



INTELLISNAP[®] TECHNOLOGY QUICK START GUIDE – Pure Storage FlashArray

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Quick Start Guide

This quick start guide is intended to launch users into using Commvault® IntelliSnap® technology on the Pure Storage FlashArray platform as quickly as possible. It briefly covers configuring the Pure Storage FlashArray, IntelliSnap software Array Management, Storage Policy configuration, and creating an initial Windows file system snapshot. This guide does not provide in-depth configuration details or best practices.

For in depth configuration details see [Commvault Documentation](#).

Focus of Guide

This guide will walk through the configuration of a Windows client for use with IntelliSnap technology on Pure Storage. Secondary operations and deduplication are outside the scope of the guide. This guide makes the following assumptions:

- The Pure Storage array is already online and serving data
- Commvault software has already been installed in the environment (CommServe® server and MediaAgent at a minimum)
- A Windows host that has a Volume from the Pure Storage array online, and a Commvault iDataAgent has been installed.

Array Requirements

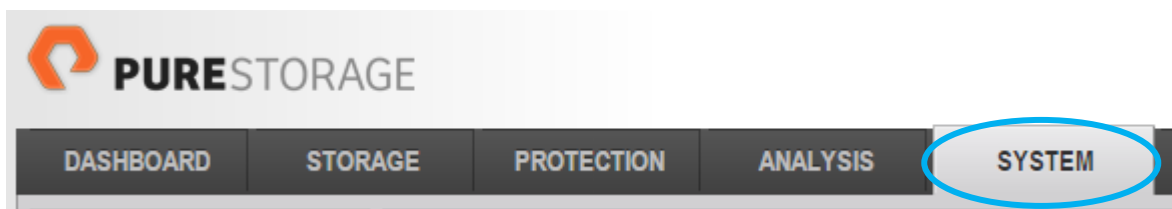
- **Array Operating System Requirements:** Purity v4.1.1 (or higher)
- **REST API:** v1.4 (found in Purity v4.x and higher)
 - o IntelliSnap software integration is based on the REST API in the Purity Operating System, v1.4 is the minimum required version of the REST API for support.
- **Array Licensing:** Pure Storage arrays require no additional licensing for IntelliSnap software functionality.
- **Protocol Support:** Fibre Channel or iSCSI

Pure Storage FlashArray Configuration

The Pure Storage FlashArray includes everything required to perform IntelliSnap software operations. To ensure proper functionality the following section describes how to check the Purity Operating System version and get the API Token that is utilized for authentication between Commvault software and the Pure Storage array.

This is a one time configuration that will enable use of the Pure Storage Array within the Commvault environment. Every client that initiates snapshot operations on this Pure Storage array will utilize this configuration. If there are multiple Pure Storage FlashArrays in the environment, each one needs to be configured using this procedure.

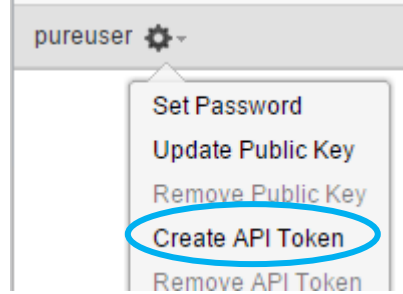
1. Open a Web Browser and navigate to the Pure Storage Administrative Console. Login with a user that has administrative rights (e.g. "pureuser").
2. Once in the main web interface, navigate to **System**:



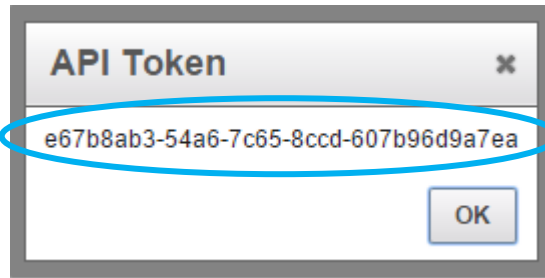
3. Select **Configuration > Array**.
4. Verify that the Purity Version is 4.1.1 (or higher) for proper IntelliSnap software functionality.

Controller Summary				
NAME	MODE	MODEL	PURITY VERSION	STATUS
CT0	secondary	FA-405	4.1.7	ready
CT1	primary	FA-405	4.1.7	ready

5. Select **Create API Token** from the **Dropdown Menu**. (Hover over the username to make the dropdown icon appear.)
NOTE: If there is an existing API Token for this user, select **Show API Token** instead, and proceed to the next step.



6. The **API Token** will be displayed on the screen. Highlight it and copy it to the clipboard. This token is required for the Commvault software configuration.

