# Patch Management for AIX

Supported Versions

The Patches for AIX Fixlet site provides Fixlet messages for the latest Maintenance Level packages for AIX 5.1, 5.2 and 5.3. It also includes inventory-only Fixlet messages for AIX Security Advisories, Critical Fixes, High Impact/Highly Pervasive Fixes and PTFs in Error released since the last Maintenance Level Package update.

In addition, the Patches for AIX Fixlet site contains Task messages you can use to compare the patch level of a machine with the most currently available fixes from IBM. You can view your results in the BigFix Console once the appropriate Analysis has been activated.

Applying AIX Patches

BigFix provides three different methods of deploying AIX patches. The one to use depends on the type of patch you need to update.
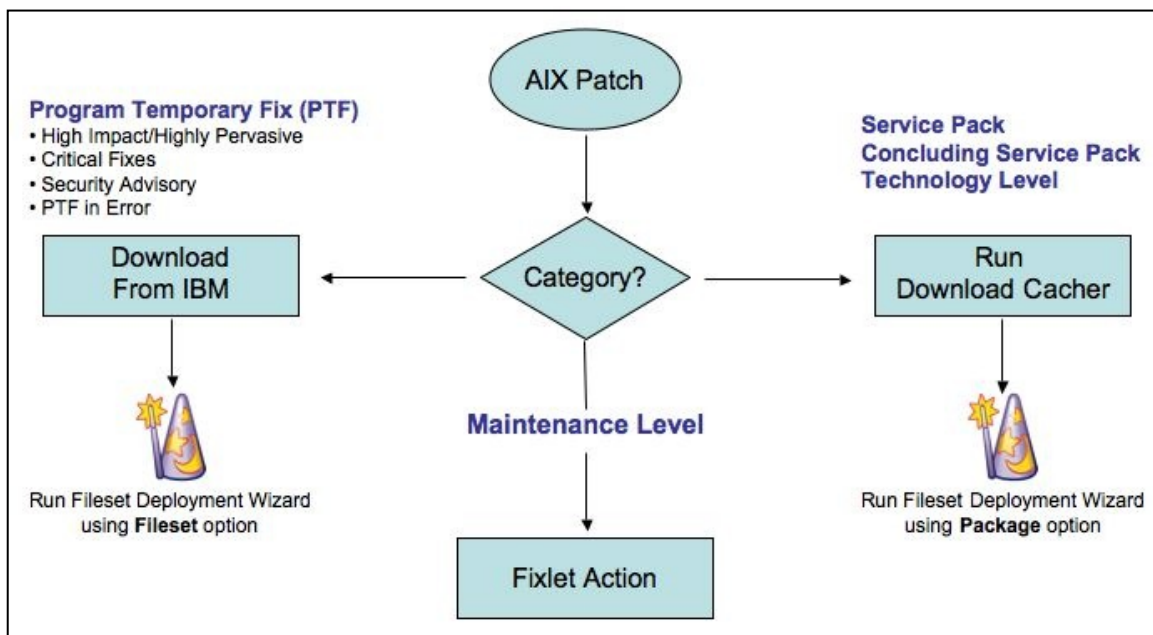
To install a Program Temporary Fix (PTF), click the IBM link on the Fixlet message's description page, and then download the fix. To reduce the size of your download, know the technology level for which you are downloading the PTF. Before downloading, it is also helpful to run the lslpp command to upload a list of the previous packages you already have. After your download, import the file or files that you download into BigFix by using the **Fileset Deployment Wizard** and choosing the **Fileset** option. This option will upload the files to the BigFix server and create a Fixlet message you can use to deploy the patch.

For Service Packs, Concluding Service Packs, and Technology Levels, the process is the same, except that when you run the **Fileset Deployment Wizard**, choose the **Package** option.

The third process is the simplest. This is for Maintenance Level (ML) patches that IBM used in earlier releases of AIX. These Fixlet messages include the action script to download and deploy

the fix. Because you might have more than one Fixlet message for a particular ML (IBM supplies these patches as multiple volumes), you might have to run multiple Fixlet messages to finish any one particular ML update.

