

vSphere Host Profiles

VMware vSphere 6.5

VMware ESXi 6.5

vCenter Server 6.5

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Contents

About vSphere® Host Profiles	5
1 Introduction To vSphere Host Profiles	7
Host Profiles Usage Model	7
Reference Host Independence	8
2 Using Host Profiles	9
Access Host Profiles	9
Create a Host Profile	9
Attach Entities to a Host Profile	10
Detach Entities From a Host Profile	10
Check Compliance	11
Remediate a Host	11
Edit a Host Profile	12
Duplicate a Host Profile	15
Copy Settings from Host	15
Host Profiles and vSphere Auto Deploy	15
Import a Host Profile	16
Export a Host Profile	16
Copy Settings to Host Profile	16
3 Configuring Host Profiles	19
Host Customization	19
Configure Storage Host Profiles	23
Set Up Host Profiles for Static IP Addresses in the vSphere Web Client	23
Index	25

About vSphere® Host Profiles

The *vSphere Host Profiles* documentation provides information about managing Host Profiles.

The *vSphere Host Profiles* documentation describes how to manage and configure Host Profiles in the vSphere Web Client.

Intended Audience

The *vSphere Host Profiles* documentation is intended for administrators who are familiar with vSphere host configuration.

Introduction To vSphere Host Profiles

The Host Profiles feature creates a profile that encapsulates the host configuration and helps to manage the host configuration, especially in environments where an administrator manages multiple hosts or clusters in vCenter Server.

Host Profiles provide an automated and centrally managed mechanism for host configuration and configuration compliance. Host Profiles can improve efficiency by reducing reliance upon repetitive, manual tasks. Host Profiles capture the configuration of a pre-configured and validated reference host, store the configuration as a managed object and use the catalog of parameters contained within to configure networking, storage, security, and other host-level parameters. Host Profiles can be applied to individual hosts, a cluster, or all the hosts and clusters associated to a host profile. Applying a Host Profile to a cluster affects all hosts in the cluster and result in a consistent configuration across the applied hosts.

Host Profiles can be used to validate the configuration of a host by checking compliance of a host or cluster against the Host Profile that is associated with that host or cluster.

NOTE Not all functionality in the vSphere Web Client has been implemented for the vSphere Client in the vSphere 6.5 release. For an up-to-date list of unsupported functionality, see *Functionality Updates for the vSphere Client Guide* at <http://www.vmware.com/info?id=1413>.

This chapter includes the following topics:

- “Host Profiles Usage Model,” on page 7
- “Reference Host Independence,” on page 8

Host Profiles Usage Model

The Host Profile workflow starts with the concept of a reference host; the reference host serves as the template from which the Host Profile is extracted. The designation reference host, and the Host Profile association to that host, persists even after creating the Host Profile.

Before you begin, ensure that you have an existing vSphere environment installation with at least one properly and completely configured host.

The sequence required to create a Host Profile from a reference host, apply the Host Profile to a host or cluster and check compliance against the Host Profile is as follows:

- 1 Set up and configure the reference host.
- 2 Create a Host Profile from the reference host.
- 3 Attach other hosts or clusters to the Host Profile.
- 4 Check the compliance to the Host Profile. If all hosts are compliant with the reference host, they are correctly configured.

5 Apply (remediate).

As a licensed feature of vSphere, Host Profiles are only available when the appropriate licensing is in place. If you see errors, ensure that you have the appropriate vSphere licensing for your hosts.

If you want the Host Profile to use directory services for authentication, the reference host needs to be configured to use a directory service. See the *vSphere Security* documentation.

vSphere Auto Deploy

For hosts provisioned with vSphere Auto Deploy, vSphere Web Client owns the entire host configuration, which is captured in a Host Profile. Usually, the Host Profile information is sufficient to store all configuration information. Sometimes the user is prompted for input when the host provisioned with Auto Deploy boots. See the *vSphere Installation and Setup* documentation for more information on Auto Deploy.

Reference Host Independence

A dedicated reference host is not required to be available to perform host profile tasks.

When you create a host profile, you extract the configuration information from a specified ESXi reference host. In previous releases, vSphere required that the reference host was available for certain Host Profiles tasks, such as editing, importing, and exporting. In vSphere 6.0, a dedicated reference host is no longer required to be available to perform these tasks.

For host profile tasks that require a reference host, an ESXi host that is compatible to the host profile is assigned as the role of reference host.

