Tivoli Endpoint Manager for Patch Management - SUSE Linux Enterprise

User's Guide

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

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Part One

Patch Management for SUSE Linux Enterprise

Supported platforms

Tivoli® Endpoint Manager for Patch Management SUSE Linux Enterprise provides coverage for Novell updates on the following platforms:

- SUSE Linux Enterprise Desktop/Server 10 SP3 (x86/x86_64)
- SUSE Linux Enterprise Desktop/Server 11 (x86/x86_64)
- SUSE Linux Enterprise Desktop/Server 11 SP1 (x86/x86_64)

Patch Management SUSE Linux provides the following updates:

- Mandatory, Recommended, Optional

To install SUSE patches, subscribe to the Patches for SLE10, Patches for SLE11, and *Linux RPM Patching web*sites.

A download plug-in for SUSE must be registered prior to deploying patches from the Tivoli Endpoint Manager console. This process is detailed in the sections below.

Register a Download Plug-in

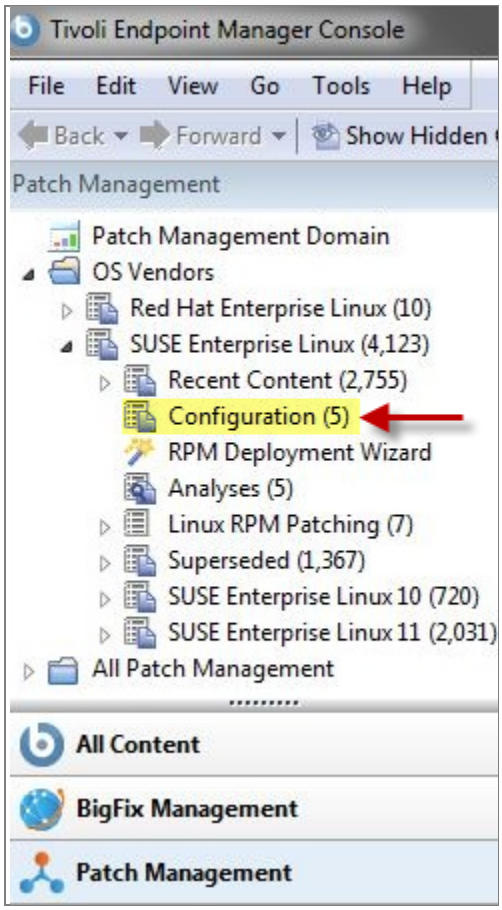
Patches must be cached on your Tivoli Endpoint Manager Server deployment. To ease the process of caching, Fixlets have a protocol incorporated that invokes download plug-ins.

Download plug-ins are executables that, based on the user's configuration, log on to the patch vendor’s website and download the specified patch. Use of the download plug-in requires a valid Novell customer support agreement for SUSE Linux Enterprise systems. For the Fixlet to recognize the protocol, the download plug-in for the protocol must be registered. After registering the SUSE download plug-in, run the Fixlets to download, cache, and deploy the patches.

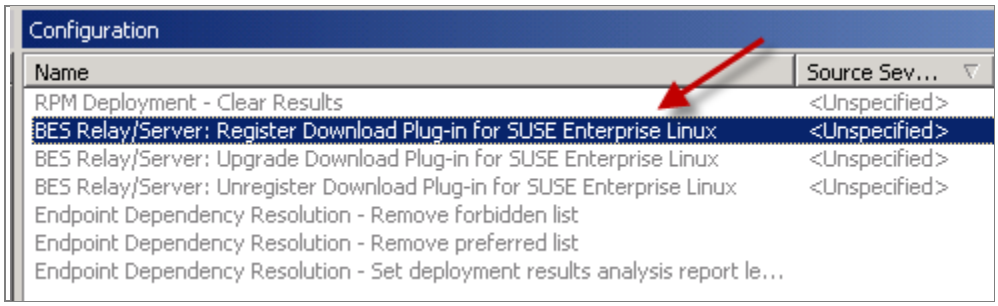
To register a download plug-in for SUSE Linux, run the *Register Download Plug-in for SUSE Linux Enterprise* task.

Run the Register Download Plug-in Task

In the navigation tree of the Patch Management domain, expand the *OS Vendors* node. Then expand the *SUSE Linux Enterprise* node, and select the *Configuration* subnode.



In the List Panel, select the task *BES Server: Register Download Plug-in for SUSE Enterprise Linux*.



In the work area, select the link to install the *SUSE Enterprise Download Plug-in* in the Actions box. You are prompted for the following action parameters:

Required Parameters

SUSE Enterprise Username

Your Novell SUSE account username
(used to log in to https://www.novell.com/ICSLogin/?%22http://www.novell.com/home/%22)

SUSE Enterprise Password

Your Novell SUSE account password
(used to log in to https://www.novell.com/ICSLogin/?%22http://www.novell.com/home/%22)

Optional Parameters

PROXY Proxy URL Proxy Username Proxy Password

Enter proxy parameters if the downloads must go through a proxy server. If your network requires a proxy server for Internet access, you must specify the 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 (for example: 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 domain\username form.

MIRROR Mirror URL Mirror Username Mirror Password

Enter mirror parameters if you want the plug-in to download from a mirror server.

