

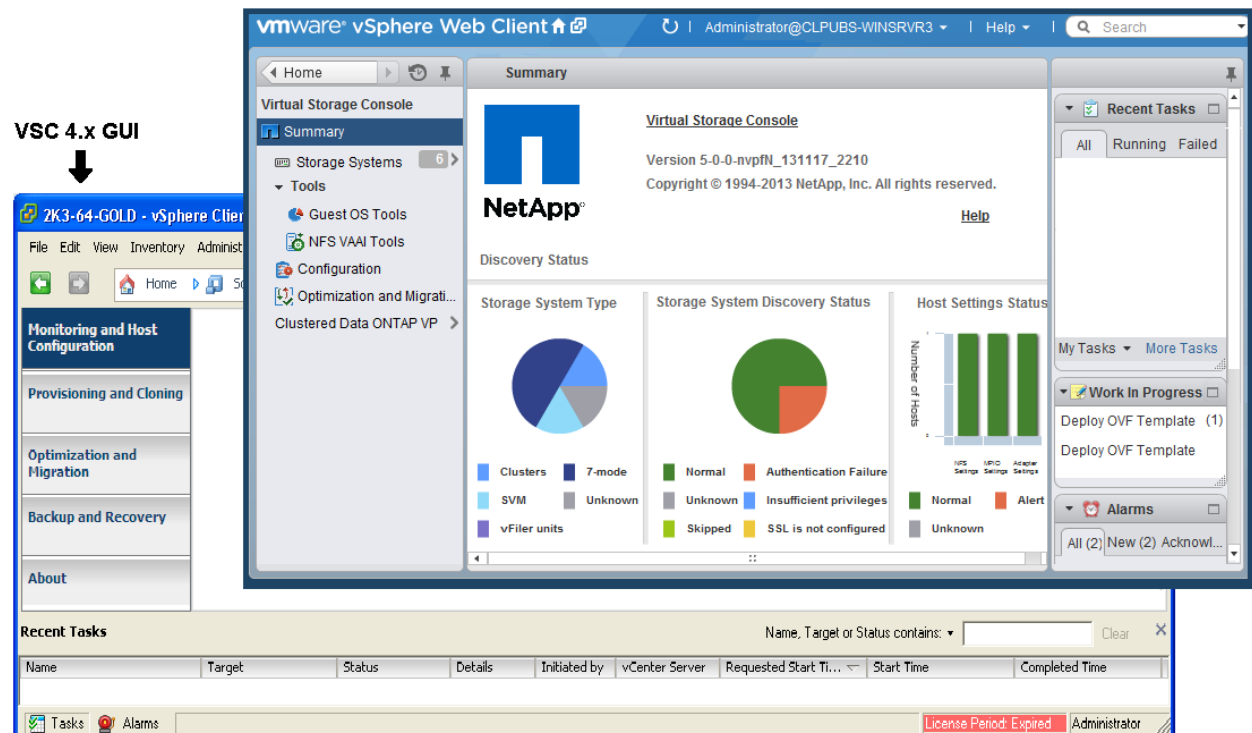
Navigating VSC 5.0 for VMware vSphere

Virtual Storage Console 5.0 for VMware vSphere works with the VMware vSphere Web Client and has dropped support for the VMware Desktop Client. This change means that VSC has a sleek new look and more seamless integration with the vCenter Server graphical user interface. As a result, the VSC 5.0 GUI provides you with new options for performing standard tasks.

If you are an experienced VSC user, you can use this document to learn the steps you need to take in VSC 5.0 to perform common tasks that you performed in VSC 4.x.

The following graphic overlays the new VSC 5.0 GUI on the VSC 4.x GUI so you can see how the interface has changed.


