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

AccessProfile Widgets Guide

IBM

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Note

Before using this information and the product it supports, read the information in "Notices" on page 13.

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 AccessProfile Widgets Guide provides information about creating and using widgets.

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*.

Technical training

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

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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AccessProfile Widgets Guide

IBM Security Access Manager for Enterprise Single Sign-On AccessProfile Widgets Guide provides information about creating and using widgets.

AccessProfile widgets overview

AccessProfile widgets are AccessProfiles that consist of pinnable states, which you can use to build another AccessProfile.

Benefits of using AccessProfile widgets

Create AccessProfiles using existing AccessProfile widgets.

The AccessProfile consists of smaller, more focused, pieces of states, triggers, and actions, which can be added as widgets in other AccessProfiles.

An AccessProfile widget, like an AccessProfile, consists of states, triggers, and actions. An AccessProfile widget can be called in other AccessProfiles.

Modular

AccessProfile widgets are modular. For example: On mainframe clients, users choose from a list of available mainframe applications. Currently, all of these application workflows must be incorporated in a single AccessProfile. You can use AccessProfile widgets to break a single AccessProfile into multiple widgets; one for each application workflow.

Reuse

You can pass values to the parameter variables of AccessProfile widgets, which makes AccessProfile widgets more applicable across different AccessProfiles. For example: A widget that gets credentials from different sources like the Privileged Identity Manager server can take the server URL as a parameter.

The same widget can be embedded multiple times in an AccessProfile and across AccessProfiles with minor differences, which can easily be parameterized.

Other examples are common UI workflows that can occur in different kinds of applications. The AccessProfile for a user interface that appears in different applications can be made as a widget. It can also be used in the AccessProfiles of those individual applications. For example: Windows logon prompt that appears when you use Remote Desktop Protocol or Windows Explorer Map Network Drive.

Prerequisites

To use the AccessProfile widgets feature, you must install IBM Security Access Manager for Enterprise Single Sign-On version 8.2.1 or greater.

Install the following components of IBM Security Access Manager for Enterprise Single Sign-On version 8.2.2. See the *IBM Security Access Manager for Enterprise Single Sign-On Installation Guide*.

- IMS Server
- AccessAgent

- AccessStudio

Limitations

AccessProfile widgets have limitations.

- You cannot call an AccessProfile widget in another widget.
- An AccessProfile can be a stand-alone profile and a widget at the same time. However, if the AccessProfile is a widget, the AccessProfile properties that are defined in the General Properties tab in AccessStudio are ignored when it is used as a widget.

Creating and using AccessProfile widgets

Create an AccessProfile widget, edit its properties, add it to an AccessProfile, and pin it to a state.

See the following topics:

- "Creating AccessProfile widgets"
- "Adding widgets" on page 3
- "Editing widgets" on page 3
- "Pinning to a state" on page 4
- "Unpinning a state" on page 5
- "Expanding and collapsing widgets" on page 5
- "Deleting widgets" on page 5
- "Uploading AccessProfile and widgets" on page 6

Creating AccessProfile widgets

An AccessProfile widget is an AccessProfile that has one or more of its states declared as *pinnable*. You use an AccessProfile widget to build AccessProfiles. You can add the AccessProfile widget to another AccessProfile through its *pinnable states*.

Procedure

1. Open AccessStudio.
2. Select the AccessProfile from the data type pane.
3. Click the **States** tab.
4. Select a state from the AccessProfile.
5. Select **Properties** > **Form Editor**.
6. Set **Can be pinned in another AccessProfile** to **Yes**.
7. Repeat steps 4 to 6 for every state that you want to reuse.

Results

The selected states are pinned. The AccessProfile becomes an AccessProfile widget.

What to do next

Add the AccessProfile widget to another AccessProfile. See "Adding widgets" on page 3

Adding widgets

Use the **Add Widget** function to add the AccessProfile widget with its pinnable states to another AccessProfile.