Sometimes, a compatible host is not available to validate the host profile during these tasks. If you made small changes to the host profile that do not require validation, you can choose to skip the validation. If you choose to skip the host validation, a warning displays indicating that no valid reference host is associated with the profile. You can then proceed and complete the task.

Due to the introduction of this feature, users can no longer edit or change the reference host from the vSphere Web Client. The reference host selection occurs at runtime, without notifying users, in the vCenter Server for on-going tasks.

Using Host Profiles

This section describes how to perform some of the basic tasks for Host Profiles.

This chapter includes the following topics:

- [“Access Host Profiles,”](#) on page 9
- [“Create a Host Profile,”](#) on page 9
- [“Attach Entities to a Host Profile,”](#) on page 10
- [“Detach Entities From a Host Profile,”](#) on page 10
- [“Check Compliance,”](#) on page 11
- [“Remediate a Host,”](#) on page 11
- [“Edit a Host Profile,”](#) on page 12
- [“Duplicate a Host Profile,”](#) on page 15
- [“Copy Settings from Host,”](#) on page 15
- [“Host Profiles and vSphere Auto Deploy,”](#) on page 15
- [“Import a Host Profile,”](#) on page 16
- [“Export a Host Profile,”](#) on page 16
- [“Copy Settings to Host Profile,”](#) on page 16

Access Host Profiles

The Host Profiles main view lists all available profiles. Administrators can also use the Host Profiles main view to perform operations on Host Profiles and configure profiles.

Procedure

- 1 From the vSphere Web Client Home, click **Policies and Profiles**.
- 2 Click **Host Profiles**.

Create a Host Profile

You create a Host Profile by extracting the designated reference host configuration.

NOTE You can also extract a host profile by navigating to the specific host.

Prerequisites

Verify that you have a working vSphere installation and at least one completely and properly configured host that acts as the reference host.

Procedure

- 1 Navigate to the Host profiles view.
- 2 Click the **Extract Profile from a Host** icon ().
- 3 Select the host that acts as the reference host and click **Next**.
The selected host must be a valid host.
- 4 Enter the name and enter a description for the new profile and click **Next**.
- 5 Review the summary information for the new profile and click **Finish**.

The new profile appears in the profile list.

NOTE Host profiles do not capture offline or unpresented devices. Any changes made to offline devices after extracting a host profile do not make a difference to the compliance check results.

Attach Entities to a Host Profile

After creating a Host Profile from a reference host, you must attach the host or cluster to the Host Profile.

Procedure

- 1 From the Profile List in the Host Profiles main view, select the Host Profile to be applied to a host or cluster.
- 2 Click the **Attach/Detach a host profile to hosts and clusters** icon ().
- 3 Select the host or cluster from the expanded list and click **Attach**.
The host or cluster is added to the Attached Entities list.
- 4 (Optional) Click **Attach All** to attach all listed hosts and clusters to the profile.
- 5 If you enable **Skip Host Customization** you will not need to customize hosts during this process.
If you skip host customizations during this process, you should edit or import host customizations before you remediate the host profile
- 6 Click **Next**.
- 7 (Optional) You can update or change the user input parameters for the Host Profiles policies by customizing the host. You will not see this step if you enabled **Skip Host Customization**.
See [“Host Profiles and vSphere Auto Deploy,”](#) on page 15.
- 8 Click **Finish** to complete attaching the host or cluster to the profile.

Detach Entities From a Host Profile

In order to disassociate a configuration from a host or cluster, that host or cluster must be detached from the Host Profile.

When a Host Profile is attached to a cluster, the host or hosts within that cluster are also attached to the Host Profile. However, when the Host Profile is detached from the cluster, the association between the host or host within the cluster and that Host Profile remains.

Procedure

- 1 From the Profile List in the Host Profiles main view, select the Host Profile to be detached from a host or cluster.
- 2 Click the **Attach/Detach Hosts and clusters to a host profile** icon ().
- 3 Select the host or cluster from the expanded list and click **Detach**.
The host or cluster is added to the Attached Entities list.
- 4 (Optional) Click **Detach All** to detach all listed hosts and clusters from the profile.
- 5 Click **Next**.
- 6 Click **Finish** to complete detaching the host or cluster to the profile.

Check Compliance

You can confirm the compliance of a host or cluster to its attached Host Profile and determine which, if any, configuration parameters on a host are different from those specified in the Host Profile.

Procedure

- 1 Navigate to a Host Profile.
- 2 Click the **Check Host Profile Compliance** icon (.

In the **Objects** tab, the compliance status is updated as Compliant, Unknown, or Non-compliant.

