



CA Single Sign-On r12.x (CA SiteMinder)

Implementation Proven Professional Exam (CAT-140)

Study Guide

Version 1.4

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1 Exam Information

The CA Technologies Certification Program is designed to measure your skills, knowledge, and expertise in managing, administering, installing, configuring and implementing select CA Technologies products for complete and optimized IT solutions. With CA certifications, management teams will have peace of mind that knowledgeable professionals are handling their CA Technologies applications.

Proctored by a third party vendor, KryterionOnline, CA Technologies certifications objectively validate the competencies of a project team – whether that team is your in-house staff, CA Technologies Professional Services, or a CA Technologies partner.

The aim of this document is to help you prepare for the CA Single Sign-On r12.x (CA SiteMinder) Implementation Proven Professional Certification Exam. Make sure that you familiarize yourself with the content areas tested. Your best path to success is to attend the exam prep course(s).

You may also find it helpful to review the product documentation at <https://support.ca.com> and to participate in CA Global User Community forums at <https://communities.ca.com/>.

The experience gained from taking courses and using the product will help you:

- Gain a comprehensive understanding of the product or solution
- Increase the likelihood of passing the exam on your first attempt

The Exam Experience

You can register to take an online proctored exam from your home or office using Kryterion's Online Proctoring (OLP) Services, or you can take an on-site proctored exam at a Kryterion testing center. If you choose to take an online proctored exam, you will need Internet access, an external web camera, and a computer that meets specific hardware and software requirements.

For answers to frequently asked questions about registering for exams, locations, on-site and virtual proctoring, OLP equipment requirements, cancellation and re-scheduling policies and more, read our FAQs at <http://www.ca.com/us/education/accreditations/certifications/certification-faq.aspx>.

CA employees may also go here for more information: <https://one.ca.com/education/certification>

Professional Exam Details

- Product release: Major release listed in the title; Includes subsequent point releases
- Recertification: There is no annual requirement to recertify for the same release of a product. For each major product release, an updated exam will be available for recertification.
- Number of items = 50
- Item types = Multiple choice, including multiple response questions
- Time to complete test: 90 minutes
- Passing score is 70%
- Attempts Permitted: You may register for your first retake immediately. For subsequent retakes you are required to wait at least thirty (30) calendar days from the date of your last attempt. Read the online [FAQs](#) for details.

2 Areas for Study

Information from a variety of sources can represent the *body of knowledge* covered by the exam.

Figure 1. Learning path and body of knowledge



Search the CA Education Portal for courses covering the latest product releases, as they may not have been available at the time of this document posting:

- Partners & Customers look here: <http://education.ca.com>
- Employees look here: <https://clearning.ca.com>

Visit Communities at CA for documentation and more: <https://support.ca.com>

Register for the exam here: www.webassessor.com/catechnologies/index.html

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Exam objectives as they map to related courseware and bodies of knowledge, including percentage of exam devoted to topics.

Exam Objectives	Related Content	Exam Focus
Understanding CA SiteMinder	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Define CA SiteMinder</i> <ul style="list-style-type: none"> Define CA SiteMinder Services and Functions 	2%
Administering Web Agents	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Administer Web Agents</i> <ul style="list-style-type: none"> Administer Web Agents 	4%
Configuring User Stores	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Configure User Stores</i> <ul style="list-style-type: none"> Configure an LDAP User Store Configure an Active Directory User Store Configure an ODBC User Store Use Directory Mapping 	8%
Protecting a Web Application	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Protect a Web Application</i> <ul style="list-style-type: none"> Protect a Web Application Create Expressions Integrate Web Applications with CA SiteMinder CA SiteMinder r12.5: Implementation 200 (04SMR20101) <i>Protect Web Applications with CA SiteMinder</i> <ul style="list-style-type: none"> Install CA SiteMinder Web Agent 	8%
Administering CA SiteMinder	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Administer CA SiteMinder</i> <ul style="list-style-type: none"> Delegate Administrator Roles Customize Authentication 	4%
Configuring Single Sign-on	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Configure Single Sign-on</i> <ul style="list-style-type: none"> Configure SSO in a Single Domain Configure a Session Store 	4%
Importing and Exporting Policy Store Objects	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Import and Export Policy Store Objects</i> <ul style="list-style-type: none"> Export and Import Policy Store Objects 	4%
Configuring Advanced Policy	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Configure Advanced Policy</i> <ul style="list-style-type: none"> Configure Policy Using the Management Console 	4%