New look for Virtual Storage Console 5.0 for VMware vSphere

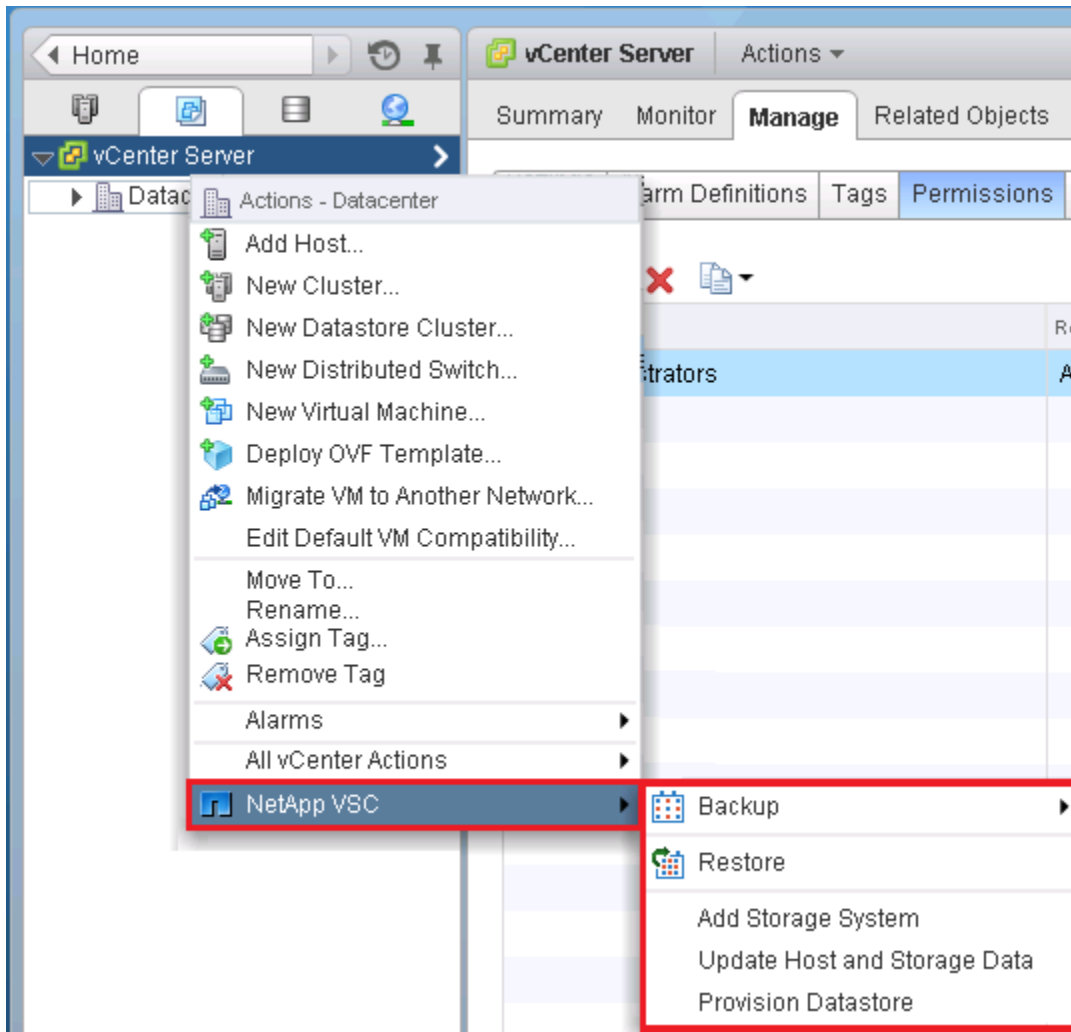


As part of its new, unified look, VSC 5.0 no longer organizes tasks based on the capability (plug-in) that supports the task. There are no Monitoring and Host Configuration, Provisioning and Cloning, Optimization and Migration, or Backup and Recovery tabs. For example, you no longer select **Provisioning and Cloning > Connection Brokers > Add Connection Broker**. Instead, you select **Virtual Storage Console > Configuration > Connection Brokers**.

All VSC 5.0 tasks are initiated from within the VMware vSphere Web Client. You can either select a vSphere object from a vCenter inventory list or select an item from the Virtual Storage Console navigation pane that is located on the left side of the VSC user interface. The navigation pane provides links to standard VSC tasks as well as optional features that work with VSC, such as VASA Provider for clustered Data ONTAP.

