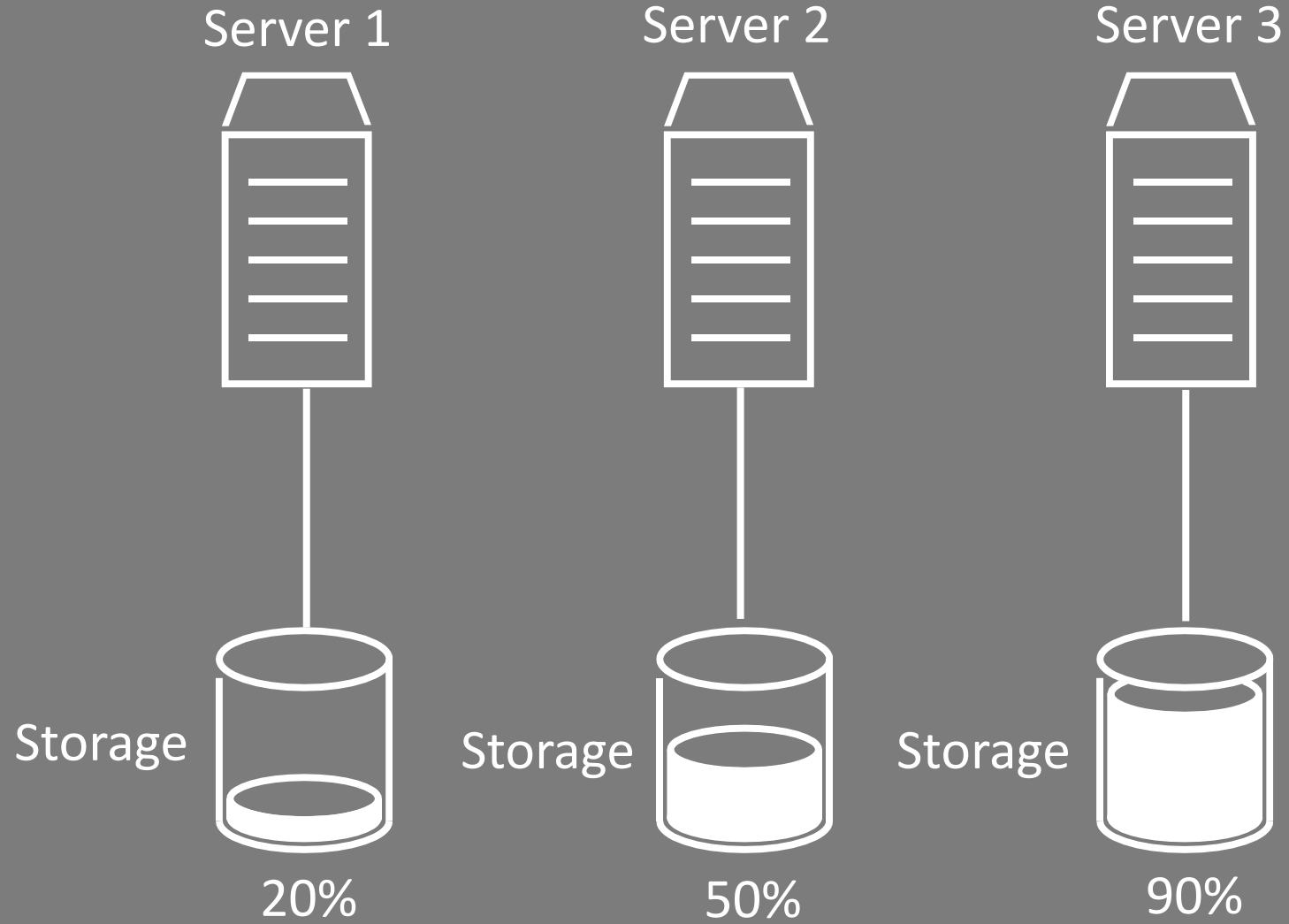




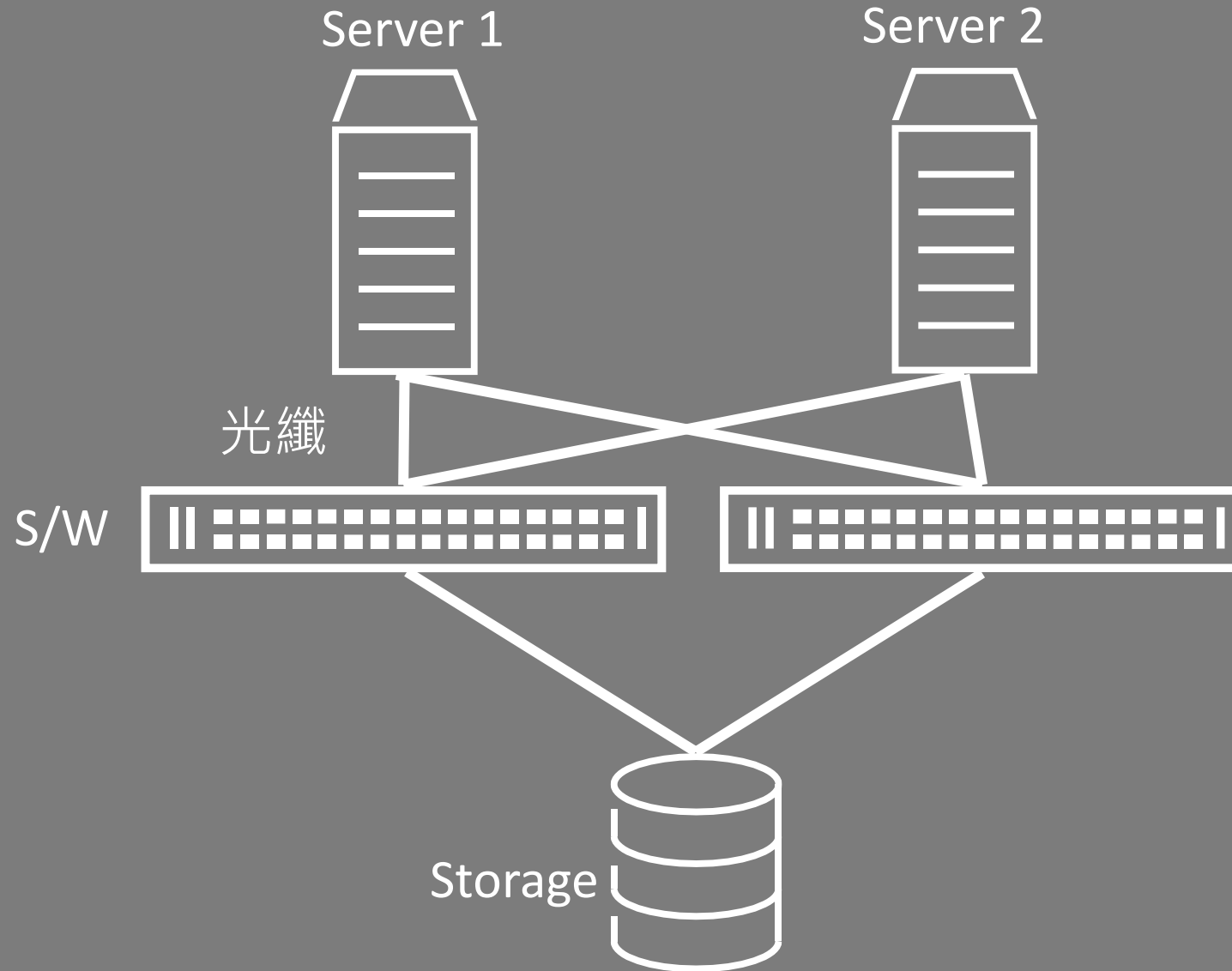
NETGEAR®

