![Software AG logo]

Using Software AG Update Manager

October 2019

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About this Guide

This guide explains how to use Software AG Update Manager to install and uninstall fixes on your Software AG products.

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Narrowfont	Identifies service names and locations in the format *folder.subfolder.service* , APIs, Java classes, methods, properties.
Italic	Identifies: Variables for which you must supply values specific to your own situation or environment. New terms the first time they occur in the text. References to other documentation sources.
Monospace font	Identifies: Text you must type in. Messages displayed by the system. Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at "http://documentation.softwareag.com". The site requires credentials for Software AG's Product Support site Empower. If you do not have Empower credentials, you must use the TECHcommunity website.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to "empower@softwareag.com" with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at "https://empower.softwareag.com/".

You can find product information on the Software AG Empower Product Support website at "https://empower.softwareag.com".

To submit feature/enhancement requests, get information about product availability, and download products, go to "Products".

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the "Knowledge Center".

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at "https://empower.softwareag.com/public_directory.asp" and give us a call.

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at "http://techcommunity.softwareag.com". You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.

- Access articles, code samples, demos, and tutorials.

- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.

- Link to external websites that discuss open standards and web technology.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

1 Concepts

Using Command Central or Software AG Update Manager to Install Fixes

Software AG recommends installing your fixes as follows:

- Use Command Central to install fixes and support patches on Software AG products in distributed staging and production environments. Command Central enables you to install, patch, configure, manage, and upgrade products remotely from a central location.

- Use Software AG Update Manager to install fixes and support patches on Software AG products on standalone development machines.

Support patches include:

- Diagnostic collector.

  Software AG delivers a diagnostic collector to collect information that will help diagnose an issue. Any generated output is provided to Software AG for review and analysis. The diagnostic collector might have multiple iterations until the root cause has been found. The diagnostic collector can only be installed in isolated test environments unless Software AG gives special permission.

- Test patch.

  Software AG delivers a test patch to try to resolve an issue and to obtain verification of the problem resolution. The test patch might have multiple iterations until the root cause has been found. The test patch can only be installed in isolated test environments.

- Hotfix.

  Software AG delivers a hotfix to resolve an issue when it is not possible to wait for the release of the equivalent official fix. The hot fix is tested in an isolated test environment and, if testing is successful, is then deployed to the production environment. When the equivalent official fix is released, the hotfix must be removed and the official fix installed.

Software AG uses these support patches to troubleshoot problems in Software AG product installations.

This guide explains how to use Update Manager. For instructions on using Command Central, see *Software AG Command Central Help*.

Fix Installation

Fix Installation Methods

Update Manager offers these methods for installing fixes:

■ You can install the latest fixes directly from the Software AG Empower Product Support website on a single machine.

■ You can download fixes from Empower into an *image* and then install the fixes from the image on one or more machines.

■ You can record a *script* of yourself installing fixes from Empower or from an image, and then use the script to install fixes with no user input on other machines.

Fix Installation from Empower

You can install fixes by running Update Manager and connecting to Empower. You might use this method if you want to install the latest versions of fixes, or if you want to install on a single machine, and the machine can go outside your corporate firewall.

Update Manager provides dependency management for fixes. When you select fixes to install from Empower, Update Manager automatically determines whether related fixes are required for other products. For example, a fix you apply to Monitor might require a related fix to Integration Server. If the products for the related required fixes are in the same installation directory as the selected fixes, Update Manager installs them automatically. If they are not, Update Manager lists them at the end of the fix installation so you can install the related required fixes yourself. You must install the related required fixes as soon possible, or your products might not work together properly.

Fix Installation from an Image

You can download fixes from Empower into an image and then use that image to install fixes on one or more machines. You might use this method in these cases:

■ The machines that host the products on which you want to install fixes cannot go outside your corporate firewall (that is, cannot connect to Empower).

■ You want to install some or all of the same fixes on multiple machines that are running the same operating system, and want to avoid the time required to download from Empower.

■ You want to store a specific version of each fix so you can install the same fix versions on multiple machines over time. Empower provides only the latest versions of fixes, so the version of a fix that is available now on Empower might be replaced by a later version in the future. An image always contains the versions of the fixes that you downloaded into it. Software AG recommends creating images to ensure

consistency across product installations over time, especially if you have a long fix verification and promotion cycle.

■ You want to make sure you can install fixes at any time, regardless of whether production servers are locked down or have special access controls.

You can create an image using these methods:

■ Connect to Empower and download fixes from a list of fixes that are available either for any product you have licensed from Software AG, or for only products in a model installation directory.

■ Run Update Manager on an offline machine to generate an inventory of products in a model installation directory and of fixes that are already installed on those products, copy the file to an online machine, connect to Empower, and download fixes from the list of fixes in the inventory file.

Update Manager provides dependency management for fixes. When you select fixes to include in a fix image, Update Manager automatically determines whether related fixes are required for other products and, if so, selects those fixes for inclusion in the image as well.

Update Manager does not install any fixes on the local machine during image creation.

