



Add SnapCenter licenses

SnapCenter Software

NetApp
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Add SnapCenter licenses

The SnapCenter Standard license enables the protection of applications, databases, files systems, and virtual machines. Before you add a storage system to SnapCenter, you must install one or more SnapCenter licenses.

For information on the licenses required, see [SnapCenter licenses](#).

SnapCenter Standard controller-based licenses

A SnapCenter Standard controller-based license is required if you are using FAS or AFF storage controllers.

The controller-based license has the following characteristics:

- SnapCenter Standard entitlement included with purchase of Premium or Flash Bundle (not with the base pack)
- Unlimited storage usage
- Enabled by adding it directly to the FAS or AFF storage controller by using either the ONTAP System Manager or the storage cluster command line



You do not enter any license information in the SnapCenter GUI for the SnapCenter controller-based licenses.

- Locked to the controller's serial number



If you already have a SnapManagerSuite license on your controller, SnapCenter Standard controller-based license entitlement is provided automatically. The names SnapManagerSuite license and SnapCenter Standard controller-based license are used interchangeably, but they refer to the same license.

Verify if the SnapManager Suite storage controller license is installed

You can use the SnapCenter GUI to view whether a SnapManager Suite license is installed on FAS or AFF primary storage systems, and to identify which storage systems might require SnapManager Suite licenses. SnapManager Suite licenses apply only to FAS and AFF SVMs or clusters on primary storage systems.



Steps

1. In the left navigation pane, click **Storage Systems**.
2. On the Storage Systems page, from the **Type** drop-down, select whether to view all the SVMs or clusters that were added:
 - To view all of the SVMs that were added, select **ONTAP SVMs**.
 - To view all of the clusters that were added, select **ONTAP Clusters**.

When you click the cluster name, all of the SVMs that are part of the cluster are displayed in the Storage Virtual Machines section.

3. In the **Storage Connections** list, locate the Controller License column.

The Controller License column displays the following status:

-  indicates that a SnapManager Suite license is installed on a FAS or AFF primary storage system.
-  indicates that a SnapManager Suite license is not installed on a FAS or AFF primary storage system.
- Not applicable - indicates that a SnapManager Suite license is not applicable for this controller.

This message is displayed for the following platforms:

- Cloud Volumes ONTAP
- ONTAP Select
- Secondary storage
- MetroCluster

View the licenses installed on the controller

You can use the ONTAP command line to view all the licenses installed on your controller to determine whether you have the SnapManagerSuite license already installed.

You must be a cluster administrator on the FAS or AFF system.



The SnapCenter Standard controller-based license displays as SnapManagerSuite license on the controller.

Steps

1. Log in to the NetApp controller using the ONTAP command line.
2. Enter the license show command, and then view the output to determine whether the SnapManagerSuite license is installed.

```
cluster1::> license show
(system license show)

Serial Number: 1-80-0000xx
Owner: cluster1
Package          Type      Description          Expiration
-----
Base             site      Cluster Base License -

Serial Number: 1-81-000000000000000000000000xx
Owner: cluster1-01
Package          Type      Description          Expiration
-----
NFS              license   NFS License         -
CIFS             license   CIFS License        -
iSCSI            license   iSCSI License       -
FCP              license   FCP License         -
SnapRestore      license   SnapRestore License -
SnapMirror       license   SnapMirror License  -
FlexClone        license   FlexClone License   -
SnapVault        license   SnapVault License   -
SnapManagerSuite license   SnapManagerSuite License -
```

In the example, the SnapManagerSuite license is installed, therefore, no additional SnapCenter licensing action is required.

If no SnapManagerSuite license is displayed, you must obtain your controller serial number, and then retrieve your license from the NetApp Support Site.

Retrieve the controller serial number

You must know your controller serial number before you can retrieve your SnapCenter controller-based license. You can retrieve the controller serial number using the ONTAP command line.

You must be a cluster administrator on the FAS or AFF system.

Steps

1. Log in to the controller using the ONTAP command line.
2. Enter the system show -instance command, and then review the output to locate the controller serial number.

```
cluster1::> system show -instance
```

```
Node: fas8080-41-42-01
Owner:
Location: RTP 1.5
Model: FAS8080
Serial Number: 123451234511
Asset Tag: -
Uptime: 143 days 23:46
NVRAM System ID: xxxxxxxxxx
System ID: xxxxxxxxxx
Vendor: NetApp
Health: true
Eligibility: true
Differentiated Services: false
All-Flash Optimized: false
```

```
Node: fas8080-41-42-02
Owner:
Location: RTP 1.5
Model: FAS8080
Serial Number: 123451234512
Asset Tag: -
Uptime: 144 days 00:08
NVRAM System ID: xxxxxxxxxx
System ID: xxxxxxxxxx
Vendor: NetApp
Health: true
Eligibility: true
Differentiated Services: false
All-Flash Optimized: false
2 entries were displayed.
```

3. Record the serial numbers.

Retrieve SnapCenter controller-based license serial number

If you are using FAS or AFF storage, you can retrieve the SnapCenter controller-based license from the NetApp Support Site before you can install it using the ONTAP command line.