The final part of the process is to test your systems, and then commit the fixes if you like them or reject the fixes if you do not. After you apply a fix it will stay there—even after a reboot—but is not considered permanent. It is in a state called **Applied**, which can then be either **Committed** or **Rejected**. The **Commit Task** will commit all applied fixes and not just fixes that you specify. If you want to be more granular, you can write a custom `installp` command. The **Reject Task** will ask you for the APAR number of the fix you wish to rollback. You can get this APAR number from the original audit-only Fixlet message.

There are also some analyses that let you see the success or failure of your deployment. The most common errors are disk space, the oslevel Fixlet not running as a policy action, or downloading the wrong file or not enough files into the Fileset Deployment Wizard.

Deploying Maintenance Level Patches

To deploy patches from the BigFix Console:

1. On the **Fixlet messages** tab, sort by **Site**. Choose the Site **Patches for AIX**.

2. Double-click on the Fixlet message you want to deploy. (In this example, the Fixlet message is **AIX 5.3: Recommended Maintenance Level Package 5300-02**.)

    The **Fixlet** window opens.

    For more information about setting options using the tabs in the Fixlet window, consult the *Console Operators Guide*.

3. Select the appropriate Action link.

Individual AIX Fileset Updates

To deploy an AIX fileset update using the AIX Fileset Deployment Wizard, you must first obtain the desired filesets from the IBM website. AIX fixes are located here: http://www-912.ibm.com/eserver/support/fixes/fixcentral/main/pseries/aix.

Note: You can obtain detailed instructions on using IBM's website from the BigFix Knowledge Base: http://support.bigfix.com/cgi-bin/kbdirect.pl?id=453.

To create a custom Task or Fixlet message, after downloading all the filesets for your AIX update, run the AIX Fileset Deployment Wizard from the BigFix Console. The Wizard will prompt you for the location of the fileset you wish to deploy. Use the folder option to deploy multiple filesets or the download URL for a single Fileset. Select relevant OS platforms and customize text fields as necessary.

After completion, the generated one-time action or Fixlet message will appear in the BigFix Console and will allow you to deploy the AIX update to relevant computers.

To view detailed information regarding the results of deploying your AIX Fileset update, activate the Analysis "AIX Custom Fileset Deployment Results" (Analysis ID: 22).

AIX Package Updates

To deploy AIX Technology Levels, Service Packs, or Concluding Service Packs, you must first download the update using the AIX Download Cacher. To use the AIX Download Cacher, deploy the Task "Run Download Cacher Tool - AIX" (Task ID: 30).

After you have downloaded the update package, run the AIX Fileset Deployment Wizard 6.0 from the BigFix Console to create a one-time action or Fixlet message. After choosing the "Package" Option, the Wizard will prompt you for the location of the AIX package you wish to deploy.

After completion, the generated one-time Action or Fixlet message will appear in the BigFix Console and will allow you to deploy the AIX package to relevant computers.

To view detailed information regarding the results of deploying your AIX package update, activate the Analysis "AIX Package Deployment Results - TL/SP/CSP" (Analysis ID: 27).
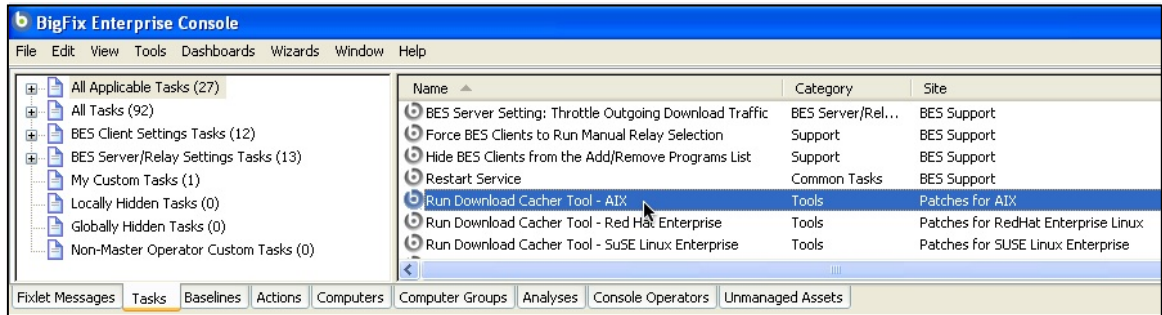
Using the Download Cacher