When additional fixes become available on Empower, you can add them to existing images.

Update Manager saves images as zip files.

When you select fixes to install from a fix image, Update Manager automatically determines whether related fixes are required for other products. For example, a fix you apply to Monitor might require a related fix to Integration Server. If the products for the related required fixes are in the same installation directory as the selected fixes, Update Manager installs them automatically. If they are not, Update Manager lists them at the end of the fix installation so you can install the related required fixes yourself. You must install the related required fixes as soon possible, or your products might not work properly together.

Fix Installation Using a Script

You create a script by recording yourself installing fixes from Empower or an image, and you then use that script to install fixes on one or more machines. You might use this method if you want to install fixes on multiple machines that have identical product installations, or if you want to automate fix installation.

If you want a script to always install the latest version of fixes, record yourself installing from Empower, which always offers only the latest fix versions. When you run the script, the script gets the fixes from Empower.

If you want the script to always install a specific version of each fix, record yourself installing from an image that contains those fix versions. When you run the script, the script gets the fixes from the image. You can also record yourself installing from an image if you do not want a script to go outside your corporate firewall.

When you run the script, you cannot provide any input. Because you use scripts only to install on machines with identical product installations, all fixes you include in the script are automatically installed in each product installation. In addition, scripts include installation-specific options such as product connection values, and the same installation-specific options are used for each product installation.

When additional fixes become available on Update Manager, you cannot add them to existing scripts. Instead you must create new scripts.

Update Manager saves scripts as .txt files.

Fix Uninstallation

You can uninstall fixes from a product installation using Update Manager. You can also record a script of yourself uninstalling fixes and then use the script to uninstall fixes with no user input on other machines.

Update Manager provides dependency management for fixes. When you select fixes to uninstall from a product installation, Update Manager automatically lets you know if other fixes depend on the selected fixes. You can choose either to not uninstall the required fixes, or to also uninstall the dependent fixes.

Fix Logging

Update Manager writes debug, error, and info logs for fix installation and uninstallation to correspondingly named directories in the *Software AG_directory*/UpdateManager/logs directory. Each log contains the entries for all product installations on the machine. For example, if you install fixes on an 9.5 product installation on the machine, and on a 9.0 product installation on the machine, Update Manager will write the entries for both installations to the same log.

Update Manager writes an audit log for fix installation and uninstallation to the *Software AG_directory*/install/fix/logs directory for the products on which the fixes are installed or uninstalled.

The most recent files are named debug.log, error.log, info.log, and audit.log. When Update Manager writes a new file, it renames the previous file to include a date stamp (for example, debug_*yyyymmdd*).

Product Troubleshooting

Software AG provides support patches (that is, diagnostic collectors, test patches, or hotfixes) when customers experience problems with products. These support patches contain code that enables the logging of additional information about the product installation and attempts to verify a solution to the problem the installation is experiencing. After installing a support patch, you run your products as usual and send the logs to Software AG for diagnosis.

In the past, you deployed these support patches manually, by unzipping jar files or modifying code yourself. You can now use Update Manager to install support patches automatically.

Support Patch Installation

Support Patch Installation Methods

Update Manager offers these methods for installing support patches:

■   You can install support patches directly from Empower on a single machine.

■   You can download support patches from Empower into an image and then install the support patches from the image on one or more machines.

■   You can record a script of yourself installing support patches from Empower or from an image, and then install the support patches from the script with no user input on one or more machines.

Support Patch Installation from Empower

You can install support patches by running Update Manager and connecting to Empower. You might use this method if you want to install on a single machine, and the machine can go outside your corporate firewall.

Support Patch Installation from an Image

You can download support patches from Empower into an image and then use that image to install support patches on one or more machines. You might use this method in these cases:

■   The machines that host the product installations on which you want to install support patches cannot go outside your corporate firewall (that is, cannot connect to Empower).

■   You want to install some or all of the same support patches on multiple machines, and want to avoid the time required to download from Empower.

You create an image by running Update Manager, connecting to Empower, and selecting the support patches to download into the image. Update Manager does not install any support patches on the local machine. You can include support patches for any operating system in the image; when you install from the image, only the support patches that are appropriate for the target system will be available for installation.

Images do not contain installation-specific options such as product connection values. When you install from an image, you provide the installation-specific options that are appropriate for the machine on which you are installing. In addition, the product installations into which you install do not have to be identical, so you can install only those support patches from the image that are appropriate for each installation. When

additional support patches become available on Empower, you can add them to existing images.

Update Manager saves images as zip files.

Support Patch Uninstallation

You can uninstall support patches from a product installation using Update Manager.

Security

If your company connects to the Internet through an HTTP or Socks proxy server, you must use that proxy server to install. You supply proxy connection information and, if necessary, credentials the first time you run Update Manager.

If you supply credentials, Update Manager uses Improved Security Support (ISS) to encrypt, decrypt, and store the password and any other sensitive data. ISS provides modern encryption algorithms (JCE AES cipher with 128-bit key) and protects sensitive data by separating it from configuration data. Sensitive data is stored in a dedicated folder and file, so if the proxy configuration file is shared (for example, with the Software AG Global Support team), the sensitive data will not leak.

