

## BigFix Patch for VMWare ESX Server User's Guide



# **Special notice**

Before using this information and the product it supports, read the information in <u>Notices</u> (on page 16).

# Edition notice

This edition applies to version 9.5 of BigFix and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Chapter 1. Overview

BigFix Patch for VMware ESX provides audit Fixlets for new patch bundle updates that VMware releases.

Patch for VMware ESX provides a way to query the patch status of devices for VMware ESX without installing an agent on the machine. It uses the management extender which communicates with the VMware API.

Patch for VMware is available through the Patches for ESX site.

## Supported platforms

BigFix Patch for ESX supports VMware updates on various platforms.

The following supported platforms are:

- VMware ESX Server 3.0.0
- VMware ESX Server 3.0.1
- VMware ESX Server 3.0.2
- VMware ESX Server 3.5
- VMware ESX Server 4.0
- VMware ESX Server 4.1

Patch for ESX provides the following updates:

- Critical
- General
- Security

To install ESX patches, subscribe to the Patches for ESX sites.

VMware ESX ended its Technical Guidance support for ESX 4.x in May 21, 2016. ESX users are advised to migrate to ESXi.

For more information about ESX end of general support and technical guidance for VMware ESX, see <a href="https://kb.vmware.com/selfservice/microsites/search.do?">https://kb.vmware.com/selfservice/microsites/search.do?</a> <a href="https://language=en\_US&cmd=displayKC&externalId=2039567">language=en\_US&cmd=displayKC&externalId=2039567</a>.

For more information about migrating from ESX to ESXi, see <u>http://www.vmware.com/files/</u> pdf/services/Files2011/vmware-ESXi-assess-migrate-service-brief.pdf

## Site subscription

Sites are collections of Fixlet messages that are created internally by you, by HCL, or by vendors.

Subscribe to a site to access the Fixlet messages to patch systems in your deployment.

You can add a site subscription by acquiring a Masthead file from a vendor or from HCL or by using the Licensing Dashboard. For more information about subscribing to Fixlet sites, see the *BigFix Installation Guide*.

For more information about sites, see the *BigFix Console Operator's Guide*.

# Chapter 2. Download plug-ins

Download plug-ins are executable programs that download a specified patch from the website of the patch vendor. To ease the process of caching, Fixlets have an incorporated protocol that uses download plug-ins.

For the Fixlet to recognize the protocol, the related download plug-in must be registered. You must use the Manage Download Plug-ins dashboard to register the download plugin. After you register the plug-in, you can run the Fixlets to download, cache, and deploy patches from the BigFix console.

If you already registered the plug-in, you can use the Manage Download Plug-ins dashboard to run the update. You must use the dashboard also to unregister and configure the download plug-in.

#### 

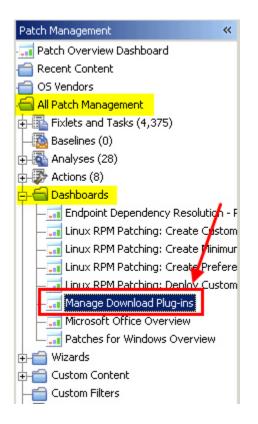
- If you install the download plug-in on relays, it is suggested that you also install it on the server.
- Download plug-ins support basic authentication only.
- The BigFix server and the BigFix client must be on the same version to avoid a null error.

## Manage Download Plug-ins dashboard overview

Use the Manage Download Plug-ins dashboard to oversee and manage download plug-ins in your deployment.

You can use the Manage Download Plug-ins dashboard to register, unregister, configure, and upgrade the download plug-ins for different patch vendors.

You must subscribe to the Patching Support site to gain access to this dashboard. To view the Manage Download Plug-ins dashboard, go to **Patch Management domain > All Patch Management > Dashboards > Manage Download Plug-ins**. Figure 1. Patch Management navigation tree



The dashboard displays all the servers and windows-only relays in your deployment. Select a server or relay to view all the plug-ins for that computer. The dashboard shows you also the version and status for each plug-in in one consolidated view.

