SANGFOR

Give Branch Business Digital Transformation a Boost

Make Your Digital Transformation Simpler and Secure

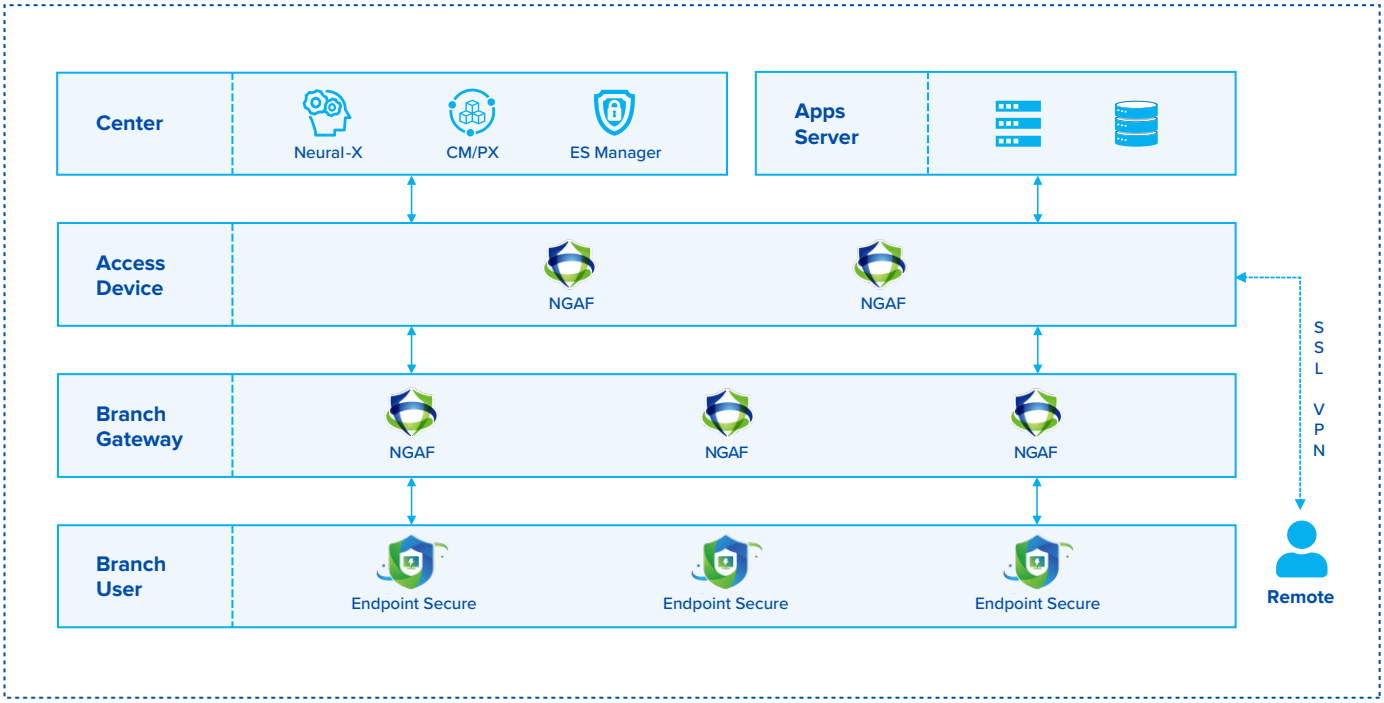
Sangfor SD-WAN Introduction

Digital transformation has forced many who rely on MPLS network architecture to seek out easier ways to support cloud apps and explosive business expansion. Some are turning to cost-effective internet broadband and LTE, yet are experiencing serious issues.

Before choosing their internet link, enterprises must consider three major issues: link interruption, efficiency, and incident response and compliance. First, with no SLA in the link to guarantee availability, there is a risk of link interruption and slow down. Secondly, user and staff efficiency decrease when users have access to time-wasting sites with streaming video or online gaming sites. Finally, unrestricted access to the internet may open your company up to potential cyber-attacks and non-compliance fines.

Sangfor SD-WAN is an integrated solution, designed to enhance business reliability and provide layered protection of assets, from user to server. SD-WAN is proven great for even enterprises with limited budgets and provides extremely simple to O&M with strong security capabilities.

