



# Preface

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This guide provides the following information:

- An overview of the major functions and features of the Cisco 4700 Series Application Control Engine (ACE) appliance
- Instructions on how to initially configure the ACE to allow traffic and basic load balancing
- Instructions on how to configure the ACE to provide various scalability and security capabilities
- References to find the information in the documentation set

This preface contains the following major sections:

- [Audience](#)
- [How to Use This Guide](#)
- [Related Documentation](#)
- [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:

- Web master
- System administrator
- System operator

# How to Use This Guide

This guide is organized as follows:

Chapter	Description
<a href="#">Chapter 1, Overview</a>	Provides an overview of the major functions and features of the ACE
<a href="#">Chapter 2, Setting Up an ACE Appliance</a>	Provides procedures to initially configure the ACE to allow the passing of traffic and remote access
<a href="#">Chapter 3, Creating a Virtual Context</a>	Provides procedures to partition the ACE into virtual contexts for more efficient operation
<a href="#">Chapter 4, Configuring Access Control Lists</a>	Provides procedures to configure an access control list in an ACE to secure your network
<a href="#">Chapter 5, Configuring Role-Based Access Control</a>	Provides procedures to configure a user with permission to perform limited operations and access a subset of your network
<a href="#">Chapter 6, Configuring Server Load Balancing</a>	Provides procedures to configure the ACE to allow basic server load balancing
<a href="#">Chapter 7, Configuring a Load-Balancing Predictor</a>	Provides procedures to select a predefined predictor for server load balancing
<a href="#">Chapter 8, Configuring Server Persistence Using Stickiness</a>	Provides procedures to configure server persistence for requests from a client using stickiness
<a href="#">Chapter 9, Configuring SSL Security</a>	Provides procedures to configure SSL security for your network
<a href="#">Chapter 10, Configuring Health Monitoring Using Health Probes</a>	Provides procedures to configure server health monitoring using health probes
<a href="#">Chapter 11, Configuring Redundant ACEs</a>	Provides procedures for configuring fault tolerance in your network.

Chapter	Description
<a href="#">Chapter 12, Configuring Bridged Mode</a>	Provides procedures for configuring your ACE to operate at Layer 2 with the client-side VLAN and the server-side VLAN in the same IP subnet.
<a href="#">Chapter 13, Configuring One-Arm Mode</a>	Provides procedures for configuring your ACE to operate in a network where the clients and the servers are in the same VLAN.

If you are already familiar with the ACE appliance and would like to quickly set up the device for basic server load balancing, you can follow the configuration procedures in the following chapters:

- [Chapter 2, Setting Up an ACE Appliance](#)
- [Chapter 3, Creating a Virtual Context](#)
- [Chapter 6, Configuring Server Load Balancing](#)

The remaining chapters allow you to explore additional capabilities of the ACE.

## Related Documentation

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

Document Title	Description
<i>Administration Guide, Cisco ACE Application Control Engine</i>	Describes how to perform the following administration tasks on the ACE: <ul style="list-style-type: none"> <li>• Setting up the ACE</li> <li>• Establishing remote access</li> <li>• Managing software licenses</li> <li>• Configuring class maps and policy maps</li> <li>• Managing the ACE software</li> <li>• Configuring SNMP</li> <li>• Configuring redundancy</li> <li>• Configuring the XML interface</li> <li>• Upgrading the ACE software</li> </ul>
<i>Application Acceleration and Optimization Guide, Cisco ACE 4700 Series Application Control Engine Appliance</i>	Describes how to configure the web optimization features of the ACE appliance. This guide also provides an overview and description of those features.
<a href="#">Cisco Application Control Engine (ACE) Configuration Examples Wiki</a>	Provides examples of common configurations for load balancing, security, SSL, routing and bridging, virtualization, and so on.
<a href="#">Cisco Application Control Engine (ACE) Troubleshooting Wiki</a>	Describes the procedures and methodology in wiki format to troubleshoot the most common problems that you may encounter during the operation of your ACE.

