

IBM® Security Access Manager for Enterprise Single  
Sign-On  
Version 8.2.2

*Context Management Integration Guide*

**IBM**



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**Note**

Before using this information and the product it supports, read the information in "Notices" on page 9.

**Edition notice**

**Note:** This edition applies to version 8.2.2 of IBM Security Access Manager for Enterprise Single Sign-On, (product number 5724-V67) and to all subsequent releases and modifications until otherwise indicated in new editions.

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## About this publication

*IBM Security Access Manager for Enterprise Single Sign-On Context Management Integration Guide* provides information about installing, configuring, and testing the Context Management integrated solution in each client workstation.

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## Accessibility

Accessibility features help users with a physical disability, such as restricted mobility or limited vision, to use software products successfully. With this product, you can use assistive technologies to hear and navigate the interface. You can also use the keyboard instead of the mouse to operate all features of the graphical user interface.

For additional information, see "Accessibility features" in the *IBM Security Access Manager for Enterprise Single Sign-On Planning and Deployment Guide*.

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## Technical training

For technical training information, see the following IBM Education website at <http://www.ibm.com/software/tivoli/education>.

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## Support information

IBM Support provides assistance with code-related problems and routine, short duration installation or usage questions. You can directly access the IBM® Software Support site at <http://www.ibm.com/software/support/probsub.html>.

*IBM Security Access Manager for Enterprise Single Sign-On Troubleshooting and Support Guide* provides details about:

- What information to collect before contacting IBM Support.
- The various methods for contacting IBM Support.
- How to use IBM Support Assistant.
- Instructions and problem-determination resources to isolate and fix the problem yourself.

**Note:** The **Community and Support** tab on the product information center can provide additional support resources.

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## Chapter 1. Context Management

The healthcare industry uses IBM Security Access Manager for Enterprise Single Sign-On with Context Management. Its integration with existing solutions enhances clinical operations.

For more information:

- “Context Management system overview”
- “Context Management solution”

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### Context Management system overview

The Health Level Seven (HL7) Clinical Context Object Workgroup (CCOW) is a vendor independent standard that uses context management. Use context management to share information across different healthcare applications.

With context management, a clinician can have access to the same clinical information stored in different healthcare applications. Examples of clinical information are the identity of a patient, identity of a user, or a particular encounter with a patient.

When a clinician logs on to one application within a group of disparate healthcare applications in CCOW, the clinician is also logged on to all the other applications within the group. Similarly, when the clinician selects a patient in one application, the same patient is selected in all the applications.

Clinical Context Object Workgroup is rapidly gaining popularity in the healthcare industry because it provides clinicians with faster access to patient records across multiple applications.

Carefx is one of the vendors that provide a CCOW-compliant context management tool called Fusionfx Context Manager (FCM). IBM integrates its Context Management solution to provide sign-on automation to all Clinical Context Object Workgroup and non-Clinical Context Object Workgroup applications.

AccessAgent sets the IBM Security Access Manager for Enterprise Single Sign-On user name as the user context in Carefx FCM after the user logs on to AccessAgent. Fusionfx Context Manager manages the mapping of individual application logon accounts for the user name. FCM automates the sign-on to individual Clinical Context Object Workgroup applications by using the mapped accounts.

There is no suitable authentication mechanism between AccessAgent and Fusionfx Context Manager. The Carefx Fusionfx Context Manager assumes that AccessAgent manages the user authentication before the user context is set to Fusionfx Context Manager.

---

### Context Management solution

The IBM Security Access Manager for Enterprise Single Sign-On with Context Management provides single sign-on services to all Clinical Context Object Workgroup and non-Clinical Context Object Workgroup applications.

Carefx uses a model that allows all user logons to go through the IBM Security Access Manager for Enterprise Single Sign-On. When a user logs on, the IBM Security Access Manager for Enterprise Single Sign-On executes a Carefx synchronization process called FccSync that can integrate effectively with FCC. When FCC is alerted about a logon, it calls IBM Security Access Manager for Enterprise Single Sign-On through the SSO API to obtain the name of the current user. FCC then sets the user name into the CCOW context.

FCC does not use a command-line argument containing the user name, which is not secure. Instead, FCC calls into the IBM Security Access Manager for Enterprise Single Sign-On to extract the user name.

When a user logs off, IBM Security Access Manager for Enterprise Single Sign-On executes the same Carefx synchronization process, or FccSync, to notify FCC that the user logged off. The FCC then calls the IBM Security Access Manager for Enterprise Single Sign-On, which sets a null user name to FCC, indicating that there is no currently logged on user.