If the proxy password is corrupted or deleted (for example, if someone edits or deletes the proxy.cnf file in the *Software AG_directory*/UpdateManager/conf directory), retype the proxy information in the GUI or on the command line. ISS will encrypt and store the re-typed password.

> **Important:** Do not share any information stored in the *Software AG_directory*/UpdateManager/**/storage directory with anyone outside your company.

EU General Data Protection Regulation (GDPR)

Update Manager connects to the Software Download Center on Empower to download your fixes and support patches. Update Manager collects and stores Empower user names on the Software Download Center so it can track problems that occur during installation of fixes or support patches. To request removal of this personal data from the Software Download Center, contact Software AG Global Support.

Documentation

Update Manager is upgraded on an ongoing basis. This guide is not updated as frequently. You might therefore find minor differences between Update Manager and this guide.

2   Critical Requirements and Recommendations for Successful Installation

Machine Requirements

- If you are going to create an installation image, make sure the machine on which you are going to run the installer has at least twice the size of the installation image in free disk space in the file system that will contain the image file. For example, if you are going to create the 1GB image MyImage.zip in C:\MyDirectory, file system C:\ must have at least 2GB free disk space available. This is because the installer downloads the products to a directory with the same name as the image (for example, C:\MyDirectory\MyImage) before adding the products to the image, so if you lose your connection to the Empower Product Support website, you can resume where you left off. To predict the image size, see the numbers for Free Space Required (for the image) and Free Space Available (in the file system) in the product selection tree after you select the products to include in the image.

- The performance of the products installed on your environment is related to the available hardware resources. Running Software AG Update Manager with limited hardware resources might affect the performance of the product, for example, when running Update Manager on a system with a single CPU core. Performance might be affected when running Update Manager simultaneously with other installed products and/or antivirus programs.

Installation Requirements

- To avoid file or product conflicts, do not run Update Manager and Software AG Installer at the same time.

- Do not modify or remove files that have been installed or created by Update Manager or Software AG Installer unless specifically instructed to do so by Software AG.

- Do not modify or remove files from the Update Manager installation directory or the *Software AG_directory* \install directory; these directories contain important metadata that is used by Update Manager and the installer.

- Before installing a fix on a product, back up the Update Manager installation directory and the product directory.

- Back up the Update Manager installation directory regularly, in synchronization with your regular backups of your Software AG products. These backups ensure that Software AG can restore the products as well as the Update Manager metadata to a known point of time.

- Read the readmes for all fixes you want to install before installing the fixes. The readmes describe the issues that have been fixed and provide cautions and warnings. Some readmes also provide steps you must perform before or after you install the fixes. The fix installation chapter explains how to access readmes.

- Verify fixes in a development or test environment of Software AG products before promoting the fixes to production environments. Then create a fix image and install fixes from that image into production environments for the reasons cited in "Fix Installation" on page 11.

- If you encounter problems after installing a fix, contact Software AG Global Support.

Troubleshooting Download and Installation of Update Manager

- When you download the Update Manager bootstrapper and then install Update Manager from Empower, the Update Manager components are verified using SHA256 checksums.

- During component download, activity might appear at times to stop completely. The cause might be that your virus scanner is scanning the components. Add the Update Manager installation directory to the virus scanner's exclusion list. If you do not have such a list, disable your anti-virus software while using Update Manager.

- If your network interferes with the component download, you might have problems connecting to Empower or see error messages about corrupted Zip files. Try the following:

  - Most download issues are caused by interference from a security appliance such as a virus scanner. Ask your network administrator whether he can make an adjustment to allow the download to work properly. Also check whether a proxy must be used to download files properly in Update Manager. Ask the network administrator to check the security settings for your proxy or firewall; they might be incompatible with Update Manager. If so, ask your IT department for temporary access to a port outside the firewall to download the components.

  - Test whether your network is handling SSL traffic properly; public websites are available to help with this diagnoses. The verbose log will give you a great deal of troubleshooting information, but even if you cannot spot the problem, you will need to provide the verbose log to Software AG Global Support.

  - If you have access to another network, try running the same installation on the other network. If the installation succeeds, create an installation image to use on machines in the network that is experiencing problems.

  - If you are still having trouble after trying these options, contact Software AG Global Support for help. If the issue cannot be resolved after exploring all possibilities, or if you need an installation image urgently, Software AG Global Support can contact Software AG Logistics to provide Update Manager on a DVD or through a private FTP site.

3   Installing, Configuring, and Uninstalling Update Manager

Install Update Manager

Overview

Install Update Manager on any machine that hosts 10.0 or later Software AG products you want to work with, and use that Update Manager to install fixes on all 10.0 or later Software AG installations on the machine.

You can install Update Manager as a user with no administrative rights in any directory that is not controlled by the system. Do not install Update Manager in a system-controlled directory such as Program Files.

