BigFix Patch
Patch for Mac OS X - User's Guide

Special notice

Before using this information and the product it supports, read the information in Notices.

Edition notice

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

Contents

Chapter 1. Overview

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 **Note:** Superseded Fixlet® content are in the Patches for Mac OS X (Superseded) site. Contact your Technical Sales Representative if you need access to the superseded content.

BigFix® clients identify when and if a patch is needed. For each new supported update that becomes available, BigFix 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.

With a few keystrokes, the BigFix® Console operator can apply the patch to all the relevant computers and visualize its progress as it deploys throughout the network. The BigFix 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's new in this update release

BigFix Patch for Mac OS X released a new set of Fixlet® content for Mac OS X, Mac applications, and third-party applications.

The Patches for Mac OS X now contains content for OS X 10.15.

The Updates for Mac Applications site now contains content for AdobeAcrobat 2020 and Adobe Acrobat Reader 2020 classic track, GoToMeeting, Webex Meetings, Zoom, Google Chrome, Mozilla Firefox and Microsoft Skype.

Previous updates

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:

- OS X security and non-security updates
- Apple Safari updates
- 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 Patching using Fixlets.

Supported operating systems and applications

The BigFix® Patch for Mac supports updates on various Mac OS X operating systems, Mac applications, and third-party applications.

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

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

Fixlet Site Name	Supported Operating System or Application	Version	Type of Update
Patches for Mac OS X	Mac OS X	10.15 (Catalina)	Security and non-security updates
		11.x (BigSur)	Security and non-security updates
	Apple Safari	15.x	Application Updates
	Oracle Java™ Runtime Environment (JRE)	8	Application Updates

Notes:

- Superseded Fixlet® content are in the Patches for Mac OS X (Superseded) site. Contact your 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
- Creating custom Fixlets from templates

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

Fixlet® Site Name	Supported Operating System or Application	Version	Type of Update
Updates for Mac Applications	Adobe™ Acrobat and Adobe™ Adobe Reader	17.x, 19.x and 20.x	Application updates
	GoToMeeting	10.10.1.17956 and later	
	Microsoft™ Office for Mac 2019	16.0 and later	
	Microsoft™ Skype	8.58.0.93 or later	
	Mozilla Firefox	75.0 or later	
	Google Chrome	83.0.4103.61 or later	
	Zoom Meetings	5.1.27838.0614 or later	
	Webex Meetings	40.8.4.7 and later	

Table 3. Out of Support MacOS Flavours and applications

Fixlet® Site Name	Supported Operating System or Application	Version	Out of Support by Vendor
Updates for Mac Applications	Adobe™ Acrobat (2015) and Adobe™ Acrobat Reader (2015)	15.x	July 7, 2020
	Microsoft™ Office for Mac 2016	15.x	October 13, 2020

Table 3. Out of Support MacOS Flavours and applications (continued)

Fixlet® Site Name	Supported Operating System or Application	Version	Out of Support by Vendor
	Adobe Flash Player	32.x	December 31, 2020
Patches for Mac OS X	Mac OS X	10.12 (Sierra)	November 30, 2019
	Mac OS X	10.13 (High Sierra)	January 31, 2021
	Mac OS X	10.14 (Mojave)	October 25, 2021
	Apple Safari	14.x	September 13, 2021

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

Table 4. Supported languages

Supported Languages	Patches for Mac OS X site	Updates for Mac Applications site
Brazilian Portuguese	*	*
Chinese (Simplified)	*	*

Table 4. Supported languages (continued)

Supported Languages	Patches for Mac OS X site	Updates for Mac Applications site
Chinese (Traditional)	*	*
Czech	*	*
Danish	*	
Dutch	*	
English	*	*
Finnish	*	
French	*	*
German	*	*
Greek	*	
Hebrew	*	
Hungarian	*	*
Italian	*	*
Japanese	*	*
Korean	*	*
Norwegian	*	
Polish	*	*
Russian	*	*
Spanish	*	*
Swedish	*	
Turkish	*	

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*.

Patching methods

BigFix® 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 BigFix 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. You can configure an OS X Server as the caching server and host your own patches in your network. This type of architecture prevents your network from overloading. This alternative 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 Safari updates
- 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 Patching using Fixlets.
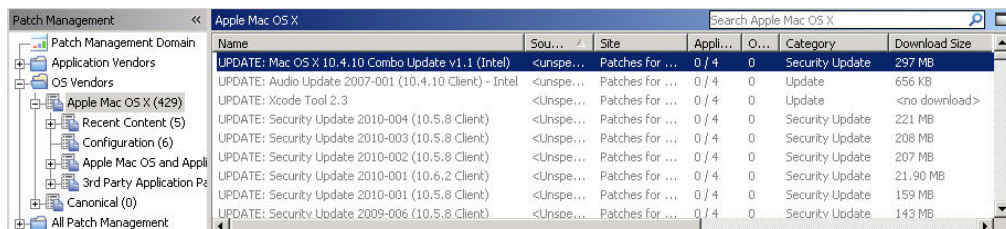
Chapter 2. Patching using Fixlets

You can select the action for the appropriate Fixlets that you want to deploy from the BigFix 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.

