

# NSE Training Institute

# FortiGate Infrastructure

In this course, you will learn how to use advanced FortiGate networking and security.

Topics include features commonly applied in complex or larger enterprise or MSSP networks, such as advanced routing, transparent mode, redundant infrastructure, site-to-site IPsec VPN, single sign-on (SSO), and diagnostics.

#### **Product Version**

FortiOS 7.0

#### **Course Duration**

- · Lecture time (estimated): 6 hours
- Lab time (estimated): 5 hours
- Total course duration (estimated): 11 hours / 2 days

#### Who Should Attend

Networking and security professionals involved in the design, implementation, and administration of a network infrastructure using FortiGate devices should attend this course.

This course assumes knowledge of basic FortiGate fundamentals. You should have a thorough understanding of all the topics covered in the *FortiGate Security* course before attending the *FortiGate Infrastructure* course.

#### Certification

This course and the FortiGate Security course are intended to help you prepare for the NSE 4 certification exam.

# **Prerequisites**

- · Knowledge of OSI layers
- Knowledge of firewall concepts in an IPv4 network
- Knowledge of the fundamentals of FortiGate, as presented in the FortiGate Security course

# **Agenda**

- 1. Routing
- 2. SD-WAN Local Breakout
- 3. Virtual Domains (VDOMs)
- 4. Layer 2 Switching
- 5. IPsec VPN
- **6.** Fortinet Single Sign-On (FSSO)
- 7. High Availability (HA)
- 8. Diagnostics

# **Objectives**

After completing this course, you will be able to:

- · Analyze a FortiGate route table
- Route packets using policy-based and static routes for multipath and load-balanced deployments
- Configure SD-WAN to load balance traffic between multiple WAN links effectively
- Inspect traffic transparently, forwarding as a Layer 2 device
- Divide FortiGate into two or more virtual devices, each operating as an independent FortiGate, by configuring virtual domains (VDOMs)
- Establish an IPsec VPN tunnel between two FortiGate devices
- Implement a meshed or partially redundant VPN
- Diagnose failed IKE exchanges
- Offer Fortinet Single Sign-On (FSSO) access to network services, integrated with Microsoft Active Directory (AD)
- Deploy FortiGate devices as an HA cluster for fault tolerance and high performance
- Diagnose and correct common problems

# **Training Delivery Options and SKUs**

#### Instructor-Led Training

Includes standard NSE training content delivered in person onsite, or live online using a virtual classroom application. Training is delivered within public classes or as a private class. Private requests are scoped, quoted, developed, and delivered by Fortinet Training (minimum quantities apply).

Use the following ILT Training SKU to purchase scheduled public classes of this course through Fortinet Resellers or Authorized Training Partners:

FT-FGT-INF

#### **Self-Paced Training**

Includes online training videos and resources through the NSE Training Institute library, free of charge.

You can purchase on-demand lab access with interactive, hands-on activities using the following methods:

- Credit card, through the course on the NSE Training Institute
- Purchase order (PO), through Fortinet Resellers or Authorized Training Partners

After you complete the purchase, you receive lab access and the accompanying lab guide within the self-paced course.

Use the following on-demand lab training SKU to purchase lab access using a PO:

FT-FGT-INF-LAB

See Purchasing Process for more information about purchasing Fortinet training products.

#### (ISC)<sup>2</sup>

- CPE training hours: 6
- CPE lab hours: 5
- · CISSP domains: Security Operations

# **Program Policies and FAQs**

For questions about courses, certification, or training products, refer to Program Policy Guidelines or Frequently Asked Questions.