AccessAgent uses the user logon and logoff scripts to launch the Carefx synchronization process. Logon and logoff scripts can be defined per user through AccessAdmin. For an enterprise deployment, the logon and logoff scripts are included in the policy template. The scripts are included so that all users are enabled with Carefx automatically after sign up.

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## Chapter 2. Context Management installation and uninstallation

Install the Context Management tool in client computers.

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### Installing Context Management

To use context management, you must install Carefx Crypto Utility, Carefx Fusionfx Context Channel, and Carefx Fusionfx Context Enabler. You must also edit the Carefx registry and properties file.

#### Before you begin

Make sure that:

- You have AccessAgent version 8.2.2 on your computer.
- You have a copy of the Context Management installer package or `integrated_installer.zip`. The integrated installer version is 1.3.3.
- Your computer has at least 200 MB free hard disk space.

**Important:** If you have a previous version of Context Management, uninstall the earlier version and delete or rename its folder. See “Uninstalling Context Management” on page 5.

#### Procedure

1. Download the latest installer of your context management system from the FTP or download site.  
If the installer is in a compressed file, create a folder in your local computer and extract the compressed file into that folder. For example: `<INSTALLDIR>`.
2. Navigate to the `Integrated_Installer` folder.
3. Select **Start > Run**.
4. Navigate to `<INSTALLDIR>\FCM Enabler\Setup.exe`.
5. Run the program and retain the default values for the installation options.
6. Navigate to `<INSTALLDIR>\CfxCrypto\Cfx- Crypto.exe`.
7. Run the program and retain the default values for the installation options.
8. Navigate to `<INSTALLDIR>\Context Channel\Setup.exe`.
9. Run the program and retain the default values for the installation options.
10. Navigate to the `<INSTALLDIR>\WTS Session` folder.
11. Copy its contents to the `<PROGDIR>\Carefx\cm-sdk\cm-client` folder.

#### Note:

- `<PROGDIR>\Carefx` is the base installation folder for Carefx.
  - Overwrite the existing files with the copied files that have the same name in this folder.
12. In the `<PROGDIR>\Carefx\cm-sdk\cm-client` folder, double-click the `contextsession.reg` file.
  13. When prompted, click **Yes** to add the registry file into the system registry.
  14. Click **OK**.
  15. Register the COM components.
    - a. Select **Start > Run**.

- b. Enter `cmd` in the **Open** field.
  - c. Click **OK**.
  - d. Type `cd <PROGDIR>\Carefx\cm-sdk\cm-client\`.
  - e. Press **Enter**.
  - f. Type `regsvr32 CarefxSessionUtil.dll`.
  - g. Press **Enter**. A dialog box is displayed, indicating that the registration of the library file is complete.
  - h. Click **OK**.
  - i. Type `regsvr32 CMWtsUtil.dll`.
  - j. Press **Enter**. A dialog box is displayed, indicating that the registration of the library file is complete.
  - k. Click **OK**.
  - l. Type `exit` then press **Enter**.
16. Navigate to the `<INSTALLDIR>\Properties` folder.
  17. Copy the `cmsecurity.properties` file to the `<PROGDIR>\Carefx\cm-sdk\properties` folder.  
Overwrite the existing files with the copied files that have the same name in this folder.
  18. Navigate to the `<PROGDIR>\Carefx\cm-sdk\Fusionfx\Context Channel\` folder.
  19. Right-click the `fcc.ini` file, and then click **Edit**.
  20. Add the following lines in the `[CCOW]` section:  

```
userSubjectSuffix=desktop
patientSubjectSuffix=desktop
encounterSubjectSuffix=
```
  21. Save the file then close the window.
  22. Navigate to the `<INSTALLDIR>\Launcher` folder.
  23. Copy the contents of the entire folder to the `<PROGDIR>\Carefx` folder.
  24. Create a shortcut of `<PROGDIR>\Carefx\CM-sdk\cm-server\startcs.cmd`.
  25. Paste the shortcut in **Start menu > All Programs > Startup** so that the program runs when Windows starts.
  26. Enable the logon or logoff script policies in the IMS Server for the Carefx user.  
To know which VBScript to add, see Chapter 3, "Testing Context Management," on page 7.
  27. Restart the computer.
  28. Open the Registry Editor and export the registry location `[HKLM\Software\Encentuate\AccessAgent\Integration\Carefx\FusionFx]`.
  29. Open the exported registry file.
  30. Replace Encentuate with IBM\ISAM ESSO. For example:  

**Original location**  
`[HKEY_LOCAL_MACHINE\SOFTWARE\Encentuate\AccessAgent\Integration\Carefx\FusionFx]`

**Updated location**  
`[HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ISAM ESSO\AccessAgent\Integration\Carefx\FusionFx]`
  31. Double-click the registry file to add to the registry.
  32. Verify that `[HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ISAM ESSO\AccessAgent\Integration\Carefx\FusionFx]` is created in the Registry Editor.

