

SDW101

SD-WAN Router



INTRODUCTION

Edgecore Networks SD-WAN solution is to address those network issues and able to provide robust, secure, adaptive network services on demand. By enhancing or substituting the traditional branch networking devices with virtualization appliances that can be programmed to understand the nature of traffic it is handling and dynamically adjust accordingly, latency-sensitive traffic for applications such as video and voice, need to be continuously monitored and prioritized, which requires such things as application recognition, traffic re-routing, load-balancing, bandwidth-control, automation fail-over, that MPLS connections simply cannot provide.

SDW101 is a high-capacity SD-WAN CPE that is stable for large enterprise application. SDW101 can be managed by SD-WAN software controller and allow users to install software controller in the data center or server. Besides, SDW101 can be adjusted as Hub or Spoke via software. On top of traffic monitoring, Edgecore Networks centralized controller can be used to set policies and prioritize traffic, in which the SD-WAN takes into account these policies and the network bandwidth to route traffic accordingly, ensuring the application performances expected.

HIGHLIGHTS

- **Central Management**

Provide unified web GUI that System Administrator can monitor and auto-adjust all remote (branch) networks with real-time feedback from premises and deploy the pre-configured network path to remote sites.

- **Traffic Steering**

Allow dedicated WAN interface assignment to designated services such as Mail Service on WAN1 while VoIP/VPN on WAN2.

- **Adaptive WAN Selection**

Provide multiple parallel connections as to provide granular load-balancing between them, and even fail-over to new connection should there be a significant drop over the threshold value set forth on Central Management in concurrent bandwidth.

- **Multi-Tenant**

With adoption of our management system, you—as a System Administrator—have the option to sublet the services to other partners/tenants, as a source of revenue, while assuring each tenant's data is isolated and remains invisible to other tenants. In addition, cost of the deployment can be greatly reduced through economies of scale, with minimum effort on administration workload such as account assignment and database maintenance.

- **Bandwidth Control**

Provide traffic control on sensitive applications through the use of QoS, and rate-limit by interface or application type to ensure the latency-sensitive applications receive abundant resource required.

- **Network Quality Assurance**

Provide continuously monitored real-time network flow on Central Management for adaptive network re-route for optimized network quality.

- **Package Analysis**

Inspect the nature of the network traffic, allowing control actions such as rate-limiting, and top 5 statistical ranking analysis of the access behavior of a node in the network including host, application and accumulated packet size.

- **Zero Touch Deployment**

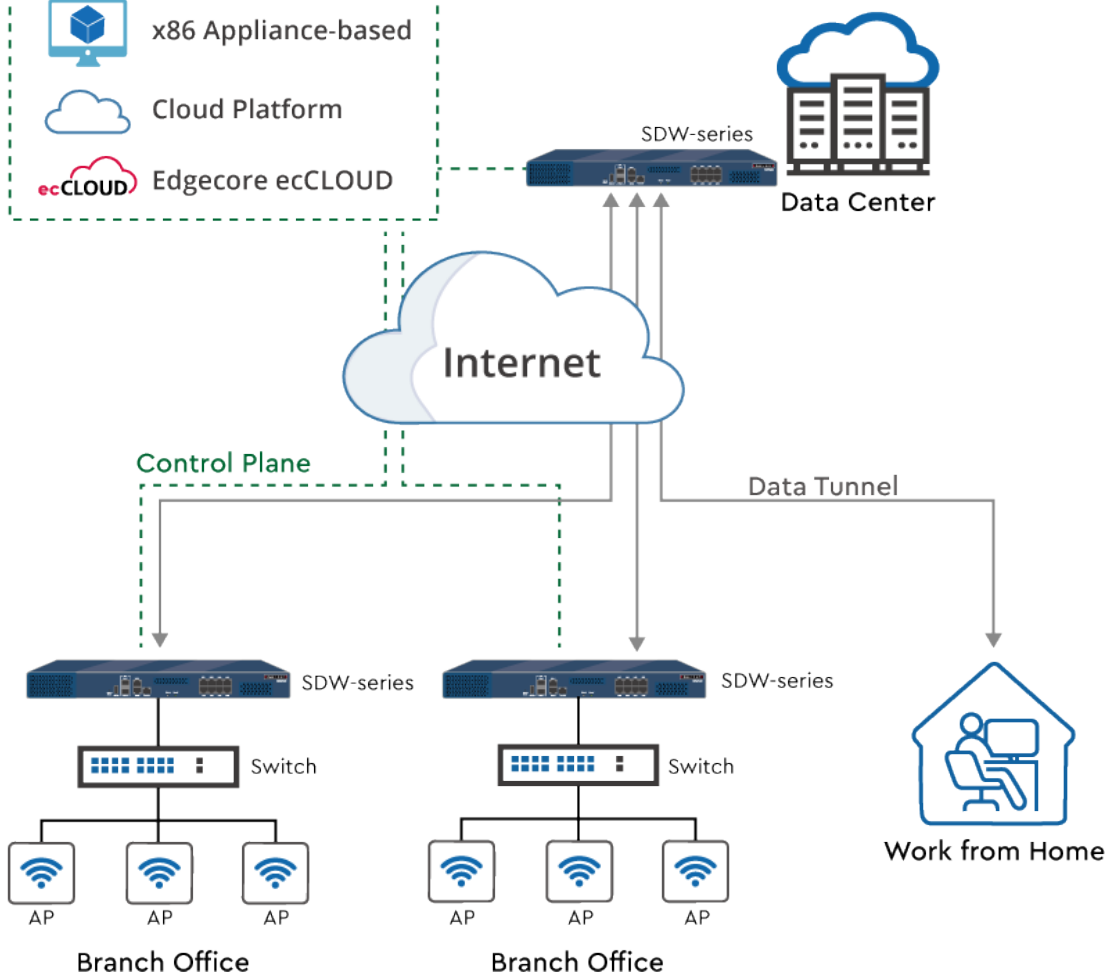
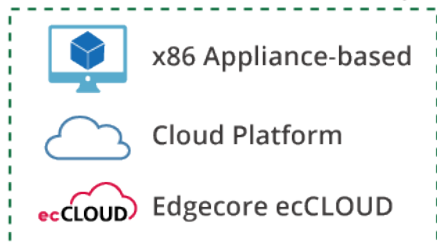
Fully automated provisioning from Central Management with pre-configured network setup to the edge devices at remote sites without user intervention can improve reliability, minimize bring-up costs while maintaining efficiency and flexibility on deployment.

