# Forcepoint

# Next Generation Firewall

6.11.0

**Release Notes** 

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# **About this release**

This document contains important information about this release of Forcepoint Next Generation Firewall (Forcepoint NGFW). We strongly recommend that you read the entire document.

# Lifecycle model

This release of Forcepoint NGFW is a Feature Stream (FS) version.

Support for Feature Stream versions is discontinued when a new major version of Forcepoint NGFW is available.

We recommend using the most recent Long-Term Support (LTS) version if you do not need any features from a Feature Stream version.

For more information about the Forcepoint NGFW lifecycle policy, see https://support.forcepoint.com/ProductSupportLifeCycle.

# System requirements

To use this product, your system must meet these basic hardware and software requirements.



#### **CAUTION**

To protect the privacy of your data, we recommend using dedicated hardware for all NGFW, SMC, and SMC Appliance installations. For cloud-based virtualization platforms, use an instance type that runs on dedicated hardware. For on-premises virtualization platforms, install the NGFW Engines, SMC components, or SMC Appliance on a hypervisor that does not host any other virtual machines. For third-party hardware, do not install any other software on the computer where you install the NGFW Engines or SMC components.

#### Forcepoint NGFW appliances

We strongly recommend using a pre-installed Forcepoint NGFW appliance for Forcepoint NGFW installations.



#### Note

Some features are not available for all appliance models. See Knowledge Base article 9743 for appliance-specific software compatibility information.

The majority of the following supported appliances can be used in the Firewall/VPN, IPS, or Layer 2 Firewall role.

- 50 Series (51 and 51 LTE)
- N60
- 100 Series (110 and 115) (Firewall/VPN role only)
- 120 Series (N120, N120W, N120WL)
- 330 Series (330, 331, and 335)
- 1100 Series (1101 and 1105)
- 2100 Series (2101 and 2105)
- 2200 Series (2201, 2205, and 2210)
- 3300 Series (3301 and 3305)
- 3400 Series (3401, 3405, and 3410)
- **6205**



#### Note

To use the appliance as VPN Broker or with Forcepoint NGFW Manager, we recommend that you use a Forcepoint NGFW appliance that has at least 4GB of memory.

### **Basic hardware requirements**

You can install Forcepoint NGFW on standard hardware with these basic requirements.

Component	Requirement
CPU	Intel® Pentium D series 2 core or higher

Component	Requirement	
Memory	4 GB RAM	
Hard disk	8GB	
	Note  RAID controllers are not supported.	
Peripherals	<ul> <li>DVD drive</li> <li>VGA-compatible display</li> <li>Keyboard</li> </ul>	
Interfaces	<ul> <li>One or more network interfaces for the Firewall/VPN role</li> <li>Two or more network interfaces for the IPS in IDS configuration</li> <li>Three or more network interfaces for inline IPS engine or Layer 2 Firewall</li> <li>For information about supported Ethernet interface types and adapters, see Knowledge Base article 9721.</li> </ul>	

#### **Master NGFW Engine requirements**

Master NGFW Engines have specific hardware requirements.

- Each Master NGFW Engine must run on a separate physical device. For more details, see the *Forcepoint Next Generation Firewall Installation Guide*.
- All Virtual NGFW Engines hosted by a Master NGFW Engine or Master NGFW Engine cluster must have the same role and the same Failure Mode (fail-open or fail-close).
- Master NGFW Engines can allocate VLANs or interfaces to Virtual NGFW Engines. If the Failure Mode of the Virtual IPS engines or Virtual Layer 2 Firewalls is *Normal* (fail-close) and you want to allocate VLANs to several NGFW Engines, you must use the Master NGFW Engine cluster in standby mode.
- Cabling requirements for Master NGFW Engine clusters that host Virtual IPS engines or Layer 2 Firewalls:
  - Failure Mode Bypass (fail-open) requires IPS serial cluster cabling.
  - Failure Mode Normal (fail-close) requires Layer 2 Firewall cluster cabling.

For more information about cabling, see the Forcepoint Next Generation Firewall Installation Guide.

#### Virtual appliance node requirements

You can install Forcepoint NGFW on virtual appliances with these hardware requirements. Also be aware of some limitations.