## What to do next

After you install Context Management, you can upgrade AccessAgent to a later version. The upgrade does not affect the current installation of Context Management. See "Upgrading the AccessAgent" in the *IBM Security Access Manager for Enterprise Single Sign-On Installation Guide*.

After you upgrade AccessAgent, edit the PATH environment variable to include the `<aa_home>`. For example: `C:\Program Files\IBM\ISAM ESSO\AA`.

### To edit the PATH environment variable:

1. Right-click **My Computer** and then click **Properties**.
2. Click **Advanced > Environment Variables**.
3. Click an existing variable PATH either from the User variables or System variables, and then click **Edit** to change its value.

---

## Uninstalling Context Management

To uninstall context management, you must remove the Carefx-related programs, delete the corresponding registry entries and folder.

### Procedure

1. Select **Start > Control Panel**.
2. Double-click **Add or Remove Programs** to remove the following Carefx-related programs:
  - Carefx Crypto Utility
  - Carefx Fusionfx Context Channel
  - Carefx Fusionfx Context Enabler
3. Select **Start > Run**.
4. Enter `regedit` in the **Open** field. The Registry Editor window is displayed.
5. Navigate to these folders and delete the following registry entries:
  - `HKEY_LOCAL_MACHINE\Software\Carefx`
  - `[HKEY_LOCAL_MACHINE\SOFTWARE\IBM\ISAM ESSO\AccessAgent\Integration\Carefx\FusionFx]`
6. Navigate to the `<PROGDIR>\Carefx` folder, and delete this folder.
7. Navigate to **Start > All Programs > Startup**.
8. Right-click the shortcut and click **Delete**.
9. Disable the logon or logoff script policies in the IMS Server for the Carefx users.
10. Remove the VBScript in the logon and logoff script sections that are related to Carefx.

To know which VBScript to remove, see Chapter 3, "Testing Context Management," on page 7.
11. Restart the computer.



---

## Chapter 3. Testing Context Management

Verify whether IBM Security Access Manager for Enterprise Single Sign-On with Context Management functions as expected.

Testing Context Management involves:

- Testing logons
- Testing logoffs
- Successfully starting the executable files that are installed with the system

---

### Testing functionality

The logon and logoff script policies in the IMS Server are enabled when a user can log on and log off successfully.

#### Procedure

1. Add the following batch script for the logon and logoff script sections.

```
Logon script:  
@echo off  
<Install Dir> /AccessAgent\Integration\Carefx\Fusionfx\LogonCarefx.exe
```

```
Logoff script:  
@echo off  
C:\Program Files\IBM\ISAM ESSO\AA\AccessAgent\Integration\Carefx\  
Fusionfx\LogoffCareFx.exe
```

2. Log on to AccessAgent.

The Wallet of the user synchronizes the logon or logoff scripts from the IMS Server.

**Important:** The logon script does not run during the first logon to AccessAgent after the script is defined on the IMS Server.

3. For subsequent logons to AccessAgent, the user is automatically logged on to the Context Manager through the logon script.

---

### Additional verifications

When a user logs on or logs off from AccessAgent, the user must be also automatically logged on or logged off from the Context Manager.

Do the following verifications:

- To verify whether a user is logged on to Context Manager, right-click the gray-blue icon of the **context channel** system tray.  
The message Status:Linked and User:<ISAM ESSO user name> is displayed.
- To verify whether a user is logged off from the Context Manager, right-click the gray-blue icon of the **context channel** system tray.  
The message Status:Unlinked and User: is displayed.
- Open any of the executable files from the <PROGDIR>\Carefx\Launcher directory. The executable files display the same user name that is logged on to the application.

**Important:** The applications that are provided at <PROGDIR>\Carefx\Launcher folder are for demonstration purposes only.



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## Glossary

This glossary includes terms and definitions for IBM Security Access Manager for Enterprise Single Sign-On.