Sangfor Secure SD-WAN Architecture



Gateway

- **Next Generation Application Firewall (NGAF):** Total Security for WFH and Office Environments
- **Sangfor Central Manager (CM):** Unified Policy Operation & Status Visualization

Endpoint

- **Endpoint Secure (ES):** Immediate Defense Against Malware & APT threats at endpoint
- **Endpoint Secure Manager:** Policy & Liscence Management Solution for Endpoint Secure

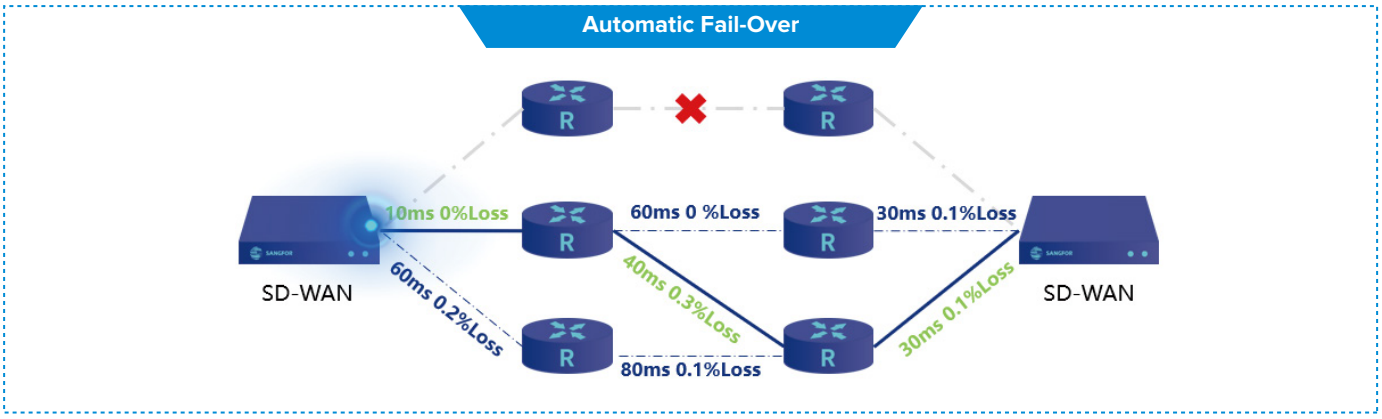
Cloud

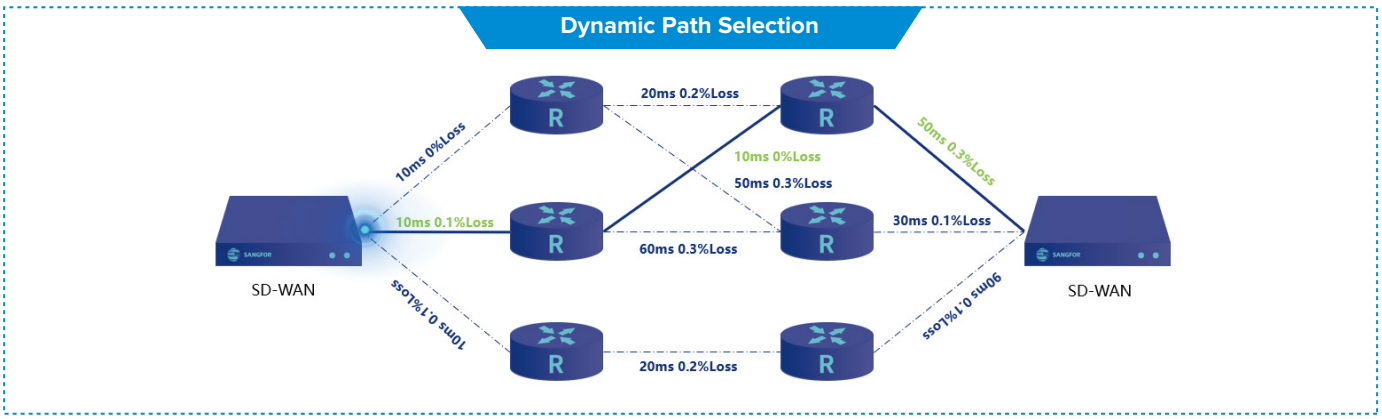
- **Neural-X:**
  - AI-Enabled Threat Intelligence & Analytics Cloud Platform
  - Interconnected with 20,000+ devices deployed at customer sites and third-party organizations, with open-source resources.
- **Platform-X:** Easily Manage IT Assets, NGAF and Endpoint Secure in Cloud

Highlights & Benefits of Sangfor Secure SD-WAN

1. Guarantees Business Availability

Real-time tunnel quality detection makes it possible for traffic to fail-over in seconds, without user perception. SD-WAN dynamically selects the best quality tunnel for critical apps.