A non-compliant status indicates a discovered and specific inconsistency between the profile and the host. To resolve this, you should remediate the host. Any unknown status indicates that the compliance of the host could not be verified; to resolve the issue, remediate the host through the Host Profile.

NOTE Host profiles do not capture offline or unrepresented devices. Any changes made to offline devices after extracting a host profile will not make a difference to the compliance check results.

What to do next

To see more detail on compliance failures, select a Host Profile from the **Objects** tab for which the last compliance check produced one or more failures. In order to see specific detail on which parameters differ between the host that failed compliance and the Host Profile, click on the **Monitor** tab and select the Compliance view. Then, expand the object hierarchy and select the failing host. The differing parameters are displayed in the Compliance window, below the hierarchy.

Remediate a Host

In the event of a compliance failure, use the Remediate function to apply the host profile settings onto the host. This action changes all Host Profile managed parameters to the values contained in the profile attached to the host.

Prerequisites

Verify that the profile is attached to the host.

Procedure

- 1 Navigate to the profile you want to remediate to the host.

- 2 Right-click the host profile and select **Remediate**.

NOTE Certain Host Profile policy configurations require that the host be rebooted after remediation. In those cases, you are prompted to place the host into maintenance mode. You might be required to place hosts into maintenance mode before remediation. Hosts that are in a fully-automated DRS cluster are placed into maintenance mode at remediation. For other cases, the remediation process stops if the host is not placed into maintenance mode when it is needed to remediate a host.

- 3 Select the host or hosts you want to remediate with the host profile.
The host profile will be applied to each host that you select.
- 4 Enter the host customizations to specify host properties or browse to import a host customization file.
- 5 (Optional) You can update or change the user input parameters for the Host Profiles policies by customizing the host, and click **Next**.

See [“Host Profiles and vSphere Auto Deploy,”](#) on page 15 for more information about vSphere Auto Deploy.
- 6 Click **Pre-check Remediation** to check if the selected hosts are ready for remediation.
This check generates a list of tasks that will be performed on the host.
- 7 Select the checkbox to reboot the host if it is required in order to complete the remediation process. If you wish to manually reboot the host after the process, do not select the checkbox.
- 8 Review the tasks that are necessary to remediate the Host Profile and click **Finish**.

The compliance status is updated.

Edit a Host Profile

You can view and edit Host Profile policies, select a policy to be checked for compliance, and change the policy name or description.

Procedure

- 1 Navigate to the Host Profile that you want to edit and click the **Configure** tab.
- 2 Click **Edit Host Profile**.
- 3 (Optional) Change the profile name and description and click **Next**.
- 4 The host profile's configuration options are listed in hierarchy according to functional or resource category. Expand each category to view or edit a particular policy or setting.

See [“Edit a Policy,”](#) on page 13 for detailed instructions for editing a Host Profile policy. See [“Disable Host Profile Component,”](#) on page 14 for detailed instructions on enabling or disabling a policy from compliance check or remediation.
- 5 From the **View** menu, you can choose to view **All** host profile configurations or only **Favorite** configurations. Select a configuration and click the  icon to mark that configuration as a favorite. Click on the  icon to unmark a configuration as a favorite.

When you view **Favorite** configurations, only those marked as favorites are displayed.
- 6 In the search field, you can filter the configuration names and values you want to view.
For example, enter **SNMP**. All configurations that contain **SNMP** are displayed.
- 7 Click **Next**.

8 (Optional) Customize the hosts.

Make any changes to the available configuration values for this profile.

NOTE The host customization settings page only appears if you changed any settings that require host customizations.

9 Click **Finish**.

The changes are made when the "Update Host Profile" task is completed in the Recent Tasks status. If you attempt to remediate the profile before the task is complete, the profile configuration does not contain the change.

Edit a Policy

A policy describes how a specific configuration setting is applied. You can edit policies belonging to a specific Host Profile.

When you edit the Host Profile, you can expand the Host Profile's configuration hierarchy to see the sub-profile components that comprise the Host Profile. These components are categorized by functional group or resource class to make it easier to find a particular parameter. Each subprofile component contains one or more attributes and parameters, along with the policies and compliance checks.

Each policy consists of one or more options that contains one or more parameters. Each parameter consists of a key and a value. The value can be one of a few basic types, for example integer, string, string array, or integer array.

NOTE Currently, there is no way to remove or replace policy options policies, or sub-profiles that are deprecated in this release. Metadata is added to these deprecated policies that allows old host profiles to continue working but will extract new host profiles with only non-deprecated parts of a host profile.

