Sangfor WANO

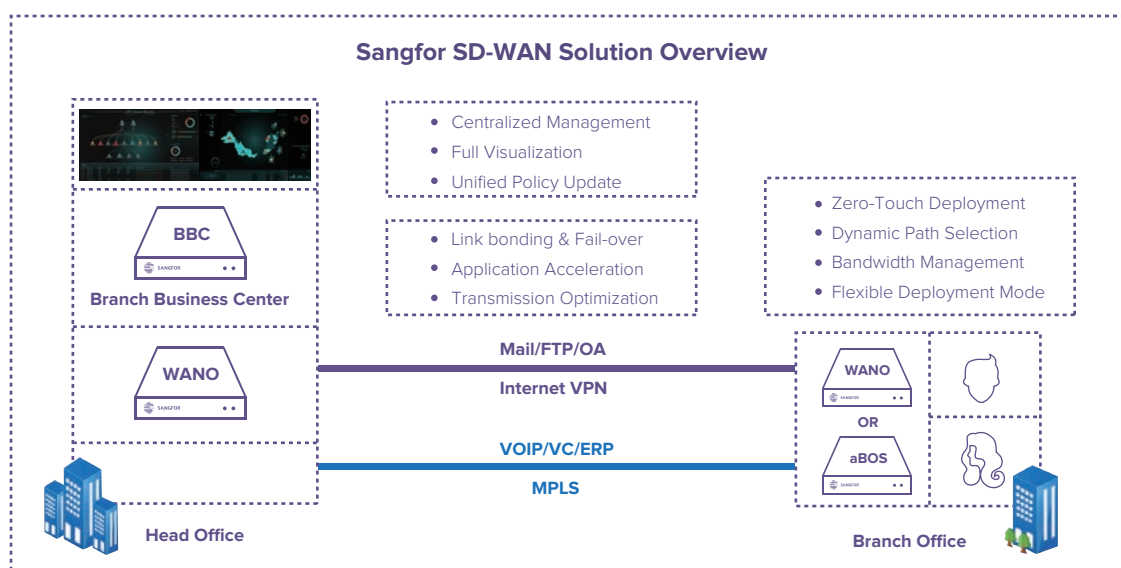## Sangfor SD-WAN Battlecard for VeloCloud

SANGFOR

Company Overview

Sangfor Technologies is the global leading vendor of IT infrastructure solutions specializing in Cloud Computing, Network Security and Network Optimization. With a focus on Asia, several internally developed Sangfor WAN Optimization, Enterprise Network Firewall and Secure Web Gateway products are listed in Gartner Magic Quadrant, making Sangfor the #1 WAN Optimization and VPN vendor in Mainland China.

VeloCloud is a SD-WAN market vendor, acquired by VMware. VeloClouds' VMware NSX SD-WAN is a key component of the Virtual Cloud Network and tightly integrated with NSX Data Center and NSX Cloud, enabling customers to extend consistent networking and security policies from data centers, to branches and finally to the cloud.

WAN Solution Overview

Sangfor provides a one-stop solution to solve network connectivity, network transmission, network security and centralized management issues. Our SD-WAN (WAN Optimization) features powerful and internally developed components like WANO, aBOS, NGFW and BBC.

● WANO provides enhanced application acceleration, seamless bandwidth management and secure high-speed VPN services while reducing WAN investment by 70%.

● aBos provides 1-click generated topography and is a deploy on-demand NFV supporting centralized management with real-time information summary, uniform security policy distribution and centralized log management.

● NGFW provides comprehensive network security with integrated layer 2-7 security protection, application based deep intrusion prevention, anti-virus detection, DOS/DDOS attack protection and large-scale, regularly updated signature database maintained by the R&D team.

● BBC provides centralized management for all Sangfor network products for enterprises.

Sangfor SD-WAN Solution Overview

- Centralized Management
- Full Visualization
- Unified Policy Update

- Link bonding & Fail-over
- Application Acceleration
- Transmission Optimization

- Zero-Touch Deployment
- Dynamic Path Selection
- Bandwidth Management
- Flexible Deployment Mode

BBC
Branch Business Center

WANO

Head Office

Mail/FTP/OA
Internet VPN
VOIP/VC/ERP
MPLS

WANO
OR
aBOS

Branch Office

VeloCloud SD-WAN solution contain 3 components; NSX SD-WAN Gateways, NSX SD-WAN Edge and NSX SD-WAN Orchestrator.

● NSX SD-WAN Gateways provides optimized data paths to all applications, branches and data centers as well as the ability to deliver network services from the cloud.

● NSX SD-WAN Edge is a zero-touch enterprise-class appliance that provides secure optimized connectivity to private, public and hybrid applications, compute and virtualized services, and performs deep application recognition, application and packet steering, performance metrics and end-to-end quality service in addition to hosting virtual network function (VNF) services.

