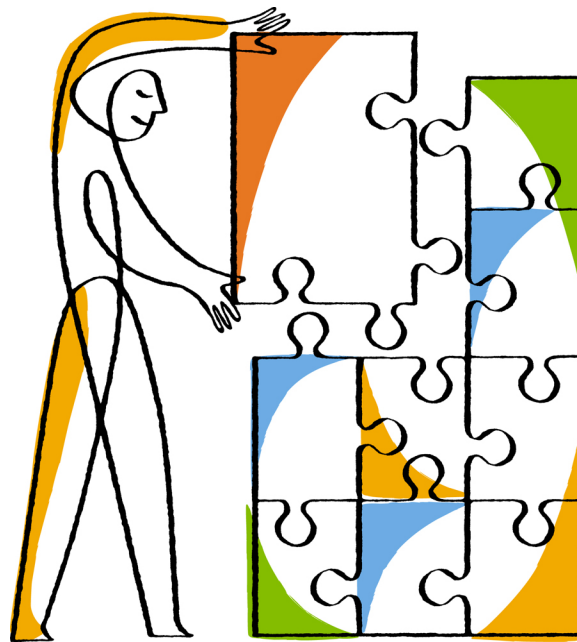




**NetApp®**

## OnCommand® System Manager 3.1.2

### Installation and Setup Guide



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## Understanding System Manager

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System Manager is a graphical management interface that enables you to manage storage systems and storage objects (such as disks, volumes, and aggregates) and perform common management tasks related to storage systems from a web browser. As a cluster administrator, you can use System Manager to administer the entire cluster and its resources.

System Manager enables you to perform many common tasks such as the following:

- Configure and manage storage objects, such as disks, aggregates, volumes, qtrees, and quotas.
- Configure protocols, such as CIFS and NFS, and provision file sharing.
- Configure protocols such as FC, FCoE, and iSCSI for block access.
- Verify and configure network configuration settings in the storage systems.
- Set up and manage mirroring and vaulting relationships.
- Perform cluster management, storage node management, and Storage Virtual Machine (SVM, formerly known as Vserver) management operations.
- Create and configure SVMs, manage storage objects associated with SVMs, and manage SVM services.
- Monitor and manage HA configurations in a cluster.

## Supported versions of Data ONTAP

You should be aware of the Data ONTAP versions that are supported by System Manager.

For storage systems running clustered Data ONTAP, System Manager supports the following versions:

- Data ONTAP 8.1.3 and 8.1.4
- Data ONTAP 8.2.1, 8.2.2, and 8.2.3  
Starting with clustered Data ONTAP 8.2.2, support for Federal Information Processing Standard (FIPS) 140-2 is available for secure web services (HTTPS). However, System Manager does not support FIPS. Therefore, you cannot manage FIPS-enabled clusters.
- Data ONTAP 8.3.x  
When you use System Manager 3.1.2 to manage clusters running Data ONTAP 8.3 or later, the corresponding version of System Manager is launched to manage these clusters.

For storage systems running Data ONTAP operating in 7-Mode, System Manager supports the following versions:

- Data ONTAP 7.3.7
- Data ONTAP 8.0.4 and 8.0.5  
You must enable HTTP on the storage system when using System Manager to manage the Data ONTAP 8.0.x release family. You cannot use a secure communication protocol to manage your storage systems.
- Data ONTAP 8.1.3 and 8.1.4
- Data ONTAP 8.2.1, 8.2.2, and 8.2.3

Secure Sockets Layer (SSL) 2.0 and 3.0 versions are no longer supported. If you want to manage Data ONTAP versions 7.3.x, 8.1.x, and 8.2.x using a secure communication protocol, you must ensure that the Transport Layer Security (TLS) protocol is enabled on the storage system.

**Note:** Data ONTAP 8.3 and later do not include a 7-Mode version.

For more information, see the *Data ONTAP System Administration Guide for 7-Mode*.

## Support for multiple languages

System Manager supports the display of UI text in multiple languages.