Table 2-1. Subset of Host Profile Subprofile Configurations

Component Categories	Configuration Settings	Notes and Examples
Advanced Configuration Settings	Advanced Options, Agent VM , DirectPath I/O , Hosts file, Power Sytem, System Image Cache	<ul style="list-style-type: none"> ■ Host Profiles do not check advanced settings if they are the same as the default settings. vCenter Server copies only the advanced configuration settings that have changed and that differ from the default values. In addition, compliance checks are limited to the settings that are copied. ■ Host Profiles does not support the configuration of PCI devices for virtual machine passthrough on the ESXi host.
CIM Indication Subscriptions	CIM-XML Indication Subscriptions	
General System Settings	Console, Core Dump, Device Alias, Host Cache, Kernel Module, Management Agent, System Resource Pool, System Swap, vFlash Host Swap Cache	<p>For Date and Time Configuration:</p> <ul style="list-style-type: none"> ■ For the time zone, enter a UTC string. For example, "America/Los_Angeles" for United States Pacific time zone. ■ The default time zone is set to the local time and location of the vSphere Web Client machine. ■ Configure Network Time Protocol (NTP) correctly. You can configure the NTP settings on the host's Configure tab. Click Time Configuration (under System). Click Edit to configure the time settings .

Table 2-1. Subset of Host Profile Subprofile Configurations (Continued)

Component Categories	Configuration Settings	Notes and Examples
Networking	vSwitch, Port groups, Physical NIC speed, security and NIC teaming policies, vSphere Distributed Switch, and vSphere Distributed Switch uplink port.	When DHCPv6 is enabled in the networking subprofile, manually turn on the corresponding ruleset in the firewall subprofile.
Security	Firewall, Security Settings, Service	
Storage	Configure storage options, including Native Multi-Pathing (NMP), Pluggable Storage Architecture (PSA), FCoE and iSCSI adapters, and NFS storage.	<ul style="list-style-type: none"> ■ Use the vSphere CLI to configure or modify the NMP and PSA policies on a reference host, and then extract the Host Profile from that host. If you use the Profile Editor to edit the policies, to avoid compliance failures, make sure that you understand interrelationships between the NMP and PSA policies and the consequences of changing individual policies. For information about the NMP and PSA, see the <i>vSphere Storage</i> documentation. ■ Add the rules that change device attributes before extracting the Host Profile from the reference host. After attaching a host to the Host Profile, if you edit the profile and change the device attributes (for example, mask device paths or adding SATP rules to mark the device as SSD) you are prompted to reboot the host to make the changes. However, after rebooting, compliance failures occur because the attributes changed. Because Host Profiles extract device attributes before rebooting, if any changes occur after the reboot, it evaluates and finds those changes, and reports it as noncompliant.

Other profile configuration categories include: user group, authentication, kernel module, DCUI keyboard, host cache settings, SFCB, resource pools, login banner, SNMP agent, power system, and CIM indication subscriptions.

Procedure

- 1 Edit the Host Profile.
- 2 Expand a subprofile until you reach the policy to edit.
- 3 Select the policy.

The policy options and parameters appear on the right side of the Edit Host Profile window.

- 4 Make changes to the policy.

Disable Host Profile Component

You can decide whether a Host Profile component is applied or considered during compliance check. This allows administrators to eliminate non-critical attributes from consideration or ignore values that, while part of the Host Profile, are likely to vary between hosts.

Procedure

- 1 Edit a Host Profile.

- 2 Expand the Host Profile Component hierarchy until you reach the desired component or component element.
- 3 Disable the checkbox next to a component to remove it from being applied during remediation or considered during a profile compliance check.

NOTE The check box is enabled by default. If you disable the check box so this component or component element is not checked for compliance or applied during remediation, the other policies that are enabled will still be applied and checked.

Duplicate a Host Profile

A Host Profile duplicate is a copy of an existing Host Profile.

Procedure

- 1 Navigate to the profile that you want to duplicate.
- 2 Click the **Duplicate Host Profile** icon ().
- 3 Type the name and description for the duplicate Host Profile and click **Next**.
- 4 Review the summary information for the new profile and click **Finish**.

A clone of the profile appears in the Host Profiles list.

Copy Settings from Host

If the configuration of the reference host changes, you can update the Host Profile so that it matches the reference host's new configuration.