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.

    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. You can set more parameters in the Take Action dialog.

For detailed information about setting parameters with the Take Action dialog, see the
BigFix Console Operator's Guide.

6. Click **OK**.

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, subscribe to the Patching Support site then go to the Patch
Management domain and click **> OS Vendors > Reports > Patches for Mac Overview**.

You must also 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

The dashboard has the following tabs:

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

Note: In 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 different sections.

**Table 5. Patches for Mac Overview tab**

The following table lists the sections available in the Patches for Mac Overview tab.

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.

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

Figure 2. Patches for Mac Overview tab
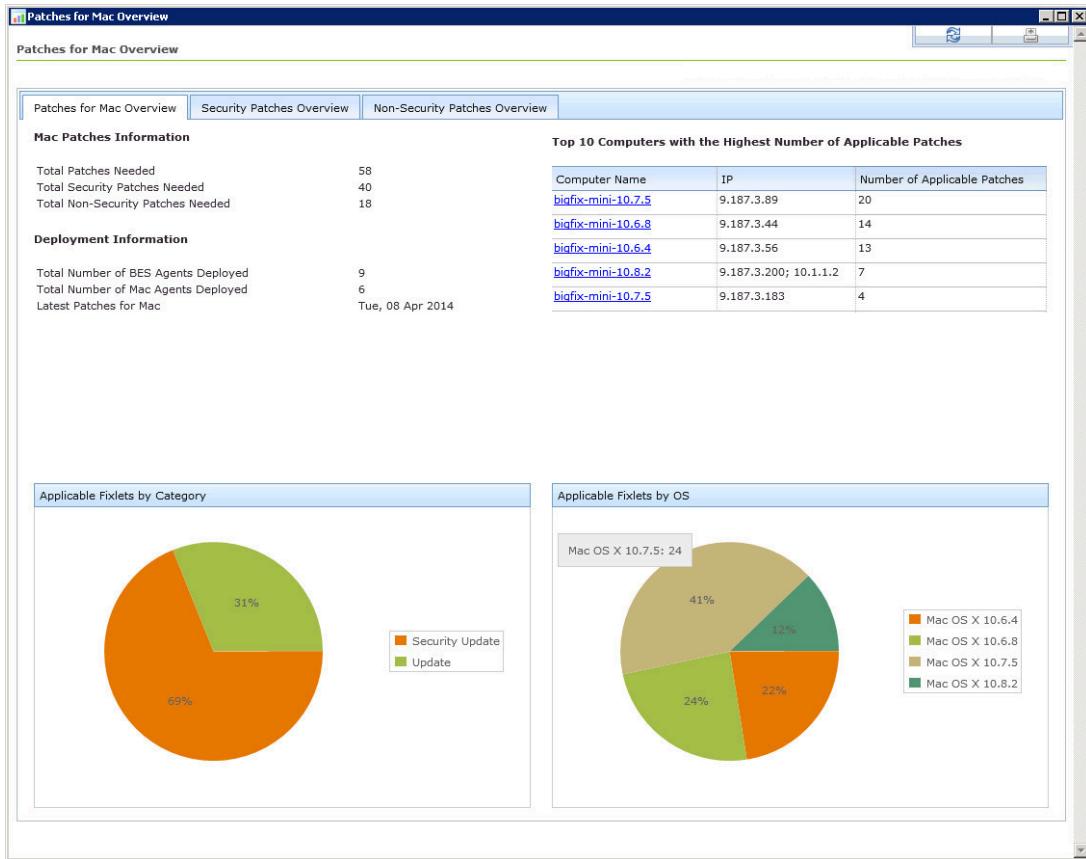
Security Patches Overview tab

The Security Patches Overview tab provides a quick summary of your security patches and is divided into different sections.

Table 6. Security Patches Overview tab

The following table lists the sections available in the Security Patches Overview tab.

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.

