Security-Driven Networking for a Hyperconnected World

The Fortinet Security Fabric

Security-Driven Networking
Secure SD-WAN
Secure Access
Secure Cloud
Secure 5G

SoC4

Exploit
Malware
Insider

Q2 2019
Overview
Fortinet’s mission is to deliver the most innovative, highest-performing network security fabric to secure and simplify your IT infrastructure. We are a leading global provider of network security appliances for carriers, data centers, enterprises, and distributed offices.

Share Price Performance*

<table>
<thead>
<tr>
<th>FTNT Rank</th>
<th>1-year</th>
<th>3-year</th>
<th>5-year</th>
<th>Since IPO**</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTNT</td>
<td>62%</td>
<td>126%</td>
<td>268%</td>
<td>1,027%</td>
</tr>
<tr>
<td>CHKP</td>
<td>-1%</td>
<td>26%</td>
<td>59%</td>
<td>209%</td>
</tr>
<tr>
<td>PANW</td>
<td>30%</td>
<td>7%</td>
<td>228%</td>
<td>348%</td>
</tr>
</tbody>
</table>

* Share price performance thru 12/31/2018, Source: FactSet
** FTNT IPO on 11.18.09 at $6.25 (split adjusted); PANW IPO on 7.20.12 at $42. CHKP performance from FTNT IPO date.

Q1 2019 Financial Spotlight:
23% Y/Y billings growth on a trailing 12-month basis for Global 2000 customers (excludes service providers and MSSPs)

Fortinet is gaining revenue share and has recently overtaken several key competitors*

*Source: IDC Worldwide Security Appliance Tracker, March 2019 (based on quarterly Firewall, UTM, and VPN vendor revenues)
#1 Most Deployed Network Security Solution

Based on annual Firewall, UTM, and VPN unit shipments (IDC)

Source: IDC Worldwide Security Appliance Tracker, March 2019 (based on annual unit shipments of Firewall, UTM and VPN appliances)

#1 Security Innovator

Competitor data based on patents issued as listed by the U.S. Patent and Trademark Office

Fortinet Is the Only Company to Excel at All Key Stages of Network Security

Detection  Prevention & Remediation  Integration  Performance & Value

100s of Companies  < 50  < 5

589 U.S. Patents
30 Int’l Patents
619 Global Patents

as of March 31, 2019
#1 Broadest Security Protection—from IoT to the Cloud
Enables Fortinet to pursue growth in several key markets

Network Security Evolution
First-generation network security (stateful firewalls) focused on securing the connection. Led by Fortinet, a second generation of network security, next-generation firewalls and UTMs, expanded inspection to the application and content. The emergence of cloud, IoT, and mobile is driving the need for a third generation of network security to protect the rapidly expanding attack surface.

Source: Fortinet reclassification of data from recent analyst research. 2022 opportunity shown.

1ST GENERATION ➔ 2ND GENERATION ➔ 3RD GENERATION

- **FIREWALL**: Connectivity
- **NGFW UTM**: Content
- **FABRIC**: Infrastructure
The Fortinet Security Fabric

Third-Generation Network Security

Fortinet is once again leading the way with its Security Fabric, the first open architectural approach to security that dynamically adapts to and secures the evolving IT infrastructure.

**Broad**
Visibility of the entire digital attack surface

**Integrated**
AI-driven breach prevention across all devices, networks, and applications

**Automated**
Operations, orchestration and response

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Fabric Connectors
Fabric APIs

AWS
Azure
Cisco
Google Cloud
nuagenetworks
Oracle
ServiceNow
VMware

eADVA
galcide
algosec
amdocs
ARISTA
Attivo Networks
BACKBOX
BROCADE
CyberArk
Cyber Observer

Carbon Black
Centrify
chronicle
Clootix
Cloudify
CSFi

CyGlass
Digital Security
FIREMONT
ForeScout
Hewlett Packard Enterprise
Hughes
IBM

Intel
JASK
McAfee
Micro Focus
NEC
NoviFlow

NOZOMI Networks
Nutanix
Phantom

Pulse Secure
Qualys
RAD
ribbon
rubrik
SentinelOne

SIEMENS
Skybox
Splunk

StratoZen
Symantec
TRUEFORT
tufin
Ubique
WhiteHat Security
ziften
Zingbox
## Network Security

Fortinet’s high-performance FortiGate firewalls—powered by our purpose-built OS, security processors, and threat intelligence from FortiGuard Labs—provide consolidated, advanced security and deep visibility that protects the network from known and unknown threats.

