



Next Generation Firewall

6.3.15

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 Long-Term Support (LTS) version.

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

For more information about the Forcepoint NGFW lifecycle policy, see Knowledge Base article [10192](#).

System requirements

Make sure that you meet these basic hardware and software requirements.

Forcepoint NGFW appliances

We strongly recommend using a pre-installed Forcepoint NGFW appliance as the hardware solution for new Forcepoint NGFW installations.



Note

Some features in this release are not available for all appliance models. See Knowledge Base article [9743](#) for up-to-date appliance-specific software compatibility information.

The following table shows whether you can use an appliance model in the Firewall/VPN (FW), IPS, or Layer 2 Firewall (L2FW) role.

Appliance model	Roles
FW-315	FW
320X (MIL-320)	FW
IPS-1205	IPS, L2FW
FWL321	FW
NGF321	FW, IPS, L2FW
FWL325	FW
NGF325	FW, IPS, L2FW
110	FW
115	FW
330	FW, IPS, L2FW
331	FW, IPS, L2FW
335	FW, IPS, L2FW
1035	FW, IPS, L2FW
1065	FW, IPS, L2FW
1101	FW, IPS, L2FW
1105	FW, IPS, L2FW
1301	FW, IPS, L2FW
1302	FW, IPS, L2FW
1401	FW, IPS, L2FW
1402	FW, IPS, L2FW
2101	FW, IPS, L2FW

Appliance model	Roles
2105	FW, IPS, L2FW
3201	FW, IPS, L2FW
3202	FW, IPS, L2FW
3205	FW, IPS, L2FW
3206	FW, IPS, L2FW
3207	FW, IPS, L2FW
3301	FW, IPS, L2FW
3305	FW, IPS, L2FW
5201	FW, IPS, L2FW
5205	FW, IPS, L2FW
5206	FW, IPS, L2FW
6205	FW, IPS, L2FW

Sidewinder S-series appliances

These Sidewinder appliance models can be re-imaged to run Forcepoint NGFW software.

Appliance model	Roles
S-1104	FW
S-2008	FW
S-3008	FW
S-4016	FW
S-5032	FW
S-6032	FW

Basic hardware requirements

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

- (Recommended for new deployments) Intel® Xeon®-based hardware from the E5-16xx product family or higher



Note

Legacy deployments with Intel® Core™2 are supported.

- IDE hard disk and DVD drive



Note

IDE RAID controllers are not supported.

- 4 GB RAM minimum
- VGA-compatible display and keyboard
- One or more network interfaces for the Firewall/VPN role
- Two or more network interfaces for the IPS in IDS configuration
- Three or more network interfaces for inline IPS engine or Layer 2 Firewall

For information about supported Ethernet interface types and adapters, see Knowledge Base article [9721](#).

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 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.

- (Recommended for new deployments) Intel® Xeon®-based hardware from the E5-16xx product family or higher



Note

Legacy deployments with Intel® Core™2 are supported.

- One of the following hypervisors:
 - VMware ESXi 6.0 and 6.5
 - KVM (KVM is tested as shipped with Red Hat Enterprise Linux Server 7.1 and 7.2)
 - Microsoft Hyper-V on Windows Server 2012 or Windows Server 2016 (Firewall/VPN role only)
An Intel 64-bit processor is required.
- 8 GB virtual disk
- 4 GB RAM minimum
- A minimum of one virtual network interface for the Firewall/VPN role, three for IPS or Layer 2 Firewall roles

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.

Build number and checksums

The build number for Forcepoint NGFW 6.3.15 is 19755.

Use checksums to make sure that files downloaded correctly.

- `sg_engine_6.3.15.19755_x86-64-small.iso`

```
SHA1SUM:
825feb3cdaa620ae6aa50da125e31a3ee3300e84

SHA256SUM:
10f45eee92bbee75fad5570f654ef2a71437f82d2f5589cc27f148a6dbabb538

SHA512SUM:
9fedbbdbab4d872ecbf834a6a8dfa8da
baca0862b2ca2ed1e0f33533cfe32f61
9dc222c080769a798eeafb66cd1d91ea
007e8c544ec33eaef852ddcf0777d93a
```

- `sg_engine_6.3.15.19755_x86-64-small.zip`

```
SHA1SUM:
f8a43ef8435ebef4e75c377b7d14763078cf9998

SHA256SUM:
34ba5ad66c9a3a5979e656fcedeed85e39f9e9e7a4267ac0ba5c6ccf63093cf4

SHA512SUM:
5d2b169a06aff515a253625eef8cdb61
e388d93311888f6aa0382f5d81ce580a
c24aea479f2bdee469a7cd0d4820c095
c8ea1c4523fc2e543aede3a923e63ffd
```

Compatibility

Forcepoint NGFW 6.3 is compatible with the following component versions.