VSC's integration with the vCenter Server GUI means that VSC tasks also appear in the VMware **Actions** menu. For example, when you right-click an object such as a datacenter in the vCenter Server GUI, the **Actions** menu that appears includes the menu option **NetApp VSC**. You can expand **NetApp VSC** to display the VSC tasks you can perform with regard to that object, such as creating backup jobs or adding storage systems.

As part of the integration of VSC and vCenter Server, VSC has added the blue NetApp icon () to standard VMware vSphere Web Client screens and portlets that contain VSC features and information.





The following tables provide information about how to perform VSC 4.x tasks in the VSC 5.0 GUI. The tables are organized according to the 4.x capabilities.






Important notes:


- To help you learn about the VSC 5.0 GUI, the information on locating the tasks in VSC 5.0 is presented as steps. These are high-level steps for performing the tasks; however, they do not include any requirements or restrictions for the tasks. Detailed information about these tasks is in the *Virtual Storage Console 5.0 for VMware vSphere Installation and Administration Guide*.

- In some cases, you can perform a VSC 5.0 task from multiple places. These tables provide some of the options for performing a task in VSC 5.0, but there might also be other ways to perform it.
- The instructions in these tables say to right-click an option; however, you can also select the option and choose the **Actions** menu from the menu bar. The menu option **NetApp VSC** is part of the **Actions** menu.
- Some VSC 4.x features are no longer supported in 5.x. These include mbralign, Single File Restore, Datastore Remote Replication, and several data collection scripts.


Working with storage systems and tools (formerly Monitoring and Host Configuration)







Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
View details about your storage systems and hosts.	<p>Virtual Storage Console GUI method</p> <p>The Virtual Storage Console GUI contains information about storage systems on the following pages:</p> <ul style="list-style-type: none"> • Summary page • Storage Systems page <p>vCenter Server GUI method for storage systems</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, select vCenter () > Datacenters. 2. At the Datacenter page, select a datacenter. 3. When the Related Objects tab appears, click it. <p>vCenter Server GUI method for hosts</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, select vCenter () > Hosts. 2. Right-click a host and select NetApp VSC > Show details.
Check SAN details.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, select a storage system and click the tabs Related Objects > SAN.
Check NAS details.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, select a storage system and click the tabs Related Objects > NAS.
Specify default credentials for storage systems.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Configuration > Set Default Credentials. 2. At the dialog box that appears, select the tab for the object for which you want to set the default credentials. 3. Complete the information and click OK.



Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
<p>Modify the credentials for a storage system.</p> <p>You also perform this task if the storage controller name is displayed as “unknown.”</p>	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, right-click a storage system and select Modify from the Actions menu. 3. Select the Settings tab of the Modify Storage System - <storage_system_name> dialog box and complete the information.
<p>Add a storage system.</p>	<p>Virtual Storage Console GUI method</p> <ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. Click the Add icon (). <p>vCenter Server GUI method</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage (). 2. Right-click a datacenter and select NetApp VSC > Add Storage System.
<p>Remove a storage system.</p>	<p>Virtual Storage Console GUI method</p> <ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, right-click the storage system and select Actions > Delete. <p>vCenter Server GUI method</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage (). 2. Right-click a datacenter and select NetApp VSC > Destroy.
<p>Discover storage systems.</p>	<p>VSC automatically performs a background discover process at specific intervals. You can also manually force VSC to perform a discovery process.</p> <p>Virtual Storage Console GUI method</p> <ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, click the Update All icon (). <p>vCenter Server GUI method</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage (). 2. At the Storage page, right-click the datacenter and select NetApp VSC > Update Host and Storage Data.
<p>Change an indirect path to a data LIF from a cluster node to a direct path.</p>	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, select a storage system and click the tabs Related Objects > NAS. 3. Right-click a row that has an indirect path and select View Direct Data Path Choices. The Direct Data Path Choices pop-up box appears. <p>Note: Before selecting a port, manually confirm that it has network access.</p>

Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Configure ESX server multipathing and timeout settings.	<ol style="list-style-type: none"> 1. From the vSphere Web Client Home page, select vCenter > Hosts. 2. Right-click a host and select NetApp VSC > Set Recommended Values. 3. Select the appropriate values for your system from the Recommended Settings pop-up box.
Complete the installation of the NetApp NFS Plug-in for VAAI after you have downloaded the software.	<p>Virtual Storage Console GUI method</p> <ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, select Tools > NFS VAAI. 2. After you have completed the steps in the plug-in installation guide, <i>Installing the NetApp NFS Plug-in for VMware</i>, click Install on Host. <p>vCenter Server GUI method</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, select vCenter () > Hosts. 2. Right-click a host and select NetApp VSC > Install NFS Plug-in for VMware VAAI.
Access the guest operating system timeout scripts.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, select Tools > Guest OS Tools. 2. Follow the instructions on the Guest OS Tools page to get the correct SCSI I/O timeout script for your operating system.
Collect VSC log files.	From the Virtual Storage Console Home page, click Configuration > Export VSC Logs .
Use VSC as the management console for VASA Provider for clustered Data ONTAP.	<p>Register VASA Provider with VSC</p> <p>From the Virtual Storage Console Home page, click Configuration > Register/Unregister VASA Vendor Provider.</p> <p>Use the VASA Provider GUI provided by VSC</p> <p>From the Virtual Storage Console Home page, select VASA Provider for clustered Data ONTAP to access the VSC VASA Provider GUI.</p>

Provisioning datastores and cloning virtual machines (formerly Provisioning and Cloning)


Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Provision datastores.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Hosts and Clusters () 2. Right-click the object to which you want to mount the datastore and select NetApp VSC > Provision Datastore. 3. Complete the pages in the Datastore Provisioning wizard.

Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Clone virtual machines.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates (. 2. Right-click a virtual machine template and select NetApp VSC > Create Rapid Clones. 3. Complete the pages in the Create Rapid Clones wizard.
Enable deduplication.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage (. 2. Select a datastore and click the Summary tab. 3. In the Deduplication Details pane, select the settings to enable deduplication.
Specify default settings for new volumes.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Storage Systems. 2. At the Storage page, right-click a storage system and select Modify from the Actions menu. 3. Select the Provisioning Options tab of the Modify Storage System - <storage_system_name> dialog box and complete the information. Note: If the storage system properties have been locked, click Enabling Editing and enter the user name/password for that storage system.
Add a connection broker.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Configuration > Connection brokers. 2. In the Connection Brokers dialog box, click Add. 3. Complete the information in the Connection Brokers dialog box.
Remove a connection broker.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Configuration > Connection brokers. 2. In the Connection Brokers dialog box, click Remove and select the connection broker you want to remove.
Redeploy NFS-based virtual machine clones from a template.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates (. 2. Right-click a virtual machine and select NetApp VSC > Redeploy Clones. 3. Complete the information in the Redeploy Clones dialog box.
Reclaim space from NFS-based virtual machines.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage () to reclaim space from all virtual machines in a datastore or VMs and Templates () to reclaim space from one virtual machine. 2. Right-click on either the datastore or the virtual machine and select NetApp VSC > Reclaim Space.
Resize datastores.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage (. 2. Right-click a datastore and select NetApp VSC > Resize. 3. Complete the information in the Resize dialog box.








Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Mount datastores.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Hosts and Clusters (). 2. Right-click a host and select NetApp VSC > Mount Datastores.
Destroy a datastore.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click Storage (). 2. Right-click a datastore and select NetApp VSC > Destroy.









