

Symantec™ Dynamic Multi-Pathing 6.1 Installation Guide - VMware ESXi

Symantec™ Dynamic Multi-Pathing Installation Guide

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When you contact Technical Support, please have the following information available:

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- Hardware information

- Available memory, disk space, and NIC information
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- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
 - Error messages and log files
 - Troubleshooting that was performed before contacting Symantec
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- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
- Information about the Symantec Buying Programs
- Advice about Symantec's technical support options
- Nontechnical presales questions
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version (located on the second page), and chapter and section titles of the text on which you are reporting. Send feedback to:

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<https://www-secure.symantec.com/connect/storage-management/forums/storage-and-clustering-documentation>

About Symantec Connect

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<http://www.symantec.com/connect/storage-management>

Support agreement resources

If you want to contact Symantec regarding an existing support agreement, please contact the support agreement administration team for your region as follows:

Asia-Pacific and Japan customercare_apac@symantec.com

Europe, Middle-East, and Africa semea@symantec.com

North America and Latin America [supportolutions@symantec.com](mailto:supportsolutions@symantec.com)

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Installation overview and planning

- [Chapter 1. Introducing Symantec Dynamic Multi-Pathing](#)
- [Chapter 2. System requirements](#)
- [Chapter 3. Licensing Symantec products](#)

Introducing Symantec Dynamic Multi-Pathing

This chapter includes the following topics:

- [About Symantec Dynamic Multi-Pathing for VMware](#)

About Symantec Dynamic Multi-Pathing for VMware

Symantec Dynamic Multi-Pathing for VMware 6.1 (VxDMP) is a multi-pathing solution integrated with VMware's vSphere infrastructure, which brings the established and proven enterprise-class functionality to VMware virtual environments.

VxDMP provides multi-pathing functionality for the devices that are configured on the system. VxDMP creates VxDMP metadevices (also known as VxDMP nodes) to represent all the device paths to the same physical LUN.

VxDMP provides the best in class availability, reliability, and performance by using advanced path failover and load balancing for a wide range of storage arrays. VxDMP also helps in gaining better visibility of a storage, and in managing it better.

VxDMP solution consists of the following components:

- VxDMP offline bundles installed on the ESXi servers.
The ESXi bundle contains the binaries for VxDMP that need to be installed on each individual ESXi server.
You can obtain the ESXi bundle from the Symantec software download website, or use vSphere Client to download it from the VxDMP UI plug-in tab within the vSphere Client.
- Administrative components:
 - VxDMP Console installed on a Windows-based host (physical or virtual).

The VxDMP Console plugs into VMware vSphere environment, a vCenter Plugin, and enables you to manage VxDMP in the vSphere environment. Once the VxDMP Console is installed, Symantec Dynamic Multi-Pathing is available in vSphere Client, under the **vCenter Home** view, and as a **VxDMP** tab. The VxDMP tab offers the host view for a selected ESXi host, or the datacenter view for a selected datacenter.

Use the Symantec installation media to install the VxDMP Console on a Windows-based host that has the supported Windows version.

- Administration CLI installed on a Windows-based or Linux-based remote host.

The usual `vxdlmpadm` and `vxddladm` commands enable you to administer VxDMP on multiple ESXi from a remote host at a command line shell such as to allow creation of custom scripts.

You can obtain the CLI package from the Symantec product download website, or use vSphere Client to download the CLI package from the VxDMP tab within the vSphere Client.

- VxDMP plug-in for vSphere Web Client.
 A VxDMP plug-in is registered in the VMware vSphere Web Client server that enables you to manage VxDMP on an ESXi host from the vSphere Web Client GUI. In the vSphere Web Client, select the host and navigate to the **Manage > VxDMP**. To monitor the I/O performance of the entities, navigate to **Monitor > Performance > VxDMP** views.

Note: VxDMP is referred as DMP in some sections of this document.

See [“Installing VxDMP”](#) on page 18.

System requirements

This chapter includes the following topics:

- [Release notes](#)
- [Supported operating systems](#)
- [Disk space requirements](#)

Release notes

The *Release Notes* for each Symantec product contains last-minute news and important details for each product, including updates to system requirements and supported software. Review the *Release notes* for the latest information before you start installing the product.

The product documentation is available on the web at the following location:

<https://sort.symantec.com/documents>

Supported operating systems

For information on supported operating systems for various components of DMP, see the *Symantec Dynamic Multi-Pathing Release Notes*.

Disk space requirements

The system where you want to install the VxDMP components must have enough free disk space.

[Table 2-1](#) provides the minimum disk space requirements for the VxDMP components.

Table 2-1 VxDMP disk space requirements

Component	Disk space required
DMP Console	310 MB
Administration CLI	3.5 MB

Licensing Symantec products

This chapter includes the following topics:

- [About Symantec product licensing](#)
- [Installing Symantec product license keys](#)

About Symantec product licensing

When you purchase a Symantec product, you receive a License Key certificate. The certificate specifies the product keys and the number of product licenses purchased.

A software license is a legal instrument governing the usage or redistribution of copyright protected software. The administrator and company representatives must ensure that a server or cluster is entitled to the license level for the products installed. Symantec reserves the right to ensure entitlement and compliance through auditing.

If you encounter problems while licensing this product, visit the Symantec licensing support website.

<http://www.symantec.com/techsupp/>

The administration interface prompts you for a license key. Use the remote CLI or vSphere Client to install the license.

See [“Installing Symantec product license keys”](#) on page 15.

If you upgrade to this release from a previous release of the Symantec software, the product installer does not change the license keys that are already installed. The existing license keys may not activate new features in this release.

Installing Symantec product license keys

You can use only those Symantec software products for which you have purchased a license, even though other products may be included on the enclosed software media.

To install a new license from a remote CLI

- 1 To get a list of the installed license keys, from the remote CLI, run the `vxdmpadm license` command.
- 2 Add a new license key if required, after accepting the End User License Agreement (EULA).

Alternatively, you can apply new license to a single or multiple hosts from the vSphere Client GUI.

See [“Applying new license to a single host or multiple hosts”](#) on page 15.

You can also view a report of the DMP licenses installed in the environment.

Applying new license to a single host or multiple hosts

You can apply the VxDMP license to a host, from vSphere Client's Symantec Dynamic Multi-Pathing for VMware home view.

To apply license to a single host or multiple hosts

- 1 From **vCenter Home > Solutions and Applications**, click **Symantec Dynamic Multi-Pathing**. The **Symantec Dynamic Multi-Pathing for VMware** home view with **Getting Started** tab appears.
- 2 Click the **License Management** tab.
- 3 From the list of hosts, select one or more hosts.