Mar, 2021
Eric Hsu

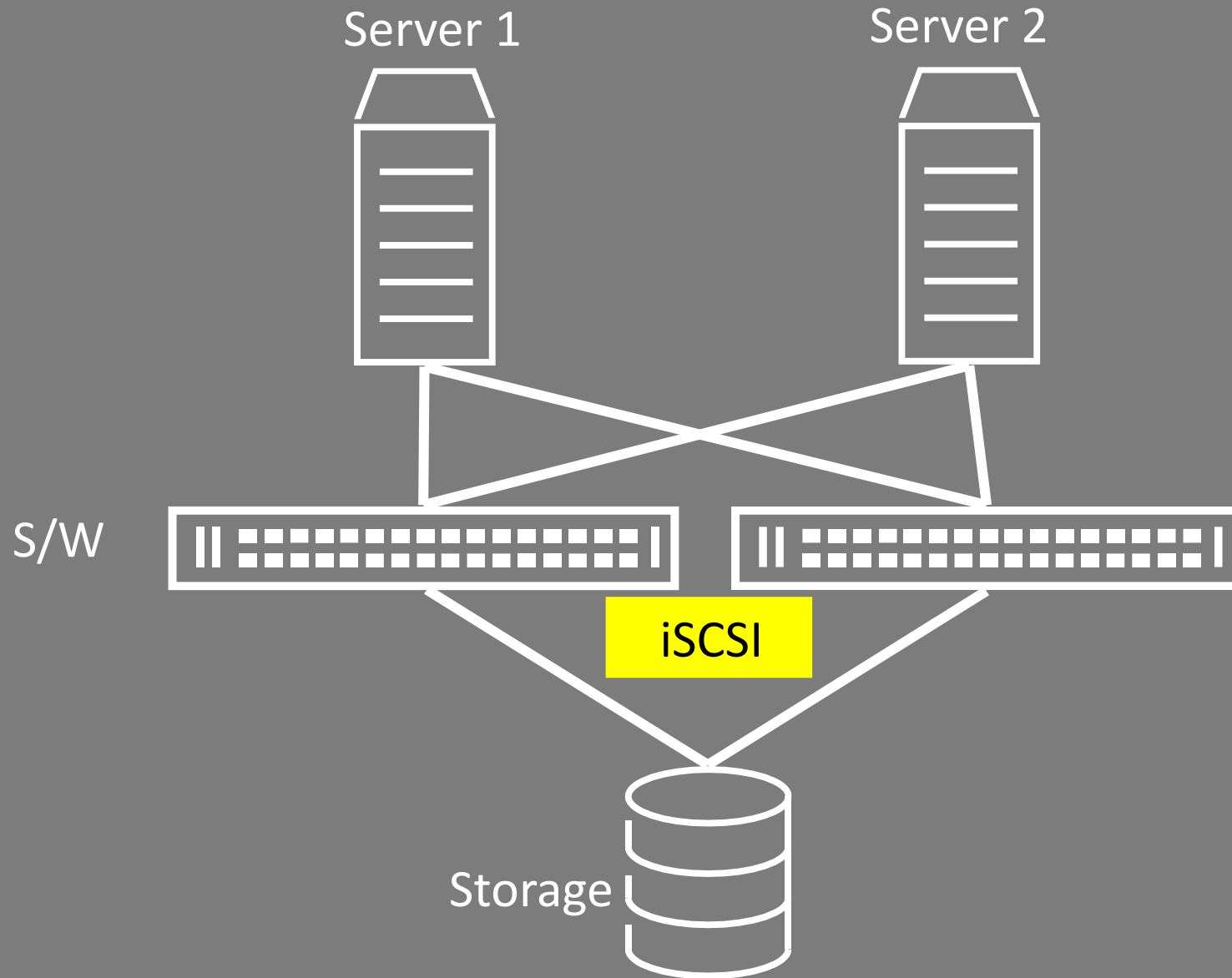
DAS架構



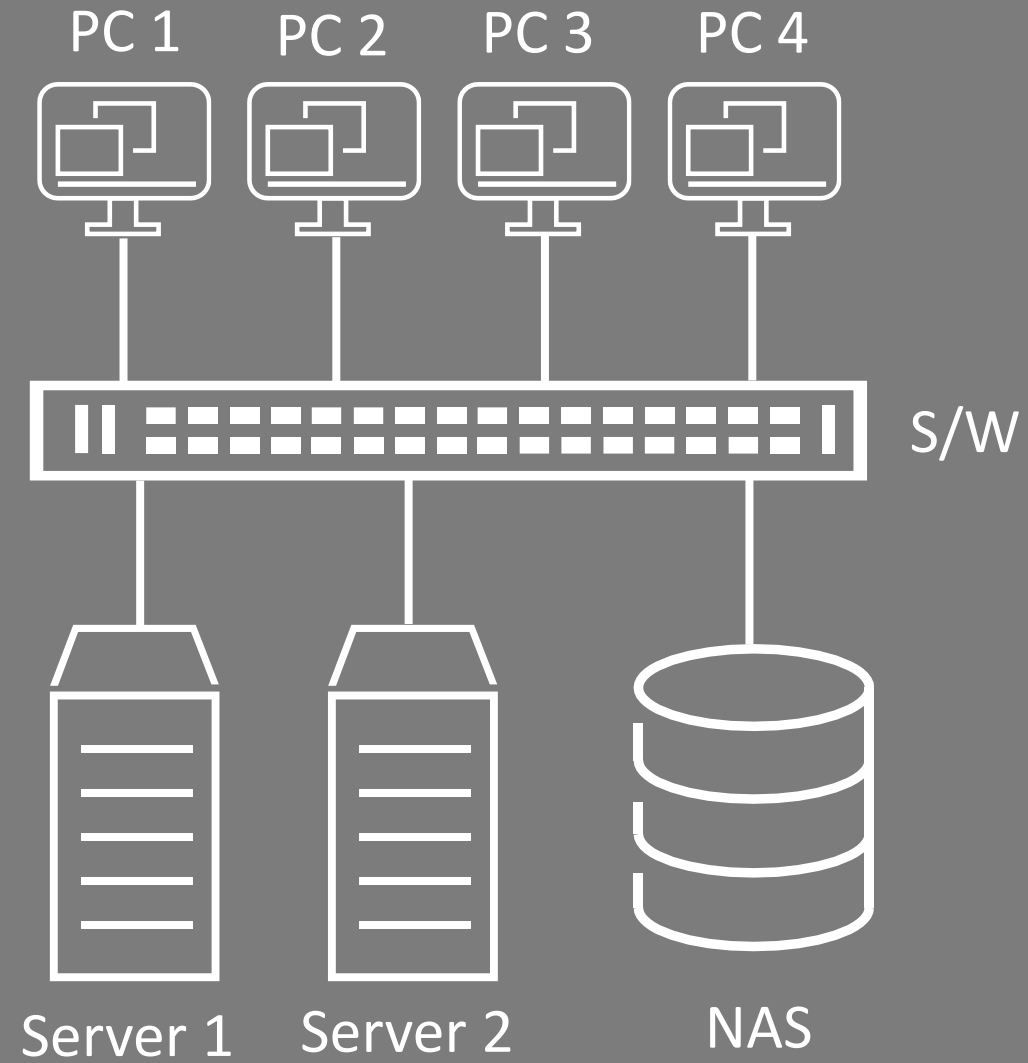
