



# Preface

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## Audience

This guide is for security administrators who use ACS, and who set up and maintain network and application security.

## Organization



**Note**

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This release of the User Guide combines the Windows and Solution Engine platforms. Where necessary, the appropriate platform is clearly identified.

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This document contains the following chapters and appendixes:

- **Chapter 1, “Overview”**—An overview of ACS and its features, network diagrams, and system requirements.
- **Chapter 2, “Using the Web Interface”**—Concepts and procedures regarding how to use the Interface Configuration section of ACS to configure the HTML interface.
- **Chapter 3, “Network Configuration”**—Concepts and procedures for establishing ACS network configuration and building a distributed system.
- **Chapter 4, “Shared Profile Components”**—Concepts and procedures regarding ACS shared profile components: downloadable IP ACLs, network access filters, network access restrictions, and device command sets.
- **Chapter 5, “User Group Management”**—Concepts and procedures for establishing and maintaining ACS user groups.
- **Chapter 6, “User Management”**—Concepts and procedures for establishing and maintaining ACS user accounts.
- **Chapter 7, “System Configuration: Basic”**—Concepts and procedures regarding the basic features found in the System Configuration section of ACS.
- **Chapter 8, “System Configuration: Advanced”**—Concepts and procedures regarding RDBMS Synchronization, ACS Internal Database Replication, and IP pools, found in the System Configuration section of ACS.
- **Chapter 9, “System Configuration: Authentication and Certificates”**—Concepts and procedures regarding the Global Authentication and ACS Certificate Setup pages, found in the System Configuration section of ACS.

- **Chapter 10, “Logs and Reports”**—Concepts and procedures regarding ACS logging and reports.
- **Chapter 11, “Administrators and Administrative Policy”**—Concepts and procedures for establishing and maintaining ACS administrators.
- **Chapter 12, “User Databases”**—Concepts about user databases and procedures for configuring ACS to perform user authentication with external user databases.
- **Chapter 13, “Posture Validation”**—Concepts and procedures for implementing Posture Validation (also known as Network Admission Control or NAC) and configuring posture validation policies.
- **Chapter 14, “Network Access Profiles”**—Concepts and procedures for creating Network Access Profiles and implementing profile-based policies in ACS.
- **Chapter 15, “Unknown User Policy”**—Concepts and procedures about using the Unknown User Policy with posture validation and unknown user authentication.
- **Chapter 16, “User Group Mapping and Specification”**—Concepts and procedures regarding the assignment of groups for users authenticated by an external user database.
- **Appendix A, “TACACS+ Attribute-Value Pairs”**—A list of supported TACACS+ AV pairs and accounting AV pairs.
- **Appendix B, “RADIUS Attributes”**—A list of supported RADIUS AV pairs and accounting AV pairs.
- **Appendix C, “CSUtil Database Utility”**—Instructions for using CSUtil.exe, a command line utility you can use to work with the ACS internal database, to import AAA clients and users, to define RADIUS vendors and attributes, and to generate (Protected Access Credentials) PAC files for EAP-FAST clients.
- **Appendix D, “VPDN Processing”**—An introduction to Virtual Private Dial-up Networks (VPDN), including stripping and tunneling, with instructions for enabling VPDN on ACS.
- **Appendix E, “RDBMS Synchronization Import Definitions”**—A list of import definitions, for use with the RDBMS Synchronization feature.
- **Appendix F, “Internal Architecture”**—A description of ACS architectural components.

## Conventions

This document uses the following conventions:

Item	Convention
Commands, keywords, special terminology, and options that should be selected during procedures	<b>boldface font</b>
Variables for which you supply values and new or important terminology	<i>italic font</i>
Displayed session and system information, paths and file names	screen font
Information you enter	<b>boldface screen font</b>
Variables you enter	<i>italic screen font</i>
Menu items and button names	<b>boldface font</b>
Indicates menu items to select, in the order you select them.	<b>Option &gt; Network Preferences</b>

**Tip**

Identifies information to help you get the most benefit from your product.

**Note**

Means *reader take note*. Notes identify important information that you should reflect upon before continuing, contain helpful suggestions, or provide references to materials not contained in the document.

**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage, loss of data, or a potential breach in your network security.