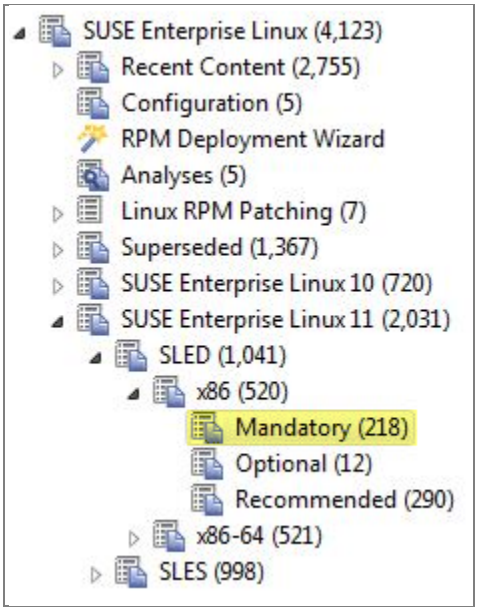
The **Mirror URL** is the URL of the mirror server. Leave blank to use Novell's mirror servers.

If the mirror server requires authentication, you must specify the **Mirror Username** and **Mirror Password**.

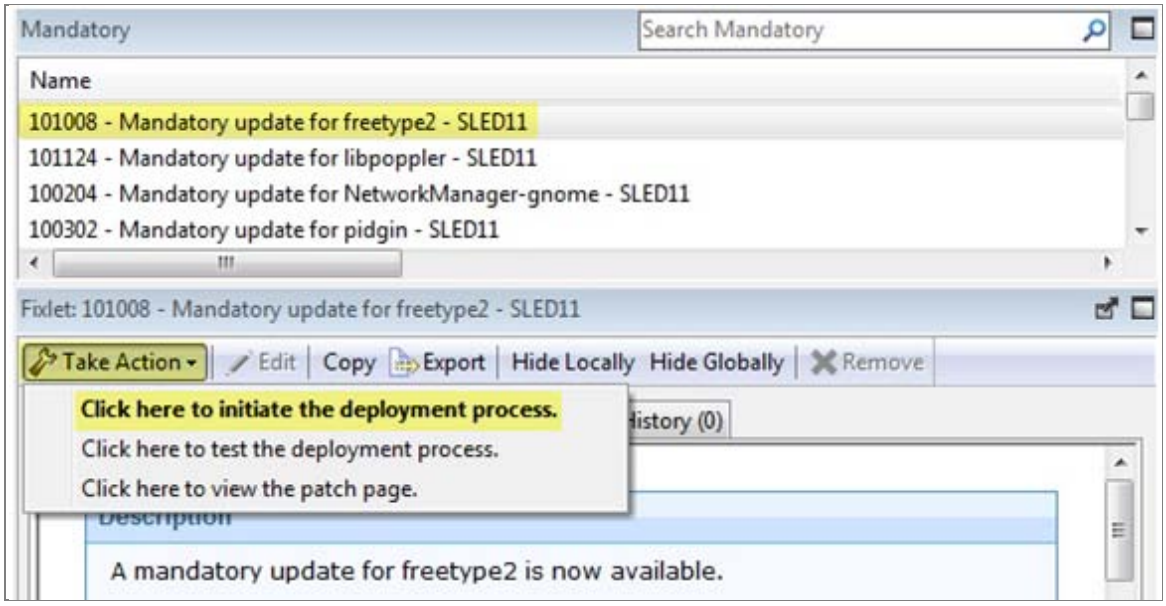
After you have entered all parameters, select the server that you want to register the plug-in with and click *OK*. Finally, authenticate your action. The plug-in is now registered.

Patch using Fixlets

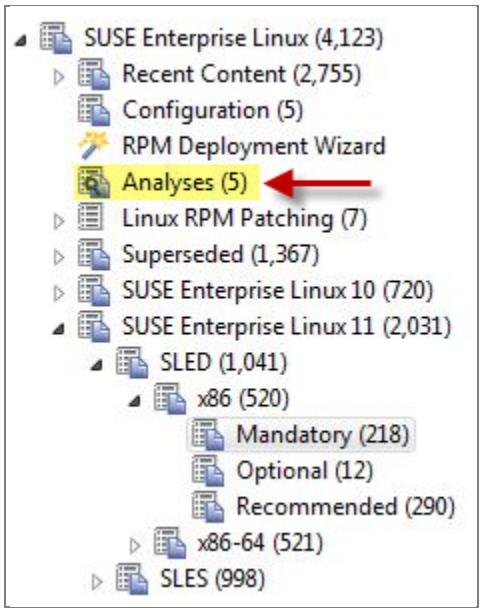
To deploy patches, navigate to the patch content using the domain nodes.