### Chassis-based  5000 & 7000 Series

<table>
<thead>
<tr>
<th>Feature / Capability</th>
<th>FortiGate 100F*</th>
<th>SD-WAN competitor average**</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPsec VPN Throughput Overlay</td>
<td>11.5 Gbps</td>
<td>0.6 Gbps</td>
</tr>
<tr>
<td>Max Overlay Tunnels</td>
<td>2,500</td>
<td>200</td>
</tr>
<tr>
<td>Threat Protection</td>
<td>0.8 Gbps</td>
<td>Not published/supported</td>
</tr>
<tr>
<td>SSL Inspection</td>
<td>1 Gbps</td>
<td>Not published/supported</td>
</tr>
<tr>
<td>Interfaces</td>
<td>10G, 1G</td>
<td>1G only</td>
</tr>
</tbody>
</table>

* Results of preliminary Fortinet internal testing. Final numbers subject to change.

** Average of comparable competitive solutions from Cisco, VMware, Versa, and Silver Peak

### High-end Appliance  1000 – 3000 & 6000 Series

<table>
<thead>
<tr>
<th>Feature / Capability</th>
<th>FortiGate 5144C</th>
<th>FortiGate 7060E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Factor</td>
<td>2RU – 5RU appliance</td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>10, 25, 40, and 100 GE</td>
<td></td>
</tr>
<tr>
<td>FW(TP) Throughput</td>
<td>52 Gbps – 1 Tbps (4 Gbps – 100 Gbps)</td>
<td></td>
</tr>
<tr>
<td>Special Features</td>
<td>Ultra-low latency, ultra high-speed SSL inspection</td>
<td></td>
</tr>
</tbody>
</table>

### Mid-range Appliance  100 – 900 Series

<table>
<thead>
<tr>
<th>Feature / Capability</th>
<th>FortiGate 3600E</th>
<th>FortiGate 6500F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Factor</td>
<td>1RU – 2RU appliance</td>
<td></td>
</tr>
<tr>
<td>Interfaces</td>
<td>1 and 10 GE</td>
<td></td>
</tr>
<tr>
<td>FW(TP) Throughput</td>
<td>7 Gbps – 36 Gbps (1 Gbps – 7 Gbps)</td>
<td></td>
</tr>
<tr>
<td>Special Features</td>
<td>High-speed SSL inspection</td>
<td></td>
</tr>
</tbody>
</table>

### Entry-level Appliance  30–90 Series

<table>
<thead>
<tr>
<th>Feature / Capability</th>
<th>FortiGate 80E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Factor</td>
<td>Desktop</td>
</tr>
<tr>
<td>Interfaces</td>
<td>High-density 1 GE</td>
</tr>
<tr>
<td>FW(TP) Throughput</td>
<td>1 – 4 Gbps (150 Mbps – 250 Mbps)</td>
</tr>
<tr>
<td>Special Features</td>
<td>Wi-Fi, PoE, ruggedized</td>
</tr>
</tbody>
</table>

### Virtual/Cloud Firewall

<table>
<thead>
<tr>
<th>Private Cloud</th>
<th>Public Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use Cases &amp; Integrations</td>
<td>All major hypervisors, VMware NSX, Cisco ACI, OpenStack, Nuage, Azure Stack</td>
</tr>
<tr>
<td>Throughput</td>
<td>Hardware dependent</td>
</tr>
<tr>
<td>Licensing</td>
<td>Perpetual, subscription, metered</td>
</tr>
<tr>
<td>Throughput</td>
<td>Cloud dependent</td>
</tr>
<tr>
<td>Licensing</td>
<td>BYOL or on-demand</td>
</tr>
</tbody>
</table>

### New Product Spotlight—FortiGate 100F

FortiGate combines best-of-breed SD-WAN and NGFW into one single offering, enabling digital transformation initiatives at the enterprise branch without sacrificing security.