Table 6. Security Patches Overview tab

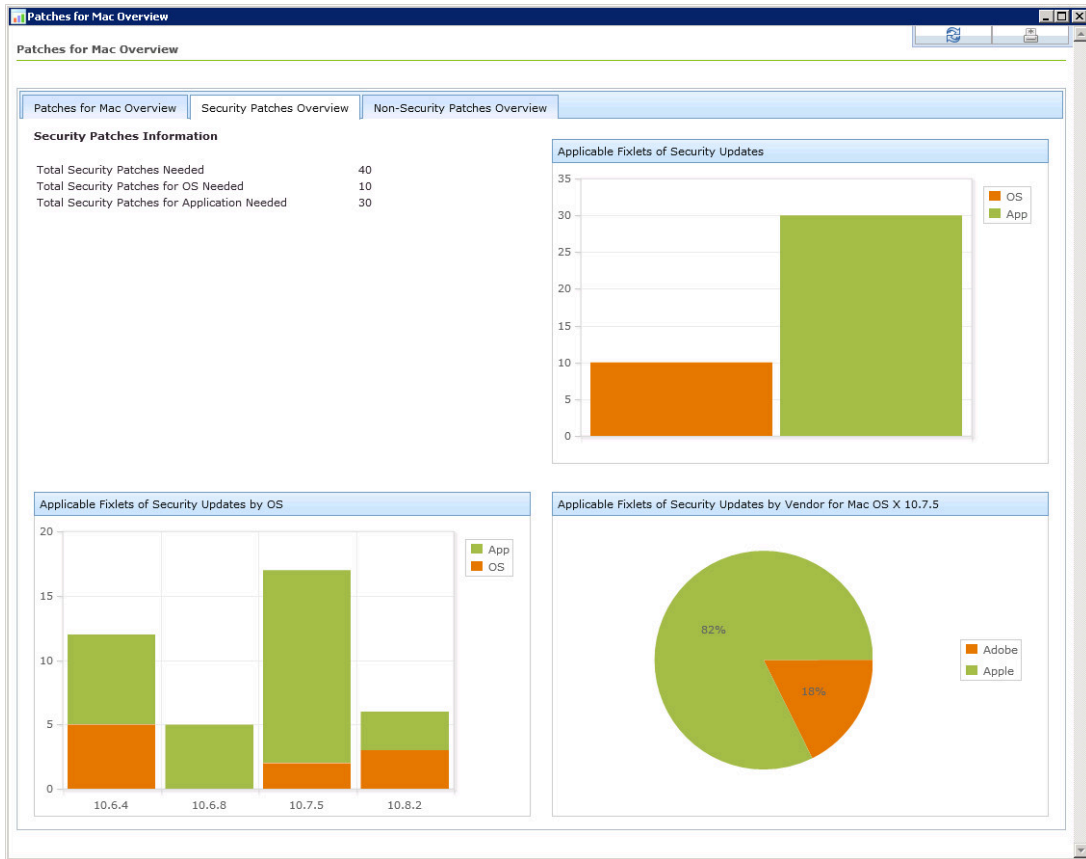*The following table lists the sections available in the Security Patches Overview tab.*

(continued)

Section	Description
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 corner 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 and is divided into different sections.

Table 7. Patches for Non-Security Patches Overview tab

The following table lists the sections available in the Patch for Non-Security 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.

Table 7. Patches for Non-Security Patches Overview tab

*The following table lists the sections available in the Patch for Non-Security tab.*

(continued)

Section	Description
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 corner to select the operating system.

