



IBM Software Group

IBM WebSphere Application Server V7.0 Feature Pack for Service Component Architecture V1.0.1

Silent installation and uninstallation



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This presentation describes how to use the Installation Manager to silently install and uninstall the IBM® WebSphere® Application Server Feature Pack for Service Component Architecture.

Agenda

- Silent installation
- Silent uninstallation



The first section of the presentation walks through how to silently install the feature pack, and the second section describes the silent uninstallation process. Silent installation and uninstallation are supported on all platforms where the IBM Installation Manager is supported. Some platforms, like HP-UX and Solaris, do not support the graphical interface for the Installation Manager, so silently installing and uninstalling is the only option.

Section

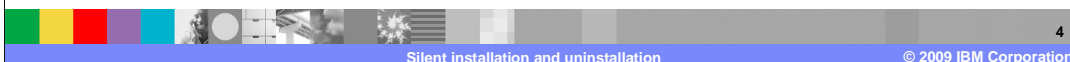
Silent installation



This section provides an overview of the silent installation process and walks you through the steps for silently installing the feature pack.

Silent installation process

- Install the Installation Manager
- Record a response file for the installation actions
- Create a keyring to use with authenticated repositories (optional, Web installation only)
- Invoke the Installation Manager with the response file



The general process for silent installation is the same as installing the product using the GUI. You need to have the Installation Manager installed, import the application server, then install the feature pack from some product repository. When using silent installation, you perform the product installation using response files instead of the graphical interface. The Installation Manager itself can be installed silently, and you can use it to record an XML-formatted response file. If you are going to be installing silently from a repository that requires authentication – like the Web repository hosted by IBM – you need to create a keyring file to store your authentication information. Once you have the response file and the keyring ready, run the Installation Manager program silently with the appropriate parameters to install the product. The rest of this section explores these silent installation steps in more detail.

Installing the Installation Manager

- IBM Installation Manager can be installed silently or by using the installation wizard
- To install the Installation Manager silently:
 - ▶ Open a command prompt to the directory that contains the Installation Manager installation image
 - ▶ Windows® sample command for installing as administrator:
 - `installc.exe --launcher.ini silent-install.ini -log C:\IM\IM-install-log.xml`
 - ▶ Windows sample command for installing as a non-administrative user:
 - `userinst.exe --launcher.ini user-silent-install.ini -log C:\IM\IM-install-log.xml`

IBM Installation Manager can be installed using a graphical installation wizard, or it can be installed silently. To install Installation Manager silently, open a command prompt to the directory that contains the Installation Manager installation image. You need to use a different installation program, depending on whether the user ID you are using to run the installation has administrative privileges. Privileges such as the user administrator, on Windows, or the user root on a Linux® system. If you are installing as a user with administrative privileges, use the installation program to start the installation, otherwise, use the program called userinst. When you run the installation command, you need to provide a launcher parameter that points to the appropriate configuration file – either silent-install.ini or user-silent-install.ini. These files contain a set of required parameters to launch the silent installation process. You do not need to create them; they are included as a part of the Installation Manager image. Optionally, you can include a log parameter on the installation command to log the results of the installation process to a separate log file. Note that on Windows, it is not supported to use install.exe for silent installs. Use installc.exe for silent installs instead.

Recording a response file

- A response file is an XML file that contains data read by Installation Manager in silent mode
- Response files can be recorded using the Installation Manager
 - ▶ Can also be created or modified by hand
- To record a response file, start the Installation Manager in record mode
 - ▶ Windows sample commands:
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIM.exe -record C:\IM\install.xml -skipInstall "C:\IM\temp-registry"`
- When done recording, the file passed in on the record parameter contains the recorded installation steps

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Silent installation and uninstallation

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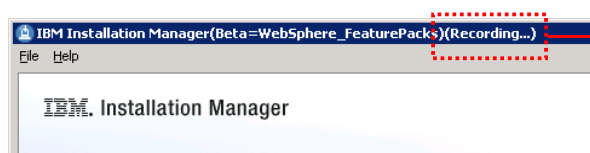
Response files for IBM Installation Manager are XML-formatted files that contain the data and instructions that the Installation Manager uses while installing, modifying, or uninstalling software packages silently. The Installation Manager allows you to record response files by capturing your actions to a designated XML file as you click through the interface. Response files can also be created or modified by hand. To record a response file, start the Installation Manager in record mode. To run in record mode, use the `-record` parameter when starting Installation Manager and supply the full path to the file in which you want your actions recorded. When you are done recording, the file passed in – in this case, `install.xml` – contains the recorded installation steps.

