IBM Endpoint Manager Version 9.1

Patch Management for Mac OS X User's Guide



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Note

Before using this information and the product it supports, read the information in "Notices" on page 19.

This edition applies to version 9, release 1, modification level 0 of IBM Endpoint Manager and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Overview

IBM[®] Endpoint Manager for Patch Management for Mac provides unified, real-time visibility and enforcement to deploy and manage patches to all Mac endpoints from a single console. It keeps your Mac clients current with the latest Apple security updates and service packs for your OS X and applications.

Use Fixlet[®] to manage large numbers of patches and updates. From the console, you can access the Fixlet through the available sites:

- Patches for Mac OS X
- Updates for Mac Applications

Note: Superseded Fixlet content are in the Patches for Mac OS X (Superseded) site. Contact your IBM Technical Sales Representative if you need access to the superseded content.

IBM Endpoint Manager clients identify when and if a patch is needed. For each new supported update that becomes available, IBM Endpoint Manager releases a Fixlet that identifies and updates all the computers in your enterprise that need it. For information on the supported updates, "Supported operating systems and applications" on page 2.

With a few keystrokes, the IBM Endpoint Manager Console operator can apply the patch to all the relevant computers and visualize its progress as it deploys throughout the network. The IBM Endpoint Manager client checks the operating system version, file versions, the language of the system, and other relevant factors to determine when and if a patch is necessary.

You can use Fixlets to manage large numbers of updates and patches with comparative ease, enabling automated, highly targeted deployment on any schedule that you want. Large downloads can be phased to optimize network bandwidth and the entire deployment process can be monitored, graphed, and recorded for inventory or audit control.

What is new in this release

IBM Endpoint Manager for Patch Management for Mac OS X releases a patching capability for deploying Fixlets through the Apple Software Update tool.

You can use Apple Software Update to deploy the following supported updates:

- Mac OS X security and non-security updates
- Apple iTunes updates
- Apple Safari updates
- Apple Java
- Apple QuickTime updates

Note: Apple QuickTime is built into OS X. Its updates normally come with an OS X or Safari update.

For more information about using this patching capability, see Chapter 2, "Patching using Fixlets," on page 7.

Supported operating systems and applications

The Patch Management for Mac supports updates on various Mac OS X platforms, Mac applications, and third-party applications.

In alignment with Apple Security Updates, IBM Endpoint Manager provides various content for Apple security and software updates for Mac OS and various Apple and third-party applications.

The Patches for Mac OS X site to obtain the latest patches for the following Mac operating system and applications.

Fixlet Site Name	Supported Operating System or Application	Version	Type of Update
Patches for Mac OS X	Mac OS X	10.6 (Snow Leopard)	Security and non-security updates
		10.7 (Lion)	
		10.8 (Mountain Lion)	
		10.9 (Mavericks)	
	Apple iTunes	10.x	Application updates
		11.x	Note: Apple QuickTime is built into OS X. Its updates normally
	Apple Java [™]	10.6 (Snow Leopard)	come with an OS X or Safari update.
		10.7 (Lion)	
		10.8 (Mountain Lion)	
		10.9 (Mavericks)	
	Apple QuickTime	6.x	
		7.x	
	Apple Safari	5	
		6.x	Audit Fixlets
		7.x	
	Oracle Java Runtime	7.x	Application updates
	Environment (JRE)	8.x	

Table 1. Supported operating systems and applications for the Patches for Mac OS X site

Notes:

- Superseded Fixlet content are in the Patches for Mac OS X (Superseded) site. Contact your IBM Technical Sales Representative if you need access to the superseded content.
- To view a detailed list of supported Java versions that are released by Apple, check the Apples security bulletin page at http://support.apple.com/kb/ht1222.

Third-party applications are found in the Updates for Mac Applications site.

