



FORTINET®

Fortinet NGFW 介紹



Agenda

- **Fortinet 公司介紹**
- **NG Firewall 101**
- **FortiGate 企業級小型產品線**





Who is Fortinet?

20 多年來，Fortinet 的使命一直是保護無處不在的人員、設備和數據。

我們一直是網路安全發展以及網路和安全融合的推動力。我們的網路安全解決方案是業內部署最多、獲得專利最多且驗證最多的解決方案之一。

Nasdaq 100

Nasdaq: FTNT

Publicly Traded

S&P 500

Nasdaq: FTNT

GAAP Profitable

BBB+ Baa1

Security Investment Grade Rating

Financially Stable

\$4.18B

FY2021 Billing

Top 3

50+

Integrated Fabric Products

Broadest Attack Surface Coverage

ASIC

Security Processing Unit (SPU)

High Performance

Broad Global Footprint

Majority of our R&D is in North America

1,279

Patents Globally

Top Innovator

11,500+

Employees

Global Leader

595,000+

Customers Worldwide

Massive Customer Input

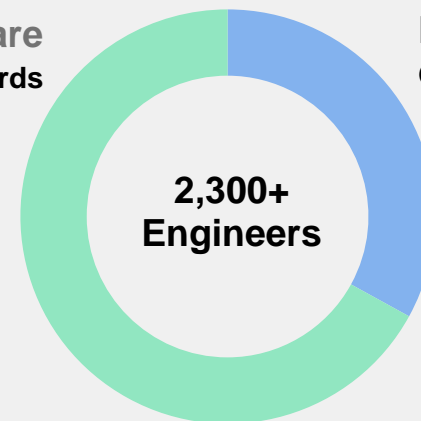
8.8M+

Global Firewall Shipments

Huge Scale

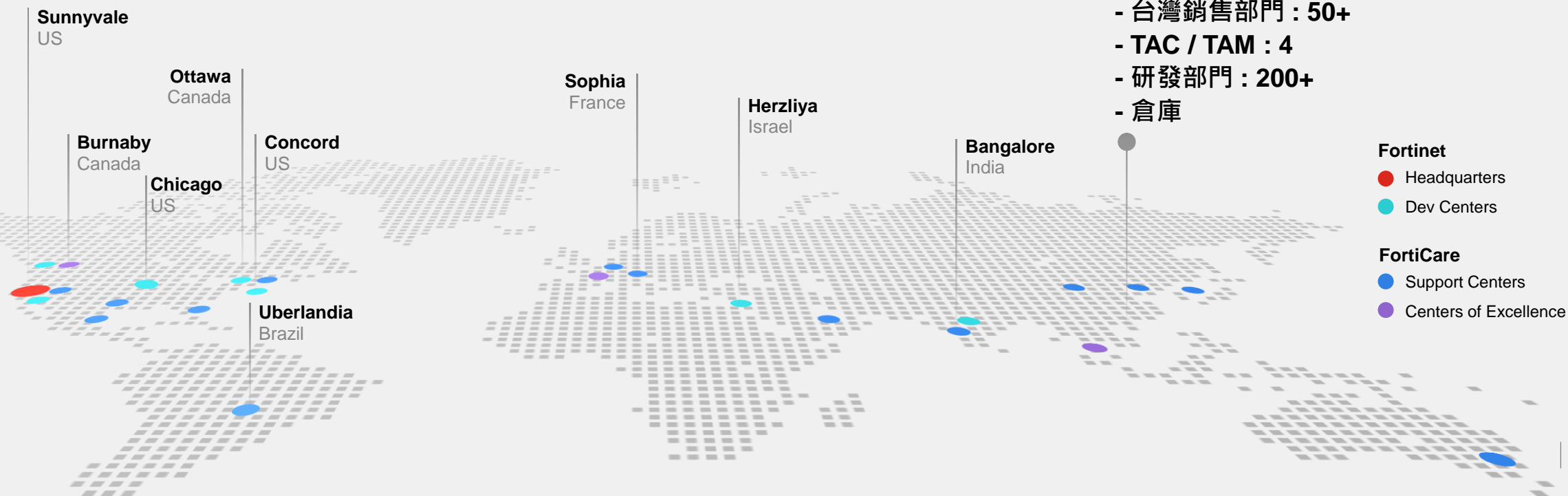
Software
Two-Thirds

Hardware
One Third



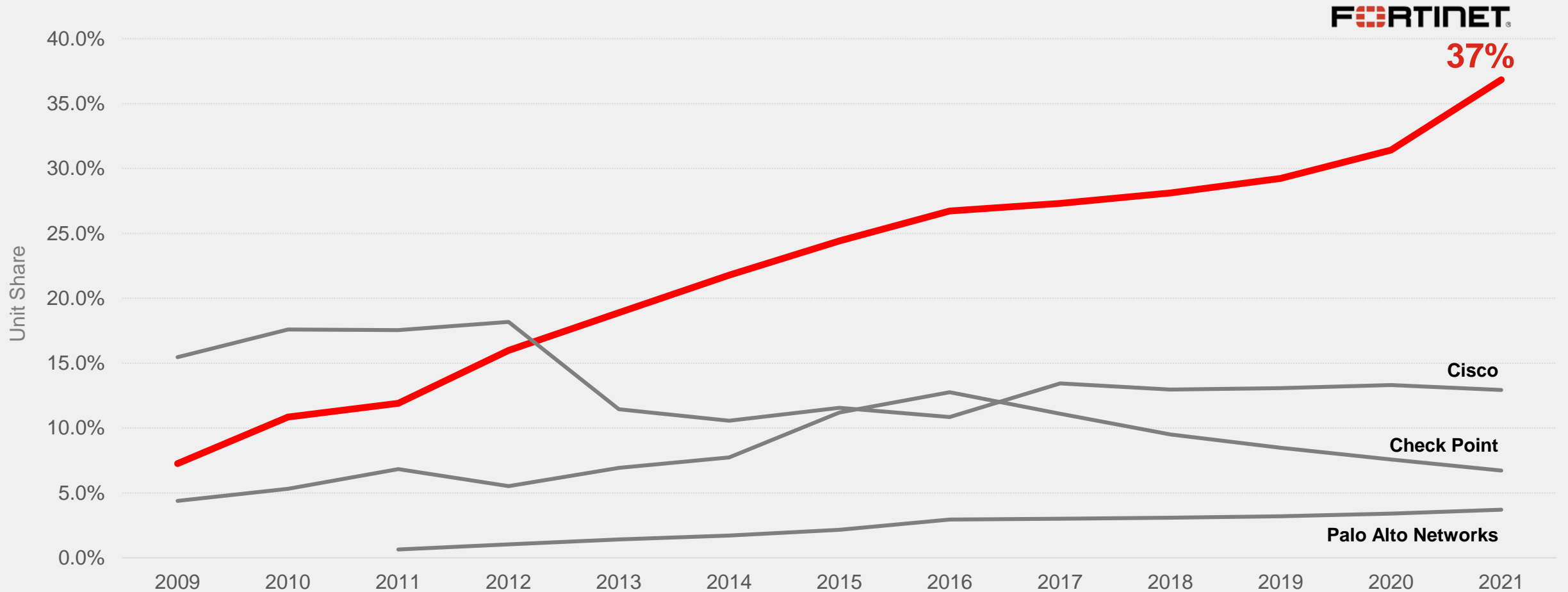
Fortinet North Asia in Taiwan

- 台灣銷售部門 : 50+
- TAC / TAM : 4
- 研發部門 : 200+
- 倉庫



Most Deployed Firewall in the World

Over One-Third of All Firewall Shipments



Source: IDC Worldwide Security Appliance Tracker, March 2022 (based on unit shipments of Firewall, UTM, and VPN appliances)



