b> =boolean	Optional. Specifies the Actifio Desktop login access for a user. Options include: <ul style="list-style-type: none"><li>• <b>false</b> -This user will be allowed to login and access the Actifio Desktop. This is the default state.</li><li>• <b>true</b> - 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.</li></ul> <hr/> <b>Note:</b> Set this to true only under the direction of an Actifio Support representative. <hr/>
<b>argument</b> =string	Required. Specifies the ID or name of the user whose details should be modified.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chuser	argument

---

**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

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

## rmuser

[About rmuser Command](#) on page 13

[rmuser Request Details](#) on page 13

[rmuser Example](#) on page 13

### About rmuser Command

#### Description

Use this command to delete a user.

#### Rights

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

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the user to be removed. Use <a href="#">lsuser</a> to get the ID or name of the user.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmuser	argument

---

**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 14

[mkrole Request Details](#) on page 14

[mkrole Example](#) on page 14

### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies a description for the role.
<b>name</b> =string	Required. Specifies a name. The role name should be unique within the Actifio appliance.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkrole</code>	name

---

**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-a624-5b575cff54d3

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

#### Response

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

## lsrights

[About lsrights Command](#) on page 15

[lsrights Request Details](#) on page 15

[lsrights Example](#) on page 15

### About lsrights Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<code>role=string</code>	Optional. Specifies the role name or role ID. When you use this parameter, the rights of the role are listed. Use <a href="#">lsuserrole</a> to get the ID or name of the role.

### lsrights 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	<code>/actifio/api/info/lsrights</code>	None

---

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

---

### lsrights 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

```
{
  "result": [
    "Access Domain Manager",
    "Access SLA Architect",
    "Application Manage",
```

```
    "Backup Manage",
    "CLI Usage",
    "Clone Manage",
    "Dedup-Async Manage",
    "Dedup-Async Test",
    "Host Manage",
    "LiveClone Manage",
    "Mount Manage",
    "Restore Manage",
    "SLA View",
    "Storage Manage",
    "Storage View"
  ],
  "status": 0
}
```

## roleaddrights

[About roleaddrights Command](#) on page 17

[roleaddrights Request Details](#) on page 18

[roleaddrights Example](#) on page 18

### 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

Parameter	Description
<b>role</b> =string	Required. Specifies the ID or name of the role to add rights to.
<b>rights</b> =string	Required. Specifies the rights to be added. The list should be colon-separated if more than one right is specified. The rights are: <ul style="list-style-type: none"><li>• <i>Access Application Manager</i></li><li>• <i>Access Domain Manager</i></li><li>• <i>Access SLA Architect</i></li><li>• <i>Access System Monitor</i></li><li>• <i>Application Manage</i></li><li>• <i>Backup Manage</i></li><li>• <i>CLI Usage</i></li><li>• <i>Clone Manage</i></li><li>• <i>Host Manage</i></li><li>• <i>Join Appliance</i></li><li>• <i>LiveClone Manage</i></li><li>• <i>Mirroring Manage</i></li><li>• <i>Mount Manage</i></li><li>• <i>Restore Manage</i></li><li>• <i>SLA Assign</i></li><li>• <i>SLA Manage</i></li><li>• <i>SLA View</i></li><li>• <i>Storage Manage</i></li><li>• <i>Storage View</i></li><li>• <i>System Manage</i></li><li>• <i>System View</i></li><li>• <i>Test-Failover</i></li><li>• <i>WorkFlow Manage</i></li><li>• <i>WorkFlow Run</i></li><li>• <i>WorkFlow View</i></li></ul>

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/roleaddrights</code>	<code>rights</code> <code>role</code>

---

**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

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



## roledelrights

[About roledelrights Command](#) on page 19

[roledelrights Request Details](#) on page 20

[roledelrights Example](#) on page 20

### 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

Parameter	Description
<b>role</b> =string	Required. Specifies the ID or name of the role to delete the rights from.
<b>rights</b> =string	Required. Specifies the rights to be deleted. The list should be colon-separated if more than one right is specified. The rights are: <ul style="list-style-type: none"><li>• <i>Access Application Manager</i></li><li>• <i>Access Domain Manager</i></li><li>• <i>Access SLA Architect</i></li><li>• <i>Access System Monitor</i></li><li>• <i>Application Manage</i></li><li>• <i>Backup Manage</i></li><li>• <i>CLI Usage</i></li><li>• <i>Clone Manage</i></li><li>• <i>Host Manage</i></li><li>• <i>Join Appliance</i></li><li>• <i>LiveClone Manage</i></li><li>• <i>Mirroring Manage</i></li><li>• <i>Mount Manage</i></li><li>• <i>Restore Manage</i></li><li>• <i>SLA Assign</i></li><li>• <i>SLA Manage</i></li><li>• <i>SLA View</i></li><li>• <i>Storage Manage</i></li><li>• <i>Storage View</i></li><li>• <i>System Manage</i></li><li>• <i>System View</i></li><li>• <i>Test-Failover</i></li><li>• <i>WorkFlow Manage</i></li><li>• <i>WorkFlow Run</i></li><li>• <i>WorkFlow View</i></li></ul>

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/roledelrights	rights role

---

**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

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

## lsrole

[About lsrole Command](#) on page 21

[lsrole Request Details](#) on page 21

[lsrole Examples](#) on page 21

### 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

Parameter	Description
<b>filtervalue</b> =attribute%3Dvalue	Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attribute for the <a href="#">lsrole</a> command is: name  For string type of filters, the only operator allowed is '='. You can also use the wild card character '*'. For example, to match roles with name begins with 'foo', use filtervalue=name=%3Dfoo*.
<b>argument</b> =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 <b>filtervalue</b> 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsrole	None

---

**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-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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": "482481"
  },
],
"status": 0
}
```

## mkuserrole

[About mkuserrole Command](#) on page 24

[mkuserrole Request Details](#) on page 24

[mkuserrole Example](#) on page 24

### 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

Parameter	Description
<b>roleid</b> =integer	Required. Specifies the role ID to be assigned to a user. To learn roleid, use <a href="#">lsrole</a> .
<b>userid</b> =integer	Required. Specifies the user ID that the role will be assigned to. To learn userid, use <a href="#">lsuser</a> .

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkuserrole</code>	roleid userid

---

**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-a624-5b575cff54d3
```

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

#### Response

```
{  
  "result": 261651,  
  "status": 0  
}
```

## lsuserrole

[About lsuserrole Command](#) on page 25

[lsuserrole Request Details](#) on page 25

[lsuserrole Example](#) on page 25

### About lsuserrole Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>argument</b> =integer	Optional. Specifies the userid of a particular user for which the role mapping is displayed. To learn userid, use <a href="#">lsuser</a> .

### lsuserrole 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsuserrole	None

---

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

---

### lsuserrole 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",
```

```

        "rights": "Access Domain Manager,Access SLA Architect,Access Application
Manager,Access System Monitor",
        "id": "17512",
        "userid": "17510",
        "username": "User"
    },
    {
        "rolename": "Basic",
        "roleid": "4",
        "rights": "Access Domain Manager,Access SLA Architect,Access Application
Manager,Access System Monitor",
        "id": "17779",
        "userid": "17777",
        "username": "DevelopmentUser"
    },
    {
        "rolename": "Basic",
        "roleid": "4",
        "rights": "Access Domain Manager,Access SLA Architect,Access Application
Manager,Access System Monitor",
        "id": "121584",
        "userid": "121582",
        "username": "newuser4"
    },
    {
        "rolename": "Administrator",
        "roleid": "2",
        "rights": "",
        "id": "252672",
        "userid": "180912",
        "username": "jita_user"
    }
],
"status": 0
}

```



## chrole

About [chrole Command](#) on page 27

[chrole Request Details](#) on page 27

[chrole Example](#) on page 27

### 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

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

### [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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/chrole</code>	argument

---

**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 28

[rmuserrole Request Details](#) on page 28

[rmuserrole Example](#) on page 28

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the user-to-role mapping to be deleted.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmuserrole	argument

---

**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

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

## rmrole

[About rmrole Command](#) on page 29

[rmrole Request Details](#) on page 29

[rmrole Example](#) on page 29

### About rmrole Command

#### Description

Use this command to delete a role.

#### Rights

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

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the role to be removed. Use <a href="#">lsrole</a> to locate the ID or name of the role.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmrole</code>	argument

---

**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-a624-5b575cff54d3
```

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

#### Response

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

## Org Commands

### mkorg

[About mkorg Command](#) on page 30

[mkorg Request Details](#) on page 30

[mkorg Example](#) on page 30

### 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

Parameter	Description
<b>description</b> =string	Optional. Describes the organization.
<b>name</b> =string	Required. Specifies a name for the organization. The name should be unique.
<b>org</b> =string	Optional. Specifies a default organization in which the organization should be added to after creation. Use <a href="#">lsorg</a> to retrieve organization information.

---

**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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkorg</code>	name

---

**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](#) on page 32

[mkorgresource Request Details](#) on page 32

[mkorgresource Example](#) on page 32

### 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

Parameter	Description
<b>org</b> =string	Required. Specifies the ID or name of the organization. Use <a href="#">lsorg</a> to retrieve organization information.
<b>resources</b> =string	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 <a href="#">lsorgresource</a> command to locate the ID of the organization resource by displaying a list of organization-to-resource mappings.
<b>type</b> user   app   diskpool   host   slt   slp   org   cluster   group	Required. Specifies the type of resource to be added to an organization. <hr/> <b>Note:</b> For information on adding an Actifio appliance to an organization through specification of <b>type cluster</b> to define multi-tenancy access, see <b>Enabling Multi-Tenancy with Actifio Organizations</b> in <i>ActifioNOW</i> . <hr/>

### [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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkorgresource	type org

---

**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](https://{Actifio_API_HOST}/actifio/api/task/mkorgresource?type=user&org=Org1)

HTTP Request Header

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

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

### Response

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

## lsorg

[About lsorg Command](#) on page 34

[lsorg Request Details](#) on page 34

[lsorg Example](#) on page 34

### About lsorg 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

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

### lsorg Request Details

Your [lsorg](#) 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/lsorg	None

---

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

---

### lsorg 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
}
```

## chorg

[About chorg Command](#) on page 36

[chorg Request Details](#) on page 36

[chorg Example](#) on page 36

### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies a description for the organization.
<b>name</b> =string	Optional. Specifies a unique name for the organization, name must be unique.
<b>argument</b> =string	Required. Specifies the organization object to modify, either by ID or by name. Use <a href="#">lsorg</a> to obtain the ID or name of the organization.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chorg	argument

---

**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](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  
  }
```

## Isorgresource

[About Isorgresource Command](#) on page 38

[Isorgresource Request Details](#) on page 38

[Isorgresource Example](#) on page 39

### About Isorgresource 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

Parameter	Description
<b>filtervalue</b> =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 <a href="#">Isorgresource</a> command are: <ul style="list-style-type: none"><li>• orgid</li><li>• resourceid</li><li>• typecode [ app   host   org   slp   slt   user ]</li></ul> 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.
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the <i>argument</i> parameter, a concise view of all objects matching the filter criteria is displayed.

### Isorgresource Request Details

Your [Isorgresource](#) 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/ Isorgresource	None

---

**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-a624-5b575cff54d3

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": "host",
      "resourceid": "164521",
      "id": "165148",
      "orgid": "164816"
    },
    {
      "typecode": "user",
      "resourceid": "180912",
      "id": "180981",
      "orgid": "3"
    }
  ],
  "status": 0
}
```

## rmorgresource

[About rmorgresource Command](#) on page 40

[rmorgresource Request Details](#) on page 40

[rmorgresource Example](#) on page 40

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the resource-to-organization mapping to be deleted. Use the <a href="#">lsorgresource</a> command to get the ID or name of the organization resource.

### 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
POST	/actifio/api/task/rmorgresource	argument

---

**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](#) on page 41

[rmorg Request Details](#) on page 41

[rmorg Example](#) on page 41

### About rmorg Command

#### Description

Use this command to delete an organization.

#### Rights

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

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the organization to be deleted. Use the <b>lsorg</b> command to get the ID or name of the organization.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmorg	argument

---

**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

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

# LDAP Commands

## mkldapserver

[About mkldapserver Command](#) on page 42

[mkldapserver Request Details](#) on page 42

[mkldapserver Example](#) on page 43

### 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

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

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkldapserver</code>	<code>ip</code> <code>port</code> <code>basedn</code> <code>userattribute</code>



---

**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&noss1=true&basedn=CN%3DUsers%2CDC%3Drtad%2CDC%3Dcom&useratt
ribute=cn&fallback=true
```

HTTP Request Header

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

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

#### Response

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

## testldapserver

[About testldapserver Command](#) on page 44

[testldapserver Request Details](#) on page 44

[testldapserver Example](#) on page 44

### 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

Parameter	Description
<b>user</b> =string	Required. The username with which to test.
<b>password</b> =string	Required. The password associated with the user.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/testldapserver	user password

---

**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

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

## lsldapserver

[About lsldapserver Command](#) on page 45

[lsldapserver Request Details](#) on page 45

[lsldapserver Example](#) on page 45

### About lsldapserver 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

### lsldapserver 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsldapserver	None

### lsldapserver Example

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/lsldapserver
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": [
    {
      "address": {LDAP_SERVER_IP},
      "basedn": "CN=Users,DC=SQA,DC=actifio,DC=com",
      "fallback": "false",
      "lookuppasword": "*****",
      "lookupuser": "CN=Administrator,CN=Users,DC=SQA,DC=actifio,DC=com",
      "port": "389",
      "uniqueidname": "objectGUID",
      "userattribute": "SamAccountName",
      "usessl": "false"
    }
  ],
  "status": 0
}
```

## chldapserver

[About chldapserver Command](#) on page 46

[chldapserver Request Details](#) on page 46

[chldapserver Example](#) on page 47

### 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

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

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/chldapserver</code>	None

---

**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
}
```

## mkldapgroup

[About mkldapgroup Command](#) on page 48

[mkldapgroup Request Details](#) on page 48

[mkldapgroup Example](#) on page 48

### 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

Parameter	Description
dn=string	Required. Specifies the Distinguished Name (DN) of the LDAP group.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/ mkldapgroup	dn

---

**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%3Dtestgroup02,CN%3DUsers,DC%3DSQA,DC%3Dactifio,DC%3Dcom
```

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  
}
```

## lsldapgroup

[About lsldapgroup Command](#) on page 49

[lsldapgroup Request Details](#) on page 49

[lsldapgroup Example](#) on page 49

### About lsldapgroup 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

Parameter	Description
<b>filtervalue</b> =attribute%3Dvalue	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 <a href="#">lsldapgroup</a> command is: <b>name</b> . For string filters, the only operator allowed is '='. You can use the wildcard '*'.
<b>argument</b> =string	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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument parameter, the concise view of all objects matching the filter criteria is displayed.

### lsldapgroup 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsldapgroup	None

---

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

---

### lsldapgroup 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

```
{
```

```
"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](#) on page 51

[mkldapgrouprole Request Details](#) on page 51

[mkldapgrouprole Example](#) on page 51

### 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

Parameter	Description
<b>groupid</b> =integer	Required. Specifies the LDAP group ID.
<b>roleid</b> =integer	Required. Specifies the role ID to be assigned to the LDAP group.

### 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	URI	Required Parameters
POST	<code>/actifio/api/task/mkldapgrouprole</code>	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-a624-5b575cff54d3
```

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

#### Response

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

## lsldapgrouprole

[About lsldapgrouprole Command](#) on page 52

[lsldapgrouprole Request Details](#) on page 52

[lsldapgrouprole Example](#) on page 52

### 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

Parameter	Description
<b>argument</b> =integer	Optional. Specifies the ID of an LDAP group role object, to show the role mapping for a particular LDAP group role.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/ lsldapgrouprole	None

---

**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

```
{
  "result": [
    {
      "groupid": "5215712",
      "id": "5215714",
      "roleid": "203"
    }
  ]
}
```

```
    ],  
    "status": 0  
  }  
}
```

## mkldapgrouporg

[About mkldapgrouporg Command](#) on page 54

[mkldapgrouporg Request Details](#) on page 54

[mkldapgrouporg Example](#) on page 54

### 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

Parameter	Description
<b>groupid</b> =integer	Required. Specifies the LDAP group ID.
<b>orgid</b> =integer	Required. Specifies the organization id to be assigned to the LDAP group.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkldapgrouporg</code>	groupid orgid

---

**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
}
```

}

## lsldapgrouporg

[About lsldapgrouporg Command](#) on page 56

[lsldapgrouporg Request Details](#) on page 56

[lsldapgrouporg Example](#) on page 56

### 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

Parameter	Description
<b>argument</b> =integer	Optional. Specifies the ID of an LDAP group organization object, to show the organization mapping for a particular LDAP group organization.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsldapgrouporg	None

---

**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-a624-5b575cff54d3
```

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

#### Response

```
Request success
```

```
{
  "result": [
    {
      "groupid": "5215712",
      "id": "5265064",
      "orgid": "3"
    }
  ]
}
```

```
    }  
  ],  
  "status": 0  
}
```

## rmldapgrouporg

[About rmldapgrouporg Command](#) on page 58

[rmldapgrouporg Request Details](#) on page 58

[rmldapgrouporg Example](#) on page 58

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the LDAP group organization mapping to be removed.

### 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	URI	Required Parameters
POST	<code>/actifio/api/task/rmldapgrouporg</code>	argument

---

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

---

### rmldapgrouporg Example

#### Request

```
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](#) on page 59

[rmldapgrouprole Request Details](#) on page 59

[rmldapgrouprole Example](#) on page 59

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the LDAP group role mapping to be removed.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmldapgrouprole	argument

---

**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

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

## rmldapgroup

[About rmldapgroup Command](#) on page 60

[rmldapgroup Request Details](#) on page 60

[rmldapgroup Example](#) on page 60

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the LDAP group to be removed.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmldapgroup	argument

---

**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](#) on page 61

[rmldapserver Request Details](#) on page 61

[rmldapserver Example](#) on page 61

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmldapserver	None

### 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
}
```

## Other Commands

### getauthservice

[About getauthservice Command](#) on page 62

[getauthservice Request Details](#) on page 62

[getauthservice Example](#) on page 62

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getauthservice	None

### getauthservice 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
}
```

## lsstorage

[About lsstorage Command](#) on page 63

[lsstorage Request Details](#) on page 63

[lsstorage Example](#) on page 63

### 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, to take advantage of in-band capabilities.

#### Rights

You must have 'Storage View' or 'Application Manage' right to view the details of job.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3D value	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for <a href="#">lsarray</a> are:</p> <ul style="list-style-type: none"><li>• appid</li><li>• appname</li><li>• hostid</li></ul> <p>The filter will be formed with an attribute and a value. When you specify more than one filter, they must be combined with '&amp;' character (which needs to be escaped with '\').</p> <p>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*'.</p>

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsstorage	None

**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](https://{Actifio_API_Server}/actifio/api/info/lsstorage)

HTTP Request Header

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

## Response

# 3 Host Management Commands

These commands are used for managing hosts and appliances. The GUI interface for these commands can be found in the Actifio Desktop.

For detailed information, refer to **Configuring Resources and Settings With the Domain Manager** in ActifioNOW.

This chapter details the following host management commands:

## Managing Hosts

### Host Commands

- [mkhost](#) on page 66
- [lshost](#) on page 69
- [chhost](#) on page 72
- [rmhost](#) on page 75
- [chproxyhost](#) on page 76
- [addroutetohost](#) on page 78
- [removeroutefromhost](#) on page 80
- [setautodiscovery](#) on page 82
- [getautodiscovery](#) on page 84
- [lsetchosts](#) on page 86
- [mketchosts](#) on page 87
- [rmetchosts](#) on page 89

### Other Commands

- [getsysteminfo](#) on page 90
- [configdns](#) on page 91
- [lsdns](#) on page 93
- [testdns](#) on page 94
- [configinterface](#) on page 95
- [lsipfailover](#) on page 99
- [iscsitest](#) on page 100
- [configchap](#) on page 102
- [lsdatastore](#) on page 104
- [lsssd](#) on page 107
- [lsnasshare](#) on page 109
- [nfstest](#) on page 111

## Host Commands

### mkhost

[About mkhost Command](#) on page 66

[mkhost Request Details](#) on page 68

[mkhost Example](#) on page 68

### 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

Parameter	Description
<b>alternateip</b> =string	Optional. Specifies the alternate IP address of the host. Multiple <b>alternateip</b> can be specified in a comma-delimited list.
<b>description</b> =string	Optional. Specifies the description of the host.
<b>diskpref</b> =BLOCK   NFS	Optional. Specifies preference (BLOCK or NFS) for presenting the staging disk. Default value is BLOCK.
<b>dbauthentication</b> =boolean	Optional. Specifies whether the Oracle database running on this host should be using DB Authentication or Host authentication.
<b>friendlypath</b> =string	Optional. Specifies the friendly name for the host.
<b>hbawwpn</b> =string	Required for generic/HP-UX/TPGS/openvms hosts when an iSCSI name is not specified. Multiple <b>hbawwpn</b> can be specified in a <i>comma</i> -delimited list. Not allowed for virtual machine hosts. You can get a list of potential port names with <b>usvcinfo lshbaportcandidate</b> . 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 <b>iscsiname</b> parameter.
<b>hostname</b> =string	Required. Specifies the name of the host.
<b>iogrp</b> =string	Optional. Not allowed for virtual machine hosts. Specifies a set of one or more I/O groups that the host can access the VDIs 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.



Parameter	Description
<b>ipaddress</b> =string	Optional. Specifies IP address of the host. A DNS lookup will be attempted if this is not specified.
<b>iscsiname</b> =string	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 <b>hbawwpm</b> parameter. Multiple <b>iscsiname</b> can be specified in a comma-delimited list. However, this parameter is not allowed for virtual machine hosts.
<b>mask</b> =integer	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).
<b>nfsoption</b> =string	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".
<b>org</b> =string	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.
<b>password</b> =string	Required for vCenter type. Specifies the password to access the Actifio Connector of the host.
<b>port</b> =integer	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.
<b>svcname</b> =string	Optional. Specifies the SVC host name, which limits to 15 characters, first character cannot be a number, and no space, or '.' is allowed.
<b>type</b> =generic   hmc   hpux   hyperv   isilon   netapp svm   netapp 7 mode   openvms   tpgs   vcenter	Required for vCenter or HMC type. Specifies the type of the new host: <i>generic</i> , <i>hmc</i> , <i>hpux</i> , <i>hyperv</i> , <i>isilon</i> , <i>netapp svm</i> , <i>netapp 7 mode</i> , <i>openvms</i> , <i>tpgs</i> , or <i>vcenter</i> . The <i>tpgs</i> type enables extra target port unit attentions. With the <i>vcenter</i> type, discovery (see <a href="#">vmdiscovery</a> ) allows Virtual Machines to be discovered. <i>isilon</i> , <i>netapp svm</i> and <i>netapp 7 mode</i> hosts are used with the Actifio NAS Director.  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.
<b>username</b> =string	Required for vCenter. Specifies the username to access the Actifio Connector running on the host.
<b>transport</b> =string	Optional. Specifies the transport option for host. This is applicable only for VMware Vcenter's and manually discovered ESX hosts.

## 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkhost</code>	<code>hostname=&lt;name of host&gt;</code>

---

**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 69

[Ishost Request Details](#) on page 70

[Ishost Example](#) on page 70

### 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

Parameter	Description
<b>filtervalue=attrib%3D</b> value	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <a href="#">Ishost</a> command are:</p> <ul style="list-style-type: none"><li>• alternateip</li><li>• description</li><li>• diskpref</li><li>• friendlypath</li><li>• hasagent</li><li>• hostname</li><li>• hosttype</li><li>• isclusterhost</li><li>• ipaddress</li><li>• isesxhost</li><li>• isvcenterhost</li><li>• isvm</li><li>• originalhostid</li><li>• osrelease</li><li>• ostype</li><li>• osversion</li><li>• sourcecluster</li><li>• svcname</li><li>• uniqueness</li><li>• vcenterhostid</li></ul> <p>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&amp;' 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*.</p>

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lshost	None

---

**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

```
{
  "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",
    "isvm": "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](#) on page 72

[chhost Request Details](#) on page 74

[chhost Example](#) on page 74

### About chhost Command

#### Description

Use this command to changes the attributes of a host.

#### Rights

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

#### Parameters

Parameter	Description
<b>alternateip</b> =string	Optional. Specifies the alternate IP address of the host. Multiple <b>alternateip</b> can be specified in a comma-delimited list.
<b>clearconnector</b> =boolean	Optional. Specifies whether to clear udsagent information for the host, if the connector has been already uninstalled from the host. Use it cautiously.
<b>forceclearconnector</b> =boolean	Optional. If <i>forceclearconnector</i> flag is used with the <i>clearconnector</i> , then udsagent (connector) information for the host will be removed from the database regardless of its installation status on the host. Use it cautiously.  <code>udstask chhost -clearconnector -forceclearconnector &lt;id-or-name&gt;</code>
<b>dbauthentication</b> =boolean	Optional. Specifies whether Oracle database running on this host should be using DB Authentication or Host authentication.
<b>description</b> =string	Optional. Specifies a description of the host.
<b>diskpref</b> =BLOCK   NFS	Optional. Specifies preference (BLOCK or NFS) for presenting the staging disk. Default value is BLOCK.
<b>friendlypath</b> =string	Optional. Specifies a new friendly name for the host. Change of friendly path of a VM is not allowed.
<b>hostname</b> =string	Optional. Specifies the new host name for the host.
<b>hbawwppn</b> =string	Optional. Specifies the comma-separated list of WWPN names for the host. The existing WWPN names are replaced.
<b>ipaddress</b> =string	Optional. Specifies an IP address of the host.

Parameter	Description
<b>iscsiname</b> =string	Optional. Specifies the comma-separated list of iSCSI names to add to the host. The existing iSCSI names are replaced.
<b>mask</b> =integer	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).
<b>maxjobs</b> =integer	Optional. Specifies the maximum number of jobs allowed. This parameter applies only to backup jobs. Specify 0 to use the system default.
<b>nfsoption</b> =string	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".
<b>password</b> =string	Optional. Specifies the password to start the Actifio Connector running on the host.
<b>properties</b> <i>guestvmiscsi:true</i>   <i>guestvmiscsi:false</i>	Optional. Enables/disables various properties of the host. <ul style="list-style-type: none"> <li>• <i>guestvmiscsi:true</i> maps a LUN to Virtual Machine directly.</li> <li>• <i>guestvmiscsi:false</i> maps through hypervisor.</li> </ul>
<b>port</b> =integer	Optional. Specifies a port for the Actifio Connector running on the host.
<b>svcname</b> =string	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 (' ') or period('.') characters.  <hr/> <b>Note:</b> <i>The <b>svcname</b> parameter is not supported for Actifio Sky.</i> <hr/>
<b>type</b> =generic   hmc   hpux   hyperv   isilon   netapp svm   netapp 7 mode   openvms   tpgs   vcenter	Optional. Specifies a new type for the host, which replaces existing host type(s). Separate the two types with a colon, ':', if the host is of more than one type. This is required if the host has multiple username, passwords, or ports with different type of connections. This can happen when a vCenter also has connector installed. In which case use 'type' to specify the correct username, password, and port to be changed.  <hr/> <b>Note:</b> <i>The <b>hpux</b>, <b>openvms</b>, and <b>tpgs</b> types are not supported for Actifio Sky appliances. The <b>isilon</b>, <b>netapp svm</b>, and <b>netapp 7 mode</b> types are used with the Actifio NAS Director.</i> <hr/>

Parameter	Description
<b>username</b> =string	Optional. Specifies the user name to start the Connector running on the host.
<b>blockcbt</b> =enable disable	Optional. Activates/deactivates CBT tracking for the application connector of a Linux host.
<b>argument</b> =integer	Required. Specifies the ID of the host to be modified.
<b>transport</b> NFS   SAN   GUESTVMISCSI	Optional. Specifies the transport option for host. This is applicable only for VMware Vcenter's and manually discovered ESX hosts. GUESTVMISCSI is only applicable for VMware VM.  <hr/> <b>Note:</b> Any newly created vCenter on Actifio Appliances will default the transport type to 'NFS'. In case you are using ESP, you must change to 'SAN'. Use this command to change the transport setting, <b>chhost transport san &lt;id&gt;</b> . <hr/>

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chhost	argument=<Id of host>

**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?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
{
  "result": "154829",
  "status": 0
}
```



## rmhost

[About rmhost Command](#) on page 75

[rmhost Request Details](#) on page 75

[rmhost Example](#) on page 75

### About rmhost Command

#### Description

Use this command to delete a host.

#### Rights

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

#### Parameters

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the host to be deleted.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmhost</code>	<code>argument=&lt;ID of host&gt;</code>

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

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

## chproxyhost

[About chproxyhost Command on page 76](#)

[chproxyhost Request Details on page 77](#)

[chproxyhost Example on page 77](#)

### 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.

#### Rights

You must have the 'Host Manage' right to configure a proxy host server.

#### Parameters

Parameter	Description
<b>domain</b> =string	Optional. Specifies the name of the domain to be joined. Required when the <b>joindomain</b> option is specified.
<b>joindomain</b> =boolean	Optional. If specified, adds the membership to an ADS or NT Domain. KDC details are automatically determined by the <b>ads net lookup</b> command.
<b>leavedomain</b> =boolean	Optional. If specified, removes the membership from an ADS or NT Domain.
<b>username</b> =string	Optional. Specifies the user name to authenticate to join/leave an ADS or NT Domain. Required when either the <b>joindomain</b> or <b>leavedomain</b> option is specified.
<b>password</b> =string	Optional. Specifies the password of the user to authenticate to join/leave an ADS or NT domain. Required when either the <b>joindomain</b> or <b>leavedomain</b> option is specified.
<b>port3ip</b> =string	Optional. Specifies the IP address for the port 3 interface.
<b>port3netmask</b> =integer	Optional. Specifies the netmask for the port 3 interface.
<b>port3mtu</b> =integer	Optional. Specifies the MTU value for the port 3 interface. Setting an incorrect MTU value can result in serious networking issues. If <b>port3ip</b> and <b>port3netmask</b> are not being set and are not currently set, trying to set <b>port3mtu</b> will result in an error. Setting the value to an empty string ("") will remove an existing MTU setting.
<b>port4ip</b> =string	Optional. Specifies the IP address for the port 4 interface.

Parameter	Description
<b>port4netmask</b> =integer	Optional. Specifies the netmask for the port 4 interface.
<b>port4mtu</b> =integer	Optional. Specifies the MTU value for the port 4 interface. Setting an incorrect MTU value can result in serious networking issues. If <b>port4ip</b> and <b>port4netmask</b> are not being set and are not currently set, trying to set <b>port4mtu</b> will result in an error. Setting the value to an empty string ("") will remove an existing MTU setting.
<b>argument</b> =string	Required. Specifies the object id or name of the proxy host. To see the proxy host server details refer to .

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chproxyhost	argument=<Id or name of host>

---

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

---

### 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

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

## addroutetohost

[About addroutetohost Command](#) on page 78

[addroutetohost Request Details](#) on page 78

[addroutetohost Example](#) on page 79

### 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.

---

#### Rights

You must have the 'Host Manage' right to add a network route to a host.

#### Parameters

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

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/addroutetohost	route=<route IP address> gateway=<gateway IP address> interface=<network interface> argument=<host Id>

---

**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

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

## removeroutefromhost

[About removeroutefromhost Command](#) on page 80

[removeroutefromhost Request Details](#) on page 80

[removeroutefromhost Example](#) on page 81

### 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.

---

#### Rights

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

#### Parameters

Parameter	Description
<b>route</b> =string	Required. The route to apply to the host you wish to remove. It can be a single IP address or a network range in CIDR notation.
<b>gateway</b> =string	Required. The gateway to use for this route.
<b>interface</b> =string	Required. The network interface on the host to which this routing should be removed.
<b>argument</b> =integer	Required. The host to which this route should be removed.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/removeroutefromhost</code>	<code>route=&lt;IP address of route&gt;</code> <code>gateway=&lt;IP address of gateway&gt;</code> <code>interface=&lt;network interface&gt;</code> <code>argument=&lt;host ID&gt;</code>

---

**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 82

[setautodiscovery Request Details](#) on page 82

[setautodiscovery Example](#) on page 82

### 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. Use **setschedule** to set the schedule for autodiscovery. By default, autodiscovery is performed once a day at 3 am.

#### 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

Parameter	Description
<b>clear</b> =boolean	Optional. Specifies the host to be removed from the auto-discovery list.
<b>host</b> =string	Required. Specifies the name or ID of the host. Use <a href="#">lshost</a> to locate the ID or name of the host.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/ setautodiscovery</code>	<code>host=&lt;name or ID of host&gt;</code>

---

**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 84

[getautodiscovery Request Details](#) on page 84

[getautodiscovery Example](#) on page 84

### 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.

#### Rights

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

#### Parameters

Parameter	Description
<code>hostid=integer</code>	Optional. Specifies the ID of the host to get its hostname if autodiscovery is set.

### 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.

Method	URI	Required Parameters
GET	<code>/actifio/api/info/getautodiscovery</code>	None

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

```
{
  "result": [
    {
      "hostname": "APPLE-PI"
    }
  ]
}
```

```
  ],  
  "status": 0  
}
```

## Isetchosts

[About Isetchosts Command](#) on page 86

[You must have 'System View' or 'System Manage' right to view contents of /etc/hosts.Isetchosts Request Details](#) on page 86

[Isetchosts Example](#) on page 86

### About Isetchosts Command

#### Description

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

#### Rights

You must have 'System View' or 'System Manage' right to view contents of /etc/hosts.[Isetchosts Request Details](#)

Your `lsetchosts` 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	/actifio/api/info/lsetchosts	None

### Isetchosts Example

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/lsetchosts
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": [
    {
      "ipaddress": "172.31.296.2",
      "hostname": "esxhost",
      "alias": "e..."
    }
  ],
  "status": 0
}
```

## mketchosts

[About mketchosts Command](#) on page 87

[mketchosts Request Details](#) on page 87

[mketchosts Examples](#) on page 87

### About mketchosts Command

#### Description

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

#### Rights

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

#### Parameters

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

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mketchosts</code>	<code>name=&lt;host name&gt;</code> <code>ipaddress=&lt;IP address&gt;</code>

---

**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 89

[rmetchosts Request Details](#) on page 89

[rmetchosts Examples](#) on page 89

### About rmetchosts Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<code>name=string</code>	Required. Specifies the name of the host to be removed from <code>/etc/hosts</code> .

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmetchosts</code>	<code>name</code>

---

**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 90

[getsysteminfo Request Details](#) on page 90

[getsysteminfo Example](#) on page 90

### About getsysteminfo Command

#### Description

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

#### Rights

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.

Method	URI	Required Parameters
GET	/actifio/api/info/ getsysteminfo	None

### 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  
}
```



## configdns

[About configdns Command](#) on page 91

[configdns Request Details](#) on page 91

[configdns Example](#) on page 91

### About configdns Command

#### Description

Use this command to configure DNS settings.

#### Rights

You must have 'System Manage' right to configure DNS settings.

#### Parameters

Parameter	Description
<b>type</b> =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.
<b>name</b> =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.

Method	URI	Required Parameters
POST	/actifio/api/task/configdns	name=<server_name, domain_name>

---

**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-a624-5b575cff54d3
```

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

## Response

Request success

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

## lsdns

[About lsdns Command](#) on page 93

[lsdns Request Details](#) on page 93

[lsdns Example](#) on page 93

### About lsdns Command

#### Description

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

#### Rights

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

### lsdns Request Details

Your `lsdns` 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	/actifio/api/info/lsdns	None

### lsdns 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

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

## testdns

[About testdns Command](#) on page 94

[testdns Request Details](#) on page 94

[testdns Example](#) on page 94

### About testdns Command

#### Description

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

#### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/testdns	value

### testdns Example

```
POST https://{Actifio_API_HOST}/actifio/api/task/testdns
```

```
HTTP Request Header
```

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

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

#### Response

```
Request success
```

```
{
  "result": [
    {
      "value": "172.123.456.789"
    }
  ],
  "status": 0
}
```

## configinterface

[About configinterface Command](#) on page 95

[configinterface Request Details](#) on page 95

[configinterface Example](#) on page 96

### About configinterface Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>ipaddress</b> =string	Required. Specifies the IP address to assign. To remove an IP address, specify '0.0.0.0' and select the node, interface and type.
<b>mask</b> =integer	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).
<b>dhcp</b> =string	Optional. Specifies whether DHCP is used to configure a node.
<b>gateway</b> =string	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.
<b>interface</b> =string	Required. Specifies the interface.
<b>node</b> =string	Optional. Specifies the node name (panelname), blank, or "peer" to automatically select the "CLU" (secondary) node. <hr/> <b>Note:</b> This option is not valid on Sky appliances. <hr/>
<b>mtu</b> =integer	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.
<b>type</b> =node   iscsi   cluster	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.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configinterface	ipaddress interface

---

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

---

### 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  
}
```

## configipfailover

[About configipfailover Command](#) on page 97

[configipfailover Request Details](#) on page 97

[configipfailover Example](#) on page 97

### About configipfailover 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.

#### Rights

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

#### Parameters

Parameter	Description
<b>clear</b> =boolean	Optional. Specifies that the IP fail-over interface pair to be removed. Otherwise, the interface pair is added.
<b>interface1</b> =string	Required. Specifies the first interface in the pair.
<b>interface2</b> =string	Optional, but required for configuration. Specifies the second interface in the pair.

### configipfailover Request Details

Your `configipfailover` 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	<code>/actifio/api/task/configipfailover</code>	<code>interface1</code>

---

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

---

### configipfailover Example

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/
configipfailover?interface1=eth1&interface2=eth2
```

HTTP Request Header

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

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

## Response

Request success

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



## lsipfailover

[About lsipfailover Command](#) on page 99

[lsipfailover Request Details](#) on page 99

[lsipfailover Example](#) on page 99

### About lsipfailover 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."

#### Rights

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

### lsipfailover 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsipfailover	None

### 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 100

[iscsitest Request Details](#) on page 100

[iscsitest Example](#) on page 100

### About iscsitest Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>host</b> =string	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 <a href="#">lshost</a> to locate the ID or name of the host.
<b>port</b> =integer	Optional. Specifies the port that the Actifio Connector is running on. The default is 5106.
<b>iscsiports</b> =integer	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.

### 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	<code>/actifio/api/task/iscsitest</code>	<code>host=&lt;name or ID of host&gt;</code>

---

**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
}
```

## configchap

[About configchap Command](#) on page 102

[configchap Request Details](#) on page 102

[configchap Example](#) on page 102

### About configchap Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>clear</b> =boolean	Optional. Specifies that the CHAP secret is to be cleared. This effectively disables CHAP authentication.
<b>password</b> =string	Optional. Specifies the password for CHAP authentication, the value must be between 12 and 16 characters.
<b>username</b> =string	Optional. Specifies the username for CHAP authentication. The limit is a maximum of 16 characters.
<b>host</b> =string	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.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configchap	None

---

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

---

### 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  
}
```

## lsdatastore

[About lsdatastore Command](#) on page 104

[lsdatastore Request Details](#) on page 104

[lsdatastore Example](#) on page 104

### About lsdatastore Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>esxhost</b> =string	Required. ESX host that data stores can reference.
<b>vcenter</b> =string	Required. vCenter host that data stores can reference.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsdatastore	esxhost vcenter

---

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

---

### lsdatastore 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-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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/lldatastore?vm=84363](https://{Actifio_API_HOST}/actifio/api/info/lldatastore?vm=84363)

HTTP Request Header

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

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

### Response

Request success

```

{
  "result": [
    {
      "isrdmsupported": "true",
      "name": "Sky-Snap",
      "freespace": "10056728838144",
      "type": "VMFS",
      "capacity": "10994847842304"
    },
    {
      "isrdmsupported": "true",
      "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](#) on page 107

[lsssd Request Details](#) on page 107

[lsssd Example](#) on page 107

### 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.

#### Rights

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

#### Parameters

Parameter	Description
<code>ssdname=string</code>	Optional. Specifies the name of the SSD device to get detailed information.

#### 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	URI	Required Parameters
GET	<code>/actifio/api/info/lsssd</code>	None

**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-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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-3500117310031f4dc"
    }
],
"status": 0
}
```

## lsnasshare

[About lsnasshare Command](#) on page 109

[lsnasshare Request Details](#) on page 109

[lsnasshare Example](#) on page 109

### About lsnasshare 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

Parameter	Description
<b>argument</b> =string	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.

### lsnasshare Request Details

Your `lsnasshare` 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	/actifio/api/info/lsnasshare	None

---

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

---

### lsnasshare Example

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/lsnasshare
```

```
HTTP Request Header
```

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

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

#### Response

Request success

```
{
  "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": "",
    "fileripospace": "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": "",
    "fileripospace": "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
}

```

## nfstest

[About nfstest Command](#) on page 111

[nfstest Request Details](#) on page 111

[nfstest Example](#) on page 111

### About nfstest Command

#### Description

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

#### Rights

You must have the 'Host Manage' right to run NFS test.

#### Parameters

Parameter	Description
<b>host</b> =string	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.
<b>port</b> =string	Optional. Specifies the port that the CDS Application Connector is running on, defaults to 56789.
<b>options</b> =string	Optional. Comma (,) separated NFS options to use, when diskpref is NFS. Both server and client options are supported, separated by a semi-colon (;).

### nfstest 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.

Method	URI	Required Parameters
POST	/actifio/api/task/nfstest	id

---

**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
```

where 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. The GUI interface for these commands can be found in the Actifio Desktop.

For detailed information, refer to **Configuring Resources and Settings With the Domain Manager** in ActifioNOW.

This chapter details the following appliance management commands:

## Managing Appliances

### Certificate Commands

[certexchange](#) on page 115

### Cluster Commands

[joincluster](#) on page 117  
[addcluster](#) on page 119  
[synccluster](#) on page 121  
[lscluster](#) on page 122  
[chcluster](#) on page 125  
[chappcluster](#) on page 128  
[lsappcluster](#) on page 130  
[lsclustermember](#) on page 132  
[rmappcluster](#) on page 134  
[rmclustermember](#) on page 135  
[rmcluster](#) on page 136

### Job Commands

[lsjob](#) on page 138  
[lsjobhistory](#) on page 143  
[lsjobwarnings](#) on page 147  
[chjob](#) on page 149

### Dedup Load Factor Commands

[lsdedupefficiency](#) on page 204  
[getdedupsafelimits](#) on page 206  
[getdedupstats](#) on page 208  
[lsdeduploadstat](#) on page 210

### Schedule Commands

[setschedule](#) on page 151  
[getschedule](#) on page 153  
[setgcschedule](#) on page 155  
[getgcschedule](#) on page 157  
[rmgcschedule](#) on page 159

### Other Commands

[addssd](#) on page 160  
[rmssd](#) on page 162  
[setarchiveconfig](#) on page 163  
[setparameter](#) on page 165  
[getparameter](#) on page 167  
[lsaudit](#) on page 172  
[lsmetricstat](#) on page 175  
[lssystemdetail](#) on page 180

## Managing Pools

### Disk Commands

- [mkdiskpool](#) on page 183
- [lsdiskpool](#) on page 185
- [lsvaulttype](#) on page 188
- [lsvaultstat](#) on page 190
- [rmdiskpool](#) on page 194
- [lsdeduppoolstat](#) on page 195
- [lsdiskpoolstat](#) on page 198
- [lssnappoolstat](#) on page 201
- [Dedup Load Factor Commands](#) on page 204

### SLP Commands

- [mkslp](#) on page 212
- [lssl](#) on page 214
- [chslp](#) on page 216
- [rmslp](#) on page 218

### Other Commands

- [chauthservice](#) on page 219
- [configresourcewarning](#) on page 220
- [getresourcewarning](#) on page 222
- [mkarray](#) on page 224
- [lsarray](#) on page 226
- [lsarrayoption](#) on page 228
- [charray](#) on page 231
- [rmarray](#) on page 233
- [lsappstorage](#) on page 234

## Auto Update and Remote Setup Commands

### Auto Update Commands

- [lsversion](#) on page 236
- [lsupdate](#) on page 238

### Remote Setup Commands

- [setremotesupport](#) on page 241
- [getremotesupport](#) on page 242



## Certificate Command

### certexchange

[About certexchange command](#) on page 115

[certexchange Request Details](#) on page 115

[certexchange Example](#) on page 115

### About certexchange command

#### Description

Use this command to exchanges certificates with a remote Actifio appliance to establish a trusted relationship for SSL.

#### Rights

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

#### Parameters

Parameter	Description
<b>ipaddress</b> =string	Required. Specifies the IP address of the remote Actifio appliance.
<b>password</b> =string	Optional. Specifies the password for the user on the remote Actifio appliance.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/certexchange	ipaddress

---

**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](#) on page 117

[joincluster Request Details](#) on page 117

[joincluster Example](#) on page 117

#### About joincluster command

##### Description

Use this to join two Actifio appliances. Prior to joining, the two Actifio appliances must exchange security certificates to allow secure communication between them. Use Actifio Desktop to download and upload the security certificates.

When an Actifio 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 Actifio appliances.

##### Parameters

Parameter	Description
<b>ipaddress</b> =string	Required. Specifies the IP address of the Actifio appliance to join to.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/joincluster	ipaddress

---

**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 119

[addcluster Request Details](#) on page 119

[addcluster Examples](#) on page 119

### About addcluster Command

#### Description

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

---

**Note:** Before adding two Actifio appliances, the appliances must exchange certificates to communicate securely. Use the Actifio Desktop on each Actifio appliance to download and upload the security certificates.

---

---

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

---

#### Rights

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

#### Parameters

Parameter	Description
<b>ipaddress</b> =string	Required. Specifies the IP address of the Actifio appliance to be added.
<b>deduponly</b> =boolean	Optional. Specifies whether the added Actifio 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.

Method	URI	Required Parameters
POST	/actifio/api/task/addcluster	ipaddress

---

**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-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 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-a624-5b575cff54d3

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

### Response

Request success

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

## synccluster

[About synccluster Command](#) on page 121

[synccluster Request Details](#) on page 121

[synccluster Example](#) on page 121

### About synccluster Command

#### Description

Use this command to trigger a synchronization between joined Actifio appliances. All of the shared data between the Actifio 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 Actifio 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.

