



# NSE 8 Certification

Public Handbook

**FORTINET**  
**NSE Training Institute**  
Certification Program

NSE 8 Certification Public Handbook

for FortiGate 6.2.x and higher

Last Updated: 8 July 2020

Fortinet®, FortiGate®, and FortiGuard® are registered trademarks of Fortinet, Inc. in the U.S. and other jurisdictions, and other Fortinet names herein may also be trademarks, registered or otherwise, of Fortinet. All other product or company names may be trademarks of their respective owners. Copyright © 2002 - 2020 Fortinet, Inc. All rights reserved. Contents and terms are subject to change by Fortinet without prior notice. No part of this publication may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from Fortinet, Inc., as stipulated by the United States Copyright Act of 1976.

# Table of Contents

|   |           |
|---|-----------|
| <b>NETWORK SECURITY EXPERT (NSE) 8 .....</b>              | <b>4</b>  |
| NSE 8 Certification .....                                 | 4         |
| Audience.....   | 4         |
| <b>CERTIFICATION REQUIREMENTS .....</b>                   | <b>4</b>  |
| Written Exam .....  | 4         |
| Practical Exam.....                                       | 5         |
| Practical Examination Components.....                     | 6         |
| <b>NSE 8 TEST SITES .....</b>                             | <b>8</b>  |
| <b>EXAM PREPARATION .....</b>                             | <b>9</b>  |
| Certification Topics .....                                | 9         |
| Firmware Versions.....                                    | 12        |
| Recommended Study Materials .....                         | 13        |
| Recommended Preparatory Courses .....                     | 14        |
| Recommended Knowledge and Experience .....                | 14        |
| <b>EXAM PROCESS .....</b>                                 | <b>15</b> |
| Exam Registration and Scheduling .....                    | 15        |
| <b>NON-STANDARD PRACTICAL EXAM DELIVERY .....</b>         | <b>17</b> |
| Delivery Modes.....                                       | 17        |
| Requirements for a Non-Standard NSE 8 Exam Delivery ..... | 18        |

|   |           |
|---|-----------|
| <b>GRADING PROCEDURE.....</b>                   | <b>20</b> |
| NSE 8 Written Exam Grade.....                   | 20        |
| NSE 8 Practical Exam Grade .....                | 20        |
| Examination Summary Report.....                 | 21        |
| <b>SUCCESSFUL CANDIDATES .....</b>              | <b>21</b> |
| Sequential Identification Numbers.....          | 21        |
| Awards.....                                     | 22        |
| <b>NSE 8 VALIDITY AND RECERTIFICATION .....</b> | <b>23</b> |
| Certification Validity .....                    | 23        |
| Recertification.....                            | 23        |
| <b>ABOUT THIS DOCUMENT .....</b>                | <b>24</b> |
| Document Version .....                          | 24        |



# Network Security Expert (NSE) 8

## NSE 8 Certification

Welcome to the Fortinet NSE 8 Certification exam preparation handbook. The purpose of this document is to provide all the information required by the test taker to prepare for the NSE 8 certification exam.

Fortinet NSE 8 certification recognizes the successful candidate's comprehensive and in-depth ability to design, configure, and troubleshoot network security using Fortinet products in complex networks.

NSE 8 is the top-level certification in the Fortinet NSE program and is designed to reflect best practices using Fortinet solutions in the network security and cybersecurity industry.

## Audience

The intended audience for this document is as follows:

- Network security and cybersecurity professionals interested in attempting the NSE 8 certification written and practical examinations.
- Partners, distributors, authorized training centers (ATCs), and the general public who are looking for more information related to the NSE 8 program.

## Certification Requirements

Assessment for Fortinet NSE 8 certification is composed of two parts: a written exam and a practical exam. There are no prerequisites to take the Fortinet NSE 8 written exam. However, the candidate must pass the NSE 8 written exam before they can take the Fortinet NSE 8 practical exam. The written exam on its own is not a certification. You must pass both the written exam and practical exam to obtain NSE 8 certification.

## Written Exam

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

A set of practice questions is available at the Fortinet NSE Institute. The practice questions are intended to provide a reference about the type of question included in the written exam.