One OS for Networking and Security

Only vendor recognized as a leader across both SD-WAN and Network Firewall

Sept. 2021 Magic Quadrant for WAN Edge Infrastructure

Fortinet Recognized as a Leader



Nov. 2021 Magic Quadrant for Wired & Wireless LAN Access Infrastructure

Fortinet Recognized as a Visionary



Nov. 2021 Magic Quadrant for Network Firewalls

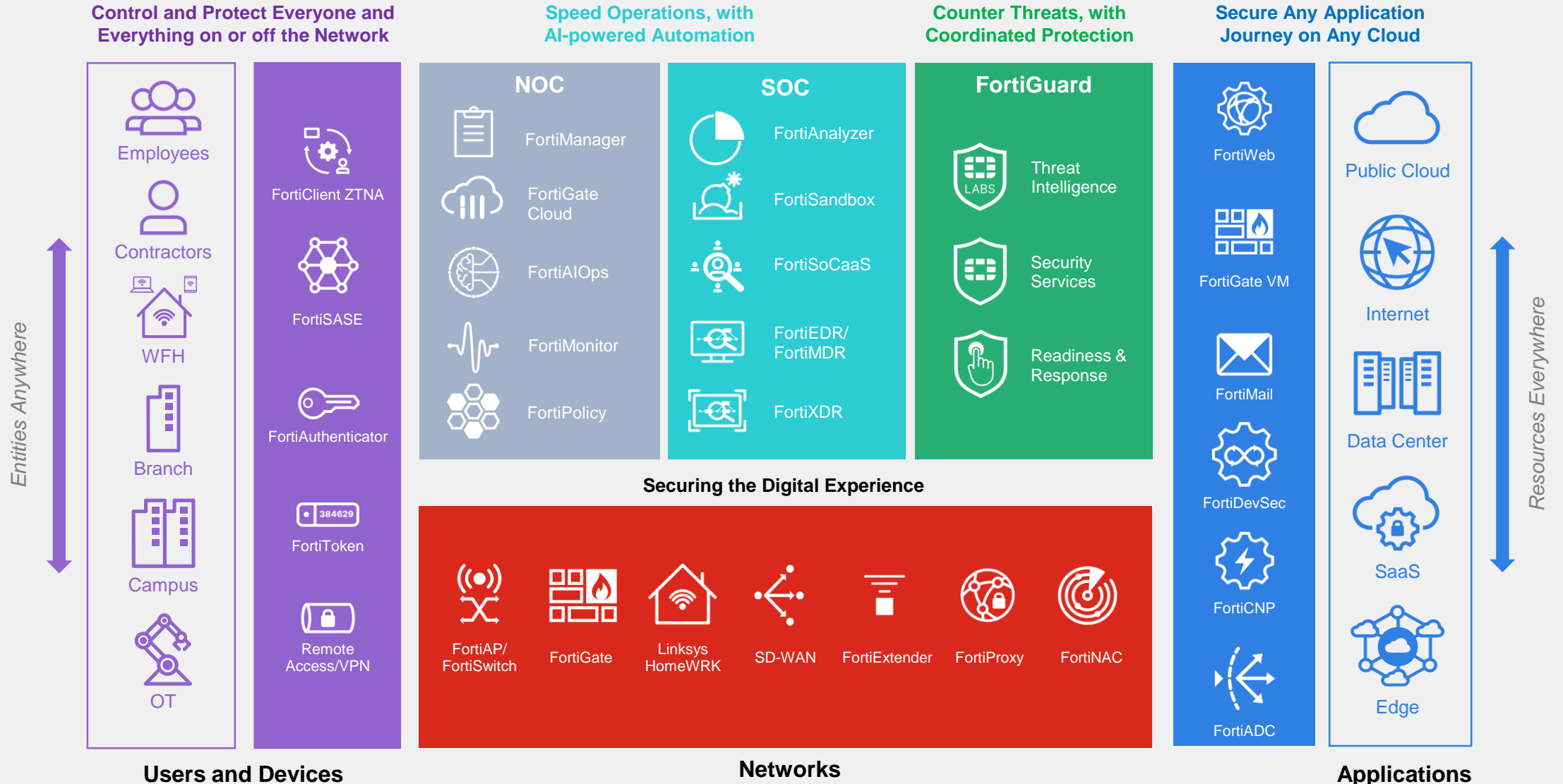