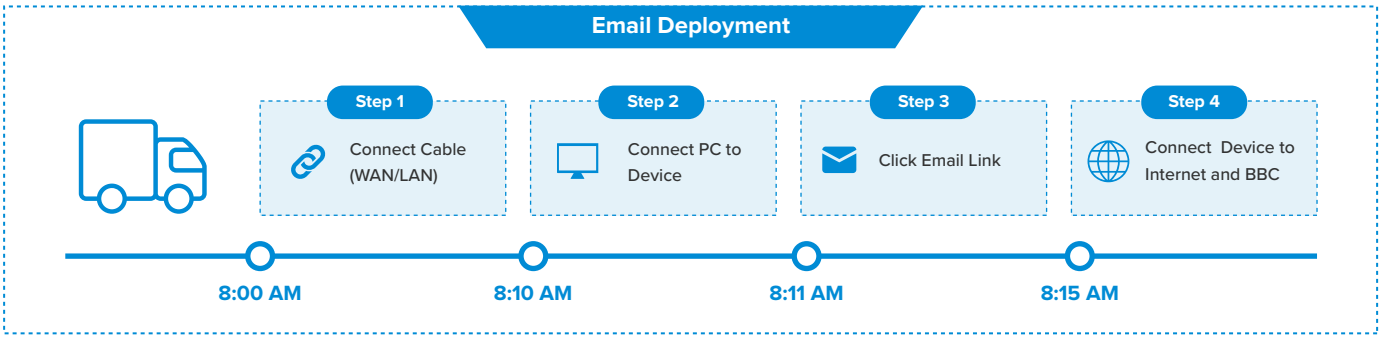


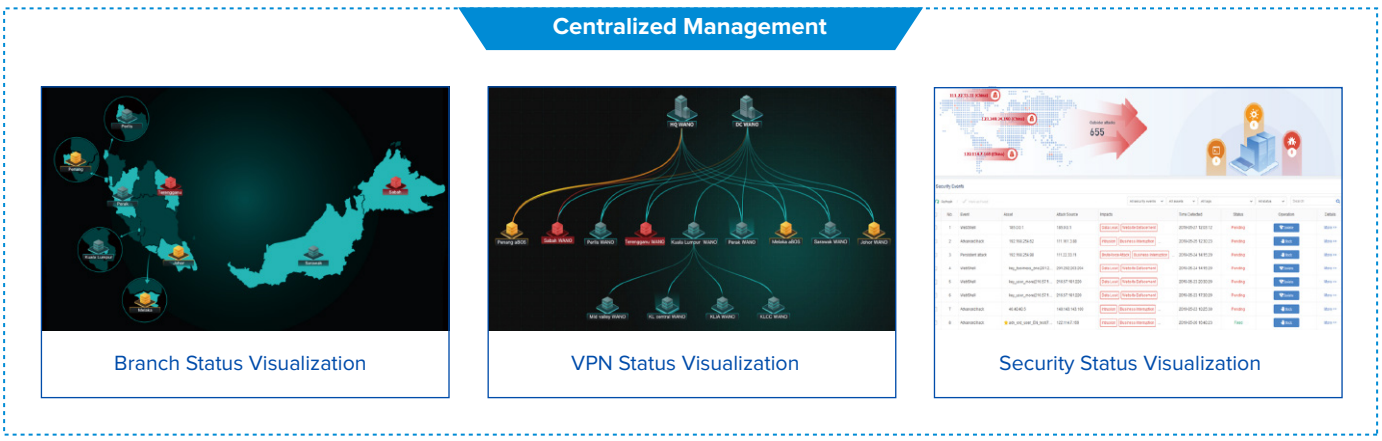
2. Improve Efficiency

Block or limit non-productive activities and sites, and ensure bandwidth for business applications based on local and international cloud URL and application database.

3. Simplify Operation & Management

Deploy SD-WAN with one email and one click in branch offices to provide centralized management and a unified policy, simplifying daily O&M.