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Exam Objectives	Related Content	Exam Focus
Implementing Password Services	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Implement Password Services</i> <ul style="list-style-type: none"> Implement Password Services 	4%
Managing Reports in the Administrative UI	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Manage Reports in the Administrative UI</i> <ul style="list-style-type: none"> Use CA SiteMinder Reports 	2%
Implementing Other CA SiteMinder Features	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Implement Other CA SiteMinder Features</i> <ul style="list-style-type: none"> Implement Other CA SiteMinder Features 	4%
Troubleshooting CA SiteMinder	CA SiteMinder r12.5: Administration 200 (04SMR20091) <i>Troubleshooting CA SiteMinder</i> <ul style="list-style-type: none"> Troubleshoot CA SiteMinder 	4%
Installing CA SiteMinder Server Components on Microsoft Windows	CA SiteMinder r12.5: Implementation 200 (04SMR20101) <i>Install CA SiteMinder Server Components on Microsoft Windows</i> <ul style="list-style-type: none"> Install CA SiteMinder Policy Server Install CA SiteMinder Administrative UI 	4%
Understanding Federation Components	CA SiteMinder r12.5: Implementation 200 (04SMR20101) <i>Define Federation Components</i> <ul style="list-style-type: none"> Identify How to Set Up Asserting Party Components 	2%
Understanding how to Upgrade to CA SiteMinder r12.5	CA SiteMinder r12.5: Implementation 200 (04SMR20101) <i>Identify How to Upgrade to CA SiteMinder r12.5</i> <ul style="list-style-type: none"> Define How to Configure a Parallel Environment 	2%
Configuring Agent Parameters	CA SiteMinder r12.5: Advanced Topics 300 (04SMR30011) <i>Configure Advanced Agent Parameters</i> <ul style="list-style-type: none"> Identify Web 2.0 Integration Features 	2%
Leveraging Authentication Schemes	CA SiteMinder r12.5: Advanced Topics 300 (04SMR30011) <i>Leverage Authentication Schemes</i> <ul style="list-style-type: none"> Create HTML Forms-based Authentication Schemes Use OpenID Authentication 	4%
Securing the CA SiteMinder User Session	CA SiteMinder r12.5: Advanced Topics 300 (04SMR30011) <i>Secure the CA SiteMinder User Session</i> <ul style="list-style-type: none"> Configure CA SiteMinder Features that Secure the User Session 	2%
Configuring Advanced Single Sign-on	CA SiteMinder r12.5: Advanced Topics 300 (04SMR30011) <i>Configure Advanced Single Sign-on</i> <ul style="list-style-type: none"> Enable SSO Across Multiple Cookie Domains Configure Security Zones 	4%
Configuring Load Balancing and Failover	CA SiteMinder r12.5: Advanced Topics 300 (04SMR30011) <i>Configure Load Balancing and Failover</i> <ul style="list-style-type: none"> Configure Load Balancing and Failover for Web Agent to Policy Server Connections 	2%

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Exam Objectives	Related Content	Exam Focus
Understanding Federation and Kantara Test Cases	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Define Federation and Kantara Test Cases</i> <ul style="list-style-type: none"> Identify Kantara Test Cases Identify Test Cases Q and R 	4%
Understanding CA SiteMinder Federation High Level Architecture	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Define CA SiteMinder Federation High Level Architecture</i> <ul style="list-style-type: none"> Identify Federation Security Services Components 	2%
Configuring CA SiteMinder Federation Components	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Configure CA SiteMinder Federation Components</i> <ul style="list-style-type: none"> Identify CA SiteMinder Federation Components Define Common Components for Partnership and Legacy 	4%
Configuring Partnership Federation Components	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Configure Partnership Federation Components</i> <ul style="list-style-type: none"> Create Partnerships Identify Components Beyond Base Partnership 	4%
Configuring Legacy Federation Components	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Configure Legacy Federation Components</i> <ul style="list-style-type: none"> Create a Legacy SAML 2.0 IDP IDP->SP Test a Legacy SAML 2.0 Partnership 	4%
Extending SiteMinder Federation	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Extending SiteMinder Federation</i> <ul style="list-style-type: none"> Identify Federation SDK's Identify Asserting Party Extensibility 	4%
Troubleshooting	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Troubleshooting</i> <ul style="list-style-type: none"> Configure Logging Facilities to Collect Logs 	2%
Understanding Common Federation Partnership Use Cases	CA SiteMinder r12.5: Federation 200 (04SMR20131) <i>Common Federation Partnership Use Cases</i> <ul style="list-style-type: none"> Identify Federation Interoperability 	2%

3 Sample Certification Exam Questions

These sample questions are very similar to the questions in the actual exam. Some questions may include several correct options.

Question 1

In your CA SiteMinder environment, adding CA SiteMinder Federation enables you to:

- A. define firewall policies.
- B. manage component licensing agreements.
- C. bind the CA SiteMinder and J2EE sessions together.
- D. implement single sign-on (SSO) across different security domains.

