Operating and Implementing Cisco WAN Automation Engine (SPWAE)

What you'll learn in this course

The Operating and Implementing Cisco WAN Automation Engine (SPWAE) v1.0 course teaches you, through a combination of lectures and labs, how to install the Cisco® WAN Automation Engine (WAE), builds your confidence with Cisco WAE configuration and basic troubleshooting, and enables you to practice designing and managing bandwidth and traffic engineering.

Additionally, you'll learn the basic knowledge necessary to plan, deploy, configure, and maintain the Cisco WAN Automation Engine solutions.

Course duration

- Instructor-led training: 3 days in the classroom and hands-on lab practice
- Virtual instructor-led training: 3 days of web-based classes and hands-on lab practice
- E-learning: Equivalent to 3 days of classroom instruction

How you'll benefit

This course will help you:

- Learn to install Cisco WAN Automation Engine
- Gain confidence with Cisco WAE configuration and basic troubleshooting
- Practice designing and managing bandwidth and traffic engineering

Who should enroll

This course is designed for:

- System installers
- System integrators
- System administrators
- Network administrators
- Solutions designers

Technology areas

- Network Automation

Course details

Objectives

After taking this course, you should be able to:

- Explain WAE basics, the purpose of WAE, and its capabilities
- Understand the Cisco WAE solution implementation
- Describe the network module configuration process
- Describe WAE Design software tools, demands creation, BGP modeling, and Failure and Simulation analysis
- Describe Cisco WAE Design traffic engineering and QoS modeling
- Explain how to use API with WAE Design and WAE Server
- Describe the function, components, and processes of Cisco WAE Live

Recommended knowledge and training

Before enrolling in this course, you should have the following knowledge and skills:

- Knowledge of general networking and routing concepts
- Basic knowledge of routing protocols: Open Shortest Path First (OSPF), Intermediate System-to-Intermediate System (IS-IS), Border Gateway Protocol (BGP)
- Understanding of Cisco Multiprotocol Label Switching Traffic Engineering (MPLS TE) technologies
- Understanding of Segment Routing Traffic Engineering (SR-TE) technologies
- Basic knowledge of Linux server operation and Linux tools
- Basic understanding of network automation and Software-Defined Networking (SDN) concepts

These are the recommended Cisco offerings that may help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA®)
- Implementing and Operating Cisco Service Provider Network Core Technologies (SPCOR)
- Implementing Segment Routing on Cisco IOS XR (SEGRTE201)

How to enroll

To enroll in the SPWAE course or explore our larger catalog of courses on Cisco Digital Learning, contact us at <training@fastlane-mea.com>

Outline

- WAE Solution and Architecture Overview
- Implementing a Cisco WAE Solution
- Network Model Configuration
- WAE Design Fundamentals
- Cisco WAE Design Traffic Engineering and Optimization
- Introducing Cisco WAE API
- Cisco WAE Live Deployment

Lab outline

- Start with Cisco WAE
- Cisco WAE Server Setup and Collector Configuration
- Get Started with Cisco WAE Design
- Describe Traffic with Demands
- Failures and Simulation Analysis
- Engineer Traffic Using Metrics and SR-TE
- Cisco WAE Design Remote Procedure Call (RPC) API
- Configure Cisco WAE Live