After you create a Host Profile, you can make incremental updates to the profile. When making changes to a Host Profile, consider the benefits and limitations of the two methods:

- Make the configuration changes to a host in the vSphere Web Client, and copy that host's settings to the profile. The settings within the existing profile are updated to match those of the host. This method allows you to validate the configuration on a single host before rolling it to the other hosts that are attached to the profile.
- Update the profile directly by editing the Host Profile. This provides the ability to do more comprehensive and immediate remediation of those changes.

Procedure

- 1 Navigate to the Host Profile.
- 2 Click **Copy Settings from Host**.
- 3 Select the host from which you want to copy the configuration settings.
- 4 Click **OK**.

Host Profiles and vSphere Auto Deploy

Host Profiles works with vSphere Auto Deploy to provision physical ESXi hosts have a complete and expected configuration state for virtual switches, driver settings, boot parameters, and so on.

Because hosts that are provisioned with Auto Deploy are considered to be stateless, configuration state information is not stored on the host. Instead, create a reference host and configure it completely with the settings you want. Then, create a Host Profile from this reference host. Next, associate the Host Profile with a new deploy rule using the Auto Deploy rules engine through the PowerCLI. Now, as new hosts are provisioned through Auto Deploy, they will automatically have the Host Profile applied

Remediation for these hosts is the same as statefully deployed hosts. The user is prompted to customize the hosts and enter answers for policies that are specified during Host Profile creation when the Host Profile is applied.

Note If you deploy ESXi through Auto Deploy, configure syslog to store logs on a remote server. See the instructions to set up Syslog from the Host Profiles interface in the *vSphere Installation and Setup* documentation.

For more information, see about setting up an Auto Deploy reference host in the vSphere Auto Deploy documentation.

Import a Host Profile

You can import a profile from a file in the VMware profile format (.vpf).

When a host profile is exported, administrator and user profile passwords are not exported. This is a security measure and stops passwords from being exported in plain text when the profile is exported. You will be prompted to re-enter the values for the password after the profile is imported and the password is applied to a host.

Procedure

- 1 Navigate to the Host Profiles view.
- 2 Click the Import Host Profile icon ()
- 3 Click **Browse** to browse for the VMware Profile Format file to import
- 4 Enter the **Name** and **Description** for the imported Host Profile, and click **OK**.

The imported profile appears in the profile list.

Export a Host Profile

You can export a profile to a file that is in the VMware profile format (.vpf).

When a host profile is exported, administrator and user profile passwords are not exported. This is a security measure and stops passwords from being exported in plain text when the profile is exported. You will be prompted to re-enter the values for the password after the profile is imported and the password is applied to a host.

Procedure

- 1 Navigate to the Host Profile you want to export.
- 2 Right-click the profile and select **Export Host Profile**.
- 3 Select the location and type the name of the file to export the profile.
- 4 Click **Save**.

Copy Settings to Host Profile

Once you make changes to a host profile, you can propagate those changes to other host profiles in the inventory.

Procedure

- 1 Navigate to a Host Profile.
- 2 Right-click the profile and select **Copy Settings to Host Profiles** or click the  icon.

- 3 Select the settings you wish to copy to other host profiles, and click **Next**.
- 4 Select the target host profile that will be overwritten with the selected settings, and click **Next**.
The differences between the host profile settings are displayed in the results.
- 5 Click **Finish**.

Configuring Host Profiles

This section describes how to configure host profiles using the host profile editor.

This chapter includes the following topics:

- [“Host Customization,”](#) on page 19
- [“Configure Storage Host Profiles,”](#) on page 23
- [“Set Up Host Profiles for Static IP Addresses in the vSphere Web Client,”](#) on page 23

Host Customization

To customize hosts with shared attributes, you can create a host profile in a reference host. To customize individual hosts, you can set up some fields in the host profile to prompt the user for input for each host.

Host profiles allow you to prespecify information, for example, the storage setup or Syslog setup in a reference host to and apply the host profile to a set of target hosts that share the same settings. You can also use host profiles to specify that certain settings are host dependent. If you do so, the host comes up in maintenance mode when you provision it with Auto Deploy. Remediate the host or reset the host customization to be prompted for input. The system stores your input and uses it the next time the host boots.

When the host profile is set to prompt for user input, you must specify a value in the dialog that appears when you reset the host customization. An error results if you do not specify a value.

