



Preface

This guide provides instructions for the administration of the Cisco Application Control Engine (ACE) module in a Catalyst 6500 series switch or a Cisco 7600 series router, hereinafter referred to as the switch or router, respectively.

It describes how to perform administration tasks on the ACE, including doing the initial setup, establishing remote access, managing software licenses, configuring class maps and policy maps, managing the ACE software, configuring Simple Network Management Protocol (SNMP), configuring redundancy, configuring the Extensible Markup Language (XML) interface, and upgrading your ACE software.

This preface contains the following major sections:

- [Audience](#)
- [How to Use This Guide](#)
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- [Symbols and Conventions](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines](#)

Audience

This guide is intended for the following trained and qualified service personnel who are responsible for configuring the ACE:

- System administrator
- System operator

How to Use This Guide

This guide is organized as follows:

| Chapter | Description |
|--|---|
| Chapter 1, “Setting Up the ACE” | Describes how to configure basic settings on the ACE, including topics such as how to session and log in to the ACE, change the administrative username and password, assign a name to the ACE, configure a message-of-the-day banner, configure the date and time, configure terminal settings, modify the boot configuration, and restart the ACE. |
| Chapter 2, “Enabling Remote Access to the ACE” | Describes how to configure remote access to the Cisco Application Control Engine (ACE) module by establishing a remote connection using the Secure Shell (SSH) or Telnet protocols. It also describes how to configure the ACE to provide direct access to a user context from SSH. This chapter also covers how to configure the ACE to receive ICMP messages from a host. |
| Chapter 3, “Managing ACE Software Licenses” | Describes how to manage the software licenses for your ACE. |
| Chapter 4, “Managing the ACE Software” | Describes how to save and download configuration files, use the file system, view and copy core dumps, capture and copy packet information, use the configuration checkpoint and rollback service, display configuration information, and display technical support information. |
| Chapter 5, “Displaying ACE Hardware and Software System Information” | Describes how to display ACE hardware and software configuration and technical support information. |
| Chapter 6, “Configuring Redundant ACEs” | Describes how to configure the ACE for redundancy, which provides fault tolerance for the stateful failover of flows. |
| Chapter 7, “Configuring SNMP” | Describes how to configure SNMP to query the ACE for Cisco Management Information Bases (MIBs) and to send event notifications to a network management system (NMS). |
| Chapter 8, “Configuring the XML Interface” | Describes how to provide a mechanism using XML to transfer, configure, and monitor objects in the ACE. This XML capability allows you to easily shape or extend the CLI query and reply data in XML format to meet different specific business needs. |

Related Documentation

In addition to this document, the ACE documentation set includes the following:

| Document Title | Description |
|---|--|
| <i>Release Note for the Cisco Application Control Engine Module</i> | Provides information about operating considerations, caveats, and command-line interface (CLI) commands for the ACE. |
| <i>Cisco Application Control Engine Module Hardware Installation Note</i> | Provides information for installing the ACE into the Catalyst 6500 series switch or a Cisco 7600 series router. |

| Document Title | Description |
|--|--|
| <i>Cisco Application Control Engine Module Getting Started Guide</i> | Describes how to perform the initial setup and configuration tasks for the ACE. |
| <i>Cisco Application Control Engine Module Administration Guide</i> | Describes how to perform the following administration tasks on the ACE: <ul style="list-style-type: none"> • Setting up the ACE • Establishing remote access • Managing software licenses • Configuring class maps and policy maps • Managing the ACE software • Configuring SNMP • Configuring redundancy • Configuring the XML interface • Upgrading the ACE software |
| <i>Cisco Application Control Engine Module Virtualization Configuration Guide</i> | Describes how to operate your ACE in a single context or in multiple contexts. |
| <i>Cisco Application Control Engine Module Routing and Bridging Configuration Guide</i> | Describes how to perform the following routing and bridging tasks on the ACE: <ul style="list-style-type: none"> • Configuring VLAN interfaces • Configuring routing • Configuring bridging • Configuring Dynamic Host Configuration Protocol (DHCP) |
| <i>Cisco Application Control Engine Module Server Load-Balancing Configuration Guide</i> | Describes how to configure the following server load-balancing features on the ACE: <ul style="list-style-type: none"> • Real servers and server farms • Class maps and policy maps to load balance traffic to real servers in server farms • Server health monitoring (probes) • Stickiness • Firewall load balancing • TCL scripts • |