The languages supported are as follows:

- English (en)
- Japanese (ja)
- Simplified Chinese (zh-cn)

The default language is the language derived from the locale of the operating system. Therefore, the System Manager installer reads the system locale from the host operating system. If the system locale is not supported, then the default language used is English.

## Where to find additional clustered Data ONTAP information

System Manager Help provides basic clustered Data ONTAP conceptual information to help you perform tasks using System Manager. For in-depth conceptual information to help you configure, monitor, and manage storage objects and storage systems, you can see the Data ONTAP documentation available on the NetApp Support Site.

You might find the following Data ONTAP documentation useful:

### ***Clustered Data ONTAP Physical Storage Management Guide***

Describes how to configure, operate, and manage the physical storage resources for storage systems running clustered Data ONTAP. It provides information about disks, RAID groups, plexes, and aggregates.

### ***Clustered Data ONTAP Logical Storage Management Guide***

Describes how to configure, operate, and manage the storage resources for storage systems running clustered Data ONTAP. It provides information about volumes, FlexClone volumes, files and LUNs, deduplication, compression, qtrees, and quotas.

### ***Clustered Data ONTAP System Administration Guide for Cluster Administrators***

Describes general system administration for storage systems that run Data ONTAP software.

### ***Clustered Data ONTAP High-Availability Configuration Guide***

Describes installation and management of high-availability configurations.

### ***Clustered Data ONTAP System Administration Guide for SVM Administrators***

Describes the capabilities of Storage Virtual Machine (SVM) administrators to administer SVMs in clustered Data ONTAP.

### ***Clustered Data ONTAP Network Management Guide***

Describes how to configure and manage networks associated with storage systems running clustered Data ONTAP and how to manage file access with NFS and CIFS protocols.

### ***Clustered Data ONTAP SAN Administration Guide***

Describes how to configure and manage the iSCSI and FC protocols for SAN environments.

***Clustered Data ONTAP File Access and Protocols Management Guide***

Describes how to configure and manage networks and how to manage file access with NFS and CIFS protocols.

***Clustered Data ONTAP Data Protection Guide***

Describes how to back up and recover data using clustered Data ONTAP online backup and recovery features.

**Related information**

[Documentation on the NetApp Support Site: \*mysupport.netapp.com\*](http://mysupport.netapp.com)

## Where to find additional 7-Mode information

System Manager Help provides basic Data ONTAP operating in 7-Mode conceptual information to help you perform tasks using System Manager. For in-depth conceptual information to help you configure, monitor, and manage storage objects and storage systems, you can see the Data ONTAP documentation available on the NetApp Support Site.

You might find the following Data ONTAP documentation useful:

***Data ONTAP Storage Management Guide for 7-Mode***

Describes how to configure, operate, and manage the storage resources for storage systems running Data ONTAP operating in 7-Mode, using disks, RAID groups, aggregates, volumes, FlexClone volumes, files and LUNs, FlexCache volumes, deduplication, compression, qtrees, and quotas.

***Data ONTAP System Administration Guide for 7-Mode***

Describes general system administration for storage systems that run Data ONTAP software.

***Data ONTAP High Availability and MetroCluster Configuration Guide for 7-Mode***

Describes how to install and manage high-availability configurations.

***Data ONTAP MultiStore Management Guide for 7-Mode***

Describes how to administer vFiler units (virtual storage systems) with the MultiStore software available by license with Data ONTAP operating in 7-Mode.

***Data ONTAP Network Management Guide for 7-Mode***

Describes how to configure and manage networks associated with storage systems running Data ONTAP operating in 7-Mode.

***Data ONTAP Storage Efficiency Management Guide for 7-Mode***

Describes the features and functionalities that help to significantly improve storage utilization.

***Data ONTAP SAN Administration Guide for 7-Mode***

Describes how to configure and manage the iSCSI and FC protocols for SAN environments.

***Data ONTAP File Access and Protocols Management Guide for 7-Mode***

Describes how to manage file access on storage systems with Data ONTAP operating in 7-Mode for NFS, CIFS, HTTP, FTP, and WebDAV protocols.

***Data ONTAP Data Protection Online Backup and Recovery Guide for 7-Mode***

Describes how to back up and recover data using Data ONTAP operating in 7-Mode online backup and recovery features.

