

Actifio CDS/Sky Tech Brief

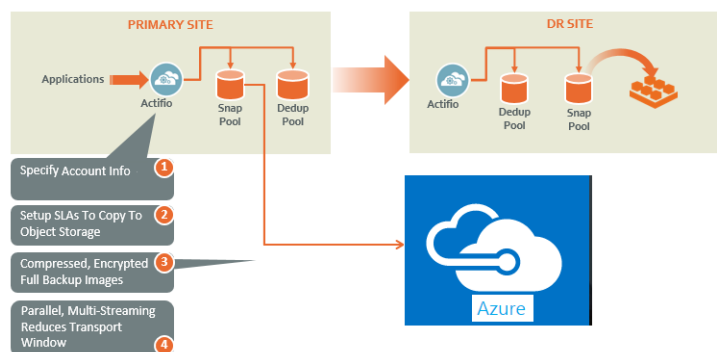
Configuring Microsoft Azure and Actifio OnVault for Long-Term Data Retention

Overview

Actifio appliances retain data in pools:

- Actifio Snapshot Pools provide short-term data retention i.e. two or three days. Snapshot data ensures instant access to the latest production data.
- Actifio Dedup Pools provide medium-term data retention i.e. three to six months. Dedup data is incrementally rehydrated before it is accessed.

With the introduction of Actifio OnVault Pools and Actifio OnVault Policies, a single Actifio appliance can send compressed, encrypted, full snapshots of application data to the Microsoft® Azure cloud and retain that data for the long-term i.e. for months or years.



Putting Application Data into Microsoft Azure

Note: Incremental copies of production data are not sent to OnVault Pools.

Audience

The intended audience for this document is the user who has an Azure storage account and is familiar with Microsoft Azure and who has a basic understanding of Actifio processes and procedures:

- Microsoft provides detailed conceptual information and step-by-step instructions on how to create an Azure storage account and how to use Azure.
- Actifio provides conceptual information and detailed step-by-step instructions that can be found in the Actifio Desktop's Online Library and at ActifioNow. For an overview of Actifio's basic concepts and procedures see **Getting Started with Actifio Copy Data Management**.

Purpose

The purpose of this document is to provide a high-level overview of Microsoft Azure and Actifio processes and procedures, and how they fit together to form a single, cohesive solution for retaining data for long periods of time.

Specifically, this document provides high-level instructions on how to:

- [Create a Storage Account](#) on page 3
- [Create a Container](#) on page 4
- [Obtain an Access Key](#) on page 5
- [Add Actifio OnVault Pools](#) on page 6
- [Create Snapshot to OnVault Policy](#) on page 9
- [Access Data in an Actifio OnVault](#) on page 10

Before You Begin

Before begin, you must have a fully functional Microsoft Azure storage account. From the Microsoft Azure storage account you will need to:

- Create and record the name of a new storage account and ensure it is created in the region in which you want to store the data. See [Create a Storage Account](#) on page 3 for details.
- From within the storage account:
 - o Create and record the name of a container. See [Create a Container](#) on page 4 for details.
 - o Obtain the Access Key associated with the storage account. See [Obtain an Access Key](#) on page 5 for details.

Note: *The Microsoft Azure screen captures and Microsoft Azure procedures in this document have been pulled directly from Microsoft Azure. Updates to Azure's user interface and procedures may occur before Actifio has had the opportunity to update this document. Consult the Microsoft Azure documentation for the most up-to-date information.*

Create a Storage Account

Microsoft provides detailed information on how to create storage account. When creating a storage account configure the account according to your needs. Actifio recommends selecting a region for your storage account close to your data's source.

Microsoft Azure Storage accounts > Create storage account

Create storage account

The cost of your storage account depends on the usage and the options [Learn more](#)