#### NSE 8 written exam details:

- Name: NSE 8 - Fortinet Network Security Expert
- Exam series: NSE8\_811
- Language: English only
- Available at: Pearson VUE test centers worldwide
- Cost: USD 400.00
- Number of questions: 60
- Time allowed to complete: 120 minutes
- 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 unsuccessful attempts: 15 days
- Time for acknowledgment and score to be reflected in NSE Institute transcripts: 21 days
- Scoring: Pass or fail
- Score report: At the end of the exam, a score report is displayed to the test taker showing their overall result: pass or fail. The report will also show exam section grades. No further detail or assistance is provided. This document is not a certificate. It is a summary of the candidate's written exam results only. The score report can be viewed and downloaded from the candidate's Pearson VUE account.
- Expiration: 2 years

## Practical Exam

After the candidate has passed the prerequisite NSE 8 written exam, they can register to take the practical exam at any of Fortinet's NSE 8 test centers.

The Fortinet NSE 8 practical exam is a two-day practical assessment. During the practical exam, the candidate must build and configure a complete network topology that includes multiple Fortinet products and solutions.

#### Details of the NSE 8 practical exam:

- Name: NSE 8 Practical Exam
- Exam series: NSE8\_860
- Language: English only



- Available at: On-site (non-standard locations are also available); scheduling required, procotored
- Cost: USD 1600.00
- Number of tasks: 38
- Time allowed to complete: 15 hours (nine hours on day one and six hours on day two)
- 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 unsuccessful attempts: 15 days
- Time for acknowledgment and score to be reflected in the NSE Institute transcripts: 21 days
- Scoring: Pass or fail
- The test taker will receive an Exam Summary report document showing their overall result: pass or fail. The report will also show exam section grades. No further detail or assistance is provided.

## Practical Examination Components

### Exam Delivery

The NSE 8 practical exam includes almost all Fortinet products and solutions. It is a hybrid infrastructure with a mix of hardware and virtual components.

Each student will work in their own unique and independent environment or pod.

All material necessary to complete the exam is provided on each pod:

- Computer and peripherals (mouse, keyboard, monitors)
- Digital version of the exam tasks and diagrams
- Three (3) NSE 8 branded pages for notes with pen or pencil (notepad)
- Digital access to configuration guides: handbooks, administration guides, CLI documents for all the products and solutions are included in the exam

No external documentation or materials are allowed in the testing room.

### Laptop Computers

To complete all the tasks included in the practical exam, each NSE 8 test taker is provided with a pre-configured and dedicated laptop. No personal or external devices are allowed in the testing room.

Each test taker's pod will also have a dedicated virtual bastion host with all the required tools and software needed to complete the exam.



#### Main software:

- Operating System: Windows 10
- Windows Remote Desktop Client
- FortiClient

#### Additional software:

- |                                     |                       |
|-------------------------------------|-----------------------|
| • Kali Linux                        | • FileZilla FTP       |
| • Ubuntu desktop                    | • Mozilla Thunderbird |
| • Ubuntu server                     | • Notepad++           |
| • Adobe Acrobat Reader              | • Putty               |
| • Mozilla Firefox (default browser) | • 3CDaemon (FTP/TFTP) |
| • Wireshark                         |                       |

## Additional Information

The following are some additional details about the NSE 8 practical exam:

- An introduction session (exam overview and instructions) is delivered on day one of the exam. This presentation is delivered 30 minutes before the exam starts.
- The test taker must bring a government-issued photo ID to the exam.
- An attendee list must be signed on each day of the exam.
- No physical connections or cabling is required during the exam.
- Some troubleshooting might be required during the exam. The complexity of this troubleshooting is directly related to the configuration of each test taker environment (pod).
- No external material or devices are allowed in the testing room, including computers, cell phones, tablets, or any other electronic devices.
- Lunch is provided on each day of the exam.
- Other details are shared during the introduction session.