Optimizing datastores (formerly Optimization and Migration)



Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Scan datastore to check the alignment status of the virtual machines.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Optimization and Migration. 2. Choose one of the following options: <ul style="list-style-type: none"> • Click Scan Now to scan all the datastores. • Select the datastores you want to scan and click Scan Selected. • Select the datastores you want to scan and click Global Scan Schedule to set recurring scans. 3. Review the results by clicking on a datastore to determine whether its virtual machines are aligned or misaligned. 4. Check the Alignment State column of the virtual machines table at the bottom of the page to determine whether each virtual machine is aligned or unaligned.
Perform an online alignment of virtual machines.	<ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Optimization and Migration. 2. On the Optimization and Migration page, select a datastore on which a misaligned virtual machine is running. 3. In the virtual machines table at the bottom of the page, select one or more machines that have both the same offset and an Alignment State of “Misaligned, Online migration capable.” 4. Click Migrate. 5. Complete the pages in the Migrate Virtual Machines wizard.

Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Migrate datastores and virtual machines.	<p>VSC GUI method</p> <ol style="list-style-type: none"> 1. From the Virtual Storage Console Home page, click Optimization and Migration. 2. Select the virtual machines you want to migrate and click Migrate. <p>vCenter Server method</p> <ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click vCenter () 2. Select Virtual Machines. 3. In the Objects table, select the virtual machines that you want to migrate and click NetApp VSC > Migrate. 4. Complete the pages in the Migrate Virtual Machines wizard.

Backing up and restoring datastores (formerly Backup and Recovery)

Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
View all VSC backup jobs.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click vCenter () 2. In the navigation pane, select NetApp > Backup Jobs.
Back up a virtual machine or datastore.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates () to view virtual machines or Storage () to view datastores. 2. Right-click the object (either virtual machine or datastore) and select NetApp VSC > Backup > Schedule Backup. 3. Complete the pages in the Schedule Backup wizard.
Perform an on-demand (one-time) backup of a virtual machine or datastore.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates () to view virtual machines or Storage () to view datastores. 2. Right-click the object (either virtual machine or datastore) and select NetApp VSC > Backup > Backup Now. 3. Complete the information in the Backup Now dialog box.
Add a virtual machine or datastore to an existing backup job.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates () to view virtual machines or Storage () to view datastores. 2. Right-click the object (either virtual machine or datastore) and select NetApp VSC > Backup > Add to Backup Job. 3. Complete the information in the Add to Backup Job dialog box.

Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Edit a backup job.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click vCenter (). 2. In the navigation pane, under NetApp, click Backup Jobs. 3. Right-click the backup job you want to change and select Modify. 4. Edit the information.
Delete a backup job.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click vCenter (). 2. In the navigation pane, under NetApp, click Backup Jobs. 3. Right-click each backup job you want to delete and select Delete.
Suspend an active backup job.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click vCenter (). 2. In the navigation pane, under NetApp, click Backup Jobs. 3. Right-click the backup job you want to suspend and select Suspend.
Resuming a backup job.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click vCenter (). 2. In the navigation pane, under NetApp, click Backup Jobs. 3. Right-click the backup job you want to resume and select Resume.
Locate and restore backed up jobs.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates () to view virtual machines or Storage () to view datastores. 2. Right-click the object (either virtual machine or datastore) and select NetApp VSC > Restore. 3. Complete the pages in the Restore wizard. 4. If you do not know where your specific backup job is, click Advanced Filter in the Restore wizard to search for it.
Mount a backup copy.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates () to view virtual machines or Storage () to view datastores. 2. Right-click the object (either virtual machine or datastore) and select NetApp VSC > Backup > Mount. 3. Complete the information in the Mount Backup dialog box.

Task	Path to the task in the VSC 5.0 for VMware vSphere user interface
Unmount a backup.	<ol style="list-style-type: none"> 1. From the VMware vSphere Web Client Home page, click VMs and Templates () to view virtual machines or Storage () to view datastores. 2. Right-click the object (either virtual machine or datastore) and select NetApp VSC > Backup > Unmount. 3. Complete the information in the Unmount Backup dialog box.

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You can also contact us in the following ways:

NetApp, Inc., 495 East Java Drive, Sunnyvale, CA 94089 U.S.
Telephone: +1 (408) 822-6000
Fax: +1 (408) 822-4501
Support telephone: +1 (888) 463-8277