Configuring Actifio OnVault

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Contents

Preface

Your Actifio Appliance's Documentation Library and AGM Online help contain detailed, step-by-step, application-specific instructions on how to protect and access your data.

Audience

The intended audience for this document has experience using object storage. Object storage vendors provide detailed conceptual information and step-by-step instructions on the use of their object storage product.

Actifio provides conceptual information and detailed step-by-step instructions that can be found in:

- The AGM Online Help
- The ActifioNOW customer portal

For an overview of basic concepts and procedures see **_Getting Started with Actifio Copy Data Management_**.

The ActifioNOW Customer Portal

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

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

To log into the ActifioNOW customer portal:

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

Actifio Support Centers

To contact an Actifio support representative, you can:

- Send email to: **support@actifio.com**
- Call:

   From anywhere: +1.315.261.7501
   US Toll-Free: +1.855.392.6810
   Australia: 0011 800-16165656
   Germany: 00 800-16165656
   New Zealand: 00 800-16165656
   UK: 0 800-0155019

1 Introduction

OnVault policies support Actifio's incremental forever data capture model, where the first time a policy runs, it captures an entire image, then subsequent data captures are only the changes to the image. This allows you to perform more frequent uploads (typically daily) to an object storage target.

Actifio OnVault with incremental forever data capture is a cost-effective solution that allows you to replace your off site vault infrastructure with on-demand object storage to store your daily, weekly, monthly, and yearly backup images. To review the types of data capture and storage, see Types of Incremental Forever Data Capture to OnVault Pools on page 2.

Storage Pools

Actifio Appliances retain data in pools:

- **Snapshot Pools** provide, local, short-term data retention i.e. a few days. Snapshot data ensures instant access to the latest production data.Snapshot pools also serve a source for OnVault policies.

- **Dedup Pools** provide local and remote, medium-term data retention i.e. three to six months. Dedup data is incrementally rehydrated before it is accessed.

- **OnVault Pools** define access to object stores. Data can be accessed directly from the object store without first copying it back to a local storage device.

Note: OnVault is fully supported on Actifio Sky Appliances and CDX Appliances, and on CDS Appliances capable of supporting 128TB dedup pools. Earlier generations of CDS hardware that were limited to 48TB or 64TB dedup pools cannot support OnVault.
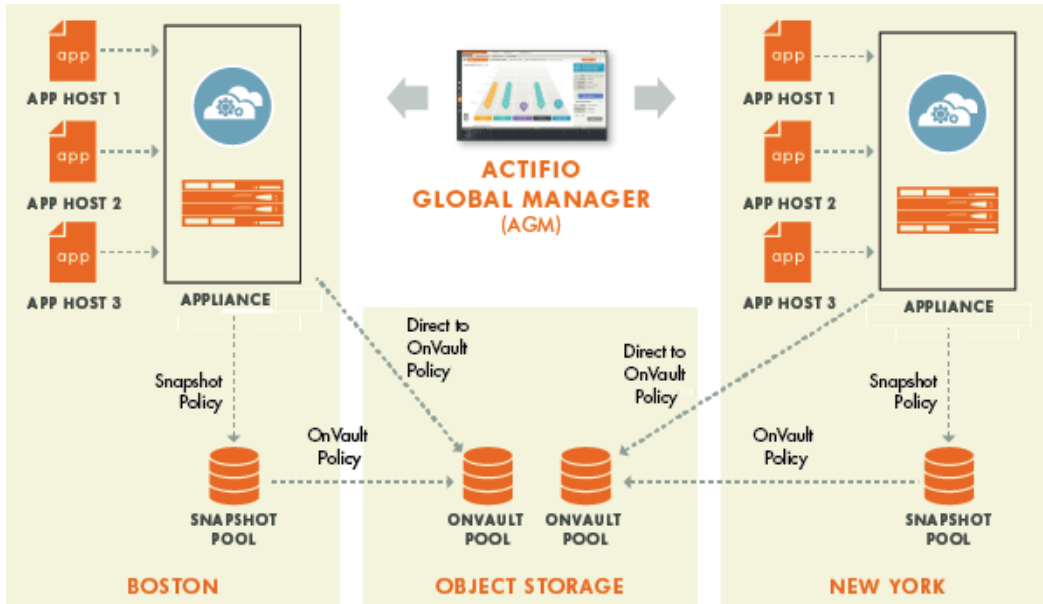
Import OnVault Images

AGM users can import OnVault images from one managed Actifio Appliance to another. An image that has been imported to another Actifio Appliance can be mounted to that appliance's application hosts. This is especially useful in a disaster scenario where an Actifio Appliance is no longer available. Data from the lost site can be mounted almost instantly to the other Actifio Appliance's application hosts.