### FortiGate 100F

**Powered by the Fortinet SoC4, the industry’s first SD-WAN ASIC.**

- Best price/performance for secure SD-WAN
- Industry’s highest scalability
- Fastest application steering with security
- Most accurate application identification
- Expansion and growth with 10G interfaces
The FortiOS Advantage

FortiOS is the foundation of the Fortinet Security Fabric, consolidating many technologies and use cases into a simplified, single policy and management framework. FortiOS provides customers with superior protection, deeper visibility and control, reduced complexity, and greater operational efficiency across their entire attack surface.

The Security Processor Advantage

Fortinet Security Processors radically increase the performance, scalability, and value of Fortinet solutions while greatly shrinking space and power requirements, compared to CPU-based solutions. Use of SSL Inspection is increasingly critical but comes with a large performance hit on most firewall solutions. Our latest Content Processor (CPU9) delivers both high performance Threat Protection and SSL Inspection with minimal performance degradation relative to comparable competitive products.

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### Threat Protection & SSL Inspection Performance

<table>
<thead>
<tr>
<th>Firewall Model</th>
<th>Throughput (Gbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FortiGate 6300F</td>
<td>Threat Protection: 65</td>
</tr>
<tr>
<td>FortiGate 3600E</td>
<td>Threat Protection: 50</td>
</tr>
<tr>
<td>PAN 5260</td>
<td>Threat Protection: 30</td>
</tr>
</tbody>
</table>

Source: Product datasheets and Palo Alto Networks press release dated February 7, 2017

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### The FortiGuard Threat Intelligence Advantage

Our FortiGuard Labs threat research team develops the threat intelligence that informs all of our solutions. FortiGuard Labs leverages leading-edge machine learning and AI technologies to provide consistently top-rated protection* and actionable threat intelligence that protect and inform our customers worldwide. FortiGuard Labs partners with law enforcement agencies, governments, alliances, and other vendors, taking a leadership role to ensure the industry is collaborating and effectively responding to emerging security risks worldwide.

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<table>
<thead>
<tr>
<th>Individual Subscription Services</th>
<th>Application Control**</th>
<th>IPS</th>
<th>Advanced Malware Protection**</th>
<th>Anti-spam</th>
<th>Web Filtering</th>
<th>Industrial Security</th>
<th>Security Rating Service</th>
<th>Cloud</th>
<th>SD-WAN Cloud-Assisted Monitoring Service</th>
<th>SD-WAN Overlay Controller</th>
<th>FortiManager Cloud</th>
<th>FortiAnalyzer Cloud</th>
<th>FortiConverter Cloud</th>
<th>FortiConverter Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>360 Protection Bundle</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Enterprise Protection bundle</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Unified Protection (UTM) bundle</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>Threat Protection bundle</td>
<td>x</td>
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<tr>
<td>A la carte services</td>
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<td>x</td>
</tr>
</tbody>
</table>

** Fortinet SPU-based Parallel Path Processing
- CPU
- Flexible Policy
- NPU
- Network Traffic
- CP9
- Accelerates Content Inspection

* Fortinet System-on-a-Chip
- SoC4
- Optimized for Entry-level Form Factors

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* Per many independent third-party tests. See pages 10-11. ** Application Control comes standard with every FortiCare support contract. *** Includes AV, Antibotnet, Mobile Security, Cloud Sandbox, Content Disarm and Reconstruction, and Virus Outbreak Protection.
### Other Fabric Solutions

|-------------|-----------------------|----------------------|---------------------|--------------------|

- A large, growing, and open ecosystem of partner integrations
- Fabric-Ready partners span a broad range of technologies
- Fabric Connectors provide deep integration into customers’ multi-vendor ecosystems
- DevOps scripts automate security provisioning & configuration.