Fiber Channel SAN架構



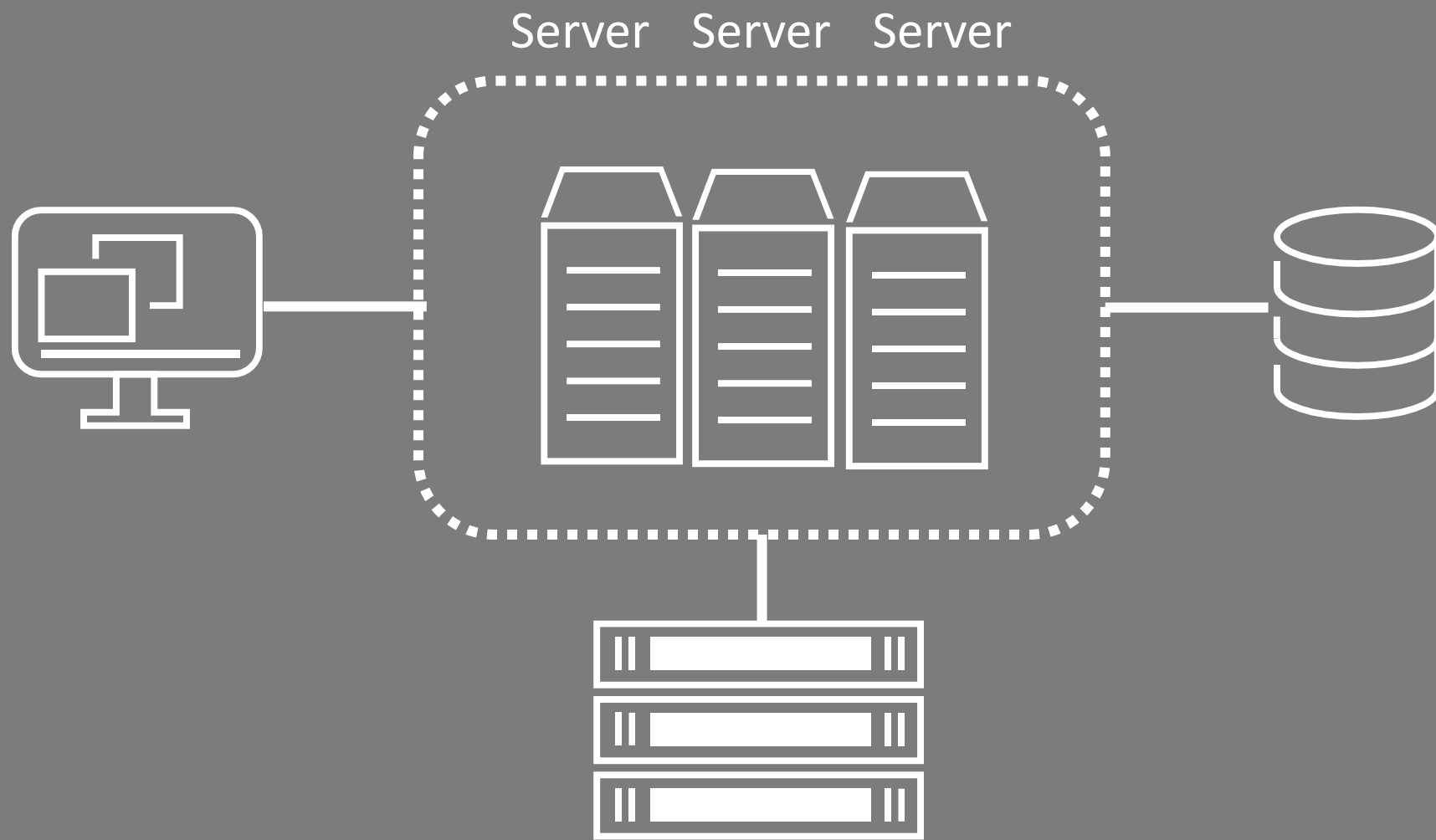
IP SAN架構



NAS架構