Table 3-1. Host Profile Options that Prompt for iSCSI User Input

Information to Request User Input For	Setting the Host Profile Option
When you apply a host profile on a system that includes a profile for iSCSI, you are prompted for several properties. For many of the properties, a system default is available. For some properties, you must specify a value or an error results.	<ol style="list-style-type: none"> 1 Select Edit Host Profile, click Storage configuration, and click iSCSI Initiator Configuration. 2 Select the folder for an already enabled initiator and set up the initiator. 3 Set up the initiator. For many fields, the user is prompted as part of host customization.
IQN name	If the iSCSI setup uses an IQN name, you are prompted when you apply the host profile. You cannot continue until you provide the name.
CHAP information	If you set up iSCSI to require CHAP authentication, you are prompted for CHAP information including the user name and the secret when you apply the host profile. You cannot continue until you provide the name.

Table 3-2. Host Profile Options that Prompt for Storage User Input

Information to Request User Input For	Setting the Host Profile Option
You are setting up the Fixed PSP configuration and want to prompt for the adapter and target IDs for the storage arrays that should use the Fixed PSP.	<p>You can set the option only if the adapter is set up to use the Fixed PSP.</p> <ol style="list-style-type: none"> 1 Select Edit Host Profile, click Storage configuration. 2 Click Native Multipathing (NMP). 3 Click Path Selection Policy (PSP) configuration. 4 In the Preferred Path window, select Prompt the user for adapter and target IDs on the host.
Configure FCoE adapter activation based on a user-specified MAC address.	<p>You can set the option only if an activation profile exists.</p> <ol style="list-style-type: none"> 1 Select Edit Host Profile, click Storage configuration. 2 Click Software FCoE configuration. 3 Click Adapter Configuration. 4 Click the activation profile and click Policy Profile. 5 Select Activation policy based on adapter MAC address from the drop-down menu.

Table 3-3. Host Profile Options that Prompt for Security User Input

Information to Request User Input For	Setting the Host Profile Option
Administrator password for ESXi host when the host boots for the first time.	<ol style="list-style-type: none"> 1 Select Edit Host Profile, and click Security and Services. 2 click Security Settings and click Security configuration. 3 In the right panel, select User Input Password to be Used to Configure Administrator Password from the Administrator password drop-down menu.
Preconfigures a user for the ESXi host but prompts for the password for that user on each host when the host boots for the first time.	<p>You can perform this task only if a user configuration already exists. Configure the user by selecting one of the options.</p> <ul style="list-style-type: none"> ■ Assigned fixed user configurations is available for compatibility with ESX/ESXi 4.1 system, this option displays the password in the clear. ■ Assign advanced fixed user configurations is for users of ESXi 5.0 and later systems. ■ Specify the user configuration in the profile but prompt for password during host configuration allows you to specify the information about the user but prompt for a password on each host.
Prompt the user for credentials when the host joins the Active Directory domain.	<ol style="list-style-type: none"> 1 Set the Authentication configuration profile to use a fixed domain. <ol style="list-style-type: none"> a Select Edit Host Profile, click Security and Services. b Click Security Settings, and click Authentication configuration. c Click Active Directory configuration. d In the Domain Name drop-down menu, select Configure a fixed domain name. 2 Set the method for joining the domain to prompt the user. <ol style="list-style-type: none"> a Select Edit Host Profile, click Security and Services and click Authentication configuration. b Click Active Directory configuration. c In the Join Domain Method drop-down menu, select Use user specified AD credentials to join the host to domain.