Question 2

Which guideline applies when connecting to Active Directory with Secure Sockets Layer (SSL)?

- A. Change the default SSL port to 540.
- B. Use a native Windows Certificate database.
- C. Configure the Web Agent to override the parameters of trusted hosts.
- D. Use the Lightweight Access Directory Protocol (LDAP) Namespace in Web Directory Configuration.

Question 3

Arjun Prasad authenticates using an authentication scheme for application A, which has a protection level of 4. Then, Arjun accesses application B on the same browser session, which is protected by an authentication scheme with a protection level of 5. Which statement is TRUE?

- A. Arjun is immediately permitted access to application B.
- B. Arjun is logged out of application A before being permitted access to application B.
- C. Arjun is rechallenged to log in to application B. After the successful login, Arjun can go back to application A on the same browser session if the session has not expired.
- D. Arjun is rechallenged to log in to application B, but after logging in to application B, the previous established session for application A is terminated and Arjun is logged out of A.

Question 4

When you configure a certificate-based authentication scheme, you need to:

- A. define the file system structure and user database.
- B. define the certified user and configure the access table.
- C. select an x509-based authentication scheme template and issue the access certificate.
- D. select an x509-based authentication scheme template and configure a certificate mapping.

Question 5

Which tool do you use to determine the identifiers of objects for a granular export or import by exploring a list of applications or domains?

- A. XPSExplorer
- B. XPSExport
- C. XPSImport
- D. XPSConfig

Question 6

Which Federal Information Processing Standards (FIPS) modes can CA SiteMinder operate in? (Choose three)

- A. FIPS-only
- B. FIPS-verified
- C. FIPS-migration
- D. FIPS-compatibility
- E. FIPS-maintenance

Question 7

A trusted host is:

- A. a CA SiteMinder administrator.
- B. a Host Configuration Object (HCO).
- C. an Agent Configuration Object (ACO).
- D. a client computer on which one or more CA SiteMinder Web Agents can be installed.

Question 8

If you need to configure a CA SiteMinder r12.5 environment with an existing r12.x deployment, which guideline should you follow?

- A. If your r12.x environment contains smkeydatabases, migrate the smkeydatabase content to the r12.5 certificate store.
- B. Make sure that the CA SiteMinder user directory objects you create in both environments have different names.
- C. If you are deploying multiple keystores, enable dynamic agent key generation for all Policy Servers.
- D. Configure r12.x Policy Servers to communicate with the r12.5 keystore.

Question 9

In your company, authentication information is stored in a central Oracle repository. However, authorization information is spread across several different SQL Server and Oracle user directories associated with specific applications. The Social Security Number (SSN) of employees is common to all user directories. You are likely to use Lightweight Directory Access Protocol (LDAP) directories in the near future. For CA SiteMinder directory mapping options:

- A. it is best to use the identical DN method to map LDAP directories to the central Oracle repository.
- B. when mapping relational database directories to each other, Universal ID is the only method available.
- C. when mapping LDAP user directories to the central Oracle repository, Universal ID is the only method available.
- D. you can choose between the Universal ID and Identical DN methods when mapping relational databases with the central Oracle repository for authentication.

Question 10

Which component of CA SiteMinder can be used to configure the scope and permissible tasks of an administrator?

- A. CA SiteMinder Database
- B. CA SiteMinder Agent dialog
- C. Policy Server Management Console
- D. CA SiteMinder administrative user interface (UI)

Question 11

CA SiteMinder password policies can be used to enforce: (Choose three)

- A. failed login criteria.
- B. password reuse criteria.
- C. password synchronization.
- D. password composition criteria.

Question 12

In CA SiteMinder, policy store objects require identifiers, such as the following example:

CA.SM::Domain@03-d922906c-43ec-4da7-869b-
3d000c9c1ba9

The example shown is known as:

- A. an XID.
- B. an extension class.
- C. an object identifier (OID).
- D. a universally unique identifier (UUID).

Question 13

In a multiple cookie domain environment, which statement about cookie provision in a CA SiteMinder enterprise is TRUE?

- A. Each Web Agent acts as a cookie provider.
- B. Only one keystore acts as a cookie provider.
- C. Only one Web Agent acts as a cookie provider.
- D. Each Policy Server instance acts as a cookie provider.

Question 14

You are configuring load balancing for several Lightweight Directory Access Protocol (LDAP) user directories. You want to force a specific directory server to service more requests. How can you accomplish this?

- A. Use server aliases.
- B. Assign a higher priority number.
- C. Place the server higher in the list.
- D. Add the specific directory server multiple times in the directory configuration of the load balanced setup.

Question 15

When investigating CA SiteMinder issues, which log should you view to examine authentication, authorization, and administrator access event information?