Ownership of an application's OnVault images can be taken by the Actifio Appliance to which it was imported. Actifio Appliances can only expire the OnVault images it owns. If a image is mistakenly imported, the AGM Forget option undoes the import operation. Importing OnVault images is detailed in Importing OnVault Images on page 21.

Types of Incremental Forever Data Capture to OnVault Pools

Any data type captured in an Actifio Snapshot Pool can be written to an Actifio OnVault pool. In addition, VMware VMs can be captured directly from your production environment to an OnVault pool. For details on how to create the policies associated with these capture operations, see Creating OnVault Policies on page 17.

OnVault in a Multi-Appliance Environment - Managed by AGM

Note: *Direct to OnVault supported for VMware VMs only.*

2 Creating an OnVault Pool

This chapter assumes that you have an existing account with an object storage vendor and you are an experienced user of the object storage. Object storage vendors provide detailed instructions on the use of their object storage.

OnVault Pools are created from an Actifio Appliance. The Actifio Appliance from which the OnVault Pool was created or the AGM that manages that appliance (if applicable), can use the pool as the destination for a Resource Profile.

A best practice for customers using AGM is to use the same object storage for all OnVault Pools. This includes having the same access credentials. This makes the import operation and disaster recovery operations seamless.

This chapter consists of two sections:

Before You Begin

OnVault Pools require access to your object storage. Before you can create an OnVault pool, you must gather some basic access related information from your object storage account. This information varies by object storage vendor. Use the following sections to determine what information is required from your object storage account.

Be sure port 443 is open between the Actifio appliance and the object storage. To check, telnet from the Actifio appliance to object storage over the port 443: `Actifio> telnet <object storage URL> 443`

The following sections detail the information that you need to configure:

Note: *Actifio is continually qualifying new object storage vendors. If you do not see your object storage vendor listed here, contact your Actifio representative for the latest list of supported vendors.*

Cloud - Alibaba Cloud Object Storage Service (OSS)

Table 1: Alibaba Cloud Object Storage Service (OSS)

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Cloud - Alibaba Cloud Object Storage Service (OSS)	Actifio
Access Key ID	Required	The access key for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
Ali resources region	Required	Select one of the Cloud – Ali resources regions from the drop-down list. Regions are physical geographic locations which contain one or more zones.	Cloud Vendor
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	Cloud Vendor
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

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Cloud - Amazon S3 Standard and Cloud - Amazon S3 IA

Table 2: Amazon S3 Standard and Amazon S3 IA

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Cloud - Amazon S3 Standard or Cloud - Amazon S3 Standard - IA (Infrequent Access)	Actifio
Access Key ID	Required	The access key for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
AWS resources region	Required	Select one of the AWS resources regions from the drop-down list. Regions are physical geographic locations which contain one or more zones.	Cloud Vendor
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	Cloud Vendor
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

Cloud - Google Nearline and Google Coldline Storage

Table 3: Google Nearline and Google Coldline

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	AGM
Pool Type	Required	Select: Cloud - Google Nearline Storage or Cloud - Google Coldline Storage	Actifio
Service Account ID	Required	The access ID for Object Store access	Cloud Vendor - Management Console
Path to private key file in PKCS12 format	Required	Upload a valid private key file.	AGM - File Upload OnVault Configuration Form
Bucket	Required	A name for the Object Store bucket	Customer
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	AGM
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	AGM
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault.	AGM **Note:** *Change this only under the guidance of Actifio Support.*

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Cloud - Microsoft Azure and Microsoft Azure US Government

Note: *When creating the pool, you must select a Standard storage account. Premium storage accounts are not supported.*

Table 4: Microsoft Azure and Microsoft Azure US Government

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Cloud - Microsoft Azure or Cloud - Microsoft Azure US Government	Actifio
Storage Account Name	Required	Name of the Storage Account	Customer
Access Key	Required	The access key for Object Store access	Cloud Vendor
Container Name	Required	A name for the Object Store bucket	Customer
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	Cloud Vendor
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