* Name

Deployment model Resource manager Classic

Account kind

Performance Standard Premium

Replication

* Storage service encryption Disabled Enabled

* Subscription

* Resource group Create new Use existing

* Location

Pin to dashboard

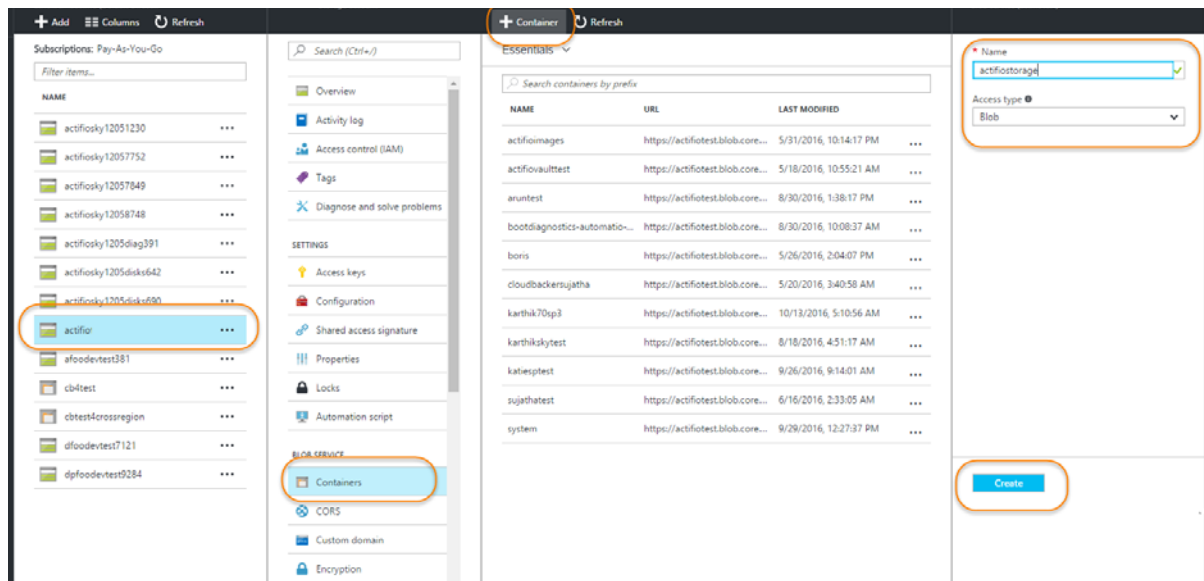
[Automation options](#)

Create Storage Account

Create a Container

To create a container for the Actifio OnVault Pool, from the storage account you created for your Actifio OnVault Pool:

1. Under **Blob Services** select **Containers** and a list of containers is displayed.



Creating a Container

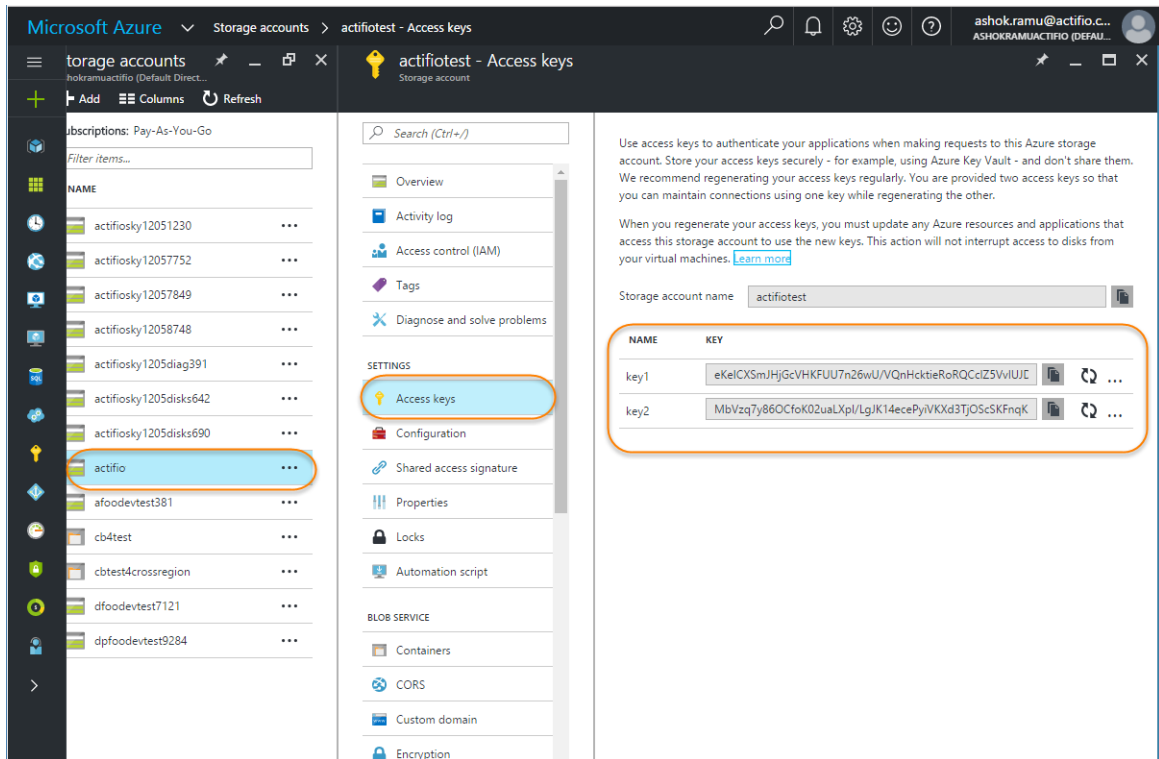
2. On the top menu, click **+Container** and the window is expanded.
3. In the space provided enter a name for the container.
4. From the **Access Type** drop down menu select **Blob**.
5. Click **Create** and the new container is created.

