



Configure the ONTAP tools preferences file

ONTAP tools for VMware vSphere 9.11

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Configure the ONTAP tools preferences file

Set IPv4 or IPv6 using the preferences file

The preferences files contain settings that control ONTAP tools for VMware vSphere operations. Under most circumstances, you do not have to modify the settings in these files. It is helpful to know which preference files Virtual Storage Console (VSC) uses.

VSC has several preference files. These files include entry keys and values that determine how VSC performs various operations. The following are some of the preference files that VSC uses:

```
/opt/netapp/vscserver/etc/kamino/kaminoprefs.xml
```

```
/opt/netapp/vscserver/etc/vsc/vscPreferences.xml
```

You might have to modify the preferences files in certain situations. For example, if you use iSCSI or NFS and the subnet is different between your ESXi hosts and your storage system, you have to modify the preferences files. If you do not modify the settings in the preferences file, datastore provisioning fails because VSC cannot mount the datastore.

There is a new option added to the preference file `kaminoprefs.xml` that you can set to enable support for IPv4 or IPv6 for all storage systems added to VSC.

- The `default.override.option.provision.mount.datastore.address.family` parameter has been added to the `kaminoprefs.xml` preference file to set a preferred data LIF protocol for datastore provisioning.

This preference is applicable for all of the storage systems added to VSC.

- The values for the new option are `IPv4`, `IPv6`, and `NONE`.
- By default the value is set to `NONE`.

Value	Description
NONE	<ul style="list-style-type: none">• Provisioning happens using the same IPv6 or IPv4 address type of data LIF as the type of cluster or SVM management LIF used for adding the storage.• If the same IPv6 or IPv4 address type of data LIF is not present in the SVM, then the provisioning happens through the other type of data LIF, if available.
IPv4	<ul style="list-style-type: none">• Provisioning happens using the IPv4 data LIF in the selected SVM.• If the SVM does not have an IPv4 data LIF, then the provisioning happens through the IPv6 data LIF, if it is available in the SVM.

IPv6	<ul style="list-style-type: none"> • Provisioning happens using the IPv6 data LIF in the selected SVM. • If the SVM does not have an IPv6 data LIF, then the provisioning happens through the IPv4 data LIF, if it is available in the SVM.
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To configure the IPv4 or IPv6 using the user interface, see the following sections:

- [Add different subnets](#)
- [Enable datastore mounting across different subnets](#)

Add different subnets

You can use the ONTAP tools interface or REST APIs to add different subnets of ESXi hosts. This enables you to either allow or restrict the subnets for datastore mount operation after provisioning storage systems. If you do not add subnets of ESXi hosts then ONTAP tools blocks datastore mount operation for those subnets.

Steps

1. Log in to your vCenter Server instance and access ONTAP tools.
2. On the homepage, click **Settings > Manage Subnet Access**.
3. In the Manage Subnet Access dialog box, click **Selected** option in Allowed subnets for NFS Subnets Access.
4. Enter the values for the required subnets, and then click **ADD**.
5. Select either **None** or **Selected** for Restricted subnets.
6. Repeat the above steps for iSCSI Subnets Access, and click **Apply**.

Enable datastore mounting across different subnets

If you use iSCSI or NFS and the subnet is different between your ESXi hosts and your storage system, you have to modify the ONTAP tools for VMware vSphere preferences files. If you do not modify the preferences file, then datastore provisioning fails because Virtual Storage Console (VSC) cannot mount the datastore.

About this task

When datastore provisioning fails, VSC logs the following error messages:

`Unable to continue. No ip addresses found when cross-referencing kernel ip addresses and addresses on the controller.

Unable to find a matching network to NFS mount volume to these hosts.`

Steps

1. Log in to your vCenter Server instance.

2. Launch the maintenance console using your unified appliance virtual machine.

[Maintenance Console of ONTAP tools for VMware vSphere](#)

3. Enter 4 to access the Support and Diagnostics option.
4. Enter 2 to access the Access Diagnostic Shell option.
5. Enter `vi /opt/netapp/vscserver/etc/kamino/kaminoprefs.xml` to update the `kaminoprefs.xml` file.
6. Update the `kaminoprefs.xml` file.

If you use...	Do this...
iSCSI	Change the value of the entry key <code>default.allow.iscsi.mount.networks</code> from ALL to the value of your ESXi host networks.
NFS	Change the value of the entry key <code>default.allow.nfs.mount.networks</code> from ALL to the value of your ESXi host networks.

The preferences file includes sample values for these entry keys.



The value “ALL” does not mean all networks. The “ALL” value enables all of the matching networks, between the host and the storage system, to be used for mounting datastores. When you specify host networks, then you can enable mounting only across the specified subnets.

7. Save and close the `kaminoprefs.xml` file.

Regenerate an SSL certificate for Virtual Storage Console

The SSL certificate is generated when you install Virtual Storage Console (VSC). The distinguished name (DN) that is generated for the SSL certificate might not be a common name (CN) that the client machines recognize. By changing the keystore and private key passwords, you can regenerate the certificate and create a site-specific certificate.

About this task

You can enable remote diagnostic using the maintenance console and generate site-specific certificate.

[Virtual Storage Console: Implementing CA signed certificates](#)

Steps

1. Log in to the maintenance console.
2. Enter 1 to access the Application Configuration menu.
3. In the Application Configuration menu, enter 3 to stop the VSC service.

4. Enter 7 to regenerate SSL certificate.

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