

Advanced Services' Cisco Active Network Abstraction (CANA) Version 3.7



Cisco Active Network Abstraction (Cisco ANA) is a network management foundation for Cisco-based service provider IP networks. ANA addresses the challenge of managing converged, multiservice, and multivendor IP networks through its unique model-based virtual network abstraction. Its service-aware design supports Multiprotocol Label Switching (MPLS), Carrier Ethernet, and IP Radio Access Network (RAN)/Mobile Transport over Packet (MToP) and extends to emerging technologies.

The Cisco Active Network Abstraction (CANA) v3.7 course is a modular course that teaches students how to install, configure, customize, and effectively use the Cisco ANA product suite. The student gains understanding of the primary components of the ANA architecture; guidelines for deployment; hardware and software requirements; and the concepts, processes, and tools that allow customization of an ANA management system to meet the specific needs of the customer's unique network. The students' understanding is deepened by hands-on labs that include installing ANA units, gateway, and client software and utilizing the ANA applications, NetworkVision and EventVision, for network and service discovery and fault detection.

Duration

Four Days

Target Audience

This course is for network administrators and consultants who will be planning, installing, customizing, and using the Cisco ANA applications for network, service, and fault management in multivendor networks. The following are the primary audience for this course:

- Network administrators, system administrators, and operators
- System integrators, professional services, and consultants

Course Objectives

Upon completion of this course, you should be able to:

- Describe the ANA architecture, consisting of Cisco ANA gateways, ANA units, and clients.
- Describe virtual network elements (VNEs), which are the software-based building blocks of the Cisco ANA virtual network model, each one cloning the characteristics and properties of its real-world counterpart. Create network maps and build a virtual network model consisting of VNEs.
- Describe and show how new technology support is managed by ANA, For instance CE, MTOP etc.
- Plan an ANA deployment; review hardware and software requirements.
- Install the various ANA components.
- Configure the VNEs.
- Configure user accounts and ANA security features.
- Discover and view network inventory information.
- Visualize and monitor the physical network elements and their logical services.
- Troubleshoot, manage, and correlate network events and faults.
- Maintain and troubleshoot the ANA system.
- Plan for high availability.
- Understand the ANA registry and its inheritance and the purpose of the ANA Golden Source.
- Create, manage, and troubleshoot ANA soft properties.
- Set soft properties thresholds and define threshold crossing alarms.
- Utilize ANA command builder to create, manage, and troubleshoot custom commands.
- Create and deploy ANA custom workflows using the workflow editor, templates, views, and user preferences.
- Understand Inheritance and how to publish, export, and import ANA soft properties, commands, and workflows.
- Use ANA Manage and ANA EventVision to view and manage the deployed workflows.

After completing this four-day course, students will have gained extensive knowledge about the primary components of the ANA architecture and will have learned how to set up and use the ANA applications. Students will meet these objectives by applying the information learned in the lectures through hands-on lab exercises.

Course Prerequisites

Following are the prerequisites for this course:

- Basic Microsoft Windows user-level knowledge
- Basic understanding of network management concepts (Simple Network Management Protocol [SNMP], MIBs, and so on)
- TCP/IP networking experience
- Oracle administration knowledge
- Solaris and UNIX system administration knowledge
- Networking Technologies, MPLS, CE , MTOP
- IOS,XML

To locate Cisco courses that cover the listed prerequisites, go to the Cisco Training & Events web page found at <http://www.cisco.com/web/learning/index.html>.

Course Outline

The course outline is as follows:

- Cisco ANA Operations
 - Module 1: Cisco ANA Product Overview
 - Module 2: Using Cisco ANA NetworkVision
- Cisco ANA Installation and Configuration
 - Module 3: Pre-deployment Planning
 - Module 4: Software Installation and Configuration
 - Module 5: Administration
- Cisco ANA Customization
 - Module 6: Miscellaneous Tools (ANA Shell, Registry Editor, BQL Basics)
 - Module 7: Cisco ANA Soft Properties
 - Module 8: Cisco ANA Command Builder
 - Module 9: Cisco ANA Workflow Editor

Lab Outline

The lab outline is as follows:

- Cisco ANA Operations
 - Lab 1: Getting Started with NetworkVision
 - Lab 2: Network Visualization
 - Lab 3: Network Element Visualization
 - Lab 4: Service Visualization
 - Lab 5: Using PathTracer
 - Lab 6: Fault Management
- Cisco ANA Installation and Configuration
 - Lab 1: Preparing a Deployment Plan
 - Lab 2: Installing the ANA Gateway
 - Lab 3: Installing the ANA Unit
 - Lab 4: Installing the ANA Client (NetworkVision, Tools)
 - Lab 5: Initial ANA Configuration (ANA Manage)
 - Lab 6: Managing User Accounts/Scopes
 - Lab 7: Maintaining ANA (Logs/Updates/Patches)
- Cisco ANA Customization
 - Lab 1: ANA Soft Properties
 - Lab 2: ANA Command Builder
 - Lab 3: ANA Workflow Editor

Lab Topology

Following is the lab topology that is used in this course.

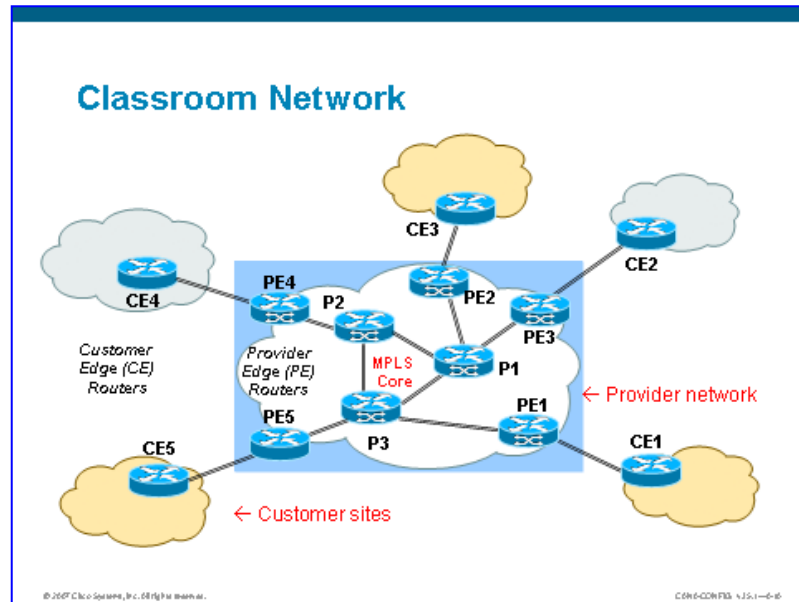


Figure 1 Lab Topology of Cisco Active Network Abstraction Training

Registration Information

For more information about schedules and registration for this course, please contact aeskt_registration@cisco.com.

For More Information

For more information about Advanced Services Education course offerings, including custom training options, as well as Advanced Services Curriculum Planning Services and Advanced Services Technical Knowledge Library (TKL), refer to the Advanced Services Education Website at www.cisco.com/go/ase.



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