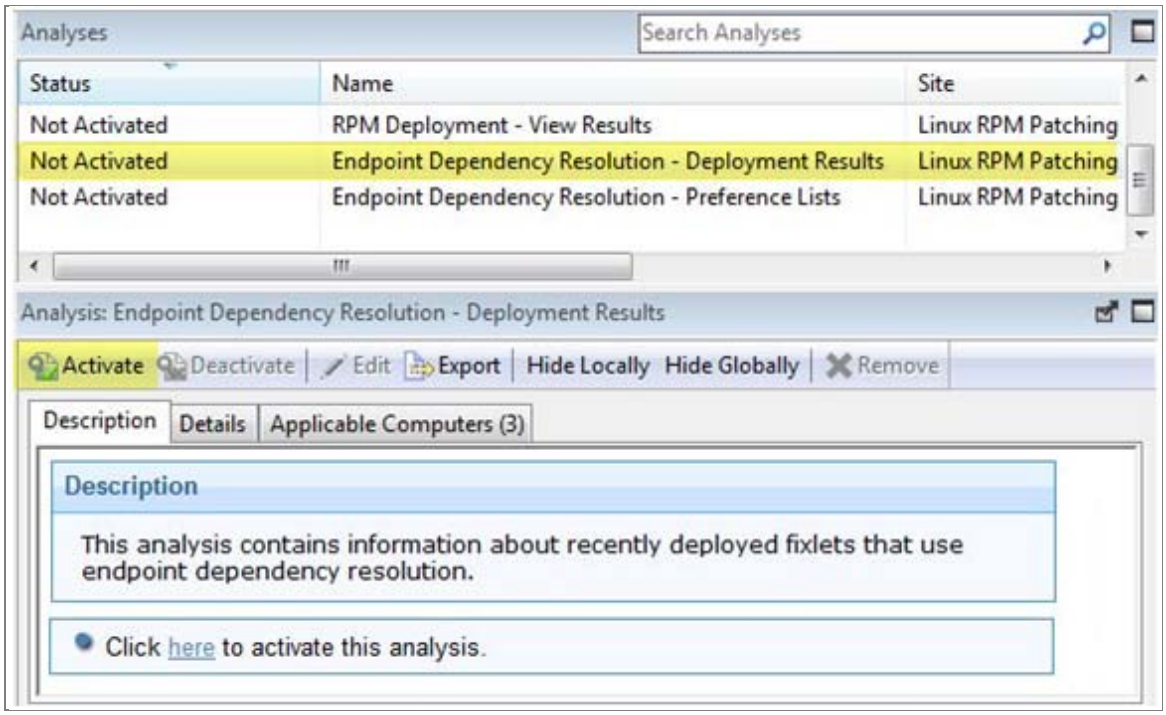
After you select an appropriate node, you can see Fixlets in the Work Area. Select the Fixlet that you want to apply, click "Take action", and start the deployment process.



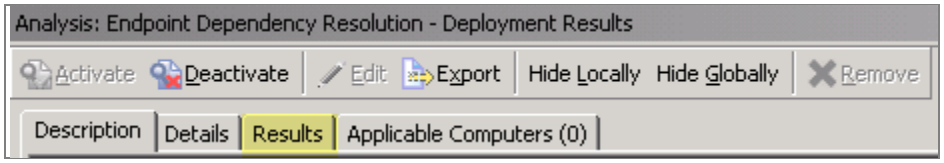
If the action is successful, the results are written in a log file on the endpoint. You can activate an analysis to view the results. You can navigate to the analysis by clicking the Analyses node and selecting "Endpoint Dependency Resolution - Deployment Results".



From there, click *Activate*.

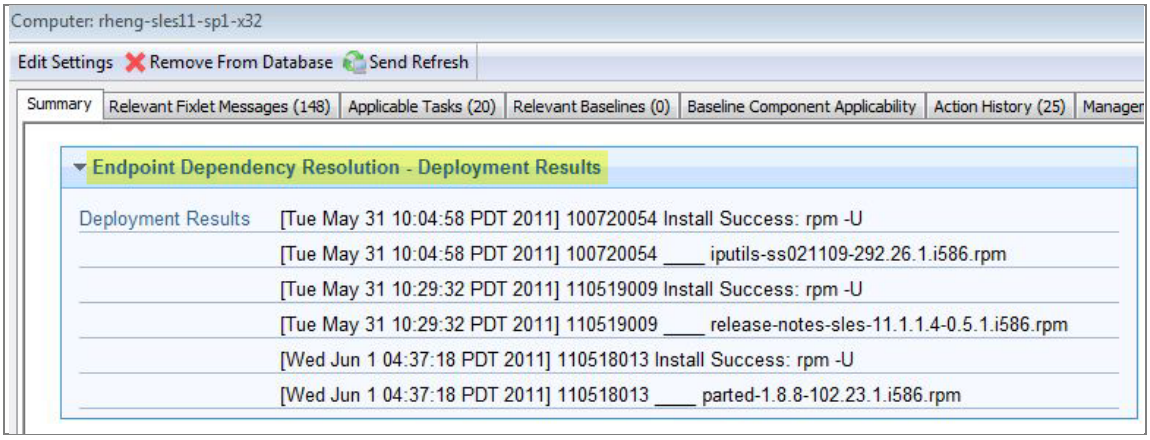


Click the Results tab in the Analysis window that is displayed after you activate the analysis.



When you review the properties of an endpoint, you can view the current deployment information on that system. To view this data, navigate on the *All Content* domain and select the *Computers* node. Select the computer you want to inspect in the work area. Scroll down to the Deployment Results.