Note: To select multiple hosts, hold the **Ctrl** key, and click the host names.

- 4 To apply the license key, click **Apply**.
- 5 The **Add New License** window appears. Enter the license key.
- 6 Select the check box to accept the license agreement.
- 7 Click **Apply**.

Note: An error message appears, if any of the license keys are not applied. Select the hosts and apply the correct license keys.

Installation of Symantec Dynamic Multi-Pathing

- [Chapter 4. Installing Symantec Dynamic Multi-Pathing](#)

Installing Symantec Dynamic Multi-Pathing

This chapter includes the following topics:

- [Preparing to install VxDMP](#)
- [Installing VxDMP](#)
- [Registering VxDMP with multiple vCenter or Web Client server](#)

Preparing to install VxDMP

Before you start the installation, ensure that the following prerequisites are satisfied:

For installing the VxDMP Console,

- The physical or virtual machine that hosts VxDMP Console for vCenter must run the Windows OS. Make sure that the required version of Windows OS is installed and running.

For information on supported operating systems, see the *Symantec Dynamic Multi-Pathing Release Notes*.

VxDMP console uses the ports 14241 and 14242. Ensure that these ports are not already in use, and the port 14242 is not blocked by firewall.

- You must have the privileges to install software, and to access the vCenter from the UI Console server . To register the VxDMP Plug-in, you must have the extension privileges.

For installing the administration CLI,

- The system where you want to install the administration CLI has JRE 7.0 or above installed.

Installing VxDMP

Installation of VxDMP involves installing the following components:

- VxDMP Console on a Windows-based host
See [“Installing VxDMP Console on a Windows-based system”](#) on page 18.
- VxDMP offline bundle on the ESXi servers
See [“Installing the VxDMP offline bundle on an ESXi 5.x host using VMware vSphere CLI”](#) on page 24.
See [“Installing the VxDMP offline bundle using VMware vSphere® Update Manager™”](#) on page 26.
- Administration CLI on a remote system
See [“Installing the administration CLI”](#) on page 28.

You can use the Symantec software download website to download the installers for these components. After VxDMP Console is installed, you can also use vSphere Client to download the VxDMP bundle for ESXi, and the CLI from the VxDMP UI plug-in.

See [“Downloading the VxDMP offline bundle for ESXi”](#) on page 22.

See [“Downloading the administration CLI package for a remote host”](#) on page 23.

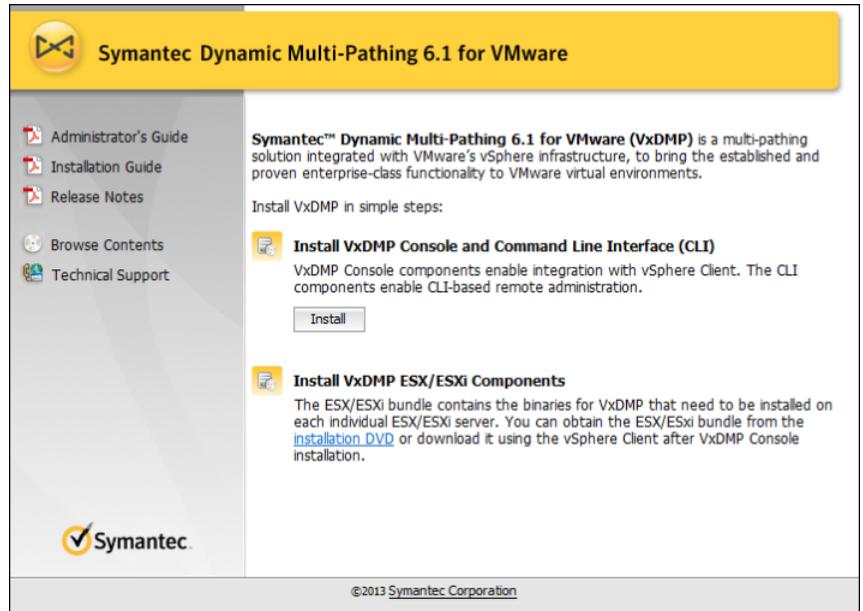
Note: You must have the administrator privileges to load the software.

Installing VxDMP Console on a Windows-based system

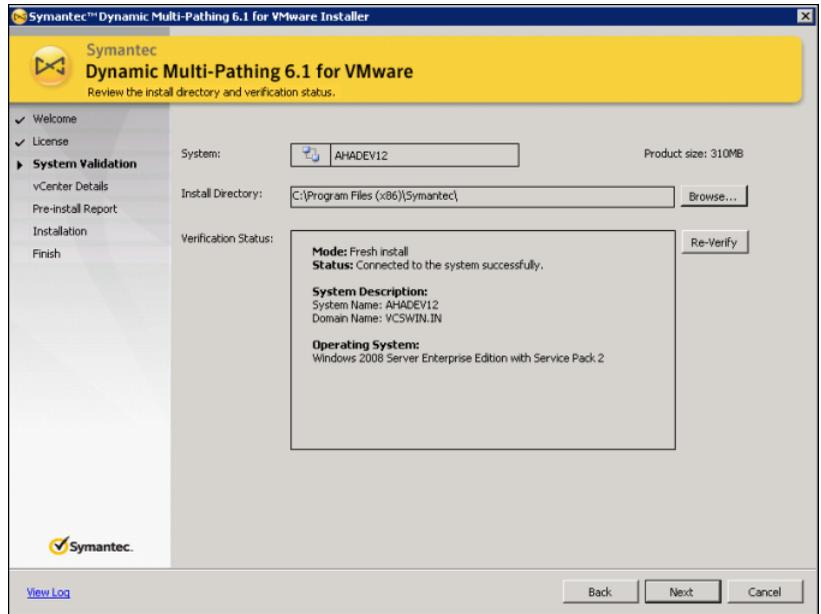
When installing VxDMP Console, ensure that there are no parallel installations, live updates, or Microsoft Windows updates in progress on the system where you install.