Use the Fixlet Maker dashboard to create the necessary Fixlets to patch the applications. For more information, see the following topics:

- "Fixlet Maker dashboard overview" on page 12
- "Creating custom Fixlets from templates" on page 13

Fixlet Site Name	Supported Operating System or Application	Version	Type of Update
Updates for	Adobe Acrobat	10.x	Application updates
Mac Applications		11.x	
	Adobe Acrobat X	10.x	
		11.x	
	Adobe AIR	14.x	
	Adobe Flash Player	11.x	
		14.x	
	Adobe Reader	10.x	
		11.x	
	Adobe Reader X	10.x	
		11.x	
	Adobe Shockwave	11.x	
	Player	12.x	
	Microsoft Office for Mac 2011	14.1 and later	

Table 2. Supported applications for the Updates for Mac Applications site

Note: For Adobe Reader and Adobe Reader X versions earlier than 10.1, they are first upgraded to 10.1, then upgraded to the latest version.

For information about how to subscribe to Fixlet sites, see Subscribing to Fixlet sites.

Supported languages

Patch Management for Mac is supported in multiple languages.

Mac OS X patches are not language-dependent. The patches in the Patches for Mac OS X site are relevant in all the supported languages that are listed in the following table. Patches for Mac applications, however, are not supported in all the listed languages.

Supported Languages	Patches for Mac OS X site	Updates for Mac Applications site
Brazilian Portuguese	*	*
Chinese (Simplified)	*	*
Chinese (Traditional)	*	*
Czech	*	*
Danish	*	
Dutch	*	
English	*	*

Table 3. Supported languages

Supported Languages	Patches for Mac OS X site	Updates for Mac Applications site
Finnish	*	
French	*	*
German	*	*
Greek	*	
Hebrew	*	
Hungarian	*	*
Italian	*	*
Japanese	*	*
Korean	*	*
Norwegian	*	
Polish	*	*
Russian	*	*
Spanish	*	*
Swedish	*	
Turkish	*	

Table 3. Supported languages (continued)

Site subscription

Sites are collections of Fixlet messages that are created internally by you, by IBM, 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 IBM or by using the Licensing Dashboard. For more information about subscribing to Fixlet sites, see the *IBM Endpoint Manager Installation Guide*.

For more information about sites, see the *IBM Endpoint Manager Console Operator's Guide*.

Patching methods

IBM Endpoint Manager for Patch Management for Mac offers more flexibility to the solution by providing several patching options that can cater to your needs.

Generally, Fixlets can be deployed through the IBM Endpoint Manager server that downloads and caches the update installer. The endpoints or relays then downloads it from the server and caches the file to the client folder. The next time other endpoints in the same deployment need to be patched, the update installer is downloaded from the server. This patching method offers greater stability and scalability.

In some cases, Fixlets can be deployed through the Apple Software Update tool. Apple Software Update downloads the files from the Apple server and stores them directly to the endpoint. It maintains a history of installed updates. You can configure an OS X Server as the caching server to host your own patches in your network and prevent your network from overloading. This patching method is best used for endpoints that are offsite and have internet connection.

Note: To successfully install patches and updates through the Apple Software Update tool, all endpoints must have continuous internet connection and can connect to the Apple server.

The Apple Software Update is supported in the following updates:

- Mac OS X security and non-security updates
- Apple iTunes updates
- Apple Safari updates
- Apple Java
- Apple QuickTime updates

Note: Apple QuickTime is built into OS X. Its updates normally come with an OS X or Safari update.

For more information about using this patching capability, see Chapter 2, "Patching using Fixlets," on page 7.

Chapter 2. Patching using Fixlets

You can select the action for the appropriate Fixlets that you want to deploy from the IBM Endpoint Manager console. Patches are applied based on the settings that you make in the Fixlet work area and the Take Action dialog.

- Ensure that you are subscribed to the following Fixlet sites:
 - Patches for Mac OS X
 - Updates for Mac Applications
 - Patching Support
- Familiarize yourself with the different patching methods available for Mac OS X. See "Patching methods" on page 4.
- 1. From the Patch Management domain, click **OS Vendors** > **Apple Mac OS X**.
- **2.** In the content that is displayed in the list panel, click the Fixlet that you want to deploy. The Fixlet opens in the work area.