● NSX SD-WAN Orchestrator provides centralized enterprise-wide installation, configuration and real-time monitoring in addition to orchestrating data flow through the cloud network. It also enables one-click provisioning of virtual services in branches, the cloud or the enterprise data center.
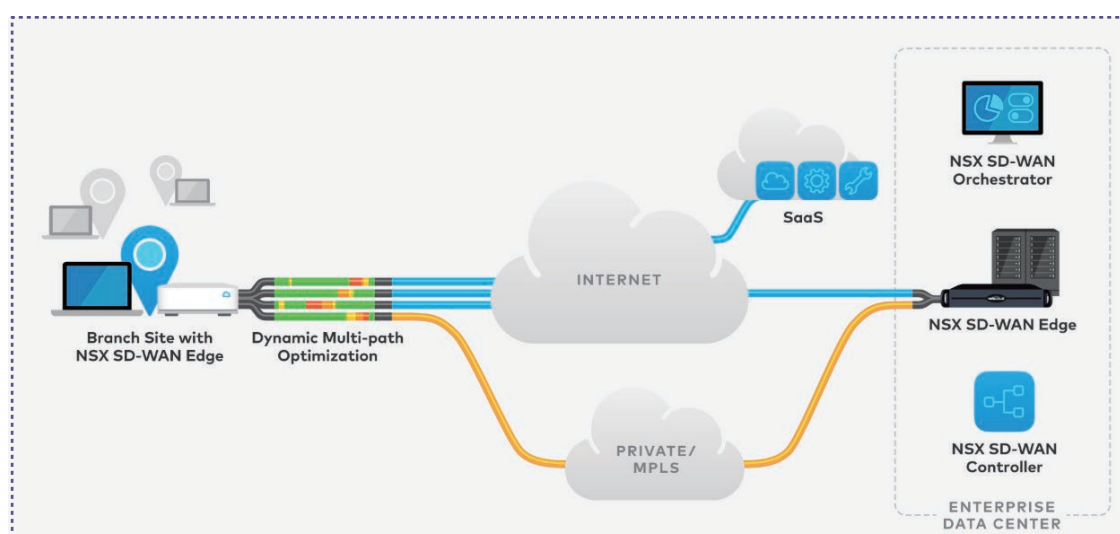
Sangfor VS VeloCloud

	Deployment	Zero-touch	Path Selection	Fail-over	Bandwidth Bonding	Traffic Reduction	Protocol optimization	Application proxy	QoS/BM	URL Filtering	Secure transmission	ARP Protection	Anti-DoS	Virtual service
WANO	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅	✅
VeloCloud	✓	✅	✅	✅	✅	○	○	○	✓	○	✓	○	○	✓
Score	✅ Good		✓ Normal		○ Not Support									

Reference:
http://www.velocloud.com/products/capabilities

Deployment

Sangfor WANO product supports a variety of network environments, gateways, single bridge/double bridges and single arm/double arm, requiring no network changes in bridge mode for customers wishing to upgrade their network to the SD-WAN solution. Sangfor WANO simplifies deployment by providing a zero-touch email-method feature, requiring the IT manager to pre-configure in the BBC centralized management platform and send a URL link containing the configuration to branch users. Branch users simply connect their PC to the device and click the email link to deploy, eliminating the need for an internet environment and ideally suited for new networks.

VeloCloud SD-WAN Edge must deploy as a gateway and must replace a different gateway device or add an additional subnet. VeloCloud zero-touch features require network and DHCP while SD-WAN Edge must obtain an IP address from DHCP server to synchronize with the cloud centralized platform, suited to only internet-ready environment.

Performance & Reliability

Performance and reliability deliver the core value of SD-WAN to customers who expect hybrid WAN to enhance WAN performance, improve WAN availability and reduce WAN cost. Both Sangfor WANO and VeloCloud SD-WAN Edge support dynamic path selection to improve business quality, bandwidth bonding to enhance core business performance and fail-over to improve availability. As a Gartner WAN Optimization Magic Quadrant vendor, Sangfor WANO has full WAN optimization features to improve WAN performance and user application experience, byte level cache and compression to reduce traffic in WAN, transmission protocol optimization to improve the link quality and efficiency and application proxy to reduce connections in WAN. To maximize WAN bandwidth usage, a good SD-WAN solution must have powerful traffic identification capability to restrict non-work-related apps over-use of available bandwidth. Sangfor WANO has a 2900+ app database and 10 million-level URL library to guarantee core business traffic and limit or block non work-related traffic. VeloCloud only supports 2500+ app identification and traffic QoS.

Security and Virtual Service

Both the Sangfor and VeloCloud SD-WAN solution provide secure tunnels for transmission. Sangfor WANO provides basic security functions like firewall, centered around service, anti-DoS and ARP protection. For customers requiring stronger and more secure protection, Sangfor also has its internally developed NGAF hardware or vNGAF NFV installed in the aBOS solution. Alternatively, for those with stronger security requirements, VeloCloud SD-WAN solution requires third-party service. In contrast to the Sangfor one-stop solution, VeloCloud has an increased risk of incompatibility and service interruption.

Model Comparison

VPN Throughput	VeloCloud	Sangfor
100M	Edge 5xx	M5000-QE-I
100M	Edge 520	M5000-QE-I
200M	Edge 540	M5200-QE-I
1G	Edge 840	M5800-WANO
1G	Edge 1000	M5800-WANO