When you record a new response file, you can specify the `-skipInstall` parameter. Using this parameter has two benefits. First, no files are actually installed, and this speeds up the recording. Second, if you use a temporary data location with the `-skipInstall` parameter, Installation Manager writes the installation registry to the specified data location. It does this while recording rather than writing to the standard registry where Installation Manager is installed. When you start Installation Manager again without the `-skipInstall` parameter, you then can use your response file to import and install against the real installation registry. While recording response files, it is a good practice to use the `-skipInstall` parameter and provide a temporary installation registry.

Note that `-skipInstall` argument is used to ensure WebSphere application server is not in itself actually uninstalled but just removed from IM.

Recording mode

- With the Installation Manager in record mode, step through the wizard and perform the actions you want recorded
 - ▶ Adding repositories
 - ▶ Importing WebSphere Application Server
 - ▶ Installing the Feature Pack for SCA
- Because the Installation Manager was started in skipInstall mode, no installation actions are performed
 - ▶ Installation actions recorded in response file for later use



The Installation Manager is in record mode when it says **Recording...** at the top of the panel



You know that Installation Manager is running in record mode because the user interface will say **Recording** in the top title bar. With the Installation Manager in record mode, step through the wizard and perform the actions that you want recorded. For example, open File > Preferences > Repositories and add the location of a repository that contains the product binaries you want to install. Then, use the import wizard to import an installation of WebSphere Application Server into the Installation Manager. Finally, you can install the feature pack for SCA into the WebSphere Application Server package group. All of these steps can be recorded into a single response file. Because Installation Manager was started in skipInstall mode, no installation actions are performed, and the actual installation registry is not modified. The installation actions are recorded into a response file for later use.

Response file format for import, installation

```
<agent-input acceptLicense='true'>
  <profile installLocation='C:\IBM\WebSphere\AppServer' id='IBM WebSphere
Application Server - ND'>
    <data key='eclipseLocation' value='C:\IBM\WebSphere\AppServer' />
    <data key='cic.selector.nl' value='en' />
    <data key='user.cic.imported,com.ibm.websphere.ND.v70' value='WAS' />
  </profile>
  <import profile='IBM WebSphere Application Server - ND' type='WAS' />
  <server>
    <repository
location='http://download.boulder.ibm.com/ibmdl/pub/software/websphere/repos
itories/repository.config' />
  </server>
  <install modify='false'>
    <offering profile='IBM WebSphere Application Server - ND'
features='fep.sca.core.feature'
id='com.ibm.websphere.SCA.v101' />
  </install>
  <preference value='C:\Program Files\IBM\AppServer-Shared'
name='com.ibm.cic.common.core.preferences.eclipseCache' />
  ... additional preferences ...
</agent-input>
```

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Silent installation and uninstallation

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This page shows sample response file content for importing the application server and installing the Feature Pack for SCA. The first entry in the response file is the license acceptance parameter. In order to install any product packages, you need to accept the relevant license agreements. In the response file, the license acceptance statement at the top indicates that you are accepting the license terms for all of the products that you are installing with this response file. The next major section is a `<profile/>` element. This element defines the application server profile that you are importing into the Installation Manager, identifying the product edition and installation location and other associated data. The `<import/>` section defines the application server import operation. The `<server/>` section includes a list of all of the repositories that are configured in your Installation Manager. This list will include repositories that were configured when you started Installation Manager and any repositories that you add during the recording process. The `<install/>` section describes the actions for installing the feature pack for SCA. For example, defining which package group the feature pack gets installed into, the package name of the product being installed, and so forth. The last section of the response file contains several other Installation Manager preferences.

Notice that the structure of the response file is not platform specific. This means that you can, for example, record a response file on a Windows system using the Installation Manager GUI. You can then transfer that file over to a Solaris system. Then, modify the directory locations to reflect the target system. System such as providing the installation location of the application server installation you want to import. Finally use the response file to perform installation actions silently. This is especially useful for platforms like Solaris and HP-UX that do not support the Installation Manager GUI, or for any system that does not have a graphical desktop configured.