ch Management 🛛 🛛 🛠	Apple Mac OS X			Sear	ат мрріе	e Mac OS X	2
📊 Patch Management Domain	Name	Sou A	Site	Appli	0	Category	Download Size
Application Vendors	UPDATE: Mac OS X 10.4.10 Combo Update v1.1 (Intel)	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>297 MB</td></unspe<>	Patches for	0/4	0	Security Update	297 MB
OS Vendors	UPDATE: Audio Update 2007-001 (10.4.10 Client) - Intel	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Update</td><td>656 KB</td></unspe<>	Patches for	0/4	0	Update	656 KB
Apple Mac OS X (429)	UPDATE: Xcode Tool 2.3	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Update</td><td><no download=""></no></td></unspe<>	Patches for	0/4	0	Update	<no download=""></no>
Recent Content (5)	UPDATE: Security Update 2010-004 (10.5.8 Client)	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>221 MB</td></unspe<>	Patches for	0/4	0	Security Update	221 MB
- Configuration (6)	UPDATE: Security Update 2010-003 (10.5.8 Client)	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>208 MB</td></unspe<>	Patches for	0/4	0	Security Update	208 MB
+ 🔂 Apple Mac OS and Appli	UPDATE: Security Update 2010-002 (10.5.8 Client)	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>207 MB</td></unspe<>	Patches for	0/4	0	Security Update	207 MB
- 3rd Party Application Pa		<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>21.90 MB</td></unspe<>	Patches for	0/4	0	Security Update	21.90 MB
Canonical (0)	UPDATE: Security Update 2010-001 (10.5.8 Client)	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>159 MB</td></unspe<>	Patches for	0/4	0	Security Update	159 MB
All Patch Management	UPDATE: Security Update 2009-006 (10.5.8 Client)	<unspe< td=""><td>Patches for</td><td>0/4</td><td>0</td><td>Security Update</td><td>143 MB</td></unspe<>	Patches for	0/4	0	Security Update	143 MB

Figure 1. Fixlet and Tasks List panel for the Patches for Mac OS X site

- 3. Click the tabs at the top of the window to review details about the Fixlet.
- 4. Click **Take Action** to deploy the Fixlet. You can also click the appropriate link in the Actions box.

Important: If you choose to deploy the patches through Apple Software Update, ensure that the endpoints have continuous internet connection to successfully install the updates.

5. Optional: You can set more parameters in the Take Action dialog.

For detailed information about setting parameters with the Take Action dialog, see the *IBM Endpoint Manager Console Operator's Guide*.

- 6. Click OK.
- 7. Enter your Private Key Password when necessary.

The action propagates across your network, installing the designated patch on the computers that you specified and according to the schedule that you selected. You can monitor and graph the results of this action to see exactly which computers were remediated to ensure compliance.

Viewing patch information with the Patches for Mac Overview dashboard

View the breakdown of security and non-security Mac patches that are needed in your deployment. The Patches for Mac Overview dashboard displays a summary of patch information for Mac computers in your deployment using tables, graphs, and pie charts.

To access the dashboard, you must subscribe to the Patching Support site. You must subscribe to any of the following sites, which is where the dashboard gathers data:

- Patches for Mac OS X site
- Updates for Mac Applications site

From the Patch Management domain, click **All Patch Management** > **Dashboards** > **Patches for Mac Overview**.

The dashboard has the following tabs:

- Patches for Mac Overview
- Security Patches Overview
- · Non-Security Patches Overview

Note: In IBM Endpoint Manager versions 9.0 and 9.1, the value for the Latest Patches for Mac in the **Patches for Mac Overview** tab gathers the date from the Updates for Mac Applications site only. It does not include the latest date from the Patches for Mac OS X site.

Patches for Mac Overview tab

The Patches for Mac Overview tab provides a quick summary of your Mac remediation and is divided into the sections that are listed in the following table.

Section	Description
Mac Patches Information	Identifies the breakdown of security and non-security patches, and the total number that is needed in the deployment.
Deployment Information	Identifies the date of the latest patches for Mac and a breakdown of the number of BigFix and Mac agents that are deployed.
Top Ten Computers with the Highest Number of Applicable Patches	Lists the 10 computers with the most number of applicable patches. Clicking the computer ID redirects you to the details of the selected computer.
Applicable Fixlets by Category	Shows the percentage of updates by the following categories: Update and Security.
Applicable Fixlets by OS	Shows the percentage of updates by version of the operating system.

Table 4. Patches for Mac Overview tab

Note: Hovering the mouse over the pie charts displays the computer count.