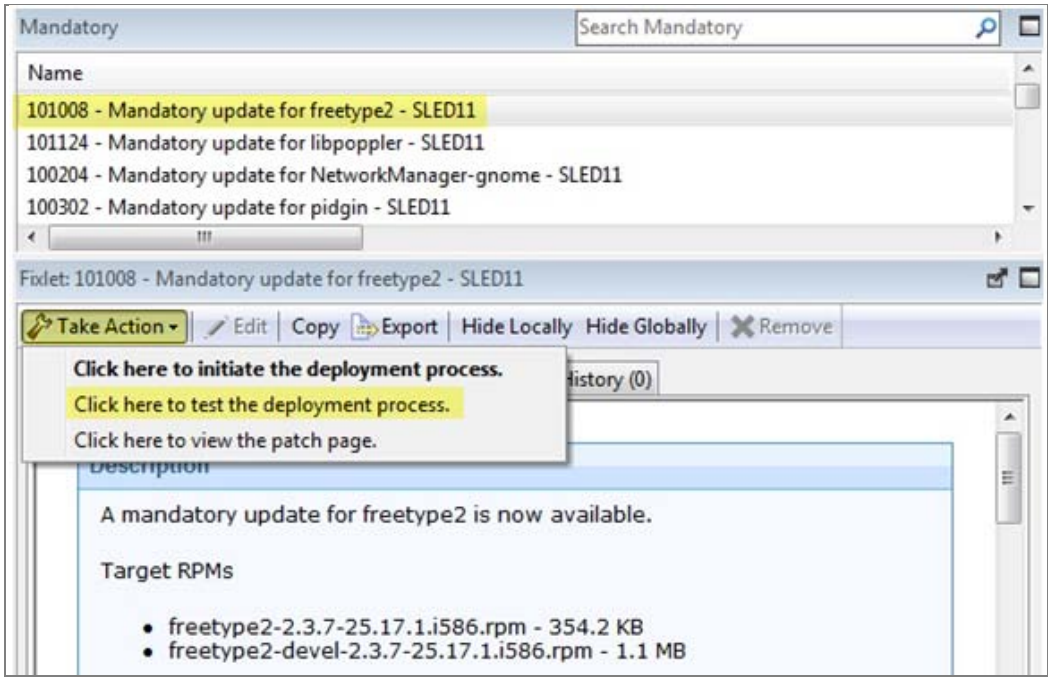
You can limit the length of the output by running the *Endpoint Dependency Resolution – Set deployment results analysis report length* task. To access this task, click OS Vendors from the navigation tree, and then click the SUSE Linux Enterprise and Configuration subnodes.



The default analysis report length is 100 entries.

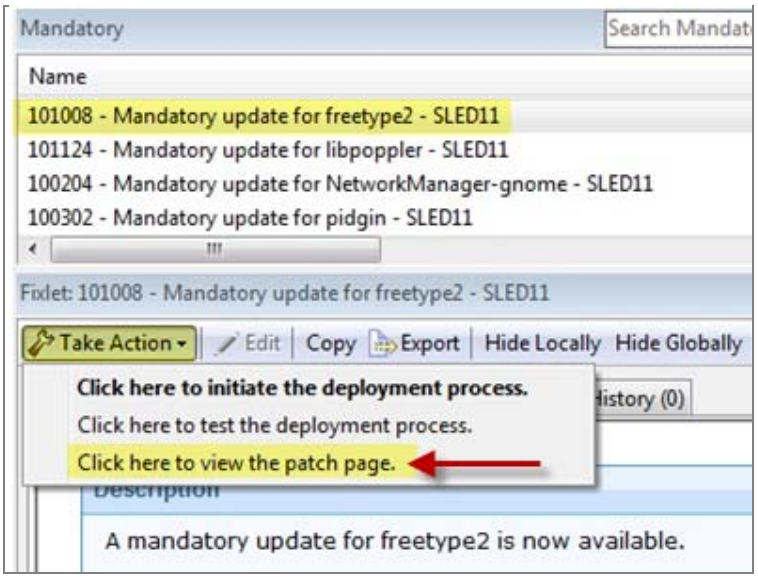
When running a SUSE Linux Enterprise patch Fixlet, you can also deploy a test run prior to applying the patch. You can view the Deployment Results analysis to determine if the dependencies have been successfully resolved and if an installation will be successful.

> ***Note:*** *This action reports back as Fixed, even if the test fails.*



Kernel updates provide the option to upgrade or install all kernel packages. The upgrade option replaces existing kernel packages with later versions. The install option installs the later kernel packages next to the previous versions. The default behavior for kernel updates is to install packages side by side. Additionally, each kernel update Fixlet provides the ability to test each of these options.

To view the Novell bulletin for a particular Fixlet, select the *Click here to view the patch page* action to view the patch page.



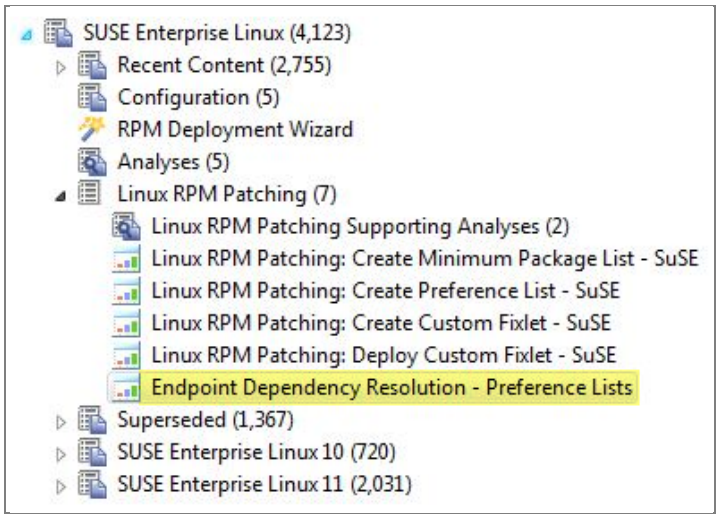
Manage Preference Lists

Preference lists are lists of packages that affect the dependencies that are installed for systems patched by content with endpoint dependency resolution.