About this task

When you add multiple instances of a widget from a single AccessProfile, each instance of the widget is automatically labeled in this format: *Widget_InstanceName (AccessProfile_WidgetName)*. For example:

- `New Widget1 (Profile2)`
- `New Widget2 (Profile2)`

`New Widget1` is the instance name of the widget. `Profile2` is the AccessProfile name of the widget.

When you add the widget in the AccessProfile, it is not automatically added as part of the AccessProfile. You must pin the widget into the selected AccessProfile state. See "Pinning to a state" on page 4.

You cannot add widgets in an AccessProfile widget.

Procedure

1. Open AccessStudio.
2. Select the AccessProfile from the data type pane.
3. Click the **States** tab.
4. Click **Add Widget**.
5. Select the name of the AccessProfile widget you want to add.

Results

The selected widget is added to the state diagram canvas.

What to do next

Pin the widget with its pinnable state into the selected AccessProfile state. See "Pinning to a state" on page 4.

You can also customize the name of the AccessProfile widget before you start pinning the widget. See "Editing widgets."

Editing widgets

You can edit the AccessProfile name of the widget, the instance name of the widget or the name of the pinnable state. Edit the names to avoid confusion if you use several AccessProfile widgets.

About this task

Editing the AccessProfile name of the widget or the name of the pinnable state replicates the changes to all instances of the AccessProfile widget.

Editing the instance name of the widget applies the change only to the instance that you edited. The name for each instance of the added widget is specific for that AccessProfile widget.

See the *IBM Security Access Manager for Enterprise Single Sign-On AccessStudio Guide* for the general AccessProfile concepts and for the AccessStudio standard workflows.

Procedure

- To edit the AccessProfile widget name:
  1. Select the AccessProfile widget from the data type pane.
  2. Click the **General Properties** tab.
  3. Edit the **AccessProfile ID**. For example: `Profile2`.
- To edit the instance name of the widget:
  1. Select the AccessProfile from the data type pane.
  2. Click the **States** tab.
  3. Click the **Widget** name from the state diagram canvas. For example: `New Widget1 (Profile2)`.
  4. Select the **Properties** pane.
  5. In the **Form Editor** tab, edit the **Widget Name**.
  6. Click outside the **Form Editor** tab to apply the changes.

What to do next

Pin the widget with its pinnable state into the selected AccessProfile state. See “Pinning to a state.”

Pinning to a state

When you add a widget in the AccessProfile, it is not automatically added as part of the AccessProfile. You must pin the widget with its pinnable state into the selected AccessProfile state. Pinning the pinnable state calls the widget.

About this task

You can select the AccessProfile widget instance and pinnable state that you want to pin to the selected AccessProfile state.

You can pin the pinnable states of a widget to any AccessProfile state. There are no limits to the number of pinnable states that you can pin to an AccessProfile state. You can pin 1 or more of these pinnable states to the same state.

If you pin a pinnable state on an instance of an AccessProfile widget to the main AccessProfile, that state is no longer available for pinning.

Pinning to an AccessProfile state merges the pinned widget's state-machine with that AccessProfile state machine. When the current state machine reaches the state with other states pinned, all the triggers of all the states are evaluated. The order of evaluation of the triggers depends on the order in which the states are pinned.

Procedure

1. Open AccessStudio.
2. Select the AccessProfile from the data type pane.
3. Click the **States** tab.
4. Right-click the name of the state where you want to pin the widget.
5. Select **Pin State**.

6. Select the instance of the widget and the specific pinnable state that you want to pin to the AccessProfile state. The AccessProfile widget and state names are displayed in this format: `Widget_InstanceName::AccessProfile_WidgetName::Pinnable_state`.

Unpinning a state

Unpin a state if you want to remove the connection of a widget instance and its pinnable state from the selected state.

About this task

In the AccessProfile widget properties pane, if you change the setting of the pinnable state to **Cannot be pinned in another AccessProfile**, that state is automatically unpinned from the selected AccessProfile state.

Procedure

1. Open AccessStudio.
2. Select the AccessProfile from the data type pane.
3. Click the **States** tab.
4. Right-click the name of the pinned widget.
5. Select **Unpin State**.