Fortinet Recognized as a Leader



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Fortinet Technology Vision



OT資安事故圖示

ICS/OT環境弱點

-  OT內部網路環境
-  無存取授權IOT設備
-  不安全的認證存取及協議
-  老舊作業系統設備
-  無安全防護
-  即時威脅擴散
-  人員疏失



資安事故



惡意軟體

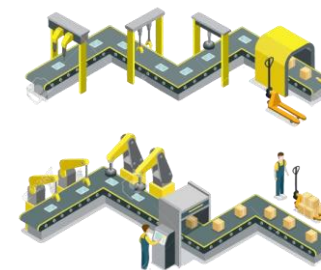
勒索病毒

協議串改

OT網路癱瘓



資安事故衝擊

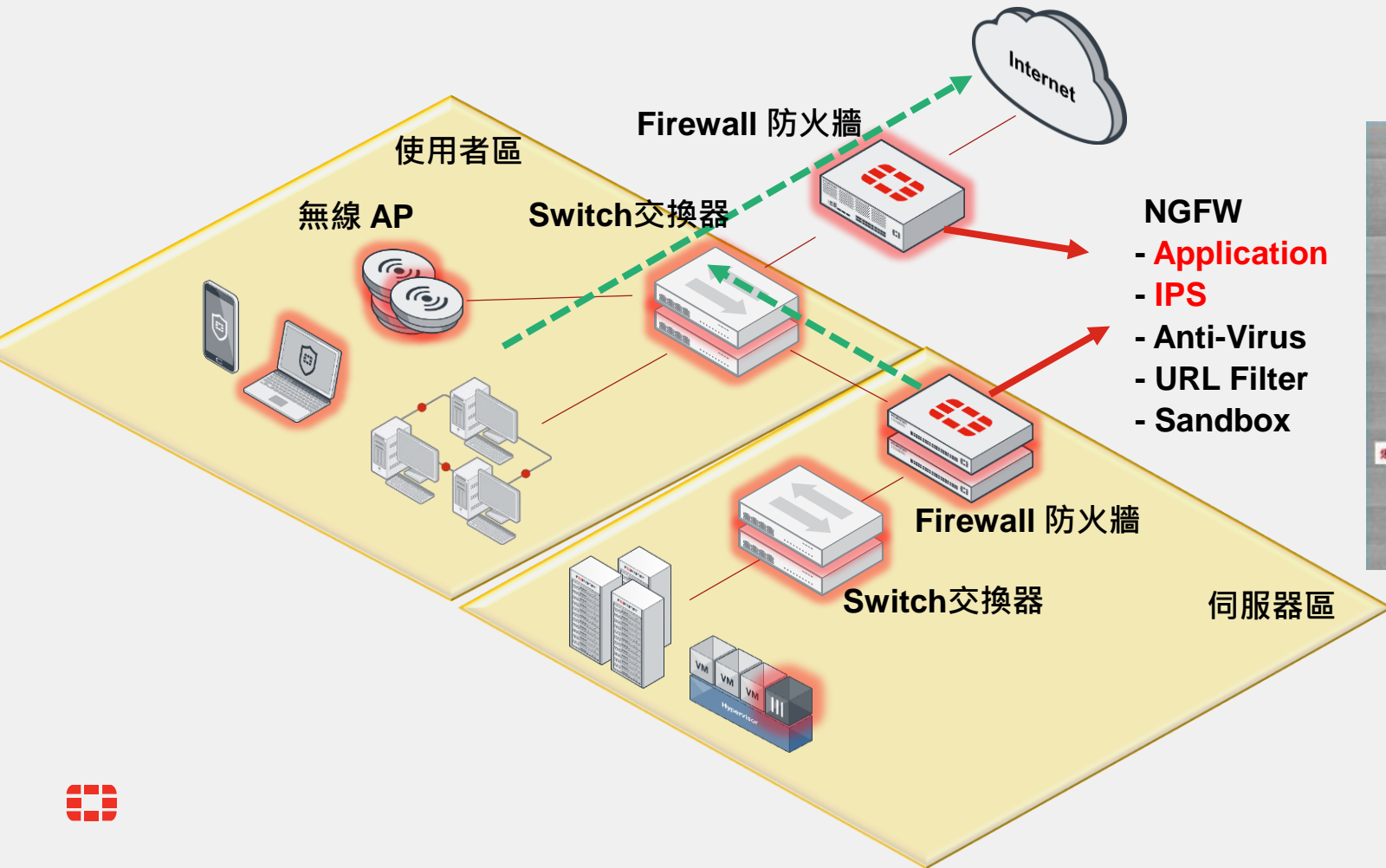


產線停擺

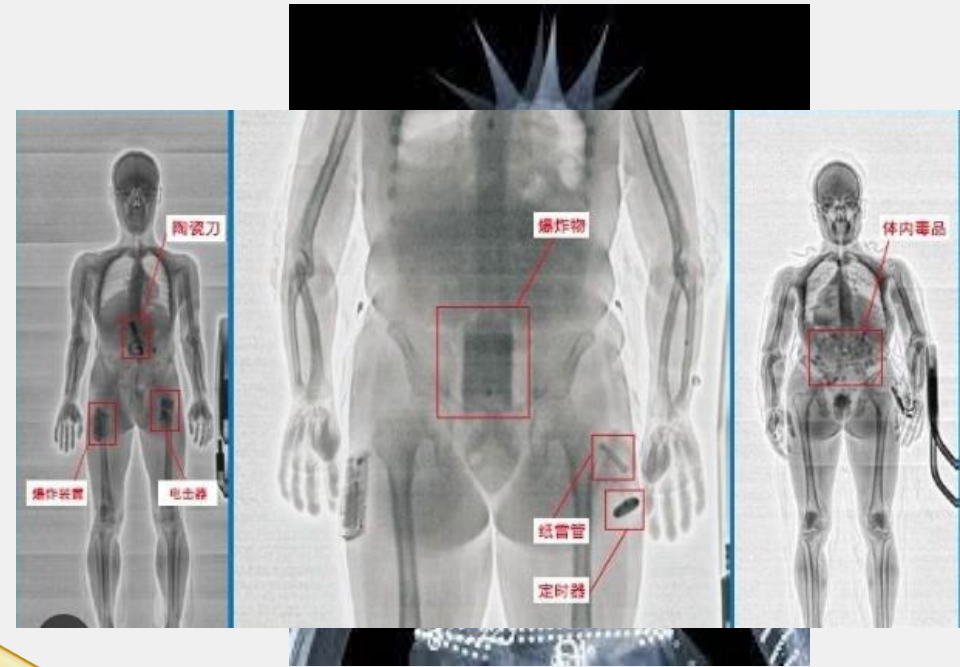


公安事件
(嚴重需要關廠)

