

## OPERATING AND IMPLEMENTING CISCO WAN AUTOMATION ENGINE (SPWAE) V1.0

### OPERATING AND IMPLEMENTING CISCO WAN AUTOMATION ENGINE (SPWAE) V1.0

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.

#### How you'll benefit

This class will help you:

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

#### Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

#### Who Should Attend

The primary audience for this course is as follows:

- System Installers
- System Integrators
- System Administrators
- Network Administrators
- Solutions Designers

#### OUTLINE

##### Module 1: WAE Solution and Architecture Overview

- Examining WAE
- Examining WAE Architecture and Design
- Examining WAE Applications and Use Cases

##### Module 2: Implementing a Cisco WAE Solution

#### Course Duration

3 days

#### Course Price

\$2,895.00 or 29 CLCs

#### Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

### **Module 3: Network Model Configuration**

- Describing the Collection Process
- Describing Network Interface Modules
- Creating Network Models
- Configuring WAE Modeling Daemon

### **Module 4: WAE Design Fundamentals**

- Getting Started with WAE Design
- Describing Demands and Traffic Tools
- Modeling Interior Gateway Protocol (IGP) and BGP
- Describing Failures and Simulation Analysis

### **Module 5: Cisco WAE Design Traffic Engineering and Optimization**

- Engineering Traffic by Using Metrics
- Engineering Traffic by Using Resource Reservation Protocol with Traffic Engineering (RSVP-TE)
- Engineering Traffic by Using Segment Routing-Traffic Engineering (SR-TE)
- Engineering Traffic by Using Latency Constraints
- Modeling Quality of Service (QoS)

### **Module 6: Introduction to WAE API**

- Introducing WAE Design Remote Procedure Call (RPC) API
- Introducing WAE Optimization and Prediction Module (OPM) API
- Introducing WAE Server Representational State Transfer Configuration Protocol (RESTCONF) and Network Configuration Protocol (NETCONF) APIs
- WAE Live Deployment
  - Describing the Components of WAE Live
  - Configuring WAE Live
  - Explaining WAE Live Features
- Maintenance and Troubleshooting
  - Maintaining WAE
  - Troubleshooting WAE

### **Module 7: Cisco WAE Live Deployment**

#### **LAB OUTLINE**

- **Lab 1: Start with Cisco WAE**
- **Lab 2: Cisco WAE Server Setup and Collector Configuration**
- **Lab 3: Get Started with Cisco WAE Design**
- **Lab 4: Describe Traffic with Demands**
- **Lab 5: Failures and Simulation Analysis**
- **Lab 6: Engineer Traffic Using Metrics and SR-TE**
- **Lab 7: Cisco WAE Design Remote Procedure Call (RPC) API**
- **Lab 8: Configure Cisco WAE Live**