Method	URI	Required Parameters
POST	/actifio/api/task/synccluster	None

### 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

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

## lscluster

[About lscluster Command](#) on page 122

[lscluster Request Details](#) on page 122

[lscluster Example](#) on page 123

### About lscluster Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for <b>lscluster</b> are:</p> <ul style="list-style-type: none"><li>• clusterid</li><li>• bandwidth</li><li>• dedupid</li><li>• defaultdiskpool</li><li>• description</li><li>• ipaddress</li><li>• masterid</li><li>• name</li><li>• streamsnapbw</li><li>• thisisme</li></ul> <p>The filter is formed with an attribute and a value. When specifying more than one filter, the filters must be combined with the '&amp;' 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*.</p>
<b>argument</b> =string	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</p>

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lscluster	None



---

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

---

## lscluster Example

### Request

GET [https://{Actifio\\_API\\_Server}/actifio/api/info/lscluster](https://{Actifio_API_Server}/actifio/api/info/lscluster)  
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 Actifio appliance.

#### Rights

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

#### Parameters

Parameter	Description
<b>bandwidth</b> =integer	Optional. Specifies out-going bandwidth limit used by dedup for the Actifio appliance, in Mb/s. Enter 0 to indicate unlimited bandwidth.
<b>bwschedule</b> =boolean	Optional. Specifies whether bandwidth schedule for the Actifio appliance should be enabled. Setting this to false will suspend the bandwidth schedule for the appliance.
<b>datastore</b> =string	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 <b>readyvm</b> is true. For multiple datastores, use a comma ',' to separate them, if a data store has a comma ',' or backslash '\' in its name, it needs to be escaped with '\\.
<b>defaultdiskpool</b> =string	Optional. Specifies the default disk pool name for the specified Actifio appliance. This is the pool to be used for remote target (such as dedup-async) appliance.
<b>description</b> =string	Optional. Specifies the description of the Actifio appliance.
<b>esxhost</b> =string	Optional. Specifies ESX host to be used when replicating VM to a data store during dedup-async operation. This applies to VM replication if <b>readyvm</b> is true.
<b>location</b> =string	Optional. Specifies the location of the Actifio appliance.
<b>operativeip</b> =string	Optional. Specifies the IP address for communication with remote Actifio appliance, typically the same as IP address.
<b>ipaddress</b> =string	Optional. Specifies the new IP address for the Actifio appliance. This option is deprecated and not supported for Sky appliance. Use <code>configinterface</code> to change <code>ipaddress</code> on Sky appliance.

---

**Note:** For the SVC, the cluster IP of port 1 is also changed, if applicable.

---

Parameter	Description
<b>streamsnapbw</b> =integer	Optional. Specifies outgoing bandwidth limit (in Mb/s) to the specified Actifio appliance for StreamSnap replication. Enter 0 to indicate unlimited bandwidth.  <b>Note:</b> CDS/Sky only.
<b>timezone</b> =string	Optional. Specifies a new timezone.  <ul style="list-style-type: none"> <li>For the Actifio Sky appliance, the timezone entry must be a valid timezone path (for example, "America/Chicago").</li> <li>For the Actifio CDS appliance, the timezone must be a valid timezone value.</li> </ul> <b>Note:</b> CDS/Sky only. Use the <b>lstimezones</b> command to find the appropriate timezone for the Actifio appliance.
<b>name</b> =string	Optional. Specifies a new name for the Actifio appliance.  <b>Note:</b> CDS/Sky only.
<b>vcenter</b> =string	Optional. Specifies vCenter to be used when replicating VM to a datastore during dedup-async operation. This applies to VM replication if <b>readyvm</b> is true.
<b>readyvm</b> =boolean	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.
<b>argument</b> =string	Required. Specifies the ID or name of the Actifio appliance to be changed. Use <b>lcluster</b> to retrieve the ID or name of the Actifio appliance.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chcluster	argument

**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-a624-5b575cff54d3

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

### Response

Request success

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

## chappcluster

[About chappcluster Command](#) on page 128

[chappcluster Request Details](#) on page 128

[chappcluster Example](#) on page 128

### About chappcluster Command

#### Description

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

#### Rights

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

#### Parameters

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

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/chappcluster</code>	<code>argument</code>

---

**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 Isappcluster Command](#) on page 130

[Isappcluster Request Details](#) on page 130

[Isappcluster Example](#) on page 130

### About Isappcluster Command

#### Description

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

#### Parameters

Parameter	Description
<b>filtervalue</b> =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 <b>Isappcluster</b> are: <ul style="list-style-type: none"><li>• nodeid</li><li>• appid</li></ul> The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with '&' character).
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.

### Isappcluster Request Details

Your **Isappcluster** 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	/actifio/api/info/lsappcluster	None

---

**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-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 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
}
```

## lsclustermember

[About lsclustermember Command](#) on page 132

[lsclustermember Request Details](#) on page 132

[lsclustermember Example](#) on page 132

### About lsclustermember 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.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	Optional. Specifies that you want your report to display any or all of the valid filter attributes. The valid filter attributes for <b>lsappcluster</b> are: <ul style="list-style-type: none"><li>• nodeid</li><li>• appid</li></ul> The filter will be formed with an attribute and a value. When specifying more than one filter, the filters must be combined with '&' character
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.

### lsclustermember 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsclustermember	None

---

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

---

### lsclustermember Example

#### Request

GET https://{Actifio\_API\_Server}/actifio/api/info/lsclustermember

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
}
```

## rmappcluster

[About rmappcluster Command](#) on page 134

[rmappcluster Request Details](#) on page 134

[rmappcluster Example](#) on page 134

### About rmappcluster Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the application to node mapping to be removed. Use <b>lsappgroup</b> to locate the ID.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmappcluster	argument

---

**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-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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 Actifio appliance.

#### Parameters

Parameter	Description
<b>argument</b> =string	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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmclustermember	argument

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

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

## rmcluster

[About rmcluster Command](#) on page 136

[rmcluster Request Details](#) on page 136

[rmcluster Example](#) on page 136

### About rmcluster Command

#### Description

Use the **rmcluster** command to delete a Actifio appliance. Use the **lscluster** command to retrieve the ID or name of the appliance. You cannot delete a 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 Actifio appliance to completely dissolve the two appliances.

#### Rights

You must have the 'System Manage' right to delete an Actifio appliance.

#### Parameters

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

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmcluster</code>	argument

---

**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-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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 139

[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

You must have 'Storage View' or 'Storage Manage' or 'Application Manage' or 'Host Manage' right to view the details of job.

##### Parameters

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.



Parameter	Description
<b>filtervalue</b> =attrib%3 Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for <b>lsjob</b> are:</p> <ul style="list-style-type: none"> <li>• appid</li> <li>• appname</li> <li>• component</li> <li>• enddate</li> <li>• errorcode</li> <li>• expirationdate</li> <li>• hostname</li> <li>• immutabilitydate</li> <li>• isscheduled [true   false]</li> <li>• 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   fallback   directdedup   seedin   seedout   verification   rollbackliveclone   OnVault   StreamSnap   LogReplicate   reprovision]</li> <li>• jobname</li> <li>• jobtag</li> <li>• parentid</li> <li>• policyname</li> <li>• priority</li> <li>• progress</li> <li>• date</li> <li>• relativesize</li> <li>• retrycount</li> <li>• sltname</li> <li>• startdate</li> <li>• status [ running   d   paused   interrupted   stalled]</li> <li>• sourceid</li> <li>• virtualsize</li> </ul> <p>When you specify more than one filter, they must be combined with '&amp;' 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, d, paused, interrupted, or stalled. To match job status that is running, used 'filtervalue status=running'. For number and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;= . For example,  <pre>filtervalue=errorcode\&gt;0 filtervalue= errorcode&gt;0 filtervalue=errorcode&gt;0</pre> The expirationdate, date, startdate, and enddate parameters can also use these operators. For example:  <pre>filtervalue= startdate&gt;2010-09-28 filtervalue= expirationdate&gt;2010-09-28 6:50:00</pre> 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.</p>

### lsjob 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.

**Method**

**URI**

**Required Parameters**

GET	/actifio/api/info/ljsjob	None
-----	--------------------------	------

---

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

---

## lsjob Examples

### Request

GET https://{Actifio\_API\_Server}/actifio/api/info/ljsjob

HTTP Request Header

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

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

### Response

Request success

```
{
  "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": "",
    "changerequest": "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/lsgjob?argument=Job\\_22179743](https://{Actifio_API_Server}/actifio/api/info/lsgjob?argument=Job_22179743)

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 00:08:12.327",
    "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"
},
"status": 0
}
```

## lsjobhistory

[About lsjobhistory Command](#) on page 143

[lsjobhistory Request Details](#) on page 145

[lsjobhistory Example](#) on page 145

### 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

You must have 'Storage View' or 'Storage Manage' or 'Application Manage' or 'Host Manage' right to view the details of job.

#### Parameters

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

Parameter	Description
<b>filtervalue=attrib%3Dvalue</b>	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for <b>Isjobhistory</b> are:</p> <ul style="list-style-type: none"> <li>• appid</li> <li>• appname</li> <li>• enddate [ usage: 'enddate since 24 hours' for jobs started since last 24 hours, 'enddate before 7 days' for jobs started older than 7 days ]</li> <li>• errorcode</li> <li>• expiration</li> <li>• hostname</li> <li>• immutabilitydate</li> <li>• isscheduled [ true   false ]</li> <li>• isexpired [ true   false ]</li> <li>• 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 ]</li> <li>• jobname</li> <li>• jobtag</li> <li>• policyname</li> <li>• priority</li> <li>• relativesize</li> <li>• sltname</li> <li>• sourceid</li> <li>• status [ succeeded   failed   canceled   succeeded with warning   retry   notrun]</li> <li>• startdate [ usage: 'startdate since 24 hours' for jobs started since last 24 hours, 'startdate before 7 days' for jobs started older than 7 days]</li> </ul> <p>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with the '&amp;' character .</p> <p>For string type of filters, the only operator allowed is '='. You can also use the wild card character '*'.</p> <p>For example, to list all jobs with a jobname that begins with 'Job_0001', use 'filtervalue jobname=Job_0001*'. </p> <p>Some filters allow only predefined constants. For example, status allows only running, d, paused, interrupted, or stalled. To match job status that is running, used 'filtervalue status=running'.</p> <p>For number and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;= . :</p> <pre>filtervalue=errorcode\&gt;0 filtervalue=errorcode&gt;0 filtervalue=errorcode&gt;0</pre> <p>The expirationdate, date, startdate, and enddate parameters can also use these operators. For example:</p> <pre>filtervalue=startdate\&gt;2010-01-01 00:00:00 filtervalue=startdate\&gt;2010-01-01</pre>

## lsjobhistory 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsjobhistory	None

---

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

---

## lsjobhistory 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",
      "sltnname": "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",
"sltnname": "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
}
```



## lsjobwarnings

[About lsjobwarnings Command](#) on page 147

[lsjobhistory Request Details](#) on page 145

[lsjobhistory Example](#) on page 145

### 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 the job has been removed, the list of warnings will no longer be available. If a job has no warnings, the command will return an empty list of warnings.

#### Rights

There are no specific rights associated with this operation. User with 'administrator' role can retrieve the list of job warnings.

#### Parameters

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsjobwarnings	None

---

**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](#) on page 149

[chjob Request Details](#) on page 149

[chjob Examples](#) on page 149

### 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

Parameter	Description
<b>changerequest</b> = <i>pause</i>   <i>resume</i>   <i>cancel</i>	Optional. Specifies a change request for a job. For CDS/Sky, the allowed value is cancel.
<b>priority</b> = <i>low</i>   <i>medium</i>   <i>high</i>	Optional. Specifies the priority of a job.
<b>argument</b> =string	Required. Specifies the ID or name of the job to be modified.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chjob	name id

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

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

## Schedule Commands

### setschedule

[About setschedule Command](#) on page 151

[setschedule Request Details](#) on page 151

[setschedule Example](#) on page 152

#### About setschedule Command

#### Description

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

#### Rights

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

#### Parameters

Parameter	Description
<b>day</b> =integer	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.
<b>frequency</b> =daily   weekly   monthly	Optional. Specifies the frequency of the schedule. This is ignored for SLA analysis.
<b>name</b> =archive   autodiscovery   storagestatus	Required. Specifies the name of the schedule.
<b>op</b> =now   delete	Optional. Specifies operation for the schedule. Specifying <i>now</i> for the operation, results in the schedule being run immediately. This is ignored for SLA analysis.
<b>repeatinterval</b> =integer	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.
<b>time</b> =string	Optional. Specifies the time of the schedule.

#### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/setschedule	name

---

**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](#) on page 153

[getschedule Request Details](#) on page 153

[getschedule Example](#) on page 153

### 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

Parameter	Description
<code>name=archive</code>   <code>autodiscovery</code>   <code>storagestatus</code>	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.

Method	URI	Required Parameters
GET	<code>/actifio/api/info/getschedule</code>	name

---

**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  
}
```



## setgcschedule

[About setgcschedule Command](#) on page 155

[setgcschedule Request Details](#) on page 156

[setgcschedule Example](#) on page 156

### 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

Parameter	Description
<b>day</b> =integer	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.
<b>duration</b> =min	Optional. Specifies the duration (in minutes), for the sweep or isweep phase. The phase runs as long as necessary if duration is not specified.
<b>frequency</b> =string	Optional. Specifies the frequency of the schedule.
<b>op</b> =now   delete	Optional. Specifies whether the operation should run immediately or delete the schedule type. <ul style="list-style-type: none"><li>• now: runs scheduled operation right away, using saved options</li><li>• delete: deletes specified schedule type, for CDS/Sky gc cannot be deleted</li></ul>
<b>repeatinterval</b> =integer	Optional. Specifies the repeat interval of the schedule (default of 1), which means every week or every month depending on the schedule frequency.
<b>time</b> =string	Optional. Specifies the time of the schedule, in 24- hour format.
<b>type</b> =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.

Method	URI	Required Parameters
POST	/actifio/api/task/setgcschedule	type

---

**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

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

## getgcschedule

[About getgcschedule Command](#) on page 157

[getgcschedule Request Details](#) on page 157

[getgcschedule Example](#) on page 157

### 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

Parameter	Description
<code>type=string</code>	Required. Specifies the type of GC schedule.

### 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.

Method	URI	Required Parameters
GET	<code>/actifio/api/info/getgcschedule</code>	<code>type</code>

---

**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 159

[rmgcschedule Request Details](#) on page 159

[rmgcschedule Example](#) on page 159

### 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

Parameter	Description
<b>type</b> =string	Required. Specifies the type of GC schedule to delete.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmgcschedule	type

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

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

## Other Commands

### addssd

[About addssd Command](#) on page 160

[addssd Request Details](#) on page 160

[addssd Example](#) on page 160

#### About addssd Command

##### Description

Use this command to add SSD devices to the Actifio appliance.

##### Rights

You must have the 'System Manage' right to add SSD devices.

##### Parameters

Parameter	Description
<b>component</b> =string	Optional. Specifies the pool name or adhd (dedup) to add the SSD device(s) to the Actifio 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 Actifio CDS appliance, the SSD device is added to the dedup engine only.
<b>argument</b> =string	Required. For the Actifio Sky appliance, this is a comma (,) separated list of devices to be added. For the Actifio CDS appliance, only one device can be specified.

#### 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

Method	URI	Required Parameters
POST	/actifio/api/task/addssd	argument

---

**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-a624-5b575cff54d3

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

## Response

Request success

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

## rmssd

[About rmssd Command](#) on page 162

[rmssd Request Details](#) on page 162

[rmssd Example](#) on page 162

### About rmssd Command

#### Description

Use this command to remove SSD devices from the Actifio appliance.

#### Rights

You must have the 'System Manage' right to remove SSD devices.

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. For the Actifio Sky appliance, this is a comma (,) separated list of devices to be removed. For the Actifio CDS appliance, only one device can be specified.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmssd	argument

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

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



## setarchiveconfig

[About setarchiveconfig Command](#) on page 163

[setarchiveconfig Request Details](#) on page 163

[setarchiveconfig Example](#) on page 164

### About setarchiveconfig Command

#### Description

Use this command to configure historical data archive attributes. The Actifio 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

Parameter	Description
<b>dataage</b> =integer	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 Actifio appliance persistent data storage. Units for the age depends on the 'measure' value.
<b>retention</b> =integer	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.
<b>measure</b> =days   weeks	Optional. Specifies the period to store data before it is archived. The default value is weeks.
<b>filepath</b> =string	Optional. Specifies the file path to store the archive files. The default file path is /act/pg/archive
<b>outputfile</b> =string	Optional. Specifies the output file name to store the archived data in. The default name is 'archive'.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/setarchiveconfig	None

---

**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 165

[setparameter Request Details](#) on page 165

[setparameter Example](#) on page 165

### About setparameter Command

#### Description

Use this command to set a new system parameter value for the Actifio appliance. You can set the Actifio appliance system parameters listed under [Isaudit](#) on page 172. See [Appendix D, List of Parameters Used With getparameter and setparameter](#) for more information. Prior to changing any system parameters, please consult your Actifio representative.

#### Rights

You must have the 'System Manage' right to set a new parameter value.

#### Parameters

Parameter	Description
<b>param</b> =string	Required. Specifies the name of the parameter to be set. Use <b>getparameter</b> to retrieve the name and range of values for the parameter. <b>setparameter</b> uses the parameters detailed in <a href="#">Appendix D, List of Parameters Used With getparameter and setparameter</a> .
<b>value</b> =string	Required. Specifies the value of the parameter.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/setparameter	param value

---

**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](https://{Actifio_API_Server}/actifio/api/task/setparameter?param=gcmintreshold&value=70)

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  
}
```

## getparameter

[About getparameter Command](#) on page 167

[getparameter Request Details](#) on page 167

[getparameter Example](#) on page 167

### About getparameter Command

#### Description

Use this command to display the Actifio appliance parameters and their values. 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 Actifio representative.

---

#### Rights

You must have the 'System Manage' or 'System View' right to view the Actifio appliance parameters.

#### Parameters

Parameter	Description
<b>param</b> =string	Optional. Specifies the name of the parameter to retrieve the value. If you do not use this option, it displays all the Actifio appliance parameters with their values.
<b>type</b> =backup   dedup   psrv   udppm	Optional. Specifies the type of system parameter.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getparameter	None

---

**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",
    "firstbackupwholevmk": "1",
    "disable.TLSv1.0": "false",
    "enableindexing": "false",
    "vminocbtdocompare": "1",
    "vmconsolidatedisks": "fail",
    "streamsnapdnetaalerttime": "900",
    "http.concurrentsession.allow": "true",
    "reserveddedupslots": "3",
    "schedulerdedupperiodpercentage": "90",
    "checkpoolspace": "0",
    "default.ssh.session.timeout": "60",
    "removeduplicateevents": "false",
    "OracleChildLimit": "0",
    "auditchanges": "true",
    "sweepthreshold": "50",
    "onejobperhostoverride": "none",
    "ignoredtraps": "0",
    "datastoreutilizationpollfreqinmins": "15",
    "schedulerinterval": "10",
    "networkinterfacecheck": "none",
    "ldap.referral.support": "false",
    "streamsnapdconnectiontimeout": "60",
    "vmlowsplashwithcvt": "never",
    "enableexpiration": "1",
    "default.v3700.ssh.connect.timeout": "60",
    "appminshrinksizefornewstagingdisk": "34359738368",
    "rfcsnappooloverallocationpercent": "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",
    "reservedrdedupslots": "3",
    "vmexistingsnapshotwarning": "0",
    "vmorgenericbackupmountpvidchange": "1",
    "dontexpirededupsduringgc": "0",
    "slaAnalysis.analysisType": "version1",
    "reservedstreamsnapslots": "2",
    "hostheartbeattimeoutinmins": "60",
    "vmdatastorefullwarnthreshold": "80",
    "vixdisklibdebuglevel": "4",
    "changeratedb": "6",
    "enablesnapshots": "1",
    "expirerloadcount": "2500",
    ",
    ",
    ",
    ",
    ",
    ",
    ",
    ",
    "[1..1000]",
    ",
    ",
    "[0..25]",
    "[0..100]",
    ",
    "[0..180000]",
    ",
    ",
    ",
    "[1..-1]",
    ",
    ",
    "[1..7200]",
    "[1..120]",
    ",
    ",
    "[1..1200]",
    ",
    ",
    "[0..180000]",
    ",
    "[0..1000]",
    ",
    "[0..100]",
    "[0..180000]",
    ",
    ",
    "[0..1000]",
    ",
    ",
    "[1..16]",
    "[0..25]",
    "[0..10240]",
    "[0..25]",
    "[0..25]",
    ",
    "[0..2]",
    "[0..1]",
    ",
    "[0..25]",
    "[0..43200]",
    "[50..-1]",
    "[0..7]",
    "[0..100]",
    ",
    "[100..10000]",
  }
}
```

```

"retriesonfailure": "3",
"streamsnapdmillispertick": "1000",
"vmtaskcompletiontimeout": "60",
"critical.events.exclude": "10011,10013,10023,10025,10039",
"https.request.timeout": "420000",
"limiteddupexpirations": "2",
"preflight.default.timeout": "5",
"GC_ZTR_PARALLEL_ACTIVE_WORKERS": "-1",
"streamsnapdreconnectdelay": "100",
"maxesxscans": "10",
"secureconnect.proxy_server": "",
"disableguardrails": "false",
"https.socket.timeout": "420000",
"streamsnapdmaxtunnelconnections": "50",
"firewall.icmp.redirect.drop.threshold": "5000",
"dontfullingestdedupsduringgc": "1",
"auditage": "90",
"secureconnect.local": "",
"maxiscsisessionspertarget": "15",
"snmptablesize": "500",
"streamsnapdmaxserverconnections": "320",
"streamsnapdmaxsslconnections": "160",
"deduprehydratedimageexpirationinhours": "24",
"netapp.enable": "0",
"webserver.TLS.protocols": "TLSv1,TLSv1.1,TLSv1.2",
"secureconnect.server": "secureconnect2.actifio.com",
"delegatingpoolstatecachetimeout": "5",
"session-timeout-minutes": "60",
"ExpirerEventLogFrequency": "86400",
"maxvmtasktimeout": "600",
"readyvmtargetlowsplash": "1",
"systemcontact": "",
"retrydecay": "400",
"scheduleroptimizations": "1",
"template.agm.lock": "true",
"enableremotededups": "1",
"enablereplicationscripts": "0",
"streamsnapdmaxwindowsize": "64",
"streamsnaponramslots": "0",
"preservelastimage": "1",
"slaAnalysis.notificationtype": "warning",
"systemlocation": "",
"expirerretrylocked": "60",
"maxvmtaskretrycount": "10",
"vmlowsplashwithcbtthreshold": "50",
"lodeduponramslots": "2",
"genericappfailonconnecterror": "0",
"maxrdedupslots": "6",
"disablenbdvmbackups": "0",
"hourlystatexpirationindays": "14",
"ChildLimit": "5",
"prefernbdssl": "0",
"reservedvaultslots": "4",
"vmfilesthreshold": "32",
"default.v3700.ssh.session.timeout": "60",
"expirerjobspercycle": "10",
"copywarninglimit": "14",
"enablededupasync": "1",
[0..20]",
[100..10000]",
[1..43200]",
",
[0..1800000]",
[0..25]",
[5..30]",
[0..16]",
[1..10000]",
[1..50]",
",
",
[0..1800000]",
[5..256]",
[1..1000000]",
[0..1]",
[1..365]",
",
[15..100]",
[100..5000]",
[5..1024]",
[5..1024]",
[0..100000]",
",
",
",
",
[1..20]",
",
[3600..86400]",
[60..7200]",
",
",
[100..10000]",
[0..1]",
",
",
",
[8..1024]",
[0..100]",
",
",
",
[30..900]",
[1..100]",
",
[0..100]",
",
[0..1000]",
",
[0..360]",
",
",
[0..25]",
[5..100]",
[0..1800000]",
[1..20]",
[2..1000]",
",

```

```

"maxondemandslots": "6" [0..1000]",
"dosnapshotonreplicationfailure": "1" ",
"streamsnapdheartbeattimeout": "60" [1..1800]",
"PreserveSnapsOfPriority": "low" ",
"enablelocaldedups": "1" ",
"scriptexectimeout": "60" [1..120]",
"EnableGenericLVM": "false" ",
"rdeduponrampslots": "2" [0..100]",
"vmdatastorefullcriticalthreshold": "95" [10..99]",
"maxexpirationlots": "10" [0..1000]",
"DBAuthentication": "false" ",
"maptoallnodesincluster": "1" ",
"expirerretrydependent": "900" [60..3600]",
"enableencryptedreplication": "1" ",
"maxdarslots": "3" [0..1000]",
"streamsnapdmaxrunningjobs": "90" [1..1024]",
"autoconfigsnapshots": "1" ",
"enableesxmount": "false" ",
"usegcjob": "false" ",
"vaultrehydratedimageexpirationinhours": "24" [0..100000]",
"maxconcurrentvaultsubjobs": "12" [4..1000]",
"snapshotonrampslots": "2" [0..100]",
"dailystatexpirationindays": "60" [30..360]",
"retrydelay": "240" [30..3600]",
"secureconnect.proto": "udp" ",
"streamsnapdinternaltimeout": "10" [1..1800]",
"schedulerldedupperiodpercentage": "90" [0..100]",
"reserveddarslots": "3" [0..25]",
"streamsnapdprogressupdateinterval": "5" [1..600]",
"enablecompressedreplication": "1" ",
"reservedlogreplicateslots": "2" [0..25]",
"maxlogreplicateslots": "6" [0..1000]",
"missed.cluster.ping.threshold": "-1" ",
"maxldedupslots": "8" [0..1000]",
"streamsnapdmaxmemorysize": "4" [1..1024]",
"GC_ZTR_PARALLEL_HI_PRIO": "10" [1..10]",
"maxconnectorupgradetimeout": "10" [5..60]",
"nasserversnapexpirationindays": "3" [0..365]",
"expirerrefailure": "3600" [900..86400]",
"delegatingpoolstatecachesize": "30" [10..200]",
"expirerreloadinterval": "900" [120..3600]",
"backupjobsperhost": "1" [1..1000]",
"authentication.method": "database" ",
"ignore.schedule.off.violation": "0" ",
"bdd.ip.test.timeout": "30" [0..300]",
"zpoolcompression": "on" ",
"enablevaults": "1" ",
"schedulerjobspercycple": "4" [1..20]",
"changeratenondb": "3" [0..100]",
"operatingwindowintonextday": "1" [0..1]",
"maxsnapslots": "6" [0..1000]",
"remotepsrvrequesttimeout": "5" [5..30]",
"slaAnalysis.enable": "true" ",
"maptoallexincluster": "1" ",
"streamsnapdnetworkretries": "5" [1..1000]",
"streamsnapdnossl": "0" [0..1]",
"maxoutofbandappsize": "140737488355328" ",
"minlaststagingdisksize": "274877906944" ",

```



```

"secureconnect.proxy_port": "0" [0..65536]",
"reservedexpirationslots": "3" [0..25]",
"secureconnect.port": "1194" [1..65536]",
"maxldapresults": "50000" ",
"ldap.user.autocreate": "false" ",
"unreservedslots": "12" [0..100]",
"maxstreamsnapslots": "6" [0..1000]",
"critical.events.include": "9052,999999999,45005" ",
"stagingdiskgranularity": "109951162776" ",
"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 172

[Isaudit Request Details](#) on page 173

[Isaudit Example](#) on page 173

### 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

Parameter	Description
<code>=attrib%3Dvalue</code>	<p>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for <b>Isaudit</b> are:</p> <ul style="list-style-type: none"><li>• command</li><li>• component</li><li>• ipaddress</li><li>• issuedate [usage: 'issuedate since 24 hours' for audited logs since last 24 hours, 'issuedate before 7 days' for audited logs older than 7 days]</li><li>• status</li><li>• username</li></ul> <p>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 .</p> <p>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*'. </p> <p>For numbers and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. For example:</p> <ul style="list-style-type: none"><li>• filtervalue=status\&gt;0</li><li>• filtervalue=status&gt;0</li><li>• filtervalue=status&gt;0</li></ul> <p>Date parameter issuedate can also use these operators, for example,</p> <pre>filtervalue=issuedate&gt;2010-09-28 filtervalue=issuedate&gt;2010-09-28 6:50:00</pre>
<code>argument=string</code>	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the <i>argument</i>, a concise view of all objects matching the filter criteria is displayed.</p>

## lsaudit 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsaudit	None

---

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

---

## lsaudit Example

### Request

GET https://{Actifio\_API\_Server}/actifio/api/info/lsaudit

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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"
  },
  {
    "privileged": "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
}
```

## lsmetricstat

[About lsmetricstat Command](#) on page 175

[lsmetricstat Request Details](#) on page 176

[lsmetricstat Example](#) on page 176

### About lsmetricstat 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.

#### Rights

You must have 'System Manage', or 'System View' rights to be able to view details of metric statistics.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	<p>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for <b>lsmetricstat</b> are:</p> <ul style="list-style-type: none"><li>• appid</li><li>• appname</li><li>• hostid</li><li>• hostname</li><li>• apptype [FileSystem   Oracle   SQL   Microsoft Exchange Writer   Microsoft Hyper-V VSS Writer   VMBackup]</li><li>• jobclass [snapshot   StreamSnap   OnVault]</li><li>• stattype [Daily   Hourly]</li><li>• clusterid</li><li>• poolid</li><li>• poolname</li><li>• jobname</li><li>• metricname [dataingest   networkdata   dataread   vdiskcount   totalused]</li><li>• status [succeeded   failed   cancelled]</li><li>• starttime</li><li>• endtime</li><li>• stattime</li><li>• grouptype [application   jobclass   hostid   apptype   poolid   clusterid]</li></ul> <p>When user specifies more than one filter, they must be combined with '&amp;' character .</p> <p>For string type of filters, the only operator allowed is '='. One can also use wildcard character '*'. For example, to match metric stats with jobname begins with 'Job_0001', use 'filtervalue jobname=Job_0001*'. </p> <p>Some filters allow only predefined constants. For example, stattype allows only Daily or Hourly stats, to match metrics with stattype "Daily" use 'filtervalue status=Daily'.</p> <p>For number and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. Use URL-encoded values for these operators. For example:filtervalue=appid%3E0</p> <p>Date parameters startdate, enddate and expiration can also use these operators, for example,</p> <ul style="list-style-type: none"><li>• filtervalue=starttime%3E2010-01-01+00:00:00</li><li>• filtervalue=starttime%3E2010-01-0</li></ul>

Parameter	Description
<b>argument</b> =string	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 <b>filtervalue</b> parameter is ignored.  If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.

### lsmetricstat Request Details

Your `lsmetricstat` 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	/actifio/api/info/lsmetricstat	None

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

### lsmetricstat Example

#### Request

```
GET https://{Actifio_API_Server}/actifio/api/info/lsmetricstat
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_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",
      "starttime": "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",
    "stattype": "Daily",
    "poolid": "0",
    "stattime": "2018-01-11 03:00:00.116",
    "id": "364185",
    "metricname": "totalused",
    "jobname": "",
    "valueunit": "Bytes"
  }
],
"status": 0
}
```

## runpreflight

[About runpreflight Command](#) on page 178

[runpreflight Request Details](#) on page 178

[runpreflight Example](#) on page 178

### About runpreflight Command

#### Description

Use this command to run **preflight** to look for updates that are available for installation on the Actifio 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

Parameter	Description
<b>name</b> =string	Required. Specifies the name of the update to run the preflight check.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/runpreflight	name

---

**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-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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%.\\nINFO: /var has enough space for
upgrade: available: 1749 MB free: 91%.\\nINFO: /var/log has enough space for upgrade:
available: 1810 MB free: 94%.\\nINFO: /tmp has enough space for upgrade: available: 3690 MB
free: 96%.\\nINFO: /dumps has enough space for upgrade: available: 286517 MB free:
99%.\\nINFO: /home has enough space for upgrade: available: 1847 MB free: 96%.\\nINFO: /act
has enough space for upgrade: available: 4666 MB free: 51%.\\nINFO: /act/pg has enough space
for upgrade: available: 91144 MB free: 95%.\\nINFO: No active running jobs.\\nINFO: No mount
job or restore job is currently in progress.\\nINFO: No backup job is currently in
progress.\\nINFO: No ESX server with version 6.0.0 require upgrade.\\nINFO: Permissions on 1
VCenter hosts are ok.\\nINFO: There are no appaware SQL clustered images active or
mounted.\\nINFO: There are no appaware SQL images active or mounted.\\nINFO: There are no
appaware Oracle images active or mounted.\\nINFO: There are no VMWare or Hyper-V images active
or mounted.\\nINFO: Actifio preflight check completed successfully.",

"status": 0

}
```

## lssystemdetail

[About lssystemdetail Command](#) on page 180

[lssystemdetail Request Details](#) on page 180

[lssystemdetail Example](#) on page 180

### About lssystemdetail Command

#### Description

Use this command to view the default data in source image and know the parameters required to construct key-value pairs in "systemprops" argument of mountimage, for doing the systemstate recovery in a cloud.

#### Rights

User must have 'administrator' role and privileges.

#### Parameters

Parameter	Description
<b>cloudtype</b> =string	Required. To get the parameters needed for systemstate recovery in the required cloud.
<b>image</b> =string	Optional. Based on the imagename/id, get the sourceimage default values like cpu, memory and ostype, and show them under default header of display.
<b>structure</b> =string	Optional. To fetch the subproperties of a structure.

### lssystemdetail Request Details

Your `lssystemdetail` 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	/actifio/api/info/lssystemdetail	cloudtype

---

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

---

### lssystemdetail Example

#### Request

GET [https://{Actifio\\_API\\_Server}/actifio/api/info/lssystemdetail?cloudtype=AWS](https://{Actifio_API_Server}/actifio/api/info/lssystemdetail?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": ""
    },
    {
      "default": "",
      "min": "",
      "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
}

```

## Disk Commands

### mkdiskpool

[About mkdiskpool Command](#) on page 183

[mkdiskpool Request Details](#) on page 184

[mkdiskpool Example](#) on page 184

#### 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

Parameter	Description
<b>ext</b> =integer	Optional. Specifies the size of the extents for this disk pool in MB. The <code>extent_size</code> 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.
<b>mdisk</b> =string	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_mdsknnnn', where nnnn is a 4-digit number. Similarly, the mdisks added to the primary pool should be named as 'act_pri_mdsknnnn', 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. <hr/> <b>Note:</b> To change the name of a managed disk, use <b>usvctask chmdisk -name new_name old_name</b> . Use the <b>usvctask addmdisk</b> command to add mdisks to a diskpool. <hr/>
<b>name</b> =string	Required. Specifies the name for the disk pool.
<b>org</b> =string	Optional. Specifies a default organization to which the disk pool should be added. To use this option you must have the 'System Manage' right.
<b>properties</b> =string	Optional. Specifies properties for vault type of pools, comma (,) separated name value pair. Use <b>lsvaulttype</b> to view a list of available properties for a specific type of vault pool. For example, <b>-properties "bucket=mybucket,accessId=myid"</b> . Special characters ',' and '=' must be escaped, by repeating the same character. For ("xx,=x") <b>-properties "bucket=mybucket,accessKey=xx,,=x"</b> .

Parameter	Description
<b>safe</b> pct=string	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%.
<b>type</b> =perf vault	Required. Specifies the type of pool (performance/ primary/vault) to create. <ul style="list-style-type: none"> <li>perf - the performance pool is used to store snapshot images.</li> <li>vault - The vault pool is used for selecting Amazon S3 and Google Cloud Storage.</li> </ul>
<b>warn</b> pct=string	Optional. Specifies the warning percentage for the disk pool. The value must be between 10 and 99. The value of <b>warn</b> pct should be equal to or less than that of <b>safe</b> pct. When the disk usage exceeds this percentage, a warning event is raised. For a dedup disk pool, the warnpct cannot be more than 75%.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkdirpool	type mdisk name

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

### mkdirpool Example

#### Request

```
POST https://{Actifio_API_Server}/actifio/api/task/
mkdirpool?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
}
```

## lsdiskpool

[About lsdiskpool Command](#) on page 185

[lsdiskpool Request Details](#) on page 186

[lsdiskpool Example](#) on page 186

### About lsdiskpool Command

#### Description

Use this command to retrieve the details of disk pools. vDisks reside in a disk pool. Actifio 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 Actifio 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%.

#### 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

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for <b>lsdiskpool</b> are:</p> <ul style="list-style-type: none"><li>name</li><li>safepct</li><li>warnpct</li></ul> <p>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&amp;' character .</p> <p>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*'.</p> <p>For number types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. Use the URL-encoded value of these operators.</p> <p>For example: filtervalue=warnpct%3E%3D80</p>
<b>argument</b> =string	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</p>

## 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsdiskpool	None

## Lsdiskpool Example

### Request

```
GET https://{Actifio_API_Server}/actifio/api/info/lsdiskpool
```

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": "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",
      "modifydate": "2018-03-01 22:55:18.837",
      "name": "jitapool1",
      "pooltype": "perf",
      "safepct": "90",

```



```
        "warnpct": "80"  
    }  
  ],  
  "status": 0  
}
```

## lsvaulttype

[About lsvaulttype Command](#) on page 188

[lsvaulttype Request Details](#) on page 188

[lsvaulttype Example](#) on page 188

### About lsvaulttype Command

#### Description

Use this command to provides a list of available OnVault types or provides detailed information for a specific OnVault type.

#### Rights

You must have 'System View', 'System Manage', 'Storage View', or 'Storage Manage' rights to view OnVault type information.

#### Parameters

Parameter	Description
<b>argument</b> =string	Optional. The OnVault type name (Google, Amazon, and so on).

### lsvaulttype Request Details

Your **lsvaulttype** 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	/actifio/api/info/lsvaulttype	None

### lsvaulttype Example

#### Request

```
GET https://{Actifio_API_Server}/actifio/api/info/lsvaulttype
```

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
}
```

## Isvaultstat

[About Isvaultstat Command](#) on page 190

[Isvaultstat Request Details](#) on page 190

[Isvaultstat Example](#) on page 190

### About Isvaultstat 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 Isvaultstat data.

#### Parameters

Isvaultstat 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsvaultstat	None

### Isvaultstat 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
}
```

## chdiskpool

[About chdiskpool Command](#) on page 192

[chdiskpool Request Details](#) on page 192

[chdiskpool Example](#) on page 193

### 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

Parameter	Description
<b>name</b> =string	Optional. Specifies a name for the disk pool.
<b>safepct</b> =integer	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
<b>warnpct</b> =string	Optional. Specifies warning percentage for the disk pool. The value must be between 10 and 100. The value for <b>warnpct</b> must be less than or equal to that of <b>safepct</b> .
<b>properties</b> =string	Optional. Specifies properties for vault type of pools, comma (,) separated name value pair. Use <a href="#">lsvaulttype</a> 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 <b>properties=</b> bucket%3Dmybucket%2CaccessId%3Dmyid.
<b>argument</b> =string	Required. Specifies the ID or name of the diskpool to be modified.

### 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.

---

Method	URI	Required Parameters
POST	/actifio/api/task/chdiskpool	argument

### 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](#) on page 194

[rmdiskpool Request Details](#) on page 194

[rmdiskpool Example](#) on page 194

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the diskpool to be deleted. Use <a href="#">lsdiskpool</a> to locate the ID or name of the disk pool.
<b>force</b> =boolean	Optional. Forces the removal of an Actifio OnVault storage pool, The <b>force</b> argument applies only to an Actifio OnVault pool.

#### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmdiskpool</code>	argument

---

**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-a624-5b575cff54d3
```

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

#### Response

Request success

```
{
  "result": "1",
  "status": 0
}
```



## Isdeduppoolstat

[About Isdeduppoolstat Command](#) on page 195

[Isdeduppoolstat Request Details](#) on page 196

[Isdeduppoolstat Example](#) on page 196

### About Isdeduppoolstat 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

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	<p>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for <b>Isdeduppoolstat</b> are:</p> <ul style="list-style-type: none"><li>• statetime</li><li>• sourcecluster</li><li>• appid</li><li>• hostname</li><li>• appname</li><li>• dedupusage</li><li>• totalappsize</li><li>• appsize</li><li>• newsiz</li><li>• dedupsize</li><li>• compresssize</li><li>• dedupcount</li></ul> <p>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 .</p> <p>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*'.</p> <p>For number types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. For example:</p> <pre>filtervalue=dedupcount\&gt;=80 filtervalue=dedupcount&gt;=80 filtervalue=dedupcount&gt;=80</pre>
<b>argument</b> =integer	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</p>

## Isdeduppoolstat Request Details

Your `Isdeduppoolstat` 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	<code>/actifio/api/info/lsdeduppoolstat</code>	None

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

## 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",
      "dedupsize": "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",
      "dedupsize": "0",
      "stattime": "2017-10-13 03:00:00.104",
      "appsize": "124554051584",
      "sourcecluster": "1415056619",
      "id": "284562"
    }
  ],
}
```

```
"status": 0  
}
```

## Isdiskpoolstat

[About Isdiskpoolstat Command](#) on page 198

[Isdiskpoolstat Request Details](#) on page 198

[Isdiskpoolstat Example](#) on page 199

### About Isdiskpoolstat 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 Actifio 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

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.
<b>filtervalue</b> =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 <b>Isdiskpoolstat</b> are: <ul style="list-style-type: none"><li>• stattime</li><li>• poolname</li><li>• pooltype</li><li>• capacity</li><li>• used</li></ul> 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 names that begin with 'foo', use 'filtervalue name=foo*'. For number types, allowed operators are: =, >, >=, <, <=. For example: <ul style="list-style-type: none"><li>• filtervalue=pooltype\\&gt;=1</li><li>• filtervalue=pooltype&gt;=1</li><li>• filtervalue=pooltype&gt;=1</li></ul>

### Isdiskpoolstat Request Details

Your **Isdiskpoolstat** 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	/actifio/api/info/lsdiskpoolstat	None

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

## lsdiskpoolstat 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
}
```

```
}
```

## lssnappoolstat

[About lssnappoolstat Command](#) on page 201

[lssnappoolstat Request Details](#) on page 201

[lssnappoolstat Example](#) on page 202

### About lssnappoolstat Command

#### Description

Use this command to retrieve statistics of snapshotpool 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

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.
<b>filtervalue</b> =attrib%3Dvalue	<p>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for <b>lssnappoolstat</b> are:</p> <ul style="list-style-type: none"><li>• sourcecluster</li><li>• appid</li><li>• hostname</li><li>• appname</li><li>• appsize</li><li>• vdiskcount</li><li>• totalused</li><li>• totalstaging</li></ul> <p>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 '\').</p> <p>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*'.</p> <p>For number types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. These must be escaped with '\' or enclosed in ' or ", as required by shell. For example:</p> <ul style="list-style-type: none"><li>• -filtervalue vdiskcount\&gt;=10</li><li>• -filtervalue "vdiskcount&gt;=10"</li><li>• -filtervalue 'vdiskcount&gt;=10'</li></ul>

### lssnappoolstat 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lssnappoolstat	None

### lssnappoolstat 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": "150732800",
      "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": "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](#) on page 204

[lsdedupefficiency Request Details](#) on page 204

[lsdedupefficiency Example](#) on page 204

#### 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.

##### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsdedupefficiency	None

#### 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",
      "id": "165467",
      "avgingestion": "0.00",
      "avgFIDI": "0.452042"
    },
    {
      "baseappsize": "0.00",
      "avgIIDI": "0.000000",
      "lastjobenddate": "2017-12-11 23:59:01",
      "appid": "6862",
    }
  ]
}
```

```

    "id": "188223",
    "avgingestion": "0.00",
    "avgFIDI": "0.452042"
  },
  {
    "baseappsize": "0.00",
    "avgIIDI": "0.000000",
    "lastjobenddate": "2017-12-11 23:59:02",
    "appid": "8760",
    "id": "260043",
    "avgingestion": "0.00",
    "avgFIDI": "0.452042"
  },
  {
    "baseappsize": "0.00",
    "avgIIDI": "0.000000",
    "lastjobenddate": "2017-12-11 23:59:02",
    "appid": "198375",
    "id": "260044",
    "avgingestion": "0.00",
    "avgFIDI": "0.452042"
  },
  {
    "baseappsize": "0.00",
    "avgIIDI": "0.000000",
    "lastjobenddate": "2017-12-11 23:59:03",
    "appid": "198377",
    "id": "260045",
    "avgingestion": "0.00",
    "avgFIDI": "0.452042"
  },
  {
    "baseappsize": "0.00",
    "avgIIDI": "0.000000",
    "lastjobenddate": "2017-12-11 23:59:03",
    "appid": "198376",
    "id": "321738",
    "avgingestion": "0.00",
    "avgFIDI": "0.452042"
  }
],
"status": 0
}

```

## getdedupsafelimits

[About getdedupsafelimits Command](#) on page 206

[getdedupsafelimits Request Details](#) on page 206

[getdedupsafelimits Example](#) on page 206

### About getdedupsafelimits Command

#### Description

Use this command to retrieve the safe limits for the various dedup load metrics.

#### Rights

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.

Method	URI	Required Parameters
GET	/actifio/api/info/getdedupsafelimits	None

### getdedupsafelimits Example

#### Request

```
GET https://{Actifio_API_Server}/actifio/api/info/getdedupsafelimits
```

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 208

[getdedupstats Request Details](#) on page 208

[getdedupstats Example](#) on page 209

### About getdedupstats Command

#### Description

Use this command to retrieve statistics for an identified dedup load metric (uniqueblocks, ingestdata, or dedupload).

#### Rights

You must have the 'System View' or 'System Manage' right to view statistics for dedup load metrics.

#### Parameters

Parameter	Description
<b>startdate</b> =DateTime	Optional. Specifies the start date value of the date range window. Date format can be in <b>yyyy-MM-dd</b> or in <b>yyyy-MM-dd HH:mm:ss</b> . If you do not specify the <b>-startdate</b> argument, the Actifio appliance assumes 30 days earlier from the end date (the <b>enddate</b> argument).
<b>enddate</b> =DateTime	Optional. Specifies the end date value of the date range window. Date format can be in <b>yyyy-MM-dd</b> or in <b>yyyy-MM-dd HH:mm:ss</b> . If you do not specify the <b>enddate</b> argument then the end date would be set to the current Actifio appliance system date.
<b>metricname</b> =string	Required. Specifies the name of dedup metric whose statistics need to be retrieved. Choices include: <ul style="list-style-type: none"><li><i>uniqueblocks</i> - Lists a summary of unique blocks information.</li></ul> <hr/> <p><b>Note:</b> This selection does not require a value in the <b>startdate</b> and <b>enddate</b> arguments.</p> <hr/> <ul style="list-style-type: none"><li>ingestdata - Lists a summary of ingest data metrics.</li><li>dedupload - Lists a summary of dedup slot utilization metrics.</li></ul>
<b>units</b> =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.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getdedupstats	metricname

---

**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](https://{Actifio_API_Server}/actifio/api/info/getdedupstats?metricname=ingestdata)

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 210

[Isdeduploadstat Request Details](#) on page 210

[Isdeduploadstat Example](#) on page 210

### About Isdeduploadstat Command

#### Description

Use this command to retrieve details of dedup load stats.

#### Rights

You must have the 'System View' or 'System Manage' right to list statistics for dedup load metrics.

#### Parameters

Parameter	Description
<b>startdate</b> =DateTime	Optional. Specifies the start date value of the date range window. Date format can be in <b>yyyy-MM-dd</b> or in <b>yyyy-MM-dd HH:mm:ss</b> . If you do not specify the <b>startdate</b> argument, the Actifio appliance assumes 30 days earlier from the end date (the <b>enddate</b> argument).
<b>enddate</b> =DateTime	Optional. Specifies the end date value of the date range window. Date format can be in <b>yyyy-MM-dd</b> or in <b>yyyy-MM-dd HH:mm:ss</b> . If you do not specify the <b>enddate</b> argument, then it is set to the current Actifio appliance system date.

### Isdeduploadstat Request Details

Your **Isdeduploadstat** 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	/actifio/api/info/Isdeduploadstat	None

### 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](#) on page 212

[mkslp Request Details](#) on page 212

[mkslp Example](#) on page 213

#### 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

Parameter	Description
<b>dedupasyncnode</b> =string	<b>Note:</b> Optional. Specifies the name of the remote dedup-async node. The remotenode is used if not specified.
<b>description</b> =string	Optional. Specifies the description for new profile.
<b>name</b> =string	Required. Specifies the name for new profile. The name must be unique within the Actifio appliance.
<b>org</b> =string	Optional. Specifies a default organization in which the profile should be added after creation. To use this, you must have 'System Manage' right.
<b>performancepool</b> =string	Required. Specifies the name of the performance pool.
<b>primarystorage</b> =string	Optional. Specifies the name of the primary storage.
<b>remotenode</b> =string	Optional. Specifies the name of the remote appliance node.
<b>vaultpool</b> =string	<b>Note:</b> Optional. Specifies the name or ID of the Actifio OnVault storage pool.

#### 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.

Method

URI

Required Parameters

POST	/actifio/api/task/mkslp	performancepool name
------	-------------------------	-------------------------

---

**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

```
{
  "result": 364648,
  "status": 0
}
```

## lsslp

[About lsslp Command](#) on page 214

[lsslp Request Details](#) on page 214

[lsslp Example](#) on page 214

### About lsslp 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 Actifio appliance.

#### Rights

You must have the 'SLA View', 'SLA Assign', or 'SLA Manage' right to view the details of profiles.

#### Parameters

Parameter	Description
<b>filtervalue</b> =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 <b>lsslp</b> are: <ul style="list-style-type: none"><li>• name</li><li>• localnode</li><li>• performancepool</li><li>• primarystorage</li><li>• remotenode</li></ul> 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*'.
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

### lsslp Request Details

Your **lsslp** 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	/actifio/api/info/lsslp	None

### lsslp Example

#### Request

GET https://{Actifio\_API\_Server}/actifio/api/info/lsslp

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
}
```

## chslp

[About chslp Command](#) on page 216

[chslp Request Details](#) on page 216

[chslp Example](#) on page 217

### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies new description for the SLP.
<b>dedupasyncnode</b> =string	<b>Note:</b> Optional. Specifies the name of the remote dedup-async node, remote node is used if not specified.
<b>name</b> =string	Optional. Specifies new name for the SLP.
<b>performancepool</b> =string	Optional. Specifies new performance pool for the SLP.
<b>primarystorage</b> =string	Optional. Specifies new primary storage for the SLP.
<b>remotenode</b> =string	Optional. Specifies new remote appliance node for the SLP.
<b>argument</b> =string	Required. Specifies the ID or name of the profile (SLP) to be changed.
<b>vaultpool</b> =string	Optional. Specifies the name or ID of the OnVault pool. Use 0 to clear the OnVault pool of the profile.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chslp	argument

---

**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-a624-5b575cff54d3

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

#### Response

Request success

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

## rmslp

[About rmslp Command](#) on page 218

[rmslp Request Details](#) on page 218

[rmslp Example](#) on page 218

### About rmslp Command

#### Description

Use this command to delete a profile.

