CA SiteMinder®

SDK Release Notes

r12.5

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Contact CA Support

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Chapter 1: SDK Release Notes

This document contains operating system support, installation considerations, known issues, fixes, and information about contacting CA Technical Support.

Chapter 2: Operating System Support

To learn about operating system support for the SDK, see the SiteMinder Platform Support Matrix for SiteMinder r12 on the Technical Support site. This matrix includes supported platforms for SiteMinder r12.5.

The SDK platform support matrix is typically included with the SiteMinder Platform Support Matrix.

Note: Some platforms in previous releases might possibly no longer be supported.

Chapter 3: System Requirements

Ensure that you have the required JRE version installed. For the required version, refer to the SiteMinder Platform Support Matrix for r12 on the Technical Support site.

Applications developed with the SiteMinder SDK r12.5 cannot be run against Policy Server versions prior to v6.0. Applications developed with a previous version of the SDK and that worked with the SiteMinder Policy Server v5.0, v5.5, and 6.x will continue to work with Policy Server r12.5.

Chapter 4: Installation Considerations

Considerations for Localized Installations

When installing the SiteMinder SDK on a system with a non-English operating system, remember that the smpolicyapi is an UTF-8 based API . The library expects UTF-8 encoded strings as input. It returns UTF-8 encoded strings as output parameters.

Install the SDK on Windows

No special accounts or privileges are required to install the SiteMinder SDK. Instructions for installing a first version of the SDK and upgrading from an existing version are the same.

Do not install the SiteMinder SDK in the installation path with the Policy Server or Web Agent. The SDK can possibly have different versions of the same support libraries.

To install the SDK

1. Close all programs.
2. Download the SDK from the CA Technical Support site.
3. Navigate to the win32 directory and run the following program:

   ```
   ca-sdk-12.52sp1-win32.exe
   ```

Follow the wizard.

Windows Server 2008 System Considerations

For Windows Server 2008, the User Account Control feature helps prevent unauthorized changes to your system. When the User Account Control feature is enabled on the Windows Server 2008 operating environment, prerequisite steps are required before doing any of the following tasks with a SiteMinder component:

- Installation
- Configuration
- Administration
- Upgrade

Note: For more information about which SiteMinder components support Windows Server 2008, see the SiteMinder Platform Support matrix.

To run SiteMinder installation or configuration wizards on a Windows Server 2008 system

1. Right–click the executable and select Run as administrator.

   The User Account Control dialog appears and prompts you for permission.
2. Click Allow.

   The wizard starts.

To access the SiteMinder Policy Server Management Console on a Windows Server 2008 system

1. Right–click the shortcut and select Run as administrator.

   The User Account Control dialog appears and prompts you for permission.
2. Click Allow.

   The Policy Server Management Console opens.

To run SiteMinder command–line tools or utilities on a Windows Server 2008 system

1. Open your Control Panel.
2. Verify that your task bar and Start Menu Properties are set to Start menu and *not* Classic Start menu.
3. Click Start and type the following in the Start Search field:

   `Cmd`
4. Press Ctrl+Shift+Enter.

   The User Account Control dialog appears and prompts you for permission.

5. Click Continue.

   A command window with elevated privileges appears. The title bar text begins with Administrator:

6. Run the SiteMinder command.

More information:

Contact CA Technologies (see page 3)

Install the SDK on UNIX in GUI mode

No special accounts or privileges are required to install the SiteMinder SDK. Instructions for installing a first version of the SDK and upgrading from an existing version are the same.

Do not install the SiteMinder SDK in the same path as the Policy Server or Web Agent. The SDK can possibly have different versions of the same support libraries.

Note: When installing the SiteMinder SDK on Linux systems, be sure that you have the appropriate 32.bit C runtime library for your operating environment (that is, libstdc++.so.6). You can obtain this library by installing the following rpm:

- compat-gcc-34-c++-3.4.6-*patch_version*.i386.rpm

On UNIX, the installation executable file is ca-sdk-12.52sp1-*platform*.bin.

You can install the SDK in GUI mode or console mode.

To Install the SDK in UNIX GUI Mode

1. Close all programs.
2. Download the SDK from the CA Technical Support site.
3. In a UNIX shell, navigate to the directory that corresponds to your platform (solaris, aix, linux, or hpux).

4. Enter the following command:

   `sh ./ca-sdk-12.52sp1-OS.bin`

   OS

   Replace *OS* with sol, aix, linux, suse, or hp.

   For example, on Solaris platforms, the command is:

   `sh ./ca-sdk-12.52sp1-sol.bin`

5. Follow the wizard.

Install the SDK on UNIX in Console Mode

No special accounts or privileges are required to install the SiteMinder SDK. Instructions for installing a first version of the SDK and upgrading from an existing version are the same.