- Forcepoint NGFW Security Management Center (SMC) 6.3 or later
- Dynamic Update 988 or later
- Stonesoft® VPN Client for Windows 6.0.0 or later
- Stonesoft® VPN Client for Mac OS X 2.0.0 or later
- Stonesoft® VPN Client for Android 2.0.0 or later
- Server Pool Monitoring Agent 4.0.0 or later
- Forcepoint Endpoint Context Agent (ECA) 1.1.0
- Forcepoint User ID Service 1.1.0
- McAfee® Logon Collector 2.2 and 3.0
- McAfee® Advanced Threat Defense 4.0

**Note**

Forcepoint NGFW 6.3 is the last major version that supports McAfee Advanced Threat Defense.

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* and the *Forcepoint Next Generation Firewall Installation Guide*.

Support for Forcepoint Endpoint Context Agent

Support for Forcepoint Endpoint Context Agent (ECA) allows you to use endpoint information in the Forcepoint NGFW policy to control access, identify users, and log their actions. ECA is a Windows client application that provides endpoint information to the NGFW Engine. ECA is a replacement for McAfee Endpoint Intelligence Agent (McAfee EIA).

**CAUTION**

If McAfee Endpoint Intelligence Agent (McAfee EIA) is configured on the NGFW Engine when you upgrade to version 6.3 or later, the NGFW Engine node is returned to the initial configuration state and stops processing traffic. You must remove the McAfee Endpoint Intelligence Agent (McAfee EIA) configuration and refresh the policy before you upgrade to version 6.3 or later. For more information, see Knowledge Base article [14093](#).

Multi-Layer Deployment for NGFW Engines in the Firewall/VPN role

Multi-layer deployment is now supported for NGFW Engines in the Firewall/VPN role. In multi-layer deployment, NGFW Engines in the Firewall/VPN role have both layer 2 physical interfaces and layer 3 physical interfaces. The same NGFW Engine can now provide the features of the Firewall/VPN role, as well as the inspection features of the IPS and Layer 2 Firewall roles.

Route-based VPN improvements

The user interface for configuring a route-based VPN has been improved. Instead of configuring a single Route-Based VPN element, you can create individual Route-Based VPN Tunnel elements. The route-based VPN tunnels can be used in Administrative Domains other than the Shared Domain.

Improvements in Forcepoint Advanced Malware Detection

In addition to the cloud sandbox, Forcepoint Advanced Malware Detection now also supports on-premises local sandboxes. Other improvements include the following:

- The NGFW Engine can now delay file transfers until the results of the sandbox scan are received.
- The NGFW Engine now separately requests a file reputation for each file in .zip archives.

- The reporting tools in the external portal have been improved, and it is easier to access reports in the external portal from the Management Client.

NGFW on Azure and Hyper-V

You can now deploy NGFW Engines in the Microsoft Azure cloud to provide VPN connectivity, access control, and inspection for services in the Microsoft Azure cloud. The Microsoft Hyper-V virtualization platform on Windows 2012 and 2016 servers is now also supported for NGFW deployment on a virtualization platform in a private cloud. Only NGFW Engines in the Firewall/VPN role are supported in the Microsoft Azure cloud and on the Microsoft Hyper-V virtualization platform.

Support for Forcepoint User ID Service

Forcepoint User ID Service collects information about users, groups, and IP addresses from Windows Active Directory (AD) servers and AD domains. You can use the information from the Forcepoint User ID Service in the Forcepoint NGFW policy to identify users and control access.

Support for HTTPS in Sidewinder HTTP Proxy

The Sidewinder HTTP Proxy can now provide decryption, inspection, protocol validation, certificate validation, and certificate revocation checking for the HTTPS protocol.

Enhancements

This release of the product includes these enhancements.

