

# CA SiteMinder®

## Web Agent Option Pack Guide

r12.0 SP3



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## CA Technologies Product References

This document references the following CA Technologies products:

- CA SiteMinder®

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- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

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# Chapter 1: Introduction

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This section contains the following topics:

[Features Provided by the Web Agent Option Pack](#) (see page 7)

## Features Provided by the Web Agent Option Pack

The Web Agent Option Pack is a stand-alone component that must be installed separately from SiteMinder. It installs Federation Web Services (FWS) on an application server or Web server.

**Note:** Unlike the Web Agent Option Pack, the Policy Server Option Pack is no longer a stand-alone component but an integral part of the Policy Server and its installation.

The Web Agent Option Pack supports the following SiteMinder features:

### Federation Security Services

#### SAML 1.0, 1.1, 2.0 and WS-Federation

SAML and WS-Federation are standards that define the exchange of authentication and authorization information between entities in a network using assertions. To support these standards, the Web Agent Option Pack is required.

#### Federation Web Services (FWS)

Federation Web Services is an application that enables production and consumption of SAML assertions. FWS is installed by the Web Agent Option Pack on a server that is connected to the Policy Server.

#### SAML Affiliate Agent

The SAML Affiliate Agent is a stand-alone component that provides authentication and session management for a consumer site or affiliate that does not have a SiteMinder Policy Server and Web Agent to protect its resources. The Web Agent Option Pack installs Federation Web Services, which allows the SAML Affiliate Agent to communicate with the Policy Server.

**Note:** For more information about Federation Security Services, see the *Federation Security Services Guide*.

### **eTelligent Rules**

eTelligent Rules are policy expressions that combine Boolean operators and user-defined variables and that are evaluated at runtime. As policy expressions, eTelligent Rules allow administrators to implement fine-grained access control of protected resources on a SiteMinder-protected Web site. To support POST variables, the Web Agent Option Pack is required.

**Note:** For more information about eTelligent Rules, see the *Policy Server Configuration Guide*.

# Chapter 2: Installation Requirements and Considerations

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This section contains the following topics:

[Components Required for Federation Security Services](#) (see page 9)

[Components Required for eTelligent Rules](#) (see page 9)

[Installation Requirements](#) (see page 10)

[Version Compatibility](#) (see page 11)

[Environment Variables Added by the Installation](#) (see page 12)

## Components Required for Federation Security Services

The following components are required for Federation Security Services:

- Policy Server
- Application Server or Web Server

**Note:** An application server with built-in Web server, such as JBOSS, WebLogic or WebSphere, is required to deploy Federation Web Services. Alternately, a Web server with application server plug-in, such as ServletExec, can be used.

- Web Agent Option Pack

## Components Required for eTelligent Rules

The following components are required for eTelligent Rules:

- Policy Server
- Web Agent Option Pack

The Web Agent Option Pack is required to support eTelligent Rules that contain POST variables.

## Installation Requirements

Before you can install the Web Agent Option Pack, you must install the following:

- ServletExec or other supported application server

For ServletExec, the Web Agent Option Pack must be installed on the same Web server as the Web Agent.

For the supported ServletExec versions, see the Platform Support Matrix at the [Technical Support](#) site.

**Note:** Be sure to apply the most current hot fixes for ServletExec. Without the hot fixes, Federation Web Services does not work with ServletExec. To obtain the hot fixes, go to the [New Atlanta Communications](#) web site.

- A supported Java Development Kit (JDK).

This JDK is required even if you are using an application server that ships with a JDK or JRE.

- (Linux) Be sure that the required Linux libraries are installed.

**Note:** You can install the Web Agent Option Pack without the Web Agent. However, the Web Agent must be installed before you can use Federation Security Services.

## Required Linux Libraries

If you are installing or upgrading a Linux version of this component, the following is required on the host system:

```
compat-libstdc++-33.3.2.3-patch_version.i386.rpm
```

Install this rpm to be sure that you have the appropriate 32-bit C run-time library for your operating system.

