

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

Web API Guide

IBM

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Note

Before using this information and the product it supports, read the information in “Notices” on page 11.

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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Chapter 1. Web API overview

The IBM Security Access Manager for Enterprise Single Sign-On (ISAM ESSOWeb API) is a set of RESTful Web Service that retrieves, creates, and updates application credentials that are stored in a User Wallet.

These services can be accessed by using any client or programming language that can submit an HTTP request.

Chapter 2. Installation and configuration of the Web API

This section describes the deployment and configuration that are required in the IBM Security Access Manager for Enterprise Single Sign-On IMS Server 8.2.2.

Web API deployment on the IMS Server roadmap

The Web API deployment on IMS Server roadmap provides a list of tasks that you must complete to use the Web API.

Use the following roadmap to deploy the Web API on IMS Server. In a WebSphere® Application Server Network Deployment cluster, the following steps need to be applied on the deployment manager.

Table 1. Web API deployment on IMS Server

	Procedure	Reference
1	Install the IMS Server or upgrade an existing server to a newer version of the product.	See <i>IMS Server Installation Roadmap</i> in the <i>IBM Security Access Manager for Enterprise Single Sign-On Installation Guide</i>
2	Integrate IMS Server with an enterprise directory and modify the existing configuration for Active Directory or LDAP Directory server. 1. Install the latest fix pack of the IBM Security Access Manager for Enterprise Single Sign-On IMS Server, Version 8.2.1. 2. Install the Web API EAR file.	“Installing the Web API EAR file”
4.	Develop the client application to use the Web API.	Chapter 3, “Sample scenario,” on page 5

Installing the Web API EAR file

Upload the Web API EAR file to WebSphere Application Server to install the Web API.

About this task

Use WebSphere Application Server on Windows x86 or x64.

Procedure

1. Open the Administrative Console. Select **Start > All Programs > IBM WebSphere > Application Server <version> > Profiles > <profile name> > Administrative Console**
2. Log on to the Integrated Solutions Console.
3. On the Integrated Solutions Console navigation pane, click **Application types > WebSphere enterprise application**
4. Click **Install**.
5. Specify the path for the EAR file to upload and install. You can select from the IMS Server installation folder and then **Browse** to the location of the `com.ibm.security.isamesso.webapi.service.deploy.ear` file.

6. Click **Next**. The Preparing for the application installation window is displayed.
7. Select one of the following options:
 - **Fast Path - Prompt only when additional information is required**
 - **Detailed - Show all installation options and parameters**
8. Click **Next**.
9. Retain the default values under **Select installation options**.
10. Click **Next**
11. For clusters and servers selections, select **Map modules to servers** for both fast and detail path.
12. Select `isamesso.imsserver.webapi`.
13. Click **Apply**.
14. Click **Next**. The Summary page and the Installing window are displayed. Once successful, Application ISAMESSOIMSWebAPI installed successfully is displayed.
15. In the message box, click **Save**. Changes are saved to the master configuration.
16. For WebSphere Application Server Network Deployment only: Resynchronize the nodes. See *Resynchronizing the nodes* in the *IBM Security Access Manager for Enterprise Single Sign-On Installation Guide*
17. Restart WebSphere Application Server.

Chapter 3. Sample scenario

Develop a client application to use the IBM Security Access Manager for Enterprise Single Sign-On Web API.

Authorizing a workflow for another user by using an AccessProfile

You can authorize a workflow for another user by using the Accounts GET API.

Before you begin

Deploy the Web API and install the Web API EAR file. See “Web API deployment on the IMS Server roadmap” on page 3 for details.

About this task

Judith Hall Service Manager, JKE

Judith is a typical user in the organization and leads a team of 4.

Mary Liu Employee, JKE

Mary is a junior employee and reports to Judith.