Component	Requirement
CPU	Intel <sup>®</sup> Pentium D series 2 core or higher
Memory	4 GB RAM
Virtual disk space	8 GB

Component	Requirement
Hypervisor	One of the following:  VMware ESXi 6.5 or 7.0  KVM with Red Hat Enterprise Linux 7.9 or 8.4  (Firewall/VPN role only) Microsoft Hyper-V on Windows Server 2012 R2 or Windows Server 2016 with an Intel 64-bit processor
Interfaces	<ul> <li>At least one virtual network interface for the Firewall/VPN role</li> <li>Three virtual network interfaces for IPS or Layer 2 Firewall roles</li> <li>The following network interface card drivers are recommended:</li> <li>VMware ESXi platform — vmxnet3.</li> <li>KVM platform — virtio_net.</li> </ul>

When Forcepoint NGFW is run as a virtual appliance node in the Firewall/VPN role, these limitations apply:

- Only Packet Dispatching CVI mode is supported.
- Only standby clustering mode is supported.
- Heartbeat requires a dedicated non-VLAN-tagged interface.

When Forcepoint NGFW is run as a virtual appliance node in the IPS or Layer 2 Firewall role, clustering is not supported.

#### Supported cloud environments

You can deploy Forcepoint NGFW in the Amazon Web Services (AWS) and Microsoft Azure cloud environments.

#### Google Cloud, IBM Cloud, and Oracle Cloud

Starting from Forcepoint NGFW version 6.11 public cloud platforms from Google, IBM, and Oracle are supported. For more details, see the Knowledge Base article 39116.

#### **Amazon Web Services**

Forcepoint NGFW instances can be launched from AWS using 1-Click Launch, and existing instances can be remotely upgraded to the latest Forcepoint NGFW version.

To see the currently available instance types, search for Forcepoint NGFW in the AWS Marketplace.

For more information about deploying in AWS, see the document *How to deploy Next Generation Firewall in the Amazon Web Services cloud* and Knowledge Base article 10156.

#### **Microsoft Azure**

Forcepoint NGFW instances can be launched from Azure using custom solution templates, and existing instances can be remotely upgraded to the latest Forcepoint NGFW version.

To see the currently available custom solution templates, search for Forcepoint NGFW in the Azure Marketplace.

For more information about deploying in Azure, see the document *How to deploy Next Generation Firewall in the Azure cloud* and Knowledge Base article 14485.

#### **Build number and checksums**

The build number for Forcepoint NGFW 6.11.0 is 27053.

Use the checksums to make sure that the installation files downloaded correctly.

sg\_engine\_6.11.0.27053\_x86-64-small.iso

SHA256SUM: 0dbac3f0ee0dab35cf5bfb00656cc68dc95ee4f47c1118f46e46244d190e4707 SHA512SUM: f2b452a36b0282760c1aa509e95715b9 facb40d8c246e8576740aa2282b662e1 f1aa68ea32941391607ef4b49e501857 f8844b59f3cdf2b9ff77a7b46343c1e2

sg\_engine\_6.11.0.27053\_x86-64-small.zip

SHA256SUM:

35b29006e84f778eccc08f8b2419f7f0dbe8c9486c659bcfca3bb46f79cdbf96

SHA512SUM:

4c932800c24472d687f0790e5fc31fd6 92662a297a87ea3c788918f7c2bec9c0 7f8d631d965032493c6a129f24c8fa85 622ed8254a6cf8402b5dde451e459cfc

Forcepoint-NGFW-6.11.027053.qcow2

SHA256SUM:

a2f853cdbb9cb679a501f5b861d39df2e335b595aeb5fd499ad911de7f9a6a2e

SHA512SUM:

5f1f6ee3a8cf41258d3f0a230e6bc717 bcf7d0371e124f89c41eb9574a4c7b47 cfec71b95f08661a4977b8becf00d71c 9ed9a358b0e3fd03eacf3a6756bdd3d0

# **Compatibility**

Forcepoint NGFW 6.11 is compatible with the following component versions.

- Forcepoint NGFW Security Management Center (SMC) 6.11 or higher
- Dynamic Update 1423 or higher
- Forcepoint VPN Client 6.6.0 or higher for Windows
- Forcepoint VPN Client 2.0.0 or higher for Mac OS X
- Forcepoint VPN Client 2.0.0 or higher for Android
- Forcepoint VPN Client 2.5.0 or higher for Linux
- Server Pool Monitoring Agent 4.0.0 or higher
- Forcepoint Endpoint Context Agent (ECA) included in Forcepoint One Endpoint 19.05 or higher

Forcepoint User ID Service 2.0.0 or higher

#### **New features**

This release of the product includes these new features. For more information and configuration instructions, see the *Forcepoint Next Generation Firewall Product Guide*, the *Forcepoint Next Generation Firewall Installation Guide*, and the *Forcepoint NGFW Manager and VPN Broker Product Guide*.