NG Firewall 101 (Next Generation) NOT No Good ~

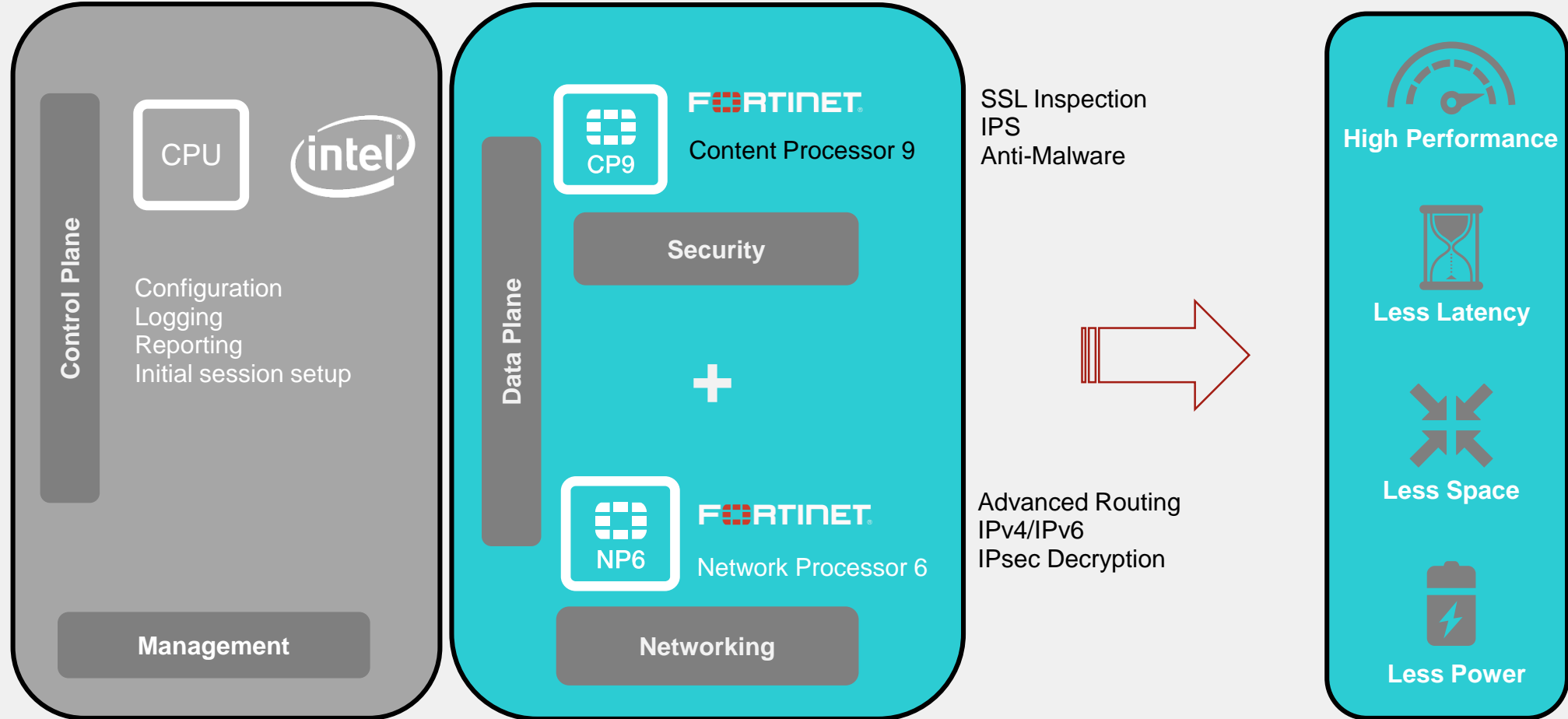


- NGFW**
- Application
 - IPS
 - Anti-Virus
 - URL Filter
 - Sandbox



FortiGate NGFW - Parallel Path Processing Architecture

驅動高效能資安網路



FortiGate NGFW – Managing External Risks

有效防禦外部網路攻擊



Before



Campus/DC



FW



解決方案：FortiGate NGFW

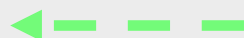
具備強大安全保護機制，適用於任何企業邊際端使用



After



Campus/DC



NGFW



FortiGuard Application Control



Block / Restricts Access to Risky Applications

Full Visibility – SSL Inspection & Control – Define your own custom app

Extensive support = 4416 apps and 24 categories

FortiGuard Labs
FORTINET

NEWS / RESEARCH SERVICES THREAT LOOKUP PSIRT RESOURCES Search FortiGuard Labs

► Home / Application Control

Application Control

Browse the FortiGuard Labs extensive encyclopedia of applications. Click any title to view more information about an application. Can't find what you are looking for? Try using the search bar above to find a specific application description.

Applications (4416)

Filter by Risk Level:


- All
- Level 5 (178)

OCPP.1.6 (Industrial)



Application Control

- 擋 Facebook 上傳檔案行為

 Facebook_Chat  	Social.Media	Browser-Based
 Facebook_File.Download  	Social.Media	Browser-Based
 Facebook_File.Upload  	Social.Media	Browser-Based
 Facebook_Login  	Social.Media	Browser-Based
 Facebook_Post  	Social.Media	Browser-Based
 Facebook_Search  	Social.Media	Browser-Based

- 擋 DropBox 下載檔案行為

 Dropbox_File.Download  	Storage.Backup	Browser-Based
 Dropbox_File.Upload  	Storage.Backup	Browser-Based
 Dropbox_Login  	Storage.Backup	Browser-Based



IPS (Intrusion Protection)