Installing the VxDMP Console on a Windows-based system

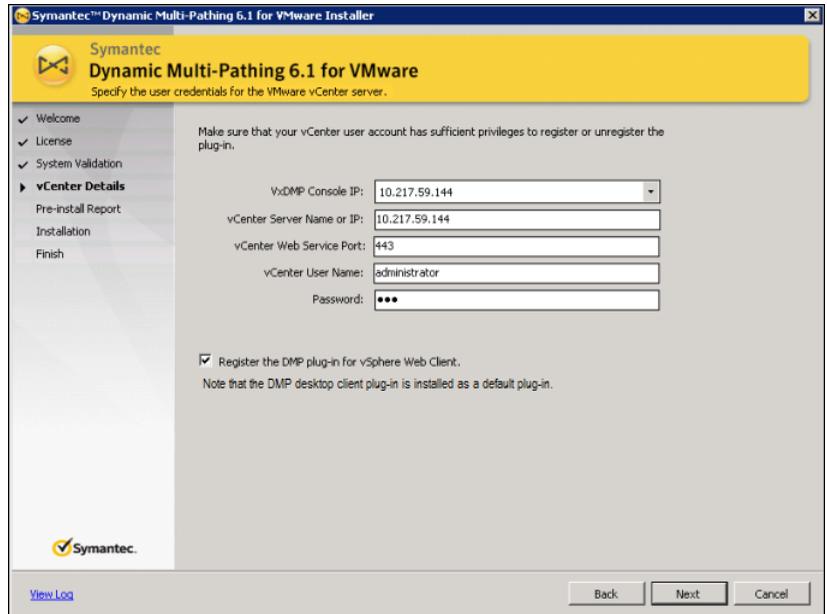
- 1 From the Symantec installation media, download the installer to the disc drive of the physical or virtual Windows-based system where you want to install VxDMP Console.
- 2 From the root folder of the installer, click `setup.exe`. The installation wizard appears.



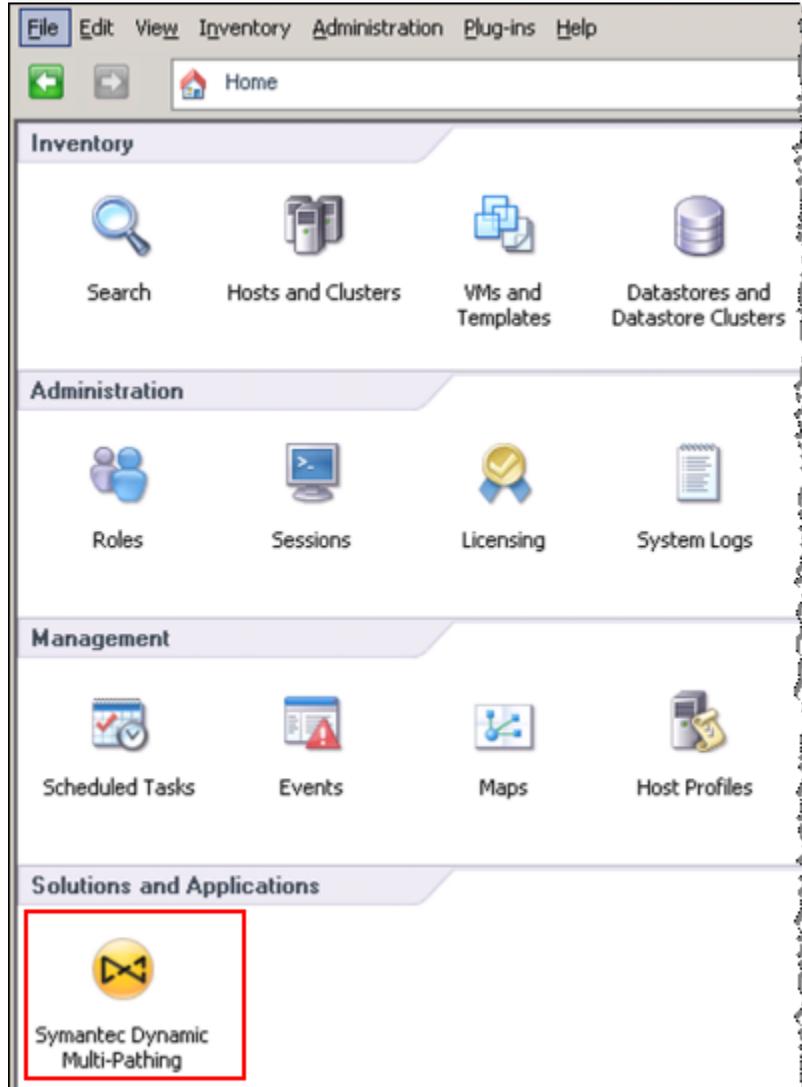
- 3 Follow the instructions in the wizard to complete the installation. You must do the following:
 - Accept the license agreement.
 - Choose the installation destination folder.



- Provide the vCenter administration credentials.
- Check the **Register the DMP plug-in for vSphere Web Client** check box to manage VxDMP from the vSphere Web Client.



- 4 For the desktop vSphere client, verify that the VxDMP Plugin is registered, by logging in to the vSphere client. The **vCenter Home** view displays the Symantec Dynamic Multi-Pathing solution in the **Solutions and Applications** panel.



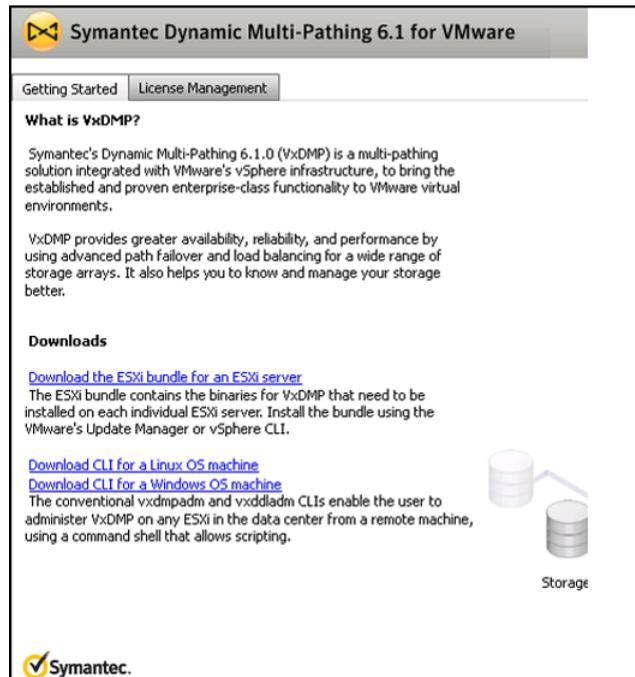
Downloading the VxDMP offline bundle for ESXi

You can use the vSphere Client GUI to download the DMP offline bundle for ESXi.

Note: To be able to download the offline bundle from the home view, make sure that for the logged in user, the IE Enhanced Security setting is set to "Off".

To download the installer from vSphere Client

- 1 Log in to vSphere Client.
- 2 From **vCenter Home > Solutions and Applications**, click **Symantec Dynamic Multi-Pathing**. The **Symantec Dynamic Multi-Pathing for VMware** home view with **Getting Started** tab appears.



