



Cisco WAAS Enterprise

Length
4 days

Format
Lecture/lab

Track
Design &
Deploy

Version
2.0.1

Course Description

Geographically distributed enterprises are faced with the challenge of cutting costs while improving application performance at remote and branch sites. Cisco WAAS allows enterprises to centralize management of their data and optimize application performance over the WAN.

In this course, you will learn about Cisco WAAS WAN and application optimization technologies. You will learn how to design a basic WAAS configuration, and how to configure WAE devices to implement TCP and application-specific optimizations.

New features in the WAAS 4.1.1 platform are covered, including new application optimizers, Windows on WAAS virtual blades, and management enhancements.

Note: This 4-day course does not include the WAAS Mobile product. An appendix will be provided but WAAS Mobile will not be covered during the class. If you are interested in WAAS Mobile, please contact our sales team.

Who Should Attend

This course is designed for both pre-sales and post-sales systems engineers, as well as server, storage, and network IT managers.

Recommended Prerequisites

You will gain the most from this course if you have fundamental knowledge of data networking and Microsoft Windows networking technologies.

CWAAASE

Learning Objectives

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

- Integrate Cisco WAAS into an existing network infrastructure
- Install and configure WAEs
- Perform a rapid installation and deployment of WAAS using inline interception
- Configure traffic interception using WCCPv2
- Use the WAAS Central Manager to centrally configure, manage, and monitor a topology of WAE devices
- Configure application traffic policies
- Configure WAAS virtualization and Windows on WAAS
- Configure CIFS and NFS optimization
- Configure network printing
- Configure HTTP, MAPI, video, and SSL optimization
- Design Cisco WAAS solutions based on performance, scalability, and capacity sizing metrics
- Monitor and troubleshoot a WAAS deployment



Learning
Solutions



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Course Outline

Module 1: Cisco Wide Area Application Services

Lesson 1: Introducing Cisco WAAS

- Application Delivery Initiatives
- Cisco WAAS Introduction
- Cisco WAAS Optimizations
- Cisco WAAS Interception
- Secure WAN Optimization
- Cisco WAAS Mobile
- Cisco WAAS Virtual Blade
- Cisco WAE Platforms and Software Licensing

Lesson 2: Understanding WAN Optimization

- Application Performance Barriers
- Introduction to TCP
- Transport Flow Optimization
- Advanced Compression
- WAAS Auto Discovery

Lesson 3: Understanding Application Acceleration

- The Need for Application Acceleration
- CIFS Acceleration
- Windows Print Services
- NFS Optimization
- HTTP Optimization
- MAPI Optimization
- Streaming Video Optimization
- SSL Optimization

Module 2: WAAS Quick Start

Lesson 1: Introducing Traffic Interception

- Physical Inline Deployment
- Off-Path Network Deployment

Lesson 2: Installing and Configuring WAAS Using Quick Start

- Physical Inline Deployment
- Initial Central Manager Configuration
- Initial Accelerator Appliance Configuration
- Configuring Inline Interception
- Introduction to Cisco WAAS Central Manager
- Configuring WAAS for Acceleration

Module 3: Implementation, Integration, and Management

Lesson 1: Performing an Advanced WAE Installation and Configuration

- Initial Accelerator Network Module Configuration
- Configuring WAE Interfaces
- Enabling and Disabling Disk Encryption
- Commonly Used CLI Commands
- The WAE Device GUI

Lesson 2: Configuring Traffic Interception

- Configuring Inline Interception
- Configuring WCCPv2
- Configuring WAE Egress Methods
- Asymmetric Routing
- WCCPv2 Design Considerations
- Network Transparency

Lesson 3: Configuring Cisco WAAS Virtualization

- Cisco WAAS Virtualization Introduction
- Virtual Blade Architecture
- Configuring Virtual Blade
- Deploying Windows on WAAS as a Service

Lesson 4: Implementing Cisco WAAS Central Management

- Introduction to Cisco WAAS Central Manager, System Dashboard and reporting
- Creating Location Groups
- Activating WAEs
- Configuring Device Groups
- Managing and Monitoring WAEs
- Configuring Role-Based Access Control
- Managing Software Distribution and Upgrade
- Configuring High Availability
- System Settings and Device Recovery

Lesson 5: Configuring Application Traffic Policies

- Application Traffic Policies
- Default Policies
- Creating Application Definitions
- Managing Policies
- Configuring Adapter Policies
- Monitoring Optimizations



Learning Solutions



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Module 4: Cisco WAAS Application Optimizers

Lesson 1: Configuring CIFS Optimization

The Need for CIFS Optimization
The Cisco WAAS CIFS Solution
Configuring the CIFS Solution
Verifying the CIFS Solution
Troubleshooting

Lesson 2: Configuring WAAS Network Printing

The Need for Network Printing
The Cisco WAAS Network Printing Solution
Configuring the Network Printing Solution
Verifying the Network Printing Solution
Troubleshooting

Lesson 3: Configuring NFS Optimization

The Need for WAAS NFS Optimization
The Cisco WAAS NFS Solution
Configuring the NFS Solution
Verifying the NFS Solution
Troubleshooting

Lesson 4: Configuring HTTP Optimization

The Need for HTTP Optimization
The Cisco WAAS HTTP Solution
Configuring of HTTP Solution
Verifying the HTTP Solution
Troubleshooting

Lesson 5: Configuring MAPI Optimization

The Need for MAPI Optimization
The Cisco WAAS MAPI Solution
Configuring the MAPI Solution
Verifying the MAPI Solution
Troubleshooting

Lesson 6: Configuring Streaming Video Optimization

The Need for Streaming Video Optimization
The Cisco WAAS Streaming Video Solution
Configuring the Streaming Video Solution
Verifying the Streaming Video Solution
Troubleshooting

Lesson 7: Configuring SSL Optimization

The Need for SSL Optimization
The Cisco WAAS SSL Solution
Configuring the SSL Solution
Verifying the SSL Solution
Troubleshooting

Module 5: Cisco WAAS Design Solutions

Lesson 1: Planning a Cisco WAAS Network Design

Cisco WAAS Design Fundamentals
Cisco WAE Device Positioning
WCCPv2 Design Considerations

Module 6: Troubleshoot Cisco WAAS

Lesson 1: Troubleshooting Introduction

Troubleshooting Workflow
Common Issues
Platform Liveliness and Connectivity
Troubleshooting Management Services
Reporting Facilities

Lesson 2: Troubleshooting Network Interception

Network Interception Troubleshooting Overview
Troubleshooting WCCPv2 Interception
Troubleshooting Egress Methods
Troubleshooting Inline Interception
Troubleshooting Automatic Discovery

Lesson 3: Troubleshooting WAN Optimization

WAN Optimization Troubleshooting Overview
Disk Encryption Verification and Troubleshooting
Configured and Applied Policies
Examining Optimized Connections
TFO Transaction Logs
Compression Statistics





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Course Labs

- Lab 1: WAAS Quick Start
- Lab 2: Configure the NME-WAE and WCCP
- Lab 3: Configure Cisco WAAS Virtualization
- Lab 4: Configure Application Traffic Policies, Device Groups and Disk Encryption
- Lab 5: Configure Application Optimizers and Printing
- Lab 6: Workshop: Designing Cisco WAAS Solutions



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