Expanding and collapsing widgets

Expand or collapse the AccessProfile widget to view or hide its state details.

When you add the widget in the AccessProfile:
- The widget is collapsed by default.
- The pinnable states associated with the widget are visible, although the widget is collapsed.
- The states that are not set as pinnable are collapsed.

Click the plus sign beside the instance name of the widget to expand or to collapse its contents.

Deleting widgets

Use the **Delete** options if you added the wrong widget to the AccessProfile and you must replace or remove the widget.

You can delete the widget whether it is pinned or not yet pinned to a state in the AccessProfile. If you delete an AccessProfile widget with pinned states, all the pinned states from this widget are unpinned and deleted from the AccessProfile where they are added and pinned.

You cannot delete a pinned state of a widget from an AccessProfile that is using it. In general, you cannot edit a widget from an AccessProfile that is using it.

Use one of the following options to delete the widget from the AccessProfile state diagram canvas:
- Click the widget and press the **Delete** key.
- Right-click the widget and select **Delete** from the menu.

Uploading AccessProfile and widgets

To activate and use the AccessProfile, upload the AccessProfile and its associated widgets to the IMS Server.

About this task

When you upload to the IMS Server, all widgets that are pinned to the AccessProfile are also uploaded.

Procedure

1. Select the AccessProfile from the Data type pane.
2. Click the **Upload selected data to IMS** icon from the toolbar.

   Alternatively, you can right-click on the selected AccessProfile and associated widgets and select **Upload to IMS**.

Passing values to parameters

When you create an AccessProfile widget, you declare the parameters through which the main AccessProfile can transfer data to the AccessProfile widget.

You must declare the parameter variables in the AccessProfile widget. Then, set the equivalent parameter variables in the AccessProfile for each AccessProfile widget parameter.

You can set the following types of parameters:

- Account Data Bag
- Property Store Item

The values that are passed to these parameters are either provided as direct values or are derived from various sources during the AccessProfile run time.

These values can be passed to the AccessProfile widget through any of the following options:

- By reference
- By direct value

See the following topics:

- “The pass by reference option”
- “The direct value option” on page 7
- “Passing values to parameters” on page 7
- “Example: Passing values to parameters” on page 8

The pass by reference option

Use the pass by reference option if you want the AccessProfile widget parameter variable to use and modify the same value that is assigned to the parameter variable in the main AccessProfile.

When values are passed by reference:

- If the value that is assigned to the parameter variable in the main AccessProfile changes, the new value is reflected on the designated parameter variable that is declared in the AccessProfile widget.

- If the value of the parameter variable that is declared in the AccessProfile widget changes, the new value is reflected on the originating parameter variable in the main AccessProfile. The AccessProfile widget parameter variable is set from the originating parameter variable in the main AccessProfile.

The direct value option

Use the direct value option if you want the main AccessProfile to pass a hardcoded value to a parameter in the AccessProfile widget.

With this option, the value that is assigned to the parameter variable does not change at run time.

Passing values to parameters

You can pass values to the parameters that are declared in the AccessProfile widget by reference, by value, or by specifying the direct value. Define this option in the main AccessProfile.

Procedure

1. Create an AccessProfile widget.
   a. Add states. See the *IBM Security Access Manager for Enterprise Single Sign-On AccessStudio Guide*.
   b. Select the state you want to pin in another AccessProfile.
   c. Declare the parameters that you want the main AccessProfile to pass to the pinned state.
      1) Select the type of parameter.
      2) Specify the parameter ID and display name.

      Note: There is no limit to the number of parameters you can add. Repeat step c until you complete all of the parameters you want to add.
   d. Add triggers and actions. See the *IBM Security Access Manager for Enterprise Single Sign-On AccessStudio Guide*.
2. In the main AccessProfile:
   a. Add the AccessProfile widget. See “Adding widgets” on page 3.
   b. Pin the pinnable state to a state. See “Pinning to a state” on page 4.
   c. Select the instance of the pinned state to edit its properties. For example: `Widget_InstanceName::Pinnable_state`.
   d. In **Properties** > **Form Editor**, expand the property details of the parameter. For example: `Parameter_name[Type:Account Data Bag]`.
   e. Select the type of parameter and passing parameter option, then click the **Add** icon.

