



Preface

This Guide provides reference information on Cisco Active Network Abstraction (Cisco ANA) version 3.7.1. This information is presented in four parts:

- Part 1—Cisco VNEs: Supplies detailed information on all of the Virtual Network Elements (VNEs) supplied with Cisco ANA.
- Part 2—Technology Support and Information Model Objects: Details the level of functionality Cisco ANA provides for each of the networking technologies it supports, and explains how the product models these technologies using VNEs and Information Model Objects (IMOs).
- Part 3—Alarms and Events: Lists and describes all of the Cisco ANA alarms, events, SNMP traps, and syslogs, supported in this version of Cisco ANA.
- Part 4—Commands: Lists, describes, and explains how to use the commands supplied with Cisco ANA. Note that additional Cisco ANA command scripts are available for download from the Cisco ANA Tech Center at <http://developer.cisco.com/web/ana/home>.

New and Changed Information

The following table describes information that has been added or changed since the initial release of the *Cisco Active Network Abstraction 3.7.1 Reference Guide*.

Table 1 ***New and Changed Information in This Guide***

Date Released	Revision	Location
July 6, 2011	Removed ACE20-MOD-K9 module support for Cisco 7600 series routers.	Cisco 7600 Series—Supported Modules, page 96
	Updated SNMP informs support for traps.	Traps, page 1

Table 1 ***New and Changed Information in This Guide (continued)***

Date Released	Revision	Location
June 8, 2011	Updated the NE Type and Sys OID for the Cisco Service Control Engines.	Cisco Service Control Engines, page 18
	Included additional information for Cisco XR 12000 series routers and Cisco Carrier Routing System (CRS-1).	• Cisco XR 12000 Series—Additional Information, page 141 • Cisco CRS-1—Additional Information, page 151
	Replaced the image capture for the expanded view of CRS-1 multichassis support.	Multichassis Support for CRS-1, page 152
	Updated the description of the supported modules for Cisco Catalyst 4500 series switches based on the prospectus.	Cisco Catalyst 4500 Series—Supported Modules, page 38
February 22, 2011	Verified and updated the short description of the subtype events for all the service alarms based on the Registry Editor.	Registry Parameters, page 58
February 3, 2011	Listed the following protocols that support Bidirectional Forwarding Detection (BFD): • OSPF • BGP • MPLS TE • IPv4 (static) • IPv6 (static) • IS-IS	Technology Description, page 1
	Changed the short description of the subtype events for the Lag Down and Lag Link Down alarms.	• Lag Admin Down • Lag Oper Down • Lag Up • Lag Link Admin Down • Lag Link Oper Down • Lag Link Up

Audience

The intended audience for this guide includes engineers involved in the customization, extension, management and networking operations of Cisco ANA.

Conventions

This document uses the following conventions:

Table 2 **Conventions**

Convention	Description
<i>string</i>	A string is a nonquoted set of characters. For example, when setting an SNMP community string to public , do not use quotation marks around the string, or the string will include the quotation marks.
^ or Ctrl	^ or Ctrl represents the Control key. For example, the key combination ^D or Ctrl-D means hold down the Control key while you press the D key. Alphabetic character keys are indicated in capital letters but are not case sensitive.
< >	Angle brackets show nonprinting characters, such as passwords.
!	An exclamation point at the beginning of a line indicates a comment line.
[]	Square brackets indicate optional elements of a command.
{ }	Braces group alternative, mutually exclusive elements that are part of a required choice.
	A vertical bar, also known as a pipe, separates alternative, mutually exclusive elements of a choice.
boldface font	Indicates a button name, command, keyword, key combination, or menu item.
boldface screen font	Courier bold shows an example of text that you must enter.
<i>Italic text</i>	Indicates a variable or attribute value, including enumerated values.
<i>italic</i> screen font	Indicates variables for which you must enter a value.
screen font	Courier plain shows an example of information displayed on the screen.
Blue text	Indicates a link or reference to a section, table or object elsewhere in this Guide or on the World Wide Web.
Option > Network Preferences	Indicates menu items to be selected, and the order in which to select them.

Related Documentation

The following documentation is available for Cisco Active Network Abstraction 3.7.1:

- [Cisco Active Network Abstraction 3.7.1 Administrator Guide](#)
- [Cisco Active Network Abstraction 3.7.1 Customization User Guide](#)
- [Cisco Active Network Abstraction 3.7.1 Documentation Guide](#)
- [Cisco Active Network Abstraction 3.7.1 Installation Guide](#)
- [Cisco Active Network Abstraction 3.7.1 Release Notes](#)
- [Cisco Active Network Abstraction 3.7.1 User Guide](#)
- [Cisco Active Network Abstraction 3.7.1 Theory of Operations](#)
- [Cisco Active Network Abstraction Configuration and Image Management 1.0 User and Administrator Guide](#)
- [Cisco Active Network Abstraction Network Service Activation 1.1 User Guide](#)
- [Cisco Active Network Abstraction Network Service Activation 1.1 Customization Guide](#)
- [Open Source Used in Cisco Active Network Abstraction 3.7.1](#)

- *Cisco Active Network Abstraction 3.7.1 Integration Developer Guide* is available on the Cisco ANA Technology Center. This guide describes how to use Cisco ANA integration interfaces.

The Cisco ANA Technology Center is an online resource for additional downloadable Cisco ANA support content, including help for integration developers who use Cisco ANA application programming interfaces (APIs). The website provides information, guidance, and examples to help you integrate your applications with Cisco ANA. It also provides a platform for you to interact with subject matter experts. To view the information on the Cisco ANA Technology Center website, you must have a Cisco.com account with partner level access, or you must be a Cisco ANA licensee. You can access the Cisco ANA Technology Center at: <http://developer.cisco.com/web/ana/home>.

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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