***Data ONTAP Archive and Compliance Management Guide for 7-Mode***

Describes how to archive and protect data for compliance purposes.

**Related information**

*[Documentation on the NetApp Support Site: mysupport.netapp.com](https://mysupport.netapp.com)*

# Installing, upgrading, or uninstalling System Manager

---

You can download and install System Manager on a desktop or laptop that is running a Windows or a Linux operating system. You can upgrade to the current System Manager version from earlier versions of the product. You can uninstall System Manager at any time.

On Windows, you can install System Manager by using the standard wizard-based installer. On Linux, you must install System Manager through the command-line interface by using Red Hat Package Manager (RPM). You can perform an in-place upgrade to System Manager 3.x from System Manager 2.x versions.

## System requirements for System Manager

You must ensure that you have the required host system configuration, operating system, and browser to run the System Manager software. You must also have the necessary administrative privileges to access the software.

Your host system must meet the following minimum requirements:

- Pentium x86 processor
- 1 GB RAM
- 1 GB video display RAM
- 1 GB free disk space  
If you are upgrading from an earlier version, you might require additional disk space for the existing log files.
- Wireless or Ethernet connection to the network
- 32-bit or 64-bit Windows or Linux operating system
- Adobe Flash Player 11.0 or later
- 32-bit or 64-bit Oracle Java Runtime Environment (JRE) 7 or JRE 8
  - Installing a 32-bit or 64-bit JRE depends on the operating system.  
If you are using a 32-bit Windows or Linux operating system, a 32-bit JRE must be installed. Similarly, if you are using a 64-bit Windows or Linux operating system, a 64-bit JRE must be installed.
  - You can install a 32-bit or 64-bit Oracle JRE 7 or JRE 8 from [www.java.com/en](http://www.java.com/en).
  - If you encounter any issue while opening System Manager after upgrading to JRE 8, see Bug ID 864070 in Bugs Online.  
*Bug ID: 864070 - Cannot open System Manager after upgrading to Java 8*

Your Windows system must be running one of the following:

- Windows Vista
- Windows 7
- Windows 8
- Windows Server 2003



- Windows Server 2008
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2

Your Linux system must be running one of the following:

- Red Hat Enterprise Linux 5 or 6
- SUSE Linux Enterprise Server 11

Your Linux system must have a graphical desktop environment, such as GNOME or KDE, installed.

Your web browser must be one of the following:

- Internet Explorer 9.0, 10.0, or 11.0 (for Windows)

**Note:** Internet Explorer launched in the compatibility mode is not supported.

- Mozilla Firefox 38.0 (for both Windows and Linux)
- Google Chrome 42.0 (for Windows)

**Note:** You can run either a 32-bit browser or a 64-bit browser on a 64-bit operating system.

You should be aware of the following information:

- You should use a resolution of 1280 x 1024 pixels for optimal viewing.

**Note:** You must ensure that the screen width does not exceed 2000 pixels.

- You must ensure that the web browser is not in offline mode.

**Note:** For storage systems running Data ONTAP 8.2 or later operating in 7-Mode, you must enable HTTP by using the `httpd.admin.ssl.enable` option.

For information about the supported Data ONTAP versions, see [Supported versions of Data ONTAP](#) on page 4.

For the latest information about currently supported systems, see the Interoperability Matrix.

#### Related information

[Interoperability Matrix: mysupport.netapp.com/NOW/products/interoperability](http://mysupport.netapp.com/NOW/products/interoperability)

## Downloading the System Manager software

Before you install System Manager, you must download the software from the NetApp Support Site. The software is available to all registered users for free download.

#### Before you begin

You must have access to the NetApp Support Site.

#### Steps

1. Log in to the NetApp Support Site.
2. In the NetApp Support page, click **Downloads > Software**.
3. In the OnCommand System Manager row, select the platform, and click **Go!**

4. Follow the prompts and download the software file to a local directory.

**Related information**

[NetApp Support Site: mysupport.netapp.com](http://mysupport.netapp.com)

## Installing System Manager on Windows

You can install System Manager on your Windows system by using the wizard-based installer.