| Document Title | Description |
|---|--|
| <i>Cisco Application Control Engine Module Security Configuration Guide</i> | <p>Describes how to perform the following ACE security configuration tasks:</p> <ul style="list-style-type: none"> • Security access control lists (ACLs) • User authentication and accounting using a Terminal Access Controller Access Control System Plus (TACACS+), Remote Authentication Dial-In User Service (RADIUS), or Lightweight Directory Access Protocol (LDAP) server • Application protocol and HTTP deep packet inspection • TCP/IP normalization and termination parameters • Network Address Translation (NAT) • |
| <i>Cisco Application Control Engine Module SSL Configuration Guide</i> | <p>Describes how to configure the following Secure Sockets Layer (SSL) features on the ACE:</p> <ul style="list-style-type: none"> • SSL certificates and keys • SSL initiation • SSL termination • End-to-end SSL |
| <i>Cisco Application Control Engine Module System Message Guide</i> | <p>Describes how to configure system message logging on the ACE. This guide also lists and describes the system log (syslog) messages generated by the ACE.</p> |
| <i>Cisco Application Control Engine Module Command Reference</i> | <p>Provides an alphabetical list and descriptions of all CLI commands by mode, including syntax, options, and related commands.</p> |
| <i>Cisco CSM-to-ACE Conversion Tool User Guide</i> | <p>Describes how to use the CSM-to-ACE conversion tool to migrate Cisco Content Switching Module (CSM) running- or startup-configuration files to the ACE.</p> |
| <i>Cisco CSS-to-ACE Conversion Tool User Guide</i> | <p>Describes how to use the CSS-to-ACE conversion tool to migrate Cisco Content Services Switches (CSS) running-configuration or startup-configuration files to the ACE.</p> |
| <i>Cisco Application Control Engine (ACE) Troubleshooting Wiki</i> | <p>Describes the procedures and methodology in wiki format to troubleshoot the most common problems that you may encounter during the operation of your ACE.</p> |
| <i>Cisco Application Control Engine (ACE) Configuration Examples Wiki</i> | <p>Provides examples of common configurations for load balancing, security, SSL, routing and bridging, virtualization, and so on.</p> |

Symbols and Conventions

This publication uses the following conventions:

| Convention | Description |
|-----------------------------|--|
| boldface font | Commands, command options, and keywords are in boldface . Bold text also indicates a command in a paragraph. |
| <i>italic font</i> | Arguments for which you supply values are in <i>italics</i> . Italic text also indicates the first occurrence of a new term, book title, emphasized text. |
| { } | Encloses required arguments and keywords. |
| [] | Encloses optional arguments and keywords. |
| {x y z} | Required alternative keywords are grouped in braces and separated by vertical bars. |
| [x y z] | Optional alternative keywords are grouped in brackets and separated by vertical bars. |
| string | A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks. |
| screen font | Terminal sessions and information the system displays are in <i>screen font</i> . |
| boldface screen font | Information you must enter in a command line is in boldface screen font . |
| <i>italic screen font</i> | Arguments for which you supply values are in <i>italic screen font</i> . |
| ^ | The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key. |
| < > | Nonprinting characters, such as passwords are in angle brackets. |

1. A numbered list indicates that the order of the list items is important.
 - a. An alphabetical list indicates that the order of the secondary list items is important.
- A bulleted list indicates that the order of the list topics is unimportant.
 - An indented list indicates that the order of the list subtopics is unimportant.

This document uses the following conventions:



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.



Caution

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

For additional information about CLI syntax formatting, refer to the *Cisco Application Control Engine Module Command Reference*.

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, 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>