What you will need

- You must have valid NetApp Support Site login credentials.

If you do not enter valid credentials, no information is returned for your search.

- You must have the controller serial number.

Steps

1. Log in to the NetApp Support Site at mysupport.netapp.com.
2. Navigate to **Systems > Software Licenses**.
3. In the Selection Criteria area, ensure Serial Number (located on back of unit) is selected, enter the controller serial number, and then click **Go!**.

Software Licenses

Selection Criteria

Choose a method by which to search

▶ **Serial Number (located on back of unit)** ▾ Enter Value: **Go!**

Enter the Cluster Serial Number value without dashes.

- OR -

▶ Show Me All: **Serial Numbers with Licenses** ▾ For Company: **Go!**

A list of licenses for the specified controller is displayed.

4. Locate and record the SnapCenter Standard or SnapManagerSuite license.

Add a SnapCenter Standard controller-based license

You can use the ONTAP command line to add a SnapCenter controller-based license when you are using FAS or AFF systems, and you have a SnapCenter Standard or SnapManagerSuite license.

What you will need

- You must be a cluster administrator on the FAS or AFF system.
- You must have the SnapCenter Standard or SnapManagerSuite license.

About this task

If you want to install SnapCenter on a trial basis with FAS or AFF storage, you can obtain a Premium Bundle evaluation license to install on your controller.

If you want to install SnapCenter on a trial basis, you should contact your sales representative to obtain a Premium Bundle evaluation license to install on your controller.

Steps

1. Log in to the NetApp cluster using the ONTAP command line.
2. Add the SnapManagerSuite license key:

```
system license add -license-code license_key
```

This command is available at the admin privilege level.

3. Verify that the SnapManagerSuite license is installed:

```
license show
```

Remove the trial license

The trial license (serial number ending with “50”) cannot be deleted using the SnapCenter GUI. If you are using a controller-based SnapCenter Standard license and need to remove the capacity-based trial license from the SnapCenter GUI, you must use MySQL commands to remove the trial license manually.

About this task

Removing a trial license manually is only required if you are using a SnapCenter Standard controller-based license. If you procured a SnapCenter Standard capacity-based license and add it in the SnapCenter GUI, the trial license gets overwritten automatically.

Steps

1. On the SnapCenter Server, open a PowerShell window to reset the MySQL password.
 - a. Run the Open-SmConnection cmdlet to initiate a connection session with the SnapCenter Server for a SnapCenterAdmin account.
 - b. Run the Set-SmRepositoryPassword to reset the MySQL password.

For information about the cmdlets, see [SnapCenter Software Cmdlet Reference Guide](#).

2. Open the command prompt and run `mysql -u root -p` to log into MySQL.

MySQL prompts you for the password. Enter the credentials you provided while resetting the password.

3. Remove the trial license from the database:

```
use nsm; ``DELETE FROM nsm_License WHERE nsm_License_Serial_Number='510000050';
```

SnapCenter Standard capacity-based licenses

You use a SnapCenter Standard capacity license to protect data on ONTAP Select and Cloud Volumes ONTAP platforms.

The license has the following characteristics:

- Composed of a nine-digit serial number with the format 51xxxxxxx

You use the license serial number and valid NetApp Support Site login credentials to enable the license using the SnapCenter GUI.

- Available as a separate, perpetual license, with the cost based on either the used storage capacity or the size of the data you want protected, whichever is lower, and the data is managed by SnapCenter
- Available per terabyte

For example, you can obtain a capacity-based license for 1 TB, 2 TBs, 4 TBs, and so on.

- Available as a 90-day trial license with 100 TB capacity entitlement

How SnapCenter calculates capacity usage

If you have a SnapCenter capacity-based license installed, SnapCenter automatically calculates capacity usage once a day at midnight on the ONTAP Select and Cloud Volumes ONTAP storage it manages. To ensure you have configured SnapCenter correctly, you should be aware of how SnapCenter calculates capacity.

If you are using ONTAP Select or Cloud Volumes ONTAP as your storage platform, you must have a SnapCenter Standard capacity-based license installed to enable SnapCenter features such backup and restore. When you are using a Standard Capacity license, SnapCenter calculates the unused capacity by deducting the used capacity on all volumes from the total licensed capacity.

If used capacity exceeds the licensed capacity, an overuse warning is displayed on the SnapCenter Dashboard. If you configured capacity thresholds and notifications in SnapCenter, an email is sent when the used capacity reaches the threshold you specify.

Calculate capacity requirements for a SnapCenter capacity-based license

Before you obtain a SnapCenter capacity-based license, you should calculate the amount of capacity on a host that is to be managed by SnapCenter.

What you will need

You must be a cluster administrator on the Cloud Volumes ONTAP or ONTAP Select system.

About this task

SnapCenter calculates the actual capacity used. If the size of the file system or database is 1 TB, but only 500 GB of space is used, SnapCenter calculates 500 GB of used capacity. The volume capacity is calculated after dedupe and compression, and it is based on the entire volume's used capacity.