#### Rights

You must have the 'SLA Manage' right to delete a profile.

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the profile to be deleted.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmslp</code>	argument

---

**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](#) on page 219

[chauthservice Request Details](#) on page 219

[chauthservice Example](#) on page 219

#### 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

Parameter	Description
<code>type=string</code>	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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/chauthservice</code>	<code>type</code>

---

**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-a624-5b575cff54d3
```

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

##### Response

Request success

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

## configresourcewarning

[About configresourcewarning Command](#) on page 220

[configresourcewarning Request Details](#) on page 220

[configresourcewarning Examples](#) on page 220

### About configresourcewarning Command

#### Description

Use this command to configure the warning level for a system resource within the Actifio 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

Parameter	Description
<b>name</b> =string	Required. Specifies the name of the resource to set the warning level. The supported resources and the permitted resources are: <ul style="list-style-type: none"><li>• <b>vdisk</b>: You can configure a maximum of 2048 virtual disks for one iogrp.</li><li>• <b>copy</b>: You can create a maximum of 256 copies per VDisk.</li><li>• <b>snap</b>: snapshot bitmap memory (pre-configured)</li><li>• <b>remote</b>: remote copy memory (pre-configured)</li><li>• <b>mirror</b>: mirror copy memory (pre-configured)</li></ul>
<b>warnpct</b> =integer	Optional. Specifies the warning percentage for the resource, between 10 and 99. The default warning percentage is 90%.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configresourcewarning	name

---

**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-a624-5b575cff54d3
```

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

## Response

Request success

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

## getresourcewarning

[About getresourcewarning Command](#) on page 222

[getresourcewarning Request Details](#) on page 222

[getresourcewarning Example](#) on page 222

### About getresourcewarning Command

#### Description

Use this command to fetch the warning level for the system resource within your Actifio appliance. This is a percentage for resource usage and the warning is generated when usage crosses the warning threshold set in [configresourcewarning](#) on page 220.

#### Rights

You must have 'System View' or 'System Manage' right to view the warning threshold of a resource.

#### Parameters

Parameter	Description
<b>name</b> =string	Required. Specifies the name of the resource to configure the warning level for. You can configure a warning level for the following resources: <ul style="list-style-type: none"><li>• <b>vdisk</b>: You can create a maximum of 2048 VDIsks on a Actifio appliance.</li><li>• <b>copy</b>: You can create a maximum of 256 copies per VDisk.</li><li>• <b>snap</b>: Snapshot bitmap memory. This is pre-configured.</li><li>• <b>remote</b>: Remote copy memory. This is pre-configured.</li><li>• <b>mirror</b>: Mirror copy memory. This is pre-configured.</li></ul>

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getresourcewarning	name

---

**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-a624-5b575cff54d3
```

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

## Response

Request success

```
{  
  "result": "90",  
  "status": 0  
}
```

## mkarray

[About mkarray Command](#) on page 224

[mkarray Request Details](#) on page 224

[mkarray Example](#) on page 225

### 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

Parameter	Description
<b>arraytype</b> =IBM_Storwize   PureStorage_Flash array	Required. Specifies type of array. The valid array types are: <ul style="list-style-type: none"><li>• IBM_Storwize</li><li>• PureStorage_Flash array</li></ul>
<b>ipaddress</b> =string	Required. Specifies the UI/Management IP.
<b>name</b> =string	Required. Specifies the name for the array. It has to be unique within the appliance.
<b>properties</b> =string	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 <b>Isarrayoption</b> command.  <i><b>Note:</b> When using PureStorage_Flash array, the British Pound Sterling character (£) is not supported in the password.</i>

#### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkarray	arraytype ipaddress name properties

***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  
}
```

## lsarray

[About lsarray Command](#) on page 226

[lsarray Request Details](#) on page 226

[lsarray Example](#) on page 227

### About lsarray 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

Parameter	Description
<b>filtervalue</b> =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 <b>lsarray</b> are: <ul style="list-style-type: none"><li>• arraytype</li><li>• name</li><li>• status</li></ul> 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*'. 
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

### lsarray 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsarray	None

---

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

---



## lsarray Example

### Request

```
GET https://{Actifio_API_Server}/actifio/api/info/lsarray
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
}
```

## lsarrayoption

[About lsarrayoption Command](#) on page 228

[lsarrayoption Request Details](#) on page 228

[lsarrayoption Example](#) on page 228

### About lsarrayoption Command

#### Description

Use this command to returns 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

Parameter	Description
<code>arraytype=IBM_Storage   PureStorage_Flash array</code>	Optional. Specifies the type of array to retrieve the options.

### lsarrayoption Request Details

Your `lsarrayoption`, 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	<code>/actifio/api/info/lsarrayoption</code>	None

---

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

---

### lsarrayoption 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 231

[charray Request Details](#) on page 231

[charray Example](#) on page 231

### About charray Command

#### Description

Use this command to modify an array object.

#### Rights

You must have 'Storage Manage' right to modify an array.

#### Parameters

Parameter	Description
<b>ipaddress</b> =string	Optional. Specifies the IP address for the array
<b>name</b> =string	Required. Specifies the name for the array. It has to be unique within the appliance.
<b>properties</b> =string	<b>Note:</b> 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 <b>lsarrayoption</b> command. <i>Not all properties can be changed for an array.</i>
<b>argument</b> =string	Required. Specifies the array object to modify, either by ID or by name.

### 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.

Method	URI	Required Parameters
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-a624-5b575cff54d3
```

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

## Response

Request success

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

## rmarray

[About rmarray Command](#) on page 233

[rmarray Request Details](#) on page 233

[rmarray Example](#) on page 233

### About rmarray Command

#### Description

Use this command to delete an array.

#### Rights

You must have 'Storage Manage' right to remove an array.

#### Parameters

Parameter	Description
<code>array_id</code>   <code>array_name</code> argument =string	Required. Specifies the ID or name of the array to be removed.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmarray</code>	None

---

**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
```

```
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  
}
```

## Isappstorage

[About Isappstorage Command](#) on page 234

[Isappstorage Request Details](#) on page 234

[Isappstorage Example](#) on page 234

### About Isappstorage 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, to take advantage of in-band capabilities.

#### Rights

User must have 'Storage View', or 'Application Manage' right to see application storage details.

#### Parameters

Parameter	Description
<b>filtervalue</b> =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 <b>Isarray</b> are: <ul style="list-style-type: none"><li>• appid</li><li>• appname</li><li>• hostid</li></ul> 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*.

### Isappstorage Request Details

Your **Isappstorage** 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	/actifio/api/info/lsappstorage	None

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

### Isappstorage Example

#### Request

GET https://{Actifio\_API\_Server}/actifio/api/info/lsappstorage

HTTP Request Header

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

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



## Response

Request success

???

## Auto Updates Commands

### lsversion

[About lsversion Command](#) on page 236

[lsversion Request Details](#) on page 236

[lsversion Example](#) on page 236

#### About lsversion Command

##### Description

Use this command to retrieve installed Actifio 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsversion	None

#### 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

```
{
  "result": [
    {
      "installed": "2017-12-14 00:41:29",
      "component": "CDS",
      "version": "8.0.2.189"
    },
    {
      "installed": "2017-12-14 00:41:29",
      "component": "srv-revision",
      "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 238

[lsupdate Request Details](#) on page 238

[lsupdate Examp](#)l on page 238

### About lsupdate Command

#### Description

Use this command to retrieve a list of updates available to be installed onto the Actifio 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 Actifio 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsupdate	None

---

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

---

### lsupdate Examp

#### 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

```
{
  "result": [
    {
      "update": "patch-SKY7.1.1.740"
    }
  ],
  "status": 0
}
```

## uploadupdate

[About uploadupdate Command](#) on page 239

[uploadupdate Request Details](#) on page 239

[uploadupdate Example](#) on page 239

### About uploadupdate Command

#### Description

Use this command to upload an Actifio-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 Actifio update file.

#### Parameters

Parameter	Description
<b>argument</b> =string	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.

Method	URI	Required Parameters
POST	/actifio/api/task/uploadupdate	argument

---

**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-a624-5b575cff54d3

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

#### Response

Request success

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

## installupdate

[About installupdate Command](#) on page 240

[installupdate Request Details](#) on page 240

[installupdate Example](#) on page 240

### About installupdate Command

#### Description

Use this command to install all Actifio provided 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.

#### Rights

There are no specific rights associated with this operation. A user with 'administrator' role can install all Actifio provided update files.

#### Parameters

Parameter	Description
<b>force</b>	Optional. When set, any preflight errors will be ignored and proceed with installation.

### 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.

---

Method	URI	Required Parameters
POST	/actifio/api/task/uploadupdate	argument

### installupdate Example

#### Request

```
POST https://{Actifio_API_Server}/actifio/api/task/installupdate?force
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": "Install of updates completed",
  "status": 0
}
```

## Remote Setup Commands

### setremotesupport

[About setremotesupport Command](#) on page 241

[setremotesupport Request Details](#) on page 241

[setremotesupport Example](#) on page 241

#### About setremotesupport Command

##### Description

Use this command to set administrative support for Actifio SecureConnect remote support.

##### Rights

You must have 'System Manage' right to be able to configure SecureConnect remote support.

##### Parameters

Parameter	Description
<b>restricted</b> =string	Optional. Enables/disables Actifio remote access.
<b>secureconnect</b> =string	Optional. Enables secure connect.

#### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/setremotesupport	None

---

**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 242

[getremotesupport Request Details](#) on page 242

[getremotesupport Example](#) on page 242

### 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

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getremotesupport	None

### 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
}
```



# 5 License Management Commands

These commands are for Actifio Sky appliance license management. The GUI interface for these commands can be found in the Actifio Desktop .

For information, see **Configuring Resources and Settings With the Domain Manager** in ActifioNOW.

**Note:** *The license management commands are specific only to the Actifio Sky appliance.*

This chapter details the following license management commands:

## Managing License

### Commands

[getlicenseinfo](#) on page 244

[lslicense](#) on page 246

[rmlicense](#) on page 248

## getlicenseinfo

[About getlicenseinfo Command](#) on page 244

[getlicenseinfo Request Details](#) on page 244

[getlicenseinfo Example](#) on page 244

### About getlicenseinfo Command

#### Description

Use this command to display licensing information. If no option is supplied, a summary of all installed licenses is provided.

#### Rights

You must have 'System View' or 'System Manage' role.

#### Parameters

Parameter	Description
<b>licensekey</b> =string	Optional. Specifies the license key.
<b>licensefile</b> =string	Optional. Specifies the file that contains license key.
<b>id</b> =integer	Optional. Specifies the ID of the license key.

### 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.

Method	URI	Required Parameters
GET	<code>/actifio/api/info/getlicenseinfo</code>	<code>licensekey   licensefile   id</code>

---

**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://{Actifio_API_HOST}/actifio/api/info/getlicenseinfo?id=83005
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": "License Detail: Installed. Type: [PRODUCT] Customer: [Actifio] 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 246

[lslicense Request Details](#) on page 246

[lslicense Examples](#) on page 246

### 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.

#### Rights

You must have 'System View' or 'System Manage' rights to retrieve license key info.

#### Parameters

Parameter	Description
id=integer	Optional. Specifies the ID of an object.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lslicense	None

---

**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://{Actifio_API_HOST}/actifio/api/info/lslicense
```

```
HTTP Request Header
```

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

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}/actifio/api/info/lslicense?id=83005
HTTP Request Header
Authorization: Actifio 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 248

[rmlicense Request Details](#) on page 248

[rmlicense Example](#) on page 248

### 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.

---

#### Rights

You must have "System Manage" right to uninstall a license.

#### Parameters

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the license key to be removed.

#### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmlicense	licenseid=<license id>

#### rmlicense Example

##### Uninstalling a license key.

##### Request

POST `https://{Actifio_API_HOST}/actifio/api/task/rmlicense?licenseid=91005`

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
}
```

# 6 Application Management Commands

These commands are for application management. The GUI interface for these commands can be found in the Actifio Desktop UI.

For detailed information, refer to ***Virtualizing and Protecting Copy Data with the Application Manager, Accessing and Recovering Copy Data with the Application Manager, Replicating Data Using Actifio Appliances, or Restoring Copy Data with the Application Manager*** in the Actifio Documentation Library for CDS/Sky or in ActifioNOW.

## Managing Applications

### Application Commands

[mkapplication](#) on page 251  
[lsapplication](#) on page 253  
[chapplication](#) on page 257  
[rmapplication](#) on page 260

### Group Commands

[mkgroup](#) on page 261  
[lsgroup](#) on page 263  
[chgroup](#) on page 265  
[mkgroupmember](#) on page 267  
[lsgroupmember](#) on page 269  
[mkconsistgrp](#) on page 271  
[lsconsistgrp](#) on page 273  
[chconsistgrp](#) on page 275  
[mkconsistgrpmember](#) on page 277  
[lsconsistgrpmember](#) on page 280  
[rmconsistgrpmember](#) on page 282  
[rmconsistgrp](#) on page 283  
[rmgroupmember](#) on page 284  
[rmgroup](#) on page 285

### Discovery Commands

[appdiscovery](#) on page 286  
[lsappvols](#) on page 289  
[vmdiscovery](#) on page 292  
[hmcdiscovery](#) on page 295

### Other Commands

[failback](#) on page 297  
[failover](#) on page 298  
[testfailover](#) on page 302  
[rmfailovertest](#) on page 361  
[syncback](#) on page 308  
[lsappclass](#) on page 310  
[lsinstancemember](#) on page 312  
[lsmdlstat](#) on page 315

## Virtual Machine Commands

[addvm](#) on page 318

[lsvm](#) on page 320

## Mount Commands

[prepmount](#) on page 322

[prepunmount](#) on page 324

[mountimage](#) on page 326

[verifyimage](#) on page 333

[cloneimage](#) on page 334

[replicateimage](#) on page 337

[replicatelog](#) on page 339

[exportimage](#) on page 340

[unexportimage](#) on page 343

[lsrestoreoptions](#) on page 345

[restoreimage](#) on page 347

[createliveclone](#) on page 349

[refreshliveclone](#) on page 351

[unmountimage](#) on page 353

[expireimage](#) on page 355

[deleteimage](#) on page 357

[cleanupmirroring](#) on page 359

## Image Management Commands

[lsbackup](#) on page 363

[backup](#) on page 367

[chbackup](#) on page 369

[lsvaultbackup](#) on page 371

## Seeding Command

[lsdevice](#) on page 374

## Workflow Commands

[mkworkflow](#) on page 376

[lsworkflow](#) on page 379

[chworkflow](#) on page 381

[chflowtask](#) on page 384

[lsflowtask](#) on page 389

[runworkflow](#) on page 391

[rmworkflow](#) on page 394

## Other Command

[mksideband](#) on page 395



# Application Commands

## mkapplication

[About mkapplication Command](#) on page 251

[mkapplication Request Details](#) on page 251

[mkapplication Example](#) on page 252

### 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

Parameter	Description
<b>appname</b> =string	Required. Specifies the name.
<b>appversion</b> =string	Optional. Specifies the version.
<b>description</b> =string	Optional. Specifies the description.
<b>apptype</b> =string	Optional. Specifies the application type of the application. For NAS application, the type should be 'nas'. For generic out-of-band application, the type should be 'LVM Volume'. Otherwise, a 'generic' in-band application is created. This parameter applies to Actifio CDS or Sky appliance.
<b>hostid</b> =string	Required. Specifies the host ID where the application runs.
<b>org</b> =string	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.
<b>volumes</b> =string	Required. Specifies the names of the VDisks allotted to the application. Multiple VDisk names should be separated with a colon (:).

### 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.

Method

URI

Required Parameters

POST	/actifio/api/task/mkapplication	appliance hostid volumes appname
------	---------------------------------	-------------------------------------------

---

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

---

### mkapplication Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/  
mkapplication?hostid=84313&appliance=Solar.System&volumes=ACT_PRI_POOL000&appname=BackupApp
```

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  
}
```

## lsapplication

[About lsapplication Command](#) on page 253

[lsapplication Request Details](#) on page 254

[lsapplication Example](#) on page 254

### About lsapplication Command

#### Description

Use this command to display a concise list of applications or a detailed view of an application. Use the **appdiscovery** command to discover applications on non-VMs and use **vmdiscovery** to discover applications running on the virtual machines. Generic applications (not supported by the Actifio Connector) can be created using **mkapplication**

#### Rights

You must have the 'Application Manage' or 'Host Manage' right to create a generic application.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attribute% 3Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. Valid filter attributes for <b>lsapplication</b> are:</p> <ul style="list-style-type: none"><li>• appname</li><li>• apptype</li><li>• appversion</li><li>• auxinfo</li><li>• description</li><li>• friendlytype</li><li>• hostid</li><li>• hostname</li><li>• id</li><li>• ignore</li><li>• isclustered</li><li>• networkip</li><li>• networkname</li><li>• originalappid</li><li>• pathname</li><li>• protectable [ NONE   FULLY   PARTIALLY ]</li><li>• sourcecluster</li></ul> <p>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&amp;' character .</p> <p>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 <b>filtervalue=name=%3Dfoo</b>. Some filters allow only predefined constants. For example, <b>protectable</b> allows only NONE, FULLY, or PARTIALLY. To list applications that are protected FULLY, use <b>filtervalue=protectable=FULLY</b>.</p>
<b>argument</b> =string	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is shown.</p>

## 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsapplication	None

---

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

---

## lsapplication Example

### List all applications.

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsapplication
```

```
HTTP Request Header
```

```
Authorization: Actifio 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",
      "isclustered": "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": "ACT_PRI_POOL000"
    }
  ],
  "status": 0
}

```

### List applications by filtering on an application's Id.

#### Request

GET https://{API\_HOST}/actifio/api/info/lsapplication?argument=100626

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 257

[chapplication Request Details](#) on page 258

[chapplication Example](#) on page 259

### 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

Parameter	Description
<b>appname</b> =string	Optional. Specifies a new name for the application. This cannot be changed for a discovered application.
<b>appclass</b> =string	<b>Note:</b> Optional. Specifies the application class for the application. An app class dictates the type of option allowed for recovery operations.
<b>appysensitivity</b> =string	<b>Note:</b> Optional. Applies the sensitivity of the application to all existing local backup images.
<b>appversion</b> =string	Optional. Specifies the version of the application.
<b>description</b> =string	Optional. Specifies the description of the application.
<b>friendlytype</b> =string	Optional. Specifies friendly type for the application.
<b>ignore</b> =boolean	Optional. Specifies whether an application should be ignored. A protected application cannot be ignored.

Parameter	Description
<b>volumes</b> =string	<p>Optional. For Actifio CDS or Sky appliance, depending on the type of application:</p> <ul style="list-style-type: none"> <li>• <b>Generic Applications</b> - Specifies the VDisk names of the application. Multiple VDisk names should be separated by a colon (:).</li> <li>• <b>VM Applications</b> - Specifies VMDK files to be excluded or included during data capture, or simply the boot VMDK. The syntax for VM VMDK is: <pre>boot include:&lt;VMDK file list delimited by ,&gt; exclude:&lt;VMDK file list delimited by ,&gt;</pre> <p>If the VMDK file contains a comma (','), it must be escaped with ",". For example: "exclude:[datastore_remus] tndvm1/test.vmdk"</p> </li> <li>• <b>SQL Instances</b> - Specifies SQL Server databases to be excluded or included during data capture. The syntax for SQL Server database is: <pre>o include:&lt;SQL Server database list delimited by ,&gt; o exclude:&lt;SQL Server database list delimited by ,&gt;</pre> <p>If the database contains a comma (','), it needs to be escaped with ",".</p> </li> </ul>
<b>argument</b> =string	Required. Specifies the ID of the application to be modified. Use <b>lsapplication</b> to retrieve the ID.
<b>networkip</b> =string	Optional. Specifies the network IP of the application.
<b>isclustered</b> =string	Optional. Specifies if the application is part of an appliance.
<b>sensitivity</b> =integer	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 Actifio CDS or Sky appliance.
<b>networkname</b> = string	Optional. Specifies the network name of the application.
<b>org</b> =string	<p>Optional. Specifies a default organization in which the application should be added after creation. Use <b>lsorg</b> to locate the ID or name of the organization.</p> <hr/> <p><b>Note:</b> To use this option a user must have 'System Manage' right.</p> <hr/>
<b>pathname</b> =string	Optional. Specifies the path name of the application.

### 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.

**Method**

**URI**

**Required Parameters**



POST	/actifio/api/task/chapplication	argument
------	---------------------------------	----------

---

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

---

### chapplication Example

#### Request

POST https://{API\_HOST}/actifio/api/task/  
chapplication?argument=156726&description=Application%20for%20running%20backups

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  
}
```

## rmapplication

[About rmapplication Command](#) on page 260

[rmapplication Request Details](#) on page 260

[rmapplication Example](#) on page 260

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the application to be removed. Use <b>lsapplication</b> to retrieve the application ID.

### 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	/actifio/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}/actifio/api/task/rmapplication?argument=22375678
```

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  
}
```

## Group Commands

### mkgroup

[About mkgroup Command](#) on page 261

[mkgroup Request Details](#) on page 261

[mkgroup Example](#) on page 261

### About mkgroup Command

#### Description

Use this command to create a new group. Applications can be added to or deleted from the group using the **mkgroupprofile** and **rmkgroupprofile** 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

Parameter	Description
<b>name</b> =string	Required. Specifies the name of the group. The name should be unique.
<b>description</b> =string	Optional. Specifies the description for the group.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkgroup	name

---

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

---

### mkgroup Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/mkgroup?apistart=0&apilimit=100&name=backupapps-  
group&description=Manage+Backups&appliance=Solar.System
```

HTTP Request Header

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

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

## Response

Request success

```
{  
  "result": 156836,  
  "status": 0  
}
```

## lsgroup

[About lsgroup Command](#) on page 263

[lsgroup Request Details](#) on page 263

[lsgroup Example](#) on page 263

### About lsgroup 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

Parameter	Description
<b>filtervalue</b> =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 <b>lsgroup</b> command are: <ul style="list-style-type: none"><li>name</li><li>description</li></ul> 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 <b>filtervalue=name%3Dfoo</b>
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

### lsgroup Request Details

Your **lsgroup** 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	/actifio/api/info/lsgroup	None

---

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

---

### lsgroup Example

**List all groups.**

## Request

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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}/actifio/api/info/lsgroup?argument=156836HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
```

where 92929a8b-a413-476f-a624-5b575cff54d3 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 on page 265](#)

[chgroup Request Details on page 265](#)

[chgroup Example on page 265](#)

### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies the description.
<b>name</b> =string	Optional. Specifies the name.
<b>argument</b> =string	Required. Specifies the ID or name of the group to be modified.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chgroup	argument

---

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

---

### chgroup Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/chgroup?argument=mktgroup
```

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
```

}



## mkgrouplember

[About mkgrouplember Command on page 267](#)

[mkgrouplember Request Details on page 267](#)

[mkgrouplember Example on page 267](#)

### About mkgrouplember 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

Parameter	Description
<b>appid</b> =integer	Required. Specifies the ID of an application to add to a group. Use <b>lsapplication</b> to retrieve the application ID.
<b>groupid</b> =integer	Required. Specifies the ID of the group to add the application to. Use <b>lsconsistgrp</b> command to obtain the ID of the consistency group.

### mkgrouplember Request Details

Your **mkgrouplember** 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/mkgrouplember	appid groupid

---

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

---

### mkgrouplember Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/mkgrouplember?appid=33450&groupid=338654
```

HTTP Request Header

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

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

#### Response

Request success

```
{
```

```
"result": 403775,  
"status": 0  
}
```

## lsgroupmember

[About lsgroupmember Command](#) on page 269

[lsgroupmember Request Details](#) on page 269

[lsgroupmember Example](#) on page 269

### About lsgroupmember 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

Parameter	Description
<b>filtervalue</b> =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 <b>lsgroupmember</b> are: <ul style="list-style-type: none"><li>groupid</li><li>appid</li></ul> The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&' character .
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.

### lsgroupmember Request Details

Your **lsgroupmember** 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	/actifio/api/info/lsgroupmember	None

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

### lsgroupmember Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsgroupmember
```

```
HTTP Request Header
```

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

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

## Response

Request success

```
{
  "result": [
    {
      "modifydate": "",
      "appid": "334050",
      "groupid": "333846",
      "id": "385474"
    }
  ],
  "status": 0
}
```

## mkconsistgrp

[About mkconsistgrp Command](#) on page 271

[mkconsistgrp Request Details](#) on page 271

[mkconsistgrp Example](#) on page 271

### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies the description for consistency group.
<b>hostid</b> =string	Required. Specifies the host ID of the consistency group for the Actifio Appliance.
<b>groupname</b> =string	Required. Specifies the name of the consistency group. The name should be unique.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkconsistgrp</code>	groupname hostid

---

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

---

### mkconsistgrp Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/mkconsistgrp?hostid=198180&groupname=mygroup2
```

HTTP Request Header

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

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

#### Response

Request success

```
{  
  "result": 333957  
  "status": 0  
}
```

## lsconsistgrp

[About lsconsistgrp Command](#) on page 273

[lsconsistgrp Request Details](#) on page 273

[lsconsistgrp Example](#) on page 274

### About lsconsistgrp Command

#### Description

Use this command to display a concise list of all consistency groups created on the Actifio appliance or a detailed view of a consistency group.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3 Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <b>lsconsistgrp</b> command are:</p> <ul style="list-style-type: none"><li>• groupname</li><li>• originalappid</li></ul> <p>The filter is formed with an attribute and a value. When user specifies more than one filter, they must be combined with the '&amp;' 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 groupname=foo*'. 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,</p> <pre>-filtervalue originalappid\&gt;=80 -filtervalue "originalappid&gt;=80" -filtervalue 'originalappid&gt;=80'</pre>
<b>argument</b> =string	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, a concise view of all objects matching the filter criteria is displayed.</p>

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsconsistgrp	None

---

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

---

## lsconsistgrp Example

### Request

GET https://{API\_HOST}/actifio/api/info/lsconsistgrp

HTTP Request Header

Authorization: Actifio 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
}
```



## chconsistgrp

[About chconsistgrp Command](#) on page 275

[chconsistgrp Request Details](#) on page 275

[chconsistgrp Example](#) on page 275

### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies the description.
<b>groupname</b> =string	Optional. Specifies new name of the consistency group.
<b>argument</b> =string	Required. Specifies the consistency group ID to be modified.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chconsistgrp	argument

---

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

---

### chconsistgrp Example

#### Request

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

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
```

}

## mkconsistgrpmember

[About mkconsistgrpmember Command on page 277](#)

[mkconsistgrpmember Request Details on page 277](#)

[mkconsistgrpmember Example on page 277](#)

### 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

Parameter	Description
<b>appid</b> =string	Required. Specifies the ID of the application to be added to a consistency group. Use <b>lsapplication</b> to retrieve the application ID.
<b>groupid</b> =string	Required. Specifies the ID of the consistency group to add the application to. Use <b>lsconsistgrp</b> command to obtain the ID of the consistency group

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkconsistgrpmember	appid groupid

---

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

---

### mkconsistgrpmember Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/mkconsistgrpmember?appid=333957&groupid=334089
```

HTTP Request Header

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

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

#### Response

Request success

```
{  
  "result": 385474,  
  "status": 0
```

}

## rmconsistgrp

[About rmconsistgrp Command](#) on page 283

[rmconsistgrp Request Details](#) on page 283

[rmconsistgrp Example](#) on page 283

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the consistency group ID to be removed. Use <b>lsconsistgrp</b> command to obtain the ID or name of the consistency group.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmconsistgrp	argument

---

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

---

### rmconsistgrp Example

#### Request

POST https://{API\_HOST}/actifio/api/task/rmconsistgrp?argument=333957

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
}
```

## lsconsistgrpmember

[About lsconsistgrpmember Command](#) on page 280

[lsconsistgrpmember Request Details](#) on page 280

[lsconsistgrpmember Example](#) on page 280

### 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

Parameter	Description
<b>filtervalue</b> =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 <b>lsconsistgrpmember</b> command are: <ul style="list-style-type: none"><li>groupid</li><li>appid</li></ul> 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 '\\').
<b>argument</b> =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 <b>filtervalue</b> 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsconsistgrpmember	None

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

### lsconsistgrpmember Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsconsistgrpmember?appid=333957&groupid=334089
HTTP Request Header
```

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

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

## Response

Request success

```
{
  "result": [
    {
      "modifydate": "",
      "appid": "334050",
      "groupid": "371554",
      "id": "407411"
    }
  ],
  "status": 0
}
```

## rmconsistgrpmember

[About rmconsistgrpmember Command](#) on page 282

[rmconsistgrpmember Request Details](#) on page 282

[rmconsistgrpmember Example](#) on page 282

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the application to be deleted from a consistency group.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmconsistgrpmember	argument

---

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

---

### rmconsistgrpmember Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/rmconsistgrpmember?argument=333957
```

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
}
```



## rmconsistgrp

[About rmconsistgrp Command](#) on page 283

[rmconsistgrp Request Details](#) on page 283

[rmconsistgrp Example](#) on page 283

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the consistency group ID to be removed. Use <b>lsconsistgrp</b> command to obtain the ID or name of the consistency group.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmconsistgrp	argument

---

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

---

### rmconsistgrp Example

#### Request

Request success

```
POST https://{API_HOST}/actifio/api/task/rmconsistgrp?argument=156726
```

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
}
```

## rmgroupmember

[About rmgroupmember Command on page 284](#)

[rmgroupmember Request Details on page 284](#)

[rmgroupmember Example on page 284](#)

### About rmgroupmember Command

#### Description

Use this command to delete an application from a group. Use **lsgroupmember** to list the ID of the application-to-group mapping.

#### Rights

You must have the 'Application Manage' or 'System Manage' or 'SLA Assign' right to delete an application from a group.

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the group mapping to be removed.

### 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](#).

Method	URI	Required Parameters
POST	/actifio/api/task/rmgroupmember	argument

---

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

---

### rmgroupmember Example

#### Request

Request success

```
POST https://{API_HOST}/actifio/api/task/rmgroupmember?argument=156726
```

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
}
```

## rmgroup

[About rmgroup Command](#) on page 285

[rmgroup Request Details](#) on page 285

[rmgroup Example](#) on page 285

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the group to be deleted. Use <b>lsgroup</b> to obtain the ID or name of a group.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmgroup	argument

---

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

---

### rmgroup Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/rmgroup?argument=333850
```

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  
}
```

## Discovery Commands

### appdiscovery

[About appdiscovery Command](#) on page 286

[appdiscovery Request Details](#) on page 286

[appdiscovery Example](#) on page 287

#### 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](#).

##### Rights

You must have the 'Host Manage' or 'Application Manage' right to perform application discovery.

##### Parameters

Parameter	Description
<b>host</b> =string	Required. Specifies the ID for CDS/SKY or name of the host to discover the applications running on it. Use <b>lshost</b> to locate the ID/SRCID or name of the host.
<b>ipaddress</b>	(Optional) Specifies the IP address of a host to perform discovery on.
<b>org</b> =string	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.
<b>port</b> =integer	Optional. Specifies the port that the Actifio Connector is running on, the default value is 5106.
<b>versiononly</b> =boolean	Optional. Specifies if only the version should be discovered for this host. By default versiononly is set to false.

#### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/appdiscovery</code>	host

---

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

---

## appdiscovery Example

### Request

POST https://{API\_HOST}/actifio/api/task/appdiscovery?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": [
    {
      "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": "3334043"
  },
  {
    "new": "true",
    "appname": "ProdMB04-Sky",
    "missing": "false",
    "exists": "false",
    "id": "3334044"
  },
  {
    "new": "true",
    "appname": "ProdMB31",
    "missing": "false",
    "exists": "false",
    "id": "3334045"
  },
  {
    "new": "true",
    "appname": "ProdPF05",
    "missing": "false",
    "exists": "false",
    "id": "3334046"
  },
  {
    "new": "true",
    "appname": "ProdMB05",
    "missing": "false",
    "exists": "false",
    "id": "3334047"
  },
  {
    "new": "true",
    "appname": "ProdMB32",
    "missing": "false",
    "exists": "false",
    "id": "3334048"
  },
  {
    "new": "true",
    "appname": "ProdPF04",
    "missing": "false",
    "exists": "false",
    "id": "3334049"
  },
  {
    "new": "true",
    "appname": "MailboxDatabase1340163881",
    "missing": "false",
    "exists": "false",
    "id": "3334050"
  }
],
"status": 0
}

```

## lsappvols

[About lsappvols Command](#) on page 289

[lsappvols Request Details](#) on page 289

[lsappvols Example](#) on page 289

### 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 Actifio appliances.

#### Rights

You must have the 'Host Manage' or 'Application Manage' right to perform application discovery.

#### Parameters

Parameter	Description
<b>host</b> =string	Required. Specifies the Linux host with a Actifio Connector to perform application discovery using either host ID or name. Use <b>lshost</b> to locate the host ID or name.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsappvols	host

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

### lsappvols Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsappvols?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": [
    {
      "size": "0",
      "name": "F:\\",
      "lvmuuid": "null"
    }
  ],
}
```

```

{
  "size": "0",
  "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": "ProdMB04-Sky",
  "lvmuuid": "null"
},
{
  "size": "0",
  "name": "ProdMB31",
  "lvmuuid": "null"
},
{
  "size": "0",
  "name": "ProdPF05",
  "lvmuuid": "null"
},
{
  "size": "0",
  "name": "ProdMB05",
  "lvmuuid": "null"
},
{
  "size": "0",
  "name": "ProdMB32",
  "lvmuuid": "null"
},
{
  "size": "0",
  "name": "MailboxDatabase1340163881",

```



```
        "lvmuuid": "null"
      }
    ],
    "status": 0
  }
}
```

## vmdiscovery

[About vmdiscovery Command](#) on page 292

[vmdiscovery Request Details](#) on page 293

[vmdiscovery Example](#) on page 293

### About vmdiscovery Command

#### Description

Use this command to discover and add virtual machines to the Actifio appliance to protect them with SLAs. A typical flow of the commands is:

##### **vmdiscovery discoverclusters host**

Use **discoverclusters** to discover clusters managed by this vCenter.

##### **vmdiscovery discovervms host cluster addall**

Use **discovervms** to discover virtual machines on the specified cluster.

##### **vmdiscovery addvms host cluster vms**

Add Virtual Machines on the specified cluster to the Actifio appliance with **addvms**.

---

**Note:** Multiple VMs must be separated with a colon (:).

---

#### Rights

You must have the 'Host Manage' right to discover virtual machines.

#### Parameters

Parameter	Description
<b>addall</b>	Optional. Specifies that all virtual machines discovered in the cluster, specified with the <b>-cluster</b> parameter, should be added to the Actifio appliance. Valid only when used with the <b>-discovervms</b> parameter.
<b>addvms</b>	Optional. Virtual machines to be added to Actifio appliance. Specify VM name, UUID of the VM to add.
<b>cluster</b> =string	Optional. For CDS/Sky, it specifies the cluster name that the virtual machines should be discovered on. Required when using the <b>discovervms</b> and <b>addvms</b> parameters.
<b>discoverclusters</b>	Optional, but required to discover clusters on a vCenter.
<b>discovervms</b>	Optional, but required to discover virtual machines. Discover virtual machines on the specified appliance.
<b>host</b> =string	Required. Specifies the vCenter host to perform discovery on using the ID or name of the vCenter host. Use the <b>lshost</b> command to obtain the ID or name of the vCenter host. The vCenter should have been added to the Actifio appliance with <b>mkhost</b> command.

Parameter	Description
<b>org</b> =string	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.
<b>vms</b> =string	Optional. Virtual machines to be added to an Actifio appliance. The list of virtual machines should be separated by a colon (:). Required when using <b>advms</b> .
<b>appliance</b> =string	Optional. Specifies the name or ID of the target Actifio CDS or Sky appliance to execute this command. VMs discovered will be added only to the target Actifio appliance if requested. Use the <b>Iscluster</b> command to retrieve the Actifio appliance name or ID to help you identify the correct appliance to include in the <b>appliance</b> argument.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/vmdiscovery	host=<id name of vcenter>

---

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

---

### vmdiscovery Example

#### Request

POST https://{API\_HOST}/actifio/api/task/vmdiscovery?discovervms&host=4322&cluster=ENG\_CLUSTER

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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.actifio.com",
      "exists": "false",
      "folder-path": "ENG_Data:/Discovered virtual machine/20GB_Win7_25_Drives",
      "hostname": "20GB_Windows7",
      "ipaddress": "",
      "osname": "Microsoft Windows 7 (64-bit)",
      "status": "1",
      "uuid": "503d6417-fcbd-44a5-7a16-5a4b8c67b759",
      "vmname": "20GB_Win7_25_Drives"
    },
  ],
  "status": 0
}
```

## hmcdiscovery

[About hmcdiscovery Command](#) on page 295

[hmcdiscovery Request Details](#) on page 295

[hmcdiscovery Example](#) on page 296

### About hmcdiscovery Command

#### Description

Use this command to discover VIOs and LPARs on an HMC host.

#### Rights

You must have the 'Host Manage' rights to perform HMC discovery.

#### Parameters

Parameter	Description
<b>host</b> =string	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 Actifio appliance.
<b>ipaddress</b> =string	Optional. Specifies the IP address of the HMC host, required when the HMC host does not exist in the Actifio appliance.
<b>org</b> =string	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.
<b>password</b> =string	Optional. Specifies the password of the HMC host, required when the HMC host does not exist in the Actifio appliance.
<b>port</b> =integer	Optional. Specifies the port to be used for discovery, default to 22.
<b>username</b> =string	Optional. Specifies the username of the HMC host, required when the HMC host does not exist in the Actifio appliance.

### hmcdiscovery Request Details

Your `hmcdiscovery` 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	<code>/actifio/api/task/hmcdiscovery</code>	None

---

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

---

## hmcdiscovery Example

### Request

POST https://{API\_HOST}/actifio/api/task/

hmcdiscovery?ipaddress={HMC\_IP}&username=name&password=pw

HTTP Request Header

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

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

## Other Commands

### failback

[About failback Command](#) on page 297

[failback Request Details](#) on page 297

[failback Example](#) on page 297

### About failback Command

#### Description

Use this to fail back an application that is protected by a Dedup Async or StreamSnap policy, from the remote Actifio appliance to the primary Actifio appliance. Prior to failing an application back, you should synchronize the application's data on the remote Actifio appliance with that of the primary Actifio 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

Parameter	Description
<b>id</b> =string	Required. Specifies the ID for CDS/Sky of the application or the consistency group to fail back. The application should be protected by an enhanced asynchronous replication policy, and is in failed-over state. Use <b>lsapplication</b> or <b>lsconsistgrp</b> for the ID/SRCID.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/failback	id

---

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

---

### failback Example

```
POST https://{API_HOST}/actifio/api/task/failback?id=34118
HTTP Request Header
Authorization: Actifio 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](#) on page 298

[failover Request Details](#) on page 300

[failover Example](#) on page 301

### About failover Command

#### Description

Use this command to fail-over a dedup-async protected application. This command is issued on the remote Actifio appliance when the application on the primary Actifio appliance is failed.

#### Rights

You must have the 'Host Manage' or 'Application Manage' right to fail over an application.

#### Parameters

Parameter	Description
<b>accessmode</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. Specifies the type of access that is allowed for the specified user (in <b>user</b> ). Allowed types are: <ul style="list-style-type: none"><li>ro: read-only</li><li>rw: read-write</li><li>deny: no access allowed</li><li>root: has full access to all the files in the share even if ACLs do not.</li></ul>
<b>allvolumes</b> =string	Optional. The flag specifies whether to export all volumes in the backup for CDS/Sky. Use <b>exportobjectid</b> to specify a specific volume to be exported.
<b>id</b> =string	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.
<b>datastore</b> =string	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.
<b>diskpool</b> =string	Optional for VM applications and required only for non-VM applications. Specifies the disk-pool to be used for fail-over.
<b>exportedname</b> =string	Optional. Specifies the exported name of the backup image, valid only for CIFS for CDS/Sky.
<b>exportedpath</b> =string	Optional. Specifies sub-directory within the mount volume to be exported for CDS/Sky.
<b>exporthost</b> =string	Optional. Specifies the ID or name of host(s) to which the backup image is to be exported for CDS/Sky. If ID is used, the host must already exist in the Actifio appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).