- 3 From **Downloads**, click the link to download the ESXi bundle for an ESXi server. The **File Download** window appears.
- 4 Click **Save** to save the .zip file in your system.

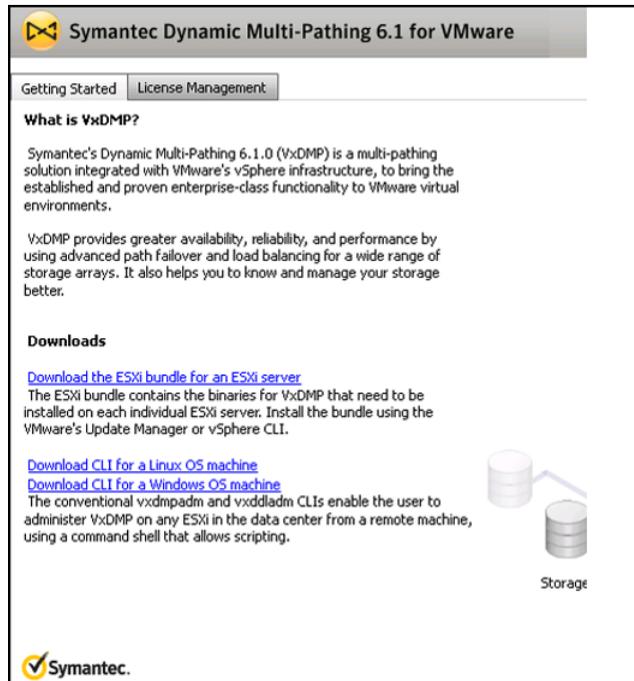
Downloading the administration CLI package for a remote host

You can administer DMP from remote physical or virtual machines, by installing the administration CLIs on the remote machine. VxDMP CLIs are available for both Windows and Linux operating systems.

You can use the vSphere Client GUI to download the administration CLI package for a remote host.

To download the administration CLI package for a remote host

- 1 Log in to vSphere Client.
- 2 From **vCenter Home > Solutions and Applications**, click **Symantec Dynamic Multi-Pathing**. The **Symantec Dynamic Multi-Pathing for VMware** home view with **Getting Started** tab appears.



- 3 From **Downloads**, click the link to download the CLI package.

Installing the VxDMP offline bundle on an ESXi 5.x host using VMware vSphere CLI

To install the VxDMP offline bundle on an ESXi 5.x host using VMware vSphere CLI

- 1 Log on to a system that has the VMware vSphere CLI utilities installed. You need to use these to remotely install components onto an ESXi host.
- 2 Obtain the VxDMP offline bundle, by doing one of the following:
 - From the Symantec installation media, `Pkgs/ESXi`, copy the installation package to your host.
 - Download the installation package from vSphere Client. See "[Downloading the VxDMP offline bundle for ESXi](#)" on page 22.

- 3 Upload the .zip file to a local datastore on ESXi server.
- 4 Follow the instructions that are provided for VMware vSphere CLI, and install the VxDMP offline bundle remotely on any target ESXi host.

For example,

On Linux:

```
# esxcli --server=esx_server_name
--username=username --password=password
software vib install
--depot=full path of VxDMP-6.1.000.000_ESXi_offline-bundle.zip
ESXi server
```

On windows:

```
C:\>esxcli.exe --server=esx_server_name
--username=username --password=password
software vib install
--depot=full path of VxDMP-6.1.000.000_ESXi_offline-bundle.zip
ESXi server
```

For more information, see <http://www.vmware.com/support/developer/vcli/>

- 5 The bundle gets installed.

For example,

```
Installation Result
Message: The update completed successfully,
but the system needs to be rebooted for the changes to be effective.
Reboot Required: true
VIBs Installed: Symantec_bootbank_vxaslapm_500.6.1.000.000-464360,
Symantec_bootbank_vxdmpmpp_500.6.1.000.000-464360,
Symantec_bootbank_vxdmpprov_500.6.1.000.000-464360
VIBs Removed:
VIBs Skipped:
```

- 6 Verify that the VxDMP bundle is installed, and restart the ESXi server.

See “[Verifying that Symantec Dynamic Multi-Pathing was installed](#)” on page 33.

After installing the VxDMP offline bundle, the VxDMP solution will be available in VMware vSphere Client. You must apply the license key for the ESXi host, to be able to use the VxDMP functionality.

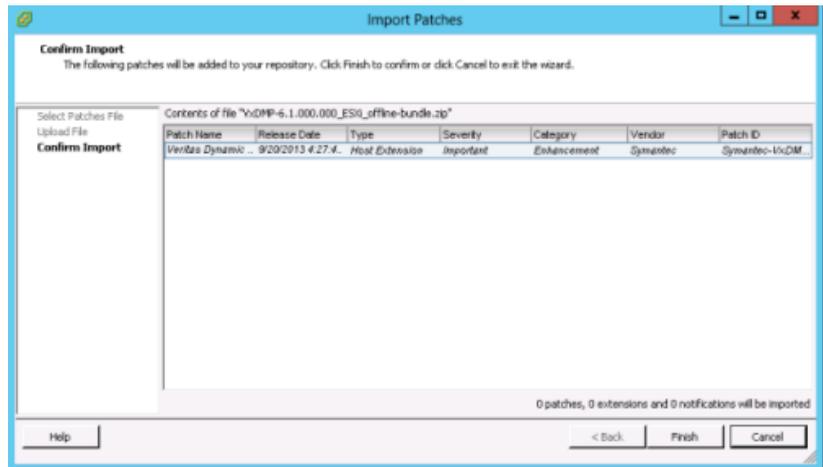
See “[Installing Symantec product license keys](#)” on page 15.

Installing the VxDMP offline bundle using VMware vSphere® Update Manager™

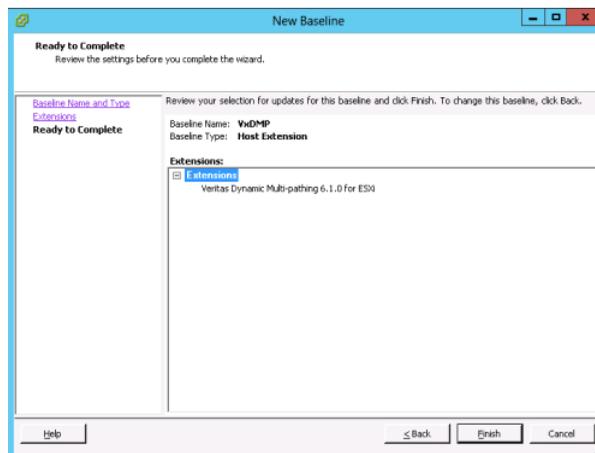
You can install the VxDMP offline bundle using VMware vSphere® Update Manager™.