## Repair ServletExec's CLASSPATH for the Web Agent Option Pack (Windows)

If you install the Web Agent Option Pack on a Windows system with ServletExec ISAPI and you get an error message, such as Class not found, when accessing an existing servlet or JSP file, verify that the ServletExec classpath is correct.

If the classpath is correct and you still get an error, you can repair the classpath.pref file.

### To repair ServletExec's CLASSPATH

1. Type the following URL in the address window of a Web browser:

`http://myserver.myorg.org/servlet/admin`

The ServletExec Admin Web page opens.

2. In the Virtual Machine menu, select classpath to open the Classpath page.
3. Click Submit.
4. Restart the Sun Java System Web server or IIS Admin services.  
This forces ServletExec to write the classpath.pref.
5. If you are using Windows 2000, stop the IIS Admin services, then start the World Wide Web Publishing service without manually restarting the IIS Admin services. If you still get an error, you can repair the classpath.pref file, as follows:
  - a. Open the classpath.pref file in a text editor.
  - b. Collapse all entries to one line, using semi-colons to separate them.
  - c. Save the file.
  - d. Restart the Web server.

## Version Compatibility

The version of the Web Agent Option Pack must match the Policy Server version, including the Service Pack and CR version. In addition, if the Web Agent and Web Agent Option Pack are installed on the same machine, they must also be the same version, including the Service Pack and CR version.

## Environment Variables Added by the Installation

The installation of the Web Agent Option Pack sets the following environment variables:

- `NETE_WA_OPACK = "INSTALLED"`
- `NETE_WA_PATH =`  
`$NETE_WA_ROOT$$/bin;$NETE_WA_ROOT$$/bin$/thirdparty;`  
`$NETE_JRE_ROOT$$/bin;$NETE_JRE_ROOT$$/bin$/server`
- `NETE_WA_CLASSPATH = $NETE_WA_ROOT$$/java$/smconapi.jar`

# Chapter 3: Install the Web Agent Option Pack

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This section contains the following topics:

[Installation Modes](#) (see page 13)

[Run the Web Agent Option Pack Installer](#) (see page 13)

## Installation Modes

The Web Agent Option Pack can be installed on a Web server running ServletExec or other supported application server, such as WebLogic, WebSphere, or JBoss.

You can install the Web Agent Option Pack in one of the following modes:

- GUI Mode  
GUI mode uses a graphical installation wizard to install the Web Agent Option Pack.
- Console Mode (UNIX platforms only)  
Uses command line questions about the installation in a UNIX console window.
- Unattended Mode  
Installs the Web Agent Option Pack without user intervention. Use the unattended installation mode to automate additional installations on other machines in your network.

**Note:** You must install the Web Agent Option Pack using GUI or Console mode *before* running an unattended installation. The initial installation creates a properties file that contains the installation settings for the unattended installation.

## Run the Web Agent Option Pack Installer

The Web Agent Option Pack can be installed as a stand-alone product. The installer will try to find an installed Web Agent, but if it cannot, it prompts you to continue or cancel. If you continue, the installer prompts you for an installation path and installs the Option Pack in the location that you specify.

Install the Web Agent Option Pack using the method for your platform:

- Windows systems: install in GUI mode.

**Important!** If you are installing the Web Agent Option Pack on a Windows system immediately after installing the Web Agent, reboot your machine first.

- UNIX systems: install in GUI or console mode.

To install in console mode, you execute the Option Pack binary with the `-i console` command argument.

### To install the Web Agent Option Pack in GUI or console mode

1. Stop the Web or application server and exit any applications that are running.
2. Log in to CA's [Technical Support](#) site.
3. Click Download Center.
4. Search the Download Center for the installation kit you need.
5. Run the installation program according to your platform.

- **Windows:** Double-click the executable.
- **UNIX:** At the command prompt, type one of the following commands:

- **GUI Mode**

```
./binary_filename
```

- **Console Mode**

```
./binary_filename -i console
```

**Example** To run the installation in GUI mode on an AIX platform, enter:

```
./ca-wa-opack-12.0-sp3-aix.bin
```

**Note:** If needed, use the `chmod` command to add execute permissions to the installation file, for example:

```
chmod +x ca-wa-opack-12.0-sp3-sol.bin
```

6. Follow the installation dialogs and prompts to complete the installation.
7. When the installation is complete, choose whether to reboot your system now or later; then click Done.