# External CA issued certificates in internal management communication

When you install a new SMC, you can now use certificates issued by an external CA instead of certificates generated by the internal CA on the Management Server for internal TLS communication between NGFW Engines and SMC components.

#### **SMC Appliance Restricted Shell**

The restricted shell installation option provides improved security on SMC Appliance installations by preventing administrator's direct operating system command line access. Instead, all required administrative tasks are executed through a restricted menu system that only allows access to those commands that are meant for SMC Appliance maintenance.

#### Run-time selection of FIPS module

In the NGFW Configuration Wizard, you can now select which FIPS module is used when the NGFW Engine is in FIPS-compatible operating mode. You can select whether to use the FIPS 140-2 module or the updated FIPS 140-3 module.

#### Move Quagga to Free Range Routing (FRR)

The dynamic routing features in the NGFW Engine that previously used the Quagga dynamic routing suite now uses the Free Range Routing (FRR) dynamic routing suite. The Free Range Routing (FRR) is a general purpose routing stack applicable to a wide variety of use cases including connecting hosts, virtual machines, and containers to the network, advertising network services, LAN switching and routing, internet access routers, and Internet peering.

#### **Support for TLS 1.3**

In addition to the previously supported TLS versions, the NGFW Engine now supports TLS inspection for TLS version 1.3 without downgrading the inspected connections to TLS version 1.2.

#### **IPv6 - IPv4 Translation Support**

The NGFW Engine now has basic support for IPv6 transition mechanisms. IPv6 transition mechanisms enable limited communication between devices that have only IPv6 addresses and devices that have only IPv4 address. Supported translation modes are NAT64, 464XLAT, and SIIT EAM.

#### **Upcoming events notification**

The upcoming events feature informs users about events that are going to happen soon, such as expiration of licenses and certificates, and failures of scheduled tasks, that require administrator action.

# Support TLS server certificate verification before decryption decision

The NGFW Engine now fetches TLS server certificate for verification from destination TLS server with separate probe connection so that it can make a more accurate decision about whether to decrypt TLS connection before the original client to server connection is established.

#### Status history reporting

The status history provides historical data for monitoring and reporting on NGFW Engines, Netlinks and SD-WAN branch or tunnel statuses over time. New status history views help to visualize past changes in the system status and the traffic and connection volumes and ISP link quality over time. Status monitoring enhancements improve the existing monitoring of SD-WAN branches and VPN tunnels as well as NGFW Engine and Netlink performance history.

#### Local alternative policies

A local alternative policy can now be defined that can be uploaded but not activated on the NGFW Engine during policy installation. If connectivity between the NGFW Engine and the Management Server is lost, any policy can be selected whether it is a normal policy or one of the local alternative policies.

#### Deep inspection throughput improved

NGFW detaches deep inspection when it is not needed to improve throughput performance and appliance capacity. This can improve performance for example with encrypted traffic that is not decrypted (e.g. QUIC, SSH, TLS), application identification when further inspection is not needed, and with big file or UDP data steams where NGFW deep inspection is not providing added value.

#### Support for Google Cloud, IBM Cloud, and Oracle Cloud

Starting from Forcepoint NGFW version 6.11 public cloud platforms from Google, IBM, and Oracle are supported. See Knowledge Base article 39116, for more details.

#### **Enhancements**

This release of the product includes these enhancements.