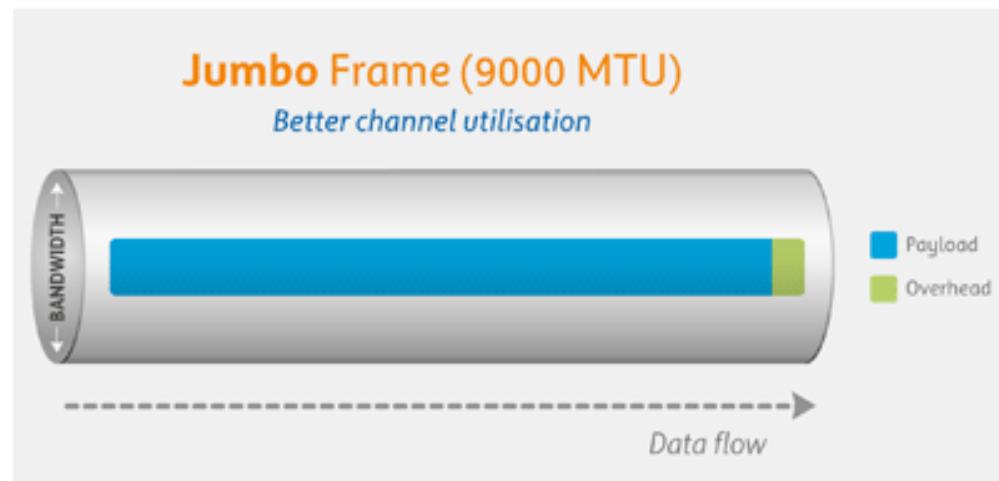
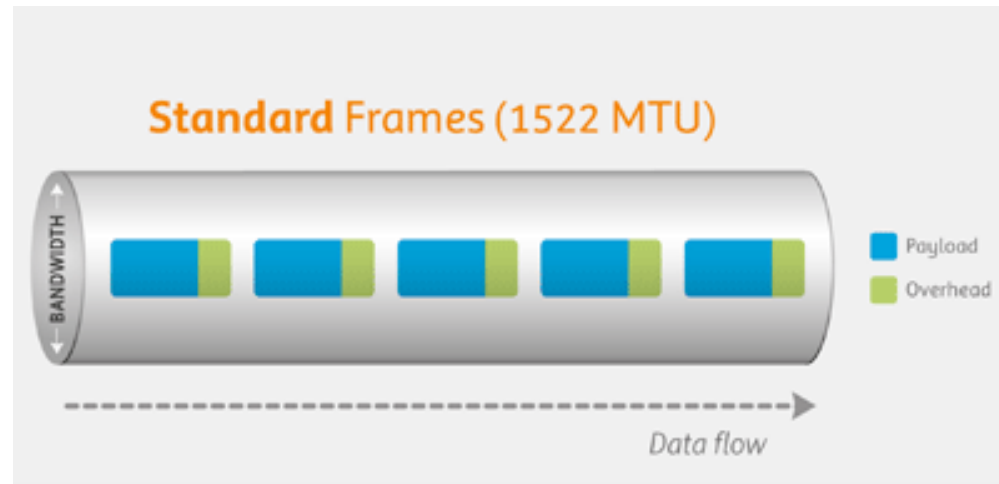
超融合儲存架構



