

FORTINET

NSE 8 EXAM DESCRIPTION

Fortinet Certification Program



About This Document

This document provides a summary of the updates that candidates need to know to prepare for the new version of the NSE 8 certification program.

Audience

The intended audience for this document includes the following groups:

- NSE 8 written candidates (new and recertification):
 - Those who want to take the NSE 8 written exam
- NSE 8 practical candidates:
 - Those who want to take the NSE 8 practical exam
- Partners, distributors, ATCs, and the general public:
 - Those who are looking for more information about the NSE 8 program

NSE 8 Certification—New Version

The NSE8 program is in the process of being updated to a new version. The program still includes two exams: one written exam, delivered in any of the worldwide Pearson Vue locations, and one practical exam, delivered on-site or remotely, in certain Fortinet offices.

This document includes a basic blueprint of the new exams. This document will be updated as soon as the program is fully released to the public.

Certification Topics

Candidates preparing for the Fortinet NSE 8 certification exam (written and practical) should be familiar with the following topics:

Note: This list is a guideline only. The topics covered in the exam may change at any time, without notice.

Written Exam

The Fortinet NSE 8 written exam is a 120-minute multiple-choice exam that is offered at Pearson VUE test centers worldwide. Questions include design scenarios, exhibits, configuration extracts, and troubleshooting captures that assess the networking, security, and Fortinet solution knowledge and experience of the test taker.

A practice exam is available at the Fortinet NSE Institute. The practical exam is designed to give you an idea of the questions on the NSE 8 exam offered at Pearson VUE.

NSE 8 written exam highlights:

- Name: NSE 8 - Fortinet Network Security Expert 810
- Language: English only
- Available at: Pearson VUE test centers worldwide
- Cost: 400.00 USD
- Number of questions: 60
- Time allowed to complete: 120 minutes total test time
- Scoring method: Each question must be 100% correct for credit. No partial credit is given. No deductions are made for incorrect answers.
- Types of questions: Multiple choice and multiple select with exhibits
- Time required between attempts: 15 days
- Time for acknowledgment and score to be reflected in NSE Institute transcripts: 21 days
- Scoring: Pass or fail
- Results: The test taker will receive a document showing their overall result: pass or fail. The document will also show which sections the test taker passed or failed. No further details or assistance is provided.
- Expiration: 2 years

Written Exam Certification Topics (Blueprint)

Candidates preparing for the Fortinet NSE 8 certification exam (written) should be familiar with the following topics:

Note: This list is a guideline only. The topics covered in the exam can change at any time without notice.

1. Security Architectures

- a) Fortinet cloud security solutions
 - i) FortiGate VM models and licensing
 - ii) FortiGate VM deployments
 - iii) Fortinet on private clouds
 - (1) FortiGate connector for OpenStack
 - (2) FortiGate-VMX
 - iv) Fortinet on public clouds
 - (1) Amazon AWS
 - (2) Microsoft Azure

- b) Designing resilient solutions
 - i) Fortinet solutions advanced high availability features
 - ii) Fortinet solutions operation and deployment modes
 - iii) FortiGate Cluster protocol
 - iv) FortiGate Session Life Support protocol
 - v) Session-aware load balancing clustering
 - vi) Load balancing
 - vii) Fault tolerance
 - c) Designing enhanced Fortinet solutions
 - i) Fortinet solutions for specific scenarios
 - (1) Secure access networks
 - (2) Web application security
 - (3) Advanced threat protection
 - (4) Cloud security
 - (5) Enterprise firewall
 - d) Fortinet high-end solutions
 - i) FortiGate 3000 Series
 - ii) FortiGate 5000 Series
 - iii) FortiGate 7000 Series
2. Hardware acceleration
- a) Hardware acceleration overview
 - i) Content processors
 - ii) Security processors
 - iii) Network processors
 - iv) FortiGate blades
 - v) FortiGate chassis
 - b) Traffic in Fortinet products
 - i) Traffic offloading
 - ii) Life of a packet
 - iii) Fortinet communication ports and protocols
3. Networking
- a) Advanced routing
 - i) Static routing

- ii) Dynamic routing
- iii) Routing and high availability
- iv) Asymmetric routing
- v) Secure SD-WAN
- b) Advanced NAT
 - i) Central NAT
 - ii) NAT64
 - iii) NAT46
 - iv) DNS64
- c) VPN technologies
 - i) Advanced IPsec
 - ii) Advanced SSL
- d) Network troubleshooting
 - i) Debugging tools
 - ii) Diagnostic tools
 - iii) Routing and VPN troubleshooting
 - iv) CLI in Fortinet solutions
- 4. Authentication
 - a) Authentication with Fortinet products
 - i) Advanced single sign-on
 - ii) RADIUS
 - iii) Two-factor authentication
 - iv) 802.1x
 - v) Certificate-based authentication
 - vi) Troubleshooting
- 5. Content inspection
 - a) Inspection modes
 - i) SSL/SSH
 - ii) Certificate
 - iii) Sandbox inspection
 - b) FortiOS security profiles
 - i) Antivirus
 - ii) Intrusion prevention systems (IPS)