# NSE 8 Test Sites

The NSE 8 practical exam is delivered at the following sites:

| Location                 | Address  | Phone           |
|--------------------------|--|-----------------|
| US – Federal             | 12005 Sunrise Valley Dr., Suite 204<br>Reston, VA 20191                      | + 408-331-4547  |
| Sunrise Florida, USA     | 13450 W Sunrise Blvd<br>Suite 430<br>Sunrise FL 33323, USA                   | + 954-368-9990  |
| Sophia Antipolis, France | 905 rue Albert Einstein<br>Bâtiment Fortinet Agora<br>06560 Valbonne, France | +33-4-8987-0500 |

Additional locations include, but are not limited to, the following non-standard sites:

- Fortinet Ottawa, Canada
- Fortinet Vancouver, Canada
- Fortinet HQ Sunnyvale, USA
- Fortinet Reading, UK
- Fortinet Paris, France
- Fortinet Germany
- Fortinet Dubai, United Arab Emirates
- Fortinet Kuala Lumpur, Malaysia

All locations offer the NSE 8 practical exam for a maximum of ten (10) test takers simultaneously, using independent environments (pods) for each student.



# Exam Preparation

## Certification Topics

Candidates preparing for the Fortinet NSE 8 certification should be familiar with the topics covered on the certification exams.

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

## Written Exam Certification Topics

1. Security architectures
  - a) Fortinet cloud security solutions
    - i) FortiGate VM models and licensing
    - ii) FortiGate VM deployments
    - iii) Fortinet on private clouds
    - iv) Fortinet on public clouds
  - 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 Certification Topics

- 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

**Note:** Troubleshooting knowledge and experience in all the previously mentioned topics and solutions.

## Firmware Versions

This section details all the firmware and versions used for the NSE 8 exams.

The new version of the NSE 8 exams will be based on the most current firmware available on the Fortinet 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 the exam becomes available to the public.

| Product            | Base Firmware | Written Exam | Practical Exam |
|--------------------|---------------|--------------|----------------|
| FortiGate          | 6.2.x +       | x            | x              |
| FortiAnalyzer      | 6.2.x +       | x            | x              |
| FortiAuthenticator | 6.0.x +       | x            | x              |
| FortiManager       | 6.2.x +       | x            | x              |
| FortiSandbox       | 3.1.x         | x            | x              |
| FortiADC           | 5.4.x +       | x            | x              |
| FortiWeb           | 6.3.x +       | x            | x              |
| FortiMail          | 6.2.x +       | x            | x              |
| FortiDDoS          | 5.3.x +       | x            | x              |
| FortiAP            | 6.2.x +       | x            | x              |
| FortiSwitch        | 6.2.x +       | x            | x              |
| FortiSIEM          | 5.2.x +       | x            | x              |
| FortiClient        | 6.2.x +       | x            | x              |

**Note:** Firmware versions may change at any time without notice. Please review the latest version of this document, the FAQ document, and the NSE 8 exam description, when preparing for your exam.



About the base firmware 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.

Additional exam components include, but are not limited to:

- Windows 10
- Ubuntu desktop
- Ubuntu server
- Kali Linux
- Windows Server

## Recommended Study Materials

This section lists the recommended study materials to help certification candidates prepare for the NSE 8 certification exams.

- Administration guides and handbooks:
  - FortiGate, FortiManager, FortiAnalyzer
  - FortiADC, FortiSIEM, FortiDDoS
  - FortiWeb, FortiMail
  - FortiSandbox, FortiAuthenticator, FortiClient
  - FortiSwitch, FortiAP
- CLI references
- Cookbooks
- Fortinet Knowledge Base articles



## Recommended Preparatory Courses

The NSE 8 certification exams have no prerequisites, but it is highly recommend that test candidates complete the following courses before attempting the certification exams.

| NSE 4  | NSE 5                                      | NSE 6   | NSE 7  |
|--|--|---|--|
| FortiGate Security<br>FortiGate Infrastructure | FortiAnalyzer<br>FortiManager<br>FortiSIEM | FortiWeb<br>FortiMail<br>Secure Wireless<br>FortiADC<br>FortiSandbox<br>FortiAuthenticator<br>FortiDDoS | Secure Access<br>Enterprise Firewall<br>Advanced Threat Protection<br>Cloud Security |

## Recommended Knowledge and Experience

It is strongly recommended that the test candidates have extensive knowledge and experience in the following areas:

- Third-party systems and practices:
  - Advanced virtual Infrastructures
  - Advanced switching and routing
  - Advanced operating systems: Windows and Linux
  - Security vulnerabilities and penetration testing tools and techniques
- Fortinet solutions, networking, and security practices:
  - Design
  - Deployment
  - Management and administration
  - Troubleshooting

**For more information, please visit:**

<https://www.fortinet.com/support/training/network-security-expert-program.html>



# Exam Process

## Exam Registration and Scheduling

These are the steps that candidates must follow to complete both the written and practical components of the NSE 8 certification:

1. Buy a voucher to take the written exam.
  - SKU: NSE-EX-CERT
  - Price: USD 400.00 per voucher per candidate
  - Voucher expiration: One year. If the voucher is not used during the one-year lifespan, a replacement voucher will *not* be issued.
  - Usage restrictions: Each voucher can be used only once.
2. Go to the Person VUE [website](#) to register for the written exam. Create a Pearson VUE user account if you do not already have one.

The following information must be provided when creating a new account.

**Note:** When entering an email address, a corporate address is preferred.

| Basic Info   | Location       | Additional Info      |
|--------------|----------------|----------------------|
| Customer ID  | Address        | Company <i>Email</i> |
| First Name   | Country        | Is Employee          |
| Middle Name  | State/Province | <i>Relationship</i>  |
| Last Name    | City           | Updated by           |
| Title        | Postal Code    | Updated Date         |
| Company      | Phone          |                      |
| <i>Email</i> | Fax            |                      |

**Important!** The information provided when registering on the Pearson VUE site must match the corresponding information that the candidate provided when creating their Fortinet NSE Institute account.

3. On the Pearson VUE site, choose the date and location to take the written component of the exam.
  - If the test taker passes the written exam, they can then move on to the practical component.





- If the test taker passes the written exam, they do *not* receive a certificate until they also pass the practical exam.
  - If the test taker does not pass the written exam, they will require a new voucher to write the exam again.
4. Purchase a voucher to take the practical exam.
- SKU: NSE8-EX-PRL8
  - Price: USD 1600.00 per voucher per candidate
5. Enroll in the practical exam through the regional training team administrator:
- training@fortinet.com for AMER
  - EMEAtraining@fortinet.com for EMEA
  - APACtraining@fortinet.com for APJC, ANZ, and INDIA

**Important!** The information that the candidate provides when enrolling to take the practical exam must match the corresponding information that they provided when registering on the Pearson VUE site.

6. Indicate the preferred exam location. If a non-standard location is requested, the following conditions apply:
- A minimum of six test takers are required for a session (maximum is 10).
  - Location and proctors should be defined within 60 days (minimum) of the requested exam date.
  - The Fortinet Training Operations team confirms if the requested date is available on the calendar. If it is, they will notify the test taker that the date, site, and proctor have been approved.
  - If the test taker needs to cancel or reschedule the exam, they must inform the Fortinet Training Operations team at least 20 days before the scheduled exam date.
  - Approved facilities for taking the non-standard location exam, include:
    - Fortinet offices worldwide
    - Distributor offices worldwide
    - ATCs offices worldwide
- Note:** Review the [Requirements for a non-standard NSE8 exam delivery](#) section for more details and in-depth rules for this option.
7. After the test taker completes the practical exam and the proctor grades it, the test taker will receive an examination summary report with the results of the exam. The report will include:
- A global pass or fail section
  - All the exam sections with corresponding results: pass or fail



8. The Fortinet Technical Training Operations team will follow the internal process to confirm that the test taker has passed both exams: the written and the practical.
9. If the test taker passes both exams, the updated information will be available at the NSE Institute site 21 business days after the practical exam was approved in the candidate's profile. A digital certificate will be available for download.
10. After completing this process, the Fortinet Training department will proceed with the preparation of the NSE 8 Award box. The NSE 8 Award box will be delivered to the shipping address provided by the test taker.