Obtain an Access Key

When you create a storage account, Azure generates two 512-bit storage access keys, which are used for authentication when the storage account is accessed.

To display the access keys:

1. Select the storage account you created for the Actifio Storage Pool.



Obtain Access Key

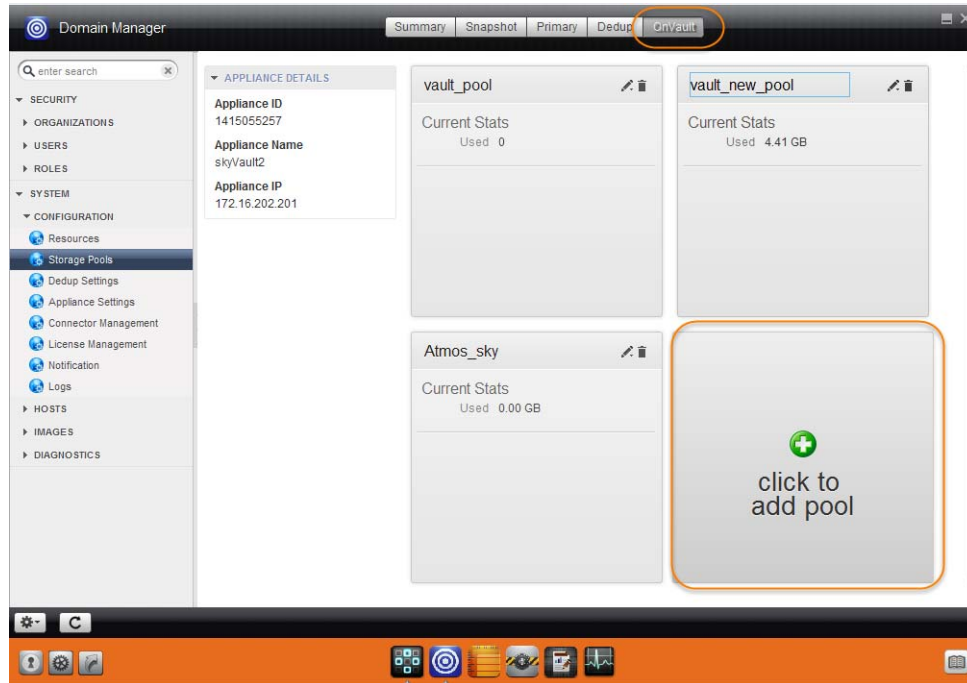
2. Under Settings, select **Access Keys** and the two access keys for the storage account are displayed.
3. When adding an Actifio OnVault Pool for Azure, copy one of the access keys and paste it into the Access Key field in the Actifio OnVault Pool dialog box.

Add Actifio OnVault Pools

Actifio appliances store data in pools. Actifio OnVault Pools store copies of Production Snapshot data in Microsoft Azure.

To add an OnVault Pool to an Actifio appliance:

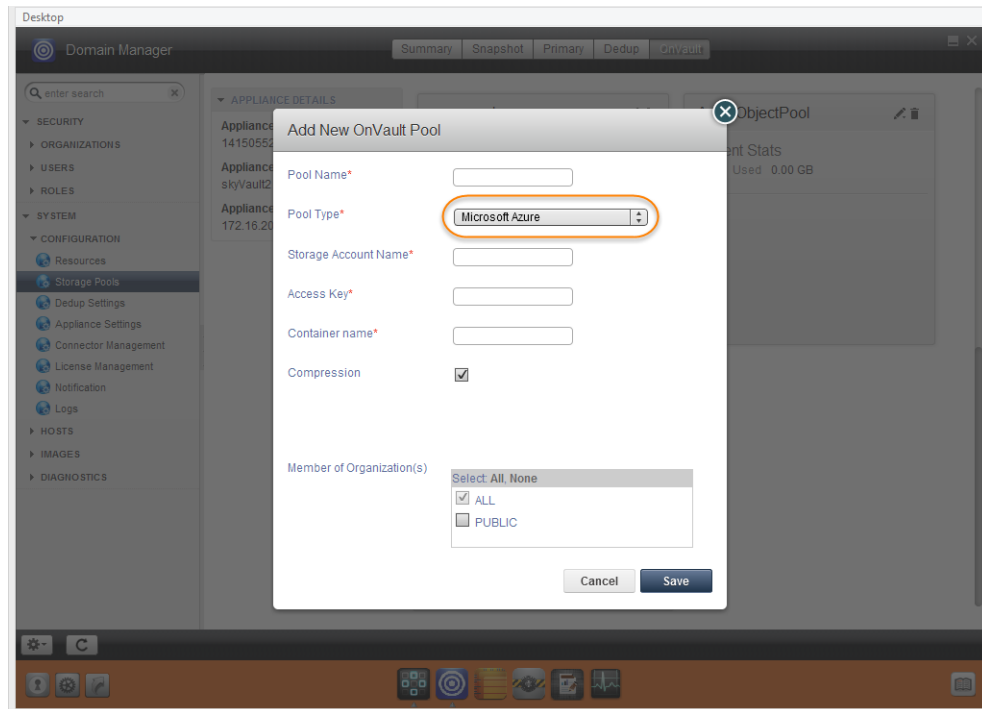
1. Open the **Domain Manager** to **System > Configuration > Storage Pools**.
2. Select the **Vault** tab and the Vault Pools page opens:



Create OnVault Pool

3. Click **Click to add pool** and the Create OnVault Pool dialog box opens.

- From the Pool Type drop down menu, select **Microsoft Azure** and the OnVault Pool options for Microsoft Azure are displayed:



Create Azure OnVault Pool Dialog Box

- In the spaces provided enter:
 - A name for the OnVault pool.
 - The name of the storage account you created. See [Create a Storage Account](#) on page 3.
 - The access key generated when you created the storage account. See [Obtain an Access Key](#) on page 5.
 - The name of the container you created. See [Create a Container](#) on page 4.
- In most cases you will want to keep the compression checked. Compression will keep network traffic to a minimum.
- Select the organization memberships for the Actifio OnVault Pool as needed.
- Click **Save** and the OnVault Pool is created and can be added to a Resource Profile.

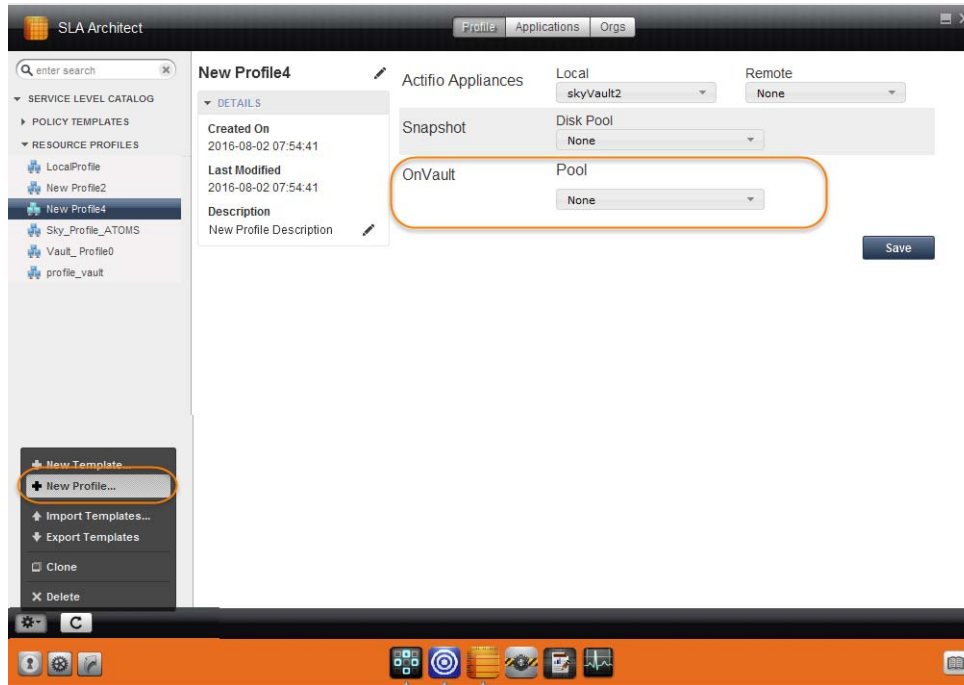
Create a Resource Profile

Resource profiles define in which Actifio pool application data is retained.