挑選NAS要用的Switch原則

- 支援Jumbo Frame
- Packet Buffer size
- 保固年限

Jumbo Frame提升大檔案傳輸效率



24X
24X

48X

8X8F
12X12F

24X24F

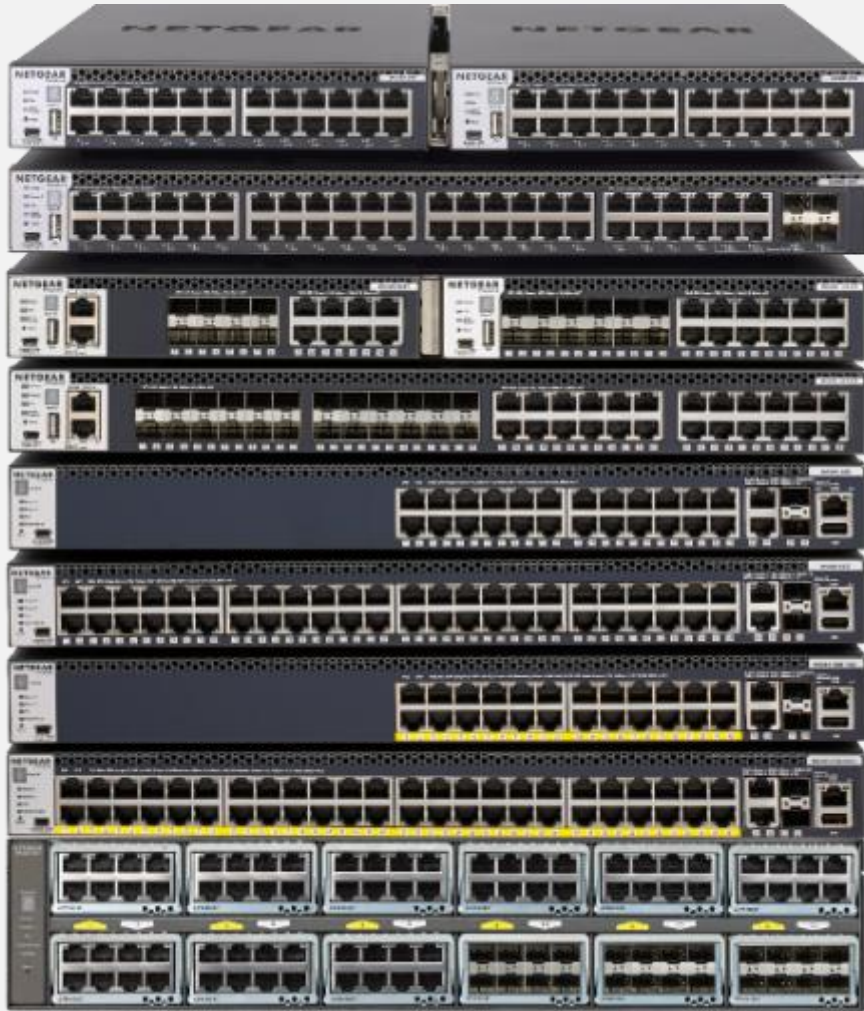
28G

52G

28G-PoE+

52G-PoE+

96X



Netgear 交換器的優勢

M4300 series

- **連接埠選用有彈性：**
M4300 系列 10G 交換器同時提供半光半電，滿足超融合架構及 10G Server & 10G Storage 的需求。
- **較大 Packet buffer：**
降低封包遺失或延遲的狀況。
- **最優保固條件：**
一律提供五年保固，故障換新品。



SDN
ready

 **SDVoE™**

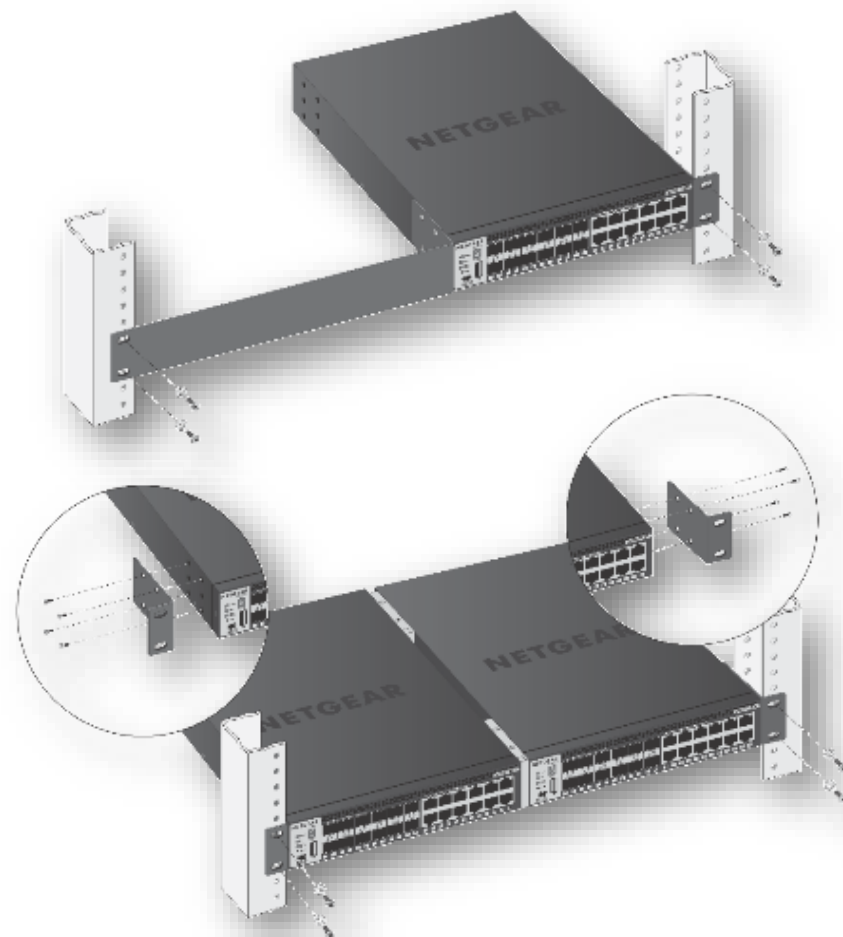
NETGEAR®
BUSINESS

獨特半寬式設計，不佔空間

正面圖



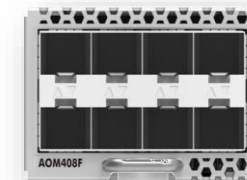
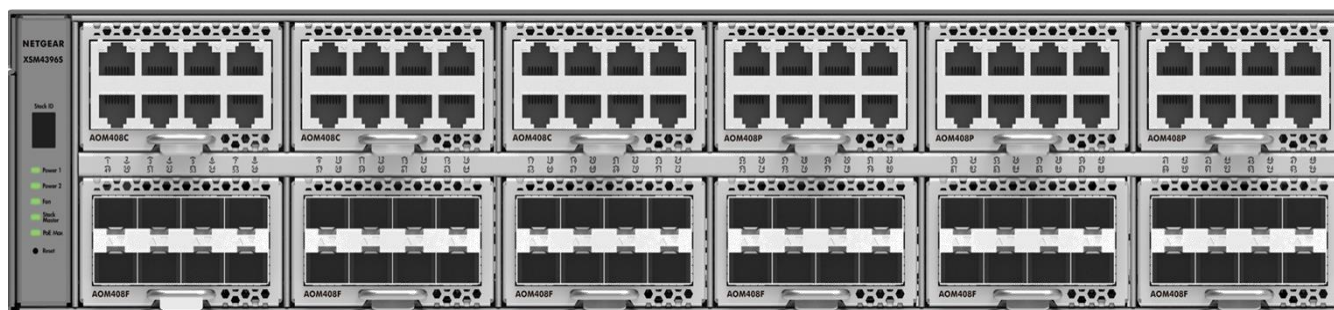
後面圖