**Before you begin**

- Your Windows host system must be running the supported software version.
- The System Manager software must be downloaded from the NetApp Support Site.
- You must have the necessary administrator privileges to install the application.
- You must have read/write permission to your home directory.  
By default, your home directory is used to store configuration files and log files.
- If you manually specify the port for the Jetty Web server that System Manager installs, the selected port must not already be used by another application when the System Manager application is launched.

**Note:** The System Manager installation is completed even if the configured port is used by another application. However, you cannot launch System Manager and you must reinstall it on a different port or ensure the port to be used is free.

- Oracle Java Runtime Environment (JRE) 7 or 8 must be installed.

**Steps**

1. Run the System Manager setup (.exe) file from the directory where you downloaded and saved the software.
2. Select the language.

The default language is the language derived from the locale of the host operating system. If the system locale is not supported, then the default language used is English.

3. Follow the on-screen prompts to complete your installation.

By default, the installation path is C:\Program Files\NetApp\OnCommand System Manager.

By default, System Manager configuration details and logs are stored in the following user preference directories:

- For systems running Windows Vista, Windows 7, or Windows 8, the location is: C:\Users\user\_name\NetApp\SystemManager.

**After you finish**

You can launch System Manager and start managing your storage systems and objects.

**Related tasks**

[Downloading the System Manager software](#) on page 9

[Launching System Manager](#) on page 15

**Related references**

[System requirements for System Manager](#) on page 8

**Related information**

[NetApp Support Site: mysupport.netapp.com](#)

## Upgrading to System Manager on Windows

You can upgrade to the latest version of System Manager from the earlier versions. After the upgrade, you can continue to manage the storage systems that you were managing with the earlier versions.

**Before you begin**

- Your host system must be running the supported software versions.
- The latest version of System Manager software must be downloaded from the NetApp Support Site.
- All browser windows or tabs must be closed.
- Oracle Java Runtime Environment (JRE) 7 or 8 must be installed.
- The Java cache must be cleared.

**About this task**

There is no upgrade path from System Manager 1.x to the current version of System Manager. However, you can install the current version of System Manager even if System Manager 1.x is already installed in your system. Both System Manager 1.x and System Manager 3.x versions can coexist in the same system.

**Note:** You can perform an in-place upgrade to System Manager 3.x from System Manager 2.x versions.

**Steps**

1. Run the downloaded System Manager software file.
2. Follow the on-screen instructions to complete the upgrade.

After the upgrade, the IP addresses of all the storage systems that you managed using the earlier version of System Manager are migrated.

**After you finish**

You can launch System Manager and start managing your storage systems.

If you are using both System Manager 1.x and System Manager 3.x versions, the storage system credentials are not migrated. Therefore, you must provide the credentials before you use System Manager to manage your storage systems.

If you are upgrading from System Manager 2.x, the storage system credentials are migrated and you need not provide the credentials.

**Related tasks**

[Downloading the System Manager software](#) on page 9

[Launching System Manager](#) on page 15

### Related references

[System requirements for System Manager](#) on page 8

### Related information

[NetApp Support Site: mysupport.netapp.com](#)

[How do I clear the Java cache?](#)

## Uninstalling System Manager on Windows

You can uninstall System Manager by using the Windows Add or Remove Programs utility.

### Before you begin

The System Manager application must be closed.

### About this task

You cannot uninstall System Manager from the control panel if you have renamed the directory in which it is installed. However, you can uninstall System Manager by running `uninst.exe` from the installation directory.

### Steps

1. Click **Start > Control Panel**.
2. Open the utility to add or remove programs and uninstall System Manager *version\_number*.

## Installing System Manager on Linux

You must install System Manager on your Linux system through the command-line interface by using Red Hat Package Manager (RPM).

### Before you begin

- Your Linux host system must be running the supported software versions.
- The System Manager software must be downloaded from the NetApp Support Site.
- You must have the necessary privileges to install the application.
- You must have read/write permission to your home directory.  
By default, your home directory is used to store configuration files and log files.
- Oracle Java Runtime Environment (JRE) 7 or 8 must be installed.