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

Figure 4. Non-Security Patches Overview tab
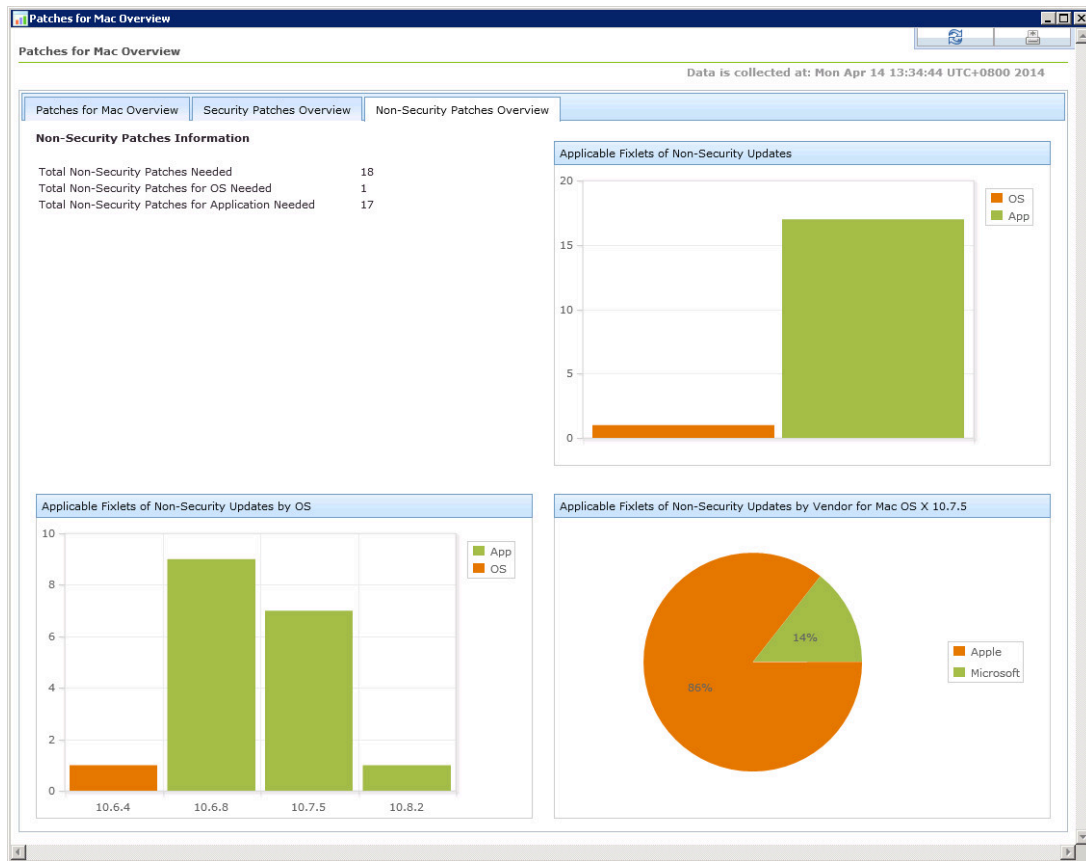
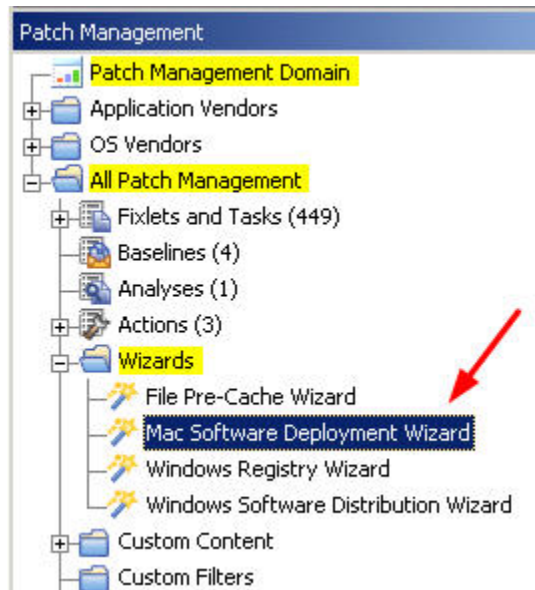# Deploying software applications

BigFix® 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.

1. 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.
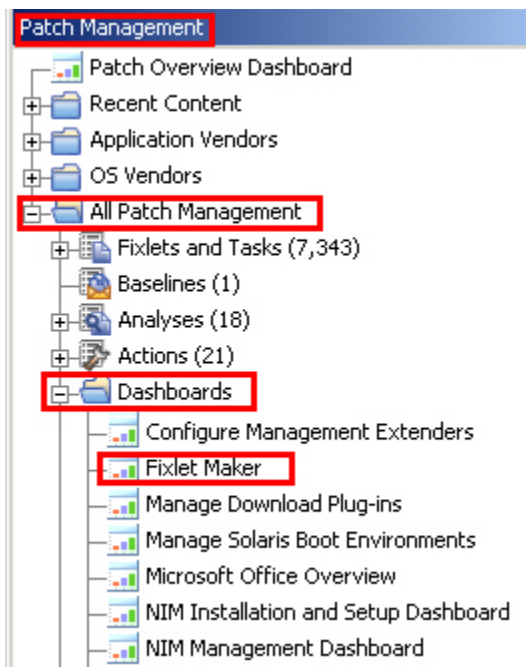
Fixlet Maker dashboard overview

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.

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 BigFix 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.

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

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

The Manage Download Plug-ins dashboard is not reflecting any data. What do I do?

Here are some steps you can do to troubleshoot the issue:

- Gather the latest **Patching Support** site.
- Activate the **Download Plug-in Versions** analysis, available from the **Patching Support** site.
- Clear the BigFix console cache.

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 HCL 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 HCL 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.

What are the supported Mac OS X updates?

BigFix provides Mac OS X operating system specific updates, as well as Mac application and third-party application updates. For more information, see Supported operating systems and applications.

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 BigFix?

No, an administrator user name and password are not needed because the BigFix client 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.

Fixlets for updating Java Runtime Environments do not seem to be working. I received the *"Unexpected HTTP response: 404 Not Found"* **error. What do I do?**

For Java Runtime Environment updates, you must manually cache the installer before deploy the patches. To manually cache a file on the server, see the knowledge article - How do I manually cache a file on the BigFix Server.

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