Creating a keyring file

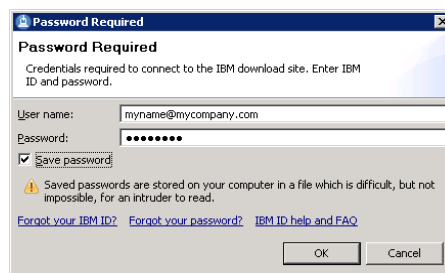
- To silently install from an authenticated repository, you need to provide a keyring file
 - ▶ The keyring file contains encrypted authentication information
 - ▶ Authentication is required to access the Web repository hosted by IBM
- Create a keyring file using the Installation Manager in console mode
 - ▶ Windows sample commands
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIM.exe -keyring C:\IM\im.keyring`



If you are installing silently from an authenticated repository, you need to provide a keyring file. The Web repositories hosted by IBM require authentication, so if you are planning to use them to install the product, you need a keyring file. The keyring file contains encrypted authentication information for the repositories you are trying to access. The file is not human readable and must be created using the Installation Manager GUI. If you are running on a system without a graphical interface, you can create the keyring file on another system where you have the Installation Manager installed. You can then copy the keyring over to your target system. The keyring files are not platform specific. To create a keyring file, start the Installation Manager with the `-keyring` parameter and provide the full path to the location where you want the keyring file to be written.

Creating a keyring file

- In the Installation Manager, perform an operation that accesses the repository, like selecting **Install**
 - ▶ When prompted for credentials, provide your user name and password
 - ▶ Select the **Save password** box, and click **OK**
- If not prompted to authenticate to your configured secure repository, clear out stored authentication credentials
 - ▶ **File > Preferences > Repositories**, then click the **Clear Credentials** button on the right



In the Installation Manager, you need to perform some action that accesses the repository – like selecting Install from the main panel to open the installation wizard. When you are prompted for credentials, provide your user name and password, then make sure you select the Save password box before clicking OK. If you are not prompted to authenticate to your configured secure repository, try clearing out your stored authentication credentials. Go to File > Preferences > Repositories and click the Clear Credentials button on the right. Then, try opening the installation wizard again – you should be prompted for your credentials. If not, check your repository configuration and make sure that you have the secure repository added to your repository list.

Running the silent installation

- Start the Installation Manager in console mode, providing the silent installation parameters
 - ▶ Windows sample commands:
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIMc.exe --launcher.ini silent-install.ini -input C:\IM\install.xml -log C:\IM\install-log.xml -keyring C:\IM\im.keyring`
- After a successful installation, control returns to the command prompt
 - ▶ Message is displayed describing profile management options
- If there are problems installing, error messages are shown in the terminal and log file



Now that you have your response file and keyring ready, you can start the silent installation process. Start the Installation Manager and provide the silent installation launcher parameter. The name of the response file that contains your installation parameters, the location of your keyring file if you are connecting to a secure repository and an optional log file parameter are also required. If the installation completes successfully, control returns to the command prompt and you see a message describing profile management options. If there are problems installing, error messages are displayed in the terminal and the log file.

Silent installation process – review

- Install the IBM Installation Manager
 - ▶ Using the wizard, or silently
- Create a response file for the silent installation
 - ▶ Record a response file from the Installation Manager, or create the XML by hand
- If needed, create a keyring file to store authentication credentials
- Run the Installation Manager with silent installation parameters



Use IBM Installation Manager to install the WebSphere Application Server Feature Pack for SCA silently. First, install Installation Manager, either silently or using the installation wizard. Create a response file for the silent installation – the file can be recorded with Installation Manager, or you can create the XML by hand. The response file needs to include the application server profile description and import statement. It also needs to include a list of repositories, a definition of the feature pack installation offering, a list of installation preferences, and a license acceptance statement. If you are installing from a secure repository, create a keyring file to store authentication credentials. Then, run the Installation Manager with silent installation parameters to install the feature pack.

Section

Silent uninstallation



This section describes how to use the Installation Manager to silently uninstall the feature pack for SCA.

Silent uninstallation process

- Create a response file for uninstalling the feature pack
- Uninstall the feature pack
- Create a response file for unimporting the application server (optional)
- Unimport the application server (optional)
- Uninstall the Installation Manager (optional)



Like silent installation, silent uninstallation is also done using XML-formatted response files. For uninstallation, first create a response file to uninstall the feature pack, then use Installation Manager to run the silent uninstallation. Next, create a response file for unimporting the application server from Installation Manager and use that response file to unimport the application server. Finally, you can uninstall the Installation Manager. If you do not want to uninstall the Installation Manager, you do not need to unimport the application server. The steps for creating an unimport response file, unimporting the application server, and uninstalling Installation Manager are all optional. You should only complete these steps if you want to remove the Installation Manager from your system and leave your WebSphere Application Server installation in place.