If you are going to deploy a service pack, concluding service pack, or a technology level, you will need to use the Download Cacher utility. The Download Cacher uses FTP to download specific fix packs. Ensure that your environment does not block FTP usage.
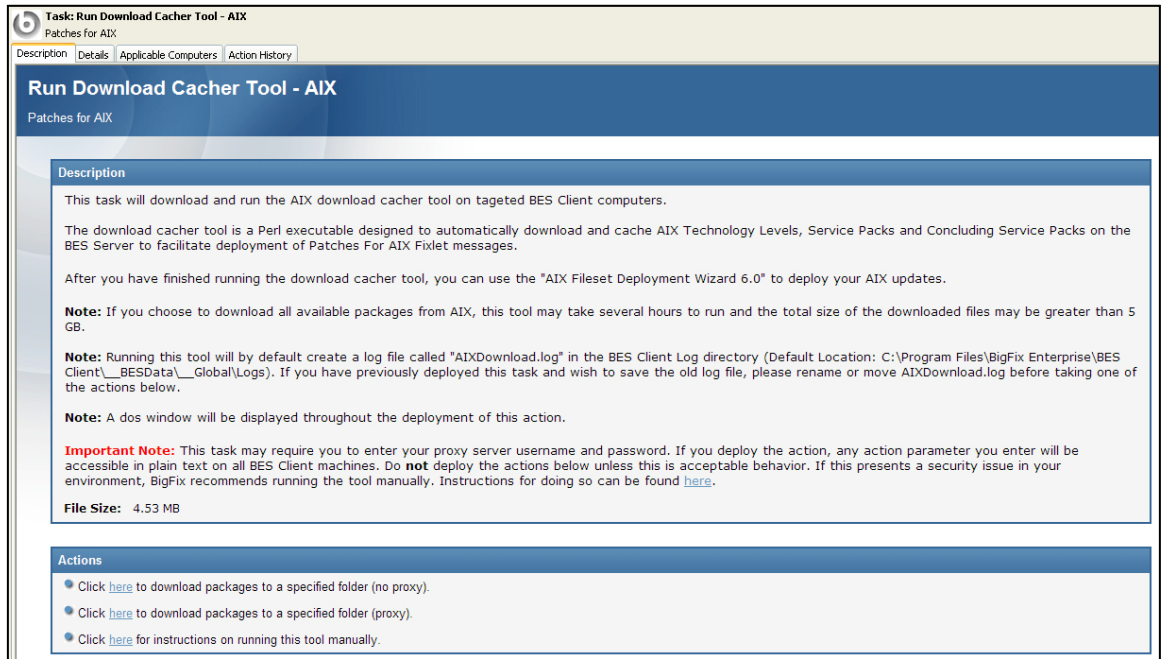
Running the Download Cacher Task

The Download Cacher tool for AIX is a Perl executable designed to automatically download and cache AIX Technology Levels, Service Packs or Concluding Service Packs to facilitate deployment of AIX Fixlet messages.

1. From the Tasks tab, choose Run Download Cacher Tool – AIX.

The **Task** window opens.

2.   Select the appropriate Action link.

Running the Download Cacher Manually

Instead of running the Download Cacher Task, you can run it manually. The Download Cacher uses FTP to download specific fix packs. Ensure that your environment does not block FTP usage.

The tool can be downloaded from the BigFix Support website:
http://support.bigfix.com/cgi-bin/kbdirect.pl?id=372.

You will also need the BigFix BFArchive tool in the same directory as the AIX Download Cacher and the BFAchive can be downloaded from:
http://support.bigfix.com/cgi-bin/kbdirect.pl?id=372.

To run this tool, you may wish to create a batch file with the following parameters.