      For passing parameters by reference
      - Account Data Bag (By Reference)
      - Property Store Item (By Reference)

      For passing parameters by value
      - Account Data Bag (By Value)
      - Property Store Item (By Value)

      For passing parameters by direct value
      1) Select **Direct value** and the **Add** icon.
      2) Specify the **String to transfer over**.

f. Save the AccessProfile.

Example: Passing values to parameters

This topic provides an example of an AccessProfile widget and a main AccessProfile. It includes a description of how the parameter values are passed.

Example of an AccessProfile widget:

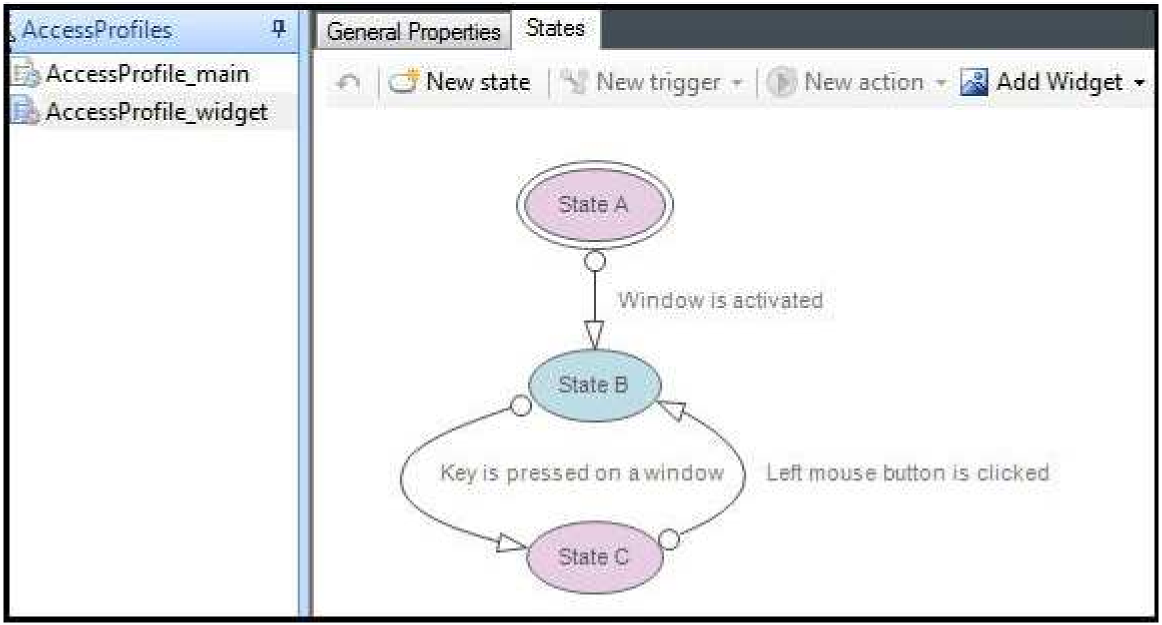

Figure 1. Sample AccessProfile widget

This AccessProfile widget has the following states:

- *State A* is a pinnable state with the following parameter types and parameter variables:

Table 1. Parameter details for State A

Parameter variable	**Parameter type**
param_adb1	Account Data Bag
param_ps1	Property Store Item

- *State B* is not pinnable.
- *State C* is a pinnable state with the following parameter type and parameter variables:

Table 2. Parameter details for State C

Parameter variable	**Parameter type**
param_ps2	Property Store Item

Example of a main AccessProfile:

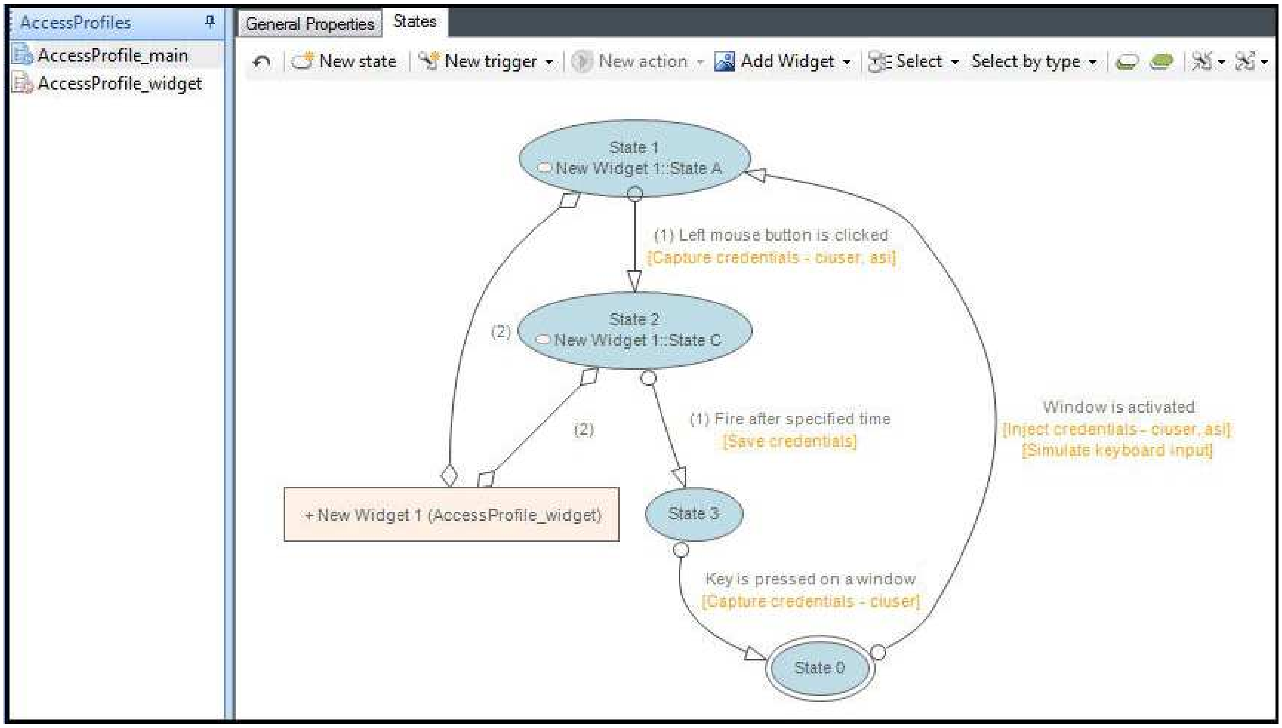

Figure 2. Sample main AccessProfile which starts the sample AccessProfile widget

This main AccessProfile has the following states:

- *State 0*
- *State 1* has the following parameter variables and data transfer item:

Table 3. Parameter details for State 1

Parameter variable	Data transfer item
adb1	Account Data Bag (By Reference)
ps1	Property Store Item (By Value)

- *State 2* has the following parameter variables and data transfer item:

Table 4. Parameter details for State 2

Parameter variable	Data transfer item
ps2	Property Store Item (By Reference)

- *State 3*

Workflow

The following table describes:

- The relationship among the states.
- The AccessProfile process flow.
- How the values from the main AccessProfile parameter variables are passed to the parameter variables in the pinned states of the AccessProfile widget.