Table 3-4. Host Profile Options that Prompt for Networking User Input

Information to Request User Input For	Setting the Host Profile Option
<p>Prompt the user for the MAC address for a port group. You can have the system prompt the user in all cases (User specified MAC address...) or prompt the user only if no default is available.</p>	<ol style="list-style-type: none"> 1 Select Edit Host Profile, click Networking configuration, and click Host port group. 2 Click Management Network. 3 In the Determine how MAC address for vmknic should be decided field, select how the system manages the MAC address. <ul style="list-style-type: none"> ■ User specified MAC Address to be used while applying the configuration ■ Prompt the user for the MAC Address if no default is available
<p>Prompt the user for the IPv4 address for each ESXi host to which the profile is applied. You can have the system prompt the user in all cases (User specified IPv4 address...) or prompt the user only if no default is available.</p>	<ol style="list-style-type: none"> 1 Select Edit Host Profile, click Networking configuration, and click Host port group. 2 Click Management Network and click IP address settings. 3 In the IPv4 address field, select how the system manages the IPv4 address. <ul style="list-style-type: none"> ■ User specified IPv4 Address to be used while applying the configuration ■ Prompt the user for the IPv4 Address if no default is available
<p>Prompt the user for the IPv6 address for each ESXi host to which the profile is applied. You can have the system prompt the user in all cases (User specified IPv6 address...) or prompt the user only if no default is available.</p>	<ol style="list-style-type: none"> 1 Select Edit Host Profile, click Networking configuration, and click Host port group. 2 Click Management Network and click IP address settings. 3 In the Static IPv6 address field, select how the system manages the IPv6 address. <ul style="list-style-type: none"> ■ User specified IPv6 Address to be used while applying the configuration ■ Prompt the user for the IPv6 Address if no default is available
<p>Prompt the user for the DNS name of the host. You can have the system prompt the user in all cases (User specified host name...) or prompt the user only if no default is available.</p>	<ol style="list-style-type: none"> 1 Select Edit Host Profile, click Networking configuration, and click DNS configuration. 2 In the Host name field, select how the system manages the DNS configuration. <ul style="list-style-type: none"> ■ Prompt the user for host name if default is not available ■ User specified host name to be used while applying the configuration
<p>Prompt the user for the MAC address for a distributed switch, its port group, or one of its services. Right-click the Host virtual NIC folder icon and click the Add sub-profile icon to determine the component to which the setting is applied. You can decide to prompt the user in all cases or only if no default is available.</p>	<ol style="list-style-type: none"> 1 Open Networking configuration. 2 Click Host virtual NIC. 3 In the Determine how MAC address for vmknic should be decided field, select how the system manages the MAC address for the distributed switch. <ul style="list-style-type: none"> ■ User specified MAC address to be used while applying the configuration ■ Prompt the user for the MAC address if no default is available

Table 3-4. Host Profile Options that Prompt for Networking User Input (Continued)

Information to Request User Input For	Setting the Host Profile Option
<p>Prompt the user for the IPv4 address for a distributed switch, its port group, or one of its services. Right-click the Host virtual NIC folder icon and click the Add sub-profile icon to determine the component to which the setting is applied.</p> <p>You can decide to prompt the user only if no default is available or in all cases.</p>	<ol style="list-style-type: none"> 1 Open Networking configuration. 2 Click Host virtual NIC. 3 Click IP address settings. 4 In the IPv4 address field, select how the system handles the IPv4 address for the distributed switch. <ul style="list-style-type: none"> ■ User specified IPv4 address to be used while applying the configuration ■ Prompt the user for IPv4 address if no default is available
<p>Prompt the user for the IPv6 address for a distributed switch, its port group, or one of its services. Right-click the Host virtual NIC folder icon and click the Add sub-profile icon to determine the component to which the setting is applied.</p> <p>You can decide to prompt the user only if no default is available or in all cases.</p>	<ol style="list-style-type: none"> 1 Open Networking configuration. 2 Open Host virtual NIC. 3 Open IP address settings. 4 In the Static IPv6 address field, select how the system manages the IPv6 address for the distributed switch. <ul style="list-style-type: none"> ■ User specified IPv6 address to be used while applying the configuration ■ Prompt the user for IPv6 address if no default is available

Export Host Customizations

If a host profile contains any customized attributes, you can export it to a .CSV file on your desktop.

For security, sensitive data such as passwords are not exported.

Procedure

- 1 Navigate to a host profile.
- 2 Right-click the host profile and select **Export Host Customizations**.
- 3 Select the location where the customization file is saved.

The file is saved as a .csv file.

- 4 Click **Save**.

What to do next

Once the file is saved to your desktop, you can manually edit the file and save it to apply the customizations at a later time.

Edit Host Customizations

You can edit the host customizations for specific hosts attached to a host profile or cluster attached to a host profile.

Procedure

- 1 Navigate to a host profile.
- 2 Right-click the host profile and select **Edit Host Customizations**.
- 3 Select the host or hosts for which to edit the customizations, and click **Next**.
- 4 Edit the host configuration values.
- 5 (Optional) Click **Browse** to import a .csv file from your desktop.

After importing the .csv file, the fields are updated with the information from the file.

- 6 Click **Finish**.

Configure Storage Host Profiles

When you use storage devices that are not shared across a cluster, but that the vSphere storage stack cannot detect as local, compliance failures might occur when you apply a host profile.

To resolve the compliance failures caused by using unshared storage devices, use the upgraded Pluggable Storage Architecture (PSA) and Native Multipathing Plug-In host profile policies.

NOTE ESXi diagnostic data that you obtain by running the `vm-support` command contains host profiles information which includes storage host profiles, PSA, NMP, and Virtual Volumes data. No sensitive information, such as passwords, is collected.