To install the VxDMP offline bundle using Update Manager

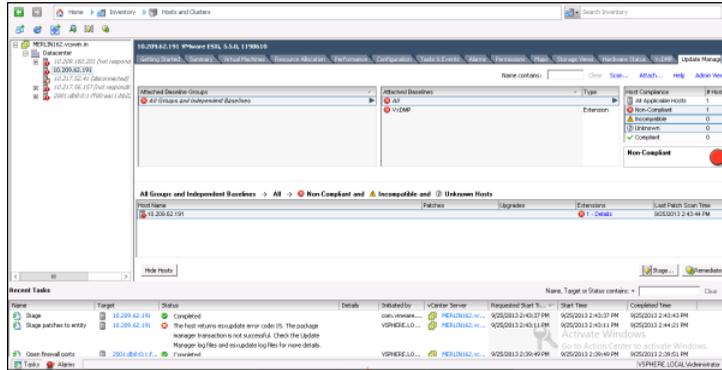
- 1 Upload the VxDMP bundle patches to the Update Manager patch repository. You must follow the steps to upload the Symantec VxDMP offline bundle.



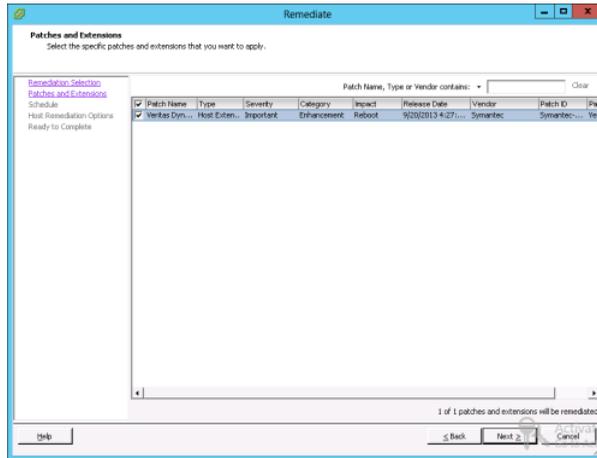
- 2 Add the VxDMP bundle to an existing or new baseline.



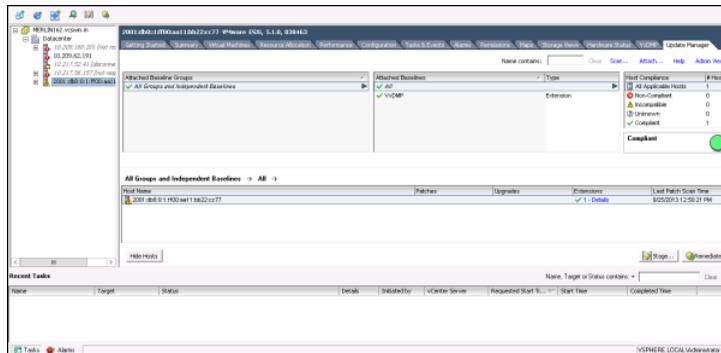
3 Check the compliance of the hosts in the datacenter to the baseline.



- 4 Remediate each of the hosts at a convenient point in time to deploy the VxDMP bundle on the target hosts. To remediate, install the patch on the hosts that show deviation from the baseline.



After restart, Update Manager displays the host as compliant, indicating that the patches are installed.



Installing the administration CLI

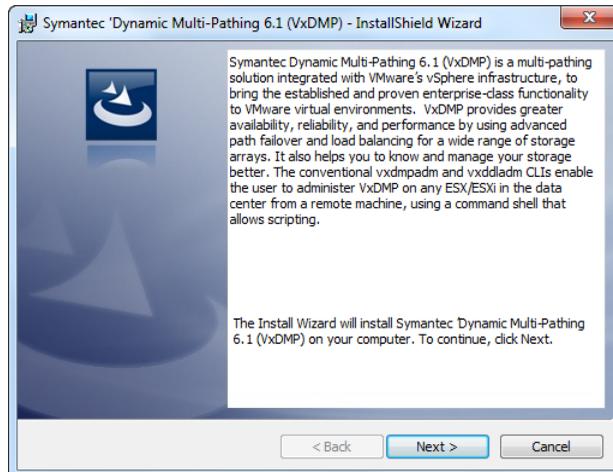
Installing the administration CLI

- 1 Log on to the physical or virtual system where you want to install the administration CLI.
- 2 To obtain the Windows or Linux package, do one of the following:
 - From the Symantec installation media, copy the Linux installation package from the `Pkgs/Linux` directory, or copy the Windows installation package from the `Pkgs/Common` directory.

- Download the installation package from vSphere Client.
See “[Downloading the administration CLI package for a remote host](#)” on page 23.
- 3 To install the CLI for Linux, use the `rpm` command to install the `vxddmpadm` and `vxddladm` command line utilities under the `/opt/VRTSdmpadm/bin` directory, as follows:

```
# rpm -ivh VRTSdmpadm-6.1.000.000-ESXi.i686.rpm
```

Note: You can use the utilities Help option to obtain the syntax and the other available options. Refer to the `vxddmpadm` and `vxddladm` Man pages for Linux installation.



- 4 To install the CLI for Windows, run the MSI executable file. The installation wizard appears. Follow the instructions.

Registering VxDMP with multiple vCenter or Web Client server

After installing VxDMP console, you can register the VxDMP plug-in on additional vCenter servers.

To register the VxDMP plug-in

- 1 Log on to the ESXi host.
- 2 From the VxDMP Console server, run the `registerPlugin.bat` utility.

- By default, the `registerPlugin.bat` utility is available at:
`C:\Program Files(x86)\Symantec\DMP\bin`
- If VxDMP is installed on a custom location, then the `registerPlugin.bat` utility is available at
`VxDMP Console install directory\DMP\bin>registerPlugin.bat`

3 Execute the following command:

```
registerPlugin.bat DMPConsole_IP vCenterServer_IP  
vCenterserverSDK_Port vCenterServer_Username  
vCenterServer_Password register script web
```

Note: You must run the `registerPlugin.bat` utility to register each vCenter Server instance.

Verification of the installation

- [Chapter 5. Verifying the Symantec Dynamic Multi-Pathing installation](#)

Verifying the Symantec Dynamic Multi-Pathing installation

This chapter includes the following topics:

- [Before you verify the installation](#)
- [Verifying that Symantec Dynamic Multi-Pathing was installed](#)
- [Verifying that Symantec Dynamic Multi-Pathing is registered](#)

Before you verify the installation

Do the following, before you verify the installation.