#### **Enhancements in Forcepoint NGFW version 6.11**

Enhancement	Description
Alternative enhanced SNMP Agent implementation	New SNMP agent can be optionally enabled that replaces the default SNMP Agent. New SNMP Agent supports improved Forcepoint NGFWMIB that provides more monitoring coverage including Virtual NGFW Engines and dynamic routing. In version 6.11 the new agent can be enabled by adding an empty file /data/config/base/enable_new_snmp to NGFW Engine file system. For more information, see Knowledge Base article 39118. This now optional enhanced SNMP Agent will be the default SNMP Agent in the next major NGFW Engine release.
VPN Broker configuration usability improvements	Usability of VPN Broker configuration interface has been improved.
Cross Site Request Forgery protection in browser based authentication	Browser Based Authentication now supports Cross Site Request Forgery (CSRF) protection. Protection can be enabled by using new user authentication page template called User Authentication Pages with CSRF protection.
DNS name logging	Log columns <b>DNS Qname</b> , <b>DNS Qclass</b> and <b>DNS Qtype</b> can be populated by enabling logging of DNS_Server-Question-Logged and DNS_Record-Address-Logged situations in the inspection policy. See Knowledge Base article 39151.
Strip H3 HTTP header	When decrypting HTTPS connection for inspection, strip H3 support advertisement from server response in order to prevent HTTP client from switching to HTTP/3. This can be controlled with the new HTTP service parameter Strip QUIC support from server replies. By default this is enabled for HTTPS.
Adjust swap location and size on small NGFW appliances	Follow instructions in the Knowledge Base article 39138 to adjust swap file location on NGFW appliance models.

### Resolved and known issues

For a list of resolved and known issues in this product release, see the Knowledge Base article 39147.

#### **Installation instructions**

Use these high-level steps to install the SMC and the Forcepoint NGFW Engines.

For detailed information, see the *Forcepoint Next Generation Firewall Installation Guide*. All guides are available for download at https://support.forcepoint.com/Documentation.

#### **Steps**

- 1) Install the Management Server, the Log Servers, and optionally the Web Portal Servers.
- Import the licenses for all components.
   You can generate licenses at https://stonesoftlicenses.forcepoint.com.
- Configure the Firewall, IPS, or Layer 2 Firewall elements in the Management Client from the Configuration view.
- 4) To generate initial configurations, right-click each NGFW Engine, then select Configuration > Save Initial Configuration.
  - Make a note of the one-time password.
- 5) Make the initial connection from the NGFW Engines to the Management Server, then enter the one-time password.
- Create and upload a policy on the NGFW Engines in the Management Client.

# **Upgrade instructions**

Take the following into consideration before upgrading licenses, NGFW Engines, and clusters.



#### **Note**

Upgrading to version 6.11 is only supported from version 6.5 or higher. If you have a lower version, first upgrade to version 6.5.



#### Note

If you use safe search features in NGFW 6.6 or lower, you must refresh the policy on the NGFW Engine cluster after all the members of the cluster have been upgraded to NGFW 6.7 or higher. Otherwise, safe search might not work correctly after the upgrade.

- Forcepoint NGFW version 6.11 requires an updated license. The license upgrade can be requested at https://stonesoftlicenses.forcepoint.com. Install the new license using the Management Client before upgrading the software. If communication between the SMC and the license server is enabled and the maintenance contract is valid, the license is updated automatically.
- To upgrade the NGFW Engine, use the remote upgrade feature or reboot from the installation DVD and follow the instructions. For detailed instructions, see the Forcepoint Next Generation Firewall Installation Guide.

# Find product documentation

In the Forcepoint Customer Hub, you can find information about a released product, including product documentation, technical articles, and more.

You can get additional information and support for your product in the Forcepoint Customer Hub at https://support.forcepoint.com. There, you can access product documentation, release notes, Knowledge Base articles, downloads, cases, and contact information.

You might need to log on to access the Forcepoint Customer Hub. If you do not yet have credentials, create a customer account. See https://support.forcepoint.com/CreateAccount.

#### **Product documentation**

Every Forcepoint product has a comprehensive set of documentation.

- Forcepoint Next Generation Firewall Product Guide
- Forcepoint Next Generation Firewall online Help



#### **Note**

By default, the online Help is used from the Forcepoint help server. If you want to use the online Help from a local machine (for example, an intranet server or your own computer), see Knowledge Base article 10097.

Forcepoint Next Generation Firewall Installation Guide

Other available documents include:

- Forcepoint Next Generation Firewall Hardware Guide for your model
- Forcepoint NGFW Security Management Center Appliance Hardware Guide
- Forcepoint Next Generation Firewall Quick Start Guide
- Forcepoint NGFW Security Management Center Appliance Quick Start Guide
- Forcepoint NGFW SMC API User Guide
- Forcepoint VPN Client User Guide for Windows or Mac
- Forcepoint VPN Client Product Guide
- Forcepoint NGFW Manager and VPN Broker Product Guide