### Steps

1. Install System Manager by using the following command:  

```
rpm -i downloaded_rpm_file_name
```
2. Check the progress of the installation by using the following command:

```
rpm -ivv downloaded_rpm_file_name
```

By default, the System Manager configuration details and logs are stored in the following user preference directory: `/root/Netapp`.

**After you finish**

You can launch System Manager and start managing your storage systems and objects.

**Related tasks**

[Downloading the System Manager software](#) on page 9

[Launching System Manager](#) on page 15

**Related references**

[System requirements for System Manager](#) on page 8

**Related information**

[NetApp Support Site: \*mysupport.netapp.com\*](#)

## Upgrading to System Manager on Linux

You can upgrade to the latest version of System Manager through the command-line interface by using Red Hat Package Manager (RPM). After the upgrade, you can continue to manage the storage systems that you were managing with the earlier versions.

**Before you begin**

- Your host system and the storage systems must be running the supported software versions.
- The latest version of System Manager software must be downloaded from the NetApp Support Site.
- All browser windows or tabs must be closed.
- Oracle Java Runtime Environment (JRE) 7 or 8 must be installed.

**About this task**

You can perform an in-place upgrade to System Manager 3.x from System Manager 2.x versions.

**Step**

1. From the command-line interface, enter the following command:

```
rpm -U download_file_name
```

**Related tasks**

[Downloading the System Manager software](#) on page 9

[Launching System Manager](#) on page 15

**Related references**

[System requirements for System Manager](#) on page 8

**Related information**

[NetApp Support Site: \*mysupport.netapp.com\*](#)

## Uninstalling System Manager on Linux

You can uninstall System Manager through the command-line interface by using Red Hat Package Manager (RPM).

### Before you begin

The System Manager application must be closed.

### Step

1. From the command-line interface, enter the following command:

```
rpm -e system_manager_package_name
```

## Getting started with System Manager

---

The System Manager user interface enables you to configure your storage systems and manage storage objects such as disks, aggregates, volumes, quotas, qtrees, and LUNs; protocols such as CIFS, NFS, iSCSI, and FC; vFiler units; Storage Virtual Machines (SVMs); HA configurations; V-Series systems; and vault and mirror relationships.

For more information about how to configure and manage your storage systems from System Manager, see the *System Manager Help*. You can access the Help in PDF format from the NetApp Support Site or from the Help provided with the System Manager software.

Before you can start managing a storage system from System Manager, you have to add the system to System Manager.

### Related information

[NetApp Support Site: mysupport.netapp.com](http://mysupport.netapp.com)

## Launching System Manager

After installing System Manager, you must launch the application to configure and manage your storage systems from a Web browser.

### Before you begin

- If you are using a Windows Server operating system and Internet Explorer, the URL `http://127.0.0.1` must be added as a trusted site in Internet Explorer.
- If you are using a proxy server, it must be disabled.
- If you are using a Linux system, Oracle Java Runtime Environment (JRE) 7 or 8 must be installed and it must be set as the default JRE.  
You can use the `java -d32 -version` command and the `java -d64 -version` command to verify that you are using the correct JRE version and the associated platform.
- If you are running Windows or Linux guest operating system on OS X operating system by using VMware Fusion, you must ensure the following:
  - The Shared folders feature must be disabled.
  - The desktop option of the Mirrored folders feature must be disabled.
- To access System Manager through a VPN connection on a machine running Windows 7 and Windows Server 2008, you must have installed the hotfix 2750841 from the Microsoft web site.

### Steps

1. Launch System Manager in one of the following ways:
  - Double-click the NetApp OnCommand System Manager icon on your desktop.
  - For Windows, click **Start > All Programs > NetApp > OnCommand System Manager > NetApp OnCommand System Manager *version\_number***.
  - For Red Hat Enterprise Linux, click **Applications > System Tools > NetApp OnCommand System Manager *version\_number***.

- For SUSE Linux Enterprise Server, click **Computer > Applications > NetApp OnCommand System Manager *version\_number***.
2. Double-click the storage system that you want to manage.