- To view the VxDMP tab in vSphere Client, verify that the following settings in your Internet Explorer (IE) browser are enabled:

Tools > Internet
Options. Advanced
tab.

- Use SSL 2.0
- Use SSL 3.0
- Use TLS 1.0

Tools > Internet
Options. Security tab.

- Active scripting
- Run ActiveX controls and plug-ins
- Script ActiveX controls marked safe for scripting

Tools > Manage
Add-ons

- Shockwave Flash Object

- To view the VxDMP tab, Symantec recommends that for the logged in user, the IE Enhanced Security setting is set to "Off". If you require to set the IE Enhanced Security setting to "On", the first time you access the VxDMP tab, you must add the console IP to the trusted zone of IE, and restart vSphere client.
- To view the VxDMP tab, verify that you have Adobe Flash installed on the system from where you run VMware vSphere Client.

Verifying that Symantec Dynamic Multi-Pathing was installed

After you complete the steps to install Symantec Dynamic Multi-Pathing, you must verify that the VxDMP components are installed.

To verify that the VxDMP Console is installed

- 1 Log in to vCenter using vSphere Client.
- 2 Verify that the **vCenter Home** view displays the Symantec Dynamic Multi-Pathing for VMware solution in the **Solutions and Applications** panel.

For more information, see the troubleshooting tips for installation and administration.

See [“Console components got installed correctly but I don’t see the VxDMP plugin in vSphere Client”](#) on page 48.

To verify that the VxDMP offline bundle is installed

- ◆ Use a VMware vSphere CLI query to verify that the VxDMP offline bundle is installed.

- For example, for installation on an ESXi 5.x host:

On Linux:

```
# esxcli --server=esx_server_name --username=username \
--password=password software vib list | grep vx
```

On Windows:

```
C:\> esxcli.exe --server=esx_server_name --username=username \
--password=password software vib list | find /i "vx"
```

After successful installation, the summary of installation details appears.

For example,

Name	Version	Vendor	Acceptance Level
-----	-----	-----	-----
Install Date			

```
-----
vxaslapm 500.6.1.000.000-464360
vxdmpmpp 500.6.1.000.000-464360
vxdmpprov 500.6.1.000.000-464360
```

Verifying that Symantec Dynamic Multi-Pathing is registered

After you have registered VxDMP Console, you can verify that VxDMP is registered on the vCenter server.

To verify that the VxDMP Console is registered on the vCenter server

- 1 Log on to the ESXi host.
- 2 From the VxDMP Console server, run the `registerPlugin.bat` utility.
 - By default, the `registerPlugin.bat` utility is available at:
`C:\Program Files (x86)\Symantec\DMP\bin`
 - If VxDMP is installed on a custom location, then the `registerPlugin.bat` utility is available at:
`VxDMP Console install directory\DMP\bin>registerPlugin.bat`
- 3 Execute the following command:

```
registerPlugin.bat DMPConsole_IP vCenterServer_IP
vCenterserverSDK_Port vCenterServer_Username
vCenterServer_Password verify script web
```

For example,

```
registerPlugin.bat 10.209.144.181 10.209.144.181 443 username
password verify script web
```

Upgrading Symantec Dynamic Multi-Pathing

- [Chapter 6. Upgrading Symantec Dynamic Multi-Pathing](#)

Upgrading Symantec Dynamic Multi-Pathing

This chapter includes the following topics:

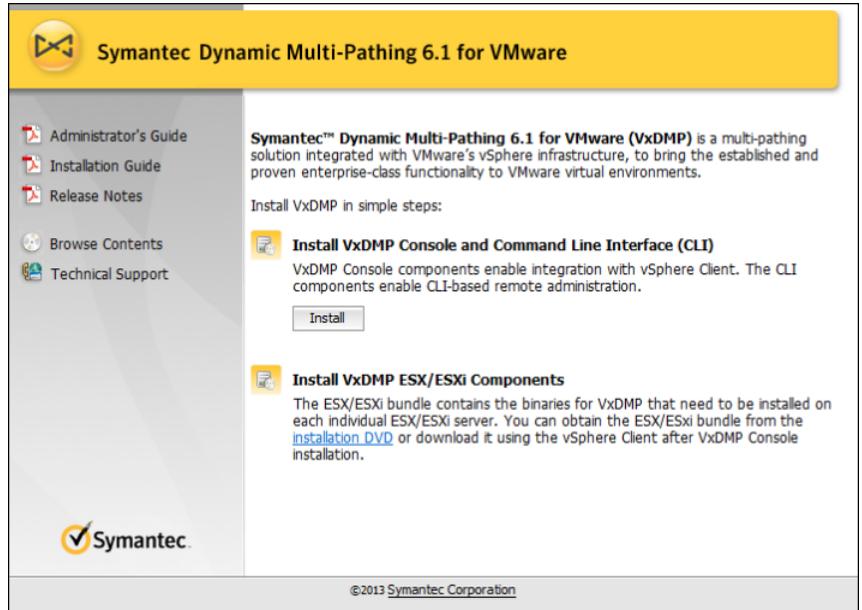
- [Upgrading VxDMP Console](#)
- [Upgrading the VxDMP offline bundle](#)
- [Updating the array support](#)

Upgrading VxDMP Console

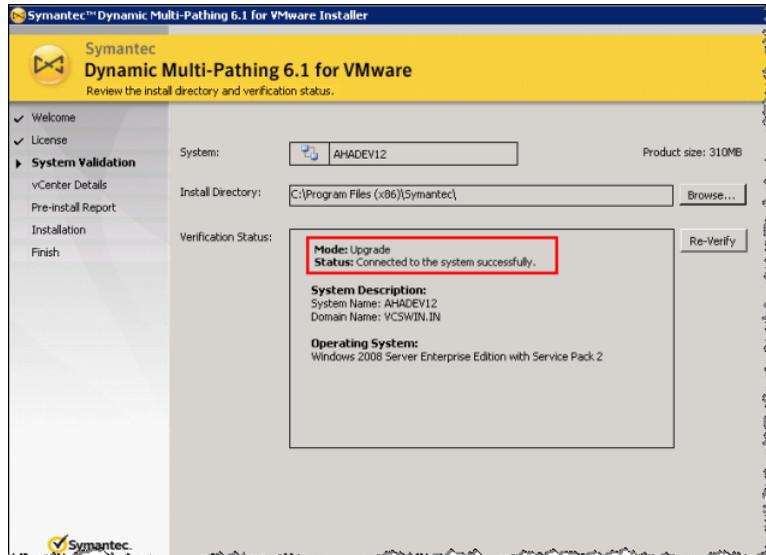
When upgrading VxDMP Console, ensure that there are no parallel installations, live updates, or Microsoft Windows updates in progress on the system where you upgrade.