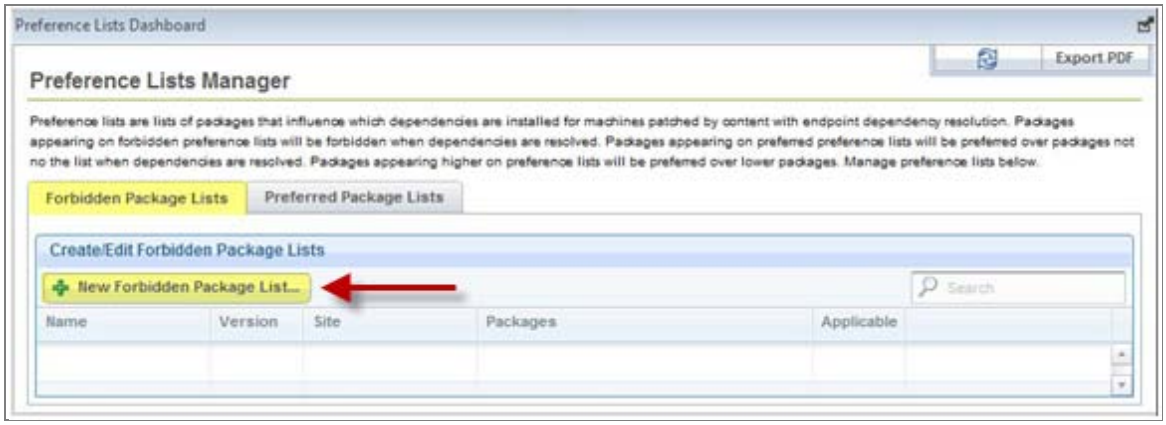
- Packages included in *forbidden* preference lists are forbidden when dependencies are resolved.
- Packages included in *preferred* preference lists are preferred over packages not in the list when dependencies are resolved.
- Packages included higher in the preference lists are preferred over lower packages. You can manage these preference lists by using the Preference Lists Dashboard.

Using the Preference Lists Dashboard

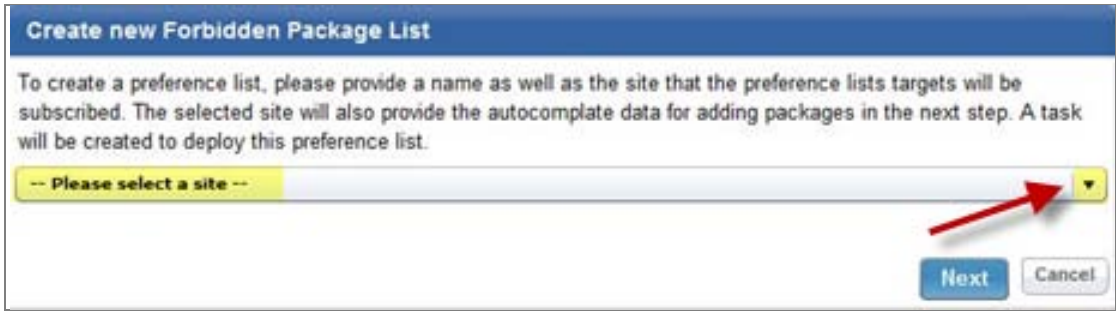
You can navigate to the dashboard by expanding the Linux RPM Patching node and selecting the *Endpoint Dependency Resolution - Preference Lists* dashboard.



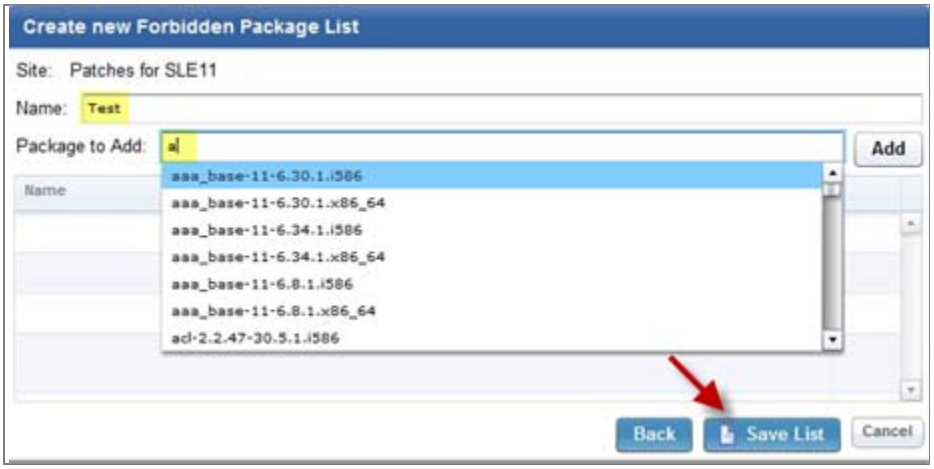
To create new Forbidden package lists, click *New Forbidden Package List*.