Do not install the SDK in the installation path with the Policy Server or Web Agent. The SDK can possibly have different versions of the same support libraries.

Note: When installing the SiteMinder SDK on Linux systems, be sure that you have the appropriate 32.bit C runtime library for your operating environment (that is, libstdc++.so.6). You can obtain this library by installing the following rpm:

- compat-gcc-34-c++-3.4.6-*patch_version*.i386.rpm

On UNIX, the installation executable file is ca-sdk-12.52sp1-*platform*.bin.

You can install the SDK in GUI mode or console mode.

To Install the SDK in UNIX Console Mode

1. Close all programs.
2. Download the SiteMinder SDK from the CA Technical Support site.
3. In a UNIX shell, navigate to the directory that corresponds to your platform (solaris, aix, linux, or hpux).

4. Enter the following command:

   ```
   sh ./ca-sdk-12.52sp1-platform.bin -i console
   ```

   platform

   Replace *platform* with sol, aix, linux, suse, or hp.

   For example, on Solaris platforms, the command is:

   ```
   sh ./ca-sdk-12.52sp1-sol.bin -i console
   ```

Follow the wizard.

Unattended Installation of the SDK on Windows

After the SiteMinder SDK has been manually installed, you can install it on the same system, or a different system, using the silent installation mode. An unattended installation uses one command that points to a properties file for installation preferences. The default properties template file (sdk-installer.properties in the install_config_info folder) can be modified to suit your requirements.

To install the SDK in silent mode on Windows

1. Navigate to the directory where the SDK executable is located.
2. Enter the following command at a command prompt:

   ```
   ca-sdk-12.52sp1-win32.exe -f sdk-installer.properties -i silent
   ```

   -f

   Specifies the name of the SDK installer properties file. If the properties file is not in the same directory as the installation executable file, specify the relative path to the properties file.

   -i

   Specifies the installation mode.

The installation is complete.

Unattended Installation of SDK on UNIX

After the SiteMinder SDK has been manually installed, you can install it on the same system, or a different system, using the silent installation mode. An unattended installation uses one command that points to a properties file for installation preferences. The default properties template file (sdk-installer.properties in the install_config_info folder) can be modified to suit your requirements.

To install the SDK in silent mode on UNIX

1. Navigate to the directory where the SDK executable is located.
2. Enter the following command at a command prompt:

   `sh ./ca-sdk-12.52sp1-platform.bin -f sdk-installer.properties -i silent`

   -f

   Specifies the name of the SDK installer properties file. If the properties file is not in the same directory as the installation executable file, specify the relative path to the properties file.

   -i

   Specifies the installation mode.

   The installation is complete.

Uninstallation of the SDK

To uninstall the SiteMinder SDK from the UNIX console

1. In a console window, navigate to the install_config_info/ca-sdk-uninstall directory within the SDK installation—for example:

   /export/ca/sdk/install_config_info/ca-sdk-uninstall

2. Run the following command:

   `./uninstall -i console`

3. When prompted, press Enter to begin the uninstallation.

   Note: When you are uninstalling the SDK in UNIX, make sure the JRE is in the PATH variable. If the JRE is not in the PATH variable, the following error occurs:

   No Java virtual machine could be found from your PATH environment variable. You must install a VM prior to running this program.

To set the JRE in your PATH, run the following two commands:

1. PATH=$PATH:*JRE_location*/bin

   For example: PATH=$PATH:/usr/bin/jdk141/jre/bin

2. export PATH

To uninstall the SiteMinder SDK from Windows:

1. From the Control Panel, double-click Add/Remove Programs.
2. Select SiteMinder SDK r12.5 and click Change/Remove.

Follow the screen prompts, and click Close when done.

Chapter 5: General Considerations

This section contains the following topics:

Policy Management API (see page 19)
SSO Support in Custom Agents (see page 19)
Custom Agents and SiteMinder r12.5 (see page 20)
LDAP SDK Integration (see page 20)

Policy Management API

Significant changes to the Policy Management API occurred beginning with SiteMinder v4.5—for example, the introduction of the OID as an object's unique identifier, and the addition of functions such as Sm_PolicyApi_Init() and Sm_PolicyApi_Release().

Developers who continue to use Policy Management APIs from a release prior to SiteMinder v4.5 should refer to the documentation that accompanied the earlier release. Further:

- SiteMinder SDK v6.0 SP 2 and later versions do not support Policy Management APIs from releases prior to SiteMinder v5.0.
- Policy Server v5.x does not support applications built with Policy Management APIs from releases prior to SiteMinder v4.5.

SSO Support in Custom Agents

When enabled with single sign-on support, custom agents can accept the SMSESSION single sign-on cookie that is created by a standard SiteMinder Web Agent of a previous release.