Update Manager offers a graphical user interface (GUI) mode and a command line mode. If you want to use Update Manager's GUI mode on a UNIX system, the UNIX system must have an X Windows environment.

Before Installing Update Manager

Open and read your installation email from Software AG.

If you are going to install on a machine that has Internet access, follow the instructions in the installation email to download the Update Manager installer to the target machine.

If you download the UNIX .sh script and then transfer it to another machine, set the transfer tool you use to binary mode.

Note:	If the installer will not start, it was corrupted during download. Go to the Empower Product Support website from which you downloaded the bootstrapper and download the SHA256 file for that bootstrapper. Calculate the SHA256 checksum for the bootstrapper and compare it to the checksum value in the downloaded SHA256 file. If the values do not match, delete the corrupted bootstrapper, re-download it, and re-transfer it using binary mode

If you are going to install on a machine that does not have Internet access, ask your system administrator to follow the instructions in the installation email and in this guide to create an image file that contains Update Manager, and then to copy the image to the target machine.

If you are going to install on a Windows system, and you want to create a script and install Update Manager from the script, do the following:

1. Follow the instructions in the installation email to download the Update Manager installer for Windows to a Windows machine.

2. Open Windows Explorer, go to the directory that contains the installer, and double-click the SoftwareAGUpdateManager*yyyymm* .exe file.

3. On the Welcome panel, click **Advanced Options**, click the **Scripts** tab and click **Create script**. In the **Script file** field, type the name of the file in which to save the new script. You can specify any file name that is permitted by your operating system.

   By default, the installer will write the new script file to the current working directory. If you want to write the file to a different directory, include the full path to the file in the **Script file** field. The directory to which you save the file must already exist.

   Click **OK**. On the proxy panel, if your company connects to the Internet through a proxy server, you must use that proxy server to install.

   > **Note:** The proxy password is encrypted, but the encryption is not the strongest possible encryption.

4. After script creation is complete, copy the script to the target machine.

Using a GUI to Install Update Manager on a Windows System for Use with Release 10.0 or Later Products

1. Open Windows Explorer, go to the directory that contains the Update Manager installer, and double-click the SoftwareAGUpdateManager*yyyymm* .exe file.

2. If you want to install Update Manager from an image, click **Advanced Options** on the Welcome panel, click the **Images** tab, click **Install from image**, and specify the full path to the image file.

   If you want to install Update Manager from a script, click **Advanced Options** on the Welcome panel, click the **Scripts** tab, click **Install from script**, and specify the full path to the script file.

3. Most panels are self-explanatory. On the proxy panel, if your company connects to the Internet through a proxy server, you must use that proxy server to install.

   > **Note:** The proxy password is encrypted, but the encryption is not the strongest possible encryption.

   If you installed from a script, the installer exits immediately after the script finishes. If the installation is successful the exit code is 0. If errors occur while script is running the exit code is 1.

Use a Script to Install Update Manager on a Windows System for Use with Release 10.0 or Later Products

1. Set the environment variable ZFUSION_ SUMINSTALL_ARGS to -readScript *full_path_to_script_file* . For example, enter:
   ```
   set ZFUSION_SUMINSTALL_ARGS= -readScript c:\myScript.txt
   ```

2. Open a command window, go to the directory that contains the installer, and execute SoftwareAGUpdateManagerInstaller*yyyymmdd* .exe.

   The installer exits immediately after finishing. If the installation is successful the exit code is 0. If errors occur while script is running the exit code is 1.

Install Update Manager on a Mac OSX or Other UNIX System for Use with Release 10.0 or Later Products

Install a 64-bit JRE to run the Update Manager installer. For information on supported JDKs for these systems, see the product system requirements on the Software AG Documentation website.

Important: Do not apply maintenance updates from the vendor of the installed JDK. If an update to the installed JDK is required, Software AG will provide the update in the form of a fix.

Open a command shell and enter one of the commands below. The default installation directory is opt/SAGUpdateManager.

■ To install from Empower:

```
sum-setup.sh --accept-license -j full_path_to_JRE
[-d full_path_to_install_dir]
```

■ To install from an image:

```
sum-setup.sh --accept-license -j full_path_to_JRE
[-d full_path_to_install_dir] -i full_path_to_fix_image_file
```

Configure Update Manager

Go to *Software AG_directory* /UpdateManager/conf directory, open the sum.cnf file in a text editor, and modify the properties as necessary.

The following table describes each configuration property you can modify for Update Manager.

Property	Description
cacheRetainDays	Update Manager caches fixes in its file system. By default, cached fixes are deleted each time you start Update Manager. To keep fixes in the cache, specify the number of days to keep the fixes.
debugLevel	The default is DEBUG. Software AG recommends not changing this level so that you will have the maximum amount of information in case of problems.