Upgrading the VxDMP Console on a Windows-based system

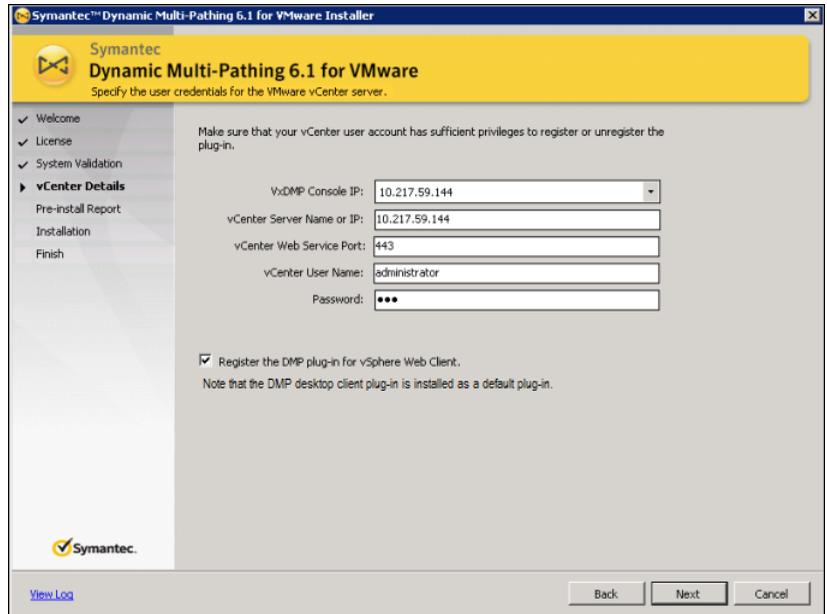
- 1 From the Symantec installation media, download the installer to the disc drive of the physical or virtual Windows-based system where you want to upgrade the installed VxDMP Console.
- 2 From the root folder of the installer, click `setup.exe`. The installation wizard appears, and automatically detects the existing installation.



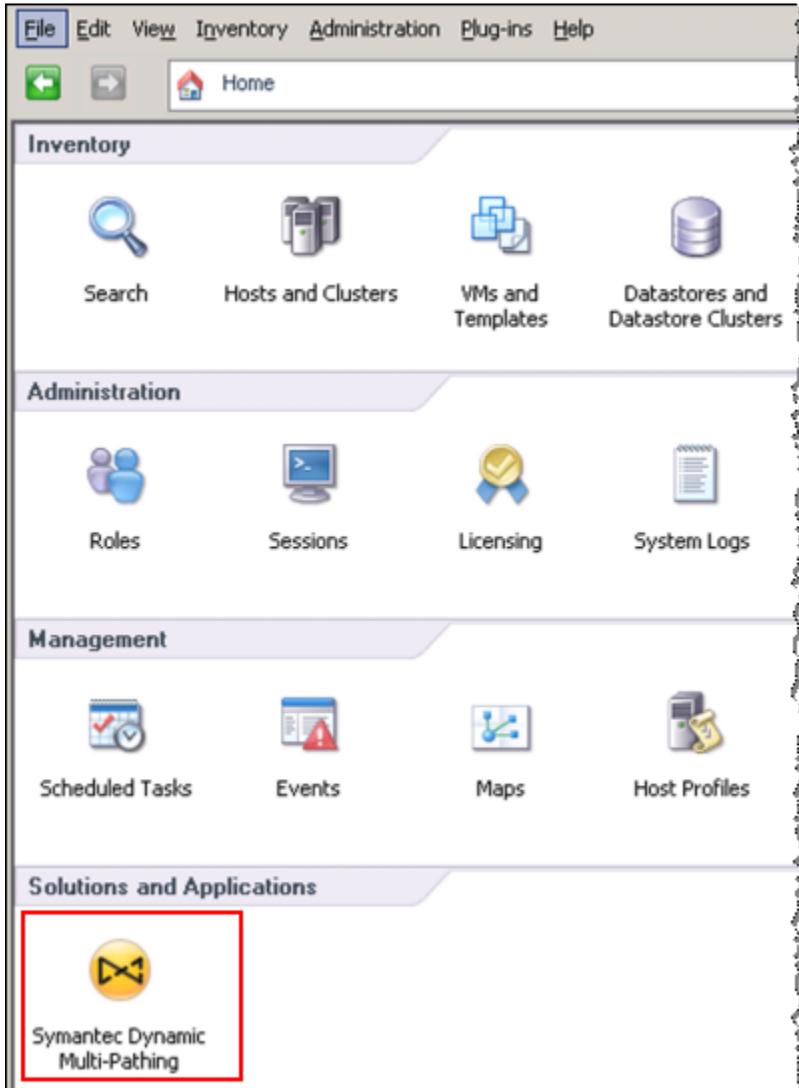
- 3 Follow the instructions in the wizard to complete the upgrade. You must do the following:
 - Accept the license agreement.
 - Choose the installation destination folder.



- Provide the vCenter administration credentials.
- Check the **Register the DMP plug-in for vSphere Web Client** check box to manage VxDMP from the vSphere Web Client.



- 4 Verify that the VxDMP Plug-in is registered, by logging in to the vSphere Client. The **vCenter Home** view displays the Symantec Dynamic Multi-Pathing solution in the **Solutions and Applications** panel.



Upgrading the VxDMP offline bundle

You need to upgrade VxDMP if a new functionality is available, or if you need to apply any fixes. You can identify from the Symantec Web site if you need to upgrade VxDMP.

See <http://sort.symantec.com>

Refer to the following steps to upgrade from the existing installed VxDMP package to the new one, for the VxDMP offline bundle for ESXi server, the VxDMP console, or the administration CLI.

To upgrade VxDMP

- 1 Download the new VxDMP offline bundle.
- 2 Put the host in the maintenance mode.
- 3 Uninstall the old VxDMP bulletins.
See “Uninstalling VxDMP ” on page 44.
- 4 Install the downloaded VxDMP offline bundle.
See “Installing VxDMP” on page 18.
- 5 Remove the host from the maintenance mode, and restart the ESXi server.