The following cross-references are used in this glossary:

- See refers you from a term to a preferred synonym, or from an acronym or abbreviation to the defined full form.
- See also refers you to a related or contrasting term.

To view glossaries for other IBM products, go to [www.ibm.com/software/globalization/terminology](http://www.ibm.com/software/globalization/terminology) (opens in new window).

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### A

#### **account data**

The logon information required to verify an authentication service. It can be the user name, password, and the authentication service which the logon information is stored.

#### **account data bag**

A data structure that holds user credentials in memory while single sign-on is performed on an application.

#### **account data item**

The user credentials required for logon.

#### **account data item template**

A template that defines the properties of an account data item.

#### **account data template**

A template that defines the format of account data to be stored for credentials captured using a specific AccessProfile.

**action** In profiling, an act that can be performed in response to a trigger. For example, automatic filling of user name and password details as soon as a sign-on window displays.

#### **Active Directory (AD)**

A hierarchical directory service that enables centralized, secure management

of an entire network, which is a central component of the Microsoft Windows platform.

#### **Active Directory credential**

The Active Directory user name and password.

#### **Active Directory password synchronization**

An IBM Security Access Manager for Enterprise Single Sign-On feature that synchronizes the ISAM ESSO password with the Active Directory password.

#### **active radio frequency identification (active RFID)**

A second authentication factor and presence detector. See also radio frequency identification.

#### **active RFID**

See active radio frequency identification.

**AD** See Active Directory.

#### **administrator**

A person responsible for administrative tasks such as access authorization and content management. Administrators can also grant levels of authority to users.

**API** See application programming interface.

#### **application**

A system that provides the user interface for reading or entering the authentication credentials.

#### **application policy**

A collection of policies and attributes governing access to applications.

#### **application programming interface (API)**

An interface that allows an application program that is written in a high-level language to use specific data or functions of the operating system or another program.

**audit** A process that logs the user, Administrator, and Helpdesk activities.

#### **authentication factor**

The device, biometrics, or secrets required as a credentials for validating digital identities. Examples of authentication

factors are passwords, smart card, RFID, biometrics, and one-time password tokens.

**authentication service**

A service that verifies the validity of an account; applications authenticate against their own user store or against a corporate directory.

**authorization code**

An alphanumeric code generated for administrative functions, such as password resets or two-factor authentication bypass.

**auto-capture**

A process that allows a system to collect and reuse user credentials for different applications. These credentials are captured when the user enters information for the first time, and then stored and secured for future use.

**automatic sign-on**

A feature where users can log on to the sign-on automation system and the system logs on the user to all other applications.

---

**B**

**base distinguished name**

A name that indicates the starting point for searches in the directory server.

**base image**

A template for a virtual desktop.

**bidirectional language**

A language that uses a script, such as Arabic and Hebrew, whose general flow of text proceeds horizontally from right to left, but numbers, English, and other left-to-right language text are written from left to right.

**bind distinguished name**

A name that specifies the credentials for the application server to use when connecting to a directory service. The distinguished name uniquely identifies an entry in a directory.

**biometrics**

The identification of a user based on a physical characteristic of the user, such as a fingerprint, iris, face, voice, or handwriting.

---

**C**

**CA** See certificate authority.

**CAPI** See cryptographic application programming interface.

**Card Serial Number (CSN)**

A unique data item that identifies a hybrid smart card. It has no relation to the certificates installed in the smart card

**CCOW**

See Clinical Context Object Workgroup.

**cell**

A group of managed processes that are federated to the same deployment manager and can include high-availability core groups.

**certificate**

In computer security, a digital document that binds a public key to the identity of the certificate owner, thereby enabling the certificate owner to be authenticated. A certificate is issued by a certificate authority and is digitally signed by that authority. See also certificate authority.

**certificate authority (CA)**

A trusted third-party organization or company that issues the digital certificates. The certificate authority typically verifies the identity of the individuals who are granted the unique certificate. See also certificate.

**CLI** See command-line interface.

**Clinical Context Object Workgroup (CCOW)**

A vendor independent standard, for the interchange of information between clinical applications in the healthcare industry.

**cluster**

A group of application servers that collaborate for the purposes of workload balancing and failover.

**command-line interface (CLI)**

A computer interface in which the input and output are text based.

**credential**

Information acquired during authentication that describes a user, group associations, or other security-related identity attributes, and that is used to perform services such as authorization, auditing, or delegation. For example, a

user ID and password are credentials that allow access to network and system resources.