Prerequisites

Extract a host profile from a reference host. See “[Create a Host Profile](#),” on page 9 for instructions.

Procedure

- 1 For SAS devices that are not detected as local, select **Storage configuration > Pluggable Storage Architecture configuration > PSA device sharing > *name of device***.

- 2 For each device not shared across the cluster, disable **Device is shared clusterwide**.

The **Is Shared Clusterwide** value for PSA devices helps you determine which devices in the cluster should be configured by a host profile. Correctly setting this value for devices in the cluster eliminates compliance errors due to non-shared devices.

By default, this value is populated to reflect the **Is Local** setting for the device. For example, a device with **Is Local** set to **True**, this setting is disabled by default. This setting allows storage host profiles to ignore these devices during compliance checks.

You can find the **Is Local** setting for the device by running the command `esxcli storage core device list` in the ESXi Shell. For more information on this command and identifying disks or LUNs, see <http://kb.vmware.com/kb/1014953>.

- 3 Do not disable **Is Shared Clusterwide** for SAN boot LUNs. In ESXi 6.0, SAN boot LUN devices are handled as expected. If **Is Shared Clusterwide** is disabled for these devices, then compliance errors caused by SAN boot LUN devices in previous releases do not occur, but the device configuration is not applied to the other hosts in the cluster. Select **Storage configuration > Pluggable Storage Architecture configuration > Host boot device configuration** and verify that this LUN is correctly captured.
- 4 Remediate the profile to the reference host for the changes in the sharing state to take effect on the reference host.

If you must re-extract the profile (for example, if you attach more shared SAN boot LUNs to your cluster), you do not need to reconfigure sharing for devices that you previously configured.

Set Up Host Profiles for Static IP Addresses in the vSphere Web Client

By default, hosts provisioned with vSphere Auto Deploy are assigned DHCP addresses by a DHCP server. You can use the vSphere Auto Deploy host customization mechanism to assign static IP addresses to hosts.

Prerequisites

- Set up your vSphere Auto Deploy environment.
- Boot the host using vSphere Auto Deploy.
- Extract a host profile from the host.

Procedure

- 1 In the vSphere Web Client, navigate to the vCenter Server that manages the vSphere Auto Deploy host, select **Policies and Profiles**, and select **Host Profiles**.
- 2 Right-click the extracted host profile and click **Edit Settings**.
- 3 Use the default name and description and click **Next**.
- 4 Change the default IP address settings by clicking **Networking configuration > Host port group > Management Network > IP address settings**.
- 5 From the **IPv4 address** drop-down menu, select **User specified IP address to be used while applying the configuration**.
- 6 If the host is in a different subnet than the vCenter Server system, select **Networking Configuration > NetStack Instance > defaultTcpipStack > DNS configuration** and enter the default route in the **Default IPv4 gateway** text box.
- 7 Select **Networking Configuration > NetStack Instance > defaultTcpipStack > DNS configuration**.
- 8 Make sure the **Flag indicating if DHCP should be used** check box is deselected.
- 9 Right-click the host and select **All vCenter Actions > Host Profiles > Attach Host Profile**.
- 10 Select the profile to attach and click **Next**.
- 11 Provide the IP address and net mask and click **Finish**.
- 12 Reboot the ESXi host.

The IP address is saved as a host customization and applied to the host.

Index

A

Auto Deploy **15**

C

compliance checks, Host Profiles **14**

configuring host profiles **19**

copy settings to host profile **16**

creating, Host Profiles **9**

D

disabling, Host Profile policy **14**

E

edit host customizations **22**

editing

 Host Profile policies **13**

 Host Profiles **12**

export host customizations **22**

exporting a host profile **16**

H

host customization **19, 23**

Host Profile, detaching host or cluster from Host Profile **10**

Host Profiles

 accessing **9**

 attaching hosts or clusters to a Host Profile **10**

 checking compliance **11**

 creating from Host Profile view **9**

 disabling policy **14**

 editing profiles **12**

 editing a policy **13**

 remediate profiles **11**

 updating from reference host **15**

 usage model **7**

host profiles, introduction **7**

Host Profiles, duplicating profiles **15**

I

importing host profiles **16**

R

reference host **8**

reference host independence **8**

S

static IP address for vSphere Auto Deploy **23**

storage host profiles **23**

U

using Host Profiles **9**

V

vSphere Auto Deploy, static IP address **23**

vSphere Web Client **23**