Depending on your browser settings, the storage system management tab opens in a new tab window or a new browser window.

**Note:** If you try to open a storage system that is already open in a browser tab, the browser does not switch to the opened tab.

#### Related information

[Microsoft hotfix 2750841: support.microsoft.com/kb/2750841](https://support.microsoft.com/kb/2750841)

## Ports used by System Manager

System Manager uses specific ports when it accesses the storage system by using management protocols such as HTTPS, HTTP, and SNMP.

System Manager uses the following ports to communicate with the storage systems:

- Port TCP/443 for HTTPS
- Port TCP/80 for HTTP
- Port UDP/161 for SNMP

It is best to use HTTPS for secure communication with the storage system. You must enable SSL on your storage system to allow administrative requests over HTTPS to succeed. For storage systems running clustered Data ONTAP 8.1 or later, if SSL is not enabled, you have to enable SSL from the command-line interface (CLI).

System Manager does not allow you to specify a port range to start the Jetty Web server. System Manager either allows you to select a specific port or automatically selects the port. If you manually specify the port, you can start only one instance of System Manager. Running a single instance does not allow multiple users to access the application simultaneously. For example, in a multiuser environment with a terminal server, if System Manager does not start with a predefined port range, multiple users cannot access the application simultaneously.

## Enabling SNMP

For System Manager to discover storage systems, you must ensure that the SNMP protocols SNMPv1 and SNMPv2c are enabled and an SNMP community is created on the storage system.

#### About this task

SNMPv1 and SNMPv2c protocols are less secure compared to SNMPv3 protocol. In storage systems running Data ONTAP 8.1 or later, SNMPv1 and SNMPv2c protocols are enabled by default. In storage systems running clustered Data ONTAP 8.2 or later, SNMPv1 and SNMPv2c are disabled by default. SNMPv2c is enabled when an SNMP community is created.

You must use the command-line interface (CLI) to enable SNMP because System Manager does not support enabling SNMP. After the discovery of controllers by using SNMP, you require NetApp Manageability SDK credentials to effectively manage the controllers.



## Creating an SNMP community for clustered Data ONTAP 8.2 or later

You can create an SNMP community that acts as an authentication mechanism between the management station and the cluster when using SNMPv1 and SNMPv2c.

### About this task

You must use the CLI to enable SNMP on the cluster.

- Starting from Data ONTAP 8.2, SNMPv1 and SNMPv2c are disabled by default. SNMPv1 and SNMPv2c are enabled when an SNMP community is created.
- Data ONTAP supports read-only communities.
- By default, a firewall data policy has SNMP service set to **deny**.
- You can create SNMP communities for the SNMPv1 and SNMPv2c users for Storage Virtual Machines (SVMs).

### Steps

1. Use the `system snmp community add` command to create an SNMP community.

#### Example

The following command creates an SNMP community:

```
cluster1::> system snmp community add -type ro -community-name public
```

The default string in System Manager is **public**. However, you can use other community strings. You must specify the correct community string while adding or discovering clusters in System Manager.

2. Use the `system snmp community show` command to verify that the communities have been created.

#### Example

The following command displays the different communities created for SNMPv1 and SNMPv2c:

```
cluster1::> system snmp community show
cluster1 ro public
```

3. Use the `firewall policy show -service snmp` command to verify that SNMP is allowed as a service in the **cluster** firewall policy.

#### Example

The following example shows that the SNMP service is allowed in the cluster firewall policy:

```
cluster1::> firewall policy show -service snmp
(system services firewall policy show)

Policy           Service  Action IP-List
-----
cluster
data             snmp   allow 0.0.0.0/0
                snmp   deny   0.0.0.0/0, ::/0
```

```
intercluster
mgmt          snmp      deny  0.0.0.0/0
              snmp      allow 0.0.0.0/0, ::/0
4 entries were displayed.
```

4. If the firewall data policy has SNMP service set to **deny**, use the `firewall policy modify -service snmp -policy cluster -action allow` command to set it to **allow**.
5. Use the `options snmp.enable` command to enable SNMP on the cluster.