<b>Document Title</b>	<b>Description</b>
<i>Command Reference, Cisco ACE Application Control Engine</i>	Provides an alphabetical list and descriptions of all CLI commands by mode, including syntax, options, and related commands.
<i>CSS-to-ACE Conversion Tool Guide, Cisco ACE Application Control Engine</i>	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.
<i>Device Manager Guide, Cisco ACE 4700 Series Application Control Engine Appliance</i>	Describes how to configure the ACE using the Device Manager GUI and provides background details about the attributes used in the GUI.
<i>Hardware Installation Guide, Cisco ACE 4710 Application Control Engine Appliance</i>	Provides information for installing the ACE appliance.
<i>Regulatory Compliance and Safety Information, Cisco ACE 4710 Application Control Engine Appliance</i>	Regulatory compliance and safety information for the ACE appliance.
<i>Release Note, Cisco ACE 4700 Series Application Control Engine Appliance</i>	Provides information about operating considerations, caveats, and command-line interface (CLI) commands for the ACE appliance.
<i>Routing and Bridging Guide, Cisco ACE Application Control Engine</i>	Describes how to perform the following routing and bridging tasks on the ACE: <ul style="list-style-type: none"> <li>• Ethernet ports</li> <li>• VLAN interfaces</li> <li>• IPv6, including transitioning IPv4 networks to IPv6, IPv6 header format, IPv6 addressing, and supported protocols.</li> <li>• Routing</li> <li>• Bridging</li> <li>• Dynamic Host Configuration Protocol (DHCP)</li> </ul>
<i>Security Guide, Cisco ACE Application Control Engine</i>	Describes how to perform the following ACE security configuration tasks: <ul style="list-style-type: none"> <li>• Security access control lists (ACLs)</li> <li>• 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</li> <li>• Application protocol and HTTP deep packet inspection</li> <li>• TCP/IP normalization and termination parameters</li> <li>• Network Address Translation (NAT)</li> </ul>

Document Title	Description
<i>Server Load-Balancing Guide, Cisco ACE Application Control Engine</i>	Describes how to configure the following server load-balancing features on the ACE: <ul style="list-style-type: none"> <li>• Real servers and server farms</li> <li>• Class maps and policy maps to load balance traffic to real servers in server farms</li> <li>• Server health monitoring (probes)</li> <li>• Stickiness</li> <li>• Dynamic workload scaling (DWS)</li> <li>• Firewall load balancing</li> <li>• TCL scripts</li> </ul>
<i>SSL Guide, Cisco ACE Application Control Engine</i>	Describes how to configure the following Secure Sockets Layer (SSL) features on the ACE: <ul style="list-style-type: none"> <li>• SSL certificates and keys</li> <li>• SSL initiation</li> <li>• SSL termination</li> <li>• End-to-end SSL</li> </ul>
<i>System Message Guide, Cisco ACE Application Control Engine</i>	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.
<i>Upgrade/Downgrade Guide, Cisco ACE 4700 Series Application Control Engine Appliance</i>	Describes how to perform an ACE appliance software upgrade or downgrade.
<i>User Guide, Cisco Application Networking Manager</i>	Describes how to use Cisco Application Networking Manager (ANM), a networking management application for monitoring and configuring network devices, including the ACE.
<i>Virtualization Guide, Cisco ACE Application Control Engine</i>	Describes how to operate your ACE in a single context or in multiple contexts.

## Symbols and Conventions

This publication uses the following conventions:

Convention	Description
<b>boldface font</b>	Commands, command options, and keywords are in <b>boldface</b> . Bold text also indicates a command in a paragraph.
<i>italic font</i>	Arguments for which you supply values are in <i>italics</i> .
[ ]	Elements in square brackets are optional.

<b>Convention</b>	<b>Description</b>
{ x   y   z }	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> .
<b>boldface screen font</b>	Information you must enter on a command line is in <b>boldface screen font</b> .
<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.

Notes use the following conventions:

**Note**

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

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Cautions use the following conventions:

**Caution**

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

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## 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>