Enhancements in Forcepoint NGFW version 6.3.0

Enhancement	Description
Rate limit per Virtual NGFW Engine for traffic from the Master NGFW Engine	You can now set a rate limit per Virtual NGFW Engine for traffic from the Master NGFW Engine to the Virtual NGFW Engine. When the limit is set, a single Virtual NGFW Engine that is under very heavy load cannot disrupt the operation of the other Virtual NGFW Engines that are hosted by the Master NGFW Engine.
Dedicated control plane operation	You can now dedicate a specified number of CPUs to control plane operations. Even under very heavy loads, you can continue to manage NGFW Engines and refresh policies, and the status of the NGFW Engines remains green in the Home view.

Enhancement	Description
Changes related to certificates	<p>The NGFW Engine can now validate certificates and check the certificate revocation status for features that have certificate validation and certificate revocation checks enabled, such as features that use a TLS Profile in the configuration.</p> <p>Except for VPN certificates, most elements related to certificates are now found in the Administration > Certificates branch of the Configuration view.</p> <p>There is no longer a separate Pending Certificate Request element. Certificate requests are now created as TLS Credentials elements. The state of the TLS Credentials element indicates whether it is a signed certificate or a certificate request.</p>
Limit for half-open TCP connections	As part of the SYN flood protection feature, you can now set a limit for the number of half-open TCP connections. When the limit is reached, SYN flood protection is enabled.
Improvements to SSM architecture	Improvements to SSM integration remove some previous limitations on inspection when Sidewinder Proxies are used. These former limitations include matching traffic based on Network Applications, file filtering, and URL filtering. New Combined Protocol elements allow you to apply a standard Protocol element and a Sidewinder Proxy Protocol element to the same traffic.
New commands for managing NGFW Engines and NGFW appliances	It is now possible to power off an NGFW Engine remotely through the Management Client. In addition, you can now also reset an NGFW appliance to factory settings through the Management Client. To increase security, you can set how many times you want the stored data on the file system of the NGFW appliance to be overwritten.
Task for validating policies	There is a new task for validating policies. The Validate Policy task allows you to validate the policy installed on NGFW Engines or Master NGFW Engines or the Alert Policy installed in an administrative Domain. You can run the Validate Policy task either manually or according to a schedule.
SYN rate limits support IPv6 connections	SYN rate limits now also support IPv6 connections.
Log rate and spooled log information available in engine status monitoring	In the engine status monitoring, you can now see the log rate and the times at which logs have been spooled on the engine.
Improved dynamic routing monitoring	Changes in the OSPF and BGP neighborhood trigger alerts that are visible in the Logs view of the Management Client. Information about route changes is also included in logs.
Improved inspection for flash files	The NGFW Engine now supports the inspection of flash files, allowing it to detect potential security threats in flash files.
Faster rule matching for dynamic elements	Rule matching for rules that contain DNS names, users, and user groups is now faster. This improvement is especially useful when the policy uses a large number of these elements.

Enhancements in Forcepoint NGFW version 6.3.2

Enhancement	Description
Dynamic routing throughput improved	The throughput of dynamically routed packets has improved.

Enhancement	Description
SNI in TLS communications for the SSL VPN Portal	The SSL VPN Portal now uses the server name indication (SNI) in TLS communications between the NGFW Engine and web resources.
IGMP-based multicast forwarding enhancement	When an NGFW Engine is used as an IGMP proxy for multicast forwarding, the number of supported multicast groups has increased.

Enhancements in Forcepoint NGFW version 6.3.3

Enhancement	Description
QoS throughput alerts added	An alert is now triggered when the QoS throughput limit defined for a Virtual Security Engine is exceeded.
Additional cipher support added	Client and server protection features now support additional ciphers.

Enhancements in Forcepoint NGFW version 6.3.4

Enhancement	Description
Session-Duplicate-Mac situation element	The Session-Duplicate-Mac situation is logged when a different VPN Client user connects using same MAC address as a VPN Client that is already connected, replacing the previous user.

Enhancements in Forcepoint NGFW version 6.3.8

Enhancement	Description
ECA_Situation-Application-Not-Identified situation element	The ECA_Situation-Application-Not-Identified situation is used when Endpoint Context Agent (ECA) reports an unidentified application.

Enhancements in Forcepoint NGFW version 6.3.9

Enhancement	Description
More precise URL categorization	URL parameters and destination IP addresses are now included in URL filtering queries to the ThreatSeeker Cloud for more precise URL categorization.

Enhancements in Forcepoint NGFW version 6.3.11

Enhancement	Description
Shorter traffic interruption	The length of time for which traffic is interrupted during policy installation or refresh has been shortened.