> 首頁 > 漏洞警訊公告

漏洞警訊公告

Windows作業系統存在高風險安全漏洞(**CVE-2022-26809**)，允許攻擊者遠端執行任意程式碼，請儘速確認並進行更新

內容說明：

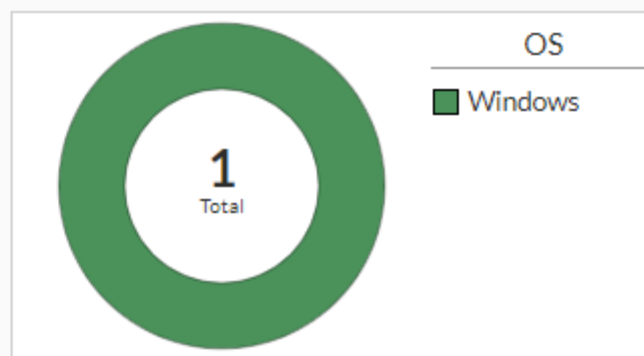
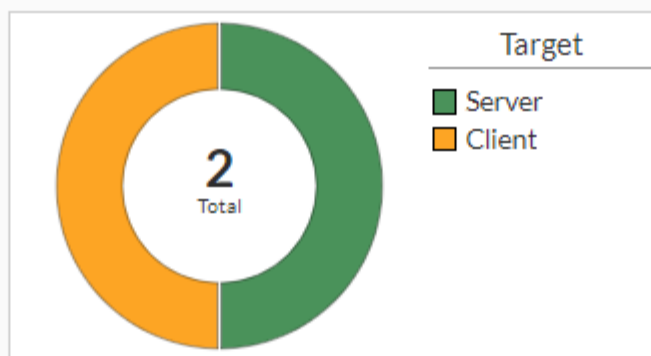
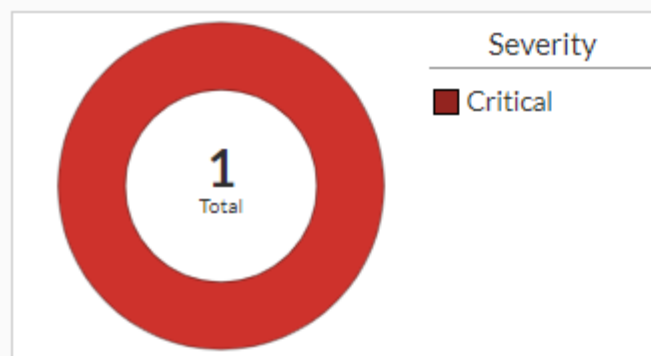
研究人員發現Windows作業系統存在高風險安全漏洞(CVE-2022-26809)，攻擊者可將特別製作之遠端程序呼叫(Remote

Procedure Call，RPC)傳送至

目前已知影響平台如下：

Windows 10 for 32-bit System

Windows 10 for x64-based System



+ Create New	Edit	Delete	CVE-2022-26809	x	Q
Name	Severity	Target	OS	Action	CVE-ID
[-] IPS Signature 1/10282					
MS.Windows.RPC.CVE-2022-26809.Remote.Cod...	■■■■■	Server Client	Windows	⊘ Block	CVE-2022-26809



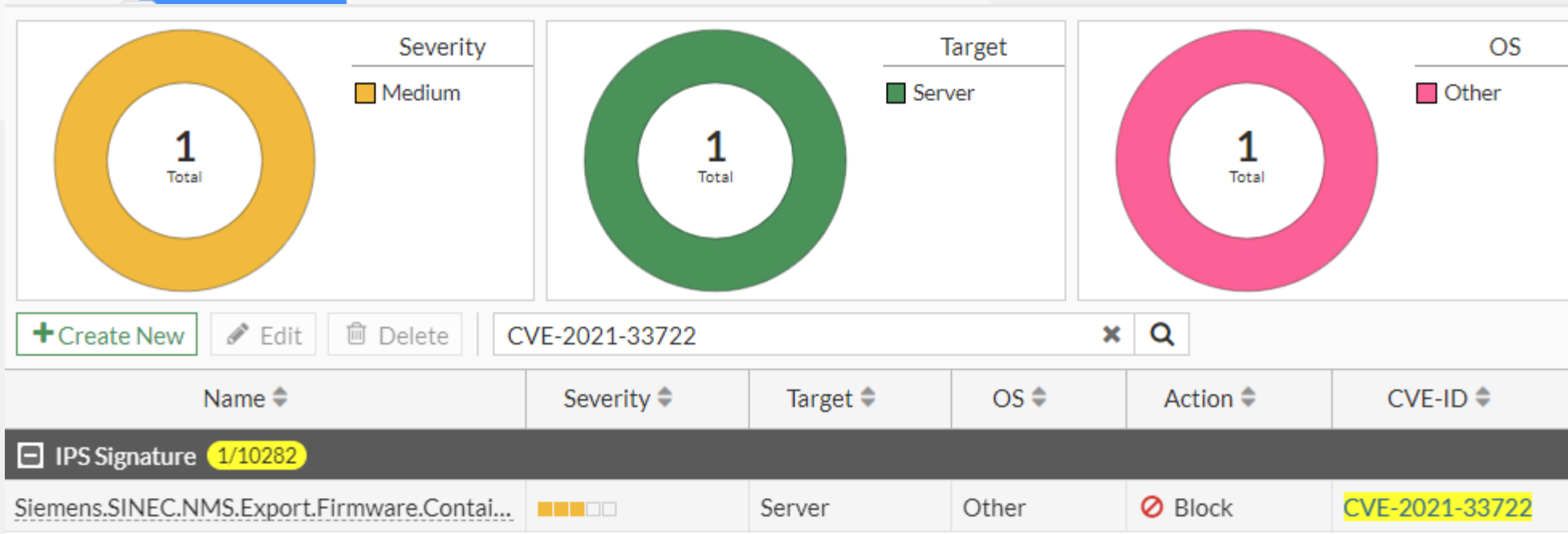
Intrusion Protection OT

西門子公布與修補15個工控網路管理系統的漏洞

用於操作科技 (OT) 環境的網路管理系統，一旦出現漏洞，有可能讓攻擊者用於掌控OT



網路環境。資安業者Claroty近日揭露，西門子旗下的SINEC網路管理系統 (NMS) 漏洞，西門子總共登錄為15個CVE編號進行列管，並發布1.0 SP2 Update 1予以修補。研究人員指出，這些漏洞中最值得注意的是CVE-2021-33723與CVE-2021-33722，前者為能讓攻擊者藉由不適當的權限挾持帳號，後者

