

## Operating and Implementing Cisco WAN Automation Engine

**Duration: 180 Days**    **Course Code: SPWAE**    **Version: 1.0**    **Delivery Method: Elearning**  
**(Self-paced)**

### Overview:

The **Operating and Implementing Cisco WAN Automation Engine (SPWAE)** course teaches you how to install the Cisco® WAN Automation Engine (WAE). Learn how to plan, deploy, configure, and maintain Cisco WAN Automation Engine solutions. Build your confidence with Cisco WAE configuration and basic troubleshooting, and practice designing and managing bandwidth and traffic engineering.

### e-Learning

Interactive self-paced content that provides flexibility in terms of pace, place and time to suit individuals and organisations. These resources also consist of online books, educational podcasts and vodcasts, and video-based learning.

### Target Audience:

Anyone involved in the planning, design and implementation of a Cisco WAN Automation Engine Solution.

### Objectives:

- **After completing 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

### Prerequisites:

#### Attendees should have the following prerequisites:

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

### Testing and Certification

#### Recommended as preparation for the following exams:

- There are no exams currently aligned to this course

## Content:

WAE Solution and Architecture Overview

WAE Design Fundamentals

Cisco WAE Live Deployment

Implementing a Cisco WAE Solution

Cisco WAE Design Traffic Engineering and Optimization

Lab outline

Network Model Configuration

Introducing Cisco WAE API

- 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

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## Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987

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