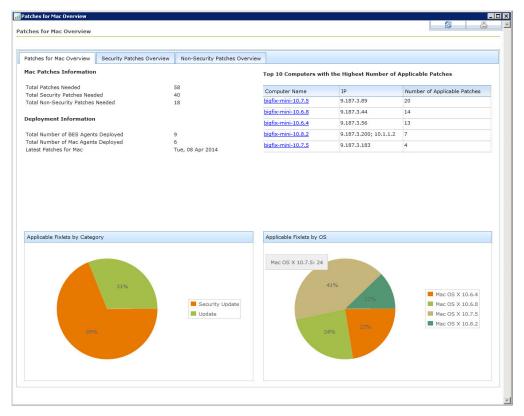


Figure 2. Patches for Mac Overview tab

Security Patches Overview tab

The Security Patches Overview tab provides a quick summary of your security patches. The tab is divided into the sections that are listed in the following table.

Table 5.	Security	Patches	Overview	tab
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Section	Description
Security Patches Information	Identifies the breakdown of security patches for operating systems and applications, and the total number of security patches that are needed in the deployment.
Applicable Fixlets of Security Updates	Shows the number of applicable Fixlets of Security Updates, according to the operating system and application.
Applicable Fixlets of Security Update by OS	Shows the number of Applicable Fixlets by operating system.
Applicable Fixlets of Security Update by Vendor	Shows the number of Applicable Fixlets by Vendor for the operating system. Note: You must click the chart bars on the lower left to select the operating system.

Note: Hovering the mouse over the pie charts displays the computer count.

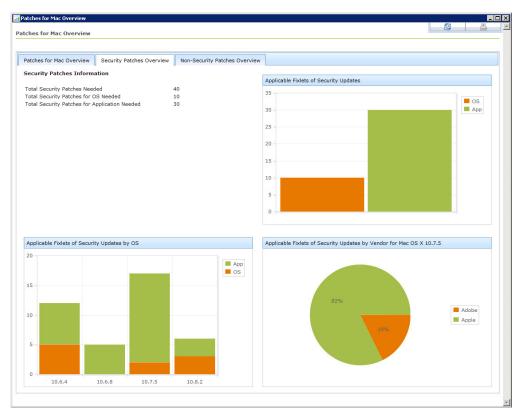


Figure 3. Security Patches Overview tab

Non-Security Patches Overview tab

The Patch for Non-Security tab provides a quick summary of your non-security patches. The tab is divided into the sections that are listed in the following table.

Table 6. Patches for Non-Security Patches Overview tab

Section	Description
Non-Security Patches Information	Identifies the breakdown of non-security patches for operating systems and applications, and the total number of security patches that are needed in the deployment.
Applicable Fixlets of Non-Security Updates	Shows the number of applicable Fixlets of Non-Security Updates, according to the operating system and application.
Applicable Fixlets of Non-Security Update by OS	Shows the number of Applicable Fixlets by operating system.
Applicable Fixlets of Non-Security Update by Vendor	Shows the number of Applicable Fixlets by Vendor for the operating system. Note: You must click the chart bars on the lower left to select the operating system.

Note: Hovering the mouse over the pie charts displays the computer count.

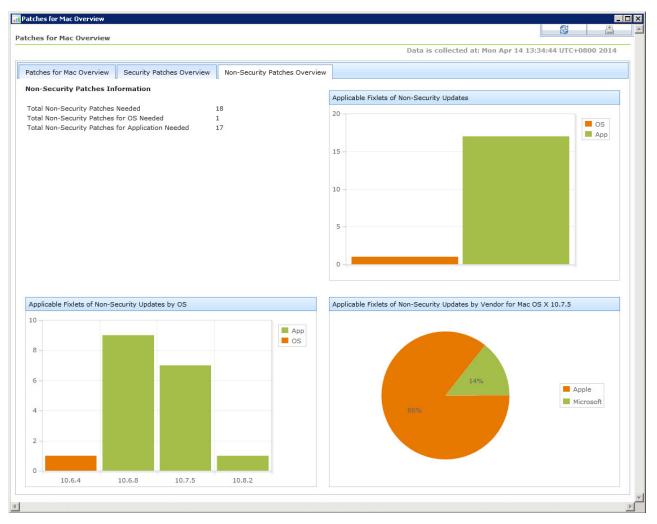


Figure 4. Non-Security Patches Overview tab

Deploying software applications

IBM Endpoint Manager for Patch Management provides the Mac Software Deployment Wizard to assist you in deploying software applications to Mac OS X computers.