Cloud - NIFCLOUD Object Storage

Table 5: NIFCLOUD Object Storage

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Cloud - NIFCLOUD Object Storage	Actifio
Endpoint URL	Required	Top level URL to access the Object Storage. Can contain multiple folders and/or objects. Must be globally unique.	NIFCLOUD-created, customer-specific
Access Key	Required	The access key for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	Cloud Vendor
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

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Cloud - Oracle

Table 6: Oracle Cloud

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Cloud - Oracle	Actifio
Access Key ID	Required	The access key ID for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Storage namespace	Required	This is a unique, uneditable system-generated string assigned during account creation. It applies to all regions. The object storage namespace serves as a container for all user buckets and objects.	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
Oracle Cloud region	Required	Select one of the Oracle Cloud regions from the drop-down list. Regions are physical geographic locations which contain one or more zones.	Cloud Vendor
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	Cloud Vendor
Proxy server (address:port)	Required if access to Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organization(s)	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default (1MB) is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

Self Managed - Hitachi Content Platform

Table 7: Hitachi Content Platform

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Cloud - Hitachi	Actifio
Object storage URL	Required	A container for all user buckets and objects.	HCP created, customer-specific
Access Key ID	Required	The access key ID for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Path to SSL certificate file in PEM format	Required	Upload a valid SSL certificate file in PEM format.	Cloud Vendor generated but user must upload it while adding a new HCP OnVault Pool.
Bucket	Required	A name for the Object Store bucket	Customer
Authentication Scheme	Required	Select either AWS Signature Version 2 (S3 backward compatible authentication) or AWS Signature Version 4.	Authentication schemes supported by HCP
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

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Self Managed - IBM Cloud Object Storage (Cleversafe)

Table 8: IBM Cloud Object Storage (Cleversafe)

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Self Managed - IBM Cloud Object Storage (Cleversafe)	Actifio
Path to SSL certificate file in PEM format	Required	Upload a valid SSL certificate file in PEM format.	Cloud Vendor
Object storage URL	Required	Top level URL to access the Object Storage. Can contain multiple folders and/or objects. Must be globally unique.	IBM-created, user-specific
Access ID	Required	The access ID for Object Store access	Cloud Vendor
Access Key	Required	The access key for Object Store access	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
Compression	Optional	Specify if data in the OnVault pool should be stored in compressed or uncompressed format. Compressing data reduces storage costs but requires additional compute capacity for Sky to compress the data before transmitting.	Cloud Vendor
Integrate with IBM COS Retention feature	Optional	Enable the checkbox for selecting the IBM COS Retention feature. See Integration with IBM COS Retention, below	Cloud Vendor
Authentication Scheme	Required	Select either AWS Signature Version 2 (S3 backward compatible authentication) or AWS Signature Version 4.	Supported IBM auth. schemes
Proxy server (address:port)	Required if object store access needs a proxy server.	Enter both the address and port number.	Customer
Member of Organization(s)	Optional	Organizations and roles work together to enforce rules by AGM administrators for access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

Integration with IBM COS Retention

When integration with IBM COS Retention is enabled, images put into this OnVault pool from policies with Enforced Retention will have the retention set on all objects related to that image. This prevents accidental or deliberate deletion of the image before its enforced retention date. For this integration to work, the IBM COS configuration must meet the following requirements:

- IBM COS Retention must be licensed and enabled on the bucket being used.
- Minimum and Default retention on the bucket must be set to 0 (zero).
- Maximum retention on the bucket must be large enough for the longest enforced retention period.

Self Managed - NetApp StorageGRID

Table 9: NetApp StorageGRID

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the Object Store (OnVault) pool	Actifio
Pool Type	Required	Select: Self Managed - NetApp StorageGRID	Actifio
Object storage URL	Required	Top level URL to access Object Storage. Can contain multiple folders and/or objects. Must be globally unique.	NetApp-created, customer-specific
Access Key ID	Required	The access key ID for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
Proxy server (address:port)	Required if access to the Object Store needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