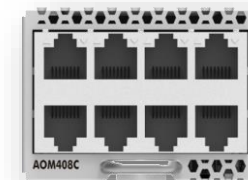
高靈活部署-依需求可任意搭配模組使用

高達96MB Packet Buffer

前面板

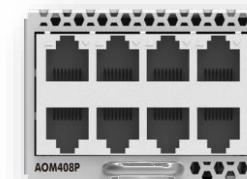


APM408F
8-PORT
10G光纖埠



APM408C
8-PORT
10G-RJ45埠

後面板



APM408P
8-PORT
10G-POE埠



APM402XL
2-PORT
40G-QSFP+

Packet buffer Size

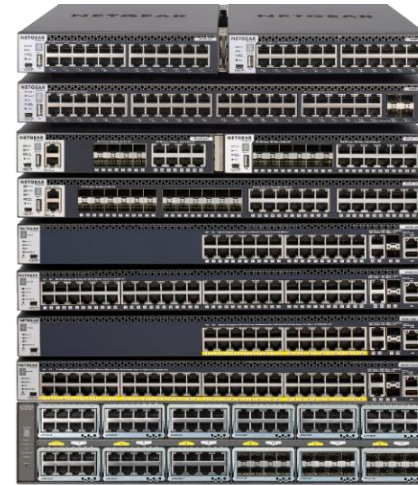


4MB~8MB



2MB

NETGEAR®



16MB/32/56/96MB



各品牌10G 交換器比較表

	Netgear		Juniper		Cisco		HP	
型號	XSM4324S	XSM4348S	EX4300-48MP	EX4600	WS-C4500X-16SFP+	WS-C4500X-32SFP+	HPE FlexFabric 5700-40XG-2QSFP+ Switch (JG896A)	HPE FlexFabric 5700-48G-4XG-2QSFP+ Switch (JG894A)
Port數	12個 100M/1G/10G RJ-45 12個 1G/10G SFP+	24個 100M/1G/10G RJ-45 24個 1G/10G SFP+	24個 10/100/1G RJ-45 24個 100/1G/2.5G/5G/10G RJ-45	48個10G SFP28 光纖連接埠 6個QSFP 28 光纖連接埠	16 個1G/10G SFP+/SFP 光纖連接埠	32 個1G/10G SFP+/SFP 光纖連接埠	40個1G/10G SFP+ 2 個 QSFP+	48個10/100/1G RJ-45 4個1G/10G SFP+ 光纖連接埠 2個QSFP+ 光纖連接埠
背板頻寬	480 Gps	960 Gps	320Gbps	1.44 Tbps	800 Gbps	800 Gbps	960 Gbps	336 Gbps
封包傳送率	357Mpps	714 Mpps	714 Mpps	1.07 Bpps	250 Mpps	250 Mpps	714.2 Mpps	250 Mpps
Packet Buffer	32MB	56Mb	16MB	12MB	32MB		9 MB	




各品牌100G 交換器比較表

	Netgear		Juniper		Cisco		HP	
型號	M4500-32C	M4500-48XF8C	QFX5200-32C	QFX5200-48Y	Nexus 9336C-FX2	Nexus 93240YC-FX2	HPE FlexFabric 5950 32QSFP28 Switch (JH321A)	HPE FlexFabric 5950 48SFP28 8QSFP28 Switch (JH402A)
Port數	32 個 10G/25G/40G/50G/ 100G QSFP28 光纖連 接埠	48個10G SFP28 光纖連 接埠 6個 10G/25G/40G/50G/10 0G QSFP28 光纖連接埠	32 個 10G/25G/40G/50G/ 100G QSFP28 光纖連 接埠	48個10G SFP28 光 纖連接埠 6個QSFP 28 光纖連 接埠	36 個 10G/25G/40G/50G /100G QSFP28 光 纖連接埠	48個1G/10G/25G SFP28 光纖連接埠 12 個QSFP 28 光纖 連接埠	32 個 10G/25G/40G/50G /100G QSFP28 光 纖連接埠 2個1G/10G SFP+ 光纖連接埠	48個10G SFP28 光 纖連接埠 8個QSFP 28 光纖連 接埠 2個1G/10G SFP+ 光纖連接埠
背板頻寬	6.4 Tbps	4 Tbps	up to 6.4Tbps	3.6Tbps	7.2 Tbps	4.8 Tbps	3200 Gbps	
封包傳送率	2 Bpps		up to 2.4Bpps	2.1Bpps	2.8 Bpps	1.8 Bpps	2796Mpps	
Packet Buffer	256MB		16MB	22MB	40MB		16MB	

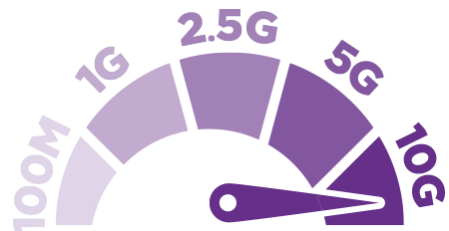
M4300- 光纖 + RJ45 混合式10G交換器

M4300-8X8F(半U式)	M4300-12X12F(半U式)
 <p>Full Managed 8 x 10GBASE-T 8 x 10G SFP+ Packet Buffer 16M Layer 3 建議售價(未稅)\$68,800</p>	 <p>Full Managed 12 x 10GBASE-T 12 x 10G SFP+ Packet Buffer 32M Layer 3 建議售價(未稅)\$90,000</p>



M4300-24X24F	M4300-24X(半U式)	M4300-48X
 <p>Full Managed 24 x 10GBASE-T 24 x 10G SFP+ Packet Buffer 56M Layer 3 建議售價(未稅)\$172,000</p>	 <p>Full Managed 24 x 10GBASE-T 4 x 10G SFP+ Packet Buffer 32M Layer 3 建議售價(未稅)\$110,000</p>	 <p>Full Managed 48 x 10GBASE-T 4 x 10G SFP+ Packet Buffer 56M Layer 3 建議售價(未稅)\$215,000</p>

Muti-G(2.5G/5G) 比10G便宜的選擇



5-speed networking (Multi-gig & 10G)

- Edge switching
- Faster file transfers
- High-bandwidth WiFi connectivity
- 4K streaming
- On existing CAT5e cabling for multi-gig