- iii) Application control
 - iv) Web filtering
 - v) DNS filtering
 - vi) VoIP inspection
 - vii) Session helpers
 - c) FortiGuard services
6. Security operations
- a) Fortinet solutions APIs
 - i) Rest API
 - b) Handling security events with Fortinet solutions
 - i) FortiSIEM
 - ii) FortiAnalyzer
 - iii) Log analysis
 - iv) Event management
 - c) Fortinet central management solutions
 - i) FortiManager
 - ii) FortiCloud
7. Integrated Solutions
- a) Integrate Fortinet solutions for advanced threat protection
 - b) FortiLink
 - c) Fortinet wireless solutions
 - d) Fortinet authentication solutions
 - e) Fortinet hybrid solutions (traditional network and cloud)
8. Enhanced Technologies
- a) Fortinet enhanced solutions including:
 - i) FortiWeb
 - ii) FortiADC
 - iii) FortiDDoS
 - iv) FortiAuthenticator
 - v) FortiMail

Practical Exam

After a candidate has passed the prerequisite NSE 8 written exam, the candidate can register to take the practical exam either remotely or in person at one of Fortinet's NSE 8 test centers.

The Fortinet NSE 8 practical exam is a two-day hands-on evaluation. During the practical exam, the candidate must configure and validate a complete network topology involving multiple Fortinet products.

Highlights of the NSE 8 practical exam:

- Language: English only
- Available at: On-site or remotely (scheduling required)
- Cost: 1600.00 USD
- Number of tasks: 38
- Time allowed to complete: TBD (proctored)
- Scoring method: Each task must be 100% correct for credit. No partial credit is given. No deductions are made for incorrect answers.
- Type of tasks: Hands-on configuration and troubleshooting
- Time required between attempts: 15 days
- Time for acknowledgment and score to be reflected in the NSE Institute transcripts: 21 days
- Scoring: Pass or fail
- Results: The test taker will receive a document showing their overall result: pass or fail. The document will also show which sections the test taker passed or failed. No further details or assistance is provided.

Practical Exam Certification Topics (Blueprint)

Candidates preparing for the Fortinet NSE 8 certification exam (practical) should be familiar with the following topics:

Note: This list is a guideline only. The topics covered in the exam can change at any time without notice.

1. FortiOS Administration
 - a) VDOMs
 - b) Proxies
 - c) Resilient networking
2. FortiOS Networking
 - a) VPN deployments
 - b) IPv6 networking
 - c) Advanced routing

3. Authentication
 - a) Single sign-on
 - b) Authentication methods
4. Content Inspection
 - a) Traffic inspection
 - b) Traffic control
5. Security Fabric
 - a) Fortinet Security Fabric
6. Secure Access
 - a) Fortinet Secure Access solutions
7. Security Operations and Management
 - a) FortiManager operation
 - b) FortiSiem operation
 - c) FortiAnalyzer operation
8. Enhanced Technologies
 - a) FortiWeb to secure web applications
 - b) Protection against DDoS attacks
 - c) FortiMail to secure mail applications
 - d) FortiADC to load balance traffic

Firmware Base Versions

The new version of the NSE 8 exams will be based on the most current firmware available on our support site. The NSE 8 candidate should have the knowledge required to configure a network environment with the latest

firmware versions available, and up to two major releases following the date on which the exam becomes available to the public.

Product	Base Firmware	Written Exam	Practical Exam
FortiGate	v5.6.x + / 6.0.x +	X	X
FortiAnalyzer	v5.6.x + / 6.0.x +	X	X
FortiAuthenticator	v5.4.x +	X	X
FortiManager	v5.6.x + / 6.0.x +	X	X
FortiSandbox	v2.5.x + / 3.0.x	X	X
FortiWAN	v4.5.x +	X	
FortiVoice Enterprise	v5.3.x +	X	
FortiADC	v4.8.x + / 5.x.x +	X	X
FortiWeb	v5.9.x + / 6.0.x +	X	X
FortiTester	v3.x.x +	X	
FortiMail	v5.4.x + / 6.0.x +	X	X
FortiDDoS	v4.4.x +	X	X
FortiAP	v5.6.x + / 6.0.x +	X	X
FortiSwitch	v3.6.x + / 6.0.x +	X	X
FortiSIEM	v4.10.x + / 5.1.x +	X	X
FortiClient	v5.6.x + / 6.0.x +	X	X

- Base versions:
 - The NSE 8 certification program will have base firmware versions for all the solutions. The program will be adaptable to support up to two additional major releases during the life of the exam.
 - The expert candidate's knowledge of Fortinet features, technologies, and solutions should extend beyond a single OS version.

New Certification

All new candidates must pass the new written exam before they schedule the practical exam session.

Recertification

Current NSE8 certification holders with a valid status should attempt and pass the written exam only.

If their certification has expired, they should attempt and pass the written exam and then schedule and pass the new practical exam.