Ensure that you are subscribed to the Patches for Mac OS Fixlet site.

The Mac Software Deployment Wizard creates a task that helps you to deploy your application to Endpoint Manager clients using the standard Take Action dialog. This wizard only provides deployment and very basic packaging of software. It is assumed that the application you deploy has an installer that can be run silently, if applicable, on local client computers.

 From the Patch Management domain, click All Patch Management > Wizards > Mac Software Deployment Wizard.

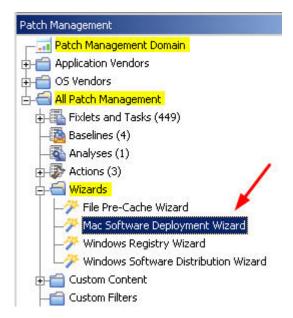


Figure 5. Mac Software Deployment Wizard from the navigation tree

- 2. Enter the name of the application that you want to deploy and click Next.
- **3.** Specify the software source file. You can specify the download URL, package file, or the folder.

Note: If you want to change the file at a later time, you must run this wizard again.

- 4. Select the Mac operating system versions where you want to install the software.
- 5. Follow the remaining instructions in the wizard until you reach the summary page, then click **Create**. The source file is immediately downloaded from the location you specified.
- 6. Enter the file destination and click **OK**. The Create Task dialog opens. You can further customize the Actions and Relevance tabs.
- 7. Click **OK** to create the task.

You can now easily deploy the software by taking an action on the task.

Fixlet Maker dashboard overview

The Fixlet Maker dashboard provides an interface where you can create application update Fixlets by using templates.

The dashboard currently supports templates for the following applications in Mac OS X computers:

- Google Chrome (Enterprise Edition)
- Mozilla Firefox
- Skype

You must subscribe to the Patching Support site to gain access to the Fixlet Maker dashboard. To access the dashboard from the Patch Management domain, click **All Patch Management > Dashboards > Fixlet Maker**.

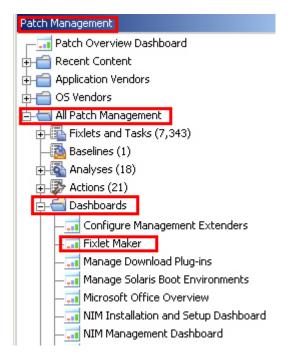


Figure 6. Fixlet Maker dashboard from the navigation tree

The dashboard displays all the previously created Fixlets for each template.

he Fixlet Maker wizard p elect a template from the		ere you can create applicati • Fixlet.	on upd		: Tue, 10 Dec 2013 15:21:46 se of templates. To create a	
Fixlet Templates						
💠 Create Fixlet					P Search	
Application	Vendor	Operating System	1 🔺	Additional Details		
Skype	Microsoft	Mac		Only supports the Skype ".dmg" installer.		-
Mozilla Firefox	Mozilla	Mac		Only supports the Firefox ".drng" installer.		
Chrome	Google	Mac		Only supports the Chrome ".dmg" installer.		
Chrome (Enterprise Edition)	Google	Windows		Only supports the Chrome Enterprise Edition ".msi" stand-a installer.		
RealPlayer	Real Networks	Windows			ayer ".exe" installer. The generate yer without setting the configurati	
WinZip	WinZip	Windows		Only supports the Winzip ".msi" installer.		
Finlata						
Fixlets						
Telete (0)					P Search	
Fixlet Title		Site Name		Sour	rce Release Date	

Figure 7. Fixlet Maker dashboard

Creating custom Fixlets from templates

You can use the Fixlet Maker dashboard to create your own Fixlets for Mac OS applications that are not supported by the Patch Management for Mac and Patching Support sites.

You can either create a dedicated custom site or use the Master Action site to store and manage the created Fixlets.

Use the templates from the Fixlet Maker dashboard to create Fixlets for the following applications:

- Google Chrome (Enterprise Edition)
- Mozilla Firefox
- Skype
- 1. Click Patch Management > All Patch Management > Dashboards > Fixlet Maker.
- 2. Select a template from the list of available templates.
- 3. Click Create Fixlet.
- 4. Specify the installation file of the application.