To reinstall the Option Pack, re-run the executable.

# Chapter 4: Unattended Mode Installation

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This section contains the following topics:

[How to Run an Unattended Mode Installation](#) (see page 15)

## How to Run an Unattended Mode Installation

After the Web Agent Option Pack is installed on one system, you can automate installations on other Web or application servers using the Web Agent Option Pack's unattended mode installation. An unattended mode installation lets you install or uninstall the Web Agent Option Pack without any user intervention.

To run an unattended mode installation, you must:

1. Run an installation in GUI or Console mode to install the unattended installation properties file.
2. Modify the properties file.
3. Run the unattended installation.

This chapter covers the following topics:

- [Prepare an Unattended Mode Installation](#) (see page 15)
- [Run an Unattended Mode Installation](#) (see page 16)
- [Stop an Unattended Mode Installation in Progress](#) (see page 17)

## Prepare an Unattended Mode Installation

An unattended mode installation uses the `ca-wa-opack-installer.properties` file to propagate the Option Pack installation set-up across all servers in your network. You can define the installation parameters in the properties file then copy the properties file and the Web Agent Option Pack executable file to any applicable server in your network. After the files are copied, you can run an unattended installation.

### To prepare an unattended mode installation

1. Run an initial installation of the Web Agent Option Pack in GUI or Console mode.  
This installation will install the `ca-wa-opack-installer.properties` file.

2. Open the `ca-wa-opack-installer.properties` file, and if needed, modify the settings. The properties file is in the directory `web_agent_opack_home/install_config_info`.

**USER\_INSTALL\_DIR**

Specifies the Web Agent Option Pack's installation location.

**USER\_REQUESTED\_RESTART**

Specifies restarting the machine after installation.

**Note:** These default values were saved in the properties file during the initial installation.

3. Save the properties file.

## Run an Unattended Mode Installation

After completing the preparation steps, you can run an unattended mode installation.

**To run an unattended mode installation**

1. From a system where the Web Agent Option Pack is already installed, copy the following files to a local directory on the system where you want to install the Option Pack.

- Web Agent Option Pack executable or binary
  - `ca-wa-opack-12.0-sp2-platform.exe`
  - `ca-wa-opack-12.0-sp2-operating_system.bin`
- `ca-wa-opack-installer.properties`

2. Open a console window and navigate to the location where you copied the files.
3. Execute the following command:

```
agent_executable -f properties_file -i silent
```

**Windows example:**

```
ca-wa-opack-12.0-sp2-win32.exe -f ca-wa-opack-installer.properties -i silent
```

**Solaris example:**

```
./ca-wa-opack-12.0-sp2-sol.bin -f ca-wa-opack-installer.properties -i silent
```

**Note:** These examples assume that you are running the installation from the directory containing the executable and properties files. If you are not running the installation from this directory, specify the full path to these files. If there are spaces in the directory path, enclose the entire path in quotation marks.

A status box opens and shows the progress of the unattended installation. When the installation is complete, the command prompt is redisplayed.

4. Determine that the installation completed successfully by viewing the log file `CA_SiteMinder_Option_Pack_12.0-sp2_for_Web_Agent_InstallLog.log`. This file is located in the directory `web_agent_opack_home/install_config_info`.

**Note:** You can run an unattended mode installation that reinstalls the Web Agent Option Pack on the original system where it was installed in GUI or console mode.

## Stop an Unattended Mode Installation in Progress

To manually stop an unattended mode installation in progress, follow the instructions for your platform:

### Windows

Open the Windows Task Manager, and stop the following two processes:

- `ca-wa-opack-12.0-sp3-win32.exe`
- `wa_option_pack.exe`

### UNIX

Type `Ctrl+C`.



# Chapter 5: Uninstall the Web Agent Option Pack

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This section contains the following topics:

[Uninstall the Web Agent Option Pack from Windows Systems](#) (see page 19)

[Uninstall the Web Agent Option Pack from UNIX Systems](#) (see page 19)

## Uninstall the Web Agent Option Pack from Windows Systems

You can uninstall the Web Agent Option Pack from Windows Systems.