#### Figure 2. Manage Download Plug-ins dashboard

lanage Download	Plug-ins					62
	ard to manage download view the applicable dow	plug-ins for different vendor s nload plug-ins.	ites on servers a	nd relays.		
Servers And Relays						
					ρ	
Name	Operating	System	Туре		Encryption Enabled	
bigfix.test	Linux Red H	lat Enterprise Server 7.2 (3.10.0-3	-\$ Server		Yes	
		=	6			
Plug-ins Register					2	
Plug-in Name	Connigure	Configure Migrate Plug-in Version		Status	P	
Red Hat Plug-in		NA		Not Installed		
Solaris Plug-in		N/A		Not Installed		-
SUSE Plug-in		N/A		Not Installed		
ESX Plug-in		N/A		Not Installed		
WAS Plug-in	g-in N/A			Not Installed		
FixCentral Plug-in		N/A		Not Installed		
SCC Plug-in	N/A			Not Installed		
RHSM Plug-in	1.0.0.2			New Version Ava	ailable	
CentOS Plug-in R2		N/A		Not Installed		

A plug-in can be in one of the following states:

- Not Installed
- New Version Available
- Up-To-Date
- Not Supported

The dashboard has a live keyword search capability. You can search based on the naming convention of the servers, relays, and plug-ins.

**Note:** If you install the download plug-in on BigFix relays, you must also install it on the BigFix server to avoid download issues.

### Registering the ESX download plug-in

Use the Manage Download Plug-ins dashboard to register the download plug-in for ESX.

You must complete the following tasks:

- Subscribe to the **Patching Support** site to gain access to the Manage Download Plugins dashboard.
- Activate the Encryption Analysis for Clients analysis, which is available from the BES Support site.
- Activate the **Download Plug-in Versions** analysis, which is available from the **Patching Support** site.
- If you want to encrypt endpoints, deploy the **Enable Encryption for Clients** Fixlet, which is available from the **BES Support** site.

When you register the download plug-in on a computer without the plug-in, the plug-in is automatically installed and the configuration file is created.

If the download plug-in is already installed on the computer, the configuration file is overwritten.

- 1. From the Patch Management domain, click **All Patch Management > Dashboards >** Manage Download Plug-ins dashboard.
- 2. From the Servers and Relays table, select the server or relay on which the download plug-in is to be registered.
- 3. From the Plug-ins table, select **ESX Plug-in**.
- 4. Click Register.

The Register ESX Plug-in wizard displays.

5. Enter the proxy parameters if the downloads must go through a proxy server.

#### Proxy URL

The URL of your proxy server. It must be a well-formed URL, which contains a protocol and a host name. The URL is usually the IP address or DNS name of your proxy server and its port, which is separated by a colon. For example: http://192.168.100.10:8080.

#### Proxy Username

Your proxy user name if your proxy server requires authentication. It is usually in the form of domain\username.

#### **Proxy Password**

Your proxy password if your proxy server requires authentication.

#### **Confirm Proxy Password**

Your proxy password for confirmation.

6. Click **OK**.

The Take Action dialog displays.

- 7. Select the target computer.
- 8. Click **OK**.

You successfully registered the ESX download plug-in.

### Unregistering the ESX download plug-in

Use the Manage Download Plug-ins dashboard to unregister the download plug-in for ESX.

- 1. From the Patch Management domain, click **All Patch Management > Dashboards > Manage Download Plug-ins dashboard**.
- 2. From the Servers and Relays table, select the server or relay on which the download plug-in is to be unregistered.
- 3. From the Plug-ins table, select **ESX Plug-in**.
- 4. Click Unregister.

The Take Action dialog displays.

- 5. Select the target computer.
- 6. Click **OK**.

You successfully unregistered the ESX download plug-in.

### Configuring the ESX download plug-in

Use the Manage Download Plug-ins dashboard to configure the download plug-in for ESX.

You might want to take note of your existing configuration for the download plug-in. Existing configurations are overwritten when you configure the download plug-in.