**cryptographic application programming interface (CAPI)**

An application programming interface that provides services to enable developers to secure applications using cryptography. It is a set of dynamically-linked libraries that provides an abstraction layer which isolates programmers from the code used to encrypt the data.

**cryptographic service provider (CSP)**

A feature of the i5/OS™ operating system that provides APIs. The CCA Cryptographic Service Provider enables a user to run functions on the 4758 Coprocessor.

**CSN** See Card Serial Number.

**CSP** See cryptographic service provider.

---

**D**

**dashboard**

An interface that integrates data from a variety of sources and provides a unified display of relevant and in-context information.

**database server**

A software program that uses a database manager to provide database services to other software programs or computers.

**data source**

The means by which an application accesses data from a database.

**deployment manager**

A server that manages and configures operations for a logical group or cell of other servers.

**deployment manager profile**

A WebSphere® Application Server runtime environment that manages operations for a logical group, or cell, of other servers.

**deprovision**

To remove a service or component. For example, to deprovision an account means to delete an account from a resource. See also provision.

**desktop pool**

A collection of virtual desktops of similar

configuration intended to be used by a designated group of users.

**directory**

A file that contains the names and controlling information for objects or other directories.

**directory service**

A directory of names, profile information, and machine addresses of every user and resource on the network. It manages user accounts and network permissions. When a user name is sent, it returns the attributes of that individual, which might include a telephone number, as well as an email address. Directory services use highly specialized databases that are typically hierarchical in design and provide fast lookups.

**disaster recovery**

The process of restoring a database, system, policies after a partial or complete site failure that was caused by a catastrophic event such as an earthquake or fire. Typically, disaster recovery requires a full backup at another location.

**disaster recovery site**

A secondary location for the production environment in case of a disaster.

**distinguished name (DN)**

The name that uniquely identifies an entry in a directory. A distinguished name is made up of attribute:value pairs, separated by commas. For example, CN=person name and C=country or region.

**DLL** See dynamic link library.

**DN** See distinguished name.

**DNS** See domain name server.

**domain name server (DNS)**

A server program that supplies name-to-address conversion by mapping domain names to IP addresses.

**dynamic link library (DLL)**

A file containing executable code and data bound to a program at load time or run time, rather than during linking. The code and data in a DLL can be shared by several applications simultaneously.

---

## E

### **enterprise directory**

A directory of user accounts that define IBM Security Access Manager for Enterprise Single Sign-On users. It validates user credentials during sign-up and logon, if the password is synchronized with the enterprise directory password. An example of an enterprise directory is Active Directory.

### **enterprise single sign-on (ESSO)**

A mechanism that allows users to log on to all applications deployed in the enterprise by entering a user ID and other credentials, such as a password.

**ESSO** See enterprise single sign-on.

### **event code**

A code that represents a specific event that is tracked and logged into the audit log tables.

---

## F

### **failover**

An automatic operation that switches to a redundant or standby system or node in the event of a software, hardware, or network interruption.

### **fast user switching**

A feature that allows users to switch between user accounts on a single workstation without quitting and logging out of applications.

### **Federal Information Processing Standard (FIPS)**

A standard produced by the National Institute of Standards and Technology when national and international standards are nonexistent or inadequate to satisfy the U.S. government requirements.

**FIPS** See Federal Information Processing Standard.

### **fix pack**

A cumulative collection of fixes that is released between scheduled refresh packs, manufacturing refreshes, or releases. A fix pack updates the system to a specific maintenance level.

### **FQDN**

See fully qualified domain name.

### **fully qualified domain name (FQDN)**

In Internet communications, the name of a host system that includes all of the subnames of the domain name. An example of a fully qualified domain name is rchland.vnet.ibm.com. See also host name.

---

## G

**GINA** See graphical identification and authentication.

**GPO** See group policy object.

### **graphical identification and authentication (GINA)**

A dynamic link library that provides a user interface that is tightly integrated with authentication factors and provides password resets and second factor bypass options.

### **group policy object (GPO)**

A collection of group policy settings. Group policy objects are the documents created by the group policy snap-in. Group policy objects are stored at the domain level, and they affect users and computers contained in sites, domains, and organizational units.

---

## H

**HA** See high availability.

### **high availability (HA)**

The ability of IT services to withstand all outages and continue providing processing capability according to some predefined service level. Covered outages include both planned events, such as maintenance and backups, and unplanned events, such as software failures, hardware failures, power failures, and disasters.

### **host name**

In Internet communication, the name given to a computer. The host name might be a fully qualified domain name such as mycomputer.city.company.com, or it might be a specific subname such as mycomputer. See also fully qualified domain name, IP address.