# Non-Standard Practical Exam Delivery

## Delivery Modes

The NSE 8 practical exam can be delivered in two ways:

- On-site, where the NSE 8 environments are located
- At a non-standard location, using a VPN connection to one of the NSE 8 physical sites locations

To take the practical exam, the test taker must be able to establish a Windows Remote Desktop (RDP) session to a bastion host (VM host) that allows full connectivity to the entire NSE 8 infrastructure, using Fortinet's provided laptops.

When taking the practical exam from a non-standard location, the test taker must establish the connection from a Fortinet-approved location to one of the NSE 8 lab environments, allowing full connectivity to the NSE 8 infrastructure.

A local Fortinet proctor is mandatory and will accompany the test takers for the duration of the exam.

The requirements and components of the NSE 8 non-standard location exam option are the same as those for the on-site exam.

The non-standard location cannot be the test taker's office or home.



# Requirements for a Non-Standard NSE 8 Exam Delivery

## Proctor requirements

At least one proctor is required for each session. For a non-standard exam location, a remote assistant (based on the NSE 8 exam environment site) is required in case a physical interaction with the environment is necessary. This person does not need to be an NSE 8 proctor or an NSE 8 certified engineer. Basic technical knowledge is required.

## Connectivity Requirements

For an acceptable remote session, proper Internet connectivity is required. At a minimum, a connection of 20Mb/s bandwidth is required.

Each session can hold a maximum of ten (10) test takers. Each student will have an independent environment (pod).

To establish a secure connection to the defined NSE 8 physical site from the test taker laptop, a wired network connection through an SSLVPN client will be used. A wireless tunneled connection alternative is also available as a backup. All traffic is isolated between pods and the Internet.

Each laptop requires an ethernet cabled connection to the Internet with DHCP enabled.

For the wireless backup alternative, there must be an ethernet cabled connection to the provided FortiAPs with DHCP enabled, DNS resolution, HTTPS, and CAPWAP traffic allowed to the Internet. The FortiAP could be powered by PoE or by a power supply.

The Internet bandwidth for the session does not need to be a dedicated connection exclusively for the exam session; however, it should meet the minimum bandwidth requirements (20Mb/s).

**Note:** The FortiAP will be a Fortinet approved and pre-configured device.

## Non-Standard Site Location Specifications

The following are the minimum requirements for the site that will host the non-standard session:

- A private room with a closed door is required for examination purposes. Preferably, a location that has minimal disruptions and noise.
- A separate desk for each test taker with space for a laptop, an additional monitor, a mouse, and a notepad.
- A pre-configured and approved laptop for each test taker.
- A projector, a television, or something similar should be available on the first day for the introduction and overview presentation.
- A paper shredder, to destroy all the examination material at the end of the second day.



## Laptop Requirements

Test takers will use a Fortinet-provided laptop. The laptop will be connected to the pre-defined NSE 8 site for the total duration of the exam, using Windows RDP through a secure connection.

Minimum hardware specifications:

- Wi-Fi card (802.11ac)
- Gigabit Ethernet RJ45 port or the required adapter.
- At least 8 GB of RAM
- Quad-Core CPU
- 100GB or more of SDD storage
- Microsoft Windows (version not relevant)
- FortiClient managed by the NSE Cloud.
- RDP Client (usually built-in with Windows)
- Adobe Acrobat Reader



# Grading Procedure

This section contains detailed information about the steps used to grade the NSE 8 certification exams. All the information not mentioned in this section is Fortinet Confidential and for internal use only.

## NSE 8 Written Exam Grade

The written exam is graded with the Pearson VUE system using the scoring method defined by Fortinet:

- Each item (question) must be 100% correct for credit, no partial credit
- No deduction for incorrect answers
- Grade: Pass or fail

At the end of the exam, a summary report will show the global and per section grades for the test.

## NSE 8 Practical Exam Grade

Test takers should consider the following approach when taking the exam:

- Review all tasks described in the Exam Task Form.
  - Scoring method: Each task must be 100% correct for credit. Where applicable some tasks may provide partial credit.
  - Score: Pass or Fail
- Consider these two aspects of each task:
  - Correct configuration parameters
    - Each task may have different configurations but all of them may be correct.
  - Correct output or operation of the configuration

When the exam is complete, the proctor will share the following information with the Fortinet Training Operations Department:

- Test taker name
- Test taker email
- Test taker country
- Date of the exam (Day one of the practical exam)
- Grade



If the test taker passes the exam, a unique NSE 8 ID is assigned. The unique ID numbering order will depend on the number of the POD used during the practical exam by the test taker and the date (Day 1) on which the test taker took the practical exam. For example, POD01 will have a lower NSE 8 ID than POD10, from the same group of the same day and will also be lower than POD01 of the next session.