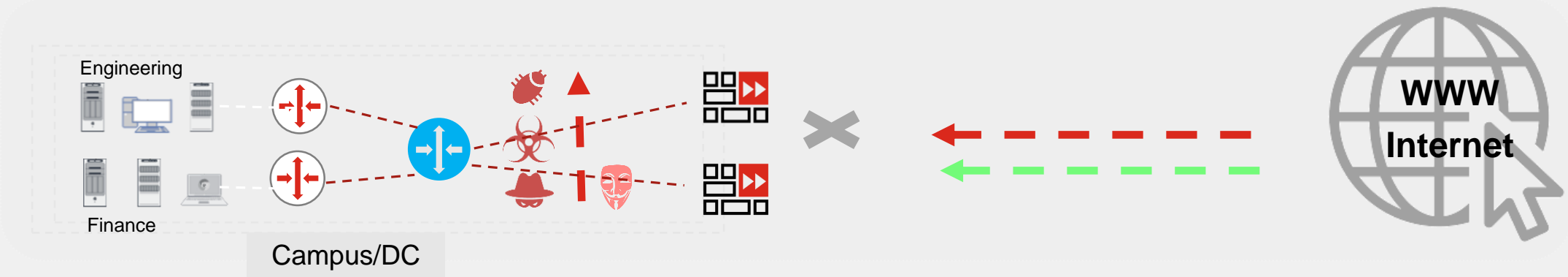


FortiGate NGFW – 內部資安防禦

有效強化內部網路資安可視化



Before



Solution: Fortinet NGFW

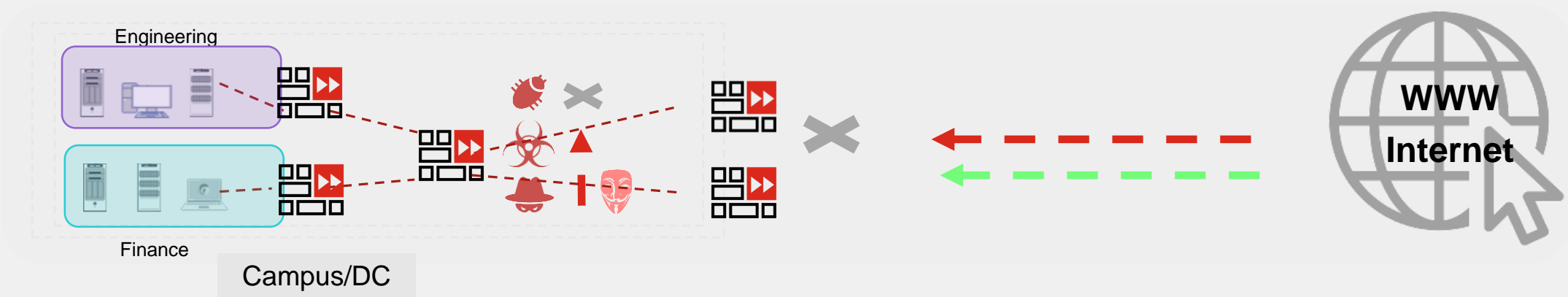
防禦內部攻擊

強化內部網路資安可視化

— Engineering
— Finance



After



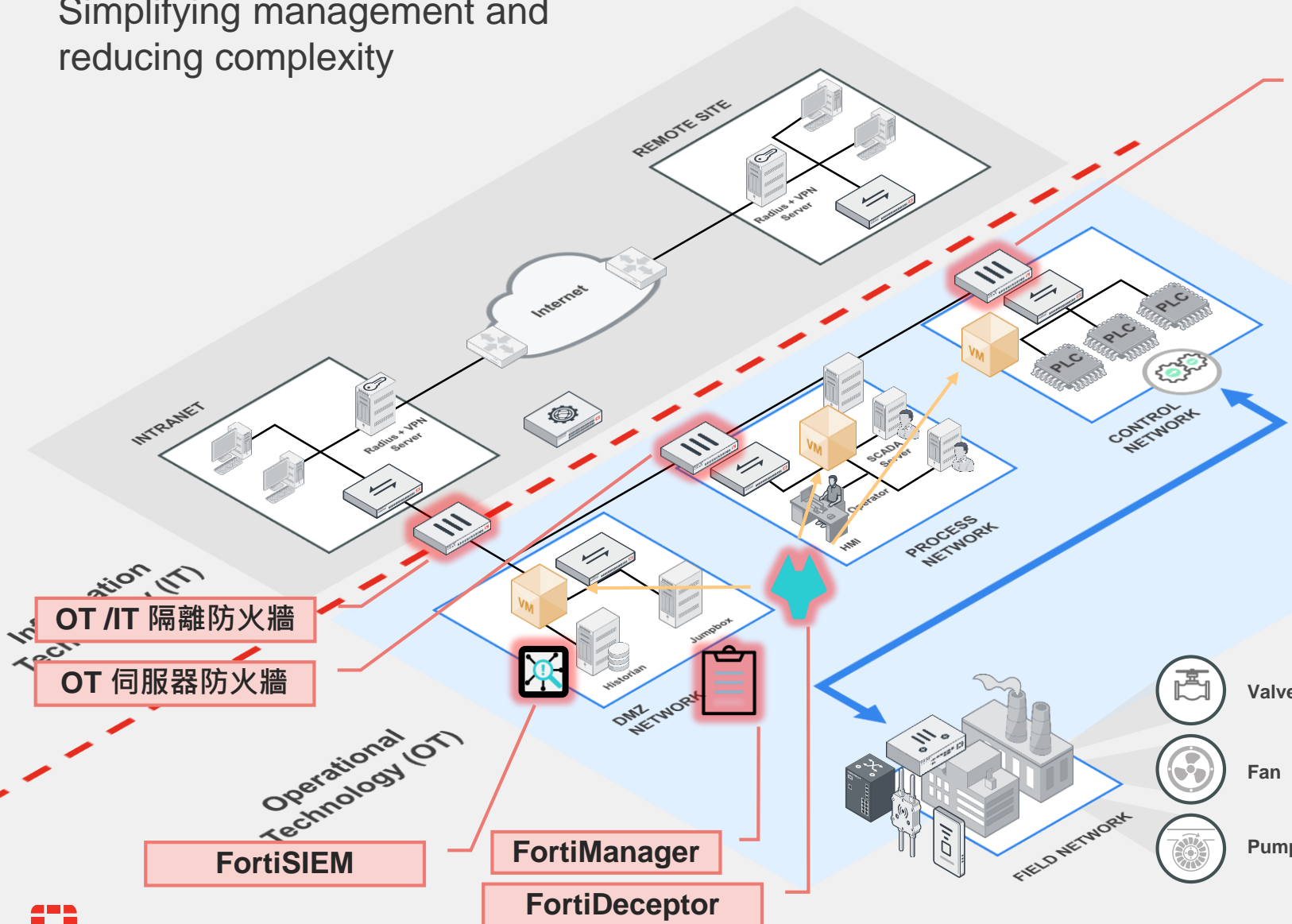


FortiGate企業級小型產品線



Fortinet's Security Fabric Protects OT & IT

Simplifying management and reducing complexity



OT 邊際防火牆

OT /IT 隔離防火牆

OT 伺服器防火牆

FortiSIEM

FortiManager

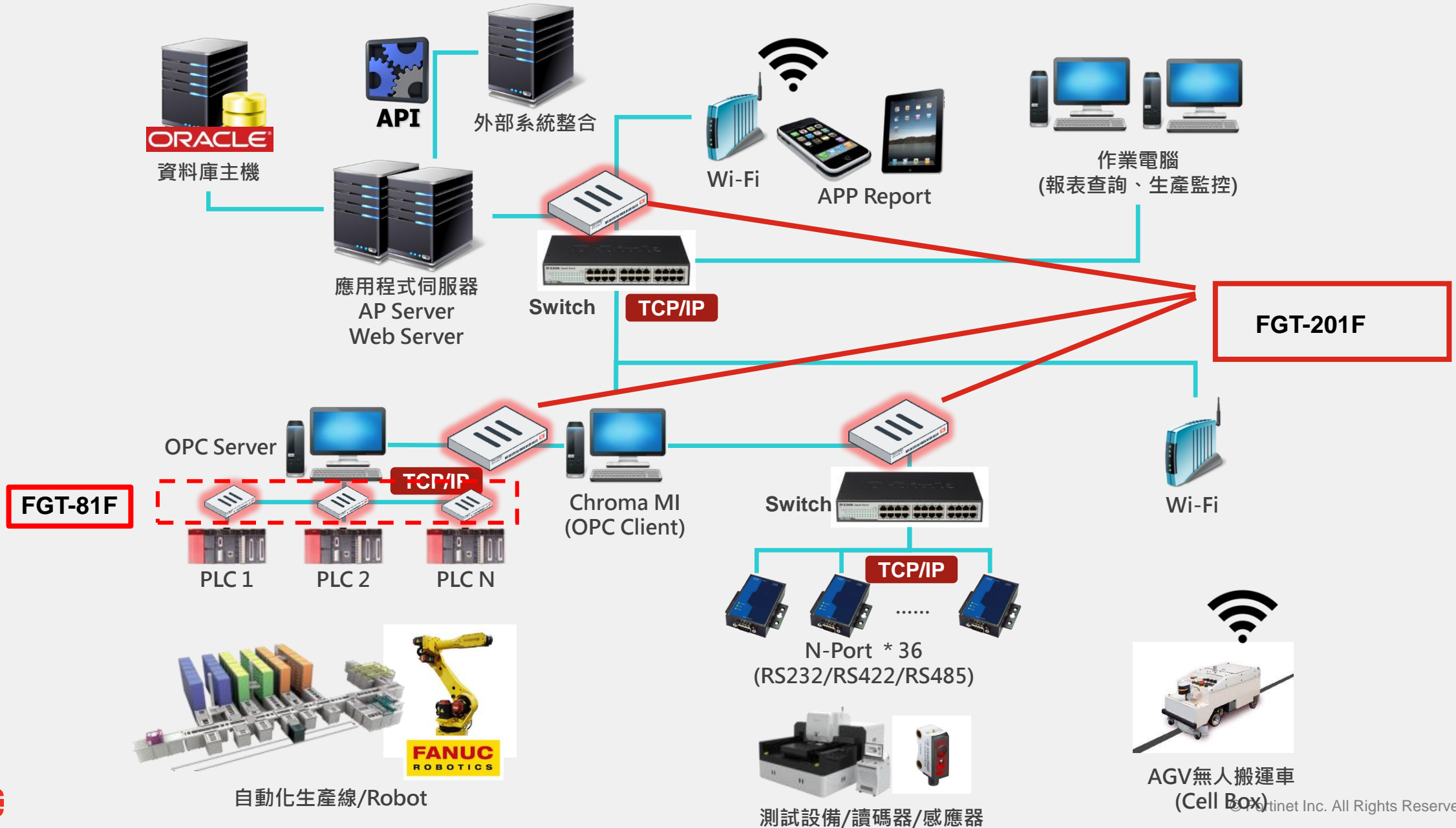
FortiDeceptor

	型號	功能
OT/IT隔離防火牆	FGT- 201F (10G介面)	- App / IPS / AV / Web
OT伺服器防火牆	FGT-201F (10G介面)	- Industrial license - App / IPS / AV / Web
OT 邊際防火牆	FGT-81F	- Industrial license - App / IPS / AV