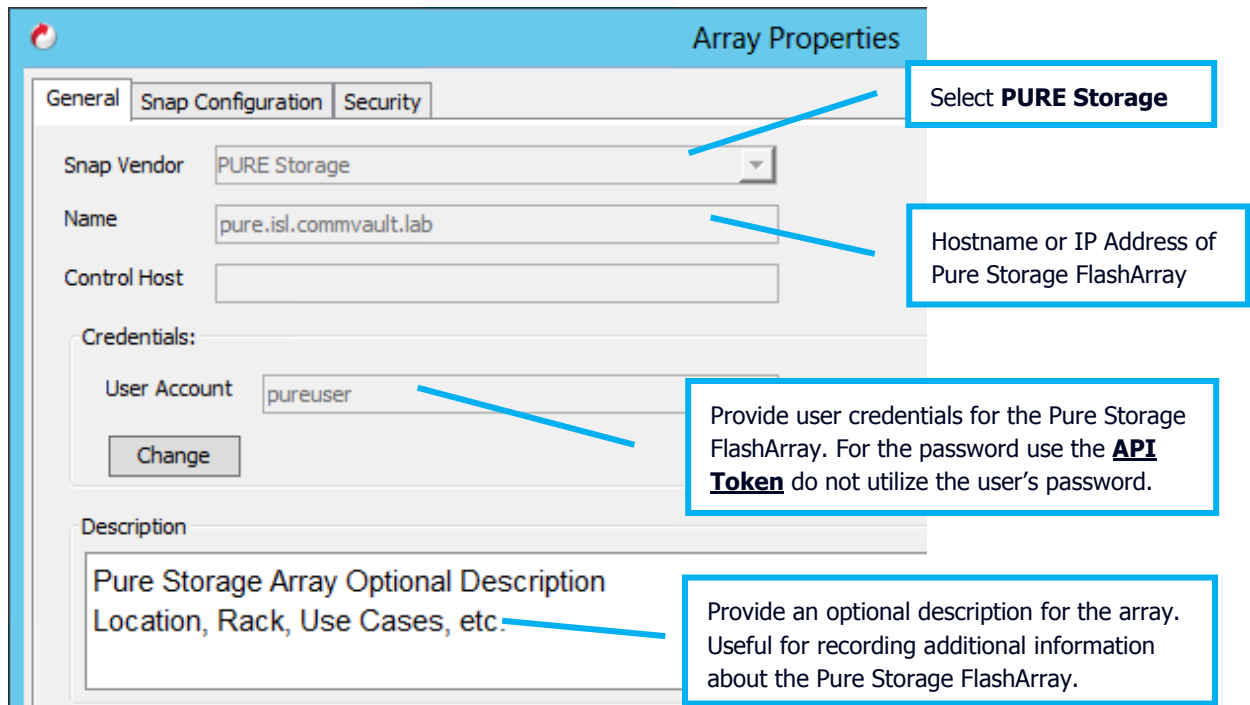


7. Click **OK**. The Pure Storage configuration is complete. Minimize the Pure Storage Administrative Console.

Commvault® Array Management Configuration

The Array Management tool in the Commvault Administrative Interface records the configuration details for all arrays that will be utilized with IntelliSnap technology. This configuration is performed only one time per array, and all clients will inherit this configuration. IntelliSnap software will automatically detect the array on each client at the time of execution to ensure maximum flexibility in the configuration.

1. Open the Commvault Administrative Interface, login with a user that has administrative rights (e.g. "admin").
2. Once in the main interface, navigate to **Storage -> Array Management** on the top menu bar.
3. The **Array Management** menu will appear. Select **Add**.
4. The **Array Properties** menu will appear. Set options as follows to configure the Pure Storage Array:

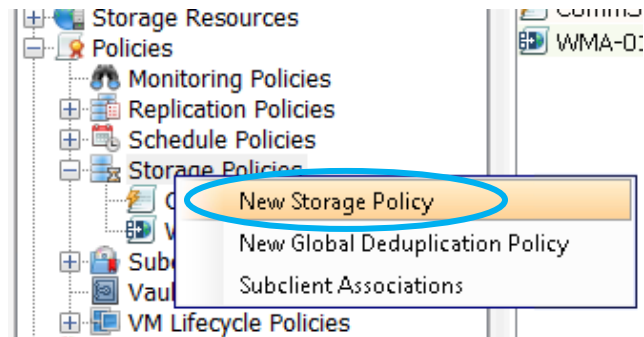


5. Click **OK** to save the Pure Storage array configuration, and click **OK** again to exit the Array Management screen. The array is now configured in Commvault.

Storage Policy Configuration

IntelliSnap software functionality will require a Storage Policy to control retention and secondary operations. For this guide a sample Storage Policy will be created to execute IntelliSnap software operations; multiple clients can utilize a single Storage Policy depending on configuration options. Deduplication and secondary operations will be ignored for the purposes of this guide. This process assumes that there is a valid MediaAgent configured with an existing disk library.