### Example

The following example shows that SNMP is enabled on the cluster:

```
cluster1::> options snmp.enable
cluster1
snmp.enable                on
```

## Enabling or disabling SNMP

You can enable or disable SNMP from the command-line interface by entering the `options snmp.enable` command.

### Step

1. To enable or disable SNMP, enter the following command:

```
options snmp.enable {on|off}
```

`on`—Enables SNMP

`off`—Disables SNMP

## Adding storage systems or clusters

Before you use System Manager to manage your storage systems and clusters, you have to add them to the application. You can also add storage systems that are in an HA configuration.

### Before you begin

- Your storage systems must be running a supported version of Data ONTAP. [Supported versions of Data ONTAP](#) on page 4
- The DNS domain name of your storage system must be added to the DNS search list in the client running System Manager.
- All the nodes in the cluster must be running Data ONTAP 8.1 or later.
- You must have the Data ONTAP credentials (user name and password) of the storage object that you are adding to System Manager.

### About this task

If you are adding one of the storage systems from an HA pair, the partner node is automatically added to the list of managed systems. If the partner node in an HA pair is down, you can add the working storage node.

**Steps**

1. From the home page, click **Add**.
2. Type the fully qualified DNS host name or the IPv4 address of the storage system or cluster.  
You can specify the IPv6 address of the storage system if you are adding a system that is running a supported version of Data ONTAP operating in 7-Mode.  
If you are adding a cluster, you must enter the IP address of the cluster-management LIF.
3. Click the **More** arrow.
4. Select the method for discovering and adding the storage system or cluster:
  - **SNMP**  
You must specify the SNMP community and SNMP version (SNMPv1 or SNMPv2).  
Although you can use SNMP to communicate with the nodes, you must provide the controller credentials to manage these nodes.
  - **Credentials**  
You must specify the Data ONTAP credentials (user name and password) of the storage object that you are adding to System Manager.  
You can use SNMP to communicate with the nodes. However, controller credentials are required for managing the nodes.
5. Click **Add**.

**Result**

The storage system that you have added is displayed in the home page.

## Discovering storage systems

You can use the Discover Storage Systems dialog box to discover storage systems, clusters, or storage systems in an HA pair on a network subnet and add them to the list of managed systems.

**Before you begin**

- Your storage systems must be running a supported version of Data ONTAP.
- All the nodes in the cluster must be running Data ONTAP 8.1 or later.
- The DNS domain name of your storage system must be added to the DNS search list in the client running System Manager.
- The SNMP protocols SNMPv1 and SNMPv2c must be enabled, and an SNMP community must be configured.

**About this task**

If you are adding one of the nodes in an HA pair, the partner system is automatically added to the list of managed systems.

**Steps**

1. From the home page, click **Discover**.
2. In the **Discover Storage Systems** dialog box, type the subnet IP address and click **Discover**.
3. Select one or more storage systems from the list of discovered systems and click **Add Selected Systems**.

4. Verify that the storage system or the HA pair that you added is included in the list of managed systems in the System Manager home page.

## Configuring storage systems

You can use the Storage Configuration wizard to configure your storage system or an HA configuration running Data ONTAP operating in 7-Mode. You must separately configure each storage system when you configure an HA configuration.

### Before you begin

- The storage system must not be configured previously.
- Your storage systems must be running a supported version of Data ONTAP operating in 7-Mode. [Supported versions of Data ONTAP](#) on page 4
- You must have enabled HTTP by using the `httpd.admin.ssl.enable` option for storage systems running Data ONTAP 8.2 or later operating in 7-Mode.

**Note:** In the Data ONTAP 8.x operating in 7-Mode product name, the term *7-Mode* signifies that the 8.x release operates in the same way as the prior Data ONTAP 7.1, 7.2, and 7.3 release families.

### Steps

1. From the home page, double-click the appropriate storage system.
2. In the navigation pane, click **Storage**.
3. Click the **Storage Configuration** wizard.
4. Type or select information as prompted by the wizard.
5. Confirm the details and click **Finish** to complete the wizard.

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