Parameter	Description
<b>exportobjectid</b> =string	Optional. Specifies the object id of the individual volume within the mounted image to be exported for CDS/Sky.
<b>exportobjecttype</b> =string	Optional. Specifies the object type of the individual volume within the mounted image to be exported for CDS/Sky.
<b>exportoption</b> =string	<p>Optional. Specifies the export option, a name/value list, separated by equal (=) for CDS/Sky. Multiple options are separated by comma (.). An example is,</p> <p style="text-align: center;">"readonly=true,writedelay=false"</p> <p>The following option is allowed for NFS:</p> <ul style="list-style-type: none"> <li>• readonly="true   false"</li> <li>• writedelay="true   false"</li> <li>• rootsquash="true   false"</li> <li>• allsquash="true   false"</li> <li>• anonuid="0"   "1"</li> <li>• insecurelocks="true   false"</li> </ul> <p>The following option is allowed for CIFS,</p> <ul style="list-style-type: none"> <li>• allowguest="true   false"</li> </ul>
<b>exporttype</b> =string	Optional. Specifies protocol for CDS/Sky, <i>cifs</i> for CIFS, and <i>nfs</i> for NFS. Default to the protocol the backup was created.
<b>group</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. Specifies a list of domain groups that are allowed to map the share, separated by a comma (.).
<b>host</b> =string	Required. Specifies the host ID for CDS/Sky or host name or the name of the virtual machine to fail-over to. For a regular host, the host has to exist already.
<b>hypervisor</b> =string	Optional (required for Virtual Machine applications for CDS/Sky). Specifies the hypervisor on which to failover to. This is the ESX host for VMware, and Microsoft Hyper-V Server for Hyper-V.
<b>label</b> =string	Optional. Specifies label for the fail-over image.
<b>mgmtserver</b> =string	Optional. Required for Virtual Machine applications for CDS/Sky. 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.
<b>nowait</b> =string	Optional. The flag specifies not to wait for the completion of the command.
<b>path</b> =string	Optional, valid only for Hyper-V Virtual Machine backup image for CDS/Sky. Specifies the path to be used for failover to a new Hyper-V Virtual Machine.

Parameter	Description
<b>poweroffvm</b>	(Optional) By default, failover of VM image is powered on automatically. Specifying 'poweroffvm' will leave the VM in the powered off state.
<b>rdmmode</b>	<p>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</p> <ul style="list-style-type: none"> <li>• dependentvirtual</li> <li>• independentvirtual (default)</li> <li>• physical</li> </ul> <p>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</p> <hr/> <p><b>Note:</b> <i>dependentvirtual is rarely used.</i></p> <hr/> <p>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.</p>
<b>restoreoption=string</b>	Optional. A comma delimited list of restore options where each restore option is a name-value pair. See <a href="#">Appendix F, List of Restore Options</a> for a summary of the supported restore options for this command.
<b>script=string</b>	<p>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.</p> <p>Syntax for each phase is:  name=&lt;name&gt;:phase={INIT PRE POST FINAL ABORT}:[timeout=&lt;timeout&gt;]:[args=arg1,arg2]Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"</p>
<b>user=string</b>	Optional, valid only for export to CIFS type for CDS/Sky. 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 Actifio appliance, but has to be unique.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/failover	id host

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

## failover Example

### Request

```
POST https://{REMOTE_APPLIANCE_HOST}/actifio/api/task/
failover?appid=17027&diskpool=act_per_pool000&host=2008
server&label=REST_failover_img&allvolumes=true
```

HTTP Request Header

```
Authorization: Actifio 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
}
```

## testfailover

[About testfailover Command](#) on page 302

[testfailover Request Details](#) on page 304

[testfailover Example](#) on page 304

### 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

Parameter	Description
<b>id</b> =string	Required. Specifies the ID for CDS/Sky of the application or consistency group to be tested. The application should be protected with a dedup-async policy.
<b>accessmode</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. Specifies the type of access that is allowed for the specified user (in <b>-user</b> ). Allowed types are: <ul style="list-style-type: none"><li>• ro: read-only</li><li>• rw: read-write</li><li>• deny: no access allowed</li><li>• root: has full access to all the files in the share even if ACLs do not</li></ul>
<b>allvolumes</b> =string	Optional. The flag specifies whether to export all volumes in the backup for CDS/Sky. Use to specify a specific volume to be exported.
<b>datastore</b> =string	Optional. Required for VMware (CDS/Sky) . Specifies the datastore to be used to test the fail-over.
<b>host</b> =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.
<b>hypervisor</b> =string	Optional. required for Virtual Machine applications for CDS/Sky. 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.
<b>label</b> =string	Optional. Specifies label for the test failover image.
<b>mgmtserver</b> =string	Optional. required for Virtual Machine applications for CDS/Sky. 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.
<b>nowait</b> =boolean	Optional. Specifies not to wait for the completion of the command.

Parameter	Description
<b>path</b> =string	Optional. Valid only for Hyper-V Virtual Machine backup image for CDS/Sky. Specifies the path to be used for test fail-over to a new Hyper-V Virtual Machine.
<b>rdmmode</b>	<p>(Optional) Specifies Raw Device Mapping (RDM) mode for a VM. Valid values are:</p> <ul style="list-style-type: none"> <li>• dependentvirtual</li> <li>• independentvirtual (default)</li> <li>• physical</li> </ul> <p>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</p> <hr/> <p><b>Note:</b> <i>dependentvirtual is rarely used.</i></p> <hr/> <p>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.</p>
<b>restoreoption</b> =string	Optional. A comma delimited list of restore options where each restore option is a name-value pair. See <a href="#">Appendix F, List of Restore Options</a> for a summary of the supported restore options for this command.
<b>script</b> =string	<p>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.</p> <p>Syntax for each phase is:  name=&lt;name&gt;;phase={INIT PRE POST FINAL ABORT};[timeout=&lt;timeout&gt;]:[args=arg1,arg2]. Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"</p>
<b>exportedname</b> =string	Optional. Specifies the exported name of the backup image, valid only for CIFS for CDS/Sky.
<b>exportedpath</b> =string	Optional. Specifies sub-directory within the mount volume to be exported for CDS/Sky.
<b>exporthost</b> =string	Optional. Specifies the ID or name of host(s) to which the backup image is to be exported for CDS/Sky. If ID is used, the host has to already exist in the Actifio appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).
<b>exportobjectid</b> =string	Optional. Specifies the objectid of the individual volume within the mounted image to be exported for CDS/Sky.
<b>exportobjecttype</b> =string	Optional. Specifies the objecttype of the individual volume within the mounted image to be exported for CDS/Sky.
<b>poweroffvm</b> =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.

Parameter	Description
<b>exportoption</b> =string	Optional. Specifies the export option for CDS/Sky, a name/value list, separated by equal (=). Multiple options are separated by commas (.). An example is: "readonly=true,writedelay=false"  The following options are allowed for NFS: <ul style="list-style-type: none"> <li>• readonly="true   false"</li> <li>• writedelay="true   false"</li> <li>• rootsquash="true   false"</li> <li>• allsquash="true   false"</li> <li>• anonuid="0"   "1"</li> <li>• insecurelocks="true   false"</li> </ul> The following option is allowed for CIFS: allowguest="true   false"
<b>exporttype</b> =string	Optional. Specifies protocol for CDS/Sky, <i>cifs</i> for CIFS, and <i>nfs</i> for NFS. Default to the protocol the backup was created.
<b>group</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. Specifies a list of domain groups that are allowed to map the share, separated by a comma (.).
<b>user</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. 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 Actifio appliance, but it has to be unique.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/testfailover	id host

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

### testfailover Example

#### Request

```
POST https://{REMOTE_APPLIANCE}/actifio/api/task/testfailover?id=17027&allvolumes=true&host=2008_server&label=test_failover_image
```

HTTP Request Header

Authorization: Actifio 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](#) on page 361

[rmtestfailover Request Details](#) on page 361

[rmtestfailover Example](#) on page 361

### 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

Parameter	Description
<b>image</b> =string	Required. Specifies the ID for CDS/Sky or name of the backup image to be deleted. Use <b>lsbackup</b> to locate the ID/SRCID or name for the image.
<b>script</b> =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"

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmfailovertest	image

---

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

---

### rmfailovertest Example

#### Request

POST https://{API\_HOST}/actifio/api/task/rmfailovertest?image=Image\_0024650

HTTP Request Header

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

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



## Response

Request success

```
{  
  "result": "Job_0025468 to rmfailovertest Image_0024650 completed",  
  "status": 0  
}
```

## syncback

[About syncback Command](#) on page 308

[syncback Request Details](#) on page 308

[syncback Example](#) on page 308

### About syncback Command

#### Description

Use this command to synchronize a failed-over dedup-async or StreamSnap-protected application back to the original Actifio appliance.

This command can be issued only on the failed-over Actifio appliance. It merges all changes made to the failed over application on the remote Actifio 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 Actifio appliance, the application data is modified on the remote appliance. However, failing the application back to the primary Actifio appliance requires synchronization of the application's data between the remote and primary Actifio 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

Parameter	Description
<b>id</b> =string	Required. Specifies the ID for CDS/Sky of the application or consistency group to be synchronized back from the previously failed over application or consistency group. Use <b>lsapplication</b> or <b>lsconsistgrp</b> for the ID/SRCID.
<b>label</b> =string	Optional. Specifies label for the newly created sync-back image.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/syncback	id

---

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

---

### syncback Example

#### Request

```
POST https://{REMOTE_APPLIANCE_HOST}/actifio/api/task/syncback?appid=17027&label=syncback_image_1
```

HTTP Request Header

```
Authorization: Actifio 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  
}
```

## lsappclass

[About lsappclass Command](#) on page 310

[lsappclass Request Details](#) on page 310

[lsappclass Example](#) on page 310

### 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.

#### Rights

You must have the 'System Manage' or 'System View' right to view the application class information

#### Parameters

Parameter	Description
<i>name=string</i>	Optional. The case sensitive Appclass name (MS-SQL Server, Oracle, EBiz, and so on).

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsappclass	None

---

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

---

### lsappclass Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsappclass
```

```
HTTP Request Header
```

```
Authorization: Actifio 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 filesystems 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}/actifio/api/info/lsappclass?name=Oracle

HTTP Request Header

Authorization: Actifio 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 312

[lsinstancemember Request Details](#) on page 312

[lsinstancemember Example](#) on page 312

### 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.

#### Rights

There are no specific rights associated with this operation. User with 'administrator' role can retrieve the list of application-to-database instance mappings.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3 Dvalue	Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <b>lsinstancemember</b> command are: <ul style="list-style-type: none"><li>instanceid</li><li>appid</li></ul> 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 '\').
<b>argument</b> =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 <b>filtervalue</b> 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsinstancemember	None

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

### lsinstancemember Example

#### Request

GET https://{API\_HOST}/actifio/api/info/lsinstancemember

HTTP Request Header

Authorization: Actifio 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": "82240",
      "id": "82564",
      "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
}

```



## lsmdlstat

[About lsmdlstat Command](#) on page 315

[lsmdlstat Request Details](#) on page 316

[lsmdlstat Example](#) on page 316

### 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 Actifio appliance manages.

#### Rights

You must have 'System View' or 'System Manage' rights to be able to retrieve MDL data.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	<p>Optional. Specifies that you want your report to display any or all of the list of valid filter attributes. The valid filter attributes for <b>lsmdlstat</b> are:</p> <ul style="list-style-type: none"><li>• allocated</li><li>• appid</li><li>• appname</li><li>• appreserved</li><li>• appsize</li><li>• capacity</li><li>• devsize</li><li>• hostname</li><li>• manageddata</li><li>• sourcecluster</li><li>• stattime</li></ul> <p>The filter will be formed with an attribute and a value. Multiple filters must be combined with '&amp;' character (which must be escaped with '\').</p> <p>For string type of filters, the only operator allowed is '='. You can also use the wildcard character '*'. For example, to match an application with appname beginning with 'foo', use '-filtervalue appname=foo*'.</p> <p>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:</p> <pre>-filtervalue vdiskcount\&gt;=10 -filtervalue "vdiskcount&gt;=10" -filtervalue 'vdiskcount&gt;=10'</pre>

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored.  If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsmdlstat	None

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

### lsmdlstat Example

#### Request

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 318

[addvm Request Details](#) on page 318

[addvm Example](#) on page 319

#### About addvm Command

##### Description

Use this command to add the 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 Actifio appliance.

##### Rights

You must have 'System Manage' right to add a Virtual Machine.

##### Parameters

Parameter	Description
<b>addall</b> =boolean	Optional. Specifies that all Virtual Machines discovered are to be added to the Actifio appliance.
<b>host</b> =string	Required. Specifies the management server host to perform discovery on, either id or name of host is needed. Use <b>lshost</b> to locate the ID or name of the management server host.
<b>org</b> =string	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 <b>lsorg</b> to locate the ID or name of the organization.
<b>vms</b> =string	Optional. Virtual Machines, colon (:) separated, to be added to the Actifio appliance.

#### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/addvm	host

---

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

---

## addvm Example

### Request

POST `https://{API_HOST}/actifio/api/task/addvm?host=bub.sqa.actifio.com&vms=2008vm2x86-juice-p:2008vm1x86-70spsky-p`

HTTP Request Header

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

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

### Response

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

## lsvm

[About lsvm Command](#) on page 320

[lsvm Request Details](#) on page 320

[lsvm Example](#) on page 320

### 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 Actifio appliance.

#### Parameters

Parameter	Description
<code>host=string</code>	Required. Specifies the management server host to perform discovery on, either id or name of host is needed. Use <b>lshost</b> to locate the ID or name of the management server host.

### 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.

Method	URI	Required Parameters
GET	<code>/actifio/api/info/lsvm</code>	<code>host=&lt;name or id of host&gt;</code>

---

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

---

### lsvm Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsvm?host={VCENTER_HOSTNAME}
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "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 322

[prepmount Request Details](#) on page 323

[prepmount Example](#) on page 323

### 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

Parameter	Description
<b>appaware</b> =boolean	Optional. The flag specifies whether the mount is to create an app-aware application from the prep-mount for CDS/Sky appliances.
<b>host</b> =string	Required. Specifies the ID or name of an existing host to which the LiveClone image is to be prep-mounted.
<b>image</b> =string	Required. Specifies the LiveClone image to be mounted. Either image ID for CDS/Sky or image name is allowed, which can be retrieved from <b>lsbackup</b> .
<b>nowait</b> =boolean	Optional. The flag specifies whether to wait for the completion of the command.
<b>rdmmode</b>	(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are: <ul style="list-style-type: none"><li>• dependentvirtual</li><li>• independentvirtual (default)</li><li>• physical</li></ul> Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots <hr/> <b>Note:</b> <i>dependentvirtual is rarely used.</i> <hr/> 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.
<b>recoverytime</b> =string	Optional. Valid only for database applications for CDS/Sky. 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 <b>hostbeginpit</b> and <b>hostendpit</b> when displayed using <b>lsbackup xxxx</b> for that image. The time format should be either: <b>yyyy-MM-dd HH:mm:ss</b> or <b>yyyy-MM-dd HH:mm:ss.SSS</b> .



Parameter	Description
<b>script</b> =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"

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/prepmount	host image

---

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

---

### prepmount Example

#### Request

POST https://{API\_HOST}/actifio/api/task/prepmount?image=Image\_0006285&host=rh74vm1

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": "Job_0006299 to prepmount Image_0006285 completed",
  "status": 0
}
```

## prepunmount

[About prepunmount Command](#) on page 324

[prepunmount Request Details](#) on page 324

[prepunmount Example](#) on page 325

### 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

Parameter	Description
<b>discard</b> =boolean	Optional. The flag specifies whether to discard the prep-mounted LiveClone image, after it is unmounted.
<b>image</b> =string	Required. Specifies the LiveClone image to be prep-unmounted, either image ID for CDS/Sky or image name is allowed, which can be retrieved from <b>lsbackup</b> . The LiveClone image has to be already prep-mounted.
<b>nowait</b> =boolean	Optional. The flag specifies whether to wait for the completion of the command.
<b>script</b> =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"

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/prepunmount	image

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

## prepunmount Example

### Request

POST https://{API\_HOST}/actifio/api/task/prepunmount?image=Image\_0006285

HTTP Request Header

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

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

### Response

Request success

```
{
  "result": "Job_0006401 to prepunmount Image_0006285 completed",
  "status": 0
}
```

## mountimage

[About mountimage Command](#) on page 326

[mountimage Request Details](#) on page 331

[mountimage Example](#) on page 331

### 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' (for CDS/Sky) rights to mount a backup image.

#### Parameters

Parameter	Description
<b>host</b> =string	Required for non-Virtual Machine applications. Specifies the ID for CDS/Sky 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 <b>vmname</b> to specify the new Virtual Machine name.
<b>appid</b> =string	Optional. Use the latest snapshot backup image of the application for CDS/Sky, specified by the <i>appid</i> for the mount. Use <b>lsapplication</b> to retrieve the application ID.
<b>datastore</b> =string	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.
<b>diskpool</b> =string	Optional. Specifies the disk pool to be used for mount for CDS/Sky. Use <b>lsdiskpool</b> to locate the ID or name of the diskpool.
<b>accessmode</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. Specifies the type of access that is allowed for the specified user (in <b>user</b> ). Allowed types are: <ul style="list-style-type: none"><li>• ro: read-only</li><li>• rw: read-write</li><li>• deny: no access allowed</li><li>• root: has full access to all the files in the share even if ACLs do not</li></ul>
<b>allvolumes</b> =boolean	Optional. The flag specifies whether to export all volumes in the backup for CDS/Sky. Use <b>exportobjectid</b> to specify a specific volume to be exported.
<b>appaware</b> =boolean	Optional. The flag specifies whether the mount is to create an app-aware application from the mount for CDS/Sky.

Parameter	Description
<b>exportedname</b> =string	Optional. Specifies the exported name of the backup image for CDS/Sky. Valid only for CIFS.
<b>exportedpath</b> =string	Optional. Specifies sub-directory within the mount volume to be exported for CDS/Sky.
<b>exportobjectid</b> =string	Optional. Specifies the object ID of the individual volume within the mounted image to be exported for CDS/Sky.
<b>exportobjecttype</b> =string	Optional. Specifies the object type of the individual volume within the mounted image to be exported for CDS/Sky.
<b>exportoption</b> =string	<p>Optional. Specifies the export option, a name/value list, separated by equal (=) for CDS/Sky. Multiple options are separated by comma (.). An example is:</p> <pre>"readonly=true,writedelay=false"</pre> <p>The following option is allowed for NFS,</p> <ul style="list-style-type: none"> <li>• readonly="true   false"</li> <li>• writedelay="true   false"</li> <li>• rootsquash="true   false"</li> <li>• allsquash="true   false"</li> <li>• anonuid="0"   "1"</li> <li>• insecurelocks="true   false"</li> </ul> <p>The following option is allowed for CIFS:</p> <ul style="list-style-type: none"> <li>• readonly="true   false"</li> <li>• allowguest="true   false"</li> </ul>
<b>exporttype</b> =string	Optional. Specifies protocol for CDS/Sky, <i>cifs</i> for CIFS, and <i>nfs</i> for NFS. Default to the protocol the backup was created.
<b>group</b> =string	Optional, valid only for export to CIFS type for CDS/Sky. Specifies a list of domain groups that are allowed to map the share, separated by a comma (.).
<b>exporthost</b> =string	Optional. Specifies the ID or name of host(s) to which the backup image is to be exported for CDS/Sky. If ID is used, the host has to already exist in the Actifio appliance. Name can contain wild characters. More than one host can be specified separated by a comma (.).
<b>hypervisor</b> =string	<p>Optional. Specifies the ID or name of the hypervisor for CDS/Sky. 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.</p> <p>This is the ESX host for VMware, and Microsoft Hyper-V Server for Hyper-V.</p>

Parameter	Description
<b>image</b> =string	Required. Specifies the image ID for CDS/Sky or name to be mounted. You can retrieve the image name or ID/SRCID using the <b>lsbackup</b> command.
<b>label</b> =string	Optional. Specifies label for the mounted image.
<b>instantmount</b>	(Optional) Specifies whether to instant mount a dedup backup image.
<b>nowait</b> =boolean	Optional. The flag specifies not to wait for the completion of the command.
<b>parts</b> =string	<p>Optional. Specifies list of logical volumes to be mounted. Logical names of the restorable objects can be retrieved from <b>lsbackup</b>, and is one of:</p> <ul style="list-style-type: none"> <li>• vdisk UID name for generic applications</li> <li>• file system or device name for discovered applications</li> <li>• VMDK path name for Virtual Machines</li> </ul> <p>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.</p> <p>A different diskpool is allowed for mounting each volume, to specify a different diskpool, use a colon ':', after the logical volume name.</p> <p>Special characters must be properly escaped:</p> <ul style="list-style-type: none"> <li>• double quote ("): needs to be escaped with '\ ' (shell)</li> <li>• comma (,): needs to be escaped with two commas (,,)</li> <li>• colon (:): needs to be escaped with two colons (::)</li> </ul> <p>Example: "my,,vm.vmdk:poolname,your::vm.vmdk".</p>
<b>path</b> =string	Optional, valid only for Hyper-V Virtual Machine backup image for CDS/Sky, specifies the path to be used for mounting a new Hyper-V Virtual Machine.
<b>mgmtserver</b> =string	Optional, valid only for VM backup image for CDS/Sky. Specifies the management server (name or ID, previously added to the Actifio 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.
<b>rdmmode</b>	<p>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</p> <ul style="list-style-type: none"> <li>• dependentvirtual</li> <li>• independentvirtual (default)</li> <li>• physical</li> </ul> <p>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</p> <hr/> <p><b>Note:</b> <i>dependentvirtual is rarely used.</i></p> <hr/> <p>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.</p>

Parameter	Description
<b>recoverytime</b> =string	Optional. Valid only for database applications for CDS/Sky. Specify the point-in-time for recovery, by applying log backups to roll forward to the specified time.
<b>restoreoption</b> =string	<p>Optional. A comma delimited list of restore options where each restore option is a name-value pair. See <a href="#">Appendix F, List of Restore Options</a> for a summary of the supported restore options for this command.</p> <p>To perform an app-aware mount to a new application for a CDS/Sky appliance, additional restore options can be provided through the <b>lsappclass</b> 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 <b>provisioningoptions</b> indicates that this is an app-aware mount, regardless of the <b>-appaware</b> flag. For example,</p> <pre>restoreoption=provisioningoptions=&lt;provisioningoptions&gt; &lt;databasesid&gt;foodb1&lt;/databasesid&gt; &lt;orahome&gt;/u01/app/oracle/product/11.2.0/db_1&lt;/orahome&gt; &lt;utlfiledirectory&gt;/home/oracle&lt;/utlfiledirectory&gt; &lt;username&gt;devuser&lt;/username&gt; &lt;/provisioningoptions&gt;,reprotect=true</pre> <p>This string needs to be URL encoded as</p> <pre>restoreoption=provisioningoptions%3D%3Cprovisioningoptions%3E%3Cdat atabasesid%3Efoodb1%3C%2Fdatabasesid%3E%20%20%20%20%20%20%20%3C orahome%3E%2Fu01%2Fapp%2Foracle%2Fproduct%2F11.2.0%2Fdb_1%3C %2Forahome%3E%20%20%20%20%20%20%20%20%20%3Cutlfiledirectory%3E%2 Fhome%2Foracle%3C%2Futlfiledirectory%3E%3Cusername%3Edevuser% 3C%2Fuseusername%3E%20%20%20%20%20%20%20%20%20%3C%2Fprovisioningoption s%3E%2Creprotect%3Dtrue</pre> <p>Included below is an example for SQL:</p> <pre>https://{API_HOST}/actifio/api/task/ mountimage?image=Image_22196358&amp;host=demo-sql- 4&amp;restoreoption=mountpointperdisk- dasvol:S:\=C:\Test\jstest,provisioningoptions=&lt;provisioning- options&gt;&lt;sqlinstance&gt;DEMO-SQL-4&lt;/sqlinstance&gt;&lt;dbname&gt;jstest&lt;/ dbname&gt;&lt;recover&gt;true&lt;/recover&gt;&lt;/provisioning-options&gt;</pre> <p>This string needs to be URL encoded as</p> <pre>https://{API_HOST}/actifio/api/task/ mountimage?image=Image_22196358&amp;host=demo-sql- 4&amp;restoreoption=mountpointperdisk- dasvol%3AS%3A%5C%5C%3DC%3A%5C%5CTest%5C%5Cjstest%2Cpro visioningoptions%3D%3Cprovisioning- options%3E%3Csqlinstance%3EDEMO-SQL- 4%3C%2Fsqlinstance%3E%3Cdbname%3Ejstest%3C%2Fdbname%3E% 3Crecover%3Etrue%3C%2Frecover%3E%3C%2Fprovisioning-options%3E</pre> <p>For the available appclass, and the provisioning options for each appclass, use <b>lsappclass</b>.</p>

Parameter	Description
<b>script</b> =string	<p>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:</p> <pre>name=&lt;name&gt;:phase={INIT PRE POST FINAL ABORT}:[timeout=&lt;timeout&gt;]:[args=arg1,arg2]</pre> <p>Multiple phases can be specified, separated by semi-colon (;), for example, "name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"</p>
<b>systemprops</b> =string	<p>Optional. A comma delimited list of system properties where each system property is a name/value pair. For available system properties, use 'udsinfolssystemdetail'.</p> <p>To perform system conversion, properties need to be specified with name=value, separated by a comma. Property that is allowed depends on the cloudtype. The existence of systemprops indicates that this is a systemstate conversation, and is allowed only with a VM backup, or a SystemState backup. No partial volumes are allowed in system conversion.</p> <p>Property with structure needs special handling, which indicates that it has sub-element. For example NICInfo, is of structure type, and it supports multiple values. 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 ']', and separated with colon (:). For example,</p> <pre>-systemprops publicIP=true, --Launches System in Public Network for AWS osType=Windows, cpu=1, memory=4, bootDiskSize=35, networkId=vpc-f6c83591, regionCode=us-east-1, nicInfo0-securityGroupId=[sg-63b5041d:sg-63b7887e], nicInfo0-subnetId=subnet-10bbda3a, cloudtype=aws, accessKey=xxxxx, secretKey=xxxx instanceFlavor=xxx&lt;optional&gt;</pre>
<b>user</b> =string	<p>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 Actifio appliance, but it has to be unique.</p>
<b>vmname</b> =string	<p>Optional. Valid only for a virtual machine backup image. Specifies the new Virtual Machine name to be mounted as.</p>



Parameter	Description
<b>instanceFlavor</b>	Instance type refers to machine type based on CPU and memory sizes in cloud. Note that while running the conversion on the cloud, we are adding one additional disk for boot space in case of Windows and Linux systems and one disk for swap space in case of Linux system. Consider the additional disks while selecting the instance flavor on Azure cloud.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mountimage	host

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

### mountimage Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/
mountimage?image=Image_0023767&host=rh74vm1&allvolumes=true&label=MyMountedImage
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

#### Response

```
Request success
{
  "result": "Job_0024650 to mount Image_0023767 completed",
  "status": 0
}
```

#### Example of an app-aware mountimage.

#### Request

```
POST https://{API_HOST}/actifio/api/task/
mountimage?host={TARGET_HOST}&image=Image_0061358&label=MyAppAwareImage&recoverytime={RECOVERY
_TIME}&restoreoption=provisioningoptions%3D%3Cprovisioningoptions%3E%3Cdatabasesid%3Eproductio
n_db%3C%2Fdatabasesid%3E%3Cusername%3Edaldba%3C%2Fusername%3E%3Cpassword%3E%3C%2Fpassword%3E%3C
orahome%3C%2Forahome%3E%3Ctnsadminidir%3E{TNS.ADMIN.DIR}%3C%2Ftnsadminidir%3E%3Cnonid%3Efalse%3C%2F
nonid%3E%3Cnotnsupdate%3Efalse%3C%2Fnotnsupdate%3E%3Crrcovery%3Etrue%3C%2Frrcovery%3E%3Cstanda
lone%3Efalse%3C%2Fstandalone%3E%3C%2Fprovisioningoptions%3E&restoreoption=mountpointperimage%3D
%2Fhome%2Fmntdir
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

## Response

Request success

```
{  
  "result": "Job_0024652 to mount Image_0061358 completed",  
  "status": 0  
}
```

## verifyimage

[About verifyimage Command](#) on page 333

[verifyimage Request Details](#) on page 333

[verifyimage Example](#) on page 333

### 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

Parameter	Description
<b>image</b> =string	Required. Specifies the image to be verified, either image ID for CDS/Sky or image name is allowed, which can be retrieved using the <b>lsbackup</b> command. Only dedup image verification is supported.
<b>nowait</b> =boolean	Optional. The flag specifies not to wait for the completion of the command.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/verifyimage	image

---

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

---

### verifyimage Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/verifyimage
```

HTTP Request Header

```
Authorization: Actifio 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 334

[cloneimage Request Details](#) on page 336

[cloneimage Example](#) on page 336

### 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

Parameter	Description
<b>datastore</b> =string	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.
<b>diskpool</b> =string	Optional, valid only for a non-virtual machine backup image. Specifies the diskpool to be used for storing the cloned image.
<b>hypervisor</b> =string	Optional. (Valid only for Virtual Machine backup image for CDS/Sky). 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.
<b>host</b> =string	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 <b>lshost</b> command to locate the ID or name of the host.
<b>image</b> =string	Required. Specifies the image to be cloned, either the image ID for CDS/Sky or image name is allowed, which can be retrieved from <b>lsbackup</b> .
<b>label</b> =string	Optional. Specifies label for the cloned image.
nfsoption=string	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".
<b>nowait</b> =boolean	Optional. The flag specifies not to wait for the completion of the command.

Parameter	Description
<b>parts</b> =string	<p>Optional. Specifies list of logical volumes to be cloned. Logical names of the restorable objects can be retrieved from <b>lsbackup</b>, and is one of:</p> <ul style="list-style-type: none"> <li>• vdisk UID name for generic applications</li> <li>• file system or device name for discovered applications</li> <li>• VMDK path name for Virtual Machines</li> </ul> <p>For Virtual Machines, a different datastore is allowed for each VMDK, to specify a different pool or datastore, use a colon ':', after the logical volume name.</p> <p>Special characters needs to be properly escaped:</p> <ul style="list-style-type: none"> <li>• double quote ("): needs to be escaped with '\ ' (shell)</li> <li>• comma (,): needs to be escaped with two commas (,,)</li> <li>• colon (:): needs to be escaped with two colons (::)</li> </ul> <p>Example: "myvm.vmdk:ds,,name,yourvm.vmdk:ds::name"</p>
<b>path</b> =string	Optional, valid only for Hyper-V Virtual Machine backup image for CDS/Sky) Specifies the path to be used for cloning to a new Hyper-V Virtual Machine.
<b>restoreoption</b> =string	Optional. A comma delimited list of restore options where each restore option is a name-value pair. See <a href="#">Appendix F, List of Restore Options</a> for a summary of the supported restore options for this command.
<b>script</b> =string	<p>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:</p> <p>name=&lt;name&gt;:phase={INIT PRE POST FINAL ABORT}:[timeout=&lt;timeout&gt;]:[args=arg1,arg2]Multiple phases can be specified, separated by semi-colon (;), for example,</p> <p>"name=setup.sh:phase=INIT;name=freeze.sh:phase=PRE"</p>
<b>vmname</b> =string	Optional, valid only for a virtual machine backup image. Specifies the new virtual machine name for the clone.
<b>poweronvm</b> =boolean	Optional. By default, clone of VM image is in the power off state. By specifying poweronvm=true will power on the VM.
<b>mgmtserver</b> =string	Optional, valid only for Virtual Machine backup image for CDS/Sky. Specifies the management server (name or ID, previously added to the Actifio 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.
<b>cluster</b> =string	Optional. Specifies the name or ID of the target Actifio CDS or Sky appliance to execute this command. All other parameters should use appliance-specific values.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/cloneimage</code>	<code>image</code>

---

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

---

### cloneimage Example

#### Request

```
POST https://{API_HOST}/actifio/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: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
```

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

#### Response

Request success

```
{
  "result": "Job_0025318 to clone Image_0023767 completed",
  "status": 0
}
```

## replicateimage

[About replicateimage Command](#) on page 337

[replicateimage Request Details](#) on page 338

[replicateimage Example](#) on page 338

### About replicateimage Command

#### Description

Use this command to replicate (make a copy of) a dedup or directdedup backup image to a remote Actifio appliance. When you use this method to replicate an image to the remote Actifio appliance 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 Actifio 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.

#### Rights

You must have 'Host Manage' or 'Application Manage' or 'Backup Manage' rights to replicate a dedup backup image.

#### Parameters

Parameter	Description
<b>-image</b> =string	Required. Specifies the image to be replicated, either image ID or image name is allowed, which can be retrieved from <b>lsbackup</b> .
<b>label</b> =string	Optional. Specifies label for the mounted image.
<b>inheritexpiration</b> =boolean	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 <b>retention</b> is supplied.
<b>retention</b> =integer	Optional. Specifies the retention period for the replicated dedup backup image. Default is set to one.
<b>retentionm</b> hours   days   weeks   months   years=hours   days   weeks   months   years	Optional. Specifies the retention measurement type for the policy. Default is set to months.

Parameter	Description
<b>targetcluster</b> = <i>cluster_name</i>   <i>cluster_id</i>	Required. Target appliance to replicate the dedup backup image to. Use the <b>lscluster</b> command to locate the ID or name of the Actifio appliance.

### replicateimage Request Details

Your **replicateimage** 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/replicateimage	image targetcluster

---

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

---

### replicateimage Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/
replicateimage?image=Image_0051453&label=DOC&targetcluster=1415010159
HTTP Request Header
Authorization: Actifio 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 339

[replicatelog Request Details](#) on page 339

[replicatelog Example](#) on page 339

### About replicatelog Command

#### Description

Use this command to trigger an on-demand log replication Oracle or Microsoft® SQL Server database transaction logs for an application or a consistency group to a remote Actifio appliance. The application or consistency group must be protected by a template that includes:

- A snapshot policy with log protection enabled
- A replication policy (StreamSnap, Dedup-Async, or Dedup Backup)

#### Rights

You must have 'Host Manage,' or 'Application Manage,' or 'Backup Manage' rights to trigger an on-demand log replication.

#### Parameters

Parameter	Description
<code>id= appid   consistgrp_id</code>	Required. Specifies ID of the application or consistency group with the log to be replicated to a remote Actifio appliance. Use <b>Isapplication</b> or <b>Isconsistgrp</b> for the ID.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/replicatelog</code>	<code>id</code>

---

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

---

### replicatelog Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/replicatelog?id=209789
```

HTTP Request Header

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

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

## exportimage

[About exportimage Command](#) on page 340

[exportimage Request Details](#) on page 341

[exportimage Example](#) on page 341

### 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 NAS/CIFS backup.

#### Rights

You must have 'Host Manage' or 'Application Manage' rights to export a backup image.

#### Parameters

Parameter	Description
<b>accessmode</b> =ro   rw   deny   root	Optional. valid only for export to CIFS type. Specifies the type of access that is allowed for the specified user (in <b>user</b> ). Allowed types are: <ul style="list-style-type: none"><li>ro: read-only</li><li>rw: read-write</li><li>deny: no access allowed</li><li>root: has full access to all the files in the share even if ACLs do not</li></ul>
<b>allvolumes</b> =boolean	Optional. The flag specifies whether to export all volumes in the backup. Use <b>objectid</b> to specify a specific volume to be exported.
<b>exportedname</b> =string	Optional. Specifies the exported name of the backup image, valid only for CIFS.
<b>exportedpath</b> =string	Optional. Specifies sub-directory within the mount volume to be exported.
<b>exportoption</b> =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: <ul style="list-style-type: none"><li>readonly="true   false"</li><li>writedelay="true   false"</li><li>rootsquash="true   false"</li><li>allsquash="true   false"</li><li>anonuid="0"   "1"</li><li>insecurelocks="true   false"</li></ul> The following option is allowed for CIFS: <ul style="list-style-type: none"><li>allowguest="true   false"</li></ul>
<b>exporttype</b> =cifs   nfs	Optional. Specifies protocol, <i>cifs</i> for CIFS, and <i>nfs</i> for NFS. Default to the protocol the backup was created.

Parameter	Description
<b>group</b> =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 Actifio appliance, but it has to be unique.
<b>host</b> =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 Actifio appliance. Name can contain wild characters. More than one host can be specified, separated by a comma (,).
<b>image</b> =string	Required. Specifies the image to be exported, either image ID or image name is allowed, which can be retrieved from <b>lsbackup</b> .
<b>nowait</b> =boolean	Optional. The flag specifies whether to wait for the completion of the command.
<b>objectid</b> =integer	Optional. Specifies the object id of the individual volume within the mounted image to be exported.
<b>user</b> =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 Actifio appliance, but it has to be unique.
<b>objecttype</b> =string	Optional. Specifies the object type of the individual volume within the mounted image to be exported.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/exportimage	image host

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

### exportimage Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/
replicateimage?exportimage?image=Image_0052605&host=172.16.113.50
```

HTTP Request Header

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

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

## Response

Request success

```
{  
  "result": "Job_0052736 to export Image_0052605 completed",  
  "status": 0  
}
```

## unexportimage

[About unexportimage Command](#) on page 343

[unexportimage Request Details](#) on page 343

[unexportimage Example](#) on page 343

### About unexportimage Command

#### Description

Use this command to un-export an exported backup image.

#### Rights

You must have 'Host Manage' or 'Application Manage' rights to un-export an exported backup image.

#### Parameters

Parameter	Description
<b>exporttype</b> =cifs   nfs	Optional. Specifies protocol, <i>cifs</i> for CIFS, and <i>nfs</i> for NFS. Default to the protocol the backup was created.
<b>host</b> =string	Required. Comma-separated list of hosts that the export should be removed from.
<b>image</b> =string	Required. Specifies the image to be un-exported, image ID or image name, which can be retrieved from <b>lsbackup</b> . The backup image must be already exported.
<b>nowait</b> =boolean	Optional. The flag specifies whether to wait for the completion of the command.

### 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.

Method	URI	Required Parameters
POST	/actifio/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}/actifio/api/task/
replicateimage?unexportimage?image=Image_0052605&host=172.16.113.50
HTTP Request Header
```

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

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

### **Response**

Request success

```
{  
  "result": "Job_0025318 to unexport Image_0052605 completed",  
  "status": 0  
}
```

## lsrestoreoptions

[About lsrestoreoptions Command](#) on page 345

[lsrestoreoptions Request Details](#) on page 345

[lsrestoreoptions Example](#) on page 346

### 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.

#### Rights

You must have the “System View” or “System Manage” right to view the restore option information.

#### Parameters

Parameter	Description
<b>applicationtype</b> =string	Optional. The application type (SQL Server, Oracle, VM, and so on). See <a href="#">List of Restore Options</a> on page 589 for a complete list of available application types.
<b>action</b> =string	Optional. The restore action to be taken: clone, mount, restore, prepmount, failover or failovertest. See <a href="#">List of Restore Options</a> on page 589 for a complete list of available restore options.
<b>targethost</b> =string	Optional. The host ID of the target system. Use the <b>lshost</b> command to locate the ID.

### lsrestoreoptions 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsrestoreoptions	targethost applicationtype action

---

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

---

### lsrestoreoptions Example

```
GET https://{API_HOST}/actifio/api/info/  
lsrestoreoptions?applicationtype=SQLServer&action=mount&targethost=20933867
```

HTTP Request Header

```
Authorization: Actifio 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"  
  ]  
}
```



## restoreimage

[About restoreimage Command](#) on page 347

[restoreimage Request Details](#) on page 348

[restoreimage Example](#) on page 348

### 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. They should be explicitly turned on using Actifio Desktop or the **chsla** command.

#### Rights

You must have the 'Application Manage' or 'Mirroring Manage' or 'Host Manage' or 'Application Manage' or 'Restore Manage' rights to restore a backup image.

#### Parameters

Parameter	Description
<b>image</b> =string	Required. Specifies the name or ID for CDS/Sky of the image to be restored.
<b>nowait</b> =boolean	Optional. Specifies not to wait for the completion of the command.
nfsoption=string	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".
<b>parts</b> =string	Optional. Specifies list of logical volumes to be restored. Logical names of the restorable objects can be retrieved from <b>lsbackup</b> , and is one of: <ul style="list-style-type: none"><li>vDisk UID name for generic applications</li><li>File system or device name for discovered applications</li><li>VMDK path name for Virtual Machines</li></ul>
<b>poweroffvm</b> =boolean	Optional. By default, restore of VM image is powered on automatically. Specify <b>poweroffvm=true</b> to leave the VM in the powered off state.
<b>restoreoption</b> =string	Optional. A comma delimited list of restore options where each restore option is a name-value pair. See <a href="#">Appendix F, List of Restore Options</a> for a summary of the supported restore options for this command.
<b>password</b> =string	Optional. Valid only for database applications for CDS/Sky. Specify the password to use to apply the logs from log backup.
<b>recover</b> =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.

Parameter	Description
<b>recoverytime</b> =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 CDS/Sky, the time should be within the range set by <b>hostbeginpit</b> and <b>hostendpit</b> when displayed using <b>lsbackup xxxx</b> for that image. The time format should be either: <b>yyyy-MM-dd HH:mm:ss</b> or <b>yyyy-MM-dd HH:mm:ss.SSS</b> .
<b>script</b> =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"
<b>username</b> =string	Optional. Valid only for database applications for CDS/Sky. Specify the username to use to apply the logs from log backup.

### 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	/actifio/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}/actifio/api/task/
restoreimage?image=skytest5.sqa.actifio.com_Image_0041610
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

#### Response

```
Request success
{
  "result": "Job_0042048 to restore skytest5.sqa.actifio.com_Image_0041610 completed",
  "status": 0
}
```

## creativeliveclone

[About creativeliveclone Command](#) on page 349

[creativeliveclone Request Details](#) on page 349

[creativeliveclone Example](#) on page 349

### About creativeliveclone 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' or 'Backup Manage' rights to create a LiveClone.

#### Parameters

Parameter	Description
<b>diskpool</b> =string	Required. Specifies the name or ID of the diskpool to use for the LiveClone. If you do not specify <b>cluster</b> , use <b>lsdiskpool</b> for the ID. If you do specify <b>cluster</b> , then use the SRCID from the command output.
<b>label</b> =string	Required. Specifies label for LiveClone. Label must be unique in each application.
<b>nowait</b>	Optional. The flag specifies whether to wait for the completion of the command.
<b>sourceimage</b> =string	Required. Specifies ID for CDS/Sky or name of the image to create the LiveClone from. If you do not specify <b>cluster</b> , use <b>lsbackup</b> for the SRCID. If you do specify <b>cluster</b> , then use the SRCID from the command output.