Note: The installation files must be downloaded from official vendor sites.

For this release, you can either select the installation file from your local drive or download the file from the internet. An example of the URL download link is http://download.nullsoft.com/winamp/client/winamp563_lite_en-us.exe.

The installation file is uploaded in the BESRootServerDir/Uploads directory of the Endpoint Manager server. For example:

On a 32-bit operating system

C:\Program Files\BigFix Enterprise\BES Server\wwwrootbes\Uploads

On a 64-bit operating system

C:\Program Files (x86)\BigFix Enterprise\BES Server\wwwrootbes\ Uploads

- 5. Enter the software version. Ensure that you specify the software version of the installation file.
- 6. Enter the source release date of the updates.
- 7. Optional: Enter the Common Vulnerabilities and Exposures (CVE) ID number. For example, cve-1234567.
- **8**. Optional: Enter the Source ID. This ID is associated with the source of the update. For example, Microsoft uses MS11-02 and Adobe uses APSB-12.
- **9**. Optional: Enter the severity of the Fixlet. For example, Low, Moderate, Important, and Critical.
- **10.** Optional: Select the operating system architecture that you want the updates to be relevant for. You can select either 32-bit or 64-bit.
- 11. Click **Create Fixlet**. A creation dialog opens with blank fields that you can complete.
- 12. Enter a user-readable title as the name of the Fixlet.
- 13. Select the site and domain to host it from.
- 14. From the **Description** tab, create a description for the Fixlet that you want to deploy.

Note: The **Actions**, **Relevance**, and **Properties** tabs are automatically populated with the information that you entered in the Fixlet template.

15. Click OK. The created Fixlet displays in the second table of the dashboard.

Appendix A. Support

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

- http://pic.dhe.ibm.com/infocenter/tivihelp/v26r1/topic/com.ibm.tem.doc_9.1/ welcome/welcome.html
- IBM Endpoint Manager Support site
- IBM Endpoint Manager wiki
- Knowledge Base
- Forums and Communities

Appendix B. Frequently asked questions

The questions and answers in this section can help you to better understand Patch Management for Mac OS X and Mac applications.

Why does a patch fail, but complete successfully?

Sometimes under specific circumstances, a patch is successfully applied but the relevance conditions indicate that it is still needed. Check to see whether there are any special circumstances that are associated with the patch, or contact IBM Software Support.

What do I do if a patch fails to install?

If a patch fails to install, there are several things that you can try:

- Determine whether you applied the patch to the correct computers.
- Try running the patch manually by downloading it from the Apple website.
- Review Mac updates.

If the patch still fails to install, contact IBM Software Support.

Why are the Mac OS X patch updates not rated with a source severity similar to the Windows patches?

Mac OS X patches are not rated with a source severity because Apple does not provide a comparable ranking as Microsoft does.

What is the best way to distinguish updates between security-related and non-security related ones?

Use the **Category** field to narrow down important patches to those that are in the "Security Update" category.

Why can I not make some Adobe Reader-related Fixlets relevant to computers that have Adobe Reader?

Some of the Adobe Reader updates require specific versions installed to make the Fixlets relevant. For example, in a Fixlet with the title *Adobe Reader X (10.1.1) Available - Adobe Reader X (10.1.0)*, you must have Adobe Reader 10.1.0 installed to make the Fixlet relevant.

What happens if the endpoint is restarted during the installation of a new

patch? The installation fails if the system is restarted during the patch installation process.

Will administrator credentials be necessary to install updates through Apple Software Update from IBM Endpoint Manager?

No, an administrator user name and password are not needed because the IBM Endpoint Manager Agent runs as root.

The Fixlets that were deployed through Apple Software Update failed. What would be the possible causes?

Some possible causes of failure are as follows:

- The endpoints might not have internet connection.
- The endpoints cannot connect to the Apple server due to firewall or network security issues.

Is it still possible to deploy patches via Apple Software Update even without an OS X Server?

Yes, it is possible. However, your network might get overloaded if you do

not have a caching server configured. Setting an OS X Server as the caching server can prevent this from happening.

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