Creating a response file to uninstall

- To record a response file, start the Installation Manager in record mode
 - ▶ Windows sample commands:
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIM.exe -record C:\IM\uninstall.xml -skipInstall "C:\IM\temp-registry"`
 - ▶ Use the same temporary registry location used to create the silent installation response file
- When the Installation Manager starts, step through the wizard for uninstalling the feature pack
 - ▶ Go to **Uninstall**, select only the feature pack, and finish walking through the wizard
 - ▶ The feature pack does not get uninstalled, but the response file contains information about the uninstall steps



Recording a response file for uninstallation works the same as recording an installation response file – start the Installation Manager in record mode and then use the GUI to click through the steps that you want to record. For the feature pack uninstallation recording session, be sure to point to the same temporary registry location that you used to create the silent installation response file. This registry already contains entries for the feature pack and the application server, so the required installation packages are displayed properly during recording. To record the uninstallation steps, start the Uninstall wizard in Installation Manager, select only the feature pack, and finish walking through the wizard. Using the `-skipInstall` parameter allows you to record the uninstallation response file without actually uninstalling the product. The uninstallation steps get recorded into the response file – in this case, `uninstall.xml`.

Modify the response file to unaugment profiles

- During uninstallation, any profiles that have been created or augmented with the SCA templates must be unaugmented
- You can either unaugment the profiles before uninstallation or add an unaugment key to your response file
- To modify your response file, add a profile entry similar to the one below to the XML file:

```
<profile installLocation= "C:\IBM\websphere\AppServer"  
  id="IBM WebSphere Application Server - ND">  
  <data value="true"  
    key="user.confirm.unaugmented,com.ibm.websphere.SCA.v101" />  
</profile>
```

During uninstallation, any profiles that have been created or augmented with the SCA templates must be unaugmented or deleted. You can either unaugment the profiles before uninstallation or add an unaugment key to your response file. If you want to use your response file and unaugment the profiles as a part of the uninstallation process, you need to modify your response file by hand. Open the file in a text editor and add a profile entry that defines the key for unaugmenting SCA profiles. A sample of this profile entry is given on this slide.

Response file format, uninstallation

```
<?xml version="1.0" encoding="UTF-8"?>
<agent-input>
  <server>
    <repository
      location='http://download.boulder.ibm.com/ibmdl/pub/software/websphere/repos
      itories/repository.config' />
    </server>
    <profile installLocation= "C:\IBM\WebSphere\AppServer"
      id="IBM WebSphere Application Server - ND">
      <data value="true"
        key="user.confirm.unaugment,com.ibm.websphere.SCA.v101" />
    </profile>
    <uninstall modify='false'>
      <offering profile='IBM WebSphere Application Server - ND'
        features='fep.sca.core.feature'
        id='com.ibm.websphere.SCA.v101' />
    </uninstall>
    <preference value='C:\Program Files\IBM\AppServer-Shared'
      name='com.ibm.cic.common.core.preferences.eclipseCache' />
    ... additional preferences ...
</agent-input>
```



This page shows the sample responds file format for uninstalling the Feature Pack for SCA. This file includes a server list of the repositories configured in Installation Manager, an uninstall element that defines the product package being uninstalled, and a list of preferences. Just like with the installation response files, the file format of the uninstallation response file is platform neutral so you can transfer it across systems.

Silently uninstalling the feature pack

- Start the Installation Manager in silent mode with the response file for uninstalling the feature pack
 - ▶ Windows sample commands:
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIMc.exe --launcher.ini silent-install.ini -input C:\IM\uninstall.xml`
- When the command completes, the feature pack is uninstalled



To uninstall the feature pack, start the Installation Manager in silent mode with the uninstallation response file. When the command completes, the feature pack is uninstalled.

Creating a response file to unimport

- To record a response file to unimport the application server, start the Installation Manager in record mode
 - ▶ Windows sample commands:
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIM.exe -record C:\IM\unimport.xml -skipInstall "C:\IM\temp-registry"`
 - ▶ Use the same temporary registry location used to create the silent installation response file
- When the Installation Manager starts, step through the wizard for unimporting the application server
 - ▶ Go to **Uninstall**, select the application server package, and finish walking through the wizard
 - ▶ The application server does not get unimported, but the response file contains information about the unimport steps



If you want to uninstall the Installation Manager, you need to first unimport the application server from the Installation Manager. Unimporting the application server can also be done silently, using response files. To record the response file, start Installation Manager in record mode – again, being careful to use the same temporary registry you have used when recording your other response files. When the Installation Manager starts, step through the Uninstall wizard, select the application server package, and finish walking through the wizard. Then close the Installation Manager. The application server does not get unimported, but the response file contains information about the unimport steps.

Note that `-skipInstall` argument is used to ensure WebSphere application server is not actually uninstalled but just removed from IM.