In this scenario, Mary, a junior employee in JKE tries to update information that requires Judith's authorization. Judith is prompted for an application password. However, Judith has her domain password but not the application password. Since she does not know the application password, Judith must create an AccessProfile that is designed to prompt for domain credentials. Once she provides the domain credentials, the profile retrieves the application credential by using the Web API and injects it into the application password prompt

Procedure

1. Create an advanced AccessProfile using AccessStudio with a VBscript or JavaScript. See *Creating advanced AccessProfiles* and *Customizing triggers* in the *IBM Security Access Manager for Enterprise Single Sign-On AccessStudio Guide*.
 - a. User is prompted to provide the Active Directory username and password.
 - b. Retrieve the username and password in Step a.
 - c. Use the Accounts GET API to retrieve the user credential for the application. See Chapter 4, “Accessing the REST API resources,” on page 7.
 - d.
 - e. Extract the credential information from the JSON response and inject it in the application when prompted.
2. Upload the AccessProfile you created to the IMS Server connected in AccessAgent.
3. Log in to AccessAgent and test the feature.

Note: Ensure that the AccessProfile is synchronized.

Results

Judith can perform a single sign-on and can authorize the workflow for Mary.

Chapter 4. Accessing the REST API resources

The REST API documentation provides information about using the REST APIs.

Before you begin

Deploy the Web API and install the Web API EAR file. See “Web API deployment on the IMS Server roadmap” on page 3 for details.

Procedure

1. Launch the web browser.
2. Access the REST API documentation by using `https://<imsserver>/esso/rapi`.

Note: See Web API deployment issues for a known issue on accessing the Web API with the Web API URL.

Chapter 5. Troubleshooting

Use troubleshooting topics to identify and resolve problems with the Web API.

Troubleshooting topics for the IBM Security Access Manager for Enterprise Single Sign-On Web API guide provide the following information:

Symptom

Before you can successfully troubleshoot a problem, you must identify the symptom and have a basic understanding of the issue.

Cause This information explains why you cannot use the Web API.

Solution

This information explains how you can resolve the problem.

Web API deployment

Use the Web API solutions when you encounter deployment issues with the Web API.

Issue: User cannot access the Web API

- Symptom 1: User cannot access the Web API after deploying the IMS Server.

Cause: If you did not deploy the Web API EAR file, the Web API is not accessible.

Solution: The Web API EAR file is a separate file from the application and must be deployed manually. Install the Web API EAR file. See “Installing the Web API EAR file” on page 3.

- Symptom 2: User cannot access the Web API after successfully configuring the IBM WebSphere Application Server Federated Repositories and installing the Web API EAR file.

Cause:

- If the Web API is not mapped to the application or web server, the Web API is not accessible.
- In a WebSphere Application Server Network Deployment, if the nodes are not synched, the Web API is not accessible.

Solution: Ensure that the Web API is mapped correctly to the IBM HTTP Server and the application server.

- Symptom 3: User cannot access the Web API by using the Web API URL.

Cause: The Web API URL in the REST API documentation is incorrect. For example: `https://{appliance_hostname}/ims/webapi/wallet/accounts?authId={authId}&serverLocator={serverLocator}&appId={appId}`

Solution: Use `https://{appliance_hostname}/esso/webapi/wallet/accounts?authId={authId}&serverLocator={serverLocator}&appId={appId}` to access the Web API.

Note: Take note of the change from `ims` to `esso` in the Web API URL.

Web API consumability

Use the Web API workarounds when you encounter consumability issues with the Web API.

Consumability issues

Issue 2: GET account returns no result

- Symptom: User cannot retrieve the list of accounts with the Accounts GET API.
- Cause: The existing IBM Security Access Manager for Enterprise Single Sign-On user has not logged on after a fix pack installation.
- Solution: Log on to AccessAgent or AccessAssistant. See "Logging on to AccessAssistant" in the *IBM Security Access Manager for Enterprise Single Sign-On User Guide*.

Issue 3: Bad request error

- Symptom: There is a bad request error when user creates or updates an account.
- Cause: Request content does not match the requested authentication service's account data template.
- Solution: Revise request content to match the account data template in AccessStudio.

Issue 4: Parameter error in Web API URL

- Symptom: User is unable to retrieve all the accounts that correspond to a specific parameter. For example: serverLocator
- Cause: Parameter names are case-sensitive. The parameter name is incorrect.
- Solution: Revise parameter name in the Web API URL. See the REST API documentation for the list of parameters.

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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.

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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