設備統合管理	FortiManager	Log/設定/設備管理
內部捕捉	FortiDeceptor	Honeypot
資安監控平台	FortiSIEM	NOC/SOC異質設備及 Log/AI關聯分析

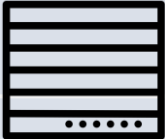





- Valve
- Fan
- Pump



Chroma 智慧製造整合平台

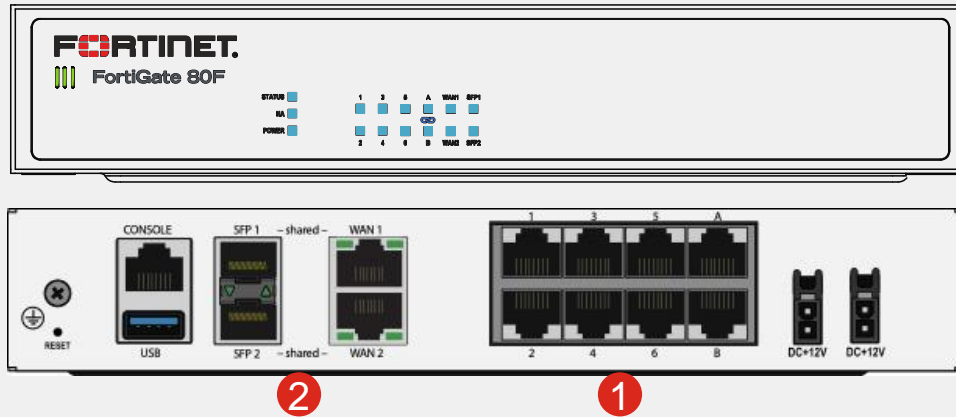


FortiGate Product Offering

	Entry Level	Mid-Range	High-End	Ultra High-End	Virtual Appliances	
Mobile Security						
Hyperscale *				6000-7000 Series	 FG-VM	
Network Segmentation			1000-4000 Series			
IPS						
Secure SD-WAN			400-800 Series			
NGFW		100-200 Series				
Universal ZTNA	30-90 Series					
Threat Protection	600– 900 Mbps	1 – 3 Gbps	5 Gbps – 10.5 Gbps	7.1 – 75 Gbps	60 Gbps – 520 Gbps	H/W Dependent