### creativeliveclone Request Details

Your `creativeliveclone` 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/creativeliveclone	sourceimage diskpool label

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

### creativeliveclone Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/creativeliveclone?sourceimage=Image_0022100&label=LiveClone-20180211&diskpool=act_per_pool000
```

HTTP Request Header

```
Authorization: Actifio 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 351

[refreshliveclone Request Details](#) on page 351

[refreshliveclone Example](#) on page 352

### 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' or 'Backup Manage' rights to refresh a LiveClone.

#### Parameters

Parameter	Description
<b>label</b> =string	Optional. Required if target image is not specified. Specifies label for the LiveClone to refresh to.
<b>nowait</b>	Optional. The flag specifies whether to wait for the completion of the command.
<b>options</b> =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: <ul style="list-style-type: none"><li>• <b>nobitmap</b> - Do not use a bitmap or extentlist</li><li>• <b>noparent</b> - No ancestor object, create a new independent object</li><li>• <b>noseed</b> - No hydroseeding image</li></ul>
<b>sourceimage</b> =string	Required. Specifies ID or name of the image with which to refresh the LiveClone.
<b>targetimage</b> =string	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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/refreshliveclone</code>	sourceimage diskpool label

---

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

---

## refreshliveclone Example

### Request

```
POST https://{API_HOST}/actifio/api/task/  
refreshliveclone?sourceimage=Image_0022100&label=LiveClone-20180211
```

HTTP Request Header

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

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

### Response

Request success

```
{  
  "result": "Job_0024559 to refreshliveclone Image_0024427 completed",  
  "status": 0  
}
```

## unmountimage

[About unmountimage Command](#) on page 353

[unmountimage Request Details](#) on page 353

[unmountimage Example](#) on page 354

### 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

Parameter	Description
<b>delete</b> =string	Optional. The flag specifies whether to delete the backup image, after it is unmounted.
<b>force</b> =string	Optional. The flag specifies whether to ignore errors when unmapping disks from the host for CDS/Sky.
<b>image</b> =string	Required. Specifies the ID for CDS/Sky or name of the image to be unmounted. The image name or ID/SRCID can be retrieved using <b>lsbackup</b> . <hr/> <b>Note:</b> <i>The backup image has to be already mounted.</i> <hr/>
<b>nowait</b> =string	Optional. The flag specifies not to wait for the completion of the command.
<b>script</b> =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"

### 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.

Method

URI

Required Parameters

POST	/actifio/api/task/unmountimage	image
------	--------------------------------	-------

---

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

---

### unmountimage Example

#### Request

POST `https://{API_HOST}/actifio/api/task/unmountimage?force=true&delete=true&image=23232`

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": "Job_0023775 to unmount Image_0023224 completed",
  "status": 0
}
```



## expireimage

[About expireimage Command](#) on page 355

[expireimage Request Details](#) on page 355

[expireimage Example](#) on page 355

### 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

Parameter	Description
<b>force</b> =string	Optional. The flag specifies whether to ignore errors when unmapping disks from the host for CDS/Sky.
<b>image</b> =string	Required. Specifies the SRCID or name of the backup image to be expired. If you do specify <b>cluster</b> , then use the SRCID from the command output.
<b>nowait</b> =string	Optional. The flag specifies whether to wait for the completion of this command.
<b>cluster</b> =string	Optional. Specifies the name or ID of the target Actifio CDS or Sky appliance to execute this command. All other parameters should use appliance-specific values.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/expireimage</code>	<code>image</code>

---

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

---

### expireimage Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/expireimage?image=22375693
```

HTTP Request Header

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

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

#### Response

Request success

```
{  
  "result": "Job_22375751 to expire Image_22375691 completed",  
  "status": 0  
}
```

## deleteimage

[About deleteimage Command](#) on page 357

[deleteimage Request Details](#) on page 357

[deleteimage Example](#) on page 357

### 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 **lsbackup** 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

Parameter	Description
<b>image</b> =string	Required. Specifies the ID for CDS/Sky or name of the backup image to be deleted. Use <b>lsbackup</b> to obtain the ID or name of the backup image. If you do not specify <b>cluster</b> , use <b>lsbackup</b> for the SRCID. If you do specify <b>cluster</b> , then use the SRCID from the command output.
<b>nowait</b> =string	Optional. The flag specifies not to wait for the completion of this command.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/deleteimage	image

---

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

---

### deleteimage Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/deleteimage?image=Image_0024650
```

HTTP Request Header

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

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

## Response

Request success

```
{  
  "result": "Job_0025468 to delete Image_0024650 completed",  
  "status": 0  
}
```

## cleanupmirroring

[About cleanupmirroring Command](#) on page 359

[cleanupmirroring Request Details](#) on page 359

[cleanupmirroring Example](#) on page 359

### 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.

#### 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.

#### Syntax

Parameter	Description
<b>id</b> =string	Required. Specifies the ID of the application or consistgrp that no longer has a dedup-async or StreamSnap policy running, to cleanup any artifacts from the policy. Use the <b>lsapplication</b> or <b>lsconsistgrp</b> command for the ID.
<b>all</b> =boolean	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 <i>true</i> . The default value is <i>false</i> .

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/ cleanupmirroring	id

---

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

---

### cleanupmirroring Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/cleanupmirroring?id=4111
```

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  
}
```

## rmfailovertest

[About rmfailovertest Command](#) on page 361

[rmtestfailover Request Details](#) on page 361

[rmtestfailover Example](#) on page 361

### 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

Parameter	Description
<b>image</b> =string	Required. Specifies the ID for CDS/Sky or name of the backup image to be deleted. Use <b>lsbackup</b> to locate the ID/SRCID or name for the image.
<b>script</b> =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"

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmtestfailover	image

---

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

---

### rmtestfailover Example

#### Request

POST [https://{API\\_HOST}/actifio/api/task/rmtestfailover?image=Image\\_0024650](https://{API_HOST}/actifio/api/task/rmtestfailover?image=Image_0024650)

HTTP Request Header

Authorization: Actifio 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 363

[lsbackup Request Details](#) on page 365

[lsbackup Example](#) on page 365

### 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.
- **sourcecuds**: 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.
- **prepdata**: 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 CDS/Sky.

- **advancedoptions:** Policy options that is being used to create the backup for CDS/Sky.
- **componenttype:** Primary or log backup of a DB/Exchange application type for CDS/Sky.

## Rights

You must have the 'Host Manage', and 'Application Manage' right to change the expiration time of a backup image.

## Parameters

Parameter	Description
<b>filtervalue=attrib%3</b> Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <b>lsbackup</b> command are:</p> <ul style="list-style-type: none"> <li>• appid</li> <li>• appname</li> <li>• apptype</li> <li>• backupdate [usage: 'backupdate since 24 hours' for backups started since last 24 hours, 'backupdate before 7 days' for backups started older than 7 days]</li> <li>• backupname</li> <li>• characteristic [PRIMARY   MOUNT   UNMOUNT   VDISK   CLONE]</li> <li>• consistencydate</li> <li>• expiration</li> <li>• hostid</li> <li>• hostname</li> <li>• jobclass [ [ snapshot   dedup   dedupasync   clone   liveclone   syncback ]</li> <li>• label</li> <li>• mappedhost</li> <li>• mountedhost</li> <li>• policyname</li> <li>• prepdate</li> <li>• slpname</li> <li>• sltname</li> <li>• sourceimage</li> <li>• sourceuds</li> <li>• targetuds</li> <li>• virtualsize</li> </ul> <p>The filter is formed with an attribute and a value. When more than one filter is specified, they must be delimited with the '&amp;' 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 '='.</p> <p>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: =, &gt;, &gt;=, &lt;, &lt;=. The operators &lt;, &lt;=, &gt;, or &gt;= should be escaped with '\ ' or enclosed in '' or ""', as required by the shell.</p>

Parameter	Description
<b>filtervalue=attrib%3Dvalue</b> <i>(continued)</i>	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'

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsbackup	None

---

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

---

### lsbackup Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsbackup?applicationtype=SQLServer&action=mount&targethost=20933867
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
```

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

#### Response

Request success

```
{
  "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",
      "apname": "CTOS6.4WP-13",
      "slpname": "LocalProfile",
      "id": "178977",
      "originalbackupid": "0",
      "sourceimage": "",
      "apptype": "VMBackup",
    }
  ]
}
```

```

    "prepdate": "",
    "backupdate": "2017-04-12 09:35:21.000",
    "jobclass": "snapshot",
    "label": "",
    "uniquehostname": "503489ac-64c0-6aef-a662-6d870f462841",
    "componenttype": "0",
    "appid": "164689",
    "policyname": "Daily snap",
    "expiration": "2017-04-14 09:36:24.572",
    "sensitivity": "0",
    "mountedhost": "0",
    "consistencydate": "2017-04-12 09:36:23.000",
    "virtualsize": "124554051584",
    "username": "Scheduler",
    "status": "succeeded"
  },
  {
    "flags": "36",
    "sltname": "Tier-4 - Local Protection Only",
    "sourcecuds": "1415056619",
    "hostname": "ctos6.4wp-13",
    "backupname": "Image_0178986",
    "modifydate": "2017-04-12 09:36:53.502",
    "appname": "CTOS6.4WP-13",
    "slpname": "LocalProfile",
    "id": "178987",
    "originalbackupid": "0",
    "sourceimage": "",
    "apptype": "VMBackup",
    "prepdate": "",
    "backupdate": "2017-04-12 09:36:32.000",
    "jobclass": "dedup",
    "label": "",
    "uniquehostname": "503489ac-64c0-6aef-a662-6d870f462841",
    "componenttype": "0",
    "appid": "164689",
    "policyname": "Daily dedup",
    "expiration": "2017-04-26 09:36:37.385",
    "sensitivity": "0",
    "mountedhost": "0",
    "consistencydate": "2017-04-12 09:36:23.000",
    "virtualsize": "124554051584",
    "username": "Scheduler",
    "status": "succeeded"
  }
],
"status": 0
}

```

## backup

[About backup Command](#) on page 367

[backup Request Details](#) on page 368

[backup Example](#) on page 368

### 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. 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** command to obtain policy ID

#### Rights

You must have the 'Host Manage' or 'Application Manage' or 'Backup Manage' right to back up an application or a consistency group.

#### Parameters

Parameter	Description
<b>app</b> =string	Required. Specifies the ID of the application or consistency group to back up. Use <b>lsapplication</b> or <b>lsconsistgrp</b> to obtain the ID.
<b>backuptype</b> =log   db   dblog	Optional. Specifies the type of backup to perform. It is only valid for Log Protection-enabled database applications. Supported types are: <ul style="list-style-type: none"><li>• <b>log</b> - backup log data only</li><li>• <b>db</b> - backup db data only</li><li>• <b>dblog</b> - backup both db and log data</li></ul>
<b>label</b> =string	Optional. Specifies the label for the newly created backup image.
<b>options</b> = nobitmap   noparent   noseed	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: <ul style="list-style-type: none"><li>• <b>nobitmap</b>: do not use a bitmap or extent list</li><li>• <b>noparent</b>: no ancestor object, create a new independent object</li><li>• <b>noseed</b>: no hydroseeding image</li></ul>
<b>policy</b> =string	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. Use the <b>lspolicy</b> command to obtain the policy ID.

Parameter	Description
<b>script</b> =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"

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/backup	app policy

---

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

---

### backup Example

#### Request

POST https://{API\_HOST}/actifio/api/task/backup?app=164689&policy=141

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": "Job_0403469",
  "status": 0
}
```

## chbackup

[About chbackup Command](#) on page 369

[chbackup Request Details](#) on page 369

[chbackup Example](#) on page 369

### 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

Parameter	Description
<b>expiration</b> =DateTime	Optional. Specifies expiration time for the backup image. The format must be 'yyyy-mm-dd HH:MM:SS'.
<b>sensitivity</b> = 0   1	Optional. Specifies if the backup image is sensitive (a backup image has restricted access before scrubbing of sensitive data). Specify <b>1</b> for a sensitive application or <b>0</b> for a non-sensitive application.
<b>label</b> =string	Optional. Specifies a new label for the backup image. For LiveClone, this must be unique.
<b>argument</b> =string	Required. Specifies the backup image object to modify, either by ID or by name.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chbackup	argument

---

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

---

### chbackup Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/chbackup?argument=17897&label=newbackup
```

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  
}
```



## lsvaultbackup

[About lsvaultbackup Command](#) on page 371

[lsvaultbackup Request Details](#) on page 371

[lsvaultbackup Example](#) on page 372

### About lsvaultbackup Command

#### Description

Use this command to return a concise list of OnVault backup images of a particular OnVault pool.

---

**Note:** The **lsvaultbackup** command is supported only by the Actifio appliances.

---

#### Rights

You must have the 'System View' or 'System Manage' right to view OnVault backups.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attrib%3Dvalue	Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. Valid filter attributes for the <b>lsvaultbackup</b> command are: <ul style="list-style-type: none"><li>• clusterid</li><li>• clustername</li><li>• appid</li><li>• appname</li></ul> 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 '\'). Note that only one of <b>appid</b> or <b>appname</b> can be specified, as is the case for <b>clusterid</b> and <b>clustername</b> . 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.
<b>vaultpool</b> =string	Required. Specifies the name or ID of the OnVault pool.

### lsvaultbackup Request Details

Your **lsvaultbackup** 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	/actifio/api/info/lsvaultbackup	vaultpool

---

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

---

## lsvaultbackup Example

### Request

GET [https://{API\\_HOST}/actifio/api/info/lsvaultbackup?vaultpool=AWS](https://{API_HOST}/actifio/api/info/lsvaultbackup?vaultpool=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": [
    {
      "hostname": "rh74vm1",
      "appname": "_boot",
      "clustername": "skytest5_sqa_actifio_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": "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": "_xf",
    "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 Command

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 command to perform the seeding operations:

Command	Description
<b>lsdevice</b>	Displays a list of physical USB devices to perform seed-in or seed-out operations.

### lsdevice

[About lsdevice Command](#) on page 374

[lsdevice Request Details](#) on page 375

[lsdevice Example](#) on page 375

### 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.

---

**Note:** The Actifio 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 Actifio appliance node at that time.

---

#### Rights

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

#### Parameters

Parameter	Description
<b>appliance</b> =string	Required. Specifies the name or ID of the target Actifio CDS or Sky appliance to execute this command. Use the <b>lscluster</b> command to retrieve the Actifio appliance name or ID to help you identify the correct appliance to include in the <b>appliance</b> argument.
<b>all</b>	Optional. List all devices, in addition to those USB devices for seeding.
<b>argument</b> =string	Optional. Specifies the name of the device to get detailed information.

## 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/lsdevice</code>	appliance

---

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

---

## lsdevice Example

### Fetching device details.

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsdevice
```

```
HTTP Request Header
```

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

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

#### Response

```
Request success
```

```
{
  "result": [
    {
      "device": "sdb",
      "initialized": "no",
      "location": "001:005",
      "name": "",
      "volume": ""
    }
  ],
  "status": 0
}
```

# Workflow Commands

## mkworkflow

[About mkworkflow Command on page 376](#)

[mkworkflow Request Details on page 377](#)

[mkworkflow Example on page 377](#)

### 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 Actifio appliance data protection features

#### Rights

User must have 'WorkFlow Manage' right to be able to create any workflow.

#### Parameters

Parameter	Description
<b>name</b> =string	Required. Specifies the name of the workflow.
<b>appid</b> =string	Required. Specifies the ID or name of the application for which you are creating the workflow. Use <b>lsapplication</b> to retrieve the application ID or name.
<b>day</b> =string	<b>[Deprecated]</b> Use <b>when</b> 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.
<b>type</b> =liveclone directmount	Optional. Specifies the workflow type: liveclone or directmount (default). <ul style="list-style-type: none"><li>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.</li><li>directmount: Mounts a selected snapshot image to a selected host exactly as it was snapped.</li></ul>
<b>source</b> =snap streamsnap onvault  policyid	Optional. Specifies the source image for the workflow. Valid values are: <ul style="list-style-type: none"><li>snap (default): use any image from snapshot policy.</li><li>policyid - use images from the specified policy. Supported image types are snap, streamsnap and DAR.</li></ul>
<b>frequency</b> =hourly  daily   weekly   monthly	Required. Specifies the frequency of the schedule.

Parameter	Description
<b>time</b> =string	Required. Specifies the time of the schedule.
<b>members</b> =appid appname/ ,appid appname][,...]	Optional, but required for application groups. Specifies list of restorable objects, identified by application name or ID. Multiple application name or IDs must be separated by commas.
<b>when</b> =integer	Optional. Specifies a 0-based number whose interpretation depends on the frequency. <ul style="list-style-type: none"> <li>For monthly frequency, 0 is first day of the month, and 1 is 2nd day of the month, and so on.</li> <li>For weekly frequency, 0 indicates Sunday, 1 indicates Monday, and so on.</li> <li>For daily frequency, represents the day intervals. For example, if you specify "2", it indicates intervals of 2 days</li> <li>For hourly frequency, indicates hourly intervals. For example, if you specify the value "3", it means intervals of 3 hours.</li> </ul>
<b>scheduletype</b> =ondemand s cheduled	Required. Specifies whether the workflow will run on schedule or on demand. Scheduled workflows can also run on demand.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkworkflow	name appid frequency time when

**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}/actifio/api/task/  
mkworkflow?name=wf_weekly&appid=84363&frequency=weekly&time=8:00&day=1
```

##### HTTP Request Header

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

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

##### Response

Request success

```
{  
  "result": "201963",  
  "status": 0  
}
```



## lsworkflow

[About lsworkflow Command](#) on page 379

[lsworkflow Request Details](#) on page 379

[lsworkflow Example](#) on page 379

### 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 Actifio appliance commands, which can be scheduled to automate a business process, for example, a Test and Development process by leveraging various Actifio 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

Parameter	Description
<b>filtervalue</b> =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 <b>lsworkflow</b> are: <ul style="list-style-type: none"><li>• appid</li><li>• scheduletype [On-Demand Hourly Daily Weekly Monthly]</li></ul> For string type of filters, the only operator allowed is '='. You can also use wildcard character '*'.  
<b>argument</b> =string	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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsworkflow	None

---

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

---

### lsworkflow Example

**Listing all available workflows.**

## Request

https://{API\_HOST}/actifio/api/info/lsworkflow

HTTP Request Header

Authorization: Actifio 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](#) on page 381

[chworkflow Request Details](#) on page 382

[chworkflow Examples](#) on page 382

### About chworkflow Command

#### Description

Use this command to modify the attributes of an existing workflow. Use **isworkflow** 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

Parameter	Description
<b>day</b> =string	<b>[Deprecated]</b> Use <b>when</b> 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.
<b>type</b> =liveclone directmount	Optional. Specifies whether the workflow type: liveclone or directmount (default). <ul style="list-style-type: none"><li>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.</li><li>directmount: Mounts a selected snapshot image to a selected host exactly as it was snapped.</li></ul>
<b>source</b> =snap policyid	Specifies the source image or the policy ID of the source image. If nothing is specified here, the latest snap image is used by default. Valid values are: <ul style="list-style-type: none"><li>snap (default): use any image from snapshot policy.</li><li>policyid - use images from the specified policy. Supported image types are snap, streamsnap and DAR.</li></ul>
<b>members</b> =appid appname[, appid appname][,...]	Optional. Specifies the applications to be included when the source is a group.
<b>disable</b> =boolean	Optional. Disables the workflow from being scheduled.
<b>frequency</b> =hourly daily   weekly   monthly	Required. Specifies the frequency of the schedule.

Parameter	Description
<b>name</b>	Optional. Specifies new name for the workflow.
<b>time=string</b>	Optional. Specifies the time of the schedule.
<b>when=integer</b>	Optional. Specifies a 0-based number whose interpretation depends on the frequency. <ul style="list-style-type: none"> <li>For monthly frequency, 0 is first day of the month, and 1 is 2nd day of the month, and so on.</li> <li>For weekly frequency, 0 indicates Sunday, 1 indicates Monday, and so on.</li> <li>For daily frequency, represents the day intervals. For example, if you specify "2", it indicates intervals of 2 days</li> <li>For hourly frequency, indicates hourly intervals. For example, if you specify the value "3", it means intervals of 3 hours.</li> </ul>
<b>argument=string</b>	Required. Identifies the workflow object to modify by ID. Use <b>lsworkflow</b> to obtain the ID.

### chworkflow Request Details

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.

Method	URI	Required Parameters
POST	/actifio/api/task/chworkflow	argument

**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}/actifio/api/task/chworkflow?argument=212027&disable=true

HTTP Request Header

Authorization: Actifio 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 schedul

## Request

POST `https://{API_HOST}/actifio/api/task/chworkflow?argument=282015&frequency=weekly&when=1&time=7:00&scheduletype=scheduled`

HTTP Request Header

Authorization: Actifio 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 384](#)

[chflowtask Request Details on page 388](#)

[chflowtask Example on page 388](#)

### 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

Parameter	Description
<b>name</b> =string	Required. Specifies the workflow object to modify by ID. Use <b>lsworkflow</b> to obtain the ID.
<b>type</b> =liveclone directmount	Optional. Specifies type of the flowtask you are modifying. Use liveclone to specify pre-processing parameters. Otherwise use mount (default).

The following parameters are applicable when the **type** is **liveclone**.

<b>appaware</b>	Optional. Set this parameter to true to perform an application aware mount. This can only be specified for Oracle and SQL applications.
<b>label</b>	Optional, but required if no value was set previously. The label applied to the images.
<b>diskpool</b>	Optional, but required if no value was set previously. Specifies the diskpool name or ID used for the operation.
<b>prepmount</b>	Optional. Specifies whether to prep-mount a LiveClone image to a host.
<b>clearsensitiveflag</b>	Optional. Specifies whether to mark data as non-sensitive. Not allowed if prepmount is specified.
<b>host</b>	Required if prepmount is specified. Specifies the ID or name of a single host to which the backup image is to be prep-mounted.

Parameter	Description
<code>rdmmode</code>	<p>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</p> <ul style="list-style-type: none"> <li>• <code>dependentvirtual</code></li> <li>• <code>independentvirtual</code> (default)</li> <li>• <code>physical</code></li> </ul> <p>Specify <code>dependentvirtual</code> if mounted volume(s) are to be included in VMware snapshots</p> <hr/> <p><b>Note:</b> <i>dependentvirtual</i> is rarely used.</p> <hr/> <p>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.</p>
<code>maptoallESX=true false</code>	Optional. Valid when the target host is a VMware VM. If there are multiple hosts, at least one must be VMware VM.
<code>maptoallclusternodes=true false</code>	Optional. Valid only for cluster applications. Map backup image to all the nodes in the cluster.
<code>mountlocation</code>	Optional. Specifies a mountpoint for the volume on host. For example, <code>/mnt/home</code>
<code>script</code>	<p>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.</p> <p>Syntax for each phase is:</p> <pre>name=&lt;name&gt;;phase={INIT PRE POST FINAL ABORT};[timeout=&lt;timeout&gt;];[args=arg1,arg2]</pre> <p>Multiple phases can be specified, separated by semi-colon (;), for example:</p> <pre>name=setup.sh;phase=INIT;name=freeze.sh;phase=PRE</pre>
<code>members=appid appname[,appid appname][,...]</code>	Optional. Specifies the applications to be included when the source is a group.

Parameter	Description
<b>provisioningoptions</b>	<p>Optional. Required if appaware is specified.</p> <p>A comma delimited list of restore options where each option is a name=value pair. Use <b>lsrestoreoptions</b> to obtain a list of applicable restore options.</p> <p>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.</p> <p>For example,</p> <pre>-provisioningoptions "&lt;databasesid&gt;foodb1&lt;/databasesid&gt; &lt;orahome&gt;/u01/app/oracle/product/11.2.0/db_1&lt;/orahome&gt; &lt;utlfiledirectory&gt;/home/oracle&lt;/utlfiledirectory&gt; &lt;username&gt;oracle&lt;/username&gt;"</pre> <p>Use udsinfo <b>lsappclass</b> to obtain a list of available appclass, and provisioning options for each appclass.</p>

The following parameters are applicable when the **type** is **mount**.

<b>label</b>	Optional. The label applied to the images.
<b>diskpool</b>	Optional. Specifies the diskpool name or ID used for the operation.
<b>host</b>	<p>Optional. Specified comma-separated list of host IDs where the image is to be mounted.</p> <p>Only one host can be specified if appaware is true.</p>
<b>rdmmode</b>	<p>(Optional) Specifies Raw Device Mapping (RDM) mode for VM. Valid values are:</p> <ul style="list-style-type: none"> <li>• dependentvirtual</li> <li>• independentvirtual (default)</li> <li>• physical</li> </ul> <p>Specify dependentvirtual if mounted volume(s) are to be included in VMware snapshots</p> <hr/> <p><b>Note:</b> <i>dependentvirtual is rarely used.</i></p> <hr/> <p>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.</p>
<b>maptoallIESX=true false</b>	Optional. Valid when the target host is a VMware VM. If there are multiple hosts, at least one must be VMware VM.
<b>maptoallclusternodes=true false</b>	Optional. Valid only for cluster applications. Map backup image to all the nodes in the cluster.



Parameter	Description
<b>mountlocation</b>	Optional. Specifies a mountpoint for the volume on host. For example, /mnt/home.
<b>appaware</b>	Optional. Set this parameter to true to perform an application aware mount. This can only be specified for Oracle and SQL Server applications.
<b>script</b>	<p>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.</p> <p>Syntax for each phase is:</p> <pre>name=&lt;name&gt;;phase={INIT PRE POST FINAL ABORT};[timeout=&lt;timeout&gt;]:[args=arg1,arg2]</pre> <p>Multiple phases can be specified, separated by semi-colon (;), for example:</p> <pre>name=setup.sh;phase=INIT;name=freeze.sh;phase=PRE</pre>
<b>provisioningoptions</b>	<p>Optional. Required if appaware is specified.</p> <p>A comma delimited list of restore options where each option is a name=value pair. Use <b>lsrestoreoptions</b> to obtain a list of applicable restore options.</p> <p>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.</p> <p>For example,</p> <pre>provisioningoptions "&lt;databasesid&gt;foodb1&lt;/databasesid&gt; &lt;orahome&gt;/u01/app/oracle/product/11.2.0/db_1&lt;/orahome&gt; &lt;utlfiledirectory&gt;/home/oracle&lt;/utlfiledirectory&gt; &lt;username&gt;oracle&lt;/username&gt;".</pre> <p>Use udsinfo <b>lsappclass</b> to obtain a list of available appclass, and provisioning options for each appclass.</p>
<b>immediateunmount</b>	<p>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.</p> <p>Cannot be specified if -reprotect is specified.</p>
<b>reprotect</b>	<p>Optional. Specifies a new application to protect.</p> <p>Cannot be specified if -immediateunmount is specified.</p>
<b>reprotectslt</b>	Required if reprotect is true. Specifies the template for the new application to protect.
<b>reprotectslp</b>	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.

Method	URI	Required Parameters
POST	/actifio/api/task/chflowtask	argument

---

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

---

## chflowtask Example

**Modify an existing workflow by adding some additional information/steps to the workflow.**

### Request

PUT `https://{API_HOST}/actifio/api/task/`

`chflowtask?argument=282015&type=mount&host=172.27.26.11,172.27.26.12&mountlocation=/home/jita`

HTTP Request Header

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

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

### Response

Request success

```
{
  "result": "282015",
  "status": 0
}
```

## lsflowtask

[About lsflowtask Command](#) on page 389

[lsflowtask Request Details](#) on page 389

[lsflowtask Example](#) on page 389

### About lsflowtask 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

Parameter	Description
<b>type</b> =liveclone mount	Optional. Specifies type of the flowtask. Use liveclone to specify pre-processing parameters. Otherwise use mount (default).
<b>argument</b> =string	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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument, the concise view of all objects matching the filter criteria is displayed.

### lsflowtask Request Details

Your `lsflowtask` 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	/actifio/api/info/lsflowtask	None

---

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

---

### lsflowtask Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsflowtask
```

```
HTTP Request Header
```

```
Authorization: Actifio 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
}
```

## runworkflow

[About runworkflow Command](#) on page 391

[runworkflow Request Details](#) on page 392

[runworkflow Example](#) on page 392

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID workflow object to be executed. Use <b>lsworkflow</b> to display detailed workflow information.
<b>norefreshliveclone</b> =string	Optional. When set, the LiveClone workflow will skip the LiveClone refresh operation.
<b>nocreateliveclone</b> =string	Optional. When set, the LiveClone workflow will skip the LiveClone mount operation.
<b>sourceimage</b> = imageid  imagenam	Optional. Specifies the name of the id of the source image. If no image is specified, automatically selected the newest image available.
<b>wait</b> =boolean	Optional. Specifies whether to wait for the completion of the command.
<b>ondemand</b>	(Optional) Specifies whether to run the workflow as on demand or scheduled. By default, the workflow is run as scheduled.

The following parameters are applicable only for mount operation (for LiveClone and Direct Mount workflows).

<b>host</b> =string	Optional. Specifies a comma-separated list of hosts on which to mount. Use the <b>lshost</b> command to retrieve a list of all hosts and their IDs. <hr/> <b>Note:</b> Only one host is supported for appaware mounts. <hr/>
<b>maptoallESX</b> =true false	Optional. Valid when the target host is a VMware VM. If there are multiple hosts, at least one must be VMware VM.
<b>maptoallclusternodes</b> = true false	Optional. Valid when target host is cluster node or cluster host.

Parameter	Description
<b>appaware=true false</b>	Optional. Set this parameter to true to perform an application aware mount. When set to true, you must either provide all required provisioning options, or specify <b>-refreshexisting</b> .
The following parameters are applicable only for appaware mount.	
<b>-recoverytime</b>	[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 'udsinfo lsbackup <image>' for that image. The format should be either: "yyyy-MM-dd HH:mm:ss" or "yyyy-MM-dd HH:mm:ss.SSS"
<b>-refreshexisting</b>	[Applicable only for appaware mount] Specify the appname to be refreshed. Cannot be specified if -provisioningoptions is also specified.
<b>-provisioningoptions</b>	[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 <b>lsrestoreoptions</b> . 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 <b>lsappclass</b> .

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/runworkflow	argument

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

### runworkflow Example

```
POST https://{Actifio_API_HOST}/actifio/api/task/runworkflow?argument=212027
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
```

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

### **Response**

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

## rmworkflow

[About rmworkflow Command](#) on page 394

[rmworkflow Request Details](#) on page 394

[rmworkflow Example](#) on page 394

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the workflow object to be removed. Use <b>lsworkflow</b> to obtain the ID.
<b>force</b>	Optional. Specifies whether to ignore errors when deleting the workflow.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmworkflow	argument

### rmworkflow Example

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/rmworkflow?argument=212030
```

HTTP Request Header

```
Authorization: Actifio 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 395

[mksideband Request Details](#) on page 395

[mksideband Example](#) on page 395

### 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 Actifio appliances only.

---

#### Rights

You must have 'System Manage' right to invoke this operation.

#### Parameters

Parameter	Description
<b>mdisk</b> =string	Required. Specifies the name of the MDisk.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mksideband	mdisk

---

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

---

### mksideband Example

#### Request

POST [https://{API\\_HOST}/actifio/api/task/mksideband?mdisk=mdisk1](https://{API_HOST}/actifio/api/task/mksideband?mdisk=mdisk1)

HTTP Request Header

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

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



# 7 Policy and Schedule Commands

Use these commands for managing policies and schedules in your Service Level Agreements (SLAs). The GUI interface for these commands can be found in the Actifio Desktop.

For information on CDS/Sky, refer to **Planning and Developing Service Level Agreements** in ActifioNOW.

This chapter details the commands used to manage policies, policy application, and schedules:

Managing Policies	Managing Schedules
<b>SLT Commands</b> <ul style="list-style-type: none"><li><a href="#">mkslt</a> on page 398</li><li><a href="#">lssl</a> on page 400</li><li><a href="#">chslt</a> on page 403</li><li><a href="#">rmslt</a> on page 405</li></ul>	<b>Bandwidth Commands</b> <ul style="list-style-type: none"><li><a href="#">mkbandschedule</a> on page 463</li><li><a href="#">lsbandschedule</a> on page 465</li><li><a href="#">chbandschedule</a> on page 467</li><li><a href="#">rmbandschedule</a> on page 469</li></ul>
<b>SLA Commands</b> <ul style="list-style-type: none"><li><a href="#">mksla</a> on page 406</li><li><a href="#">lssla</a> on page 408</li><li><a href="#">chsla</a> on page 412</li><li><a href="#">rmsla</a> on page 415</li></ul>	<b>Other Commands</b> <ul style="list-style-type: none"><li><a href="#">lsinterface</a> on page 447</li><li><a href="#">lsconfiguredinterface</a> on page 449</li><li><a href="#">configoutboundpolicy</a> on page 452</li><li><a href="#">lsoutboundpolicy</a> on page 454</li><li><a href="#">configntp</a> on page 455</li><li><a href="#">lsntp</a> on page 456</li><li><a href="#">testconnection</a> on page 457</li><li><a href="#">showroute</a> on page 459</li><li><a href="#">showrouting</a> on page 460</li><li><a href="#">showtracepath</a> on page 461</li><li><a href="#">export</a> on page 470</li><li><a href="#">import</a> on page 472</li></ul>
<b>Policy Commands</b> <ul style="list-style-type: none"><li><a href="#">mkpolicy</a> on page 417</li><li><a href="#">lspolicy</a> on page 422</li><li><a href="#">chpolicy</a> on page 428</li><li><a href="#">lssettableoption</a> on page 433</li><li><a href="#">mkpolicyoption</a> on page 437</li><li><a href="#">lspolicyoption</a> on page 439</li><li><a href="#">chpolicyoption</a> on page 441</li><li><a href="#">rmpolicyoption</a> on page 443</li><li><a href="#">rmpolicy</a> on page 445</li></ul>	

## SLT Commands

### mkslt

[About mkslt Command](#) on page 398

[mkslt Request Details](#) on page 398

[mkslt Example](#) on page 398

#### 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

Parameter	Description
<b>description</b> =string	Optional. Specifies description of the SLA template.
<b>name</b> =string	Required. Specifies name of the SLA template; the name has to be unique within the Actifio appliance
=string	Optional. Specifies a default organization to which the template is to be added after creation. Use the <a href="#">lsorg</a> command to locate the ID or name of the organization. <hr/> <b>Note:</b> To use this option user needs to have 'System Manage' right. <hr/>
<b>override</b> =boolean	Optional. Specifies whether policy option can be overridden. The default is true.
<b>id</b> =string	Optional. Use <a href="#">lssl</a> to retrieve the SLA ID.

#### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkslt</code>	<code>name=&lt;sla template name&gt;</code>

**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}/actifio/api/task/mkslt?name=Daily%20Task%20Template`

HTTP Request Header

Authorization: Actifio 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}/actifio/api/task/`

`mkslt?name=Daily%20Task%20Template%20&description=A%20new%20template%20we%20will%20use&org=org5`

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": 153184,
  "status": 0
}
```

## lssl

[About lssl Command](#) on page 400

[lssl Request Details](#) on page 400

[lssl Examples](#) on page 400

### About lssl 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

Parameter	Description
<b>filtervalue</b> =attribute%3Dvalue	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 <b>lssl</b> command is: name  For string type of filters, the only operator allowed is '='. You can also use wild-card character '*'. For example, to match template (SLT) with name begins with 'foo', use <b>filtervalue</b> =name%3Dfoo*.
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the ID or name, a concise view of all objects matching the filters is displayed.

### lssl Request Details

Your **lssl** 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	/actifio/api/info/lssl	None

---

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

---

### lssl Examples

#### Fetching list of all templates.

##### Request

```
GET https://{API_HOST}/actifio/api/info/lssl
```

HTTP Request Header

```
Authorization: Actifio 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"
    },
    {
      "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}/actifio/api/info/lsslt?argument=108](https://{API_HOST}/actifio/api/info/lsslt?argument=108)

HTTP Request Header  
Authorization: Actifio 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}/actifio/api/info/lsslt?filtervalue=name%3DTier-4+-
+Local+Protection+Only
HTTP Request Header
Authorization: Actifio 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
}
```



## chsIt

[About chsIt Command](#) on page 403

[chsIt Request Details](#) on page 403

[chsIt Examples](#) on page 403

### About chsIt Command

#### Description

Use this command to change the attributes of a template (SLT). Use the [lssl](#) command to obtain the ID or name of the template (SLT).

#### Rights

You must have the 'SLA Manage' right to change a template.

#### Parameters

Parameter	Description
<b>description</b> =string	Optional. Specifies a description for the template.
<b>name</b> =string	Optional. Specifies a name for the template.
<b>override</b> =boolean	Optional. Specifies whether policy option can be overridden.
<b>argument</b> =string	Required. Specifies the ID or name of the template to be modified.

### chsIt Request Details

Your `chsIt` 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	<code>/actifio/api/task/chsIt</code>	<code>argument=&lt;sla id sla name&gt;</code>

---

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

---

### chsIt Examples

**Update an existing template with a new description.**

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/chsIt?argument=153121&description=New  
Description
```

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
}
```

## Update an existing template to change the override property of the template.

### Request

POST [https://{Actifio\\_API\\_HOST}/actifio/api/task/chslt?argument=153121&override=false](https://{Actifio_API_HOST}/actifio/api/task/chslt?argument=153121&override=false)

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
}
```

## rmslt

[About rmslt Command](#) on page 405

[rmslt Request Details](#) on page 405

[rmslt Example](#) on page 405

### About rmslt Command

#### Description

Use this command to delete a template.

#### Rights

You must have the 'SLA Manage' right to delete a template.

#### Syntax

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the template to be deleted. Use <a href="#">lssl</a> 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmslt</code>	<code>argument=&lt;sla id&gt;</code>

---

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

---

### rmslt Example

**Delete an existing template.**

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/rmslt?argument=153121
```

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
}
```

## SLA Commands

### mksla

[About mksla Command](#) on page 406

[mksla Request Details](#) on page 407

[mksla Example](#) on page 407

### 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

Parameter	Description
<b>appid</b> =integer	Required when protecting an application or consistency group. Specifies the application ID or the consistency group ID for the new SLA. Use <a href="#">lsapplication</a> or <a href="#">lsconsistgrp</a> to retrieve the application or consistency group ID.
<b>description</b> =string	Optional. Specifies the description for the new SLA.
<b>group</b> =string	Optional, required when protecting applications in the group. Specifies the ID or name of a group. Use <a href="#">lsgroup</a> to retrieve the group ID.
<b>optionname</b> =string	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 <a href="#">Appendix E, List of Policy Options</a> for a complete list of supported policy options.
<b>optionvalue</b> =string	Optional. Specifies policy option value for the SLA.
<b>scheduleoff</b> =boolean	Optional. Specifies if the schedule should be turned off to start with when creating a new SLA for CDS/Sky.
<b>sourceuds</b> =integer	Optional. Optional source cluster ID, to apply to remote replicate policy to a remote application for CDS/Sky.
<b>slp</b> =integer	Required. Specifies the profile (SLP) ID or name for the new SLA. Use <a href="#">lsslpl</a> to retrieve the SLA ID.
<b>slt</b> =integer	Required. Specifies the template (SLT) ID or name for the new SLA. Use <a href="#">lsslsl</a> to retrieve the SLA ID.

## 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mksla</code>	<code>appid=&lt;appid consistgrp id&gt;</code> <code>slp=&lt;slp id slp name&gt;</code> <code>slt=&lt;sltid or sltname&gt;</code>

---

**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}/actifio/api/task/mksla?appid=122844&slt=84331&slp=51
```

HTTP Request Header

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

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

### Response

Request success

```
{
  "result": "153829",
  "status": 0
}
```

A new SLA is created with ID 153829.

## lssla

[About lssla Command](#) on page 408

[lssla Request Details](#) on page 408

[lssla Examples](#) on page 409

### About lssla 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

Parameter	Description
<b>filtervalue</b> =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 <b>lssla</b> command are: <ul style="list-style-type: none"><li>• appid</li><li>• dedupasyncoff [ true   false ]</li><li>• expirationoff [ true   false ]</li><li>• scheduleoff [ true   false ]</li><li>• slpid</li><li>• sltid</li></ul> The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&' character (%26 in hexadecimal).
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the ID or name, a concise view of all objects matching the filters is displayed.

### lssla Request Details

Your **lssla** 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	/actifio/api/info/lssla	None

---

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

---

## lssla Examples

### Fetching list of all SLAs.

#### Request

GET https://{API\_HOST}/actifio/api/info/lssla

HTTP Request Header

Authorization: Actifio 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",
      "sltld": "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",
      "sltld": "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",
      "sltld": "84331"
    }
  ],
  "status": 0
}
```

### Fetching information by a specific SLA by ID.

## Request

GET https://{API\_HOST}/actifio/api/info/lssla?argument=153829

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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}/actifio/api/info/lssla?filtervalue=expirationoff=true

HTTP Request Header

Authorization: Actifio 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": "2017-09-29 14:33:11.235",
      "scheduleoff": "true",
      "slpid": "51",
      "sltid": "84331"
    }
  ],
}
```



```
    "status": 0  
  }
```

## chsla

[About chsla Command](#) on page 412

[chsla Request Details](#) on page 414

[chsla Example](#) on page 414

### 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

Parameter	Description
<b>complianceerrorthresh old</b> =string	Optional. The error threshold to use for SLA compliance settings for CDS/Sky. 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). <ul style="list-style-type: none"><li>'default' specifies that the error threshold is calculated based on the characteristics of the policy.</li><li>'no analysis' specifies that there will be no alerting for these SLA compliance settings.</li></ul> <hr/> <b>Note:</b> The compliance error threshold must be higher than the warning threshold. <hr/>
<b>compliancewarnthres hold</b> =string	Optional. The warning threshold to use for SLA compliance settings for CDS/Sky. 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. <hr/> <b>Note:</b> The compliance warning threshold must be lower than the error threshold. <hr/>
<b>dedupasyncoff</b> =boolean	Optional. Specifies whether asynchronous deduplication of this SLA should be turned off.
<b>description</b> =string	Optional. Specifies the new description for the SLA.
<b>expirationoff</b> =boolean	Optional. Specifies whether the expiration of this SLA should be turned off.
<b>policyid</b> =integer	Optional. When creating an SLA compliance override for CDS/Sky using either the <b>complianceerrorthreshold</b> or <b>compliancewarnthreshold</b> parameter, the policy ID specifies the policy whose compliance settings you wish to override. Only one policy can be overridden in a single <b>chsla</b> command.

Parameter	Description
<b>scheduleoff</b> =boolean	Optional. Specifies whether scheduling of the SLA should be turned off.
<b>slpid</b> =integer	Optional. Specifies the ID of the profile (SLP). Use <a href="#">lsslp</a> to display a list of profiles (SLPs).
<b>sltid</b> =integer	Optional. Specifies the ID of the SLA template. Use <a href="#">lssl</a> to display a list of policy templates (SLTs).
<b>argument</b> =integer	Required. Specifies ID of the SLA to be changed. Use <a href="#">lssla</a> to retrieve the SLA ID.
<b>flag</b> =string	<p>Optional. Configures the <b>flag</b> 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 CDS/Sky appliances.</p> <hr/> <p><b>Note:</b> For background on image preservation, including modifying settings, see <a href="#">Configuring Image Preservation on page 533</a>.</p> <hr/> <p>Image preservation <b>flag</b> settings on a per-application basis: Settings include:</p> <ul style="list-style-type: none"> <li>• <b>OnVaultLatestSnap</b>:&lt;true   false&gt;</li> <li>• <b>ProcessLatestSnap</b>:&lt;true   false&gt; — Instructs the Actifio 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 <b>PreserveSnapsOfPriority</b> parameter in the <b>setparameter</b> command is set to all applications (low, medium, and high priority), which means that the <b>ProcessLatestSnap</b> flag is automatically disabled (set to <b>ProcessLatestSnap&gt;false</b>). You can specify <b>ProcessLatestSnap:true</b> to disable catch-up mode for a specific application.</li> <li>• <b>ProcessLatestDedup</b>:&lt;true   false&gt; — Instructs the Actifio 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 <b>PreserveLdedupsOfPriority</b> parameter in the <b>setparameter</b> is set to all applications (low, medium, and high priority), which means that the <b>ProcessLatestDedup</b> flag is automatically disabled (set to <b>ProcessLatestSnap&gt;false</b>). You can specify <b>ProcessLatestDedup:true</b> to disable catch-up mode for a specific application.</li> </ul> <hr/> <p><b>Note:</b> Once you set the flag <b>ProcessLatestSnap</b> or <b>ProcessLatestDedup</b> 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.</p> <hr/>

Parameter	Description
<b>flag</b> =string(Continued)	Disable jobs <b>flag</b> settings: <ul style="list-style-type: none"> <li>• <b>DisableSnapshot</b>:&lt;true   false&gt; — Disables or enables snapshot jobs performed on an application basis. Default is false (snapshot jobs enabled).</li> <li>• <b>DisableLocalDedup</b>:&lt;true   false&gt; — Disables or enables local dedup jobs performed on an application basis. Default is false (local dedup jobs enabled).</li> <li>• <b>DisableRemoteDedup</b>:&lt;true   false&gt; — Disables or enables remote dedup jobs performed on an application basis. Default is false (remote dedup jobs enabled).</li> <li>• <b>DisableStreamSnap</b>:&lt;true   false&gt; — Disables or enables StreamSnap jobs performed on an application basis. Default is false (StreamSnap jobs enabled).</li> <li>• <b>DisableOnVault</b>:&lt;true   false&gt; — Disables or enables OnVault jobs performed on an application basis. Default is false (OnVault jobs enabled).</li> <li>• <b>DisableDar</b>:&lt;true   false&gt;— Disables or enables Dedup-Async Replication (DAR) jobs performed on an application basis. Default is false (DAR jobs enabled).</li> </ul>

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chsla	argument=<sla id>

---

**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}/actifio/api/task/chsla?argument=153829&scheduleoff=true&description=Initial+schedule+stays+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
}
```

## rmsla

[About rmsla Command](#) on page 415

[rmsla Request Details](#) on page 415

[rmsla Example](#) on page 415

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the SLA to be removed or the ID or name of the group to be unprotected. Use <a href="#">lssla</a> to retrieve SLA information. Use <a href="#">lsgroup</a> to retrieve group information.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmsla</code>	<code>argument=&lt;slaid groupid&gt;</code>

---

**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}/actifio/api/task/rmsla?argument=153829
```

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
}
```

```
}
```

**Verify that the SLA has been deleted.**

```
GET https://{API_HOST}/actifio/api/info/lssla?argument=153829
```

```
HTTP Request Header
```

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

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

**Response**

```
Sky/CDS error:10016 object not found: 153829
```

## Policy Commands

### mkpolicy

[About mkpolicy Command](#) on page 417

[mkpolicy Request Details](#) on page 420

[mkpolicy Examples](#) on page 420

### 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

Parameter	Description
<b>complianceerrorthreshold</b> =string	<p>Optional. The error threshold to use for SLA compliance settings for CDS/Sky. 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).</p> <ul style="list-style-type: none"><li>• 'default' specifies that the error threshold is calculated based on the characteristics of the policy.</li><li>• 'no analysis' specifies that there will be no alerting for these SLA compliance settings.</li></ul> <hr/> <p><b>Note:</b> <i>The compliance error threshold must be higher than the warning threshold.</i></p> <hr/>

Parameter	Description
<b>compliancewarnthreshold</b> =string	Optional. The error threshold to use for SLA compliance settings for CDS/Sky. 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.  <i>Note: The compliance warning threshold must be lower than the error threshold.</i>
<b>continuous</b> =boolean	Optional. Defines a continuous image capture schedule for CDS/Sky (for example, perform a capture job every 8 hours, starting the first job at 1 am). If value is set to <b>true</b> , 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 <b>false</b> .  <i>Note: When this flag is set, specifying the <b>-endtime</b>, <b>-exclusion</b>, <b>-repeatinterval</b>, or <b>-scheduletype</b> options will result in an error.</i>
<b>description</b> =string	Optional. Specifies the description of the policy.
<b>endtime</b> =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 <b>-continuous</b> is set to <b>true</b> for CDS/Sky.
<b>exclusion</b> =string	Optional. Specifies the exclusion (calendar) for the policy.
<b>exclusioninterval</b> =integer	Required when the <b>exclusion</b> parameter is specified. Specifies the exclusion interval for the policy. An exclusion interval of 2 for weekly, means every two weeks.
<b>exclusiontype</b> =string	Required when the <b>exclusion</b> parameter is specified. Specifies the exclusion type for the policy.
<b>name</b> =string	Required. Specifies the name of the policy. Name should be unique within the same template.
<b>op</b> = <i>snap   cloud   dedup   directdedup   replicate   remotereplicate</i>	Specifies the operation type of the policy. <b>op</b> is required when you do not specify the <b>policytype</b> parameter.  <i>Note: A direct-dedup policy conflicts with the snap, dedup, sync, async, dedup_async and stream_snap policy types.</i>  In the <b>op</b> argument, the <b>replicate</b> option is for remote dedup and the <b>remotereplicate</b> option is for multi-hop. <i>You cannot add a remotereplicate policy to a template that has any other policies.</i>  <i>If you are defining a remote-to-mirror policy, do not specify a value for <b>op</b>.</i>



Parameter	Description
<b>predecessor</b> =integer	Optional. Specifies the predecessor policy ID for CDS/Sky. For example, a <i>stream_snap</i> policy requires a snap policy as a predecessor to work properly. In this case, you would specify the snap policy ID.  <hr/> <b>Note:</b> Required for policies where <b>policytype=streamsnap</b> is specified. <hr/>
<b>priority</b> =low   medium   high	Optional. Specifies a new priority for the policy. Applies only to the dedup, replicate, and dedup_async policies. Default is <b>medium</b> if not specified.
<b>remoteretention</b> =custom   last   snap	<b>remoteretention</b> parameter configures StreamSnap remote retention for CDS/Sky. It is required when <b>policytype stream_snap</b> is specified. Valid options include: <ul style="list-style-type: none"> <li><b>custom</b> - 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 <b>retention</b> and <b>retentionm</b> parameters.</li> <li><b>last</b> - Retain only the latest remote StreamSnap image. This is the default setting.</li> <li><b>snap</b> - Use the same retention as the local (base) snapshot policy associated with this StreamSnap policy.</li> </ul>
<b>policytype</b> =sync   async   dedup_async   stream_snap   normal   verification	Defines the type of Production to Mirror policy or a dedup verification policy. <b>policytype</b> 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 normal is used, then a value for <b>op</b> parameter must be provided. <b>policytype</b> is required when you do not specify the <b>op</b> parameter. The default value for <b>policytype</b> is <b>normal</b> , which includes the <i>snap</i> , <i>dedup</i> , and <i>replicate</i> policies.
<b>retention</b> =integer	Specifies the retention period for the policy. It is required when you specify a <i>snap</i> , <i>directdedup</i> , <i>dedup</i> , <i>replicate</i> , or <i>cloud</i> policy. It is also required for a <i>stream_snap</i> policy if <b>remoteretention</b> is set to <b>custom</b> for CDS/Sky.
<b>retentionm</b> =minutes   hours   days   weeks   months   years	Specifies the retention measurement type for the policy. It is required when <b>retention</b> is specified.
<b>rpo</b> =integer	Optional. Specifies the sets the frequency of jobs for the policy.
<b>rpom</b> =minutes   hours	Specifies the measurement type for the policy. It is required when <b>rpo</b> is specified.
<b>scheduletype</b> =daily   weekly   monthly   yearly	Required when the <b>selection</b> parameter is specified. Specifies the schedule type for the policy.