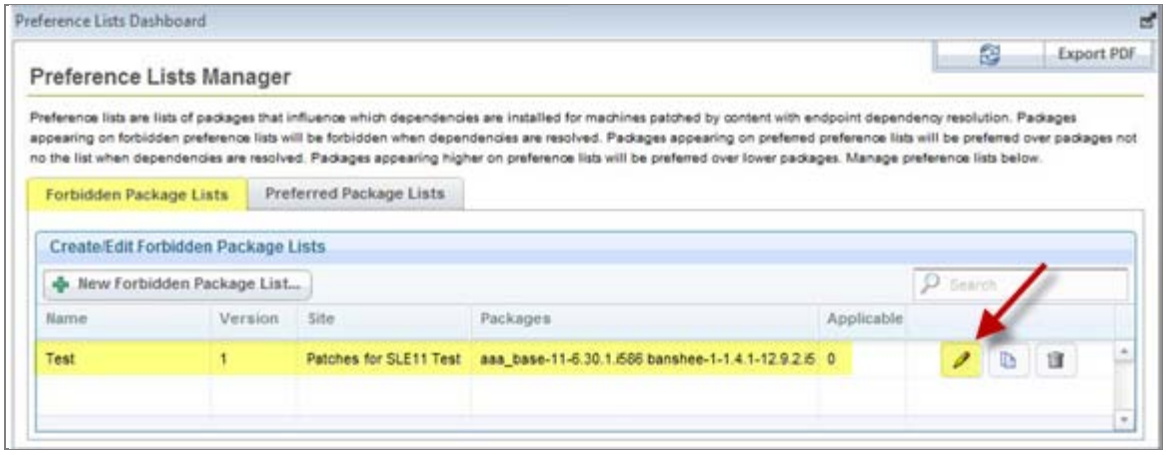
In the next dialog, you select a site for the preference lists. Endpoints subscribed to this site are relevant to this preference list. Click next after you choose a site.



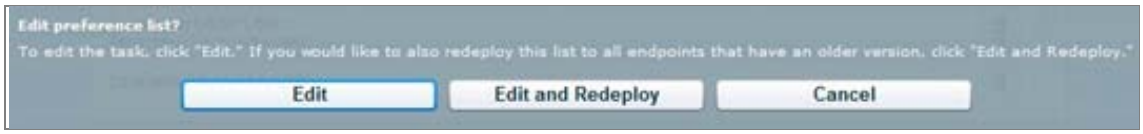
After entering a name for the list, you can begin populating your preference list with packages. Type the name in the *Package to Add* field and click *Add*. As you type, autocomplete suggestions are shown. These suggestions are populated using target packages from the selected site. After completing your list, click *Save,* click *OK,* and enter your Private Key Password. A task that deploys this preference list is displayed in the navigation tree.



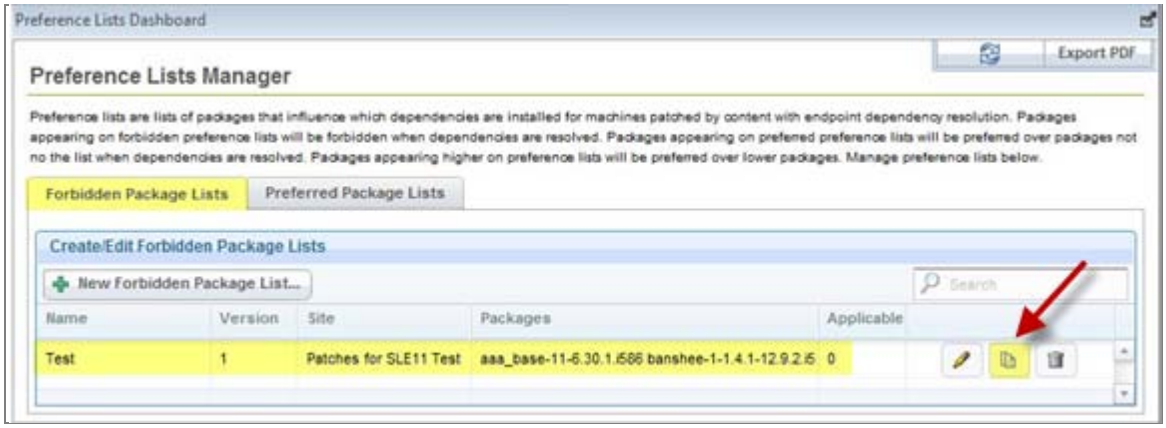
To edit a preference list, click *edit* for that particular list.



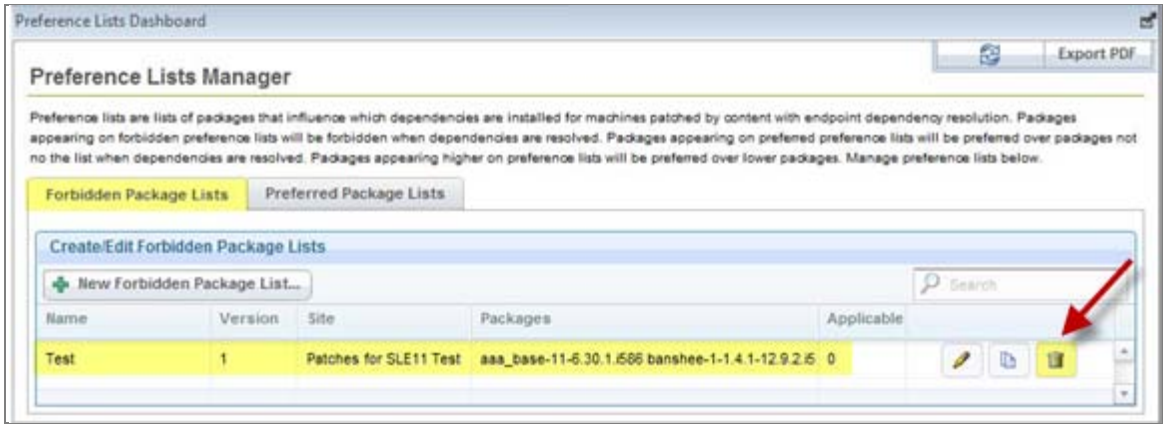
This opens the same dialog as before and allows you to edit the name and packages in the list. Click *Save.* To edit the task, click Edit. To redeploy the latest version of this list to all systems that already have the list, click *Edit and Redeploy*. Then click *OK* and enter your Private Key Password.