FortiGate 80/81F



- ① 8 x GE RJ45 Ports
- ② 2x Shared Media interface Pairs



10 Gbps
Firewall throughput



1.4 Gbps
IPS Throughput

45,000
New Sessions/Sec

1.5 Million
Concurrent Sessions



1 Gbps
NGFW Throughput



715 Mbps
SSL Inspection Throughput



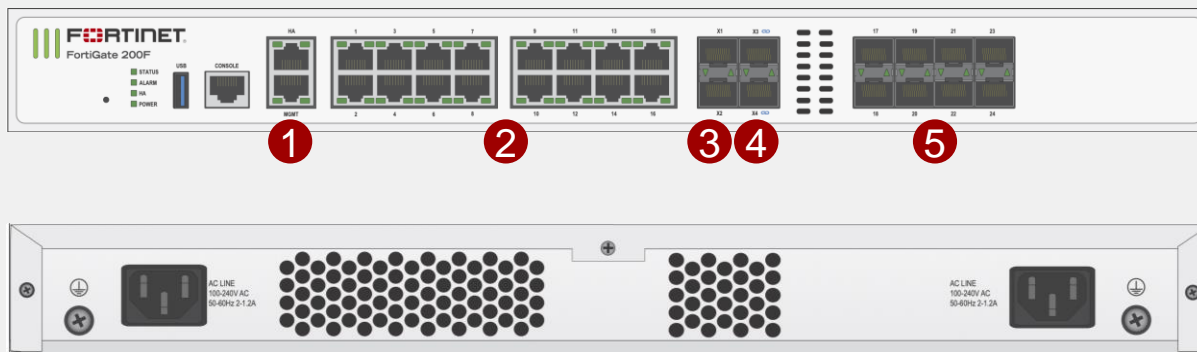
900 Mbps
Threat Protection Throughput



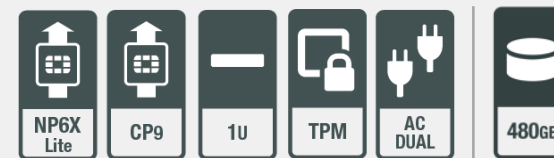
Small Business / Remote Office
NGFW / Secure SD-WAN



FortiGate 200/201F



- ① 2 x GE RJ45 MGMT/HA Ports
- ② 16 x GE RJ45 Ports
- ③ 2 x 10GE SFP+ Slots
- ④ 2 x 10GE SFP+ FortiLink Slots
- ⑤ 8 x GE SFP Slots



27 Gbps
Firewall throughput



5 Gbps
IPS Throughput

280,000
New Sessions/Sec

3 Million
Concurrent Sessions



3.5 Gbps
NGFW Throughput



4 Gbps
SSL Inspection Throughput



3 Gbps
Threat Protection Throughput



Enterprise Branch / Mid Enterprise
NGFW / Secure SD-WAN



銷售場域

FortiGate

	UTP	1G 光 SFP	10G光 SFP+	License	FortiManager-VM
FGT-80F	8	0	0	FG-80F-BDL-811-DD (Enterprise bundle)	Optional
FGT-81F	8	0	0	FG-81F-BDL-811-DD (Enterprise bundle)	Optional
FGT-200F	18	8	4	FG-200F-BDL-811-DD (Enterprise bundle)	Optional
FGT-201F	18	8	4	FG-201F-BDL-811-DD (Enterprise bundle)	Optional

- FortiGate 防火牆可單機獨立設定運作，毋須透過管理機設定。
- FortiManager 可依需求採購 Stackable Device License 。
- Enterprise Bundle :
Enterprise Protection (IPS, Advanced Malware Protection, Application Control, URL, DNS & Video Filtering, Antispam, Security Rating, IoT Detection, *Industrial Security (內建)*, FortiConverter Svc, and FortiCare Premium)
- *Industrial Security License detect assets unlimited* 毋須外購。



致茂 OT Solution Compare

	FGT-81F	FGT-201F
Firewall (1518/512/64 byte UDP)	10/10/7 Gbps	20/18/10 Gbps
Concurrent Sessions	1.5 M	1.5 M
New Sessions/Sec	45,000	56,000
IPSec VPN	6.5 Gbps	11.5 Gbps
IPS (Ent. Mix)	1.4 Gbps	2.6 Gbps
NGFW (Ent. Mix)	1 Gbps	1.6 Gbps
Threat Protection (Ent. Mix)	900 Mbps	1 Gbps
Interfaces	8x GE RJ45, 2x Shared Port Pairs	2x 10GE SFP+, 18x GE RJ45, 8x GE SFP, 4x Shard Media Pairs
Storage	128G (81F)	480 GB (201F)
Redundancy Power	Single AC PS, dual inputs	Yes



訂閱 License

SUBSCRIPTIONS

Service Category	Service Offering	A-la-carte	Bundles			
			Enterprise Protection	SMB Protection	Unified Threat Protection	Advanced Threat Protection
Security Services	FortiGuard IPS Service	•	•	•	•	•
	FortiGuard Anti-Malware Protection (AMP) — Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and FortiSandbox Cloud Service	•	•	•	•	•
	FortiGuard Web Security — URL and web content, Video and Secure DNS Filtering	•	•	•	•	
	FortiGuard Anti-Spam		•	•	•	
	FortiGuard IoT Detection Service	•	•			
	FortiGuard Industrial Security Service	•	•			
	FortiCloud AI-based Inline Sandbox Service ¹	•				
NOC Services	FortiGate Cloud (SMB Logging + Cloud Management)	•		•		
	FortiGuard Security Fabric Rating and Compliance Monitoring Service	•	•			
	FortiConverter Service	•	•			
	FortiGuard SD-WAN Underlay Bandwidth and Quality Monitoring Service	•				
SOC Services	FortiAnalyzer Cloud	•				
	FortiAnalyzer Cloud with SOCaaS	•				
Hardware and Software Support	FortiCare Essentials	•				
	FortiCare Premium	•	•	•	•	•
	FortiCare Elite	•				
Base Services	FortiGuard Application Control					
	FortiCloud ZTNA Inline CASB Service ¹					
	Internet Service (SaaS) DB Updates					
	GeoIP DB Updates					
	Device/OS Detection Signatures					
	Trusted Certificate DB Updates					
	DDNS (v4/v6) Service					
			included with FortiCare Subscription			

¹ Available when running FortiOS 7.2



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