### To uninstall the Web Agent Option Pack from Windows systems

1. Stop the Web server, and exit any applications that are running.
2. Open the Windows Control Panel.
3. Double-click Add or Remove Programs.  
The Add or Remove Programs pane opens.
4. Select CA SiteMinder Option Pack 12.0 SP3 for Web Agent, and click Remove.  
A dialog box opens, prompting you to confirm the uninstallation.
5. Click Uninstall.  
The Web Agent Option Pack is removed.
6. Stop and restart the Web server.

## Uninstall the Web Agent Option Pack from UNIX Systems

You can uninstall the Web Agent Option Pack from UNIX systems in GUI or console mode. To uninstall in console mode, execute the Option Pack binary file with the command argument "-i console".

### To uninstall the Web Agent Option Pack from Unix systems

1. Stop the Web server, and exit any applications that are running.
2. Open a console window.

3. Add the location of the JDK to the PATH environment variable, as follows:

```
PATH=jdk_home/bin:${PATH}
export PATH
```

**Note:** *jdk\_home* is the location of the JDK. This step eliminates the error message which states that the Java virtual machine cannot be found.

4. Navigate to the installed location of the Web Agent.

**Example:** `/opt/ca/webagent/`

5. At the prompt, type one of the following:

**GUI Mode:** `./ca-wa-opack-uninstall.sh`

**Console Mode:** `./ca-wa-opack-uninstall.sh -i console`

6. Review the dialog box that prompts you to confirm the removal of the Option Pack; then click Uninstall.

The Web Agent Option Pack is now removed from your system.

# Chapter 6: Upgrade the Web Agent Option Pack

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This section contains the following topics:

[Perform an Option Pack Upgrade](#) (see page 21)

## Perform an Option Pack Upgrade

The version of the Web Agent Option Pack must match the Policy Server version, including the Service Pack and CR version. In addition, if the Web Agent and Web Agent Option Pack are installed on the same machine, they must also be the same version, including the Service Pack and CR version.

**Important!** When upgrading, the program automatically creates new back-up configuration files and overwrites the existing configuration files.

### To upgrade the Web Agent Option Pack

1. Uninstall the current Option Pack. For instructions, see one of the following topics:
  - [Uninstall the Web Agent Option Pack from Windows Systems](#) (see page 19)
  - [Uninstall the Web Agent Option Pack from UNIX Systems](#) (see page 19)
2. Upgrade the Web Agent to r12.0 SP3.  
**Note:** For more information, see the *Web Agent Installation Guide*.
3. Upgrade the Web Agent Option Pack to r12.0 SP3.  
**Note:** The installation program can also be run as an upgrade.



# Appendix A: International Support

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An *internationalized* product is an English product that runs correctly on local language versions of the required operating system and required third-party products and that supports local language data for input and output. Internationalized products also support the ability to specify local language conventions for date, time, currency, and number formats.

A *translated* product (sometimes referred to as a *localized* product) is an internationalized product that includes local language support for the product's user interface, online help and other documentation, as well as local language default settings for date, time, currency, and number formats.

In addition to the English release of this product, CA SiteMinder r12.0 SP3 Web Access Manager supports *only* those languages listed in the following table.

**Important! If you run the product in a language environment *not* listed in the table, you can experience problems.**

Language	Internationalized	Translated
Brazilian-Portuguese	Yes	No
Chinese (Simplified)	Yes	No
Chinese (Traditional)	Yes	No
Czech	Yes	No
Danish	Yes	No
Dutch	Yes	No
Finnish	Yes	No
French	Yes	No
German	Yes	No
Greek	Yes	No
Hungarian	Yes	No
Italian	Yes	No
Japanese	Yes	No
Korean	Yes	No
Norwegian	Yes	No
Polish	Yes	No

<b>Language</b>	<b>Internationalized</b>	<b>Translated</b>
Russian	Yes	No
Spanish	Yes	No
Swedish	Yes	No
Turkish	Yes	No

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