10G

10-Gigabit networking

- Core switching
- Virtualized environments
- Storage & server high-speed connectivity
- 10G at the aggregation layer to support 1G/multi-gig switches
- On CAT6A or Fiber cables
- Provides 10G or 1G, no in between

Cat 5e 輕鬆升速5倍

WITHOUT MULTI-GIG



WITH MULTI-GIG



Save big in
material, labor
and time

-	1G	2.5G	5G	10G
CAT 5e	✓	✓	✓	X
CAT 6	✓	✓	✓	30 – 55 m
CAT 6A	✓	✓	✓	✓

Netgear 齊備的Multi-G產品線



	XS505M	XS508M	XS512EM	XS724EM	GS110MX	GS110EMX	GS810EMX	MS510TX	MS510TXPP	M4200
	All ports 5-speed Full flexibility on all ports				5-speed uplink ports For faster more flexible core			Combination of 1G, Multi-gig, 5-speed For areas with a variety of devices		
# of ports total	5	9	14	26	10	10	10	10	10	10
# of 1G ports					8	8	8	4	4	
# of 1G/2.5G Multi-gig ports								2	2	6
# of 1G/2.5G/5G Multi-gig ports								2	2	2
# of 10G Fiber ports	1	1	2	2				1	1	2
# of 5-speed ports (100m/1G/2.5G/5G/10G)	4	8	12	24	2	2	2	1	1	
PoE+ ports									8	8
Type of management	Unmanaged	Unmanaged	Smart Managed Plus	Smart Managed Plus	Unmanaged	Smart Managed Plus	Smart Managed Plus	Smart Managed Pro	Smart Managed Pro	Fully Managed
Plug-and-play	Y	Y			Y					
Web interface for configuration			Y	Y		Y	Y	Y	Y	Y
Easy-mount										Y

10G 無網管交換器 (Apple iMAC PRO專用)

XS505M無網管	XS508M無網管
 <p>4 x 10-Gig/Multi-Gig Copper RJ-45 1 x 10G SFP+ 建議售價(未稅)\$15,500</p>	 <p>7 x 10-Gig/Multi-Gig Copper RJ-45 1 x Shared 10G/1G SFP+ 建議售價(未稅)\$21,000</p>

NIGHTHAWK[®] Wi-Fi 6

4X Better Performance than Wi-Fi 5

- ✓ Up to 4X INCREASED CAPACITY
- ✓ FASTER SPEEDS
- ✓ LONGER BATTERY LIFE FOR MOBILE & SMART HOME SENSORS
- ✓ BACKWARDS COMPATIBLE WITH ALL EXISTING WIFI DEVICES



夜鷹三頻 AX12

- AX11000 12 串流 無線路由器
(1,200 + 4,800 + 4,800 Mbps; 4x4 + 4x4 + 4x4)
- 12 串流傳輸 可提升多裝置的傳輸效率，多達 8 裝置可同時傳輸，讓上網 / Gaming / AR / VR / IoT 應用更加順暢
- 64位元 四核心 1.8GHz 處理器 + 3x Wi-Fi通訊晶片
- 2.5 Gbps & 2 Gbps 鏈路聚合 大幅提升有線連網速度
- 為支援160MHz頻寬的移動設備 提供千兆位的吞吐量
- 6x Gbps 乙太網連接埠, 1x 可調 2.5 Gbps LAN/WAN連接埠, 2x USB3.0 連接埠
- Dynamic QoS, Nighthawk App



Model: RAX200

NIGHTHAWK®

WiFi 6



NETGEAR



NIGHTHAWK

Nighthawk AX4

High-power WiFi 6 for better coverage for small to medium homes maximum up to 40 devices

4 Stream Wi-Fi 6
Up to 3Gbps WiFi Speeds

Ideal for High Speed Internet

Nighthawk AX8

High-performance WiFi for medium to large homes maximum up to 80 or more devices

8 Stream Wi-Fi 6
Up to 6Gbps, WiFi Speeds
Multi-Gig Internet

Ideal for Fiber, Gigabit Internet Speed

Nighthawk AX12

Maximum WiFi Performance & 50% more range with 8 Stream WiFi for large homes maximum up to 160 or more devices

12 Stream Wi-Fi 6
Up to 6 Gbps, WiFi Speeds
Multi-Gig Ethernet 5Gbps
Multi-Gig Internet
Wi-Fi CERTIFIED WPA3™

Ideal for Fiber, Gigabit Internet Speed

Nighthawk Tri-Band AX12

10.8Gbps WiFi for the gaming, streaming & high-bandwidth applications for large homes maximum up to 200 or more devices