To accept an SMSESSION cookie created by a custom agent, the Web Agent must be upgraded to at least:

QMR	Supported SiteMinder Agent
4.x QMR4	SiteMinder v4.x Agents
5.x QMR1	SiteMinder v5.x and v6.x Agents

To enable a SiteMinder v4.x, v5.x, or v6.x Web Agent with the appropriate QMR upgrade to accept SMSESSION cookies created by a custom agent, the Web Agent configuration file (LocalConfig.conf with IIS servers or WebAgent.conf with other servers) or central configuration object (for v5.x or higher) must contain the following entry:

```
AcceptTPCookie="yes"
```

Set AcceptTPCookie as follows:

- With 4.x QMR4 Agents and above, add AcceptTPCookie="yes" directly in the standard agent's Agent configuration file.
- With 5.x QMR1 Agents and above, add the entry to the standard agent's Agent Configuration Object if the AllowLocalConfig parameter for that object is set to no. If AllowLocalConfig is set to yes, you can set AcceptTPCookie in the Web Agent configuration file.

Custom Agents and SiteMinder r12.5

When you build a custom agent with SDK r12.5, you can run the custom Agent only against v6.0 up through r6.0 SP 5, and r12 Policy Servers.

Agents built with the SiteMinder Agent API from SDK 5.5 can be used with SiteMinder Policy Servers v5.x and v6.0 up through r6.0 SP 5.

LDAP SDK Integration

Beginning with SiteMinder r12.5, the Policy Server is integrating with the Mozilla LDAP SDK for C SDK, version 6.0.7 (version 6.0.4 for HP-UX). If your custom code had been linked with an older version of the LDAP SDK, link with the new SDK. Older versions were named the iPlanet Directory SDK, or the Netscape LDAP SDK.

Chapter 6: SDK Known Issues

This section contains the following topics:

Installation of ETPKI Libraries (see page 22)
Patch Required for Custom Agents Running on HP-UX (see page 23)
Running C Sample Program with a 4.x Agent Requires Setting an Environment Variable [156186] (see page 23)
Configuration Issue with the smpolicyapi Samplr on UNIX platforms (see page 23)
Hierarhical Realms Not Supported in the Java PM API (see page 23)
Constants Missing from Java Policy Management API (13348) (see page 24)
Attributes Terminated with a Space in Java (13712) (see page 24)
Extra ServerDef Object Created with Java AgentAPI.getConfig() (14841) (see page 24)
Java SmPolicyApiImpl.search() cannot search for a Domain Object (15133) (see page 25)
Sort Order in a Java SmDMSCurson Object Cannot Be Empty (15317) (see page 25)
General Password Validation Errors in C (16787) (see page 25)
Java Method getConfig() Fails on Windows (39780) (see page 25)

Installation of ETPKI Libraries

The SiteMinder r12 SDK installer does not install the ETPKI libraries, which can lead to errors when you run the SDK sample applications. You must install the ETPKI libraries separately when installing the SDK on a system without other SiteMinder components.

The ETPKI r4.x (CAPKI) installer runs in silent mode without any user interaction. The ETPKI installer has the following usage:

```
setup.exe {install|remove} caller=callerID [options...]
```

callerID

Specifies the parent application that is installing ETPKI r4.x (CAPKI). This identifier is user-defined; it specifies the parent product. When multiple subcomponents of a product rely on CAPKI, each component uses a different identifier.

Limits: 255 characters

Options

instdir=*user_supplied_directory*

Specifies the initial installation directory. The installer considers this option only when these libraries are the first CA shared component on this system.

verbose/veryverbose

Enables diagnostic output with more or less detail.

UNIX only

env={none|user|all}

Specifies whether you can set environment variables for the specified user as follows:

- none — No environment variables set (default)
- user — The current user only (SHOME/.profile)
- all — all users (/etc/profile)

Using the env=user or env=all option, the ETPKI installer creates the following environment variables:

- CASHCOMP — Points to the parent directory of the CAPKI installation
- CALIB — Points to the $CASHCOMP/lib directory
- CABIN — Points to the $CACHCOMP/bin

Example

```
[root@talon etpki-install-64]# ./setup install caller=01010101
instdir=/home/CA/etpki verbose env=user
```

For more information, see the readme.txt file included with the SDK installation in the etpki-install subfolder.

Patch Required for Custom Agents Running on HP-UX

Before you install a custom agent created with the Agent API on an HP-UX machine, install the following HP patch on the agent machine:

PHSS_24303 Id & linker tools cumulative patch

This patch is available at the HP web site.

Running C Sample Program with a 4.x Agent Requires Setting an Environment Variable [156186]

Setting the environment variable for FIPs only is required for running the SmAgentAPI 'C' Samples for the 4x Agent connection to work. Make sure that this environment variable is set as follows:

```
export CA_SM_PS_FIPS140=ONLY.
```

After setting this environmental variable the SmAgentAPI 'C' Samples started working.