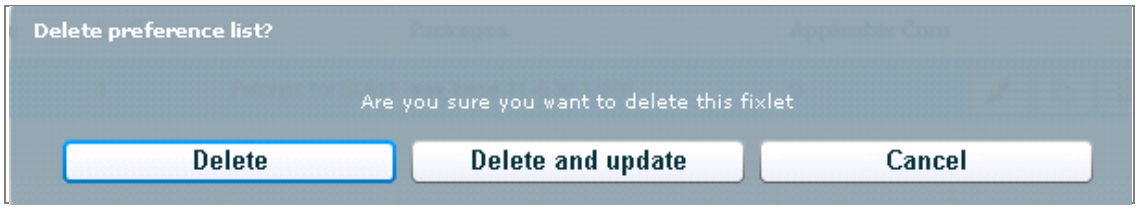
To create a copy of a preference list, click copy for that particular list.



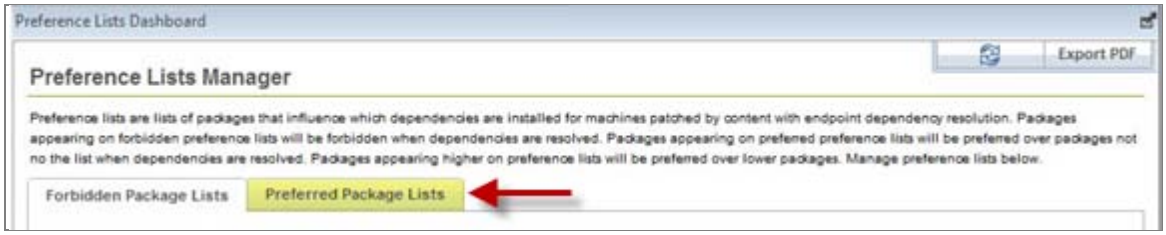
A dialog is created with a nearly identical set of data populated throughout the fields. The *Name* field has the word *copy* at the end. Click *Save* to create the new task. To delete a preference list, click *delete* for that particular list.



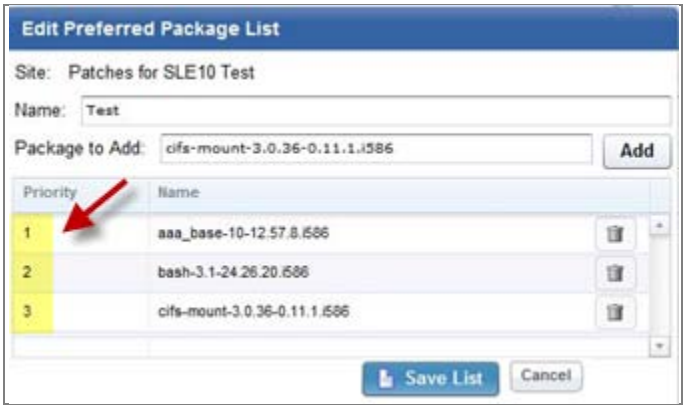
To delete the task, click *Delete.* To delete the task and issue an action to remove the preference list from all endpoints that have the list, click *Delete and Update*.



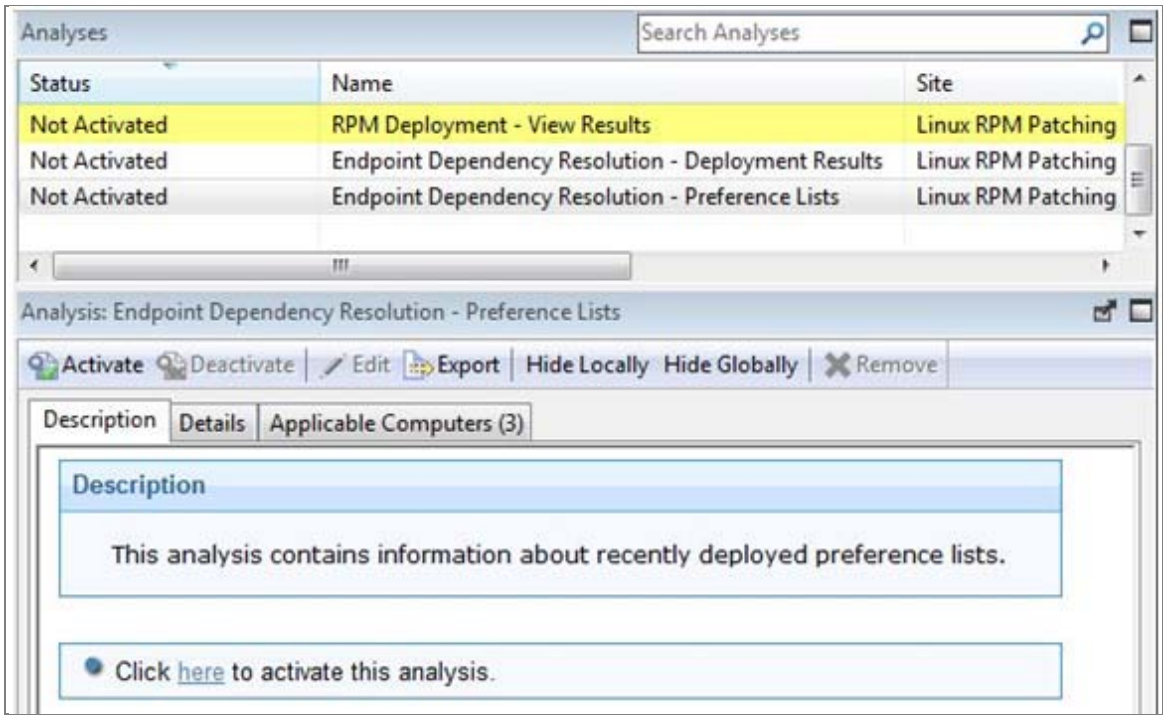
Preferred package lists can be created and managed in the same way as forbidden packages lists. The controls are listed under the Preferred Package Lists tab of the Preference Lists Dashboard.