Steps

1. Log in to the NetApp controller using the ONTAP command line.
2. To view the volume capacity used, enter the command.

```
select::> vol show -fields used -volume Engineering,Marketing
vserver volume      used
-----
VS1      Engineering  2.13TB
VS1      Marketing    2.62TB

2  entries were displayed.
```

The combined used capacity for the two volumes is less than 5 TB; therefore, if you want to protect all 5 TB of data, the minimum SnapCenter capacity-based license requirement is 5 TB.

However, if you want to protect only 2 TB of the 5 TB of total used capacity, you can acquire a 2 TB capacity-based license.

Retrieve SnapCenter capacity-based license serial number

Your SnapCenter capacity-based license serial number is available in your order confirmation or in your documentation package; however, if you do not have this serial number, you can retrieve it from the NetApp Support Site.

You must have valid NetApp Support Site login credentials. If you do not enter valid credentials, no information is returned for your search.

Steps

1. Log in to the NetApp Support Site at mysupport.netapp.com.
2. Navigate to **Systems > Software Licenses**.
3. In the Selection Criteria area, choose **SC_STANDARD** from the Show Me All: Serial Numbers and Licenses drop-down menu.

Software Licenses

Selection Criteria

Choose a method by which to search

► **Serial Number (located on back of unit)** ▾ Enter Value: **Go!**
Enter the Cluster Serial Number value without dashes.

- OR -

► Show Me All: **Serial Numbers with Licenses** ▾ For Company: **Go!**

4. Type your company name, and then click **Go!**.

The nine-digit SnapCenter license serial number, with the format 51xxxxxxx, is displayed.

5. Record the SnapCenter license serial number.

Generate a NetApp license file

If you prefer not to enter your NetApp Support Site credentials and the SnapCenter license serial number in the SnapCenter GUI, or if you do not have internet access to the NetApp Support Site from SnapCenter, you can generate a NetApp license file, and then download and store the file in a location accessible from the SnapCenter host.

What you will need

- You must be using SnapCenter with either ONTAP Select or Cloud Volumes ONTAP.
- You must have valid NetApp Support Site login credentials.
- You must have your nine-digit SnapCenter license serial number in the format 51xxxxxxx.

Steps

1. Navigate to the [NetApp License File Generator](#).
2. Enter the required information.
3. In the Product Line field, select **SnapCenter Standard (capacity-based)** from the pull-down menu.
4. In the Product Serial Number field, enter the SnapCenter license serial number
5. Read and accept the NetApp Data Privacy Policy, and then click **Submit**.
6. Save the license file, and then record the file location.

Add SnapCenter capacity-based licenses

If you are using SnapCenter with ONTAP Select or Cloud Volumes ONTAP platforms, you must install one or more SnapCenter capacity-based licenses.

What you will need

- You must log in as the SnapCenter Admin user.
- If you want to log in to the NetApp Support Site using SnapCenter to obtain your licenses, you must have the license serial numbers and valid NetApp Support Site credentials.
- If you are using a NetApp license file (NLF) to add your license, you must know the location of the license file.

About this task


You can perform the following tasks on the Settings page:


- Add a license.
- View license details to quickly locate information about each license.
- Modify a license when you want to replace the existing license, for example, to update the license capacity or to change the threshold notification settings.
- Delete a license when you want to replace an existing license or when the license is no longer required.



The trial license (serial number ending with 50) cannot be deleted using the SnapCenter GUI. The trial license automatically gets overwritten when you add a procured SnapCenter Standard capacity-based licensed.

Steps

1. In the left navigation pane, click **Settings**.
2. In the Settings page, click **Software**.
3. In the License section of the Software page, click **Add** ().
4. In the Add SnapCenter License wizard, select one of the following methods to obtain the license you want to add:

For this field...	Do this...
Enter your NetApp Support Site (NSS) login credentials to import licenses	<p>a. Enter your NSS user name.</p> <p>b. Enter your NSS password.</p> <p>c. Enter your SnapCenter license serial number.</p> <div>  <p>This is not your storage controller serial number. If you are using a storage controller-based capacity license, you must enter it on the storage controller. You do not use the SnapCenter GUI to enter controller-based licenses.</p> </div>
NetApp License File	<p>a. Browse to the location of the license file, and then select it.</p> <p>b. Click Open.</p>

5. In the Notifications page, enter the capacity threshold at which SnapCenter sends email, EMS, and AutoSupport notifications.

The default threshold is 90 percent.

6. To configure the SMTP server for email notifications, click **Settings > Global Settings > Notification Server Settings**, and then enter the following details:

For this field...	Do this...
Email preference	Choose either Always or Never .
Provide email settings	<p>If you select Always, specify the following:</p> <ul style="list-style-type: none"> • Sender email address • Receiver email address • Optional: Edit the default Subject line <p>The default subject reads as follows: "SnapCenter License Capacity Notification".</p>

7. If you want to have Event Management System (EMS) messages sent to the storage system syslog or have AutoSupport messages sent to the storage system for failed operations, select the appropriate check boxes.

Best Practice: Enabling AutoSupport is recommended to help troubleshoot issues you might experience.

8. Click **Next**.

9. Review the summary, and then click **Finish**.

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