Property	Description
selfUpdateMode	Whether Update Manager should update itself to the newest available release. Update Manager checks for a new release when it starts up and connects to Empower. Values are: ■ ON - If a new release is available, Update Manager will automatically update itself. ■ PROMPT - If a new release is available, Update Manager will ask whether to update itself. **Note:** If a fix requires the latest release of Update Manager, and you respond no to this prompt, you will not be able to install the fix.
MaxReadmeToView	Maximum number of readmes to display in Update Manager at one time when using GUI mode. If you select more fixes than this number on the fix selection tree in the Update Manager GUI, and then try to view the fix readmes, Update Manager will ask you to deselect some of the readmes.
FontPrintReadme	Type of font to use when printing readmes.
FontSizePrintReadme	Font size to use when printing readmes.
ReadmeLinePerPage	Number of lines of readme text to show at one time when using Update Manager in command line mode.

Uninstall Update Manager

To uninstall Update Manager, delete the directory that contains the Update Manager installation.

4   Starting Update Manager

Basic Startup Command

Log onto the machine that hosts Update Manager as the same user that installed the Software AG products you want to work with. Then start Update Manager.

Note: Update Manager upgrades itself automatically at startup whenever a more recent release is available on Empower when you are connected to it, or in an image from which you are installing.

The following table provides the basic startup command for Update Manager on supported operating systems.

System	Mode	Basic Startup Command
Windows	GUI	Go to **Start > Software AG > Update Manager**. On the first panel that appears, indicate whether to proceed to the Update Manager GUI, create or add to an image, or install from an image.

Windows	Command	Go to the *Software AG_directory*\UpdateManager\bin directory and run one of these commands:
		
		`UpdateManagerGUI.bat  [`*`additional_parameters`*`]`
		
		`UpdateManagerCMD.bat [`*`proxy_parameters`*`] [`*`additional_parameters`*`]`

UNIX	GUI	Go to the *Software AG_directory*/UpdateManager/bin directory and run this command: `UpdateManagerGUI.sh` On the first panel that appears, indicate whether to proceed to the Update Manager GUI, create or add to an image, or install from an image.

UNIX	Command	Go to the *Software AG_directory*/UpdateManager/bin directory and run one of these commands:
		
		`./UpdateManagerGUI.sh [`*`additional_parameters`*`]`
		
		`./UpdateManagerCMD.sh [`*`proxy_parameters`*`] [`*`additional_parameters`*`]`

Proxy Parameters

If your company connects to the Internet through an HTTP or Socks proxy server, you must use that proxy server to install.

You will be able to identify a proxy after you start Update Manager, but if you want to identify a proxy on the startup command, the parameters are as follows:

```
[-proxyHost host -proxyPort port -proxyProtocol {HTTP|SOCKS}
[-proxyUsername name] [-proxyPassword password]]
```

Update Manager stores the parameter values so you do not have to specify them next time you run Update Manager. If you later want to stop using the proxy, go to the *Software AG directory* /UpdateManager/conf directory and delete the proxy.cnf file.

Note: The proxy password is encrypted, but the encryption is not the strongest possible encryption.

Note: Do not try to change proxy parameter values by editing the proxy.cnf file. You can only change the values by specifying them after you start Update Manager or on the startup command.

Additional Parameters to Perform Specific Tasks

After starting Update Manager using these parameters, see "Installing Fixes" on page 31 and "Deploying Support Patches" on page 41 for instructions on how to proceed.

- View available fixes (available on startup command for command line mode only):

  ```
  -action viewAvailableFixes -empowerUser user_name -empowerPass password
  [-installDir full_path_to_install_dir]
  ```

- Create an image that contains only Update Manager:

  ```
  -createImageOnly full_path_to_image_file
  ```

- Create a fix image or add to an existing fix image:

  ```
  -createImage full_path_to_image_file
  ```

  If you are creating a fix image, you can specify any name for the image file; do not supply an extension. The directory that will contain the image file must exist, and no part of the path or file name can include spaces.

- When creating an image, choose the operating system on which you will run Update Manager and create the image.

  ```
  -imagePlatform operating_system_value
  ```

  The table below lists the values for the supported operating systems.

Value	Operating System
OSX	Apple Mac OS X
HP11IT	HP HP-UX Intel Itanium 2
HP11	HP HP-UX PA-RISC
LNXS390X	Linux RHEL and SLES IBM System z
LNX	Linux RHEL and SLES x86
LNXAMD64	Linux RHEL and SLES x86-64 (EM64T, AMD64)
WNT	Microsoft Windows x86
W64	Microsoft Windows x86-64 (EM64T, AMD64)
SOL	Oracle Solaris SPARC
SOLAMD64	Oracle Solaris x86-64 (EM64T, AMD Opteron)

- Install from a fix image:

```
-installFromImage full_path_to_image_file
```

- Install fixes using a script:

  If you created the script from an image, make sure the image file is still available under the same name and in the same location before running the script.

```
-readScript full_path_to_script
```

  After running the script, restart the products on which you installed fixes.

- Create a support patch image or add to an existing image:

```
-createImage full_path_to_image_file -spKey support_patch_key
```

  If you are creating a support patch image, you can specify any name for the image file; do not supply an extension. The directory that will contain the image file must exist, and no part of the path or file name can include spaces.