Parameter	Description
<b>selection</b> =string	Optional. Specifies the selection (calendar) for the policy. <b>selection</b> is relevant for the <i>snap</i> , <i>directdedup</i> , <i>dedup</i> , <i>replicate</i> , and <i>cloud</i> policies.
<b>repeatinterval</b> =integer	Only valid when <b>selection</b> 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.
<b>slt</b> =string	Required. Specifies the template id or name (CDS/Sky) for the policy.
<b>starttime</b> =string	Required for the <i>snap</i> , <i>directdedup</i> , <i>dedup</i> , <i>dedup_async</i> , <i>replicate</i> , and <i>cloud</i> policies. Specifies the start time for the policy. Starting time of the day that this policy applies. The format is "hh:mm", For example, "09:00".
<b>truncatelog</b> =boolean	Optional. Specifies that the logs should be truncated. The default value is false. This is applied to applications that support log truncation.
<b>verifychoice</b> =newest   oldest   random	Optional. Specifies the choice of an image to verify. This is (only for verification policies).

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/mkpolicy	name= slt=<id> policytype op

---

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

---

### mkpolicy Examples

#### Creating a new policy with the set of required parameters.

##### Request

```
POST https://{API_HOST}/actifio/api/task/mkpolicy?slt=153184&name=DailyBackupPolicy&policytype=normal&op=snap
```

HTTP Request Header

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

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

##### Response

Request success

```
{
  "result": "153288",
```

```
    "status": 0
  }
```

### Creating a new policy with different optional arguments.

#### Request

```
POST https://{API_HOST}/actifio/api/task/
mkpolicy?slt=153184&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=daysofwee
k:mon,tue,wed,thu,fri&schedulertype=weekly&exclusion=daysofweek:sat,sun&exclusiontype=weekly
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": "153326",
  "status": 0
}
```

## Ispolicy

[About Ispolicy Command](#) on page 422

[Ispolicy Request Details](#) on page 423

[Ispolicy Examples](#) on page 423

### 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

Parameter	Description
<b>filtervalue</b> =attribute%3Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <a href="#">Ispolicy</a> command are:</p> <ul style="list-style-type: none"><li>• endtime [hh: mm]</li><li>• exclusiontype [daily   weekly   monthly   yearly ]</li><li>• exclusioninterval</li><li>• name</li><li>• op [ snap   cloud   dedup   backup   replicate   rehydrate   mirror ]</li><li>• policytype [ sync   async   async_dedup   stream_snap]</li><li>• repeatinterval</li><li>• retention</li><li>• retentionm [ minutes   hours   days   weeks   months   years ]</li><li>• rpo</li><li>• rpom [ minutes   hours   days   weeks   months   years ]</li><li>• scheduletype [ daily   weekly   monthly   yearly ]</li><li>• sltid</li><li>• starttime [ hh: mm ]</li></ul> <p>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&amp;' character (which should be escaped with '\'). For string type of filters, the only operator allowed is '='. You can also use wild card character '*'. For example, to list policies with name begins with 'foo', use <code>filtervalue=name%3Dfoo*</code>.</p> <p>Some filters allow only predefined constants. For example, <code>exclusiontype</code> allows only daily, weekly, monthly, or yearly. To match policies with <code>exclusiontype</code> of weekly, use <code>filtervalue=exclusiontype%3Dweekly</code>.</p> <p>For number and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. For RESTful API, the hexadecimal equivalent of these characters need to be used. The <code>starttime</code> and <code>endtime</code> parameters can also use these operators. For example: - <code>filtervalue=starttime%3E%2209:00%22</code>.</p> <p>To get a list of all policies for a template (SLT), use <code>filtertype=sltid%3DID</code>.</p>

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the argument parameter, a concise view of all objects matching the filter criteria is displayed.

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lspolicy	None

---

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

---

### lspolicy Examples

#### Fetching list of all policies.

##### Request

GET https://{API\_HOST}/actifio/api/info/lspolicy?apistart=0&apilimit=100

HTTP Request Header

Authorization: Actifio 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": "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}/actifio/api/info/lspolicy?filtervalue=id%3D161

HTTP Request Header

Authorization: Actifio 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 an option with a specific name.

##### Request

GET https://{API\_HOST}/actifio/api/info/lspolicy?filtervalue=name%3DDedupAsync

HTTP Request Header

Authorization: Actifio 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": "DedupAsync - 12 hours",
      "encrypt": "",
      "endtime": "",
      "exclusion": "",
      "exclusioninterval": "1",
      "exclusiontype": "none",
      "id": "171",
      "name": "DedupAsync",
      "policytype": "dedup_async",
      "priority": "medium",
      "repeatinterval": "1",
      "retention": "",
      "retentionm": "",
      "rpo": "12",
      "rpom": "hours",
      "scheduletype": "",
      "selection": "",
      "sltid": "107",
      "starttime": ""
    },
    {
      "description": "DedupAsync - 24 hours",
      "encrypt": "",
      "endtime": "",
      "exclusion": "",
      "exclusioninterval": "1",
      "exclusiontype": "none",
      "id": "181",
      "name": "DedupAsync",
```



```

        "policytype": "dedup_async",
        "priority": "medium",
        "repeatinterval": "1",
        "retention": "",
        "retentionm": "",
        "rpo": "24",
        "rpom": "hours",
        "scheduletype": "",
        "selection": "",
        "sltid": "108",
        "starttime": ""
    }
  ],
  "status": 0
}

```

**Filtering out the result by fetching results for a single ID using the argument option.**

### Request

GET [https://{API\\_HOST}/actifio/api/info/lspolicy?argument=161](https://{API_HOST}/actifio/api/info/lspolicy?argument=161)

HTTP Request Header

Authorization: Actifio 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": "161",
    "name": "DedupAsync",
    "policytype": "dedup_async",
    "predecessor": "0",
    "priority": "medium",
    "repeatinterval": "1",
    "rpo": "4",
    "rpom": "hours",
    "sltid": "106"
  },
  "status": 0
}

```

## chpolicy

[About chpolicy Command](#) on page 428

[chpolicy Request Details](#) on page 430

[chpolicy Examples](#) on page 431

### About chpolicy Command

#### Description

Use this command to change the attributes of a policy. Use [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.

Parameter	Description
<b>complianceerrorthreshold=</b> string	<p>Optional. The error threshold to use for SLA compliance settings for CDS/Sky. 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).</p> <ul style="list-style-type: none"><li>• 'default' specifies that the error threshold is calculated based on the characteristics of the policy.</li><li>• 'no analysis' specifies that there will be no alerting for these SLA compliance settings.</li></ul> <hr/> <p><b>Note:</b> The compliance error threshold must be higher than the warning threshold.</p> <hr/>

Parameter	Description
<b>compliancewarnthreshold</b> =string	<p>Optional. The warning threshold to use for SLA compliance settings for CDS/Sky. 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.</p> <hr/> <p><b>Note:</b> <i>The compliance warning threshold must be lower than the error threshold.</i></p> <hr/>
<b>continuous</b> =boolean	<p>Optional. Defines a continuous image capture schedule for CDS/Sky (for example, perform a capture job every 8 hours, starting the first job at 1 am). If value is set to <b>true</b>, 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 <b>false</b>.</p> <hr/> <p><b>Note:</b> <i>When this flag is set, specifying the <b>endtime</b>, <b>exclusion</b>, <b>repeatinterval</b>, or <b>scheduletype</b> options will result in an error.</i></p> <hr/>
<b>description</b> =string	Optional. Specifies the description for the policy.
<b>endtime</b> =string	Optional. Specifies the end time for the policy. The format is "hh:mm", For example, "17:00". This cannot be used if <b>continuous</b> is set to <b>true</b> .
<b>encrypt</b> =boolean	Optional. Specifies the encryption for the policy
<b>exclusion</b> =string	Optional. Specifies the exclusion (calendar) for the policy.
<b>exclusioninterval</b> =integer	Required when the <b>exclusion</b> parameter is specified. Specifies the exclusion interval for the policy. An exclusion interval of 2 for weekly, means every two weeks.
<b>exclusiontype</b> =	Required when the <b>exclusion</b> parameter is specified. Specifies the exclusion type for the policy.
<b>name</b> =strings	Optional. Specifies the name for the policy. Name should be unique within the same template.
<b>repeatinterval</b> =integer	Optional. Specifies the repeat interval for the policy. A repeat interval of 2 for weekly, means every two weeks.
<b>priority</b> =	Optional. Specifies a new priority for the policy. <b>priority</b> only applies to dedup, replicate, and dedup_async policies. Default is medium if not specified.

Parameter	Description
<b>remoteretention=</b>	<p><b>remoteretention</b> parameter configures StreamSnap remote retention for CDS/Sky. It is required when <b>policytype</b> <i>stream_snap</i> is specified.</p> <p>Valid options include:</p> <ul style="list-style-type: none"> <li>• <b>custom</b> - 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 <b>retention</b> and <b>retentionm</b> parameters.</li> <li>• <b>last</b> - Retain only the latest remote StreamSnap image. This is the default setting.</li> <li>• <b>snap</b> - Use the same retention as the local (base) snapshot policy associated with this StreamSnap policy.</li> </ul>
<b>retention=integer</b>	<p>Specifies the retention period for the policy.</p> <p><b>retention</b> is required when you specify a <i>snap</i>, <i>directdedup</i>, <i>dedup</i>, <i>replicate</i>, or <i>cloud</i> policy. It is also required for a <i>stream_snap</i> policy if - <b>remoteretention</b> is set to <b>custom</b> for CDS/Sky.</p>
<b>retentionm=minutes   hours   days   weeks   months   years</b>	<p>Specifies the retention measurement type for the policy.</p> <p><b>retentionm</b> is required when <b>retention</b> is specified.</p>
<b>rpo=integer</b>	<p>Optional. Specifies the sets the frequency of jobs for the policy.</p>
<b>rpm=minutes   hours</b>	<p>Specifies the measurement type for the policy. <b>rpm</b> is required when <b>rpo</b> is specified.</p>
<b>scheduletype=daily   weekly   monthly   yearly</b>	<p>Required when the <b>selection</b> parameter is specified. Specifies the schedule type for the policy.</p>
<b>selection=string</b>	<p>Optional. Specifies the selection (calendar) for the policy. <b>selection</b> is relevant for the <i>snap</i>, <i>directdedup</i>, <i>dedup</i>, <i>replicate</i>, and <i>cloud</i> policies.</p>
<b>starttime=string</b>	<p>Required for the <i>snap</i>, <i>directdedup</i>, <i>dedup</i>, <i>dedup_async</i>, <i>replicate</i>, and <i>cloud</i> policies. Specifies the start time for the policy. Starting time of the day that this policy applies. The format is hh:mm,</p>
<b>verifychoice=newest   oldest   random</b>	<p>Optional. Specifies selection choices of images to verify (only for verification policies).</p>
<b>argument=integer</b>	<p>Required. Specifies the ID of the policy to be changed. Use <a href="#">lspolicy</a> to retrieve the ID.</p>

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chpolicy	argument=<policyid>

---

**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}/actifio/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: Actifio 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}/actifio/api/info/lspolicy?argument=153326  
 HTTP Request Header

Authorization: Actifio 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  
}
```

## lssettableoption

[About lssettableoption Command](#) on page 433

[lssettableoption Request Details](#) on page 433

[lssettableoption Examples](#) on page 434

### 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

Parameter	Description
<b>appid</b> =integer	Optional. Specifies the application ID or consistency group ID that the options can be set. Use <a href="#">lsapplication</a> or <a href="#">lsconsistgrp</a> to retrieve the ID.
<b>policyid</b> =integer	Optional. Specifies the policy ID that the options can be set. Use <a href="#">lspolicy</a> to retrieve the policy ID.
<b>argument</b> =string	Optional. For CDS/Sky, it specifies the name of the option to retrieve the specific details, including the valid values.
<b>slt</b> =string	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 <a href="#">lssl</a> to retrieve SLA information.

### 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.

Method	URI	Required Parameters
GET	<code>/actifio/api/info/lssettableoption</code>	None

---

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

---

## lssettableoption Examples

### Fetching information about a specific named policy option.

#### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/lssettableoption?argument=appconsistency

HTTP Request Header

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

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

#### Response

Request success

```
{
  "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}/actifio/api/info/lssettableoption?policyid=161

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": [
    {
      "apptype": "VMBackup,Microsoft Hyper-V VSS Writer",
      "constant": "false",
      "default": "no",
      "desc": "Take application consistent snapshot for backup",
      "multi": "false",
      "name": "appconsistency",
      "required": "false",
      "select": "true",
      "type": "string"
    }
  ]
}
```



```

    "apptype": "FileSystem,SqlServerWriter,Microsoft Exchange Writer,SharePoint Services
Writer,Microsoft Hyper-V VSS Writer,Oracle,CIFS,NFS,ConsistGrp,nas",
    "constant": "false",
    "default": "yes",
    "desc": "Out of band staging disk unmap",
    "multi": "false",
    "name": "nounmap",
    "required": "false",
    "select": "true",
    "type": "string"
  },
  {
    "apptype": "Microsoft Hyper-V VSS Writer",
    "constant": "false",
    "default": "no",
    "desc": "Only the boot volume of VM is backed up",
    "multi": "false",
    "name": "bootvolumesnapshot",
    "required": "false",
    "select": "true",
    "type": "string"
  },
  {
    "apptype": "SqlServerWriter,Microsoft Exchange Writer,SharePoint Services
Writer,VMBackup,Microsoft Hyper-V VSS Writer,Oracle,ConsistGrp",
    "constant": "false",
    "default": "no",
    "desc": "Truncate log after backup for MSSQL/Exchange; Purge log after backup for
Oracle",
    "multi": "false",
    "name": "truncatelog",
    "required": "false",
    "select": "true",
    "type": "string"
  },
  {
    "apptype": "ConsistGrp",
    "constant": "false",
    "default": "no",
    "desc": "Ignore offline applications during backup",
    "multi": "false",
    "name": "skipofflineappsincongrp",
    "required": "false",
    "select": "true",
    "type": "string"
  },
  {
    "apptype": "FileSystem,SqlServerWriter,Microsoft Exchange Writer,SharePoint Services
Writer,CIFS,NFS,ConsistGrp",
    "constant": "false",
    "default": "no",
    "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": "fail",
      "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
}

```

## mkpolicyoption

[About mkpolicyoption Command](#) on page 437

[mkpolicyoption Request Details](#) on page 437

[mkpolicyoption Example](#) on page 438

### About mkpolicyoption Command

#### Description

Use this command to create an option that changes the default behavior when performing backup operations. Use **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

Parameter	Description
<b>appid</b> =integer	Optional. Specifies the application or consistency group ID for CDS/Sky. A non-zero value specifies that this option applies to this application or consistency group. Use <a href="#">lsapplication</a> or <a href="#">lsconsistgrp</a> to retrieve the application or consistency group ID.
<b>name</b> =string	Required. Specifies name of the policy option. See <a href="#">Appendix E, List of Policy Options</a> for a complete list of supported policy options.
<b>policyid</b> =integer	Optional. Specifies the ID of the policy. A non-zero value specifies that this option applies to this specific policy. Use <a href="#">lspolicy</a> to retrieve the policy ID.
<b>slaid</b> =integer	Optional. Specifies an SLA ID. A non-zero value specifies that this option applies to this specific SLA. Use <a href="#">lssla</a> to retrieve the SLA ID.
<b>sltid</b> =integer	Optional. Specifies an SLT ID. A non-zero value specifies that this option applies to this specific SLT. Use <a href="#">lssl</a> to retrieve the SLT ID.
<b>value</b> =string	Required. Specifies the value of the policy option identified by the <b>name</b> parameter. Multiple values need to be separated by comma. For example, ','. (comma character), ',', needs to be escaped with two commas, '%27%2C%27'.

### 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.

Method

URI

Required Parameters

POST	/actifio/api/task/mkpolicyoption	name=<policy option> value=<value of the policy option>
------	----------------------------------	------------------------------------------------------------

---

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

---

## mkpolicyoption Example

### Creating a new policy option for specific policy.

#### Request

```
POST https://{API_HOST}/actifio/api/task/  
mkpolicyoption?policyid=189&name=appconsistency&value=no  
HTTP Request Header  
Authorization: Actifio 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.
```

## lspolicyoption

[About lspolicyoption Command](#) on page 439

[lspolicyoption Request Details](#) on page 439

[lspolicyoption Example](#) on page 439

### About lspolicyoption 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

Parameter	Description
<b>filtervalue</b> =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 <b>lspolicyoption</b> command are: <ul style="list-style-type: none"><li>• name</li><li>• appid</li><li>• policyid</li><li>• slaid</li><li>• sltid</li><li>• value</li></ul> The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&' character.
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the parameter, a concise view of all objects matching the filter criteria is displayed.

### lspolicyoption Request Details

Your **lspolicyoption** 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	/actifio/api/task/lspolicyoption	None

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

### lspolicyoption Example

**Fetching list of all policy options.**

## Request

GET https://{API\_HOST}/actifio/api/info/lspolicyoption

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 441

[chpolicyoption Request Details](#) on page 441

[chpolicyoption Example](#) on page 441

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the policy option to be changed. If multiple values are allowed, they need to be separated by a colon, ':'. Use <a href="#">lspolicyoption</a> command to obtain the ID of the policy option.
<b>value</b> =string	Optional. Specifies value of the option. If multiple values are allowed, they need to be separated by a comma. See <a href="#">List of Policy Options</a> on page 567 for a complete list of policy options.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/chpolicyoption</code>	<code>argument=&lt;policy option Id/Ids&gt;</code>

---

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

---

### chpolicyoption Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/chpolicyoption?argument=153544&value=yes
```

HTTP Request Header

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

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

#### Response

Request success

```
{
```

```
"result": "153544",  
"status": 0  
}
```



## rmpolicyoption

About rmpolicyoption Command on page 443

rmpolicyoption Request Details on page 443

rmpolicyoption Example on page 443

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the policy option to be removed. Use <a href="#">lspolicy</a> to retrieve the policy ID.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmpolicyoption	argument=<policy option ID>

---

**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://{Actifio_API_HOST}/actifio/api/task/rmpolicyoption?argument=153544
```

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
}
```

#### Verifying that the policy option has been deleted.

**Request**

GET https://{Actifio\_API\_HOST}/actifio/api/info/lspolicyoption?argument=153544

HTTP Request Header

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

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

**Response**

Sky/CDS error:10016 object not found: 15344

## rmpolicy

[About rmpolicy Command](#) on page 445

[rmpolicy Request Details](#) on page 445

[rmpolicy Example](#) on page 445

### About rmpolicy Command

#### Description

Use this command to delete a policy.

#### Rights

You must have the 'SLA Manage' right to delete a policy.

#### Parameters

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID of the policy to be removed. Use <a href="#">lspolicy</a> to retrieve the policy ID.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmpolicy</code>	<code>argument=&lt;policy ID&gt;</code>

---

**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}/actifio/api/task/rmpolicy?argument=153326
```

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
}
```

This deletes the policy with ID of 153326. Next, verify that the policy has been deleted.

**Request**

GET https://{API\_HOST}/actifio/api/info/lspolicy?argument=153326  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

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

**Response**

Request success

Sky/CDS error:10016 object does not exist: 15332

## lsinterface

[About lsinterface Command](#) on page 447

[lsinterface Request Details](#) on page 447

[lsinterface Example](#) on page 447

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/ lsinterface	None

---

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

---

### lsinterface Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsinterface?
```

```
HTTP Request Header
```

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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
}
```

## lsconfiguredinterface

[About lsconfiguredinterface Command](#) on page 449

[lsconfiguredinterface Request Details](#) on page 449

[lsconfiguredinterface Example](#) on page 449

### 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.

### lsconfiguredinterface Request Details

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

Method	URI	Required Parameters
GET	/actifio/api/info/ lsconfiguredinterface	None

### lsconfiguredinterface Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsconfiguredinterface
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": [
    {
      "nodename": "Gangac",
      "ipaddress": "1xx.xxx.xxx.xxx",
      "netmask": "2xx.xxx.xxx.xxx",
      "interface": "eth0",
      "type": "node",
      "gateway": "1xx.xxx.xxx.xxx"
    },
    {
      "nodename": "Gangac",
      "ipaddress": "1xx.xxx.xxx.xxx",
      "netmask": "2xx.xxx.xxx.xxx",
      "interface": "eth0",
      "type": "iscsi",
      "gateway": "1xx.xxx.xxx.xxx"
    }
  ],
}
```

```
{
  "nodename": "cluster",
  "ipaddress": "1xx.xxx.xxx.xxx",
  "netmask": "2xx.xxx.xxx.xxx",
  "interface": "eth0",
  "type": "cluster",
  "gateway": "1xx.xxx.xxx.xxx"
}
],
"status": 0
}
```



## lsnetworkcapability

[About lsnetworkcapability Command](#) on page 451

[lsnetworkcapability Request Details](#) on page 451

[lsnetworkcapability Example](#) on page 451

### About lsnetworkcapability Command

#### Description

Use this command to display all network capabilities that the appliance supports.

#### Rights

You must have the 'System Manage', or 'System View' rights to display outbound policies.

### lsnetworkcapability Request Details

Your `lsnetworkcapability` 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	/actifio/api/info/ lsnetworkcapability	None

---

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

---

### lsnetworkcapability Example

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/lsnetworkcapability
```

```
HTTP Request Header
```

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

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

#### Response

```
Request success
```

```
{
  "result": [
    {
      "name": "isInCloud",
      "value": "yes"
    }
  ],
  "status": 0
}
```

## configoutboundpolicy

[About configoutboundpolicy Command](#) on page 452

[configoutboundpolicy Request Details](#) on page 453

[configoutboundpolicy Example](#) on page 453

### 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

Parameter	Description
<b>add</b> =boolean	Optional. To add an outbound policy. Requires target and from to also be specified. If specified target already exists, that policy will be updated.
<b>default</b> =string	Optional. To set the system-wide outgoing default policy. Requires from to also be specified.
<b>delete</b> =boolean	Optional. To delete an outgoing policy. Requires target to also be specified
<b>target</b> =string	Required. Specifies an IP, with or without a prefix or netmask. For example, 1.2.3.4, 1.2.3.4/32 (equivalent).
<b>from</b> =string	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 .
<b>gateway</b> =string	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).
<b>netmask</b> =integer	Optional. Specifies the subnet mask to be used in conjunction with the specified target. Ignored if target specifies bit size.
<b>prio</b> =integer	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.

### configoutboundpolicy Request Details

Your configoutboundpolicy request must pass a valid session ID. For information see [Authentication or Login](#) on page 1.

Method	URI	Required Parameters
POST	/actifio/api/task/ configoutboundpolicy	target from add   delete   default

---

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

---

### configoutboundpolicy Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/  
configoutboundpolicy?add=true&from=eth0&target=1xx.xxx.xxx.xxx
```

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  
}
```

## lsoutboundpolicy

[About lsoutboundpolicy Command](#) on page 454

[lsoutboundpolicy Request Details](#) on page 454

[lsoutboundpolicy Example](#) on page 454

### 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.

#### Rights

You must have the 'System Manage' or 'System View' right to display outbound policies.

### lsoutboundpolicy Request Details

Your lsoutboundpolicy request must pass a valid session ID. For information see [Authentication or Login](#) on page 1.

Method	URI	Required Parameters
GET	/actifio/api/info/lsoutboundpolicy	None

---

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

---

### lsoutboundpolicy Example

#### Request

GET https://{API\_HOST}/actifio/api/info/lsoutboundpolicy

HTTP Request Header

Authorization: Actifio 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](#) on page 455

[configntp Request Details](#) on page 455

[configntp Example](#) on page 455

### About configntp Command

#### Description

Use this command to configure NTP settings.

#### Rights

You must have the 'System Manage' right to configure NTP settings.

#### Parameters

Parameter	Description
<b>server</b> =string	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.

### configntp Request Details

Your configntp request must pass a valid session ID. For information see [Authentication or Login](#) on page 1.

Method	URI	Required Parameters
POST	/actifio/api/task/configntp	server

---

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

---

### configntp Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/configntp?server=0.centos.pool.ntp.org
```

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  
}
```

## lsntp

[About lsntp Command](#) on page 456

[lsntp Request Details](#) on page 456

[lsntp Example](#) on page 456

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/lsntp	None

### lsntp Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/lsntp
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": [
    {
      "server": "time.actifio.com"
    }
  ],
  "status": 0
}
```

## testconnection

[About testconnection Command](#) on page 457

[testconnection Request Details](#) on page 457

[testconnection Example](#) on page 457

### 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 'tcpstest' 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

Parameter	Description
<b>type</b> =string	Optional. Specifies type of test, ping or tcpstest, default to ping.
<b>targetip</b> =string	Required. Specifies the target IP address.
<b>targetport</b> =integer	Optional (required for tcpstest). Specifies the target port, as to be between 1 and 65534, inclusive
<b>sourceip</b> =string	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.

### 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}/actifio/api/task/testconnection?&targetip=1xx.xxx.xxx.xxx
```

HTTP Request Header

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

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

#### Response

Request success

```
{
```

```
"result": "PING 172.27.0.204 (172.27.0.204) 56(84) bytes of data.\n64 bytes from  
172.27.0.204: icmp_seq=1 ttl=63 time=0.167 ms\n64 bytes fr  
om 172.27.0.204: icmp_seq=2 ttl=63 time=0.149 ms\n64 bytes from 172.27.0.204: icmp_seq=3 ttl=63  
time=0.166 ms\n64 bytes from 172.27.0.204: ic  
mp_seq=4 ttl=63 time=0.186 ms\n\n--- 172.27.0.204 ping statistics ---\n4 packets transmitted, 4  
received, 0% packet loss, time 3000ms\nrtt mi  
n/avg/max/mdev = 0.149/0.167/0.186/0.013 ms",  
"status": 0  
}
```



## showroute

[About showroute Command](#) on page 459

[showroute Request Details](#) on page 459

[showroute Example](#) on page 459

### 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

Parameter	Description
<b>sourceip</b> =string	Optional. Specifies the originating IP address. Must be one of the IP addresses defined on the appliance.
<b>targetip</b> =string	Required. Specifies the target IP address.

### showroute Request Details

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

Method	URI	Required Parameters
GET	/actifio/api/info/showroute	targetip

---

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

---

### showroute Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/showroute?targetip=1xx.xxx.xxx.xxx
```

HTTP Request Header

```
Authorization: Actifio 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](#) on page 460

[showrouting Request Details](#) on page 460

[showrouting Example](#) on page 460

### 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 Actifio 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.

Method	URI	Required Parameters
GET	/actifio/api/info/showrouting	None

### showrouting Example

#### Request

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

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

#### Response

Request success

```
{
  "result": "\nRULES:\n0:\tfrom all lookup local \n101:\tfrom 1xx.xxx.xxx.xxx lookup eth0_n
\n101:\tfrom all to 1xx.xxx.xxx.xxx lookup eth0_n \
n180:\tfrom all to 1xx.xxx.xxx.xxx lookup eth0_n \n197:\tfrom all to 1xx.xxx.0.0/16 lookup
eth0_n \n32766:\tfrom all lookup main \n32767:\tfrom
  all lookup default \n\nTABLE main:\n1xx.xxx.0.0/16 dev eth0 scope link metric 1002
\n1xx.xxx.0.0/16 dev eth0 proto kernel scope link src
1xx.xxx.xxx.xxx \ndefault via 1xx.xxx.1.1 dev eth0 \n\nTABLE eth0_n:\n1xx.xxx.0.0/16 dev eth0
proto static scope link src 1xx.xxx.xxx.xxx \nd
efault via 1xx.xxx.1.1 dev eth0 proto static src 1xx.xxx.xxx.xxx \n",
  "status": 0
}
```

## showtracepath

[About showtracepath Command](#) on page 461

[showtracepath Request Details](#) on page 461

[showtracepath Example](#) on page 461

### 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

Parameter	Description
<b>port</b> =integer	Optional. Specifies the target port, has to be between 1 and 65534, inclusive.
<b>targetip</b> =string	Required. Specifies the target IP address.

### showtracepath Request Details

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

Method	URI	Required Parameters
GET	/actifio/api/info/showtracepath	targetip

---

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

---

### showtracepath Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/showtracepath?targetip=1xx.xxx.xxx.xxx
```

HTTP Request Header

```
Authorization: Actifio 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\n 1\nsqagw-ndmn9k02.sqa.actifio.com (1xx.xxx.xxx.xxx)  0.432\nms  0.470 ms  0.542 ms\n 2  * * *\n 3  * * *\n 4  * * *\n 5  * * *\n 6  * * *\n 7  * * *\n 8  * *\n 9  * * *\n10 * * *\n11 * * *\n12 * *\n13 * * *\n14 * * *\n15 * * *\n16 * * *\n17 * * *\n18 * * *\n19 * * *\n20 * * *\n21 * *\n22 * * *\n23 * * *\n24 * * *\n25 * *\n26 * * *\n27 * * *\n28 * * *\n29 * * *\n30 * * *",\n  "status": 0\n}
```

## Bandwidth Commands

### mkbandwidthschedule

[About mkbandwidthschedule Command](#) on page 463

[mkbandwidthschedule Request Details](#) on page 463

[mkbandwidthschedule Example](#) on page 464

#### 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

Parameter	Description
<b>bandwidth</b> =integer	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.
<b>clusterid</b> =string	Required. Specifies the ID of the appliance for outgoing bandwidth to be enforced. Use <code>udsinfo Iscluster</code> to retrieve the Actifio appliance ID.
<b>replicationtype</b> =DEDUP   SNAP	Optional. Specifies the type of the replication that the bandwidth schedule is assigned to for CDS/Sky. Valid values are DEDUP (default) and SNAP.
<b>scheduleday</b> =string	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.
<b>scheduletype</b> =monthly   weekly   daily   hourly	Optional. Specifies the type of schedule.
<b>scheduletime</b> =string	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.

#### mkbandwidthschedule Request Details

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

Method

URI

Required Parameters

POST	/actifio/api/task/ mkbandwidthschedule	clusterid
------	-------------------------------------------	-----------

---

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

---

### mkbandwidthschedule Example

#### Request

POST https://{API\_HOST}/actifio/api/task/  
mkbandwidthschedule?bandwidth=10&clusterid={CLUSTERID}&replicationtype=DEDUP&scheduleday=thu&schedu  
duletype=weekly&scheduletime=01:00

HTTP Request Header

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

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

#### Response

Request success

```
{  
  "result": "15359"  
  "status": 0  
}
```

## lsbandwidthschedule

[About lsbandwidthschedule Command](#) on page 465

[lsbandwidthschedule Request Details](#) on page 465

[lsbandwidthschedule Example](#) on page 466

### About lsbandwidthschedule 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 CDS/Sky.

There are two types of replications that the bandwidth schedule can be assigned to for CDS/Sky: DEDUP and SNAP.

#### Rights

You must have the 'System View' or 'System Manage' rights to retrieve details of bandwidth schedules.

#### Parameters

Parameter	Description
<b>filtervalue</b> =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 <b>lsbandwidthschedule</b> command are:  *clusterid The filter will be formed with an attribute and a value.  When user specifies 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 profile (SLP) with name begins with 'foo', use filtervalue=name%3Dfoo.
<b>argument</b> =string	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 <b>filter</b> value parameter is ignored. If you do not specify the objectid, the concise view of all objects matching the filter criteria is displayed.

### lsbandwidthschedule Request Details

Your **lsbandwidthschedule** request must pass a valid session ID. For information see [Authentication or Login](#) on page 1.

Method	URI	Required Parameters
GET	/actifio/api/info/ lsbandwidthschedule	None

---

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

---

## lsbandwidthschedule Example

### Request

GET https://{API\_HOST}/actifio/api/info/lsbandwidthschedule?argument=15359

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": "10",
      "clusterid": "13474",
      "id": "13536",
      "replicationtype": "DEDUP",
      "scheduleday": "thu",
      "schedulesetime": "01:00",
      "schedulesetype": "weekly"
    },
    {
      "bandwidth": "10",
      "clusterid": "13474",
      "id": "13539",
      "replicationtype": "SNAP",
      "scheduleday": "fri",
      "schedulesetime": "02:00",
      "schedulesetype": "weekly"
    }
  ],
  "status": 0
}
```



## chbandwidthschedule

[About chbandwidthschedule Command](#) on page 467

[chbandwidthschedule Request Details](#) on page 467

[chbandwidthschedule Example](#) on page 467

### 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

Parameter	Description
<b>bandwidth</b> =integer	Required. Specifies the bandwidth used by dedup for the Actifio appliance (in Megabytes).
<b>argument</b> =string	Required. Specifies ID of the bandwidth schedule to be modified.

### chbandwidthschedule Request Details

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

Method	URI	Required Parameters
POST	<code>/actifio/api/task/chbandwidthschedule</code>	<code>argument=&lt;bandwidth schedule ID&gt;</code>

---

**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}/actifio/api/task/
chbandwidthschedule?argument=15359&&scheduleday=fri&scheduletime=05:00
```

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  
}
```

## rmbandwidthschedule

[About rmbandwidthschedule Command](#) on page 469

[rmbandwidthschedule Request Details](#) on page 469

[rmbandwidthschedule Example](#) on page 469

### 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

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID of the bandwidth schedule to be removed. Use <a href="#">lsbandwidthschedule</a> to retrieve a bandwidth schedules.

### rmbandwidthschedule Request Details

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

Method	URI	Required Parameters
POST	/actifio/api/task/rmbandwidthschedule	argument=<bandwidth schedule ID>

---

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

---

### rmbandwidthschedule Example

#### Request

POST `https://{API_HOST}/actifio/api/task/rmbandwidthschedule?argument=15359`

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

### export

[About export Command](#) on page 470

[export Request Details](#) on page 470

[export Example](#) on page 470

### About export Command

#### Description

Use this command to export all templates into a file. This file can be used to import templates using the [import](#) command.

#### Rights

You must have the 'System View,' 'System Manage,' or 'SLA View' right to export templates.

#### Parameters

Parameter	Description
<b>filename</b> =string	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.
<b>appliance</b> =string	Required. Specifies the name or ID of the target Actifio CDS or Sky appliance to execute this command. Use the <a href="#">lscluster</a> command to retrieve the Actifio appliance name or ID to help you identify the correct appliance to include in the <b>appliance</b> argument.

### export Request Details

Your **export** request must pass a valid session ID. For information see [Authentication or Login](#) on page 1.

Method	URI	Required Parameters
GET	/actifio/api/info/export	filename

---

**Note:** See the [Parameters](#) section for a list of supported parameters and their description.

---

### export Example

#### Request

```
GET https://{API_HOST}/actifio/api/info/export?filename=/home/templates.xml
```

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  
}
```

## import

The **import** command imports templates from a file.

[About import Command](#) on page 472

[import Request Details](#) on page 472

[import Example](#) on page 472

### About import Command

#### Description

Use this command to import policy templates. The file should be exported using [export](#) command.

#### Rights

You must have the 'Application Manage' or 'Host Manage' or 'SLA Manage' right to import templates.

#### Parameters

Parameter	Description
<b>duplication</b> = <i>add</i>   <i>ignore</i>   <i>replace</i>	Optional. Indicates the course of action when the name of an imported template matches that of an existing template of the Actifio 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'.
<b>filename</b> =string	Required. Specifies the name of the file to be imported. The file should be under /home or a subdirectory of /home.

### import Request Details

Your **import** request must pass a valid session ID. For information see [Authentication or Login](#) on page 1.

Method	URI	Required Parameters
POST	/actifio/api/task/import	filename

---

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

---

### import Example

#### Request

```
POST https://{API_HOST}/actifio/api/task/import?filename=/home/templates.xml
```

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  
}
```





# 8 Job Event and Notification Commands

These commands are for the tools used in monitoring job events and notifications. The GUI interface for these commands can be found in the Actifio Desktop.

For information, refer to ***Using the System Monitor to Monitor Jobs and Events*** in ActifioNOW. .

This chapter details the commands used to manage email and SNMP servers and perform archiving.

## Managing Job Event and Notifications

### SNMP Commands

[mksnmpconfig](#) on page 476  
[configsnpagent](#) on page 478  
[lssnmpconfig](#) on page 480  
[chsnmpconfig](#) on page 481  
[lssnmpevent](#) on page 483  
[rmsnmpconfig](#) on page 488

### Monitored Device Commands

[mkmonitoreddevice](#) on page 489  
[lsmonitoreddevice](#) on page 491  
[chmonitoreddevice](#) on page 493  
[rmmonitoreddevice](#) on page 495

### Email Server Commands

[configemailserver](#) on page 496  
[getemailserverconfig](#) on page 498  
[configserviceemail](#) on page 499  
[getserviceemailconfig](#) on page 501  
[configeventemail](#) on page 502  
[geteventemailconfig](#) on page 504  
[emaillogs](#) on page 505  
[rmeventemail](#) on page 507  
[rmemailserverconfig](#) on page 508  
[configcallhome](#) on page 509  
[getconfigcallhome](#) on page 510

## SNMP Commands

### mksnmpconfig

[About mksnmpconfig Command](#) on page 476

[mksnmpconfig Request Details](#) on page 476

[mksnmpconfig Example](#) on page 477

#### About mksnmpconfig Command

##### Description

Use this command to create a new SNMP server configuration.

---

**Note:** Actifio appliance supports SNMP v2 traps only.

---

##### Rights

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

##### Parameters

#### mksnmpconfig Request Details

Parameter	Description
<b>error</b> = <i>on</i>   <i>off</i>	Optional. Enables or disables receiving 'error' traps.
<b>info</b> = <i>on</i>   <i>off</i>	Optional. Enables or disables receiving 'info' traps.
<b>ipaddress</b> =string	Required. Specifies the IP address of the SNMP server.
<b>name</b> =string	Required. Specifies the name of the SNMP server.
<b>port</b> =integer	Optional. Specifies the port of the SNMP server. The default value is 162.
<b>warning</b> = <i>on</i>   <i>off</i>	Optional. Enables or disables receiving 'warning' traps.

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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mksnmpconfig</code>	<code>ipaddress=&lt;IP address of SNMP server&gt;</code> <code>name=&lt;name of the SNMP config&gt;</code>

---

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

---

## mksnmpconfig Example

### 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

Request success

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

## configsnmpagent

[About configsnmpagent Command](#) on page 478

[configsnmpagent Request Details](#) on page 479

[configsnmpagent Examples](#) on page 479

### About configsnmpagent Command

#### Description

Use this command to enable the SNMP agent in the Actifio appliance and to set the community string for SNMPv2 authentication by the SNMP agent and the management system. The Actifio appliance extends SNMPv2 support to the SNMP GET request process through the activation of an SNMP agent in the appliance to register all corresponding Actifio MIB classes to support the PULL/GET mechanism. The management system (the client) “pulls” data from the SNMP agent in the Actifio appliance. The SNMP agent service in the Actifio appliance is started as part of the PSRV service on port UDP-161 for SNMP messages.

The Actifio SNMP agent runs on the Actifio appliance as part of the PSRV service, and the Actifio SNMP agent serves all requests sent by any SNMP client or management system to monitor and manage Actifio appliance configurations, system statistics and performance, and so on. The SNMP agent integrates monitoring and management extensions into the Actifio 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 Actifio 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 Actifio MIBs, SNMP pulls specific objects to monitor and Actifio 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 Actifio appliance to the management system (the client). When you set the **snmptablesize** parameter, the SNMP agent retrieves only the specified number of records and send 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 Actifio CDS and Sky appliances and specifies a community string for SNMPv2 authentication by the SNMP agent and the management system.

#### Rights

You must have the 'System Manage' right to activate the SNMP agent on the Actifio appliance to perform SNMP GET requests.

#### Parameters

Parameter	Description
<b>communitystring=</b> string	Optional. Sets the SNMPV2 community string for performing SNMP GET requests by the Actifio appliance. Enter an authentication pass phrase for connecting to the SNMP agent as the <i>key</i> .

Parameter	Description
<b>enable</b> =boolean	Optional. This value enables or disables the SNMP agent residing in the Actifio appliance. Value are: <ul style="list-style-type: none"> <li><b>true</b>—Enables the SNMP agent in the Actifio appliance</li> <li><b>false</b>—Disables the SNMP agent in the Actifio appliance</li> </ul>

### configsnpagent Request Details

Your `configsnpagent` 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/configsnpagent	None

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

### configsnpagent Examples

#### Configuring an SNMP Agent with a community string and enable the agent.

##### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/
configsnpagent?communitystring=ActifioTeam&enable=true
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

##### Response

```
Request success
{
  "result": "SNMP V2 communitystring is succesfully updated.CDS SnmpAgent is enabled and
successfully started.",
  "status": 0
}
```

#### Disabling the SNMP Agent on the appliance.

##### Request

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

##### Request

```
Request success
{
  "result": "CDS SnmpAgent is disabled and successfully stopped.",
  "status": 0
}
```

## lssnmpconfig

[About lssnmpconfig Command](#) on page 480

[lssnmpconfig Request Details](#) on page 480

[lssnmpconfig Example](#) on page 480

### About lssnmpconfig Command

#### Description

Use this command to display the concise view of the SNMP server configuration.

---

**Note:** *The Actifio appliance supports SNMP v2 traps only.*

---

#### Rights

You must have the 'System View' or 'System Manage' to view the configuration of an SNMP server.

### lssnmpconfig Request Details

Your `lssnmpconfig` 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	/actifio/api/info/lssnmpconfig	None

### lssnmpconfig Example

**Fetching the SNMP config information from the appliance.**

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/lssnmpconfig
```

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 481

[chsnmpconfig Request Details](#) on page 481

[chsnmpconfig Example](#) on page 482

### 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 Actifio appliance.

---

**Note:** The Actifio appliance supports SNMP v2 traps only.

---

#### Rights

You must have the 'System Manage' right to modify the configuration of an SNMP server.

#### Parameters

Parameter	Description
<b>ipaddress</b> =string	Optional. Specifies new IP address for the SNMP server.
<b>port</b> =integer	Optional. Specifies the remote port number for the SNMP server. It defaults to 162. This should be a value from 1 through 65535.
<b>info</b> =on   off	Optional. Specifies whether the server receives the 'information' notifications.
<b>warning</b> =on   off	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.
<b>error</b> =on   off	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.
<b>argument</b> =string	Required. Specifies the SNMP configuration to be modified.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chsnmpconfig	argument

---

**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://{Actifio_API_HOST}/actifio/api/task/chsnmpconfig?argument=Default-SNMP&warning=on&info=on`

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-SNMP",
  "status": 0
}
```



## lssnmpevent

[About lssnmpevent Command](#) on page 483

[lssnmpevent Request Details](#) on page 483

[lssnmpevent Examples](#) on page 484

### About lssnmpevent 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

Parameter	Description
<b>filtervalue</b> =attribute% 3Dvalue	<p>Optional. Specifies that you want your report to display any or the entire list of valid filter attributes. The valid filter attributes for the <b>lssnmpevent</b> command are:</p> <ul style="list-style-type: none"><li>• clustername</li><li>• eventdate</li><li>• errorcode</li><li>• eventid</li><li>• messagetext</li><li>• notificationtype [ error   warning   info ]</li><li>• objecttype [ adhd   omd   psrv   udp ]</li></ul> <p>The filter is formed with an attribute and a value. When you specify more than one filter, they must be combined with '&amp;' character.</p> <p>For string type of filters, the only operator allowed is '='. You can also use wild card character '*'.</p> <p>Some filters allow only predefined constants. For example, notificationtype allows only error, warning, or info.</p> <p>For number and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=.</p>
<b>argument</b> =integer	<p>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 <b>filtervalue</b> parameter is ignored. If you do not specify the <i>argument</i> parameter, a concise view of all objects matching the filter criteria is displayed.</p>

### lssnmpevent Request Details

Your **lssnmpevent** 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	/actifio/api/info/lssnmpevent	None

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

## lssnmpevent Examples

### Fetching all SNMP events from the appliance.

#### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/lssnmpevent  
 HTTP Request Header  
 Authorization: Actifio 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\\nviolation time 2017-11-22
23:59:00.0\\nviolation 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\\nviolation time  2017-11-22
23:59:00.0\\nviolation 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",
        "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          2017-11-24 00:15:00.095\\nviolation time  2017-11-23
23:59:00.0\\nviolation 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 2017-11-23 00:00:04-0500 scheduling for the
application was disabled or snapshot scheduling was disabled for all applications.\\n",
        "eventdate": "2017-11-24 00:15:00.110",
        "eventid": "10043",
        "eventstatus": "",
        "id": "152316",
        "notificationtype": "warning",
        "objectid": "1",
        "objecttype": "psrv",
        "requiresclearing": "false",
        "sequenceid": "0",
        "sourceeventdate": ""
    }
],
    "status": 0
}

```

### Fetching SNMP events with the specific Id.

#### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/lssnmpevent?argument=153448

HTTP Request Header

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

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

#### Response

Request success

```

{
    "result": {
        "clustername": "localhost.localdom",

```

```

        "component": "CDS",
        "errormessage": "SLA violation(s) found for application TP-Linux on host tp-linux and
template TP-Template",
        "eventdate": "2017-11-26 00:15:00.107",
        "eventid": "10043",
        "id": "153448",
        "notificationtype": "warning",
        "objectid": "1",
        "objecttype": "psrv",
        "requiresclearing": "false",
        "sequenceid": "0"
    },
    "status": 0
}

```

### Fetching SNMP events filtered using the filtervalue argument. (Fetch all events that occurred after Nov 24, 2017.)

#### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/lssnmpevent?filtervalue=eventdate>2017-11-24  
HTTP Request Header

Authorization: Actifio 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 /boot on host tp-linux and
template TP-Template\n\n\npolicy          Production to Snap 1\n\npolicy type
normal\n\nstattime          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\njob tolerance    0\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\n",
      "eventdate": "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\\npolicy          Production to Snap 1\\npolicy type
normal\\nstatime          2017-11-26 00:15:00.097\\nviolation time  2017-11-25
23:59:00.0\\nviolation 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 2017-11-25 00:00:03-0500 scheduling for the
application was disabled or snapshot scheduling was disabled for all applications.\\n",
    "eventdate": "2017-11-26 00:15:00.107",
    "eventid": "10043",
    "eventstatus": "",
    "id": "153448",
    "notificationtype": "warning",
    "objectid": "1",
    "objecttype": "psrv",
    "requiresclearing": "false",
    "sequenceid": "0",
    "sourceeventdate": ""
  }
],
"status": 0
}

```

## rmsnmpconfig

[About rmsnmpconfig Command](#) on page 488

[rmsnmpconfig Request Details](#) on page 488

[rmsnmpconfig Example](#) on page 488

### 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

Parameter	Description
<b>argument=</b> string	Required. Specifies the name of the SNMP server to be deleted.

### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/rmsnmpconfig</code>	argument

---

**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://{Actifio_API_HOST}/actifio/api/task/rmsnmpconfig?argument=Default-SNMP
```

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  
}
```

## Monitored Device Commands

### mkmonitoreddevice

[About mkmonitoreddevice Command](#) on page 489

[mkmonitoreddevice Request Details](#) on page 489

[mkmonitoreddevice Example](#) on page 490

#### About mkmonitoreddevice Command

##### Description

Use this command to add a new device to monitor for connectivity. At regular intervals, the Actifio 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

Parameter	Description
<b>ipaddress</b> =integer	Required. Specifies the IP address for the host. The monitoring process does not rely on DNS lookups so names are not allowed.
<b>name</b> =string	Required. Specifies a name to identify the device. The name must be unique within the device type.
<b>password</b> =string	Optional. The password to use to connect to the device if required for the given device type for CDS/Sky.
<b>readonlyr</b> =boolean	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.
<b>type</b> = <i>switch</i>   <i>storage</i>	Required. Specifies the type of device to monitor. Either a switch or a storage device.
=string	Optional. The username to use to connect to the CDS/Sky device if required for the given device type.

#### 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.

Method	URI	Required Parameters
POST	<code>/actifio/api/task/mkmonitoreddevice</code>	name ipaddress type

---

**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://{Actifio_API_HOST}/actifio/api/task/  
mkmonitoreddevice?name=UnderWatch&ipaddress={MONITOR_IP_ADDRESS}&type=switch&readonly=true
```

HTTP Request Header

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

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

#### Response

Request success

```
{  
  "result": "154350",  
  "status": 0  
}
```



## lsmonitoreddevice

[About lsmonitoreddevice Command](#) on page 491

[lsmonitoreddevice Request Details](#) on page 491

[lsmonitoreddevice Example](#) on page 491

### About lsmonitoreddevice 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

Parameter	Description
<b>type</b> =string	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.
<b>argument</b> =integer	Optional. Specifies the ID of the device to get detailed information.

### lsmonitoreddevice Request Details

Your `lsmonitoreddevice` 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	/actifio/api/info/lsmonitoreddevice	None

---

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

---

### lsmonitoreddevice Example

#### Fetching list of monitored devices.

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/lsmonitoreddevice
```

HTTP Request Header

```
Authorization: Actifio 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](#) on page 493

[chmonitoreddevice Request Details](#) on page 493

[chmonitoreddevice Example](#) on page 494

### 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

Parameter	Description
<b>ipaddress</b> =string	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.
<b>name</b> =string	Optional. Specifies a name to identify the device. If id is not specified this value is required.
<b>username</b> =string	Optional. The name of the user who is to connect to the given device type for CDS/Sky.
<b>password</b> =string	Optional. The authentication password to connect to the given device type for CDS/Sky.
<b>readonly</b> =boolean	Optional. Choices are True or False for CDS/Sky. True specifies that the device hardware is not shipped by Actifio; False specifies that the device hardware is provided by Actifio.
<b>argument</b> =integer	Required. Specifies the ID for CDS/Sky of the device. Use <a href="#">lsmonitoreddevice</a> to get the ID/SRCID of the device.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/chmonitoreddevice	argument=<id of the monitored device>

---

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

---

### chmonitoreddevice Example

**Update a monitored device by adding a username.**

#### Request

POST `https://{Actifio_API_HOST}/actifio/api/task/chmonitoreddevice?argument=154350&username=adminuser`

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
}
```

## rmmonitoreddevice

[About rmmonitoreddevice Command](#) on page 495

[rmmonitoreddevice Request Details](#) on page 495

[rmmonitoreddevice Example](#) on page 495

### 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

Parameter	Description
<b>argument</b> =integer	Required. Specifies the ID to identify the device.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmmonitoreddevice	argument

---

**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://{Actifio_API_HOST}/actifio/api/task/rmmonitoreddevice?argument=154350
```

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
}
```

## Email Server Commands

### configemailserver

[About configemailserver Command](#) on page 496

[configemailserver Request Details](#) on page 497

[configemailserver Example](#) on page 497

#### About configemailserver Command

##### Description

Use this command to configure the email server to allow the Actifio appliance to send emails.

##### Rights

You must have the 'System Manage' right to configure the email server.

##### Parameters

Parameter	Description
<b>emailserver</b> =string	Optional. Specifies the host name or IP address of the email server. This option is required when the email server is specified for the first time.
<b>emailuser</b> =string	Optional. Specifies the username to authenticate to the email server. This option is required when the email server is specified for the first time.
<b>messagelimit</b> =string	Optional. Specifies the email size allowed by the email server. The email size should be suffixed with KB or MB. The default email size is 10MB. <i>Space between the number and units is not allowed, only KB and MB are supported.</i>
<b>nopassword</b> =boolean	Optional. Specifies that no authentication is required to send an email. Using this option deletes the password if it is configured already. You cannot use this option along with the password option.
<b>password</b> =string	Optional. Specifies the password of the email user.
<b>port</b> =integer	Optional. Specifies the email server port. The default value is 25 for an SMTP server and 465 for an SMTPS server.
<b>ssl</b> =boolean	Optional. Indicates whether the email should be sent using the SSL protocol. For the <b>ssl</b> parameter value, note the following conditions: <ul style="list-style-type: none"><li>• <i>true</i> must be added if the email server is smtp.gmail.com.</li><li>• <i>false</i> must be added if the email server is svn.actifio.com.</li></ul>
<b>test</b> =boolean	Optional. When set to true, sends out a test email.
<b>emailfrom</b> =string	Optional. Specifies the email address to use as the FROM address.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configemailserver	None

---

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

---

### configemailserver Example

#### Configuring new email server.

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/
configemailserver?emailserver={EMAIL_HOST}&emailuser=admin@datainc.com&messagelimit=15MB
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
}
```

## getemailserverconfig

[About getemailserverconfig Command](#) on page 498

[getemailserverconfig Request Details](#) on page 498

[getemailserverconfig Example](#) on page 498

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getemailserverconfig	None

### getemailserverconfig Example

#### Fetching information about the configured email server.

#### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/getemailserverconfig

HTTP Request Header

Authorization: Actifio 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 Command](#) on page 499

[configserviceemail Request Details](#) on page 499

[configserviceemail Examples](#) on page 499

### About configserviceemail Command

#### Description

Use this command to configure service email to be sent.

#### Rights

You must have the 'System Manage' right to be able to configure email server.

#### Parameters

Parameter	Description
<b>customername</b> =string	Optional. Specifies customer name.
<b>disable</b> =boolean	Optional. Specifies whether to enable or disable the service email.
<b>recipient</b> =string	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.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configserviceemail	None

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

### configserviceemail Examples

#### Configuring a service email.

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/  
configserviceemail?recipient=engineering@customer.com
```

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
}
```

## Configuring a service email for another customer with customer name.

### Request

POST [https://{Actifio\\_API\\_HOST}/actifio/api/task/configserviceemail?customername=Data,%20Inc.&recipient=emailgroup@datainc.com](https://{Actifio_API_HOST}/actifio/api/task/configserviceemail?customername=Data,%20Inc.&recipient=emailgroup@datainc.com)

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
}
```

## getserviceemailconfig

[About getserviceemailconfig Command](#) on page 501

[getserviceemailconfig Request Details](#) on page 501

[getserviceemailconfig Example](#) on page 501

### About getserviceemailconfig Command

#### Description

Use this command to retrieve the email sever 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.

Method	URI	Required Parameters
GET	/actifio/api/info/getserviceemailconfig	None

---

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

---

### getserviceemailconfig Example

**Fetching information about the service email config without any arguments.**

#### Request

```
GET https://{Actifio_API_HOST}/actifio/api/info/getserviceemailconfig
```

HTTP Request Header

```
Authorization: Actifio 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 502

[configeventemail Request Details](#) on page 502

[configeventemail Example](#) on page 503

### 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

Parameter	Description
<b>addemail</b> =string	Optional. Specifies an email address to be added to receive a notification from the SNMP server.
<b>deleteemail</b> =string	Optional. Specifies the email address that should no longer receive a notification from the SNMP server.
<b>eventtype</b> =warning   error   warning,error	Optional. Specifies the types of event (warning, error, or both) to begin event forwarding to the email address specified.
<b>interval</b> =integer	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.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configeventemail	None

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

## configeventemail Example

### Configure a new email event.

#### Request

POST `https://{Actifio_API_HOST}/actifio/api/task/configeventemail?addemail=customersupport@datainc.com&eventype=error`

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
}
```

## geteventemailconfig

[About geteventemailconfig Command](#) on page 504

[geteventemailconfig Request Details](#) on page 504

[geteventemailconfig Example](#) on page 504

### 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.

Method	URI	Required Parameters
GET	/actifio/api/info/geteventemailconfig	None

---

**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://{Actifio_API_HOST}/actifio/api/info/geteventemailconfig
```

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": {
    "email": "customersupport@datainc.com",
    "eventtype": "error",
    "interval": "30"
  },
  "status": 0
}
```

## emaillogs

[About emaillogs Command](#) on page 505

[emaillogs Request Details](#) on page 505

[emaillogs Example](#) on page 505

### About emaillogs Command

#### Description

Use this command to send various types of Actifio 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 Actifio appliance logs.

#### Parameters

Parameter	Description
<b>logtype</b> =adhd   database   flasher   install   omd   patch   psrv   udppm	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
<b>filelimit</b> =integer	Optional. Specifies the maximum number of log files to be sent for each log. '0' indicates all of the log files.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/emaillogs	None

---

**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://{Actifio_API_HOST}/actifio/api/task/emaillogs?logtype=adhd:database
```

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  
}
```

## Sending a limited set of log files via email.

### Request

POST [https://{Actifio\\_API\\_HOST}/actifio/api/task/emaillogs?logtype=adhd:database&filelimit=10](https://{Actifio_API_HOST}/actifio/api/task/emaillogs?logtype=adhd:database&filelimit=10)

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  
}
```



## rmeventemail

[About rmeventemail Command](#) on page 507

[rmeventemail Request Details](#) on page 507

[rmeventemail Example](#) on page 507

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmeventemail	None

### rmeventemail Example

#### Deleting the event (trap).

#### Request

POST `https://{Actifio_API_HOST}/actifio/api/task/rmeventemail`

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
}
```

## rmemailserverconfig

[About rmemailserverconfig Command](#) on page 508

[rmemailserverconfig Request Details](#) on page 508

[rmemailserverconfig Example](#) on page 508

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmemailserverconfig	None

### rmemailserverconfig Example

**Delete email server configuration.**

#### Request

POST `https://{Actifio_API_HOST}/actifio/api/task/rmemailserverconfig`

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
}
```

## configcallhome

[About configcallhome Command](#) on page 509

[configcallhome Request Details](#) on page 509

[configcallhome Example](#) on page 509

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/configcallhome	None

### configcallhome Example

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/  
configcallhomeconfig?customername=ActifioEngineering&mode=https
```

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  
}
```

## getConfigallhome

[About getConfigallhome Command](#) on page 510

[getConfigallhomeconfig Request Details](#) on page 510

[getConfigallhomeconfig Example](#) on page 510

### About getConfigallhome 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.

### getConfigallhomeconfig Request Details

Your `getConfigallhomeconfig` 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	/actifio/api/task/getcallhomeconfig	None

### getConfigallhomeconfig Example

#### Response

GET https://{Actifio\_API\_HOST}/actifio/api/info/getcallhomeconfig

HTTP Request Header

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

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

#### Response

Request success

```
{
  "result": {
    "mode": "https",
    "httpsendbaseurl": "https://callhome.actifio.net/generate-presigned-url",
    "customername": "Actifio-Engineering"
  },
  "status": 0
}
```

# 9 Actifio Connector Support Commands

These commands are for Actifio Connector, specific to finding the available connectors and upgrading Actifio Connectors. The GUI interface for these commands can be found in the Actifio Desktop.

For additional information, refer to **Connecting Hosts to Actifio Appliances** in ActifioNOW.

This chapter provides information related to following Actifio Connector commands.

## Managing Actifio Connector

### Commands

[lsavailableconnector](#) on page 512

[upgradehostconnector](#) on page 516

[abortupgradehostconnector](#) on page 518

[rmavailableconnector](#) on page 519

[fetchconnectorlogs](#) on page 520

## Isavailableconnector

[About Isavailableconnector Command](#) on page 512

[Isavailableconnector Request Details](#) on page 513

[Isavailableconnector Examples](#) on page 513

### About Isavailableconnector Command

#### Description

Use this command to return a concise list of available connectors, or a detailed view of an available connector.

#### Rights

You must have "System View" or 'System Manage' rights to view available connectors.

#### Parameters

Parameter	Description
<b>filtervalue</b> =attribute%3Dvalue	<p>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 <b>Isavailableconnector</b> command are:</p> <ul style="list-style-type: none"><li>• name</li><li>• componentversion</li><li>• componentname</li><li>• displayname</li><li>• installtime [installtime%20since%2024%20hours for installtime started since last 24 hours, installtime%20before%207%20days for installtime started older than 7 days ]</li><li>• latest</li><li>• ostype</li><li>• size</li></ul> <p>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 (%26 in hexadecimal).</p> <p>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*.</p> <p>For number and date types, allowed operators are: =, &gt;, &gt;=, &lt;, &lt;=. For RESTful API, the hexadecimal equivalent of these characters need to be used. For example,</p> <pre>filtervalue=size%3E28000000000</pre> <p>Date parameters installtime can also use these operators, for example,</p> <pre>filtervalue=installtime%3E2010-09-28</pre> <pre>filtervalue=expiration%3E2010-09-28%206:50:00</pre> <p>Multiple filtervalues are allowed, with an '&amp;' (%26 in hexadecimal),</p> <pre>filtervalue=installtime%3E2012-09-28%26size%3E128000000000</pre>

Parameter	Description
<b>argument</b> =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 <b>filtervalue</b> parameter is ignored. If you do not specify the parameter, the concise view of all objects matching the filter criteria is displayed.

### lsavailableconnector 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.

Method	URI	Required Parameter
GET	/actifio/api/info/lsavailableconnector	None

---

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

---

### lsavailableconnector Examples

#### Fetching a list of all available connectors.

##### Request

GET https://{Actifio\_API\_HOST}/actifio/api/info/lsavailableconnector

HTTP Request Header

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

where 92929a8b-a413-476f-a624-5b575cff54d3 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 14:16:05.000",
    "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://{Actifio_API_HOST}/actifio/api/info/
lsavailableconnector?filtervalue=ostype%3Dlinux_x86
HTTP Request Header
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3

where 92929a8b-a413-476f-a624-5b575cff54d3 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](#) on page 516

[upgradehostconnector Request Details](#) on page 516

[upgradehostconnector Example](#) on page 516

### About upgradehostconnector Command

#### Description

Use this command to upgrade the host with a specific version of the Actifio connector or the latest available connector from the Actifio appliance.

#### Rights

You must be Admin or have 'Administrator' role to upgrade a connector on a host.

#### Parameters

Parameter	Description
<b>hosts</b> =string	Required. Specifies a colon (:) separated list of ID or name of the hosts for upgrade. Use <a href="#">lshost</a> to retrieve the ID or name.
<b>force</b> =boolean	Optional. When set, it will cancel any running jobs on the host so it can be upgraded.
<b>version</b> =string	Optional. Specifies the upgrade version of the Actifio Connector.

### 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.

Method	URI	Required Parameter
POST	<code>/actifio/api/task/upgradehostconnector</code>	<code>hosts=&lt;hostid hostname&gt;</code>

---

**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}/actifio/api/task/upgradehostconnector?hosts=83040
```

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
}
```

## Upgrade a connector using the force option.

### Request

POST [https://{Actifio\\_API\\_HOST}/actifio/api/task/upgradehostconnector?hosts=83040&force=true](https://{Actifio_API_HOST}/actifio/api/task/upgradehostconnector?hosts=83040&force=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
}
```

## abortupgradehostconnector

[About abortupgradehostconnector Command](#) on page 518

[abortupgradehostconnector Details](#) on page 518

[abortupgradehostconnector Example](#) on page 518

### About abortupgradehostconnector Command

#### Description

Use this command to abort an ongoing Actifio Connector upgrade.

#### 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.

Method	URI	Required Parameter
POST	/actifio/api/task/abortupgradehostconnector	

### abortupgradehostconnector Example

#### Request

POST `https://{Actifio_API_HOST}/actifio/api/task/abortupgradehostconnector`

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
}
```

## rmavailableconnector

[About rmavailableconnector Command](#) on page 519

[rmavailableconnector Request Details](#) on page 519

[rmavailableconnector Example](#) on page 519

### About rmavailableconnector Command

#### Description

Use this command to delete an available connector from the Actifio appliance.

#### Rights

You must be Admin or have 'Administrator' role to delete a connector.

#### Parameters

Parameter	Description
<b>argument</b> =string	Required. Specifies the ID or name of the Actifio Connector to be removed. Use <a href="#">lsavailableconnector</a> for retrieving connector information.

### 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.

Method	URI	Required Parameters
POST	/actifio/api/task/rmavailableconnector	argument=<objectid objectname>

---

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

---

### rmavailableconnector Example

#### Removing an available connector.

#### Request

```
POST https://{Actifio_API_HOST}/actifio/api/task/rmavailableconnector?argument=48136
```

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
}
```

## fetchconnectorlogs

[About fetchconnectorlogs Command](#) on page 520

[fetchconnectorlogs Request Details](#) on page 521

[fetchconnectorlogs Example](#) on page 521

### About fetchconnectorlogs Command

#### Description

Use this command to fetch log files from the host managed by the Actifio appliance. This command downloads connector logs, syslog, diagnostic and core files from the host into the Actifio appliance log directory (**/dumps/tmp**). Apart from Actifio Connector logs, for a Windows 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 an Actifio representative by directly downloading logs from your Actifio appliance to your computer.

#### Rights

You must have 'Administrator' role to run this command.

#### Parameters

Parameter	Description
<b>all=boolean</b>	Optional. Specifying this flag will fetch all log types based on the limit specified.
<b>host=string</b>	Required. Specifies the host from which the logs are to be retrieved. Either the ID or name of the host is needed. Use <a href="#">lshost</a> to locate the ID or name of the host.
<b>limit=integer</b>	Optional. Specifies the number of log files to be downloaded from the host. Default value is set to '1'.
<b>type=&lt;syslog   core   nonblocking&gt;</b>	Optional. Specifies the additional file types to be downloaded apart from connector logs. Specifying more than one type should be delimited with ':'. Example: <code>type=syslog:core</code>
<b>startdate=string</b>	Optional. By default, the Actifio 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 CDS/Sky, use <b>startdate</b> to specify the start date of the time window to download the log files. The date format must be in 'yyyy-mm-dd'. If <b>startdate</b> is not specified, then the start date will automatically be set to the date that is three (3) days from the current date.

Parameter	Description
<b>enddate</b> =string	Optional. Specifies the end date of the time window to download the log files. The date format must be in 'yyyy-mm-dd'. If <b>startdate</b> is specified but not an <b>enddate</b> , then the end date is automatically set to the current date.

### fetchconnectorlogs Request Details

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.

Method	URI	Required Parameters
POST	/actifio/api/task/fetchconnectorlogs	host=<hostname hostid>

---

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

---

### fetchconnectorlogs Example

**Fetch connector logs from a specific host.**

#### Request

POST https://{Actifio\_API\_HOST}/actifio/api/task/fetchconnectorlogs?host=4834763

HTTP Request Header

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

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

#### Response

Request success

```
{
  "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/Setup Log 2017-10-17 #002.txt\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 #001.txt\n/dumps/tmp/Nike_Bug_Pfile/Setup Log 2017-12-01 #001.txt\n/dumps/tmp/Nike_Bug_Pfile/UDSAgent.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 2017-11-14 #001.txt\n/dumps/tmp/Nike_Bug_Pfile/TANDB_rman.log\n/dumps/tmp/Nike_Bug_Pfile/TANDB_rman.log.2\n/dumps/tmp/Nike_Bug_Pfile/BUGDB_rman.log\n",
  "status": 0
}
```





---

# A 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 523

[Advanced Settings for Oracle Databases](#) on page 524

[Advanced Settings for VM in an ESX Datastore](#) on page 526

[Overriding Script Timeout Settings for the Actifio Connector](#) on page 527

---

**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 Actifio 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:

- o Using this option, only files are excluded, directories are not excluded.
  - o 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.
  - o 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 "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" 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 an Actifio 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 -sltid 31986 -slaid 32135 -name notskip -value inaccessible
```

**Example: not skip offline table space:**

```
$ udstask mkpolicyoption -sltid 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 Actifio backup. If not specified then by default Actifio 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 Actifio to connect:

**Example:**

```
$ udstask udstask mkpolicyoption -sltid 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 -sltid 31986 -slaid 32135 -name clusternodes -value <Failover node IP:service: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 Actifio Connector option information.

**Example:**

```
$ udstask mkpolicyoption -sltid 31986 -slaid 32135 -name connectoroptions -value <Connector name>
```

## Advanced Settings for VM in an ESX Datastore

The Actifio 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 Actifio 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.

To access this feature in the Actifio Desktop, open the Appliance Manager to System > Configuration > Appliance Settings, Storage tab, and check the VM override checkbox.

## Overriding Script Timeout Settings for the Actifio Connector

To override the default script timeout values for the Actifio Connector, use the **udstask mkpolicyoption** command with these switches:

### Scriptinittimeout

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.

Example:  
`udstask mkpolicyoption -slaid 3198 -sltid 86086 -name scriptinittimeout -value 200`

### Scriptfreezetimeout

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.

Example:  
`udstask mkpolicyoption -slaid 3198 -sltid 86086 -name Scriptfreezetimeout -value 100`

### Scriptunfreezetimeout

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.

Example:  
`udstask mkpolicyoption -slaid 3198 -sltid 86086 -name Scriptunfreezetimeout -value 110`

### Scriptfinishtimeout

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.

Example:  
`udstask mkpolicyoption -slaid 3198 -sltid 86086 -name Scriptfinishtimeout -value 300`



---

# B Managing Jobs and Job Slots

---

This appendix describes the list of jobs executed when creating the policies:

- [On-demand Jobs](#) on page 529
- [Queuing of On-Demand Backup Jobs](#) on page 532
- [Relaunching Jobs](#) on page 532

Applying policies to applications results in the creation of jobs. These jobs are executed as per the schedules configured when creating policies. The Actifio 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 Actifio 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 Actifio 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 Actifio 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:

Parameter	Description	Default no. of slots allotted	Min. no. of slots	Max. no. of slots
<b>maxsnapslots</b>	Maximum number of scheduled snapshots.	6	0	1000
<b>maxstreamsnapslot</b>	Maximum number of scheduled stream snaps.	6	0	1000
<b>maxlidedupslots</b>	Maximum number of scheduled local dedups.	8	0	1000
<b>maxrdedupslots</b>	Maximum number of scheduled remote dedups.	3	0	1000
<b>maxdarslots</b>	Maximum number of scheduled dedup async.	3	0	1000
<b>maxdataaccessslots</b>	Maximum number of mount, clone and restore jobs.	12	0	1000
<b>maxvaultslots</b>	Maximum number of scheduled vault jobs.	4*	0	1000
<b>maxconcurrentvaultsubjobs</b>	Maximum number of concurrent vault subjobs ingesting into the vault. Subjobs are flow-controlled such that atleast one subjob per vault job is always allowed without throttling.	12*	4	1000
<b>maxlogreplicateslots</b>	Maximum number of scheduled stream snaps.	6	0	1000
<b>maxexpirationslots</b>	Maximum number of scheduled expirations.	10	0	1000
<b>maxondemandslots</b>	Maximum number of all types of on demand jobs.	6	0	1000
<b>unreservedslots</b>	Number of additional slots available for any job type.	12	0	100

**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:

Parameter	Description	Default no. of slots allotted	Min. no. of slots	Max. no. of slots
<b>reservedsnapslots</b>	Number of slots reserved for scheduled snapshots.	3	0	1000
<b>reservedstreamsnapslots</b>	Number of slots reserved for scheduled stream snapshots.	2	0	1000
<b>reserveddedupslots</b>	Number of slots reserved for scheduled local dedups.	3	0	1000
<b>reservedrdedupslots</b>	Number of slots reserved for scheduled remote dedups.	3	0	1000
<b>reserveddarslots</b>	Number of slots reserved for scheduled dedup async.	3	0	1000
<b>reserveddataaccessslots</b>	Number of slots reserved for mount, clone and restore jobs	6	0	1000
<b>reservedvaultslots</b>	Number of slots reserved for scheduled vault jobs.	4	0	1000
<b>reservedlogreplicateslots</b>	Number of slots reserved for scheduled stream snapshots.	2	0	1000
<b>reservedexpirationslots</b>	Number of slots reserved for scheduled expirations.	3	0	1000
<b>reservedondemandslots</b>	Number of slots reserved for all types of on demand jobs	3	0	1000

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:

```
$ 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.

## 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 on-demand job remains in the `pending` 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 pending jobs.

While an on-demand job is in a pending 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 queue the on-demand backup job:

```
$ udstask backup -app 18414 -policy 201304
ACTERR-043023 No available slots to run job
```

Using the Actifio appliance Desktop, you can view the pending jobs from **System 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 Actifio 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 retries 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.

Using the Actifio Desktop, you can view the relaunched jobs from **System Monitor > Jobs** with the job status as 'retry'. To view the details of a relaunched job, double-click the job. See [Using the System Monitor to Monitor Jobs and Events](#) in the Actifio Documentation Library and on ActifioNOW.

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# C Configuring Image Preservation

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This appendix describes the Image Preservation function and its configuration:

- [Image Preservation Overview](#) on page 533
- [Modifying Image Preservation Settings On a System-wide Application Level](#) on page 534
- [Disabling Image Preservation Mode On A Per Application Basis](#) on page 537

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 Actifio CDS or Sky 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 Actifio appliance is able to complete snapshot and local dedup jobs, the Actifio appliance operates in an Image Preservation mode. Image Preservation enhances the scheduling features of the Actifio 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 Actifio 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 Actifio 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 Actifio 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 Actifio appliance attempts to preserve snapshot images or local dedup images, the Actifio 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 Actifio 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 Actifio 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 CLI** command (see [Modifying Preserve Snapshots Settings](#) on page 534).
- Change preserved local dedup settings through the **PreserveLdedupsOfPriority** parameter in the **setparameter CLI** command (see [Modifying Preserve Local Dedup Mode](#) on page 535).

In addition, if over a period of time you find that the Actifio 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:
  - o You can disable the Preserve Snapshot setting through the **PreserveSnapsOfPriority** parameter in the **setparameter CLI** command (see [Modifying Preserve Snapshots Settings](#) on page 534).
  - o You can disable the Preserve Local Dedup setting through the **PreserveLdedupsOfPriority** parameter in the **setparameter CLI** command (see [Modifying Preserve Local Dedup Mode](#) on page 535).
- For a specific application, you can disable Image Preservation for a specific application using the **-flags ProcessLatestSnap** and **ProcessLatestDedup** options of the **udstask chsla CLI** command. When you enable a flag (set it to **true**), the Actifio 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 CLI** 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 Actifio 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 Actifio 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 **udstask chsla CLI** command. When you enable a flag (set it to **true**), the Actifio 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 537 for details.*

---

This section includes the following procedures:

- [Modifying Preserve Snapshots Settings](#) on page 534
- [Modifying Preserve Local Dedup Mode](#) on page 535

### Modifying Preserve Snapshots Settings

A dedupable snapshot is a snapshot image that would normally be deduped by the Actifio appliance based on the frequency, retention, start time, end time specified in the policy template for an application. At times, the Actifio 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 CLI** command defines to the Actifio 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 Actifio 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:

```
$ udstask setparameter -param PreserveSnapsOfPriority -value high
```

```
PUT https://{Actifio_API_Server}/actifio/api/task/  
setparameter?param=PreserveSnapsOfPriority&value=high  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

The following example illustrates disabling the Preserve Snapshot function:

```
$ udstask setparameter -param PreserveSnapsOfPriority -value none
```

```
PUT https://{Actifio_API_Server}/actifio/api/task/  
setparameter?param=PreserveSnapsOfPriority&value=none  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 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 Actifio 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 CLI** command defines to the Actifio 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 Actifio 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:

```
$ udstask setparameter -param PreserveLdedupsOfPriority -value high
```

```
PUT https://{Actifio_API_Server}/actifio/api/task/  
setparameter?param=PreserveLdedupsOfPriority&value=high  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

The following example illustrates disabling the Preserve Local Dedup function:

```
$ udstask setparameter -param PreserveLdedupsOfPriority -value none
```

```
PUT https://{Actifio_API_Server}/actifio/api/task/  
setparameter?param=PreserveLdedupsOfPriority&value=none  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

The following commands set the **PreserveLdedupsOfPriority** parameter to medium so that no low priority application will have its images preserved:

```
$ udstask setparameter -param PreserveLdedupsOfPriority -value medium
```

```
$ udstask setparameter -param PreserveSnapsOfPriority -value medium
```

```
PUT https://{Actifio_API_Server}/actifio/api/task/  
setparameter?param=PreserveLdedupsOfPriority&value=medium  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 is the session ID.
```

```
PUT https://{Actifio_API_Server}/actifio/api/task/  
setparameter?param=PreserverSnapsOfPriority&value=medium  
Authorization: Actifio 92929a8b-a413-476f-a624-5b575cff54d3  
where 92929a8b-a413-476f-a624-5b575cff54d3 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 Actifio appliance is unable to “catch-up” with backlogged snapshot or dedup jobs for that application. When disabled, the Actifio 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 **udstask chsla** CLI 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 **udstask chsla** CLI command.

```
>>- udstask -- -- chsla -- --+-----+---->
                                     '- -dedupasyncoff --+- true --+
                                     '- false -'
>--+-----+----->
    '- -description -- desc -'
>--+-----+----->
    '- -expirationoff --+- true --+- -'
                                     '- false -'
>--+-----+----->
    '- -flags --+- ProcessLatestSnap:true ---- -'
        +- ProcessLatestSnap:false --+
        +- ProcessLatestDedup:true --+
        +- ProcessLatestDedup:false --+
        +- DisableSnapshot:true -----+
        +- DisableSnapshot:false -----+
        +- DisableLocalDedup:true ----+
        +- DisableLocalDedup:false --+
        +- DisableRemoteDedup:true --+
        +- DisableRemoteDedup:false --+
        +- DisableStreamSnap:true --+
        +- DisableStreamSnap:false --+
        +- DisableOnVault:true -----+
        +- DisableOnVault:false -----+
        +- DisableDar:true -----+
        '- DisableDar:false -----'
>--+-----+----->
    '- -scheduleoff --+- true --+- -'
                                     '- false -'
>--+-----+----->
    '- -slpid -- slp_id -'      '- -sltid -- slt_id -'
```

```
>-- -- sla_id -----><
```



The **-flags** keyword of the **udstask chsla** CLI command modifies the image preservation behavior for an application as described below.

---

**Note:** For details on the other parameters used in **udstask chsla**, see the **udstask chsla** CLI command discussion in this document.

---

Parameter	Description
<code>-flags=boolean setting:value</code>	<p>Optional. Configures the <b>-flag</b> setting to disable/enable the catch-up of snapshot or local dedup jobs for a specific application.</p> <hr/> <p><b>Note:</b> Use <b>udsinfo lssla</b> to retrieve the SLA ID of the SLA to be modified.</p> <hr/> <p>Settings include:</p> <ul style="list-style-type: none"><li>• <b>ProcessLatestSnap:&lt;true   false&gt;</b>: Instructs the Actifio 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 <b>PreserveSnapsOfPriority</b> parameter in the <b>setparameter</b> command is set to all applications (low, medium, and high priority), which means that the <b>ProcessLatestSnap</b> flag is automatically disabled (set to <b>ProcessLatestSnap:false</b>). You can specify <b>ProcessLatestSnap:true</b> to disable catch-up mode for a specific application.</li><li>• <b>ProcessLatestDedup:&lt;true   false&gt;</b>: Instructs the Actifio 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 <b>PreserveLdedupsOfPriority</b> parameter in the <b>setparameter</b> is set to all applications (low, medium, and high priority), which means that the <b>ProcessLatestDedup</b> flag is automatically disabled (set to <b>ProcessLatestSnap:false</b>). You can specify <b>ProcessLatestDedup:true</b> to disable catch-up mode for a specific application.</li></ul> <hr/> <p><b>Note:</b> Once you set the <b>-flags</b> <b>ProcessLatestSnap</b> or <b>ProcessLatestDedup</b> to true, the <b>-flags</b> 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.</p> <hr/>

The following example illustrates resuming processing the most recent dedup images and discarding the preserved images for SLA ID 205677:

```
$ udstask chsla -flags ProcessLatestDedup:true 205677
```

The following example illustrates resuming processing the most recent snapshot images and discarding the preserved images for SLA ID 205677:

```
$ udstask chsla -flags ProcessLatestSnapshot:true 205677
```

This example illustrates re-enabling image preservation for local dedup jobs for SLA ID 205677 to address backlogged local dedup jobs.