- 1. From the Patch Management domain, click **All Patch Management > Dashboards > Manage Download Plug-ins dashboard**.
- 2. From the Servers and Relays table, select the server or relay on which the download plug-in is to be configured.
- 3. From the Plug-ins table, select ESX Plug-in.
- 4. Click Configure.

The Configure ESX Plug-in wizard displays.

5. Enter the proxy parameters if the downloads must go through a proxy server.

#### **Proxy URL**

The URL of your proxy server. It must be a well-formed URL, which contains a protocol and a host name. The URL is usually the IP address or DNS name of your proxy server and its port, which is separated by a colon. For example: http://192.168.100.10:8080.

#### **Proxy Username**

Your proxy user name if your proxy server requires authentication. It is usually in the form of domain\username.

#### **Proxy Password**

Your proxy password if your proxy server requires authentication.

#### **Confirm Proxy Password**

Your proxy password for confirmation.

#### 6. Click **OK**.

The Take Action dialog displays.

- 7. Select the target computer.
- 8. Click OK.

You successfully configured the ESX download plug-in.

### Upgrading the ESX download plug-in

Use the Manage Download Plug-ins dashboard to upgrade the download plug-in for ESX.

- 1. From the Patch Management domain, click **All Patch Management > Dashboards > Manage Download Plug-ins dashboard**.
- 2. From the Servers and Relays table, select the server or relay on which the download plug-in is to be upgraded.
- 3. From the Plug-ins table, select **ESX Plug-in**.
- 4. Click Upgrade.

The Take Action dialog displays.

- 5. Select the target computer.
- 6. Click OK.

You now have the latest version of the ESX download plug-in installed.

# Chapter 3. Patch using Fixlets

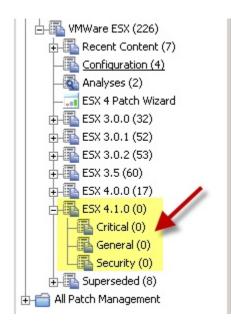
You can apply ESX patches to your deployment by using the Fixlets on the Patches for ESX3 site.

To deploy ESX patches, click the Patch Management domain and select the VMware ESX node under OS Vendors.

From the navigation tree, you can view ESX recent content, which includes new and modified Fixlets, as well as configuration, analyses, and an ESX 4 Patch Wizard.

Patch Management	«
Patch Management Domain	
🕂 💼 Application Vendors	
p- 🗐 OS Vendors	
EUSE Linux Enterprise (6,827)	-
🖻 🛱 VMWare ESX (226)	1
🛱 🔂 Recent Content (7)	
Hodified Fixlets (0)	
hew Fixlets (7)	
Configuration (4)	
Analyses (2)	
ESX 4 Patch Wizard	
ESX 3.0.0 (32)	
ESX 3.0.1 (52)	
ESX 3.0.2 (53)	
ESX 3.5 (60)	
ESX 4.0.0 (17)	
E Superseded (8)	

Click the ESX 4.1.0 node to see patches according to severity (Critical, General, and Security).



After you select an appropriate node, you can see Fixlets in the Work Area. Select the Fixlet that you want to apply, click **Take action**, and start the deployment process. Deprecated patches can be found in the Superseded node in the navigation tree.

## ESX 4 patch wizard

The ESX Patch Wizard allows you to deploy individual patches from an update bundle.

Click on a bundle to see the available individual patches. Select one or more of the patches and click **Create Fixlet**.