Resource Profiles are created in the Actifio Service Level Architect (SLA) service. To create a resource profile:

1. From the SLA Architect select either an existing policy template or from the SLA Architect's service menu, click **New Profile...** and the Resource Profile page is displayed.

Caution! If you select an existing Profile, ALL applications to which the Profile is applied will be impacted by changes to the Profile.



Create Resource Profile

2. Select the local Actifio appliance from **Local** drop-down list. This is the appliance on which the profile is created.
3. Ensure a Snapshot Pool from the **Disk Pool** drop-down list is selected. Data written to this pool will be sent to the OnVault specified according to SLA Template Policy definitions.
4. From the **Vault Pool** drop down menu, select the Actifio OnVault Pool to which production data in the Snapshot Pool will be sent. You can select this option only if this Actifio appliance has defined an OnVault Storage Pool.
5. Click **Save**.

Create Snapshot to OnVault Policy

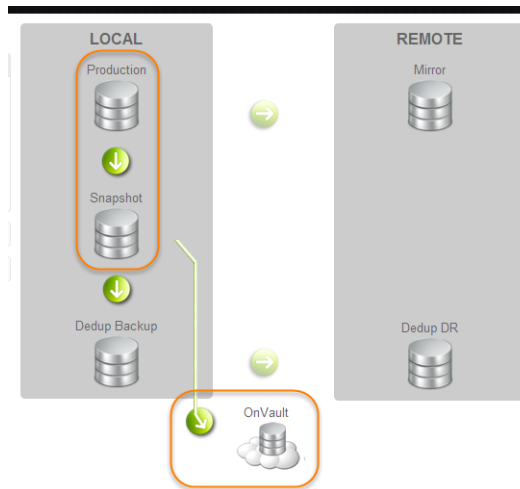
The Snapshot to OnVault policy allows you to schedule when to send Production Snapshot data to an Actifio OnVault Pool.

To create a Production to OnVault Policy, you must either use an SLA Policy Template that already has a Production to Snapshot Policy defined or create a new SLA Policy Template.

Caution! If you add a Snapshot to OnVault Policy to an existing SLA Policy Template, **ALL applications** to which the SLA Policy Template is applied will be impacted by the changes.

Best practices for creating SLA Policy Templates and Policies can be found in the **Developing Service Level Agreements** guide.

Individual policies within an SLA Policy Template are defined by clicking the green arrows on a new or existing SLA Policy Template:

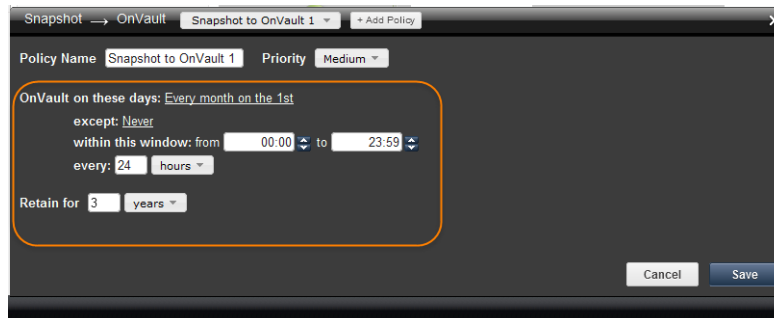


SLA Policy Template

When creating a Snapshot to OnVault policy to send the SLA Policy Template's most recent Production to Snapshot data to an Actifio OnVault Pool, set the frequency at which data is sent to no less than one week and make other settings as needed.

For example, to send Production to Snapshot data to a OnVault once a month, set:

- Vault on these days to **Every month on the 1st**
- The window to open and close as needed. Typically set to 19:00 to 18:50
- The frequency to **Every 24 Hours**
- Retain for **3 Years**



Snapshot to OnVault Policy

Capture Application Data

Once you have both a Resource Profile that uses an OnVault Pool and an SLA Policy Template that contains an OnVault Policy, you can, via the Actifio Application Manager apply the Resource profile and SLA Policy Template to applications and VMs.

Access Data in an Actifio OnVault

When accessing data in an Actifio OnVault Pool's Azure storage location:

- Actifio CDS and Sky appliances can create clones from OnVault data.
- Actifio Sky appliances can mount OnVault data.

Note: Mounted data can be accessed directly from a host, but it is not recommended to run workloads directly against this data.

- Actifio CDS appliances **cannot** mount data in an OnVault Pool.
- LiveClones cannot be created from data in an OnVault Pool.
- Actifio Application Aware mounts are not supported for data in an OnVault Pool.

For details on how to access data captured by an Actifio appliance, see **Accessing and Recovering Copy Data with the Application Manager**.