### **hot key**

A key sequence used to shift operations



between different applications or between different functions of an application.

**hybrid smart card**

An ISO-7816 compliant smart card which contains a public key cryptography chip and an RFID chip. The cryptographic chip is accessible through contact interface. The RFID chip is accessible through contactless (RF) interface.

---

**I**

**interactive graphical mode**

A series of panels that prompts for information to complete the installation.

**IP address**

A unique address for a device or logical unit on a network that uses the Internet Protocol standard. See also host name.

---

**J**

**Java Management Extensions (JMX)**

A means of doing management of and through Java technology. JMX is a universal, open extension of the Java programming language for management that can be deployed across all industries, wherever management is needed.

**Java runtime environment (JRE)**

A subset of a Java developer kit that contains the core executable programs and files that constitute the standard Java platform. The JRE includes the Java virtual machine (JVM), core classes, and supporting files.

**Java virtual machine (JVM)**

A software implementation of a processor that runs compiled Java code (applets and applications).

**JMX** See Java Management Extensions.

**JRE** See Java runtime environment.

**JVM** See Java virtual machine.

---

**K**

**keystore**

In security, a file or a hardware cryptographic card where identities and private keys are stored, for authentication

and encryption purposes. Some keystores also contain trusted or public keys. See also truststore.

---

**L**

**LDAP** See Lightweight Directory Access Protocol.

**Lightweight Directory Access Protocol (LDAP)**

An open protocol that uses TCP/IP to provide access to directories that support an X.500 model. An LDAP can be used to locate people, organizations, and other resources in an Internet or intranet directory.

**lightweight mode**

A Server AccessAgent mode. Running in lightweight mode reduces the memory footprint of AccessAgent on a Terminal or Citrix Server and improves the single sign-on startup duration.

**linked clone**

A copy of a virtual machine that shares virtual disks with the parent virtual machine in an ongoing manner.

**load balancing**

The monitoring of application servers and management of the workload on servers. If one server exceeds its workload, requests are forwarded to another server with more capacity.

**lookup user**

A user who is authenticated in the Enterprise Directory and searches for other users. IBM Security Access Manager for Enterprise Single Sign-On uses the lookup user to retrieve user attributes from the Active Directory or LDAP enterprise repository.

---

**M**

**managed node**

A node that is federated to a deployment manager and contains a node agent and can contain managed servers. See also node.

**mobile authentication**

An authentication factor which allows mobile users to sign-on securely to corporate resources from anywhere on the network.

---

## N

### **network deployment**

The deployment of an IMS™ Server on a WebSphere Application Server cluster.

**node** A logical group of managed servers. See also managed node.

### **node agent**

An administrative agent that manages all application servers on a node and represents the node in the management cell.

---

## O

### **one-time password (OTP)**

A one-use password that is generated for an authentication event, and is sometimes communicated between the client and the server through a secure channel.

**OTP** See one-time password.

### **OTP token**

A small, highly portable hardware device that the owner carries to authorize access to digital systems and physical assets, or both.

---

## P

### **password aging**

A security feature by which the superuser can specify how often users must change their passwords.

### **password complexity policy**

A policy that specifies the minimum and maximum length of the password, the minimum number of numeric and alphabetic characters, and whether to allow mixed uppercase and lowercase characters.

### **personal identification number (PIN)**

In Cryptographic Support, a unique number assigned by an organization to an individual and used as proof of identity. PINs are commonly assigned by financial institutions to their customers.

**PIN** See personal identification number.

### **pinnable state**

A state from an AccessProfile widget that

can be combined to the main AccessProfile to reuse the AccessProfile widget function.

**PKCS** See Public Key Cryptography Standards.

### **policy template**

A predefined policy form that helps users define a policy by providing the fixed policy elements that cannot be changed and the variable policy elements that can be changed.

**portal** A single, secure point of access to diverse information, applications, and people that can be customized and personalized.

### **presence detector**

A device that, when fixed to a computer, detects when a person moves away from it. This device eliminates manually locking the computer upon leaving it for a short time.

### **primary authentication factor**

The IBM Security Access Manager for Enterprise Single Sign-On password or directory server credentials.

### **private key**

In computer security, the secret half of a cryptographic key pair that is used with a public key algorithm. The private key is known only to its owner. Private keys are typically used to digitally sign data and to decrypt data that has been encrypted with the corresponding public key.