- Install from a support patch image:

```
-installFromImage full_path_to_image_file -spKey support_patch_key
```

5 Installing Fixes

Read Fix Readmes

Read the readmes for all fixes you want to install before installing the fixes. The readmes describe the issues that have been fixed and provide cautions and warnings. Some readmes also provide steps you must perform before or after you install the fixes.

When you run Update Manager in GUI mode, you can view, save, or print the readmes for one or more fixes by selecting the fixes on the fix selection tree and then clicking the appropriate button.

When you use command line mode, you can view the readme for one fix by selecting the fix on the fix selection tree and selecting the View Readme option. You can view readmes for multiple fixes by selecting the fixes and then looking in the *Software AG_directory*/ install/fix/readme directory. You can also print readmes for selected fixes, or save them in a directory or a ZIP file (provide the full path).

Symlinks

If you used a symlink when you created your product installation, you must use the symlink to specify the product directory in the tasks below.

View Available Fixes

> **Note:** Fixes released after the Standard Maintenance period are only available via Update Manager to customers who have extended maintenance contracts with Software AG. Therefore you might see more fixes when you go to the Empower Fix Explorer page than are available to you through Update Manager.

1. Start Update Manager using the necessary parameters described in .

2. In the **Action** list, select **Fix Management** and then select **View available fixes**.

3. To view the latest fixes that are available for the products in a particular installation directory, specify that directory in the **Product directory** field.

   To view the latest fixes that are available for all products you have licensed from Software AG, leave the **Product directory** field blank.

4. Select **Next**.

Create or Add to a Fix Image

Create or Add to a Fix Image Based on All Licensed Products

1. On any online machine, start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27, and then choose to **Create or add to an image**.

2. Choose to create a complete image containing both Update Manager and product fixes and specify the directory and file name to use for the image file. Also choose the operating system on which you will run Update Manager and create the image.

   The table below lists the values for the supported operating systems.

Value	Operating System
AIX	IBM AIX
OSX	Apple Mac OS X
HP11IT	HP HP-UX Intel Itanium 2 (for product releases 10.3 and lower)
HP11	HP HP-UX PA-RISC
LNXS390X	Linux RHEL and SLES IBM System z
LNX	Linux RHEL and SLES x86
LNXAMD64	Linux RHEL and SLES x86-64 (EM64T, AMD64)
WNT	Microsoft Windows x86
W64	Microsoft Windows x86-64 (EM64T, AMD64)
SOL	Oracle Solaris SPARC
SOLAMD64	Oracle Solaris x86-64 (EM64T, AMD Opteron) (for product releases 10.3 and lower)

3. Select **Choose from: All licensed products**.

4. Provide your **Empower user name** and **Password**.

5. Select **Next**. Update Manager displays the fix selection tree. The tree shows the full list of available fixes on Empower for all products you have licensed from Software AG. If you are adding to an existing image, the tree shows the fixes that are already in the image, selected.

6. Select the fixes to add to the image and select **Next**. Update Manager lists the fixes you selected. If there are other fixes that are related to and required by the fixes you selected, Update Manager lists those fixes as well.

7. Select **Next**. Update Manager downloads the fixes into the image.

8. Copy the image to the machines on which you want to install fixes.

Create or Add to a Fix Image Based on a Model Installation Directory

1. Go to an online machine that has the installation directory on which you want to model the image.

2. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27, and then choose to **Create or add to an image**.

3. Choose to create a complete image containing both Update Manager and product fixes and specify the directory and file name to use for the image file. Also choose the operating system on which you will run Update Manager and create the image.

   The table below lists the values for the supported operating systems.

Value	Operating System
AIX	IBM AIX
OSX	Apple Mac OS X
HP11IT	HP HP-UX Intel Itanium 2 (for product releases 10.3 and lower)
HP11	HP HP-UX PA-RISC
LNXS390X	Linux RHEL and SLES IBM System z
LNX	Linux RHEL and SLES x86
LNXAMD64	Linux RHEL and SLES x86-64 (EM64T, AMD64)
WNT	Microsoft Windows x86
W64	Microsoft Windows x86-64 (EM64T, AMD64)

Value	Operating System
SOL	Oracle Solaris SPARC
SOLAMD64	Oracle Solaris x86-64 (EM64T, AMD Opteron) (for product releases 10.3 and lower)

4. Select **Choose from: Installed products only**.

5. For **Product directory**, specify the full path to the product installation directory.

6. Provide your **Empower user name** and **Password**.

7. Select **Next**. Update Manager displays the fix selection tree. The tree lists the products in the specified product installation directory, fixes that are already installed on products with the word (Installed), and the latest fixes that are available for the products on Empower. If you are adding to an existing image, the tree shows the fixes that are already in the image, selected.

> **Note:** If the tree displays no fixes available for install, then no fixes are available for the products in the specified installation directory.