Sample.bat

```
AIXDownloadCacher-x.x.exe C:\temp c:\logs 5300-05 5200-08-02 5300-004-CSP 5300-
07-01-0748 http://www.proxyserver.com:8080 proxy_user proxy_password
```

Usage

```
AIXDownloadCacher-x.x.exe DirectoryPath AIXPackageNames [PROXY - must use this
keyword if using a proxy server] [proxyaddress:port] [proxy domain username]
[proxy password]
```

Required Parameters

`DirectoryPath`

The full path to the folder in which you should save downloaded files. Please ensure the DirectoryPath exists before running the Download Cacher.

`AIXPackageNames`

Specify AIX package name(s). Separate each name with a space (i.e.: 5200-08-02 5300-04-CSP 5200-09 5300-07-00-0747 5200-10-02-0730). By default, fix pack for all service packs will not include the corresponding Technology Level. This tool will work for non-Maintenance Level Packs only. In addition, all specified package names must match the ones listed on IBM's AIX Fix Central website.

Optional Parameters

`[Logfile Directory]`

Full path to the folder where you would like to create the log file. By default, the logfile is placed in the BigFix Client Logs directory (ex: C:\Program Files\BigFix Enterprise\BES Client__BESData__Global\Logs).

`[PROXY] [Proxy URL] [Proxy Username] [Proxy Password]`

PROXY is a keyword used to indicate that downloads must go through a proxy server. If your network requires a proxy server for Internet access, you must specify this keyword and provide required parameters.

Proxy URL is the URL of your proxy server. This is usually the IP address or DNS name of your proxy server, and its port, separated by a colon (ex: http://192.168.100.10:8080).

If your proxy server requires authentication, you must specify your **Proxy Username** and **Proxy Password**. Your Proxy Username is usually in the form of domain\username.

Note: If you run the tool without specifying any parameters, you will be prompted to enter the parameters at the command line.

Using the Fileset Deployment Wizard

Before running the Wizard, download any necessary packages from IBM's website.
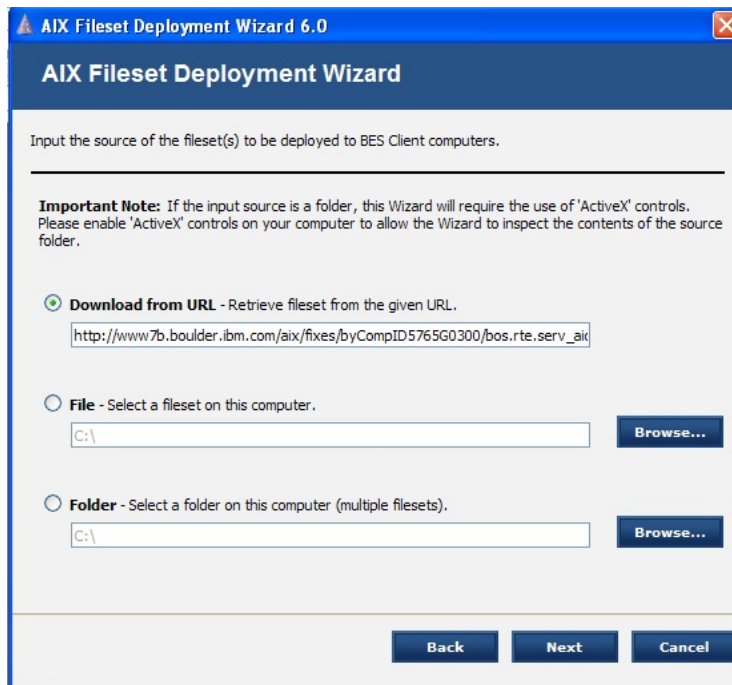
Individual AIX Fileset Updates

After you have obtained all of the filesets for your AIX update, run the **AIX Fileset Deployment Wizard** from the BigFix Console to create a custom Task or Fixlet:

1. From the BigFix Console, choose **Wizards > AIX Fileset Deployment Wizard**.
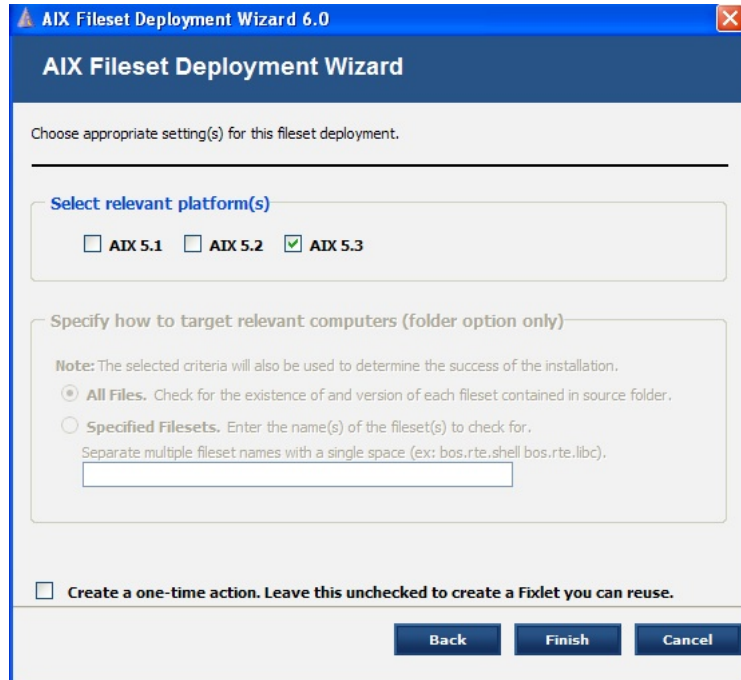
   The Wizard opens.
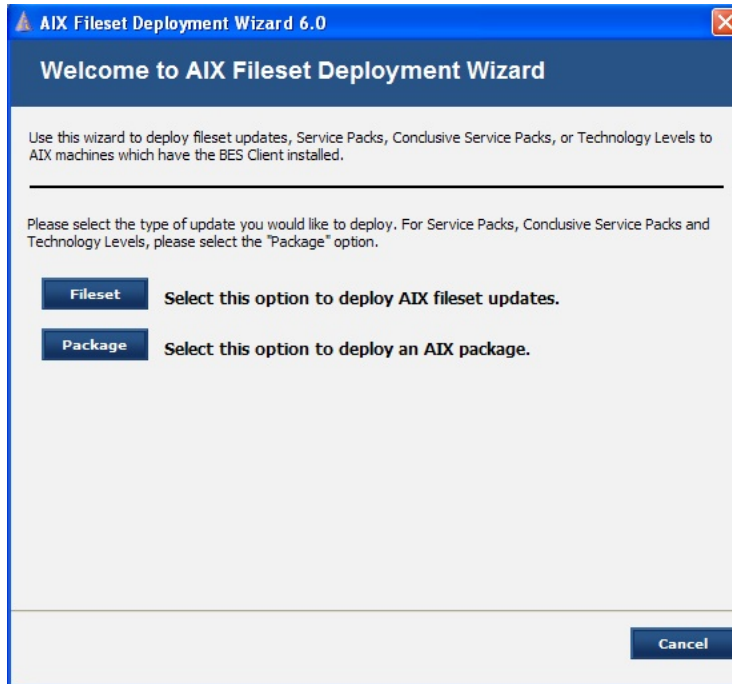
2. To deploy AIX **fileset** updates, click the **Fileset** button.

3. In this window, input the source of the fileset(s) you wish to deploy. You can input this information one of three ways:

    • Download from URL

    • File (for single filesets)

    • Folder (for multiple filesets)

    Click **Next**.