## Examination Summary Report

NSE 8 certification includes two different reports:

- A report delivered immediately after the test taker completes the written exam. This is a Pearson VUE system report that includes:
  - Candidate name
  - Date of the test
  - Result (pass or fail)
  - Grade details:
    - All the sections that the test taker has passed or failed. (It is directly related to the exam list of topics.)
- An examination summary report applicable to the practical exam that includes:
  - Candidate name
  - Date of the test
  - Overall result (pass or fail)
  - Grade details:
    - All the sections that the test taker has passed or failed. (It is directly related to the exam list of topics.)
  - This report is delivered through a direct email communication between the proctor and the test taker between 12 to 15 business days after the practical exam was taken.

## Successful Candidates

### Sequential Identification Numbers

The Fortinet NSE 8 certification uses a numbering scheme to uniquely identify candidate certification. The numbering scheme starts at 3072.

This numbering scheme is based on cryptography. In cryptography, key size or key length is the number of bits in a key used by a cryptographic algorithm (such as a cipher). Key length defines the upper-bound



on an algorithm's security. RSA key **3072** is the next step for keys intended to extend beyond 2030. This is the same approach that we have for our NSE 8 certified engineers.

Reference: [https://en.wikipedia.org/wiki/Key\\_size](https://en.wikipedia.org/wiki/Key_size)

This unique ID is perpetual and tied to the test taker's name and information.

## Awards

If the test taker passes both exams (written and practical) he/she will receive, at their registered home/office address, the following awards in a customized award box (the content of the box may differ in some cases):

- Electronic NSE 8 certificate:
  - Available for download from test taker's profile at the Fortinet NSE Institute
- Physical NSE 8 certificate:
  - Signed by Ken Xie (CEO) and Michael Xie (CTO)
- NSE 8 plaque:
  - With test taker's name and NSE 8 ID printed
- NSE 8 Pin:
  - With the logo of the program



# NSE 8 Validity and Recertification

## Certification Validity

The NSE 8 certification is valid for two (2) years.

First-time test takers:

- For the written exam; Unlimited attempts.
- For the practical exam: (Passing the written exam is mandatory to schedule and attempt the practical exam). Unlimited attempts are also allowed.

## Recertification

To recertify the following requirements apply:

- While the certification is still valid (within the two-year period), the candidate must take and pass the written exam only (three attempts maximum).
- An additional 30 day period after the expiration date is available to candidates who must recertify. The 30 day period starts on the certification expiration date. If the exam is scheduled and passed within the valid two-year period of the certification plus the 30 days, there will be no penalties, and the certification will remain valid for an additional two years.
- If the candidate fails the written exam after three (3) attempts, they must continue to attempt the written exam until they pass it; however, the candidate must schedule and pass the most updated version of the practical exam also.

The NSE Institute sends expiration notifications to the users, as follows:

- Six (6) months before the expiration date
- 90, 60, and 5 days before the expiration date

The NSE 8 certification date is fixed to the date the test taker passed the practical exam. This is the date shown on the NSE8 plaque and the physical certificate shipped in the NSE 8 award box. If the candidate keeps the certification valid after the recertification is completed, the only change will be the expiration year of the certification, the day and the month will remain unchanged.

When the candidate passes the written recertification exam, it also recertifies any other NSE certifications the candidate has achieved previously, including those that have expired.





# About This Document

The purpose of this document is to provide all the information required by the test taker to prepare for the NSE 8 certification.

## Document Version

This document contains all the current information related to the NSE 8 program and its components. It is subject to change without notice. Review the latest version of this document, the FAQ document, and the NSE 8 exam description on the Fortinet public website:

<https://www.fortinet.com/support/training/network-security-expert-program/nse-8.html>