12 Stream Wi-Fi 6 / Tri-band
Up to 10.8 Gbps, WiFi Speeds
Multi-Gig Ethernet 2.5Gbps
Multi-Gig Internet

Ideal for Fiber, Gigabit Internet Speed



The Only Home Networking Brand with Wi-Fi 6 routers for ALL needs

AX4



AX8



AX12



TRI-BAND
AX12



Features	RAX40	RAX80	RAX120	RAX200
無線速度	AX3000	AX6000	AX6000	AX11000
空間串流	4-Stream	8-Stream	12-Stream	12-Streams
處理器	Dual Core	Quad-Core 64-bit 1.8GHz	Quad-core 64-bit 2.2GHz	Quad-Core 64-bit 1.8GHz
無線規格	2.4GHz: 2x2 (Tx/Rx) 1024 QAM 40/20 MHz, up to 600Mbps 5GHz: 2x2 (Tx/Rx) 1024 QAM 160/80/40/20 MHz, up to 2,400Mbps,	2.4GHz AX: 4x4 (Tx/Rx) 1024 QAM 40MHz, up to 1.2Gbps 5GHz AX: 4x4 (Tx/Rx) 1024 QAM 160MHz, up to 4.8Gbps	2.4GHz AX: 4x4 (Tx/Rx) 1024 QAM 20/40MHz, up to 1.2Gbps 5GHz AX: 8x8 (Tx/Rx) 1024 QAM 20/40/80/80+80MHz, up to 4.8Gbps	2.4GHz AX: 4x4 (Tx/Rx) 1024 QAM 20/40MHz, up to 1.2Gbps 5GHz AX: 4x4 (Tx/Rx) 1024 QAM 20/40/80/160MHz, up to 4.8Gbps 5GHz AX: 4x4 (Tx/Rx) 1024 QAM 20/40/80/160MHz, up to 4.8Gbps
覆蓋面積	Small to Medium homes, up to 30 坪	Medium or large homes, 70坪 or more	Medium or large homes, 100坪 or more	Large to Very Large homes, up to 100坪 or more
乙太網路連接埠	LAN: 4x Gbe WAN: 1 Gbe	LAN: 5x Gbe WAN: 1 Gbe	LAN: 4x Gbe WAN: 1 Gbe 1x 5G Copper	LAN: 4x Gbe WAN: 1 Gbe 1x 2.5G Copper
WAN 連接方式 (One at a time)	1. 1x 1Gbe WAN 2. 2x 1Gbe Aggregate. WAN (Q3)	1. 1x 1Gbe WAN 2. 2x 1Gbe Aggregate. LAN/WAN	1. 1x 1Gbe WAN 2. 2x 1Gbe Aggregate. LAN/WAN 3. 1x Multi-Gbe LAN/WAN (5Gbe)	1. 1x 1Gbe WAN 2. 2x 1Gbe Aggregate. LAN/WAN 3. 1x Multi-Gbe LAN/WAN (2.5Gbe)
Ideal / Maximum # of devices	20 / (40 or more)	40 / (80 or more)	60 / (160 or more)	80 / (200 or more)
其他	1xUSB 3.0	2xUSB 3.0	2xUSB 3.0	2xUSB 3.0

NETGEAR® 全球網通領導品牌

◎ 北美第一

NETGEAR 是北美最大的網路設備供應商，所生產的智慧家庭 & 無線 WiFi 設備為美國市佔率第一品牌

◎ 行銷全球

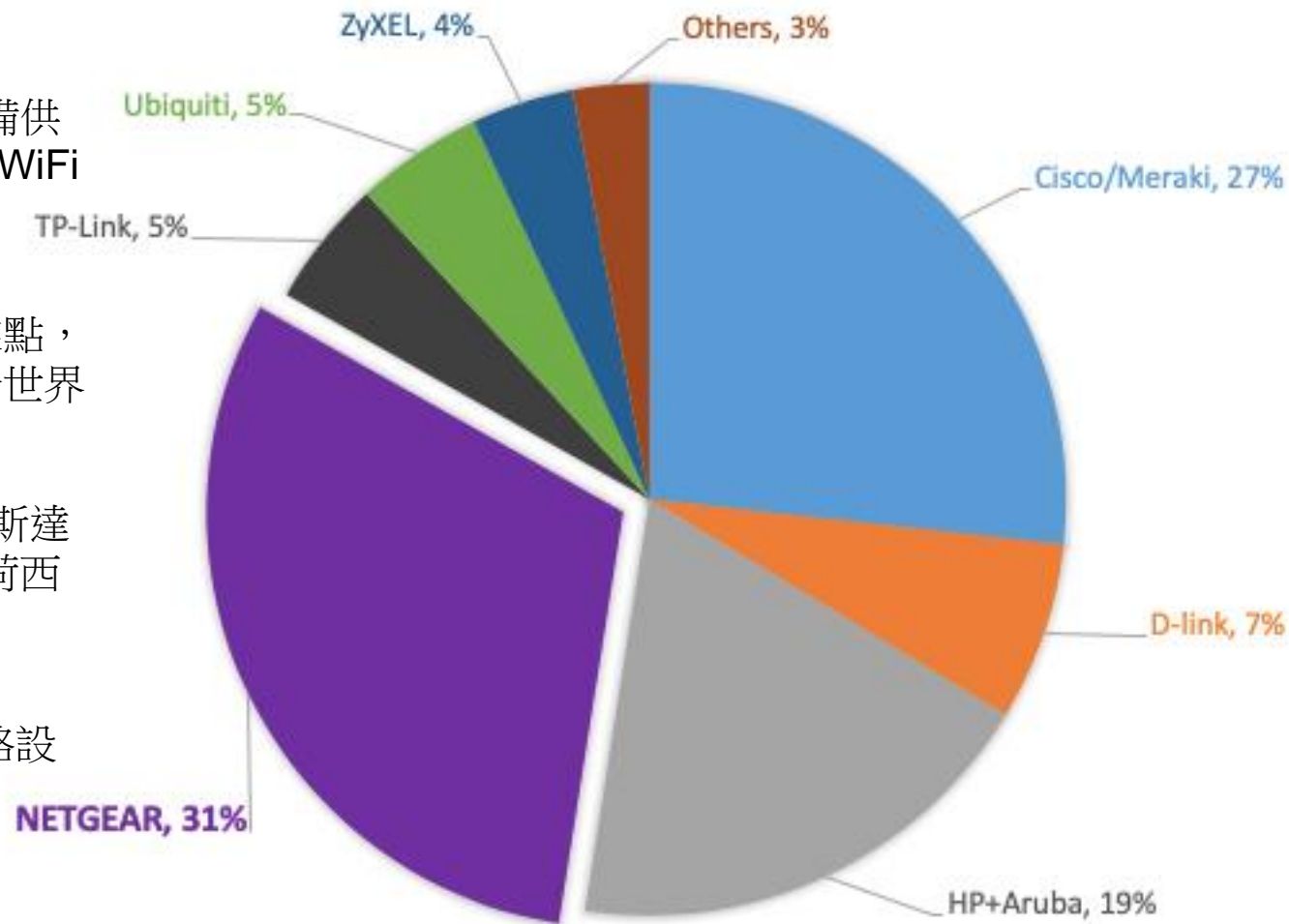
產品行銷全球約 28,000 個零售據點，擁有超過 27,000 家經銷商分佈於世界各地的主要城市。

◎ 上市公司

成立於1996年，是北美知名的納斯達克上市公司總部位於美國加州聖荷西市，目前在25個國家設有分公司

◎ 技術領先

技術領先設計各種無線與乙太網路設備，多次獲得德國紅點設計大獎



Thank you

www.netgear.com/business

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BUSINESS