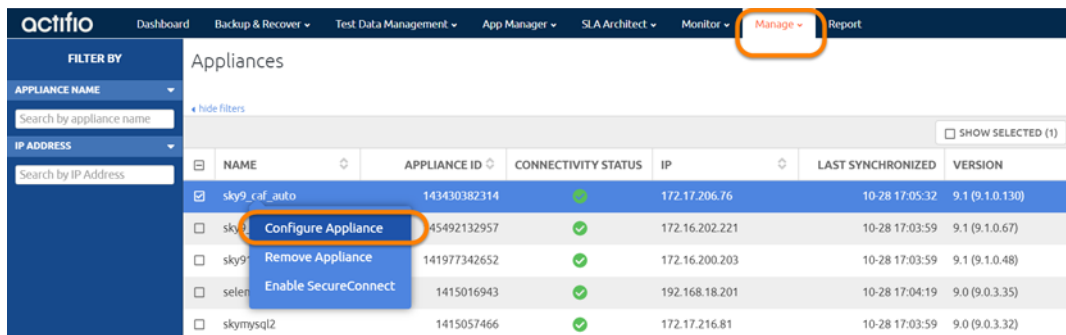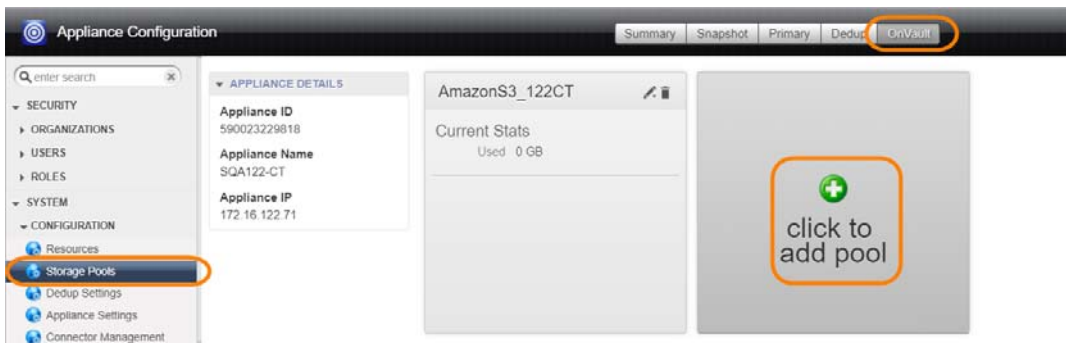actifio

Self Managed - Other Amazon S3 Compatible Object Storage

Table 10: Other Amazon S3 Compatible Object Storage

Attribute	Required?	Description	Information Source
Pool Name	Required	A descriptive name for the OnVault pool	Actifio
Pool Type	Required	Select: Self Managed - Other Amazon S3 Compatible Object Storage	Actifio
Object storage URL	Required	Top level URL to access the Object Storage. Can contain multiple folders and/or objects. Must be globally unique	Cloud Vendor
Access Key ID	Required	The access key ID for Object Store access	Cloud Vendor
Secret Access Key	Required	The secret key for Object Store access	Cloud Vendor
Path to SSL certificate file in PEM format	Required	Upload a valid SSL certificate in PEM format.	Cloud Vendor
Bucket	Required	A name for the Object Store bucket	Customer
Compression	Optional	Specify if data in the OnVault pool should be stored compressed or uncompressed. Compressing data reduces storage costs but Sky requires more compute capacity to compress data before transmission.	Cloud Vendor
Authentication Scheme	Required	Select either AWS Signature Version 2 (S3 backward compatible authentication) or AWS Signature Version 4.	Cloud Vendor supported authentication schemes
Proxy server (address:port)	Required if object store access needs a proxy server.	Enter both the address and port number.	Customer
Member of Organizations	Optional	Organizations and roles work together to enforce rules set up by AGM administrators for user access to AGM features.	Actifio
Advanced Settings: Object size	Required	Values can be from 64 KB to 8 MB. The default value of 1MB is suitable in most cases. Changing the object size can adversely affect the performance of the Sky appliance and the cost of object storage service used for OnVault. Change this only under the guidance of Actifio Support.	Actifio Support

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Creating an OnVault Pool

Once you have gathered your object storage specific information as detailed in Before You Begin on page 3, create an OnVault Pool as follows:

1. From the AGM Manage menu, select Appliances. Select the appliance that will have the OnVault Pool and click **Configure Appliance**.

2. From Storage Pools, select the **OnVault** tab and then **click to add pool**. You may have to scroll down to see the Add Pool option.