This setting is not required for 5.x agents.

Configuration Issue with the smpolicyapi Samplr on UNIX platforms

Building the smpolicyapi sample program on Unix/Linux systems requires access to several Policy Server shared libraries and the NETE_PS_ROOT environment variable set to point to them. This may be accomplished by installing the Policy Server on the system with the SDK and using ca_ps_env.ksh to set the environment.

Hierarhical Realms Not Supported in the Java PM API

Hierarchical realms are not supported in the Java Policy Management API.

Constants Missing from Java Policy Management API (13348)

The Java class com.netegrity.sdk.policyapi.SmPasswordPolicy is missing the following constants:

Constant Name	Constant Value
Sm_PasswordPolicy_StopPriorityChaining	0x00000080
Sm_PasswordPolicy_ExpireDisablePassword	0x00000100
Sm_PasswordPolicy_FailuresDisablePassword	0x00000200
Sm_PasswordPolicy_ForceCase	0x00000400
Sm_PasswordPolicy_CaseSelect	0x00000800
Sm_PasswordPolicy_CaseBits	0x00000c00
Sm_PasswordPolicy_StripLeadingWhiteSpace	0x00001000
Sm_PasswordPolicy_StripTrailingWhiteSpace	0x00002000
Sm_PasswordPolicy_StripFlankingWhiteSpace	0x00003000
Sm_PasswordPolicy_StripEmbeddedWhiteSpace	0x00004000
Sm_PasswordPolicy_WhiteSpaceBits	0x00007000
Sm_PasswordPolicy_PreProcessBits	0x00007c00

Workaround: If you need to set these values, use the literal values directly instead of referencing the constant name.

Attributes Terminated with a Space in Java (13712)

When decodeSSOToken() returns, each attribute (byte array) returned in the AttributeList parameter is terminated with a space character.

Workaround: Before you use the session specification and session id attributes in a login() call to validate the session, trim the terminating space from each byte array.

Extra ServerDef Object Created with Java AgentAPI.getConfig() (14841)

If the Java AgentAPI.getConfig() method is used to read the configuration file, it creates an InitDef object having one more ServerDef object than is actually present. The extra object does not point to any Policy Server and is just an empty object.

Java SmPolicyApiImpl.search() cannot search for a Domain Object (15133)

In package com.netegrity.sdk.policyapi, the method PolicyApiImpl.search() returns an empty list when the object type to search for is type Domain, even if valid search parameters are given.

Sort Order in a Java SmDMSCurson Object Cannot Be Empty (15317)

In the Java DMS API, any call (such as search(), getGroups(), and getMembers()) that uses an SmDmsCursor object with an empty sort order will fail.

General Password Validation Errors in C (16787)

Password validation error IDs are reported in the nMsgId parameter of Sm_PolicyApi_GetPasswordMsg(). Specific error IDs are enumerated in Sm_PolicyApi_PasswordMsgId_t. Any error ID that is not enumerated in Sm_PolicyApi_PasswordMsgId_t should be considered a general password validation error. General password validation error IDs are reported in nMsgId when Sm_PolicyApi_GetPasswordMsg() returns -38.

Java Method getConfig() Fails on Windows (39780)

In the Java class AgentAPI, the method getConfig() fails because it cannot locate the specified agent. This error only occurs on Windows platforms.

Chapter 7: Defects Fixed

DMS API displays Error while updating User Property (159572/161328)

Symptom:

DMS API displays the following error message while updating the user property:

```
Exception: Not authorized to perform this operation because 0
```

Solution:

This issue has been fixed.

Chapter 8: Documentation

This section contains the following topics:

SiteMinder Bookshelf (see page 29)
Release Numbers on Documentation (see page 29)

SiteMinder Bookshelf

Complete information about SiteMinder is available from the SiteMinder bookshelf. The SiteMinder bookshelf lets you:

- Use a single console to view all documents published for SiteMinder.
- Use a single alphabetical index to find a topic in any document.
- Search all documents for one or more words.

View and download the SiteMinder bookshelf from the CA Technical Support site. You do not need to log in to the site to access the bookshelf.

If you plan to download the documentation, we recommend that you download it before beginning the installation process.

Release Numbers on Documentation

The release number on the title page of a document does not always correspond to the current product release number; however, all documentation delivered with the product, regardless of release number on the title page, supports the current product release.

The release number changes only when a significant portion of a document changes to support a new or updated product release. If no substantive changes are made to a document, the release number does not change. For example, a document for r12 can still be valid for r12 SP1. Documentation bookshelves always reflect the current product release number.

Occasionally, we must update documentation outside of a new or updated release. To indicate a minor change to the documentation that does not invalidate it for any releases that it supports, we update the edition number on the cover page. First editions do not have an edition number.