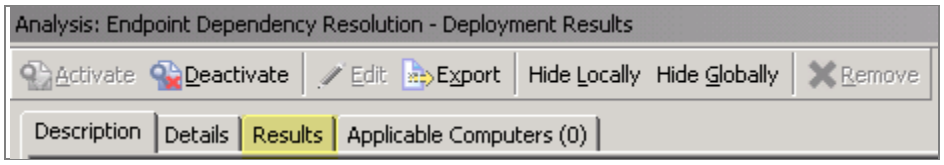
Packages are ordered from top to bottom in preference lists. Drag and drop packages to specify priority.



You can view deployed preference lists and their associated metadata by activating an analysis. Navigate to the analysis by clicking the Analyses node and selecting *Endpoint Dependency Resolution - Preference Lists*. Click the analysis and select *Activate* from the right-click menu.

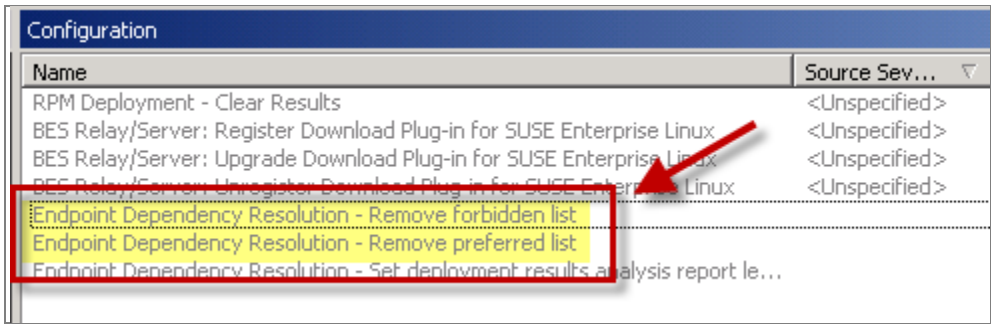


Click the Results tab in the Analysis window that is displayed after you activate the analysis.



When you review an endpoint's properties, you can view the current preference list information on that system.

To remove a preference list from an endpoint, run either the *Remove Endpoint Dependency Resolution – Remove preferred list* or the *Remove Endpoint Dependency Resolution – Remove forbidden list* tasks.



Part Two

Support

Frequently asked questions

What are superseded patches?

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

How do I deal with missing patches?

IBM only provides patches for bulletins listed on Novell's website for supported configurations. These bulletins can be found in Novell's Patch Finder:

Patch Finder

Where are the deployment logs located on endpoints?

The logs are located in a folder called EDRDeployData in the client folder. (/var/opt/BESClient/EDRDeployData).

Why is my action reporting back as a failed download?

Make sure your download plug-in has been updated to the latest version and is registered with the correct credentials.

If I have registered the latest plug-ins, why do downloads still fail?

There is a known issue with Evan's Patch #1 (8.0.627) not recognizing the whitelist for dynamic downloads. Upgrade to the latest version of Tivoli Endpoint Manager to resolve the issue.

What do I do when action reports back with an "EDR Plugin failure, Invalid set of initially installed packages ? "

There is at least one conflict between the packages that exist on the system. The resolver will not work until the conflicting packages are removed.

Why is there XML in the deployment results?

The XML is from the error output of the resolver when the resolver fails to produce a solution. You can look at the description in the “errorType” tag to gain a better understanding of why the failure occurred.

What do I do when the deployment results display a “Dependency Resolver Failure, noSolution ? ”

If the resolver finds that there is no solution, the system cannot install all targets and dependencies because of a conflict between these files and the endpoint files.

How often are new dependency graphs generated?

Dependency graphs are generated every Monday, Wednesday, and Friday.

What do I do when an action reports back with an installation failure?

Check to see if the conflict is caused by a vendor-acquired package. These must be removed for the installation to occur.

Why does the resolver function select a lower priority package over a higher priority one?

The resolver will not select a preferred package if selecting that package creates a conflict with another package. Therefore, it is possible for a lower priority package to be selected.

Technical support

The BigFix technical support site offers a number of specialized support options to help you learn, understand, and optimize your use of this product:

- IBM Tivoli Endpoint Manager Info Center
- BigFix Support Site
- Documentation
- Knowledge Base
- Forums and Communities

Part Three

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