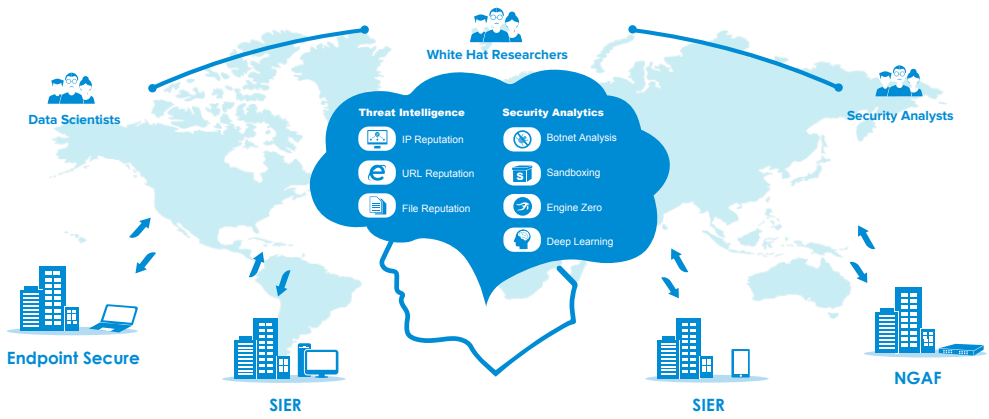




4. Comprehensive Security

Layered protection for endpoints, network, and server, blocking malware and suspicious traffic immediately from the endpoints and gateways.

Risks Summary		Sangfor Solution
• Phishing email and URL • USB device with virus	User	✓ Stop malicious URL at Gateway ✓ Stop viruss with Endpoint Secure
• Lateral movement (Branch-HQ,Branch-Branch) • C&C Breach	Network	✓ Micro-segmentation and anti-brute force functions stop lateral movement ✓ Effectively block C&C ✓ Track root cause of C&C
• Zero-day exploits from branches • Ransomware attack	Server	✓ Fast updates for protection ✓ Closed-loop ransomware protection ✓ Stop malware from scanning branch PCs with Stateful Firewall



Key Features Comparison

Category		NGAF
Common SD-WAN	Email Deployment	✓
	Select Optimal Path for Critical Apps	✓
	VPN Tunnel Bonding	✓
	Path Selection Based on Bandwidth	✓
	Automatic Fail-over	✓
Security	Level 4 Stateful Firewall	✓

Category		NGAF
Security	Application Access Control	✓
	Application Bandwidth Management	✓
	Local and AI-based Web Filtering with Neural-X	✓
	SSL VPN	✓
	IPS	✓
	Anti-Virus with AI (Engine Zero)	✓
	Threat intelligence feed with Neural-X	✓
	WAF	✓
	Correlate response with Sangfor Endpoint Secure	✓

Category	Features	Central Manager	Platform-X
Modality	Public Cloud POP		✓
	Software in local offices (Sangfor aCloud / VMware)	✓	
	Hardware in local offices	✓	
Product Support	NGAF	✓	✓
	SIER	✓	
	Internet Access Gateway	✓	
	WANO	✓	
	Endpoint Secure		✓
Management	IT asset management		✓
	Centralized security logs & Reports		✓
	Device online status	✓	✓
	VPN status	✓	
	SD-WAN/VPN management	✓	
	Configuration management	✓	✓
	License management	✓	
	Multi-tenant management		✓
	Level 2 administrators	✓	✓

Sizing Guide

Model	M4500-F-I	M5100-F-I	M5150-F-I	M5200-F-I	M5300-F-I
Profile	Desktop	1U	1U	1U	1U
Firewall Throughput[1]	2 Gbps	2.8 Gbps	3.5 Gbps	4.9 Gbps	12 Gbps
NGFW Throughput[2]	1.4 Gbps	2.5 Gbps	2.5 Gbps	2.8 Gbps	5 Gbps
IPS + WAF Throughput (HTTP)	1.2 Gbps	1.4 Gbps	1.4 Gbps	2.1 Gbps	3.85 Gbps
Threat Protection[3] Throughput	1 Gbps	1.8 Gbps	1.8 Gbps	2.1 Gbps	4.2 Gbps
IPsec VPN Throughput	250 Mbps	250 Mbps	250 Mbps	375 Mbps	1 Gbps
Max IPsec VPN Tunnels	300	300	300	500	1000