1. From the main Commvault Administrative Interface expand **Policies**. Right-click **Storage Policies** on the left side navigation bar to launch the Create Storage Policy Wizard. Click **New Storage Policy**.



2. Complete the wizard as follows:
 - **Storage Policy Type** – Data Protection and Archiving
 - **Storage Policy Name** – An identifiable name for the policy (e.g. "IntelliSnap - Pure Storage")
 - **Use Existing Global Deduplication Policy** – No (This test is focused on IntelliSnap technology)
 - **Library** – Disk Library to store index information
 - **MediaAgent** – The MediaAgent that houses the Disk Library
 - **Device Streams** – 50 (Leave at Default), leave the Aging rules as they are for Streaming copies

- **Deduplication for Primary Copy** – Deselect the checkmark in “Yes”, this test is focused on IntelliSnap software
- Click **Finish**

Name: IntelliSnap - Pure Storage
 Primary Copy: Primary
 Library: WMA-01 - Quick
 No. of Streams: 50
 iDataAgent Backup Aging Rules: infinite
 Data/Compliance Archiver Aging Rules: infinite
 Retain Snaps by Number of Jobs: N/A
 Deduplication: No

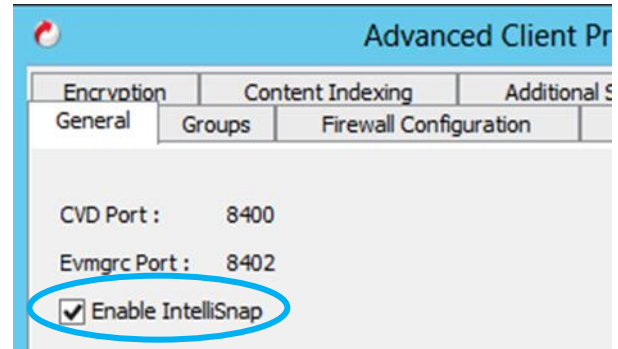
3. Right-click on the newly created Storage Policy, then choose **All Tasks -> Create New Snapshot Policy Copy**.
4. Under the **General** Tab fill in the following information:

5. Click on the Retention Tab:

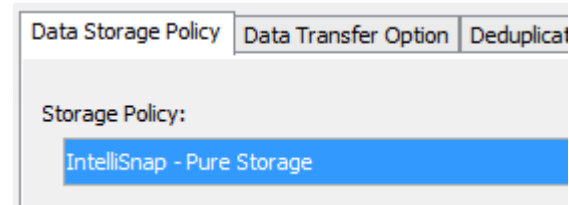
6. Click **OK**

Windows Test Client Configuration

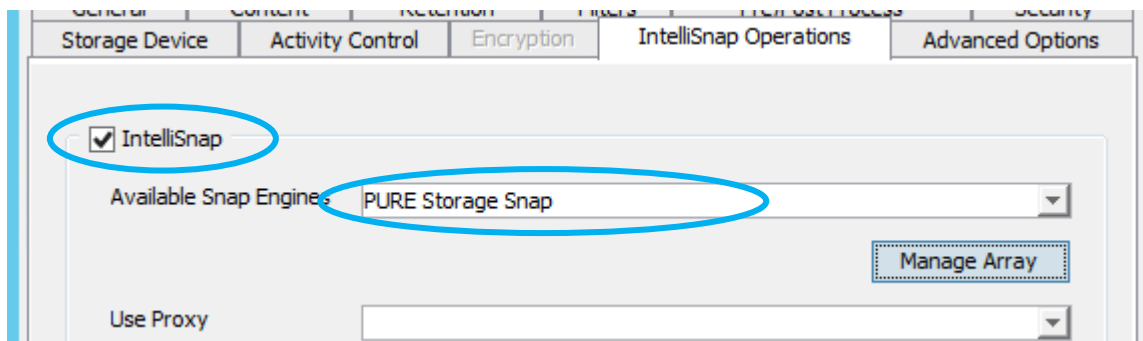
1. From the main Commvault Administrative Interface expand **Client Computers** and right-click the Windows host that will be tested and select **Properties**.
2. From the **Client Computer Properties** window select **Advanced**.
3. In the **General** tab, place a checkmark in **Enable IntelliSnap**, click **OK** to exit the Advanced tab, and **OK** again to exit **Client Computer Properties**.



4. On the Client expand **File System**, highlight **defaultBackupSet**, and right click client. Select **All Tasks** -> **New Subclient**.
5. The **Subclient Properties** screen will appear, under the **General** tab:
 - o **Subclient name** – A name to identify this Subclient (e.g. "IntelliSnap – Pure")
6. Under the **Content** tab:
 - o Click **Browse** and select the Drive Letter (or Mount Point) that is on the Pure Storage FlashArray. **DO NOT** include local content.
7. Under the **Storage Device** tab:
 - o Select the **Storage Policy** that was created during the Storage Policy Configuration phase.