**Warning**

**Identifies information that you must heed to prevent damaging yourself, the state of software, or equipment. Warnings identify definite security breaches that will result if the information presented is not followed carefully.**

## Documentation Updates

**Table 1** Updates to the User Guide for Cisco Secure Access Control Server 4.2

Date	Description
01/03/2012	Updated action code description for the action code 108 in the table Table E-3 User Creation and Modification Action Codes.
11/22/2010	Updated “ <a href="#">Configuring a Generic LDAP External User Database</a> ” section on page 31 for the bug CSCtj40421.
9/20/2010	Updated the following sections: <ul style="list-style-type: none"> <li>• <a href="#">Generating a Certificate Signing Request</a>, page 9-32.</li> <li>• <a href="#">About ACS Internal Database Replication</a>, page 8-2</li> <li>• <a href="#">About Certificate Revocation Lists</a>, page 9-29</li> </ul>
6/16/2010	Updated the following sections: <ul style="list-style-type: none"> <li>• <a href="#">Custom RADIUS Vendors and VSAs</a>, page 8-27</li> <li>• <a href="#">Adding a Custom RADIUS Vendor and VSA Set</a>, page C-18</li> </ul>
4/16/2010	Updated the User and group database component in <a href="#">Table 8-1</a> on page 8.
4/08/2010	Added “ <a href="#">Adding Users Using RDBMS Sync</a> ” section on page 31.
1/29/2010	Added a note in the “ <a href="#">TACACS+</a> ” section on page 1-4.

# Product Documentation


**Note**

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

[Table 2](#) describes the product documentation that is available.

**Table 2**      **Product Documentation**

Document Title	Available Formats
<i>Documentation Guide for Cisco Secure ACS Release 4.2</i>	<ul style="list-style-type: none"> <li>Shipped with product.</li> <li>PDF on the product CD-ROM.</li> <li>On <a href="#">Cisco.com</a>: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/roadmap/DGuide42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/roadmap/DGuide42.html</a></li> </ul>
<i>Release Notes for Cisco Secure ACS Release 4.2</i>	<ul style="list-style-type: none"> <li>On <a href="#">Cisco.com</a>: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/release/notes/ACS42_RN.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/release/notes/ACS42_RN.html</a></li> </ul>
<i>Configuration Guide for Cisco Secure ACS Release 4.2</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On <a href="#">Cisco.com</a>: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/configuration/guide/acs42_config_guide.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/configuration/guide/acs42_config_guide.html</a></li> </ul>
<i>Installation Guide for Cisco Secure ACS for Windows Release 4.2</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On <a href="#">Cisco.com</a>: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/installation/guide/windows/IGwn42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/installation/guide/windows/IGwn42.html</a></li> </ul>
<i>Installation Guide for Cisco Secure ACS Solution Engine Release 4.2</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On <a href="#">Cisco.com</a>: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_solution_engine/4.2/installation/guide/solution_engine/SE42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_solution_engine/4.2/installation/guide/solution_engine/SE42.html</a></li> </ul>
<i>User Guide for Cisco Secure Access Control Server 4.2</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On <a href="#">Cisco.com</a>: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/user/guide/ACS4_2UG.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/user/guide/ACS4_2UG.html</a></li> </ul> <p>You can also access the user guide by clicking <b>Online Documentation</b> in the ACS navigation bar. The user guide PDF is available on this page by clicking <b>View PDF</b>.</p>

**Table 2**      **Product Documentation (continued)**

Document Title	Available Formats
<i>Regulatory Compliance and Safety Information for the Cisco Secure ACS Solution Engine Release 4.2</i>	<ul style="list-style-type: none"> <li>Shipped with product.</li> <li>PDF on the product CD-ROM.</li> <li>On Cisco.com: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_solution_engine/4.2/regulatory/compliance/RCSI_42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_solution_engine/4.2/regulatory/compliance/RCSI_42.html</a></li> </ul>
<i>Installation and Configuration Guide for Cisco Secure ACS Remote Agents Release 4.2</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On Cisco.com: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_solution_engine/4.2/installation/guide/remote_agent/RA42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_solution_engine/4.2/installation/guide/remote_agent/RA42.html</a></li> </ul>
<i>Supported and Interoperable Devices and Software Tables for Cisco Secure ACS Solution Engine Release 4.2</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On Cisco.com: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/device/guide/sdt42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/device/guide/sdt42.html</a></li> </ul>
<i>Installation and User Guide for Cisco Secure ACS User-Changeable Passwords</i>	<ul style="list-style-type: none"> <li>PDF on the ACS Recovery CD-ROM.</li> <li>On Cisco.com: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/installation/guide/user_passwords/ucpNW42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/installation/guide/user_passwords/ucpNW42.html</a></li> </ul>
<i>Cisco Secure Access Control Server Troubleshooting Guide</i>	<ul style="list-style-type: none"> <li>On Cisco.com: <a href="http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/trouble/guide/ACSTrbG42.html">http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_server_for_windows/4.2/trouble/guide/ACSTrbG42.html</a></li> </ul>
Online Documentation	In the ACS HTML interface, click Online Documentation.
Online Help	In the ACS HTML interface, online help appears in the right-hand frame when you are configuring a feature.

## Related Documentation



### Note

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

A set of white papers about ACS are available on Cisco.com at:

<http://www.cisco.com/warp/public/cc/pd/sqsw/sq/tech/index.shtml>

For information on Network Admission Control, various NAC components, and ACS see:

<http://www.cisco.com/go/NAC>

# Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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