

# NSE 6 FortiSwitch

Duration: 3 Days

## COURSE DESCRIPTION

In this interactive course, you will learn how to deploy, provision, and manage a FortiSwitch with FortiGate using FortiLink. This course also covers the deployment and troubleshooting of Layer 2 and Layer 3 features, as well as the most common FortiSwitch stack topologies, including those that leverage multichassis link aggregation group (MCLAG) for redundancy and higher performance. You will also learn about FortiSwitch in standalone mode, its unique features, and how to manage a standalone switch directly, or from FortiLAN Cloud.

## COURSE OBJECTIVES

**Upon completion of this course, participants will be able to:**

- Design, deploy, and manage FortiSwitch in both managed and standalone modes
- Implement comprehensive Layer 2 and Layer 3 switching solutions
- Configure advanced security features for switched networks
- Troubleshoot complex FortiSwitch deployments
- Optimize network performance through advanced features and topologies
- Integrate FortiSwitch with FortiGate and FortiLAN Cloud platforms

## COURSE OUTLINE

### 1) Managed FortiSwitch Fundamentals

- Intro to Managed FortiSwitch Fundamentals
- FortiSwitch Overview
- FortiGate FortiLink Interface
- Auto-Discovery & Manual Authorization
- Automated Switch Authorization
- Displaying Managed Switches

### 2) FortiSwitch Topologies and STP

- Intro to FortiSwitch Topologies and STP
- Topologies and STP Overview
- Single FGT to Single FSW
- Single FGT to FSW Stack
- HA FortiGates and FortiSwitch
- Spanning Tree Protocol

### 3) FortiSwitch Ports, VLANs, & Trunking

- Intro to FortiSwitch Ports, VLANs, & Trunking
- Overview of FortiSwitch Ports, VLANs, & Trunking
- Layer 2 Ethernet Switching
- Layer 2 Switch Ports
- Power over Ethernet (PoE)
- Link Aggregation
- Virtual Local Area Networks (VLANs)

**4) FortiSwitch Layer 2 Security**

- Intro to FortiSwitch L2 Security
- Overview of Layer 2 Security
- DHCP Snooping
- Dynamic ARP Inspection (DAI)
- Intra-VLAN Traffic Control
- Storm Control
- Limits on Learned MAC Addresses

**5) FortiSwitch Advanced Features**

- Intro to FortiSwitch Advanced Features
- Overview of Advanced Features
- Network Access Control (NAC)
- MAC Address Quarantine
- IGMP Snooping
- FortiSwitch QoS
- LLDP and CDP

**6) FortiSwitch Monitoring and Troubleshooting**

- Intro to Monitoring and Troubleshooting
- Network Design Game Plan
- Initial Bootstrap of FortiGate
- Configuring Routing
- Configure FortiLink
- Adding the FortiSwitch
- Adding VLANs
- Adding a Manual Trunk
- Firewall Policies and NAT
- Tools for Monitoring

**7) FortiSwitch Standalone Mode**

- Intro to FortiSwitch Standalone Mode
- Overview of Standalone Mode
- Bootstrapping a FortiSwitch
- FortiSwitch Standalone GUI
- FortiSwitch & FortiLAN Cloud
- VLANs and Interfaces
- Trunks
- ACLs and Private VLANs

**8) FortiSwitch Spanning Tree**

- Intro to FortiSwitch Spanning Tree
- Spanning Tree Overview
- CLI Access to Managed Switches
- MST Instances
- Creating a New MST Instance
- Configure Multiple STP Root Bridges
- STP Additional Features