4.   In the final window:

   a.   Select the relevant platform or platforms.

   b.   If you are using the folder option, specify how to target relevant computers.

   c.   Check the box if you want to create a one-time action rather than a reusable Fixlet.
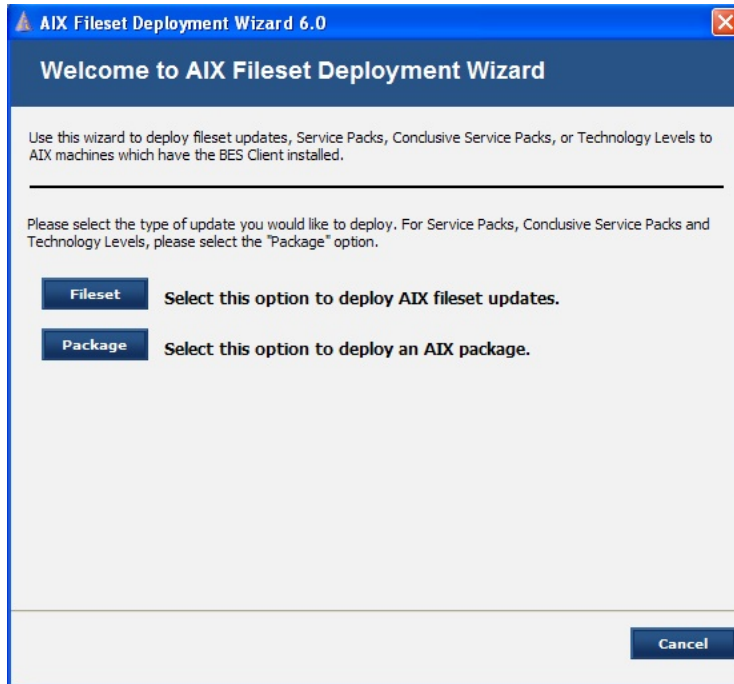
   d.   Click **Finish**.

After completion, the generated one-time action or Fixlet message will appear in the BigFix Console and will allow you to deploy the AIX update to relevant computers.

To view detailed information regarding the results of deploying your AIX Fileset update, activate the Analysis "AIX Custom Fileset Deployment Results" (Analysis ID: 22).
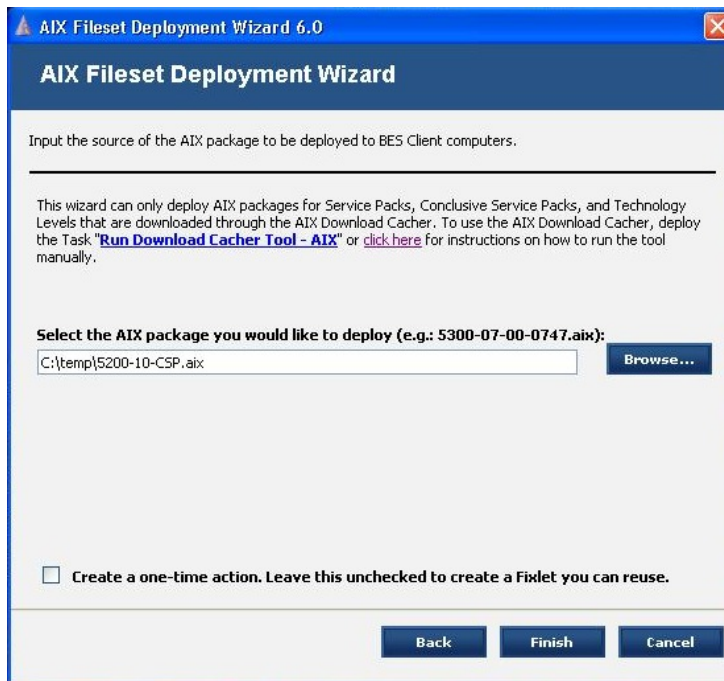
AIX Package Updates

After you have obtained the package for your AIX update, run the **AIX Fileset Deployment Wizard** from the BigFix Console to create a custom Task or Fixlet:

1.   From the BigFix Console, choose **Wizards > AIX Fileset Deployment Wizard**.

   The Wizard opens.

2. To deploy a package of AIX updates, click the **Package** button.

3. In this window:

   a. If you have not done so already, run the Download Cacher to download any necessary AIX package.

   b. Enter the location of the AIX package you want to deploy.

   c. Check the box if you want to create a one-time action rather than a reusable Fixlet.

   d. Click **Finish**.

After completion, the generated one-time action or Fixlet message will appear in the BigFix Console and will allow you to deploy the AIX update to relevant computers.