8. Select the fixes to add to the image and select **Next**. Update Manager lists the fixes you selected. If there are other fixes that are required by the fixes you selected, and products to which the fixes apply exist in the specified installation directory, Update Manager lists those fixes as well.

> **Note:** If products to which required fixes apply do not exist in the specified installation directory, Update Manager will list those fixes at the end of the installation.

9. Select **Next**. Update Manager downloads the fixes into the image.

10. Copy the image to the machines on which you want to install fixes.

Create or Add to a Fix Image Based on an Inventory File

1. Go to the offline machine that has the installation directory on which you want to base the inventory file.

2. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27 and then choose to **Proceed to Update Manager**.

3. Choose to **Create inventory**. Specify the full path to the directory in which to generate an inventory file that will list the operating system, the products in the specified installation directory, and the fixes that are already installed on those products. Update Manager names the inventory file *operating_system machine_name suite_release yyyymmdd_hhmmss* .

4. Copy the inventory file to an online machine.

5. On the online machine, start Update Manager, and then choose to **Create or add to an image**.

6. Choose to create a complete image containing both Update Manager and product fixes and specify the directory and file name to use for the image file. Also choose the operating system on which you will run Update Manager and create the image. The operating system must be the same as the machine on which you generated the inventory file.

   The table below lists the values for the supported operating systems.

Value	Operating System
AIX	IBM AIX
OSX	Apple Mac OS X
HP11IT	HP HP-UX Intel Itanium 2 (for product releases 10.3 and lower)
HP11	HP HP-UX PA-RISC
LNXS390X	Linux RHEL and SLES IBM System z
LNX	Linux RHEL and SLES x86
LNXAMD64	Linux RHEL and SLES x86-64 (EM64T, AMD64)
WNT	Microsoft Windows x86
W64	Microsoft Windows x86-64 (EM64T, AMD64)
SOL	Oracle Solaris SPARC
SOLAMD64	Oracle Solaris x86-64 (EM64T, AMD Opteron) (for product releases 10.3 and lower)

7. Select **Choose from: Inventory file** and specify the inventory file name.

8. Provide your **Empower user name** and **Password**.

9. Select **Next**. Update Manager displays the fix selection tree. The tree lists the products in the inventory file and the fixes that are already installed on those products with the word (Installed). If you are adding to an existing image, the tree shows the fixes that are already in the image, selected.

10. Select the fixes to add to the image and select **Next**. Update Manager lists the fixes you selected. If there are other fixes that are required by the fixes you selected, and products to which the fixes apply exist in the specified installation directory, Update Manager lists those fixes as well.

> **Note:** If products to which required fixes apply do not exist in the specified installation directory, Update Manager will list those fixes at the end of the installation.

11. Select **Next**. Update Manager downloads the fixes into the image.

12. Copy the image to the machines on which you want to install fixes.

Install Fixes from Empower or a Fix Image

> **Note:** In clustered environments, Software AG recommends that you install all required fixes on each node.

1. Remove all previously installed support patches from the product or component before installing official fixes.

2. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27.

3. If you are installing from Empower, select **Fix Management** in the **Action** list, and then select **Install fixes from Empower**.

4. If you want to create a script, select **Also create script**. For **Script file name**, specify the full path to the file in which to save the new script. The directory that will contain the script must exist, and no part of the path or file name can include a space. You can specify any name for the file. You do not have to supply an extension; Update Manager will automatically add the extension .txt.

> **Important:** If you create a script while installing from an image, the script will run only if the image remains available under the same name and in the same location.

5. For **Product directory**, specify the full path to the product installation directory.

6. If you are installing from Empower, provide your **Empower user name** and **Password**.

7. Select **Next**.

   If you are installing from Empower, Update Manager tries to connect. If your company connects to the Internet through an HTTP or Socks proxy server, you must use that proxy server to install. Update Manager gives you the option to specify the proxy server connection settings.

   Update Manager displays the fix selection tree. The tree lists the following:

- ◼ The products in the specified product installation directory.

- ◼ If you are installing from Empower, the latest fixes that are available for the products.

- ◼ If you are installing from an image, the fixes in the image.

- ◼ Any fixes that are already installed on the products. The names of these fixes are followed by the word (Installed).

- ◼ Any fixes that have already been installed on the products, but must be reinstalled to update product infrastructure or to apply to new instances that have been added to existing products (for example, to Integration Server or My webMethods Server). The names of these fixes are followed by the word (Reinstall). These fixes are preselected and cannot be unselected.

If the tree does not display any fixes available for installation, then no fixes are available for the products in the specified installation directory.

8. Select the fixes to install.

The following table describes information about size and space requirements shown by Update Manager.

Field	Meaning
Size	Size of the currently selected fix.
Total Download Size	Sum of the sizes of all selected fixes.
Free space required	Four times the total download size. This is because Update Manager downloads fixes in a ZIP file, but when extracted the fixes are about two times the size of the ZIP file. In addition, Update Manager requires space to back up any previously installed fixes, to write temporary files, and to perform file operations.
Free space available	Space available on the target machine. If free space required exceeds this number, Update Manager will display an error message.