### **provision**

To provide, deploy, and track a service, component, application, or resource. See also deprovision.

### **provisioning API**

An interface that allows IBM Security Access Manager for Enterprise Single Sign-On to integrate with user provisioning systems.

### **provisioning bridge**

An automatic IMS Server credential distribution process with third party provisioning systems that uses API libraries with a SOAP connection.

### **provisioning system**

A system that provides identity lifecycle management for application users in enterprises and manages their credentials.

**Public Key Cryptography Standards (PKCS)**

A set of industry-standard protocols used for secure information exchange on the Internet. Domino® Certificate Authority and Server Certificate Administration applications can accept certificates in PKCS format.

**published application**

An application installed on Citrix XenApp server that can be accessed from Citrix ICA Clients.

**published desktop**

A Citrix XenApp feature where users have remote access to a full Windows desktop from any device, anywhere, at any time.

---

**R****radio frequency identification (RFID)**

An automatic identification and data capture technology that identifies unique items and transmits data using radio waves. See also active radio frequency identification.

**random password**

An arbitrarily generated password used to increase authentication security between clients and servers.

**RDP** See remote desktop protocol.

**registry**

A repository that contains access and configuration information for users, systems, and software.

**registry hive**

In Windows systems, the structure of the data stored in the registry.

**remote desktop protocol (RDP)**

A protocol that facilitates remote display and input over network connections for Windows-based server applications. RDP supports different network topologies and multiple connections.

**replication**

The process of maintaining a defined set of data in more than one location. Replication involves copying designated changes for one location (a source) to another (a target) and synchronizing the data in both locations.

**revoke**

To remove a privilege or an authority from an authorization identifier.

**RFID** See radio frequency identification.

**root CA**

See root certificate authority.

**root certificate authority (root CA)**

The certificate authority at the top of the hierarchy of authorities by which the identity of a certificate holder can be verified.

---

**S**

**scope** A reference to the applicability of a policy, at the system, user, or machine level.

**secret question**

A question whose answer is known only to the user. A secret question is used as a security feature to verify the identity of a user.

**secure remote access**

The solution that provides web browser-based single sign-on to all applications from outside the firewall.

**Secure Sockets Layer (SSL)**

A security protocol that provides communication privacy. With SSL, client/server applications can communicate in a way that is designed to prevent eavesdropping, tampering, and message forgery.

**Secure Sockets Layer virtual private network (SSL VPN)**

A form of VPN that can be used with a standard web browser.

**Security Token Service (STS)**

A web service that is used for issuing and exchanging security tokens.

**security trust service chain**

A group of module instances that are configured for use together. Each module instance in the chain is called in turn to perform a specific function as part of the overall processing of a request.

**serial ID service provider interface**

A programmatic interface intended for integrating AccessAgent with third-party Serial ID devices used for two-factor authentication.

**serial number**

A unique number embedded in the IBM Security Access Manager for Enterprise Single Sign-On keys, which is unique to each key and cannot be changed.

**server locator**

A locator that groups a related set of web applications that require authentication by the same authentication service. In AccessStudio, server locators identify the authentication service with which an application screen is associated.

**service provider interface (SPI)**

An interface through which vendors can integrate any device with serial numbers with IBM Security Access Manager for Enterprise Single Sign-On and use the device as a second factor in AccessAgent.

**signature**

In profiling, unique identification information for any application, window, or field.

**sign-on automation**

A technology that works with application user interfaces to automate the sign-on process for users.

**sign up**

To request a resource.

**silent mode**

A method for installing or uninstalling a product component from the command line with no GUI display. When using silent mode, you specify the data required by the installation or uninstallation program directly on the command line or in a file (called an option file or response file).

**Simple Mail Transfer Protocol (SMTP)**

An Internet application protocol for transferring mail among users of the Internet.

**single sign-on (SSO)**

An authentication process in which a user can access more than one system or application by entering a single user ID and password.

**smart card**

An intelligent token that is embedded with an integrated circuit chip that provides memory capacity and computational capabilities.

**smart card middleware**

Software that acts as an interface between smart card applications and the smart card hardware. Typically the software consists of libraries that implement PKCS#11 and CAPI interfaces to smart cards.

**SMTP** See Simple Mail Transfer Protocol.

**snapshot**

A captured state, data, and hardware configuration of a running virtual machine.

**SOAP** A lightweight, XML-based protocol for exchanging information in a decentralized, distributed environment. SOAP can be used to query and return information and invoke services across the Internet. See also web service.