Enhancements in Forcepoint NGFW version 6.3.12

Enhancement	Description
Power supply monitoring for specific NGFW Appliances	Power supply monitoring is available for NGFW Appliance models 2105, 3301, and 3305.

Resolved issues

These issues are resolved in this release of the product. For a list of issues fixed in a previous release, see the Release Notes for the specific release.

Description	Role	Issue number
The internal DHCP server on NGFW Engine interfaces might stop working over time.	FW	NGFW-4947
When NAT-T is configured for the NGFW Engine, memory usage might become excessive over time.	FW	NGFW-27063
When the NGFW Engine is inspecting a TCP connection that has inconsistent sequence numbers, the inspection process might restart. Capture interfaces are most likely to receive packets that have inconsistent sequence numbers.	FW, IPS, L2FW	NGFW-27633
When traffic is allowed using Network Application elements, application routing might not work correctly for TLS traffic that does not include an SNI (Server Name Indication).	FW	NGFW-29005
In rare cases, the VPN process might restart.	FW	NGFW-29554
On Firewall Clusters, SIP calls might be terminated if they are not answered in 32 seconds.	FW	NGFW-30480
When you modify a VPN site in a mobile VPN that has SSL VPN tunnels and refresh the policy, all VPN Client users are disconnected to force them to reconnect and receive the new VPN configuration. If many VPN Client connections are active when the policy is refreshed, the Firewall nodes that are handling the VPN connections might restart, causing the policy installation to fail.	FW	NGFW-30963
Dnsmasq has been updated to address CVE-2020-25681, CVE-2020-25682, CVE-2020-25683, CVE-2020-25684, CVE-2020-25685, CVE-2020-25686 and CVE-2020-25687.	FW	NGFW-31270
Sudo has been updated to address CVE-2021-3156.	FW, IPS, L2FW	NGFW-31339

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>.



Note

The sgadmin user is reserved for SMC use on Linux, so it must not exist before the SMC is installed for the first time.



Note

If you install the SMC on Windows and Windows Defender is enabled, it might take a long time to activate a dynamic update package. For more information, see Knowledge Base article [14055](#).

Steps

- 1) Install the Management Server, the Log Servers, and optionally the Web Portal Servers.
- 2) Import the licenses for all components.
You can generate licenses at <https://stonesoftlicenses.forcepoint.com>.
- 3) 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.
- 6) 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.



CAUTION

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**Note**

Changes to category-based URL filtering in Forcepoint NGFW version 6.1 affect all existing users of category-based URL filtering. Legacy URL Situation elements can no longer be used in policies for Forcepoint NGFW version 6.1 or later. If rules in your policy contain legacy URL Situation elements, you must replace them with URL Category elements. See the *Forcepoint Next Generation Firewall Product Guide* for detailed instructions.

**Note**

Starting from Forcepoint NGFW version 6.2, the Anti-Spam feature is no longer supported. See Knowledge Base article [12394](#). If you require this feature, we recommend that you use the most recent Long-Term Support (LTS) version. See Knowledge Base article [10192](#). If you require a comprehensive Anti-Spam and Email Security solution, we recommend that you use [Forcepoint Email Security Cloud](#).

- Upgrading to version 6.3 is only supported from version 5.10 or later. If you have an earlier version, first upgrade to version 5.10.
- Forcepoint NGFW version 6.3 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*.
- If you have customized the `sshd_config` file in the `/data/config/ssh` directory, you might need to manually update the configuration file after upgrading the engine to Forcepoint NGFW version 6.3. See Knowledge Base article [10461](#).

Known issues

For a list of known issues in this product release, see Knowledge Base article [14124](#).

Known limitations

This release of the product includes these known limitations.

Limitation	Description
Inspection in asymmetrically routed networks	In asymmetrically routed networks, using the stream-modifying features (TLS Inspection, URL filtering, and file filtering) can make connections stall.
Inline Interface disconnect mode in the IPS role	The <i>disconnect mode</i> for Inline Interfaces is not supported on IPS virtual appliances, IPS software installations, IPS appliance models other than IPS-6xxx, or modular appliance models that have bypass interface modules.

For information about feature-specific limitations, see the *Forcepoint Next Generation Firewall Product Guide*.

Find product documentation

On the Forcepoint support website, 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 on the Forcepoint support website 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 support website. 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* (Formerly *Forcepoint NGFW SMC API Reference Guide*)
- *Forcepoint VPN Client User Guide* for Windows or Mac
- *Forcepoint VPN Client Product Guide*