### Solution Spotlight: Secure SD-WAN

NGFW with built-in, best-of-breed SD-WAN capability enables digital transformation at the enterprise branch.

**Products**
- FortiGate NGFW (at FortiOS 5.6 & above)
- FortiManager

**Key Features**
- Application-aware steering
- Automated WAN path intelligence
- Single-pane-of-glass management with zero-touch provisioning
- SD-WAN features include in base license

**Benefits**
- High application performance
- Reduced WAN OPEX
- Safe Internet access for branch sites
- Reduced complexity, easier management
FORTINET:  NSE Certification Program

Step | Level Objective
---|---
NSE 1 | Security Associate
- Develop a foundational understanding of the ever-increasing threat landscape and of common network security concepts.

NSE 2 | Security Associate
- Develop the knowledge of Fortinet solutions required to address the threat landscape and security concerns discussed in NSE 1.

NSE 3 | Security Associate
- Develop the skills to describe how the features of key Fortinet products are used to create the solutions discussed in NSE 2.

NSE 4 | Professional
- Develop the knowledge to manage the day-to-day configuration, monitoring, and operation of FortiGate devices to support corporate network security policies.

NSE 5 | Analyst
- Develop a detailed understanding of how to implement network security management and analytics.

NSE 6 | Specialist
- Develop an understanding of the Fabric products that augment FortiGate to provide deeper and more comprehensive network security.

NSE 7 | Architect
- Develop the knowledge to implement, troubleshoot, and centrally manage an enterprise security infrastructure composed of multiple FortiGate devices.

NSE 8 | Expert
- Demonstrate the ability to design, configure, install, and troubleshoot a comprehensive network security solution in a live environment.

SERVICES & SUPPORT SPOTLIGHT

360 Protection is a new support and service package that delivers advanced support, real-time network management, and a full suite of security and operational services.

- FortiCare: 24x7 FortiCare - Advanced Support - Engineering level
- FortiGuard:  Enterprise Bundle level
- Operational:  Cloud analytics/management - SD-WAN related services - FortiConverter

FORTINET:  Network Security Academy

The Fortinet Network Security Academy program provides industry-recognized Fortinet training and certification opportunities to students around the world. Launched in 2016, this innovative, rapidly growing program has already been adopted by 153 academies in 57 countries.

- Preparation for a career in network security
- Theoretical lecture and hands-on laboratory practice
- Fortinet certification

153 ACADEMIES
- ACADEMIC INSTITUTIONS
- NONPROFIT AGENCIES
- VETERANS PROGRAMS

57 COUNTRIES TODAY

Learn more about both programs at www.fortinet.com/support-and-training.html

Figures as of April 29, 2019
Independently Tested and Validated Protection

Recommended IN 9 out of 9 NSS LABS Tests

Next-Generation Firewall Test (2018) FortiGate 500E

- “Recommended” 5th year in a row
- 99.3% security effectiveness
- 100% blocked evasions
- High SSL performance (5.7 Gbps)
- Lowest 3 year Total Cost of Ownership

SD-WAN Test (2018) FortiGate 61E

- Only “Recommended” vendor with Security Rating
- Highest Quality of Experience for VoIP
- High Quality of Experience for Video
- 100% Blocked Evasions
- Best Value among 9 vendors ($5 per protected Mbps)
Fortinet has participated in the following real-world group tests, open to the industry, and conducted by NSS Labs. In doing so, Fortinet stands out as the only vendor to provide an ATP solution that is NSS Labs Recommended from the data center to the edge to the endpoint in the latest group tests.

