

Implementing the Application Control Engine Service Module (ACESM) v2.0

Vendor Course Code: ACESM v2.0

Course Length: 4 days

Overview: ACESM is a 4-day, instructor-led, lecture/lab course that teaches you how to design, deploy, and optimise intelligent network services using the Cisco Application Control Engine (ACE) Service Module for Catalyst 6500 switches. This course covers all of the key features of the ACE 2.0 software, including resource virtualisation and management, server load balancing (Layer 2-4 and Layer 7), SSL termination and offload, and security features like application-layer inspection and fix-ups.

Skills Gained: After you complete this course, you will be able to:

- Describe IP application delivery with the ACE module
- Describe the structure and function of the Modular Policy CLI statements used to configure ACE features
- Describe the capabilities the ACE module used to load balance IP-based applications
- Identify the layer 7 processing options used to provide advanced application networking
- Create new contexts and resource classes
- Create class maps and server farms
- Configure an ACE context load balance traffic flows
- Configure an ACE context to monitor real servers
- Implement fix-ups and inspection
- Describe the ACE features that provide IP application security
- Implement SSL termination
- Configure network address translations
- Describe the high availability features of the ACE module
- Configure an ACE context to perform a variety of functions in an integrated environment
- Troubleshoot common SLB configuration errors

Key Topics:

- Lesson 1: Introducing ACE
- Lesson 2: Deploying ACE
 - Lab 1: Implementing Virtualisation
- Lesson 3: Modular Policy CLI
- Lesson 4: Managing the ACE Module
- Lesson 5: Security Features
 - Lab 2: Using Network Address Translation
- Lesson 6: Layer 4 Load Balancing
- Lesson 7: Health Monitoring
 - Lab 3: Configuring Server Load Balancing
 - Lab 4: Implementing Health Monitoring
- Lesson 8: Layer 7 Protocol Processing
 - Lab 5: Configuring Layer 7 Load Balancing
 - Lab 6: Enabling Sticky Connections
 - Lab 7: Enabling Protocol Inspection
- Lesson 9: Processing Secure Connections

- Lab 8: Configuring SSL Termination
- Lesson 10: High Availability
- Lesson 11: Integrating Multiple Features
- Lab 9: Integrating Multiple Features
- Lab 10: Troubleshooting Case Study 1: Common SLB Configuration Errors
- Lab 11: Troubleshooting Case Study 2: Layer 7 SLB Configuration Errors

Target Audience:

This course is designed for systems engineers and network architects who need to design or deploy server load-balancing solutions using the Cisco ACE module.

Prerequisites:

You will gain the most from this course if you have a basic understanding of the following topics:

- TCP/IP protocol
- HTTP and SSL protocols
- N-tier application architecture
- Server load-balancing