Scenario	Sub Scenario	Result
• *State A* is pinned to *State 1* of *AccessProfile_main*. • *State 1* passes the values that are assigned to its parameter variables to the parameter variables of *State A*. • *State C* is pinned to *State 2*. • *State 2* passes the values that are assigned to its parameter variable to the parameter variable of *State C*.	*AccessProfile_main* moves from *State 0* to *State 1.*	• *param_adb1* is set to *adb1*. • *param_ps1* is set to *ps1.* • *param_ps2* stays uninitialized to an empty string.
	AccessProfile_main moves from *State 1* to *State B* inside the *AccessProfile_widget.*	• *param_adb1* stays set to *adb1*. • *param_ps1* stays set to *ps1.* • *param_ps2* stays uninitialized to an empty string. • Any change to *param_adb1* is reflected to *adb1*, but any change to *param_ps1* is not reflected to ps1.
	AccessProfile_main moves from *State B* to *State C* inside the *AccessProfile_widget.*	• *param_adb1* stays set to *adb1* and *param_ps1* is still set to ps1. • param_ps2 stays uninitialized to empty string. • Any change to the value of *param_adb1* is copied to *adb1.* • Any change to the value of *param_ps1* is not copied to *ps1.*
	AccessProfile_main moves from *State C* to *State 3.*	• The last value that is set for *param_adb1* is copied to *adb1* • The value for *ps2* remains unchanged.
	AccessProfile_main moves from *State 3* to *State 0* and then to *State 1.*	• *param_adb1* and *param_ps1* are reinitialized with the current values of *adb1* and *ps1*. • *param_ps2* stays uninitialized to an empty string.

Scenario	Sub Scenario	Result
	AccessProfile_main moves from *State 1* to *State 2.*	• *param_adb1* stays initialized to the recent value of *adb1*. • *param_adb1* always uses the most recent value of *adb1*. • Any change to the value of *adb1* in the profile is made available to *param_adb1*. • *param_ps1* stays initialized to the value of *ps1*. • Any change to the value of *ps1* does not affect the value of *param_ps1*. • *param_ps2* is initialized with the latest value of *ps2*. • Any change to the value of *param_ps2* inside the *AccessProfile_widget* is copied back to *ps2*.
	AccessProfile_main moves from *State 2* to *State 3.*	• *param_adb1*stays initialized to the most recent value of *adb1*. • *param_ps1* stays initialized to the last set value of *ps1*. • *param_ps2*stays initialized to the most recent value of *ps2*.
• *State A* is pinned to *State 1* of *AccessProfile_main*. • *State 1* passes the values that are assigned to its parameter variables to the parameter variables of *State A*. • *State C* of the *AccessProfile_widget* is left dangling.	*AccessProfile_main* moves to *State 1* from *State 0.*	• *param_adb1* is set to *adb1* and *param_ps1* is set to *ps1*. • *param_ps2* stays uninitialized to empty string.
	AccessProfile_main moves from *State 1* to *State B* inside the *AccessProfile_widget.*	• *param_adb1* stays set to *adb1* and *param_ps1* is stays set to *ps1*. • *param_ps2* stays uninitialized to empty string. • Any change to the value of *param_adb1* is copied to *adb1,* but any change to the value of *param_ps1* is not copied to *ps1*.

Scenario	Sub Scenario	Result
	AccessProfile_main moves from *State B* to *State C* inside the *AccessProfile_widget.*	• *param_adb1* stays set to *adb1* and *param_ps1* is still set to *ps1*. • *param_ps2* stays uninitialized to empty string. • Any change to the value of *param_adb1* is copied to *adb1*, but any change to the value of *param_ps1* is not copied to *ps1.*

Runtime logs

Check the runtime logs of the main AccessProfile or the associated AccessProfile widget if an issue occurs while you are using the AccessProfile or widget.

You can view the runtime logs from the AccessStudio **Messages** pane.

Example of a runtime log:

```
18:46:26.3437500   [State Machine Id - 0]
Action: Run a VBScript or JScript. Property line is set to 'auth_example_intranet'.
```

This runtime log includes the time and action that was triggered.

When you click a state name, trigger name or action name from the runtime log, it opens the AccessProfile that contains the trigger and not the widget.

The runtime logs include information about:

- When an AccessProfile is loaded
- When a state is transitioned
- When a trigger is fired
- When an action is run
- When a widget is not found

Note: The runtime logs do not include information about the state transition between the *start* and *end* of a pinned state.

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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 (opens in new window).

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.

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.

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

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