```
$ udstask chsla -flags ProcessLatestDedup:false 205677
```

## Alerts and Warnings

Use the **udsinfo lssnmpevent CLI** command to monitor the various SNMP events that may appear when the Actifio 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 Actifio 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 Actifio 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 Actifio 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 **udstask chdiskpool**, **udstask configresourcewarning**, **udstask mkdiskpool**, and **udsinfo getresourcewarning** commands:

- The default Warning threshold for VDIsks usage is 90%. The VDisk limit for the Actifio CDS appliance is 2048, and for the Actifio 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 Actifio 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 Actifio 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).



# D List of Parameters Used With `getparameter` and `setparameter`

This appendix describes the list of system parameters associated with the following commands:

- [getparameter](#) on page 141
- [setparameter](#) on page 140

You specify these parameters using the **param** keyword in these commands.

Parameter	Description	Default	Value Range
<code>appminshrinksizefornewstagingdisk</code>	String value for the minimum application shrink size threshold for creating new staging disks (defaults to 32GB).	34359738368	-----
<code>auditage</code>	Number of days an audit is kept.	90	1-365
<code>auditchanges</code>	Audit of old and new values for privileged commands.	true	true or false
<code>authentication.method</code>	Determines which authentication method to use for UI login (database or LDAP authentication).	database	database or ldap
<code>autoconfigsnapshots</code>	If set to 1, support auto configuration is enabled.	1	0 and 1
<code>backupjobsperhost</code>	The maximum number of snap, direct-dedup and dedup-async jobs to run at a time on a single host.	1	1 to 1000
<code>bdd.ip.test.timeout</code>	The time (in seconds) for the BDD server to wait before restoring the network configuration.	30	0 to 300
<code>changeratedb</code>	Change rate for DB application for Guardrails calculations.	6	0 to 100
<code>changeratenondb</code>	Change rate for non-database application .	3	0 to 100
<code>checkpoolspace</code>	Check pool space for rehydration.	0	0 or 1

Parameter	Description	Default	Value Range
ChildLimit	Specifies the default database descendant level limit (children and the grandchildren) for all types of child database applications. The application-specific level limit (OracleChildLimit or SQLServerChildLimit), if specified, overrides the limit for that specific database application.	5	Maximum value varies by environment and infrastructure
copywarninglimit	Modifies the default limit of 14 snapshot copies that will generate a warning if this limit is reached or exceeded based on SLA policy settings. The supported value range is from 2 to 1000.	14	2 to 1000
createmultiplestagingdisks	Create multiple staging disks for out of band applications: <ul style="list-style-type: none"> <li><b>0</b>—Create a single staging disk for each application from now.</li> <li><b>1</b>—Create multiple staging disks where applicable, based on threshold parameters and connector capabilities.</li> </ul>	1	0 to 1
critical.events.exclude	The error level events to exclude from critical events.	10011,10013,10023,10025,10039	Critical event ID
critical.events.include	The warning level events to include as critical events.	9052,999999999	Event IDs
dailystateexpirationindays	Number of days the daily statistics are to be kept in the database.	60	30 to 360
daronrampslots	The number of slots reserved for dedup-async of new applications.	0	0 to 100
datastoreutilizationpollfreqinmins	The frequency at which datastore space utilization is checked during VM data-movement operation.	15	1 to 7200
DBAuthentication	Instructs the host to use DB Authentication for Oracle applications.	false	true and false

Parameter	Description	Default	Value Range
deduprehydratedimageexpirationinhours	Controls the expiration duration for a rehydrated dedup image. The expiration duration is set in hours with a default of 24 hours.	24	0 to 100000
default.ssh.connect.timeout	Default connection timeout for SSH connections for the Actifio CDS appliance.	60	0 to 3000
default.ssh.session.timeout	Default session timeout for SSH connections for the Actifio CDS appliance.	60	0 to 3000
default.v3700.ssh.connect.timeout	Default connection timeout for SSH connections for the v3700.	60	0 to 3000
default.v3700.ssh.session.timeout	Default session timeout for SSH connections for the v3700.	60	0 to 3000
delegatingpoolstatecachesize	Delegating service poolstate cache size.	30	10 to 200
delegatingpoolstatecachetimeout	Delegating service poolstate cache timeout (in minutes).	5	1 to 20

Parameter	Description	Default	Value Range
disable.TLSv1.0	<p><b>Note:</b> The <b>disable.TLSv1.0</b> parameter has been deprecated. Instead, we recommend that you use the <b>webserver.TLS.protocols</b> parameter if it is necessary to define the allowed TLS versions. Please refer to the discussion of the <b>webserver.TLS.protocols</b> parameter later in this table for inclusive protocol control information.</p> <p>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.</p> <ul style="list-style-type: none"> <li>• <b>true</b> disables the TLSv1.0 protocol on the tomcat server in the Actifio appliance. This setting automatically restarts the tomcat server on the Actifio appliance.</li> <li>• <b>false</b> reenables the TLSv1.0 protocol on the tomcat server in the Actifio appliance. This setting automatically restarts the tomcat server on the Actifio appliance.</li> </ul>	false	true and false
disableguardrails	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).	false	true and false
disablenbdvmbackups	Fail VM backups if SAN mode data movement cannot be performed.	0	0 and 1
DiscoveryAvoidEsxUuid	Do not use ESX UUID for resolution of ESX host during VM discovery.	false	true and false
dontexpirededupsduringgc	If 1, do not expire dedup objects if GC job is less than 30% complete.	1	0 and 1



Parameter	Description	Default	Value Range
dontfullingestdedupsduringgc	If 1, do not perform a full ingest into dedup if a GC job is running.	1	0 and 1
dosnapshotonreplicationfailure	Continue with snapshot processing even if StreamSnap replication fails.	1	0 and 1
enable.password.complexity	<p>Enforces the specification of complex local user or admin password that is to be used when a user logs into an Actifio appliance.</p> <p>A complex password can be composed of any combination of upper and lower case letters, numbers, and the following special characters:</p> <p>“!”, “@”, “#”, “\$”, “%”, “^”, “&amp;”, “*”, “(”, “)”</p> <ul style="list-style-type: none"> <li>• <b>true</b> enforces the requirement to specify a complex local user or admin password.</li> <li>• <b>false</b> disables the requirement to specify a complex local user or admin password.</li> </ul>	false	true and false

Parameter	Description	Default	Value Range
enablecompressedreplication	<p>If 1, implements compression for StreamSnap replication to the second Actifio appliance. Compression is required to increase efficiency of the StreamSnap replication to the second Actifio appliance when transferring data over the network.</p> <p>If compression is not a requirement for StreamSnap replication to the second Actifio appliance (for example, when replicating images and videos), specify <b>0</b>.</p> <p>These settings may be overridden by the compressions settings in the StreamSnap policy option.</p> <hr/> <p><b>Note:</b> 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.</p> <hr/>	1	0 and 1
enablededupasync	If 1, scheduling of dedup-async jobs is enabled.	1	0 and 1

Parameter	Description	Default	Value Range
enableencryptedreplication	<p>If 1, implements SSL encryption for StreamSnap replication to the second Actifio appliance. StreamSnap encryption occurs on an external SSL port (port 5107) for all outward communication.</p> <p>If encryption is not a requirement (for example, you are replicating an Oracle database that is already encrypted) specify <b>0</b>. The data transmission then occurs in a plain-text communication. All unencrypted communication occurs over an external plain-text port 5108 and rest of the control flow is similar to the encrypted job.</p> <hr/> <p><b>Note:</b> Only disable the <b>enableencryptedreplication</b> system-level parameter under strict guidance of Actifio Support.</p> <hr/> <p>When running StreamSnap jobs with encryption disabled, you will also need to perform the following on the remote Actifio appliance:</p> <ul style="list-style-type: none"> <li>Start the remote streamsnapd in nossl mode (the <b>streamsnapdnssl</b> system-level parameter) so that it listens on both SSL and plain-text mode. By default, the Actifio appliance does not start streamsnapd in plain-text mode.</li> <li>To let plain-text replication run successfully, enter the following commands:</li> </ul> <pre>POST https:// {Actifio_API_Server}/actifio/ api/task/ setparameter?param=streamsnap dnssl&amp;value=1 HTTP Request Header Authorization: Actifio 92929a8b-a413-476f-a624- 5b575cff54d3 where 92929a8b-a413-476f- a624-5b575cff54d3 is the session ID.</pre>	1	0 and 1

Parameter	Description	Default	Value Range
enableesxmount	Enable mounting of generic backup to an ESX host.	false	true and false
enableexpiration	If 1, scheduled expirations is enabled. Set to 0 to disable scheduled expirations.	1	0 and 1
EnableGenericLVM	Enable the generic Logical Volume Management (LVM) functionality in the Actifio Desktop.	false	true and false
enableindexing	Set to 'true' to enable global indexing and search.	false	true and false
enablelocaldedups	If 1, scheduling of local dedup and direct-to-dedup jobs is enabled. Set to 0 to disable scheduling.	1	0 and 1
EnableMountToVirtualSqlCluster	Enable mount to virtual SQL cluster.	false	true and false
enablenasserversnapexpiration	Set to 0 to disable setting the expiration of NAS server snapshots. This system parameter allows the Actifio CDS appliance to expire snapshots off the NAS server itself.	1	0 and 1
enableremotededups	If 1, scheduling of remote dedup jobs is enabled. Set to 0 to disable scheduling.	1	0 and 1
enablereplicationscripts	If 1, enable invoking user-defined scripts post replication.	1	0 and 1
enablescheduler	If 1, the global scheduler is enabled. Set to 0 to disable scheduling.	1	0 and 1
enablesnapshots	If 1, scheduling of snapshot jobs is enabled. Set to 0 to disable scheduling.	1	0 and 1
enablestreamingreplication	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 Actifio Support).	1	0 and 1

Parameter	Description	Default	Value Range
enablestreamsnap	If 1, enables the scheduling of StreamSnap jobs. Set to 0 to disable scheduling (only disable this function under direct guidance of Actifio Support).	1	0 and 1
enablevaults	If 1, enables the scheduling of OnVault jobs. Set to 0 to disable scheduling (only disable this function under direct guidance of Actifio Support).	1	0 and 1
ExpirerEventLogFrequency	The frequency of the event log expirer in seconds.	86400	3600 to 86400
expirerinterval	The frequency of the expiration loop in seconds.	5	1 to 120
expirerjobspercycle	The maximum number of jobs to start in a expiration loop.	10	1 to 20
expirerloadcount	Minimum number of images the expirer should consider for each pass.	2500	100 to 10000
expirerreloadinterval	The frequency of reloading the expiration in seconds.	900	20 to 3600
expirerrefailure	Retry for expiration on a failure in seconds.	3600	900 to 86400
expirerretrydependent	Retry for expiration deferred because of a unexpired dependent backup in seconds.	900	60 to 3600
expirerretrylocked	Retry for expiration deferred because of a lock in seconds.	60	30 to 900
firewall.icmp.redirect.drop.threshold	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.	5000	1 to 1000000
firstbackupwholevmdk	If 1, change block tracking is ignored for first VM backup.	1	0 and 1

Parameter	Description	Default	Value Range
GC_ZTR_PARALLEL_ACTIVE_WORKERS	The number of active (high-priority transaction) workers on zero-token resolution, must be a power of 2.	-1	1, 2, 4, 8, and 16
GC_ZTR_PARALLEL_HI_PRIO	The transaction priority to associate with high priority for zero-token resolution.	10	1 to 10
GC_ZTR_PARALLEL_MAX_WORKERS	Total number of workers on zero-token resolution (both active and inactive), must be a power of 2.	-1	1, 2, 4, 8, and 16
gcmintreshold	Minimum usage threshold (percentage) for dedup pool before gc schedule is enabled.	65	1 to 100
gcsafethreshold	The safe mode threshold (percentage) for dedup pool	85	1 to 100
genericappfailonconnecterror	Fail the backup job for a generic application if the Connector cannot be reached.	0	0 or 1
hostheartbeattimeoutinmins	Host heartbeat timeout in minutes.	60	0 to 43,200
hourlystatexpirationindays	Number of days the hourly stats has to be kept in DB	14	0 to 360
http.concurrentsession.allow	Allow concurrent HTTP sessions for the same user.	true	true, false
https.request.timeout	Request timeout for https connections in milliseconds. The default value is 7 minutes, min 0, and max 30 minutes.	420000	0 to 1800000
https.socket.timeout	Socket timeout for https connections in milliseconds. default 7 minutes min 0, max 30 minutes.	420000	0 to 1800000
ignore.schedule.off.violation	When set to 1, specifies to ignore SLA violations when the scheduler is off.	0	0 and 1

Parameter	Description	Default	Value Range
ignoredtraps	<p>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.</p> <ul style="list-style-type: none"> <li>• <i>eventid</i> (for example, <b>ignoredtraps -value 43918</b>)</li> <li>• <i>componentname-eventid</i> (for example, <b>ignoredtraps -value CDS-43918</b>)</li> </ul>	0	<i>eventid</i> or <i>componentname-eventid</i>
ldap.referral.support	This is to specify whether to support LDAP referral.	false	true, false
ldap.user.autocreate	Automatically create LDAP users if they don't exist.	false	true, false
lideduponrampslots	The number of slots reserved for local dedups and direct-to-dedup of new applications.	0	0 to 100
licensedcapacity	Configured licensed capacity, in TB.	0	0 to 10240
limiteddupexpirations	The maximum number of scheduled dedup expirations.	2	0 to 25
liveclonerefreshcreatereference	When set to 1, create a reference object during a LiveClone refresh to revert back to in the case of a refresh failure.	0	0 and 1
maptoallesxincluster	Map staging disk to all ESX hosts in a cluster.	1	0 or 1

Parameter	Description	Default	Value Range
maxconcurrentvaultsubjobs	<p>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.</p> <hr/> <p><b>Note:</b> The default for <b>maxconcurrentvaultsubjobs</b> is 12 and the default for <b>maxvaultslots</b> 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.</p> <hr/>	12	4 to 1000
maxconnectorupgradetimeout	Maximum connector upgrade Task timeout in minutes (default to 10 minutes).	10	5 to 60
maxdarslots	The maximum number of slots for enhanced asynchronous deduplication.	3	0 to 1000
maxdataaccessslots	The maximum number of data access slots for mount, clone and restore jobs.	12	0 to 1000
maxesxscans	The maximum number of ESX host parallel scans per job while mapping to an ESX cluster.	10	1 to 50
maxexpirationlots	The maximum number of expiration slots.	10	0 to 1000
maxiscsisessionspertarget	Maximum active iSCSI sessions per target interface.	15	15 to 100
maxldapresults	The maximum number of objects processed from an LDAP query.	50000	-----



Parameter	Description	Default	Value Range
maxdedupslots	The maximum number of local dedup slots allowed.	8	0 to 1000
maxlogreplicateslots	The maximum number of log replication slots allowed.	6	0 to 1000
maxondemandslots	The maximum number of slots for all types of on demand jobs.	6	0 to 1000
maxoutofbandappsize	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).	140737488355328	-----
MaxPrvThreads	The maximum number of prsv threads allowed.	800	400 to 1200
maxrdedupslots	The maximum number of remote dedup slots allowed.	6	0 to 1000
maxskyjoins	The maximum number of appliance pairings allowed for an Actifio Sky appliance.	50	-----
maxsnapslots	The maximum number of snapshots slots.	6	0 to 1000
maxstreamsnapslot	The maximum number of scheduled StreamSnap slots.	6	0 to 1000
maxvaultslots	The maximum number of scheduled OnVault jobs. Use this parameter when you need to control the maximum slots for OnVault jobs.	4	0 to 1000
maxvmtaskretrycount	The maximum VM task retry count.	10	1 to 100
maxvmtasktimeout	Maximum VM task timeout, in seconds.	600	60
minlaststagingdisksize	String value for minimum size of last staging disk for an application with multiple staging disks.	274877906944	-----
missed.cluster.ping.threshold	Threshold value for the number of missed cluster pings before raising a trap. -1 indicates never to alert.	-1	-----

Parameter	Description	Default	Value Range
nasserversnapexpirationindays	Expiration for NAS server snapshots, specified in days. This system parameter allows the Actifio CDS appliance to expire snapshots off the NAS server, based on the specified number of days.	3	0 to 365
netapp.enable	Set to 1 to enable NetApp as a NAS server type.	0	0 and 1
networkinterfacecheck	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.	none	none, eth0, and eth1
onejobperhostoverride	Override the one-job-per-host limit on an HPUX or AIX host.	none	none, aix-only, hpux-only, and aix-and-hpux
operatingwindowintonextday	When set to 1, operating windows extend into the next day even if they were excluded.	0	0 and 1
OracleChildLimit	<p>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.</p> <hr/> <p><b>Note:</b> Only change this under guidance of Actifio Support.</p> <hr/>	0	Maximum value varies by environment and infrastructure
password.minlength	Specifies a minimum password length for the local user or admin when they log into an Actifio appliance.	6	6 to 1024

Parameter	Description	Default	Value Range
prefernbdssl	<p>When set to 1, specifies to use NBD mode VM backups over SSL instead using plain (plaintext) NBD mode VM backups.</p> <p>The use of NBDSSL results in the data being encrypted in flight while performing the data transfer from the VMDK files into the Actifio appliance.</p>	0	0 and 1
preflight.default.timeout	<p>Default timeout for the Actifio 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.</p>	5 minutes	5 to 30 minutes
preserverlastimage	<p>If 1, do not expire the last image of each type for any protected application.</p>	1	0 and 1
PreserveLdedupsOfPriority	<p>Defines how to preserve local dedup images that are due for expiration but not yet successfully processed</p> <p>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.</p> <hr/> <p><b>Note:</b> For background on image preservation, including modifying settings, see <a href="#">Configuring Image Preservation</a> on page 533.</p> <hr/>	low	none, high, medium, and low

Parameter	Description	Default	Value Range
PreserveSnapsOfPriority	<p>Defines how to preserve snapshot images that are due for expiration but not yet successfully deduped.</p> <p>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.</p> <hr/> <p><b>Note:</b> For background on image preservation, including modifying settings, see <a href="#">Configuring Image Preservation</a> on page 533.</p> <hr/>	low	none, high, medium, and low
rdeduponrampslots	The number of slots reserved for remote dedups of new applications.	0	0 to 100
readyvmtargetlowsplash	Set to 1 to avoid writing zero blocks on target VMDK using low splash comparison by reading target VMDK.	1	0 or 1
remotepsrvrequesttimeout	Timeout for remote psrv requests.	5	5 to 30
removeduplicateevents	Attempt to removed duplicate events from event emails.	false	true and false
reserveddarslots	The number of slots reserved for enhanced asynchronous deduplication.	3	0 to 25
reserveddataaccessslots	The number of slots reserved for mount, clone and restore jobs.	6	0 to 1000
reservedexpirationslots	The number of slots reserved for scheduled expirations.	10	0 to 25
reservedlledupslots	The number of slots reserved for scheduled remote local deduplication jobs.	4	0 to 25
reservedlogreplicateslots	The number of slots reserved for log replication.	2	0 to 25
reservedondemandslots	The number of slots reserved for all types of on-demand jobs.	6	0 to 25

Parameter	Description	Default	Value Range
reserveddedupslots	The number of slots reserved for scheduled remote dedup jobs.	6	0 to 25
reservedsnapshots	The number of slots reserved for scheduled snapshots.	2	0 to 25
reservedstreamsnapshots	The number of slots reserved for scheduled StreamSnap slots.	2	0 to 25
reservedvaultslots	The number of slots reserved for scheduled OnVault jobs. Use this parameter when you need to limit the reserved slots for OnVault jobs.	4	0 to 25
retriesonfailure	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, <b>retriesonfailure 3</b> specifies that the job retries three times after original attempt.	3	0 to 20
retrydecay	The delay for each subsequent retry in percent. This parameter specifies the % of delay to attempt further retries.	400	100 to 10000
retrydelay	The delay before the first retry of a failed job in seconds. This parameter specifies the number of seconds that the job should wait to retry after the original attempt. For example, <b>retrydelay 240</b> specifies that the first job retry happens after 240 seconds.	240	30 to 3600
rfcsnappooloverallocationpercent	When doing an inband restore via RFC we check that the snap pool(s) will not be overfilled via RFC. Pad the calculated space required by this percent to assure other concurrently running jobs will not exhaust the pool(s).	20	0 to 1000
schedule.watchdog.interval	Time interval in hours for Quartz hourly schedule watchdog. Set to 0 to disable.	3	1 to 24 (0 to disable)
schedulinterval	The frequency of the scheduler in seconds.	10	1 to 120

Parameter	Description	Default	Value Range
schedulerrjobspercycyle	The maximum number of jobs to start in a scheduler loop.	4	1 to 20
schedulerrldedupperiodpercentage	The percentage of Dedup policy RPO as the minimum separation of source snapshot images.	90	0 to 100
scheduleroptimizations	If 1, use optimizations to speed up scheduling.	1	0 and 1
schedulerrdedupperiodpercentage	The percentage of remote dedup policy RPO as the minimum separation of source local dedup images.	90	0 to 100
scriptexectimeout	Timeout waiting for pre and post scripts called using the Actifio Connector.	60	1 to 120
scriptinittimeout	This policy option specifies the timeout value for the init script completion.	300	1 to 600
secureconnect.local	Local IP address for secureconnect to bind to.	-----	-----
secureconnect.port	Port to use for SecureConnect.	1194	1 to 65536
secureconnect.proto	Protocol to use for SecureConnect.	udp	udp and tcp
secureconnect.proxy_port	Port for SecureConnect proxy.	0	0 to 65536
secureconnect.proxy_server	Proxy server for SecureConnect	-----	-----
secureconnect.server	Server for SecureConnect.	secureconnect2.actifio.com	-----
session-timeout-minutes	UI session timeout in minutes.	60	0 to 60
sla.tolerance	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.	0	0 and 1

Parameter	Description	Default	Value Range
slaAnalysis.analysisType	<p>Specifies which SLA analysis method the Actifio appliance is to use:</p> <ul style="list-style-type: none"> <li>• <b>basic</b> - Analyze the SLA based on counting the number of jobs (default behavior).</li> <li>• <b>advanced</b> - Analyze the SLA based on time-based threshold values.</li> </ul>	basic	basic and advanced
slaAnalysis.enable	The setting to enable/disable SLA analysis. By default, this value is 'true'.	true	true and false
slaAnalysis.notificationtype	The notification type for SLA violation traps.	warning	warning, error, info
snapshotonrampslots	The number of slots reserved for snapshots of new applications.	0	0 to 100
snmp.community.string	The community string for sending SNMP traps.	-----	-----
snmptablesizesize	Limits the number of records sent by the SNMP agent in the Actifio 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.	500	100 to 5000
SQLServerChildLimit	<p>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.</p> <hr/> <p><b>Note:</b> Only change the <b>SQLServerChildLimit</b> system-level parameter under guidance of Actifio Support.</p> <hr/>	0	Maximum value varies by environment and infrastructure

Parameter	Description	Default	Value Range
stagingdiskgranularity	A string value indicating the size of each staging disk when multiple staging disks are used for an application.	-----	1099511627776
streamsnapdconnectiontimeout	Connection timeout in seconds for the streamsnapd daemon.	60	1 to 1200
streamsnapdheartbeattimeout	Time interval between heartbeat messages for the streamsnapd daemon.	60	1 to 1800
streamsnapdinternaltimeout	Internal connect/disconnect timeout for the streamsnapd daemon.	10	1 to 1800
streamsnapdmaxmemorysize	Maximum memory usage (in GB) for the streamsnapd daemon.	4	1 to 1024
streamsnapdmaxreservedconnections	Maximum number of simultaneous reserved SSL connections for a streamsnapd daemon reconnect.	10	5 to 256
streamsnapdmaxrunningjobs	Maximum number of jobs initiated and received by the streamsnapd daemon (both the source and target Actifio appliance).	90	1 to 1024
streamsnapdmaxserverconnections	Maximum number of simultaneous non-SSL connections for all internal communication by the streamsnapd daemon. The streamsnapd daemon listens on an internal port (7445).	150	5 to 1024
streamsnapdmaxsslconnections	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).	160	1 to 256
streamsnapdmaxtunnelconnections	Maximum number of simultaneous SSL tunnel connections for the streamsnapd daemon.	50	5 to 256
streamsnapdmaxwindowsize	Maximum number of outstanding packets in the streamsnapd pipe for each session.	64	8 to 1024
streamsnapdmillispertick	Number of milliseconds per tick for updating streamsnapd statistics.	1000	100 to 10000



Parameter	Description	Default	Value Range
streamsnapdnetalerttime	Network off detection timeout for the streamsnapd daemon.	900	1 to 10000
streamsnapdnetworkretries	Maximum number of network retries for the streamsnapd daemon.	5	1 to 1000
streamsnapdnossl	Start the streamsnapd server in non-SSL mode (plain-text mode). By default, the Actifio appliance does not start streamsnapd in plain-text mode. When the nossl option is enabled, the target server listens on plain-text port 5108.	0	0 and 1
streamsnapdprogressupdateinterval	streamsnapd job progress update interval in seconds.	5	1 to 600
streamsnapdreconnectdelay	Minimum delay in milliseconds for reconnect in the streamsnapd daemon	100	1 to 10000
streamsnaponrampslots	Number of slots reserved for StreamSnap replication of new applications.	0	0 to 100
sweepthreshold	Determines how aggressive the sweep process will be in reclaiming space from expired backups.	50	1 to 100
systemcontact	A string value that sets the sysContact Object Identifiers (OID) value as part of the SNMP system information for an Actifio appliance.	-----	-----
systemlocation	A string value that sets the sysLocation OID value as part of the SNMP system information for the Actifio appliance.	-----	-----
template.agm.lock	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.	true	true or false

Parameter	Description	Default	Value Range
truepathdefaultdriveletter	Assign a drive letter to mounted volumes even if user did not specify a drive letter.	1	0 and 1
unreservedslots	The number of additional slots available for any job type.	9	0 to 100
usegcjob	missed gc/sweep jobs to be rerun.	false	true and false
v3700.pwd	The admin password for v3700 storage devices.	Contact your Actifio rep for the admin password.	-----
vaultrehydratedimageexpirationinhours	Default expiration for the rehydrated OnVault image in hours (default to 24).	24	0 to 100000
vdisklimit	The maximum number of VDIs that can be used for the pool supported by an Actifio Sky appliance.	0	0 to 10000
vixdisklibdebuglevel	The debug level for the vixdisklib.	4	0 to 7
vmconsolidatedisks	Configure job behavior when target VM needs snapshot consolidation. If the VM requires consolidation: <b>fail</b> - Fail the job: backup/DAR/direct-dedup jobs fail. <b>yes</b> - 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. <b>no</b> - 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

Parameter	Description	Default	Value Range
vmexistingnapshotwarning	Set to 1 to log a warning for existing snapshots for the VM being backed up.	0	0 and 1
vmfilesthreshold	Threshold for number of files inside a VM home directory, above which a warning event is logged.	32	5 to 100
vmloplashwithcvt	Uses the following parameters: <ul style="list-style-type: none"> <li><b>never</b> - No low splash when CBT exists</li> <li><b>threshold</b> - Low splash when CBT crosses vmlowplashwithcvtthreshold percentage</li> <li><b>full</b> - Always use low splash on full vmdk when CBT exists</li> </ul>	never	never, threshold, and full
vmlowplashwithcvtthreshold	Percentage of bytes in CBT when low splash is used. Applicable when vmlowplashwithcvt = threshold.	50	0 to 100
vmnocbtcompare	Set to 1 to avoid overwriting blocks with same data from VMware snapshot to staging disk, when no changed extent list exists.	1	0 and 1
vmorgenericbackupmountpvidchange	Mount of VM/Generic backup to host without connector: <ul style="list-style-type: none"> <li><b>0</b> - Do not change LVM PV IDs.</li> <li><b>1</b> - Change LVM PV IDs if VMware believes the OS is Linux.</li> <li><b>2</b> - Always change the LVM PV IDs.</li> </ul>	1	0 to 2
vmtaskcompletiontimeout	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.	60	1 to 43200

Parameter	Description	Default	Value Range
webservice.TLS.protocols	<p>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 Actifio appliance.</p> <hr/> <p><b>Note:</b> If a client machine that runs the Actifio Desktop is using Microsoft Windows, this will require a Microsoft Internet Explorer configuration change for supported TLS protocol versions. Open Internet Explorer to the <b>Internet Options -&gt;Advanced</b> tab and verify the corresponding TLS protocol versions. Make the necessary TLS version changes.</p> <hr/> <p>The TLS versions allowed by the Tomcat web server are determined by the following rules:</p> <ul style="list-style-type: none"> <li>• If <b>disable.TLSv1.0</b> is set to <b>false</b>, TLS versions are the same as defined in <b>webservice.TLS.protocols</b>.</li> <li>• If <b>disable.TLSv1.0</b> is set to <b>true</b>, TLS versions are those defined in <b>webservice.TLS.protocols</b> but excluding the TLSv1 protocol.</li> </ul> <p>When configuring either the <b>webservice.TLS.protocols</b> or <b>disable.TLSv1.0</b> system parameter by the <b>setparameter</b> 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.</p>	TLSv1, TLSv1.1, TLSv1.2	TLSv1, TLSv1.1, TLSv1.2
zpoolcompression	Enables the Zpool compression property.	on	on or off

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# E List of Policy Options

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This appendix is a complete list of policy options associated with the following commands:

- **chpolicyoption** ([chpolicyoption](#) on page 441)
- **lspolicyoption** ([lspolicyoption](#) on page 439)
- **mkpolicyoption** ([mkpolicyoption](#) on page 437)
- **rpmolicyoption** ([rpmolicyoption](#) on page 443)
- **lssettableoption** ([lssettableoption](#) on page 433)

Policy Option	Description	Value	Policy Type	AppType
<b>appconsistency</b>	Takes an application consistent snapshot for a backup.	<p><b>yes</b> - 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.</p> <p><b>no</b> - 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.</p> <p><b>last</b> - Takes application consistent backups, but takes a crash consistent backup if an application consistent backup fails for any reason. Setting <b>appconsistency</b> to <b>last</b> is only honored for scheduled jobs. For example, when <b>appconsistency=last</b> for scheduled jobs:</p> <ul style="list-style-type: none"> <li>• Job_1234567 will be appconsistent.</li> <li>• Job_1234567a (1st retry) will be appconsistent.</li> <li>• Job_1234567b (2st retry) will be appconsistent.</li> <li>• Job_1234567c (last retry) will be crash consistent.</li> </ul> <p>These values are on a per job basis; any internal retries inside Job_1234567 will use same value for appconsistency.</p>	snap, directdedup, dedup_async	VMBackup, Microsoft Hyper-V, VSS Writer

Policy Option	Description	Value	Policy Type	AppType
<b>archivebackuptime</b>	Instructs the Actifio appliance to backup the archivelog if it has not been backed up the specified number of times.	1 to 5	_____	Oracle, ConsistGrp
<b>archivettsservice</b>	Specifies the TNS service name for archivelog backup.	String	_____	Oracle
<b>asmraclist</b>	IP addresses of the member nodes of a RAC database for ASM backup.	String	_____	Oracle
<b>ausize</b>	Configures the ASM Diskgroup AU size, in MB	1, 2, 4, 8, 16, 32, or 64 MB	_____	Oracle, ConsistGrp
<b>autodiscoverrac</b>	Specifies to auto discover all members of a RAC database for ASM backup	false (default) or true	_____	Oracle
<b>bootvolumesnapshot</b>	<p>Specifies to back up only the boot volume of the VM.</p> <hr/> <p><b>Note:</b> <i>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.</i></p>	<p><b>no</b> - Backup all the volumes of the VM (default).</p> <p><b>yes</b> - Backup only boot volume of the VM.</p>	<p>snap, directdedup, dedup_async</p>	<p>VMBackup, Microsoft Hyper-V VSS Writer</p>
<b>catalogdb</b>	Specifies the Oracle catalog database SID name. This is for the user environment where RMAN CATALOG DATABASE is set up for RMAN backup.	String	_____	Oracle, ConsistGrp
<b>catalogpassword</b>	Specifies the Oracle catalog database user login password.	String	_____	Oracle, ConsistGrp

Policy Option	Description	Value	Policy Type	AppType
<b>cataloguser</b>	Specifies the Oracle catalog database user name for RMAN backup.	String	_____	Oracle, ConsistGrp
<b>changerate</b>	Daily change rate for the database, used to estimate staging disk size. The value must be between 0 and 100 percent.	0 to 100 percent (default is 10 percent)	snap	Oracle, SqlInstance, SqlServerWriter, ConsistGrp
<b>clusternodes</b>	<p>Enter the IP addresses of appliance nodes for fail-over choice in this format:</p> <p><b>1:172.16.16.21:svc_orarac2_act:F [failover rank]:[failover node ip]:[servicename on failover node]:[role of member node]</b></p> <p>The role of member node by default should be <b>F</b> (failover). It can also be <b>M</b> (maintenance). When an appliance member role is specified as <b>M</b>, then the Actifio appliance uses it as the primary backup node instead of using the original protected node. (Oracle, Exchange).</p>	<p>Specify the failover node choice in a Oracle RAC environment in this way:</p> <p><b>Failover choice:Node IP:Servicename:Role</b></p> <p><b>Failover Choice</b> - The order of node in which user wants to try the failover.</p> <p><b>Node IP</b> - IP address of the node where you want the backup to run.</p> <p><b>Servicename</b> - The name of the service created and specified in the tnsnames.ora for Actifio RMAN backup. This can be a new dedicated service created for Actifio backup or the SID name (instance name) of the database on that node.</p> <p><b>Role</b> - Role can be either F (failover node) or M (maintenance node)</p>	_____	Oracle, Microsoft Exchange Writer, ConsistGrp
<b>compressdblog</b>	Flag to enable log backup compression. If selected, the database server performs the compression during the log backup.	true (default) or false	snap	SqlInstance, SqlServerWriter, Oracle, ConsistGrp
<b>compressedreplication</b>	Use compression for StreamSnap replication	<p><b>yes</b> - Use compression for StreamSnap replication (default)</p> <p><b>no</b> - Do not use compression</p>	stream_snap	_____



Policy Option	Description	Value	Policy Type	AppType
<b>connectoroptions</b>	Leave <b>connectoroptions</b> blank unless you are working with Actifio Support.	String	—————	FileSystem, SqlInstance, SqlServerWriter Microsoft Exchange Writer, SharePoint Services Writer, Oracle, CIFS, NFS, NAS, Microsoft Hyper-V VSS Writer, ConsistGrp
<b>consolidatevmdisks</b>	Specifies the appropriate job behavior when target VM needs snapshot disk consolidation.	<p><b>Fail the job if VM needs consolidation</b> - Backup/DAR/direct-dedup jobs fail (default).</p> <p><b>Run the job without performing consolidation</b> - All jobs run normally even if consolidation is pending.</p> <p><b>Perform consolidation at the beginning of the job</b> - 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.</p>	—————	VMBackup
<b>crosscheckarchivelog</b>	Performs a crosscheck of the archivelog before performing a backup.	false (default) or true	—————	Oracle, ConsistGrp

Policy Option	Description	Value	Policy Type	AppType
<b>datasetsize</b>	NAS dataset size (in GB). 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 Actifio 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.	1 to 256000 (default = 1024)	_____	NAS
<b>dbbackupfreq</b>	Performs a database backup every specified number of hours for log protection.	2 to 24 (hours)	dedup_async	_____
<b>dumpschedule</b>	Performs a database dump every specified weekday.	String The string must be seven characters - either an 'F' or an 'I'. Each position within the string represents a weekday, starting with Sunday. 'F' = a full db dump 'I' = an incremental db dump For example, FFFIII.	_____	SAP HANA
<b>donotshowrecoveryrange</b>	Indicates that log backup should not have recovery range.	true (default) or false	_____	Oracle, ConsistGrp
<b>donotuncatalog</b>	To keep RMAN backup cataloged after each backup. By default Actifio appliance backup will be un-cataloged at the end of the backup and will be cataloged at the start of backup.	false (default) or true	_____	Oracle, ConsistGrp
<b>enableindexing</b>	Flag to control indexing	false (default) or true	_____	NAS

Policy Option	Description	Value	Policy Type	AppType
<b>encryptedreplication</b>	Use encryption for StreamSnap replication	<b>yes</b> - Use encryption for StreamSnap replication (default) <b>no</b> - Do not encrypt	stream_snap	—————
<b>excludepatterns</b>	Enter the file name pattern to be excluded from backup. The Actifio 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 <b>excludepatterns</b> , 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.	String	—————	FileSystem, CIFS, NFS, NAS
<b>failonmissingstartpath</b>	The SmartCopy job will fail if a start path does not exist.	false (default) or true	snap, directdedup, dedup_async	FileSystem, CIFS, NFS, ConsistGrp
<b>filesperset</b>	Specifies the number of archive logs in a backups during archive log backup.	1 to 64 (default = 64) Default depends on the number of channels provisioned during the backup and archive logs present in the database.	—————	Oracle

Policy Option	Description	Value	Policy Type	AppType
<b>forceasm</b>	If 'Yes' is selected and the source database is stored in filesystem format, the database copy stored on Actifio will be in ASM format. This option requires ASM to be installed on the Oracle server.	false (default) or true	_____	Oracle, ConsistGrp
<b>forcelevel0</b>	Start a new level0 RMAN backup when the database is protected out-of-band.	false (default) or true	_____	Oracle, ConsistGrp
<b>forceoobbackup</b>	Forces the out-of-band backup when database datafiles are in-band.	false (default) or true	snap, directdedup, dedup_async	FileSystem, SqlInstance, SqlServerWriter, Microsoft Exchange Writer, SharePoint Services Writer, Oracle, ConsistGrp
<b>fsfreeze timeout</b>	Timeout of a file system freeze in seconds for in-band backup jobs.	3 to 300 seconds (default = 30)	_____	FileSystem, ConsistGrp
<b>genericlvmscriptname</b>	Freeze and thaw script name for Linux CBT filter driver	String	_____	LVM Volume

Policy Option	Description	Value	Policy Type	AppType
<b>immutabilitydays</b>	<p>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 <b>mkpolicyoption</b> command. You can update an existing immutabilitydays policy using the <b>chpolicyoption</b> or remove an existing immutabilitydays policy option. You cannot shorten an existing retention period, only extend it.</p>	0 to 36525 days	<p>snap, directdedup, dedup, remotededup, stream_snap (for remote snapshot images), onvault,</p> <hr/> <p><b>Note:</b> Not supported on Dedup-Async Replication (DAR) policies</p> <hr/>	_____

Policy Option	Description	Value	Policy Type	AppType
<b>includepatterns</b>	<p>Enter the file name pattern to be included in the backup. The Actifio 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 a side the non-critical files. Guidelines for include patterns:</p> <p>Using <b>includepatterns</b>, only files are included, directories are not included.</p> <p>A pattern can include wild-card characters, for example, an asterisk (*) or a question mark (?). To include all the files that contains .sys as extension, enter *.sys.</p> <p>On Windows, files named pagefile.sys and hiberfil.sys that appear in the root directory of a drive are automatically ignored.</p>	String	_____	FileSystem, CIFS, NFS, NAS
<b>logalterloc</b>	Customized application log location.	String	_____	_____
<b>logbackupfreq</b>	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.	15 to 1440	snap	_____
<b>logbackupretention</b>	Retain database log backup for the specified period. Retention period must be between 1 and 90 days.	1 to 90 days (the default is 2 days)	snap	_____
<b>logbackupunit</b>	Log backup interval unit.	<b>minute</b> - Log backup in number of minutes <b>hour</b> - Log backup in number of hours	snap, dedup_async	_____

Policy Option	Description	Value	Policy Type	AppType
<b>logpurgeretention</b>	Log retention in hours before log purging.	1 to 720 (hours)	_____	Oracle, ConsistGrp
<b>logpurgeretentionnum</b>	Number of successful backups before log purging.	1 to 30	_____	Oracle, ConsistGrp
<b>logpurgeretentunit</b>	Retention period unit for log purging.	<b>day</b> - Log retention in days. <b>hour</b> - Log retention in hours.	snap, dedup_async	_____
<b>logreplication</b>	<p>Replicate Oracle or Microsoft® SQL Server database transaction logs to a remote Actifio appliance. You can use the logs at the remote site for any database image within the retention range of the replicated logs.</p> <p>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 appliance.</p> <hr/> <p><b>Note:</b> Log replication does not occur until an Oracle or SQL Server database has been protected and the image replicated to the remote Actifio appliance.</p> <hr/>	true (default) or false	snap	Oracle, SqlServerWriter, ConsistGrp
<b>logretention</b>	Retention percentage of log backup with regard to database backup.	0 to 100%	snap, dedup_async	_____
<b>logsizebuffer</b>	Buffer space for log backups. The value must be between 1 and 10 days.	1 to 10 days (the default is 2 days)	snap	_____

Policy Option	Description	Value	Policy Type	AppType
<b>logresizepercent</b>	Grow the log staging disk by a specified percentage if needed. The value must be between 5 and 100 percent.	5 to 100 percent (the default is 50 percent)	snap	_____
<b>logsmart</b>	Flag indicating that Log Protection is enabled.	false (default) or true	snap	_____
<b>logstagingdisksize</b>	Enter a log staging disk size (in GB) to override the space automatically defined for database log backups.	1 to 4000	_____	Oracle, SqlInstance, SqlServerWriter, ConsistGrp
<b>maptoallesxincluster</b>	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.	<b>no</b> - Do not map staging disk to all ESX hosts (default). <b>yes</b> - Map staging disk to all ESX hosts.	snap, directdedup, dedup_async	FileSystem, SqlInstance, SqlServerWriter, Microsoft Exchange Writer, SharePoint Services Writer, CIFS, NFS, ConsistGrp
<b>maxcorrupt</b>	Maximum block corruption allowed during an RMAN backup.	0 (default) to 1000	_____	Oracle, ConsistGrp
<b>minlaststagingdisksize</b>	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	1 to 128000	_____	Oracle, FileSystem, NFS, ConsistGrp
<b>namedlistener</b>	Oracle named listener. For more than one listener running on the database server specify the listener name.	String	_____	Oracle, ConsistGrp
<b>notskip</b>	By default, an Oracle backup skips offline tablespace and inaccessible (not physically existed) datafiles.	<b>skip</b> - Skip offline and inaccessible tablespace/ datafiles (default). <b>inaccessible</b> - Do not skip inaccessible tablespace/ datafiles. <b>offline</b> - Do not skip offline tablespace/datafiles.	_____	Oracle, ConsistGrp



Policy Option	Description	Value	Policy Type	AppType
<b>nounmap</b>	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.	<b>yes</b> - Keep staging disks mapped between jobs (default). <b>no</b> - Unmap staging disks after each job.	snap, directdedup, dedup_async	FileSystem, SqlServerWriter, Microsoft Exchange Writer, SharePoint Services Writer, Microsoft Hyper-V VSS Writer, Oracle, CIFS, NFS, NAS, ConsistGrp
<b>numberofchannels</b>	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.	1 to 255	—————	Oracle, ConsistGrp
<b>oraclechildbackup</b>	Indicates this is a Oracle child backup	true (default) or false	—————	Oracle, ConsistGrp
<b>password</b>	Specifies the authentication password as part of the user credentials.	String	—————	Oracle, CIFS, SqlInstance, SqlServerWriter VMBackup, NAS, Microsoft Hyper-V VSS Writer, ConsistGrp
<b>primarynodeservicename</b>	Specifies the servicename configured on the Data Guard node that connects to the primary Actifio node. This is required only when you are protecting data from Oracle Data Guard.	String	—————	Oracle
<b>proxyhostid</b>	Proxy host used during NAS backup.	String	—————	NAS

Policy Option	Description	Value	Policy Type	AppType
<b>prunepaths</b>	Specifies a point where the directory traversal will stop. When protecting a Windows application, a value of \\SERVERNAME\SHARENAME\abc will ensure that nothing below \\SERVERNAME\SHARENAME\abc is copied, but all other directories and files in \\<SERVERNAME\SHARENAME are copied. If <b>prunepath</b> is left blank, the directory traversal descends into every subdirectory of the start paths being backed-up.	String	_____	FileSystem, CIFS, NFS, NAS
<b>readyvm</b>	VM in ESX datastore dedup async replication.	<b>no</b> - VM in Performance pool snapshot (default) <b>yes</b> - VM in ESX datastore	_____	VMBackup
<b>remotedatastores</b>	Remote datastores details for VM in ESX datastore dedup async replication.	String	_____	VMBackup
<b>remoteesx</b>	Remote ESX server details for VM in ESX datastore dedup async replication.	String	_____	VMBackup
<b>remotemetastore</b>	Remote metadata store details for VM in ESX datastore dedup async replication	String	_____	VMBackup
<b>remotevcenter</b>	Remote vCenter details for VM in ESX datastore dedup async replication.	String	_____	VMBackup
<b>restorevalidate</b>	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.	true or false (default)	_____	Oracle, ConsistGrp

Policy Option	Description	Value	Policy Type	AppType
<b>rmanloglocation</b>	<p>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.</p> <p><b>For Linux</b> - the default log location is: /act/log/ &lt;sid&gt;_rman.log.</p> <p>If you change the path, the value must be in the form /act/log/test/custom_rman.log</p> <p><b>For Windows</b> - the default log location is: c:\act_tmp\log\&lt;sid&gt;_rman.log.</p> <p>If you change the path, be sure there are no spaces in the path.</p>	String	_____	Oracle, ConsistGrp
<b>root</b>	<p>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.</p>	String	_____	NAS
<b>schedulerrdedupperiodpercentage</b>	<p>Percentage of Dedup policy RPO as the minimum separation of source snapshot images.</p>	0 to 100	_____	_____
<b>schedulerrdedupperiodpercentage</b>	<p>Percentage of remote dedup policy RPO as the minimum separation of source local dedup images.</p>	0 to 100	_____	_____
<b>scriptfinishtimeout</b>	<p>Sets the script finish timeout setting (in seconds) for Actifio Connector</p>	1 to 86400	_____	_____

Policy Option	Description	Value	Policy Type	AppType
<b>scriptfreeze timeout</b>	Sets the script freeze timeout setting (in seconds) for Actifio Connector	1 to 86400	_____	_____
<b>scriptinit timeout</b>	Sets the script initialization timeout setting (in seconds) for Actifio Connector	1 to 86400	_____	_____
<b>scriptpostreplication timeout</b>	Sets the user-defined script post replication timeout (in seconds).	1 to 86400	_____	_____
<b>scriptunfreeze timeout</b>	Sets the script unfreeze timeout setting (in seconds) for Actifio Connector.	1 to 86400	_____	_____
<b>serviceip</b>	Enter a service access point IP address to back up 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.	String	_____	FileSystem, SqlInstance, SqlServerWriter, SharePoint Services Writer, ConsistGrp
<b>servicename</b>	Specifies the Oracle database service name. This is optional for a standalone instance but required for a RAC setup. (Oracle only).	String	_____	Oracle, ConsistGrp
<b>shareid</b>	ID address of the NAS share corresponding to the NAS application. Select one of the shares from the NAS server.	String	_____	NAS

Policy Option	Description	Value	Policy Type	AppType
<b>sharetype</b>	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.	NFS (default) or CIFS	_____	NAS
<b>skipofflineappsincongrp</b>	Specifies how to handle offline applications in a consistency group.	<b>no</b> - Fail backup when offline applications are found (default). <b>yes</b> - Skip offline applications during backup.	snap, directdedup, dedup_async	ConsistGrp
<b>sqlbackuppath</b>	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 in the volume hosting this directory to hold a full database backup.	String	_____	SqlServerWriter, VMBackup, Microsoft Hyper-V VSS Writer, ConsistGrp
<b>stagingdiskgranularity</b>	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.	1 to 128000	_____	Oracle, FileSystem, NFS, ConsistGrp
<b>stagingdiskmountpoint</b>	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)	String	_____	Oracle,FileSystem, CIFS, NFS, SharePoint Services Writer, SqlServerWriter, Microsoft Exchange Writer, ConsistGrp

Policy Option	Description	Value	Policy Type	AppType
<b>stagingdiskoverheadallocationpercentage</b>	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.	0 to 1000	_____	_____
<b>stagingdisksize</b>	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.	1 to 256000	_____	Oracle,FileSystem, CIFS, NFS, SharePoint Services Writer, SqlInstance, SqlServerWriter Microsoft Exchange Writer, Microsoft Hyper-V VSS Writer, ConsistGrp
<b>stagingdisksizeincr</b>	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 Actifio 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.	String	_____	NAS

Policy Option	Description	Value	Policy Type	AppType
<b>startpaths</b>	Provides the start path names. <b>startpath</b> specifies the directory where backup starts. If <b>startpath</b> is left blank, backup starts at the root directory of the dataset to be backed-up. For example, a value of \\SERVERNAME\SHARENAME\abc will back up the abc directory.	String	—————	FileSystem, CIFS, NFS, NAS
<b>streamingreplication</b>	Stream snapshot data to the target Actifio appliance in parallel to data movement to the staging disks	<b>yes</b> - Stream snapshot data to the target Actifio appliance (default) <b>no</b> - Do not stream snapshot data to the target Actifio appliance	stream_snap	VMBackup
<b>tnsadminidir</b>	Specifies the TNS_ADMIN network path.	String	—————	Oracle, ConsistGrp
<b>truncatelog</b>	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.	<b>no</b> - Do not truncate/purge log after backup (default) <b>yes</b> - Truncate/purge log after backup	snap, directdedup, dedup_async	SqlInstance, SqlServerWriter Microsoft Exchange Writer, SharePoint Services Writer, VMBackup, Microsoft Hyper-V VSS Writer, ConsistGrp
<b>useasm</b>	If Yes, the database copy stored on the Actifio appliance will be in filesystem format, even if the source was in ASM format.	true (default) or false	—————	Oracle
<b>usegdfs</b>	Select to enable GPFS staging disk for performing a GPFS file system backup.	false (default) and true	—————	FileSystem, ConsistGrp, Oracle

Policy Option	Description	Value	Policy Type	AppType
<b>username</b>	Specifies the authentication user name as part of the user credentials.	String	_____	Oracle, CIFS, SqlInstance, SqlServerWriter VMBackup, NAS, Microsoft Hyper-V VSS Writer, ConsistGrp
<b>userrole</b>	Database user account for Actifio RMAN backup. By default, <b>userrole</b> will use <b>sysdba</b> . For 12c sysbackup role please select the role using <b>sysbackup</b> .	<b>sysdba</b> - Role sysdba (default) <b>sysbackup</b> - Role sysbackup, applicable to 12c	_____	Oracle, ConsistGrp
<b>usezpool</b>	Use Zpool on the proxy host.	false (default) or true	_____	NAS
<b>vgsnapreservespace</b>	Amount of space to reserve in the Volume Group as a percentage of Logical Volume size to hold snapshot data.	1 to 100. Default of 20.	_____	LVM Volume
<b>wallet</b>	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.	String	_____	Oracle, ConsistGrp
<b>zfscompression</b>	Use ZFS compression on the proxy host.	<b>off</b> - Disable ZFS compression (default) <b>on</b> - Enable ZFS compression <b>lzjb</b> - lzjb compression algorithm <b>gzip</b> - gzip compression algorithm <b>zle</b> - zle compression algorithm <b>lz4</b> - lz4 compression algorithm	_____	NAS



Policy Option	Description	Value	Policy Type	AppType
<b>zfsdedup</b>	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.	<b>off</b> - Disable in-line dedup (default) <b>on</b> - Enable in-line dedup	_____	NAS



# F 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 298
- [testfailover](#) on page 302
- [lsappclass](#) on page 310
- [mountimage](#) on page 326
- [cloneimage](#) on page 334
- [lsrestoreoptions](#) on page 345
- [restoreimage](#) on page 347

You specify these options using the **-restoreoption** keyword in these commands.

Restore Option	Description	Value	Restore Operation	AppType
<b>asmracodelist</b>	Colon separated list of ASM RAC node IP addresses.	String	scrubmount, mount, clone, failover, failovertest	Oracle, ConsistGroup
<b>compressstreamsnap</b>	Use compression for StreamSnap replication.	true or false	syncback	_____
<b>encryptstreamsnap</b>	Use encryption for StreamSnap replication.  <i><b>Note:</b> Only disable the <b>encryptstreamsnap</b> restore option under strict guidance of Actifio Support.</i>	true or false	syncback	_____

Restore Option	Description	Value	Restore Operation	AppType
<b>mapdiskstoallclusternodes</b>	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 <code>mapdiskstoallesxhosts</code> .	true or false (default)	scrubmount, mount, restore, clone, failover, failovertest	_____
<b>mapdiskstoallesxhosts</b>	Map disks to all ESX hosts	true or false (default)	mount, restore, clone, failover, failovertest, scrubmount	_____
<b>maponly</b>	Map only, do not mount	true or false	mount, clone	LVM Volume
<b>mountdriveperimage</b>	Specify drive letter for the first mount volume; consecutive free drive letters are assigned for other volumes	String	scrubmount, mount, clone, failover, failovertest	_____
<b>mountdriveperdisk</b>	Specifies the drive letter for a specific volume. The <b>mountdriveperdisk</b> option requires the following format:  <code>option-&lt;unique volume id&gt;=value</code>  To properly specify the <b>mountdriveperdisk</b> restore option:  1. Use the <b>udsinfo lsbackup</b> command to locate the volume uuid. Every volume in the backup image has a unique volume identifier.  2. Specify <b>mountdriveperdisk</b> in the format:  <code>restoreoptionname-volumeuniqueid=restoreoptionvalue</code>  For example:  <b>\$ udstask mountimage -image Image_0007344 -host oel65 -restoreoption mountdriveperdisk-dasvol:172.16.201.216:/myNFS=/mnt/test123</b>	String	scrubmount, mount, clone, failover, failovertest	_____

Restore Option	Description	Value	Restore Operation	AppType
<b>mountpointperdisk</b>	<p>Specifies a mount point for a specific volume. The <b>mountpointperdisk</b> option requires the following format:</p> <pre>option-&lt;unique volume id&gt;=value</pre> <p>To properly specify the <b>mountpointperdisk</b> restore option:</p> <ol style="list-style-type: none"> <li>1. Use the <b>udsinfo lsbackup</b> command to locate the volume uuid. Every volume in the backup image has a unique volume identifier.</li> <li>2. Specify <b>mountpointperdisk</b> in the format:</li> </ol> <pre>restoreoptionname-volumeuniqueid=restoreoptionvalue</pre> <p>For example:</p> <pre>\$ udstask mountimage - image Image_0007344 - host oe165 - restoreoption mountpointperdisk- dasvol:172.16.201.216:/ myNFS=/mnt/test123</pre>	String	scrubmount, mount, clone, failover, failovertest	_____
<b>mountpointperimage</b>	<p>Specifies the root directory for all mount points.</p>	String	scrubmount, mount, clone, failover, failovertest	_____
<b>provisioningoptions</b>	<p>Specifies a path to a app-aware mount provisioning options. <b>provisioningoptions</b> indicates that this is an app-aware mount, regardless of the <b>-appaware</b> flag.</p> <p>Use the <b>udsinfo lsappclass</b> command to retrieve the supported appclass and its associated properties to include as the defined provisioning options.</p>	String	restore	_____

Restore Option	Description	Value	Restore Operation	AppType
<b>recover</b>	Recovery option for SQL Server to bring the database online. The Actifio 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 can not be applied to the database.	String	restore	SQLServer Writer
<b>reprotect</b>	Directive in the provisioning options XML file to reprotect the application.  Use the <b>udsinfo lsappclass</b> command to retrieve the supported appclass and its associated properties to include as the defined provisioning options.	Boolean	mount, mountstack	_____
<b>restoremacaddr</b>	Restore the MAC address of the network card.	Boolean	mount,clone, failover	VMBackup

Restore Option	Description	Value	Restore Operation	AppType
<b>restoretype</b>	<p>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. This image will be displayed under the Active Image tab in the Actifio Desktop.</p> <p>The <b>restoretype</b> option requires the following format:  <b>restoretype=asmswitch,volgroupname=&lt;diskgroup name&gt;,asmracodelist=&lt;node ip list&gt;</b></p> <p>For example:</p> <pre>\$ udstask mountimage -image Image_3350783 -restoreoption restoretype=asmswitch,volgroupname=ASMFSDG,asmracodelist=172.16.16.20 -host orac1</pre>	String	mount	Oracle, ConsistGroup
<b>slpid</b>	Specifies the SLP ID to use for the mount operation.	String	mount, mountstack	_____
<b>sltid</b>	Specifies the SLT ID to use for the mount operation.	String	mount, mountstack	_____
<b>vmdkprovisionformatperdisk</b>	Specifies the disk provisioning format for a specific volume	<b>sourcevmdkformat</b> - Use same data format as the source vmdk. <b>thinprovisioned</b> <b>thickeagerzero provisioned</b> <b>thicklazzero provisioned</b>	restore and clone	VMBackup

Restore Option	Description	Value	Restore Operation	AppType
<b>vmdkprovisionformatperimage</b>	Specifies the disk provisioning strategy for all volumes	<b>sourcevmdkformat</b> - Use same data format as the source vmdk. <b>thinprovisioned</b> <b>thickeagerzero provisioned</b> <b>thicklazyzero provisioned</b>	restore and clone	VMBackup
<b>volgroupname</b>	Name of the volume group or storage pool to be used for discovered disks.	String	scrubmount, mount, clone, failover, failovertest	Oracle, ConsistGroup