Cisco Catalyst 9800-CL Wireless LAN Controller and WIFI6 Workshop (C9800CLWIFI6)

ID C9800CLWIFI6   **Price** 3,290.— €(excl. tax)   **Duration** 4 days

Course Overview

The practical workshop will provide students an introduction to Cisco IOS XE and the new WLAN technologies.

It offers many hand-on exercises utilizing up-to-date hardware including Cisco Catalyst 3650 switches, Catalyst 9120 and Aironet 3800 access points, Catalyst 9800-CL WLC, ISE 2.6, Windows 10 Wireless / Wired Clients, Windows DC Server.

A rack including the hardware mentioned above as well as two Cisco Catalyst 9800-CL Wireless LAN Controllers will be provided to each student. The new "Embedded Wireless Controller" technology with the current software version (17.9.4a) utilized on a high-performance C9120 access point will be part of this training.

We also use the currently recommended software version (v17.9.5) on the WLCs.

Our remote lab environment is being updated constantly to provide new features.

Who should attend

- Experienced network engineers who are planning to switch from AireOS (2504, 5508, 5520, 8510, 8540, vWLC) to the latest IOS XE 9800er WLC
- Newcomers to the Cisco wireless environment using the new WLC portfolio (IOS XE via CLI and GUI from the initial setup till operation and maintenance)
- Network engineer teams that aim for a migration from "old school wireless" to "802.11ax and Wi-Fi 6"

Prerequisites

- Networking fundamentals
- Wireless fundamentals, e.g. Understanding Cisco Wireless Foundations (WLFNDU)
- Routing and switching fundamentals
- Troubleshooting fundamentals
- AAA/ISE fundamentals
- Experience with Cisco IOS and IOS XE
- Experience with Cisco configurations, Cisco IOS images and licences

We recommend prior attendance of the courses

- Wireless Fundamentals 1 (WFUN1) and Wireless Fundamentals 2 (WFUN2) or
- Certified Wireless Network Administrator - CWNA (CWNA)

Course Objectives

After completing the Fast Lane workshop, you will have learned about and practiced the following topics:

- Fundamental functions and characteristics of the Cisco Catalyst 9800-CL wireless controller
- Setup and initial configuration, commissioning and access point connectivity
- WLAN security method (WPA3) and access utilizing various client devices
- Cisco WLAN architecture and underlying infrastructure
- Implementation of a central wireless LAN network with IOS-XE Catalyst 9800-CL wireless controllers
- Implementation of local and central switching with state-of-the-art access switches and wireless LAN controllers
- Implementation of remote Wireless LAN networks using Flex-Connect Mode
- Fundamental WLAN maintenance and troubleshooting
- Backup and recovery concepts
- Software updates
- Archive and restore of configurations
- The new standard WiFi 6 (802.11ax) and the differences and compatibility to older standards (802.11abg/ac)
- The features and particularities of WiIFi 6 (OFDMA, Multi-User-MIMO, Target Wake Time (TWT), 1024-QAM, IoT)

Course Content

The practical workshop will provide students an introduction to

Cisco IOS XE and the new WLAN technologies.

Cisco IOS XE is the base technology for the Cisco Catalyst 9800 wireless LAN controller and meets the following requirements:

- Local, Flexconnect
- Central authentication
- Local authentication (Flex)
- CWA, LWA, Web-Authentication
- Uninterrupted software updates
- Rolling out AP upgrades
- Handling of state-of-the-art access point models (C9120 and Air2800 / Air4800)
- WPA3 support
- Certified to run as VM (C9800-CL)
- WiFi 6 access points in various roles (CAPWAP, Mobility Express, Embedded Wireless Controller)
- WiFi 6 and 802.11ax "best practices" configuration of Cisco C9800CL and C91XX EWC

The Cisco Catalyst 9800 wireless controller combines the experience of utilizing Cisco in a network with Cisco RF innovation, the functions of the proven technology of the AireOS Cisco wireless LAN controller as well as Cisco IOS XE, a state-of-the-art, programmable and modular operating system. The Catalyst 9800 also offer HF excellence, device and wireless security, high-availability, programmability and scalability through Cisco IOS XE. The Catalyst 9800-CL offers the same functionality as offered on the appliance in its' private cloud via AWS. Depending on the size of the deployment, the Catalyst 9800-CL can serve 1000, 2000 or 6000 access points. In the private cloud all installation scenarios such as Local, Flexconnect and SDA are supported. In the public cloud, Flexconnect installation is supported. It can be deployed on VMware, KVM, NFVIS, Google Cloud Platform (GCP) and Amazon Web Services (AWS). WiFi 6 (802.11ax): All facts, benefits and differences are explained and demonstrated on our modern wireless LAN controllers and access points.

About Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

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