**SPI** See service provider interface.

**SSL** See Secure Sockets Layer.

**SSL VPN**

See Secure Sockets Layer virtual private network.

**SSO** See single sign-on.

**stand-alone deployment**

A deployment where the IMS Server is deployed on an independent WebSphere Application Server profile.

**stand-alone server**

A fully operational server that is managed independently of all other servers, using its own administrative console.

**strong authentication**

A solution that uses multifactor authentication devices to prevent unauthorized access to confidential corporate information and IT networks, both inside and outside the corporate perimeter.

**strong digital identity**

An online persona that is difficult to impersonate, possibly secured by private keys on a smart card.

**STS** See Security Token Service.

**system modal message**

A system dialog box that is typically used to display important messages. When a system modal message is displayed,

nothing else can be selected on the screen until the message is closed.

---

## T

### **terminal emulator**

A program that allows a device such as a microcomputer or personal computer to enter and receive data from a computer system as if it were a particular type of attached terminal.

### **terminal type (tty)**

A generic device driver for a text display. A tty typically performs input and output on a character-by-character basis.

### **thin client**

A client that has little or no installed software but has access to software that is managed and delivered by network servers that are attached to it. A thin client is an alternative to a full-function client such as a workstation.

### **transparent screen lock**

An feature that, when enabled, permits users to lock their desktop screens but still see the contents of their desktop.

### **trigger**

In profiling, an event that causes transitions between states in a states engine, such as, the loading of a web page or the appearance of a window on the desktop.

### **trust service chain**

A chain of modules that operate in different modes such as validate, map, and issue truststore.

### **truststore**

In security, a storage object, either a file or a hardware cryptographic card, where public keys are stored in the form of trusted certificates, for authentication purposes in web transactions. In some applications, these trusted certificates are moved into the application keystore to be stored with the private keys. See also keystore.

**tty** See terminal type.

### **two-factor authentication**

The use of two factors to authenticate a user. For example, the use of password and an RFID card to log on to AccessAgent.

---

## U

### **uniform resource identifier**

A compact string of characters for identifying an abstract or physical resource.

### **user credential**

Information acquired during authentication that describes a user, group associations, or other security-related identity attributes, and that is used to perform services such as authorization, auditing, or delegation. For example, a user ID and password are credentials that allow access to network and system resources.

### **user deprovisioning**

The process of removing a user account from IBM Security Access Manager for Enterprise Single Sign-On.

### **user provisioning**

The process of signing up a user to use IBM Security Access Manager for Enterprise Single Sign-On.

---

## V

**VB** See Visual Basic.

### **virtual appliance**

A virtual machine image with a specific application purpose that is deployed to virtualization platforms.

### **virtual channel connector**

A connector that is used in a terminal services environment. The virtual channel connector establishes a virtual communication channel to manage the remote sessions between the Client AccessAgent component and the Server AccessAgent.

### **virtual desktop**

A user interface in a virtualized environment, stored on a remote server.

### **virtual desktop infrastructure**

An infrastructure that consists of desktop operating systems hosted within virtual machines on a centralized server.

### **Virtual Member Manager (VMM)**

A WebSphere Application Server component that provides applications with a secure facility to access basic

organizational entity data such as people, logon accounts, and security roles.

**virtual private network (VPN)**

An extension of a company intranet over the existing framework of either a public or private network. A VPN ensures that the data that is sent between the two endpoints of its connection remains secure.

**Visual Basic (VB)**

An event-driven programming language and integrated development environment (IDE) from Microsoft.

**VMM** See Virtual Member Manager.

**VPN** See virtual private network.

**WS-Trust**

A web services security specification that defines a framework for trust models to establish trust between web services.

---

## W

**wallet** A secured data store of access credentials of a user and related information, which includes user IDs, passwords, certificates, encryption keys.

**wallet caching**

The process during single sign-on for an application whereby AccessAgent retrieves the logon credentials from the user credential wallet. The user credential wallet is downloaded on the user machine and stored securely on the IMS Server.

**wallet manager**

The IBM Security Access Manager for Enterprise Single Sign-On GUI component that lets users manage application credentials in the personal identity wallet.

**web server**

A software program that is capable of servicing Hypertext Transfer Protocol (HTTP) requests.

**web service**

A self-contained, self-describing modular application that can be published, discovered, and invoked over a network using standard network protocols. Typically, XML is used to tag the data, SOAP is used to transfer the data, WSDL is used for describing the services available, and UDDI is used for listing what services are available. See also SOAP.

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Printed in USA