Model	M5400-F-I	M5500-F-I	M5600-F-I	M5800-F-I	M6000-F-I
Profile	1U	2U	2U	2U	2U
Firewall Throughput[1]	20 Gbps	25 Gbps	50 Gbps	67 Gbps	140 Gbps
NGFW Throughput[2]	8.4 Gbps	12.6 Gbps	23 Gbps	31 Gbps	84 Gbps
IPS + WAF Throughput (HTTP)	5.6 Gbps	8.4 Gbps	14 Gbps	21 Gbps	56 Gbps
Threat Protection[3] Throughput	5.6 Gbps	9.1 Gbps	18 Gbps	26.5 Gbps	67.2 Gbps
IPsec VPN Throughput	1.25 Mbps	2 Gbps	3 Gbps	3.75 Gbps	5 Gbps
Max IPsec VPN Tunnels	1500	3,000	4,000	5,000	10,000

1. 1518 Bytes UDP Packets.
2. NGFW is measured with Firewall, Bandwidth Management, IPS, Application Control.
3. Threat Prevention is measured with Firewall, Bandwidth Management IPS, Application Control, Anti Virus.

Power and Hardware Specifications

Model	M4500-F-I	M5100-F-I	M5150-F-I	M5200-F-I	M5300-F-I
Support Dual Power Supplies	N/A	N/A	N/A	N/A	N/A
System Dimensions (mm3)	175 x 275 x 45	300 x 430 x 45	300 x 430 x 45	300 x 430 x 45	400 x 430 x 45

Power and Hardware Specifications

Model	M5400-F-I	M5500-F-I	M5600-F-I	M5800-F-I	M6000-F-I
Support Dual Power Supplies	N/A	✓	✓	✓	✓
System Dimensions (mm3)	400 x 430 x 45	440 x 600 x 90	440 x 600 x 90	440 x 600 x 90	440 x 600 x 90

Network Interfaces

Model	M4500-F-I	M5100-F-I	M5150-F-I	M5200-F-I	M5300-F-I
Bypass (Copper)	N/A	1 pair	1 pair	1 pair	1 pair
10/100/1000 Base-T	4	4	6	6	6
1G Fiber SFP	N/A	N/A	N/A	N/A	2
10G Fiber SFP+	N/A	N/A	N/A	N/A	N/A

Model	M5400-F-I	M5500-F-I	M5600-F-I	M5800-F-I	M6000-F-I
Bypass (Copper)	3 pairs	3 pairs	3 pairs	3 pairs	4 pairs
10/100/1000 Base-T	6	6	6	10	8
1G Fiber SFP	N/A	4	4	4	8
10G Fiber SFP+	2	2	2	2	4

1. All performance values are “up to” and vary depending on the system configuration.

* More information please refer to NGAF Brochure

Module	Max. Branches	Network Interface	RAM	HD Capacity	Power [Watt] (Typical)
BBC-1000	2000	6*GbE	2*8G	240G SSD 1T HDD	180W

Module	System Dimensions (mm)	System/ Packaged Weight	Temperature Range	Relative Humidity
BBC-1000	390*430*44.5	6.7Kg/8.7Kg	0℃~40℃	5%~95% non-condensing

Module	Max. Branches	CPU Requirements	RAM Requirements	HD Capacity Requirements
vBBC-200	200	2*2.4 GHz	8G	800G
vBBC-2000	2000	4*2.4 GHz	16G	800G
Platform Requirements	Sangfor HCI/aCloud, VMware			

SANGFOR SECURE SD-WAN

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AVAILABLE SOLUTIONS

IAG	Simplify User & Network Management
NGAF	Smarter Security Powered By AI
Endpoint Secure	The Future of Endpoint Security
Cyber Command	Powerful Intelligent Threat and Detection Platform
TIARA	Threat Identification, Analysis and Risk Management
Incident Response	Closed-loop Incident Response Service Solution
HCI	Driving Hyperconvergence to Fully Converged
MCS	Your Digital Infrastructure Exclusive Store
VDI	Ultimate User Experience that Beats PC
SD-WAN	Boost Your Branch Business With Sangfor
ACCESS	Cloud-based SASE for Branch Offices & Remote Users

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