- NGFW & NGIPS
- DC Security Gateway & DCIPS
- Web Application Firewall
- Endpoint Protection
- Breach Detection and Prevention

The Only NSS Labs Recommended Edge to Endpoint ATP Solution
Sonic Drive-In
Largest chain of drive-in restaurants, part of 5th largest restaurant company in America

Scope: Secure company’s digital presence revolution – delivering dynamic marketing content & real-time information to each customer in 3600+ restaurants in 45 states

Key Requirements: Internal segmentation, remote management, secure wireless access, integrated solution set, agile support for IoT devices and future technologies

Solution: FortiGate, FortiADC, FortiAnalyzer, FortiAP, FortiAuthenticator, FortiClient, FortiMail, FortiManager, FortiSandbox, FortiSwitch, FortiToken, FortiWifi, FortiGuard Services

Customer benefits realized:
- Reliable secure infrastructure with excellent uptime
- Consolidated core and edge firewalls in single platform
- Easy deployment and remote management minimizes need for onsite support

“We were attracted to Fortinet’s vision and the roadmap of where they were going. The flexibility of the product set was uniquely positioned to meet our current and future, anticipated needs. Fortinet, as a company and with the solutions they provide, has uniquely positioned Sonic to meet current business needs while supporting and enabling our future endeavors.”

— Courtney Radke,
Sr. Retail Network Strategist

Veracruz State Government
3rd Most Populated State in Mexico

Scope: Update aging infrastructure, secure connectivity and bandwidth for state employees and citizens

Key Requirements: 10+ GE threat protection, SSL decryption, internal segmentation, authentication, email security, internal chassis redundancy

Solution: FortiGate, FortiAnalyzer, FortiManager, FortiWeb

Customer benefits realized:
- Optimized operational spending and ensured protection for all information traveling across Veracruz's State Network (REDVER)
- Strengthened data link services and reduced costs
- Provide protection using advanced security technology, with central and simple administration
- Reliably manage more than 23,000 employee and 22,000 citizen requests daily through digital channels

“Using multiple Fortinet solutions and leveraging the Fortinet Security Fabric to manage both the network and equipment provides us with visibility over transactional demands and enables us to apply policies from a central location, thus decreasing the time invested in operational tasks and network administration.”

— Sebastian Silva Sanchez,
Director-General of Technological Innovation

Superunie
Wholesale Grocery Purchasing Cooperative with 30% country market share in the Netherlands

Scope: SD-WAN and network infrastructure across 1,000 branches and 10 data centers

Key Requirements: Application-aware WAN path control, high-performance SLA, zero-touch provisioning, IoT security

Solution: FortiGate, FortiSwitch, FortiAP, FortiManager, FortiGuard Services, FortiSandbox

Customer benefits realized:
- Guarantee that business-critical applications are highly available with best SLAs
- Reduced complexity by consolidating SD-WAN and security
- Secure IoT devices on port level, due to deep technical integration between FortiGate and FortiSwitch

“We chose Fortinet’s cutting edge secure SD-WAN technology to allow us to centrally manage our networking and security solutions, while also providing SSL inspection for a seamless WAN transformation. We like the simplicity of extending Fortinet’s SD-WAN solution to include LAN at each of our stores and the ability to manage all WAN and LAN devices through a single-pane-of-glass.”

— Arjen van Dam,
Manager, IT

Alaska Airlines
5th Largest Airline in United States

Scope: Secure connectivity and data protection (including PCI data) for over 44 million passengers, 23,000 employees and 1200 flights daily

Key Requirements: Protect the e-commerce edge, data center and network, provide secure SD-WAN capabilities

Solution: FortiGate, FortiAnalyzer, FortiAuthenticator, FortiClient, FortiExtender, FortiManager, FortiSwitch, FortiWifi, FortiGuard Services

Customer benefits realized:
- Ability to secure from the e-commerce edge to the data center
- Simplified configuration, management, authentication and reporting
- Ease of deployment and rollout to distributed locations

“We were already pleased with the performance of Fortinet’s Next-Generation Firewalls in our data center and the protection they provide for employee access and authentication. We recently chose to leverage Fortinet’s Secure SD-WAN capability because it provides superior security features in one simple offering. Fortinet helps us reduce complexity and gives us the single-pane-of-glass visibility across all our locations.”

— Brian Talbert,
Director, Network and Connectivity Solutions

For more customer stories, go to www.fortinet.com/customers.html