8. Under the **IntelliSnap Operations** tab:
 - o Place a checkmark in **IntelliSnap** to enable this at the Subclient level.
 - o From the **Available Snap Engines** dropdown menu choose **PURE Storage Snap**.



- Click **OK**. A schedule menu will appear. Select **Do Not Schedule** and click **OK**. This client is now ready to perform IntelliSnap software operations.

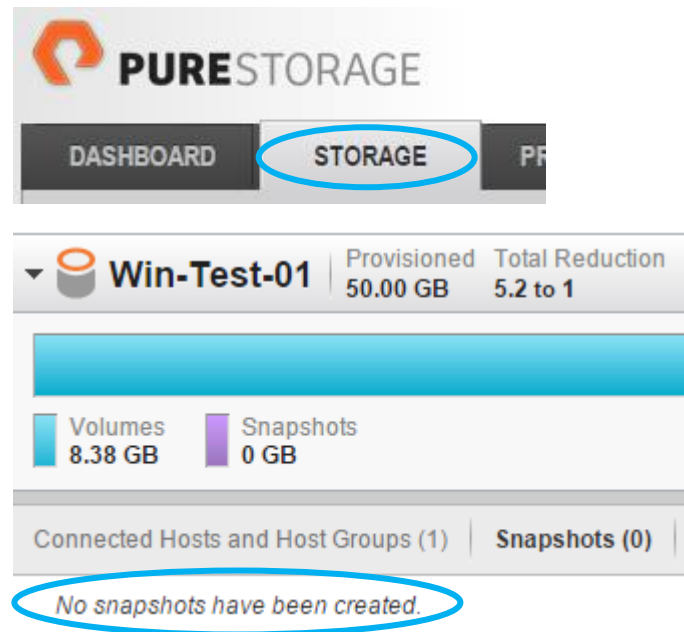
Testing the IntelliSnap[®] Software Configuration

The above configuration will allow for the Windows test client to perform IntelliSnap software operations on the Pure Storage array for the LUN that is attached to that host. This section highlights some of the visible elements on the IntelliSnap software operation in both the Commvault and Pure Storage interfaces.

Pure Storage Array Interface Prep

The Pure Storage array will show the snapshot details during the creation and indexing phases. To view those phases during the IntelliSnap software operation:

- Switch back to the Pure Storage Administrative Console. If the session has ended you will need to login again.
- Once in the main web interface, navigate to **Storage**:

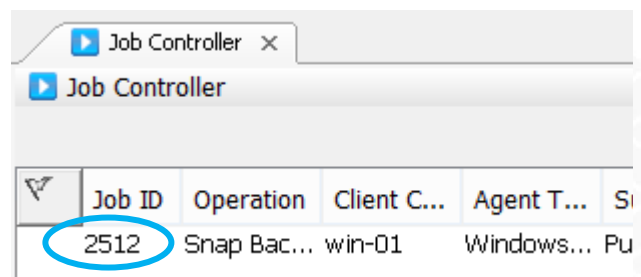


- Navigate to the Volume that is associated with the client, select the **Snapshots** tab. As you can see in this example **Win-Test-01** is the volume and there are no associated snapshots currently:

- Leave this screen open, and swap back to the Commvault Administrative Interface.

Execute IntelliSnap[®] Software Operation

- Right click on the Subclient that was created for IntelliSnap software, and select **Backup**.
- The **Backup Options for Subclient** menu will appear, select **Full** from the **Backup Type** and click **OK**, this will start the job and it will be visible in the **Job Controller**:



- The job will progress through its phases until completion, and an IntelliSnap software based snapshot in Pure

Storage will be created.

IntelliSnap[®] Technology snapshot in Pure Storage

The Volume will now show a snapshot created in the Pure Storage Administrative Console:

The nomenclature for the snapshot is as follows:

<Volume Name>.SP-2-<Job ID>-<Epoch Time>

In this case the snapshot is named **Win-Test-01.SP-2-2512-1436834169**.

- The Primary Name of the Volume (Win-Test-01)
- SP-2 (CommCell ID #)
- Job ID (2512)
- Epoch Time (1436834169)

This naming convention is automatic, and ensures that no snapshots with identical names will be issued. The Job ID is useful to correlate specific snapshots to Job IDs in the future.



Summary

This concludes the IntelliSnap Technology Quick Start Guide for Pure Storage FlashArray. Further detailed information will be released in a detailed Field Guide for Pure Storage that will include broader application configuration scenarios. Please visit www.commvault.com or documentation.commvault.com for further information about upcoming guides and videos.

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