3. A dialog box opens that will allow you to select the storage pool. Select your object storage vendor from the dropdown menu and the OnVault Pool options for your vendor are displayed. For example, for Amazon S3 Storage:

4. In the spaces provided enter a name for the OnVault pool.

5. In the spaces provided, enter the vendor-specific access information described in Before You Begin on page 3.

   In most cases you will want to keep the compression checked. Compression reduces network traffic.

   Advanced Settings should only be changed from the default block size at the direction of Actifio Support.

6. Select the organization memberships for the OnVault Pool as needed.

7. Click **Save** and the OnVault Pool is created and can be added to a Resource Profile.

3 Creating Resource Profiles

Resource Profiles define which storage pools will be used to retain application data. Resource Profiles are created in the Service Level Architect (SLA) service. To create a Resource Profile:

1. From the SLA Architect select **Profiles** from the dropdown list.

2. Either select and edit existing an Resource Profile or click **Create Profile** to create a new profile. The Create New Profile page is displayed.

Note: *If you select an existing Resource Profile, ALL applications on that appliance to which the profile is applied will be impacted by changes to the profile.*

3. In the spaces provided, enter a name and description for the profile.

4. Select the Primary Appliance from the drop-down list. This is the appliance on which the profile was or will be created.

5. From the Snapshot Pool menu, select the Snapshot Pool that the OnVault Pool will use as source.

6. From the **OnVault Pool** drop down menu, select the OnVault Pool to which production data in the Snapshot Pool will be sent. You can select this option only if the selected Actifio Appliance has defined an OnVault Storage Pool.

7. If this Profile is in an SLA Template that contains policies to replicate data to another Actifio Appliance, then from the drop down list under Remote Appliance, select the Actifio Appliance to which data will be replicated. The remote Actifio Appliance selected is not used with OnVault.

8. Click **Save Profile**.

4 Creating OnVault Policies

An OnVault policy defines when data is captured, the frequency with which it will be captured, and how long it will be retained.

You can create two types of OnVault policies:

- Snapshot to OnVault policies capture data in a Snapshot Pool and further protect that data in an OnVault Pool. To create a Snapshot to OnVault policy, see AGM Snapshot to OnVault Policy on page 17.

- Direct to OnVault policies capture VMs in their production environment and protect them directly to an OnVault Pool. To create a Direct to OnVault policy, see AGM Direct to OnVault Policy on page 19.

An OnVault policy can be created in an existing SLA Template that has a Production to Snapshot policy, or created as part of a new SLA Template.

*Note: If you add an OnVault Policy to an existing SLA Policy Template, **ALL applications** on this appliance to which the SLA Policy Template is applied will be impacted by the changes.*

Note: Best practices for creating SLA Policy Templates and Policies can be found in the AGM Online Help.

AGM Snapshot to OnVault Policy

SLA Policy Templates are defined in the SLA Architect service. Before you can create an OnVault policy, you must use an existing SLA Template that has a Production to Snapshot policy, or create a new SLA Template with a Production to Snapshot policy. Images captured by Production to Snapshot policies are used as the source for OnVault policies.

To create a Snapshot to OnVault Policy from AGM:

1. From an existing SLA Template or from a new SLA Template with a Production to Snapshot policy, click the plus sign **+** between Snapshot and OnVault.

The Snap to OnVault page is displayed:

2. Set the policy according to your needs. For example, an OnVault policy could be defined as:

   o Within a window

   o Run **Everyday**, with **No Exceptions**

   o Between **19:00 to 18:50**

   o Once per window

   o Retain for **3 Years**
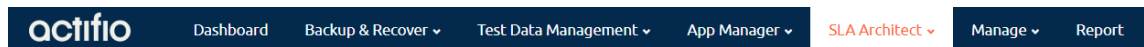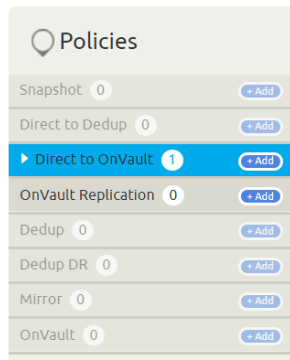
3. Click **Update Policy** and the policy is created.

AGM Direct to OnVault Policy

Direct to OnVault policies are used to capture VMware VMs and can only be created in AGM. To create a Snapshot to OnVault Policy from AGM:

1. From an existing SLA Template or from a new SLA Template with NO Production to Snapshot policy and NO Production to Mirror policy, click the plus sign **+** between Production and OnVault.