Response file format for unimport

```
<?xml version="1.0" encoding="UTF-8"?>
  <agent-input>
    <server>
      <repository
location='http://forth.beaverton.ibm.com/software/rational/repositorymanager
/repositories/wassca' />
    </server>
    <uninstall modify='false'>
      <offering profile='IBM WebSphere Application Server - ND'
features='core.feature,profile.appserver.feature,samples,consoleLanguagesSup
port.feature,runtimeLanguagesSupport.feature,import.productProviders.feature
,import.configLauncher.feature' id='com.ibm.websphere.ND.v70' />
    </uninstall>
    <preference value='C:\Program Files\IBM\AppServer-Shared'
name='com.ibm.cic.common.core.preferences.eclipseCache' />
    ... additional preferences ...
  </agent-input>
```

This page shows a sample of the response file format for unimporting the application server from the Installation Manager. This file defines a server list of repositories, and uninstall element that defines the application server profile being unimported, and a list of other installation preferences.

Silently unimporting the application server

- Start the Installation Manager in silent mode, with the response file for unimporting the application server
 - ▶ Windows sample commands:
 - `cd C:\Program Files\IBM\Installation Manager\eclipse`
 - `IBMIMc.exe --launcher.ini silent-install.ini -skipInstall "C:\Documents and Settings\All Users\Application Data\IBM\Installation Manager" -input C:\IM\unimport.xml`
- Be sure to point to the actual data directory for the Installation Manager
- When the command finishes, the application server package is removed from the Installation Manager



To silently unimport the application server, start the Installation Manager in silent mode, providing the response file as input. Just like when you are unimporting the application server from the Installation Manager using the GUI, you need to start Installation Manager in `-skipInstall` mode and provide the actual data directory for the Installation Manager. When this command completes, the application server package is removed from the Installation Manager.

Silently uninstalling the Installation Manager

- Go to the uninstall directory in the Installation Manager's data location
- Data directory location varies by platform and user

Platform	Installation type	Typical data location
Windows 2003	Administrator	C:\Documents and Settings\All Users\ Application Data\IBM\Installation Manager
Windows 2003	Non-administrator	C:\Documents and Settings\ <user_name>\ Application Data\IBM\Installation Manager</user_name>
Windows 2008 and Vista	Administrator	C:\ProgramData\IBM\Installation Manager
Windows 2008 and Vista	Non-administrator	C:\Users\ <user name="">\AppData\Roaming\ IBM\Installation Manager</user>
Linux, AIX®, HP-UX, Solaris	Root	/var/ibm/InstallationManager
Linux, AIX, HP-UX, Solaris	Non-root	<user_home>/var/ibm/InstallationManager

- Run the uninstallation program
 - ▶ `uninstallc.exe --launcher.ini silent-uninstall.ini`

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The Installation Manager itself can also be uninstalled silently. To uninstall Installation Manager silently, go the uninstall directory in the Installation Manager's data location. The data location varies by platform and by the authority whoever installed the Installation Manager. Default data locations for administrative and non-administrative users are provided in the table on this page. From the uninstall directory, run the uninstallation program in silent mode. When the command completes, the Installation Manager has been uninstalled.

Silent uninstallation process – review

- Create a response file for uninstalling the feature pack then uninstall the feature pack
- Create a response file for unimporting the application server then unimport the application server
- Uninstall the Installation Manager



Silent uninstallation relies on XML-formatted response files. To tear down your feature pack environment, start by creating a response file for uninstalling the feature pack, then silently uninstall the feature pack. Next, create a response file for unimporting the application server and then unimport the application server from the Installation Manager. Finally, you can uninstall the Installation Manager.

Section

Summary



This section provides a summary of the materials covered in this presentation.

Summary

- The Installation Manager supports silent installation and uninstallation, using XML response files
- Response files can be recorded with the Installation Manager or created and edited by hand
- Graphical user interface is required at some point during silent installations



The Installation Manager supports silent installation and uninstallation of the IBM WebSphere Application Server Feature Pack for SCA. Silent installation and uninstallation operations are driven by XML response files. These response files can be recorded using the Installation Manager GUI, or they can be created and edited by hand.

Note that graphical user interface (GUI) is required at least once during silent installs. Actions like accessing the repositories require generating keyring files which can be done easier through the GUI.

Reference

- Installation Manager information center: silent installation

http://publib.boulder.ibm.com/infocenter/install/v1r2/index.jsp?topic=/com.ibm.silentinstall12.doc/topics/t_silent_installIM_IMinst.html



References

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