9. Select **Next**. Update Manager lists the fixes you selected. If there are other fixes that are related to and required by the fixes you selected, and products to which the fixes apply exist in the specified installation directory, Update Manager lists those fixes as well.

> **Note:** If products to which related required fixes apply do not exist in the specified installation directory, Update Manager will list those fixes at the end of the installation.

10. When you are done reviewing the list, select **Next**.

11. Depending on the products you are working with, the Update Manager might ask for product connection values. The Update Manager needs the connection values to shut down and act on the indicated products.

> **Note:** If multiple instances of a product exist on the machine, make sure the connection values you supply identify the instance that is in the specified product installation directory.

12. Select **Next**. Update Manager installs the fixes, and then displays the installation complete panel.

    If products for which there are related required fixes did not exist in the specified installation directory, Update Manager lists the fixes now. You must install them on their products as soon as possible.

> **Important:** If you do not install the listed related required fixes, your products will not work properly together.

13. Restart the products on which you installed fixes.

View Installed Fixes and Save the List to File

1. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27.

2. In the **Action** list, select **Fix Management** and then select **View installed fixes**.

3. For **Product directory**, specify the full path to the product installation directory.

4. Select **Next**. Update Manager displays a list of all installed fixes, by product, in the specified installation directory.

5. In GUI mode, if you want to save the fix list to file, select **Save Fix List**, then specify the full path to the file name (for example, *Software AG_directory*/UpdateManager directory/FixesInstalled.txt).

Uninstall Fixes

1. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27.

2. In the **Action** list, select **Fix Management** and then select **Uninstall fixes**.

3. If you want to create a script, select **Also create script**. For **Script file name**, specify the full path to the file in which to save the new script. The directory that will contain the script must exist, and no part of the path or file name can include a space. You can specify any name for the file. You do not have to supply an extension; Update Manager will automatically add the extension .txt.

4. For **Product directory**, specify the full path to the product installation directory.

5. Select **Next**. Update Manager displays all installed fixes.

6. Select the fixes to uninstall and then select **Next**.

    > **Note:** You cannot uninstall fixes that are shown as disabled or uninstallable on the fix selection tree.

    If the fixes you selected are not required by other installed fixes, Update Manager lists the fixes you selected.

    If the fixes you selected are required by other installed fixes, Update Manager displays a message to that effect. You must either unselect the required fixes or keep the required fix selections and also select all fixes that depend on the required fixes.

7. When you are done reviewing the list, select **Next**.

8. Depending on the products you are working with, the Update Manager might ask for product connection values. The Update Manager needs the connection values to shut down and act on the indicated products.

    > **Note:** If multiple instances of a product exist on the machine, make sure the connection values you supply identify the instance that is in the specified product installation directory.

9. Select **Next**. Update Manager uninstalls the fixes, and then displays the uninstallation complete panel.

10. Restart the products from which you uninstalled fixes.

Changing Passwords in Scripts

Update Manager automatically encrypts passwords you enter when you create a script. If you need to change the password in a script, follow the steps below.

1. Start Update Manager in command line mode (see "Starting Update Manager " on page 27).

2. In the **Action** list, select **Fix Management** and then select **Utility for password encryption**.

3. Enter the new password you want to use. The utility returns the encrypted password. Copy the encrypted password.

4. Open the script in a text editor, paste the new encrypted password over the old password, and save the script.

6 Deploying Support Patches

Create or Add to Support Patch Image

1. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27.

2. Provide your **Empower user name** and **Password**.

3. Select **Next**. Update Manager downloads the support patch into the image.

Install Support Patch from Empower or Image

1. Start Update Manager using the necessary parameters described in "Starting Update Manager " on page 27.

2. If you are installing from Empower, select **Support Patch** in the **Action** list, and then select **Install support patch from Empower**.

3. For **Product directory**, specify the full path to the product installation directory.

   > **Note:** If you used a symlink when you created your product installation, you must use the symlink to specify the product directory

4. If you are installing from Empower, provide your **Empower user name** and **Password**.

5. Select **Next**.

   If you are installing from Empower, Update Manager tries to connect. If your company connects to the Internet through an HTTP or Socks proxy server, you must use that proxy server to install. Update Manager gives you the option to specify the proxy server connection settings.

   Update Manager displays the support patch selection tree.

6. Select the support patch to install, select **Next**, and select **Next** again.

   You might see a message that says you must install a certain fix before you can install the support patch. Exit the current action, follow the instructions in "Installing Fixes" on page 31 to install the specified fix, and then follow the instructions in this section again to install the support patch.

7. Depending on the products you are working with, the Update Manager might ask for product connection values. The Update Manager needs the connection values to shut down and act on the indicated products.

   > **Note:** If multiple instances of a product exist on the machine, make sure the connection values you supply identify the instance that is in the specified product installation directory.

8. Select **Next**. Update Manager installs the support patch, and then displays the installation complete panel.