2. The Direct to OnVault page is displayed.

3.   Set the policy according to your needs. For example, an OnVault policy could be defined as:

     o   Within a window

     o   Run **Everyday**, with **No Exceptions**

     o   Between **19:00 to 18:50**

     o   Once per window

     o   Retain for **3 Years**

4.   Click **Advanced Policy Settings** and the Policy Settings dialog box is displayed. This dialog box allows you to set VM specific advanced policy settings:

5.   From the Policy settings dialog box select:

•   **Application Consistent**

     Take 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. The recovery of a crash consistent backup may take longer time and introduce exceptions. Typically recovery from crash has to be made manually. Crash consistent backups are easy and fast for virtual machines.

     Take application consistent backup: 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. For virtual clients, usually an agent is needed to get notification of a backup at host, and then notify applications, and may need to wait for an approval from applications. Not all applications support application-consistent backups.

     Take crash consistent backup on last try: This option initially takes application consistent backups, but if an application consistent backup fails for any reason, it will then take a crash consistent backup.

•   **Truncate/Purge Log After Backup**: Select whether to truncate the logs after every backup. When this is selected, application-related logs are truncated up to the most recent backup.

•   **Job Behavior When Target VM Needs Snapshot Consolidation**

     Fail the job: Fails the job.

     Run the job without performing consolidation: All jobs run normally even if consolidation is pending.

     Perform consolidation at the beginning of the job: Backup jobs try to perform consolidation at the beginning of the job. If consolidation fails, the job fails.

6.   Click **Save Changes** or **Cancel** and the dialog box closes.

7.   Click **Update Policy** and the policy is created.

5 Accessing and Importing Images

Once you have a Resource Profile that uses an OnVault Pool and an SLA Policy Template that contains an OnVault Policy, you can, from the Application Manager, apply the Resource Profile and SLA Policy Template to applications and VMs. The OnVault policy will run according to its schedule and the captured image will be written to the OnVault Pool specified in the Resource Profile.

Accessing Data in OnVault

After the first capture operation has completed, data in an OnVault Pool's object storage location can be accessed according to the following rules:

- Actifio VDP can create clones from OnVault data on any Actifio Appliance.
- Actifio VDP cannot create LiveClones from OnVault data.
- Actifio VDP can mount OnVault data only on Sky Appliances and CDX appliances.
- Actifio VDP **can** mount data in an OnVault Pool on CDS appliances, however, it will copy all data to the snapshot pool first, then do the mount.
- Actifio VDP can perform Application Aware mounts of OnVault images on any Actifio Appliance.

Note: Data written to a mounted OnVault image is not persistent; it may be lost if the appliance is unexpectedly or 'uncleanly' shutdown. OnVault images should be mounted only for recoveries.

For details on how to access data captured by AGM, see the AGM online help.

Importing OnVault Images

AGM supports the import of OnVault images between managed Actifio Appliances. Images cannot be imported from the Actifio Desktop.

When an image is imported to an Actifio Appliance, that Actifio Appliance can instantly mount the imported data to its managed hosts.

Ownership of imported data is maintained by the source appliance. The Import function allows ownership to be transferred to the appliance to which the data is imported. Ownership gives full control over the image, including the ability to expire the image.

In case an image is accidentally imported, AGM provides a Forget Imported Image function that will remove an imported image from an Actifio Appliance.

To import images see:

When defining a OnVault Pool, use the same object store and object store credentials.

Importing Images From the AGM Domain Manager Storage Pool Page

Importing images from the Storage Pool page has the advantage of allowing you to select multiple application images. To import images from the Storage Pools page:

1. From Manage > Storage Pools, right click on an OnVault Storage Pool and from the drop down menu select **Import OnVault Images.** The Import OnVault Images page is displayed:

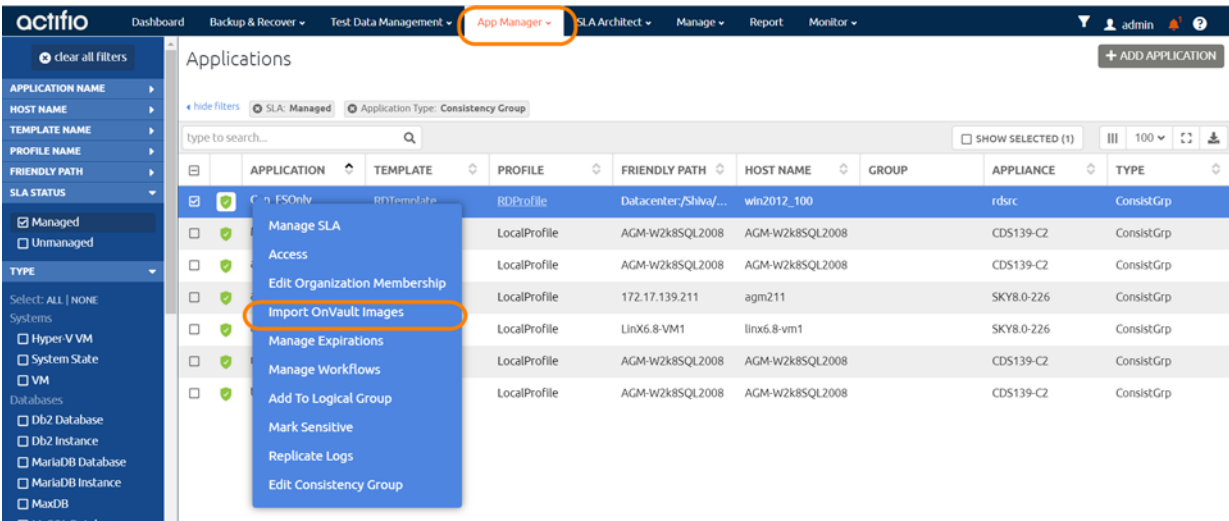2. Select the Actifio Appliance to which the application(s) will be imported.

3. Select the application(s) to import.

4. Click **Import** and the import operation will begin. A message will be displayed when the operation completes.

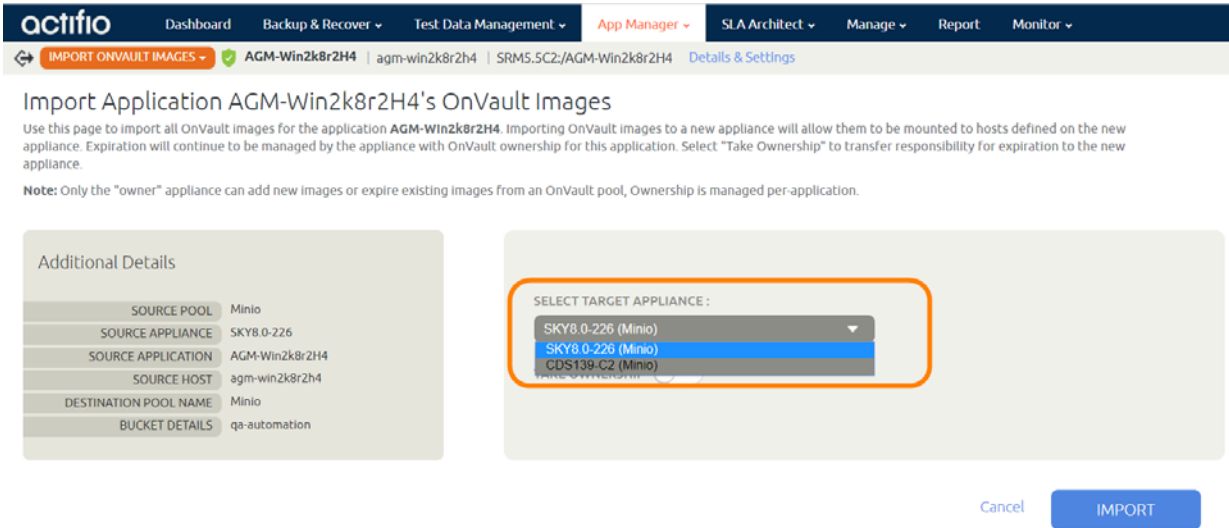# Importing Images From the AGM App Manager Applications Page

Importing images from the App Manager Applications page has the advantage of allowing you to quickly select a single, specific application image to be imported. To import multiple images, see Importing Images From the AGM Domain Manager Storage Pool Page on page 22.

To import an image from the App Manager Applications page:

1.   Right click an application that is protected in an OnVault Pool.

2.   From the drop down menu select **Import OnVault Images**. The Import OnVault Images page is displayed:

3.   From the Select Target Appliance drop down menu, select the appliance to which the image will be imported.

4.   Click **Import** and the import operation will begin. A message will be displayed when the operation is finished.