Patch Management	atch Wizard				đ
Patch Management Domain 📥					
Application Vendors  OS Vendors	New custom fixlet creation				
🗗 📠 Canonical (684)	Select Bundle				
	Bundle	Release Dat	Number of Pat	Number of Ap	plicable Co
Microsoft Windows (380)	ESX400-2009070	08/06/2009	1	0	<u>.</u>
Red Hat Enterprise Linux	ESX400-2009090	09/24/2009	2009 6	0	
Hare ESX (226)	ESX-4.0.0-update	12/09/2009	37	0	•
Recent Content (7) Gonfiguration (4)	Select Patches				
– 💽 Analyses (2) – 🚮 ESX 4 Patch Wizard	Patch				
⊕-T ESX 3.0.0 (32)					
⊕-∰ ESX 3.0.1 (52)					
⊕ - 🔂 ESX 3.0.2 (53)					
⊕				Cr	eate Fixlet
ESX 4.1.0 (0)					
🕂 🔂 ESX 3.0.0 (0)	Previously created custom fixlets				
ESX 3.0.1 (0)	ID Fixlet	Source	Bundle Creat	ion Date	Number of Ap
O All Content					
BigFix Management					
Mobile Device Managem					
📩 Patch Management					
»					
0 items in list, 0 selected.					1.

In the Take Action dialog, click in the Actions box to deploy the action.

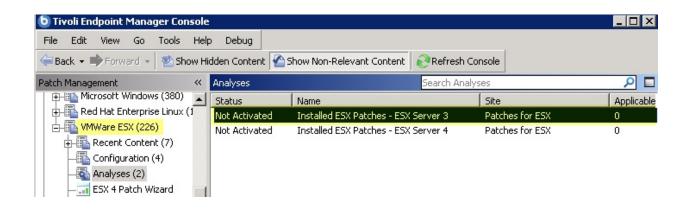
## Gather ESX patch information

Perform an inventory of ESX patches that are currently installed on ESX servers to ensure that the ESX Patch content accurately identifies the target systems.

You can generate this inventory from the **Gather ESX Patching Information** task, which can be accessed from the **Configuration** node in the navigation tree. This task is also updated at the end of each successful patch action.

b Tivoli Endpoint Manager Console	2		
File Edit View Go Tools Hel			
🖉 Back 👻 🗭 Forward 👻 🖄 Show H	idden Content   🏠 Show Non-Relevant Content	Refresh Console	
Patch Management 🛛 🛠	Configuration	Search Configuration	۵ م
H H H H H H H H H H H H H H H H H H H	Name	Source Sev 🔻 Site	Applica
E-E Canonical (684)	Gather ESX Patch Information - ESX Server 3	<unspecified> Patch</unspecified>	nes for ESX 0/0
🕀 🔂 CentOS (2,313)	Not Reporting Patch Information - ESX Server 3	<unspecified> Patch</unspecified>	nes for ESX 0/0
🗄 🗄 IBM AIX (1,122)	Gather ESX Patch Information - ESX Server 4	<unspecified> Patch</unspecified>	nes for ESX 0/0
🕀 🌆 Microsoft Windows (380)	Not Reporting Patch Information - ESX Server 4	<unspecified> Patch</unspecified>	nes for ESX 0/0
🕂 🔂 Red Hat Enterprise Linux (1			
E- K VMWare ESX (226)			
Recent Content (7)			
	•		►
	Task: Gather ESX Patch Information - ESX Server	4	d D

You can view the current list of installed ESX patches for any ESX system by activating the **Installed ESX Patches** analysis. Select **Analyses** from the navigation tree, locate the correct analysis, and select **Activate** from the right-click menu to activate it.



## Supersedence

Please refer to Supersedence in Non-Windows to know more about the supersedence.

# Appendix A. Support

For more information about this product, see the following resources:

- Knowledge Center
- BigFix Support Center
- BigFix Support Portal
- BigFix Developer
- BigFix Wiki
- HCL BigFix Forum

# Appendix B. Frequently asked questions

To better understand Patch Management for ESX, read the following questions and answers.

#### What are superseded patches?

Superseded patches are Fixlets that contain outdated packages. If a Fixlet is superseded, then a newer Fixlet exists with newer versions of the packages. The newer Fixlet ID can be found in the description of the superseded Fixlet.

#### Where are the deployment logs located on endpoints?

The log is located at /var/log/vmware/esxupdate.log.

#### Why is my action reporting back as a failed download?

As some patches can be large, make sure you have adequate disk space in the default BES data folder to run them.

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