To upgrade VxDMP using the ESXi CLI

- 1 Download the new VxDMP offline bundle.
- 2 Put the host in the maintenance mode.
- 3 Use the following command:

```
# esxcli --server=esx_server_name --username=username \  
--password=password software vib update \  
--depot=full path of VxDMP-6.1.000.000_ESX5.x_offline-bundle.zip
```
- 4 Remove the host from the maintenance mode, and restart the ESXi server.

Updating the array support

You need to update or change your array support if a new array is added, or if you need to apply any fixes for the array support. You can identify from the Symantec Web site if you need to update the array support.

See the Hardware compatibility list. <http://sort.symantec.com>

To update the array support

- 1 From <http://sort.symantec.com>, download the `VRTSaslapm-version-offline_bundle.zip` containing the latest ASL/APM VIB file.
- 2 Install the `offline_bundle` using the `esxcli` command for ESXi 5.x. This operation causes no disruption to the virtual machines running on the ESXi.

See “Installing VxDMP” on page 18.

Note: Alternatively, you can upload the new array support bundle to the VMware vSphere Update Manager patch repository, and schedule the download to the ESXi host.

Uninstallation of Symantec Dynamic Multi-Pathing

- [Chapter 7. Uninstalling Symantec Dynamic Multi-Pathing](#)

Uninstalling Symantec Dynamic Multi-Pathing

This chapter includes the following topics:

- [Uninstalling VxDMP](#)
- [Unregistering VxDMP](#)

Uninstalling VxDMP

Perform the following steps to uninstall VxDMP.

To uninstall the VxDMP offline bundle from an ESXi 5.x host using VMware vSphere CLI

- 1 Log on to a system that has the VMware vSphere CLI utilities installed. You need to use these utilities to remotely remove the VxDMP offline bundle from an ESXi 5.x host.
- 2 Execute the command to remove software from the ESXi host.

For example,

Symantec VxDMP CIM provider:

```
# esxcli --server=esx_server_name \  
--username=username --password=password \  
software vib remove --vibName=vxdmpprov
```

Symantec VxDMP Array Support:

```
# esxcli.exe --server=esx_server_name \  
--username=username --password=password \  
software vib remove --vibName=vxaslapm
```

Symantec VxDMP Plug-in:

```
# esxcli.exe --server=esx_server_name \  
--username=username --password=password \  
software vib remove --vibName=vxdmpmpp
```

- 3 Verify that the VxDMP VIBs are uninstalled.

```
# esxcli.exe --server=esx_server_name \  
--username=username --password=password \  
software vib list | grep vx
```

- 4 Remove the host from the maintenance mode, and restart the ESXi server.

To uninstall the administration CLI

- 1 Log on to the physical or virtual system where you have installed the administration CLI.
- 2 To uninstall the CLI for Windows, use the **Add/Remove Programs** option.

To uninstall the CLI for Linux, use the `rpm` uninstall option.

To uninstall VxDMP Console

- 1 Log on to the system that hosts VxDMP Console for vCenter.
- 2 To uninstall the VxDMP plug-in, from the **Start** menu, use the **Add or Remove Programs** option, and uninstall Symantec Dynamic Multi-Pathing.
- 3 After the uninstallation of VxDMP Console is complete, you must restart the system manually.

Unregistering VxDMP

You can unregister the VxDMP plug-in from the vCenter servers using the `registerPlugin.bat` utility or vCenter Managed Object Browser (MOB).

To unregister the VxDMP plug-in using the `registerPlugin.bat` utility

- 1 Log on to the VxDMP Console server,
- 2 Run the `registerPlugin.bat` utility.
 - By default, the `registerPlugin.bat` utility is available at:
`C:\Program Files (x86)\Symantec\DMP\bin`
 - If VxDMP is installed on a custom location, then the `registerPlugin.bat` utility is available at:
`VxDMP Console install directory\DMP\bin>registerPlugin.bat`

- 3 Execute the following command:

```
registerPlugin.bat DMPConsole_IP vCenterServer_IP  
vCenterserverSDK_Port vCenterServer_Username  
vCenterServer_Password unregister script web
```

To unregister the VxDMP plug-in using vCenter Managed Object Browser (MOB)

- 1 Go to:
`https://<vCenterServer_IP>/mob/?moid=ExtensionManager`
- 2 Log in using your vCenter Server credentials.
- 3 In the **Properties** table, verify if `vxdmp` and `vxdmpweb` extension is specified.
- 4 In the **Method** table, click **UnregisterExtension**.
- 5 In the **UnregisterExtension** window, type the string value as **`com.symantec.vxdmp`** .
- 6 Click **Invoke Method**.
- 7 Perform step 5 and 6 with the string value as **`com.symantec.vxdmpweb`**.

VxDMP troubleshooting

This appendix includes the following topics:

- [Troubleshooting tips](#)
- [Troubleshooting tips for installation](#)

Troubleshooting tips

Use the information in this section to diagnose the installation or operation problems that you might encounter.

Troubleshooting issues require looking at the log files created by the various components.

The following files may be required to determine the source of a problem:

- For installation issues: Refer to the Symantec VxDMP Console installation log file.
`%AllUsersProfile%\Veritas\VPI\log\date_timestamp\
See “Troubleshooting tips for installation” on page 48.`
- For ESXi server issues: Refer to the ESXi log files from the following locations.
Logs for provider: `/var/log/messages`
Logs for DMP for ESXi 5.x host: `/scratch/log/vmkernel`
See [“About the vxexplorer utility”](#) on page 48.
- For DMP Console-related issues: Refer to the DMPConsole file.
`%AllUsersProfile%\Symantec\DMP\Logs\vxdmplib.log.number`
- For VxDMP Plugin-related issues: Refer to the VIPluginRegistration file.
`%AllUsersProfile%\Symantec\DMP\Logs\VIPluginRegistration.log.number`
- For VxDMP tab issues at the host or datacenter level: In the VxDMP tab, click the **View Log** icon.

Here, %AllUsersProfile% is the Windows variable that typically expands to:

```
C:\Documents and Settings\All Users
```

On Windows 2008 and 2008 R2, it typically expands to:

```
C:\ProgramData
```

About the vxexplorer utility

The `vxexplorer` utility gathers the ESXi log information. This command generates a TGZ archive in the working directory named `vxexplorer-hostname-date.tgz`.

To run the `vxexplorer` utility

- 1 Log on to the ESXi host.
- 2 From the console, run the `vxexplorer` script.

Troubleshooting tips for installation

Console components got installed correctly but I don't see the VxDMP plugin in vSphere Client

Verify the following.

- The console IP is static.
- The console IP can be reached from vCenter Server using https requests.
- The prerequisite settings are in place.
See [“Before you verify the installation”](#) on page 32.

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