- A. Audit log
- B. Profiler log
- C. Policy Server log
- D. Web Agent trace log

Question 16

Which condition applies if you use a common key store for single sign-on (SSO) with multiple policy stores?

- A. Key store servers must run on standard ports.
- B. Key store servers must run on separate ports.
- C. The list of key store server addresses must be comma delimited.
- D. The key store must be separate from the policy store and all Policy Servers must point to a common keystore.

Question 17

As part of an ongoing effort to improve performance and high availability, Administrator Cliff Warner has created a Host Configuration Object (HCO) for a cluster. The cluster consists of four Policy Servers, each in a different data center. All Policy Servers point to an existing policy store. Cliff wants to maximize fault tolerance for Web Agents to avoid problems if the Policy Server in any data center becomes unavailable. What must Cliff do?

- A. Point the webagent.conf file to the new HCO name and restart the web server instance.
- B. Perform a complete reconfiguration of the Web Agent, which is needed to use the new HCO.
- C. Add the new cluster HCO in the smhost.conf file and add all four Policy Servers in the list of boot strap Policy Servers.
- D. Register a new trusted host going against the Policy Servers to create a new smhost.conf file. Reference the new smhost.conf file in webagent.conf and add the new cluster HCO name in webagent.conf.

Question 18

The User Authorization cache reduces the number of user directory requests required to determine CA SiteMinder policy membership. Which statement about the User Authorization cache is TRUE?

- A. It caches user entries.
- B. It only stores data about the user.
- C. It only stores user attribute values.
- D. It stores details about the relationship between users and policies.

Question 19

You are attempting to address slow web application responses, which occur during peak load on a daily basis. During your investigation, you notice that the number of requests for each CA SiteMinder agent often exceeds 60

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at any given moment; 20 in process and 40 in the queue. To help improve performance, which tuning steps should you perform next? (Choose two)

- A. Increase the value of the User AZ Cache parameter.
- B. Decrease the value of MaxSocketsPerPort parameter.
- C. Increase the value of the MaxSocketsPerPort parameter.
- D. Increase the value of Max Connections setting for Policy Server, if needed.

Question 20

You want to maximize the efficiency of CA SiteMinder-based authentication and authorization. Which advice should you follow?

- A. You only need to place the web server and Policy Server in the same data center.
- B. You only need to place the Policy Server and directory servers in the same data center.
- C. You should place the web server, Policy Server, and directory servers in the same data center.
- D. You should not be concerned about server location, because CA SiteMinder components use load balancing between agents, Policy Servers, and directory servers.

Question 21

You are planning a CA SiteMinder-based single sign-on (SSO) infrastructure. Which capacity consideration is the MOST significant?

- A. Type of operating system
- B. Total number of users in the user directory
- C. Total number of policy objects in the policy store
- D. The number of concurrent users that will access the system

Question 22

In CA SiteMinder r12.5, partnership federation using Security Assertion Markup Language (SAML) 2.0 is enhanced to comply with eGov 1.5 certifications. Examples of eGov 1.5-related features include: (Choose two)

- A. an open format cookie that supports strong encryption algorithms.
- B. a Do Not Cache setting, which tells the consumer not to retain an assertion for future use.
- C. the ability of a Service Provider to request information about how a user authenticates at the Identity Provider.
- D. a customizable user consent form that enables the user to grant permission before the Identity Provider sends identity information to a partner.

Question 23

To create a partnership from an asserting party to a legacy relying party, which information do you need?

- A. Artifact backchannel security details because you need to disable this functionality
- B. Legacy Identity Provider information to create a remote Identity Provider entity
- C. Legacy relying party information, such as a metadata file, to create the remote Service Provider entity
- D. Partnership Identity Provider information, such as the Simple Object Access Protocol (SOAP) artifact resolution URL, to configure Security Assertion Markup Language (SAML) 2.0

Question 24

What is the recommended usage for load balancers such as F5 in a single sign-on (SSO) environment? (Choose two)

- A. Route HTTP traffic to appropriate web servers.
- B. Load balance Web Agent to Policy Server connections.
- C. Load balance Policy Server connections to data stores.
- D. Provide balanced traffic between all participating web servers.

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Answers

- Question 1 = D
- Question 2 = B
- Question 3 = C
- Question 4 = D
- Question 5 = A
- Question 6 = A, C, and D
- Question 7 = D
- Question 8 = A
- Question 9 = C
- Question 10 = D
- Question 11 = A, B, and D
- Question 12 = A
- Question 13 = C
- Question 14 = D
- Question 15 = A
- Question 16 = D
- Question 17 = C
- Question 18 = D
- Question 19 = C and D
- Question 20 = C
- Question 21 = D
- Question 22 = C and D
- Question 23 = D
- Question 24 = A and D