- **OTA Update**

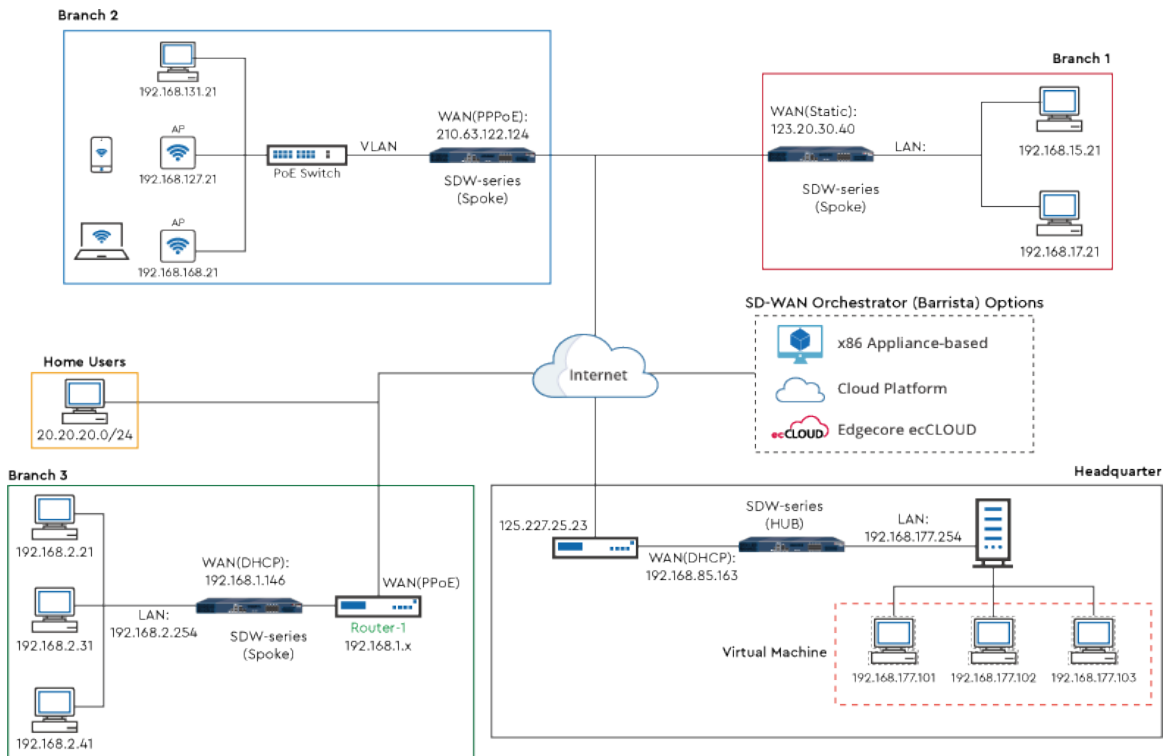
One click away to perform devices upgrade.

ARCHITECTURE

SD-WAN Orchestrator (Barrista) Options



APPLICATION



SPECIFICATIONS

HARDWARE

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|---------------------------------|--|
| Form Factor | <ul style="list-style-type: none"> 19" (1U) Rack Mount (Mounting bracket included) |
| Dimensions | <ul style="list-style-type: none"> 44.2 cm x 29.8 cm x 4.4 cm (W x D x H) |
| Weight | <ul style="list-style-type: none"> 3.1 kg (6.83 lbs) |
| Power | <ul style="list-style-type: none"> Input: 100-240 VAC, 50/60 Hz |
| Interface | <ul style="list-style-type: none"> WAN: 2 x 10GBASE-T SFP+ LAN: 2 x 10GBASE-T SFP+, 8 x GE Console: 1 x RJ-45 USB ports: 1 x USB 3.0 |
| Environmental Conditions | <ul style="list-style-type: none"> Operating Temperature: 0°C (32°F) to 40°C (104°F) Operating Humidity: 20% to 90% non-condensing |

CAPACITY

| | |
|-------------------------|---|
| Bandwidth | <ul style="list-style-type: none"> Tunnel Capability: up to 1,000Mbps Throughput per Tunnel: up to 320 Mbps |
| Concurrent Users | <ul style="list-style-type: none"> 1000 |

MANAGEMENT

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|----------------------------|---|
| SD-WAN Orchestrator | <ul style="list-style-type: none"> X86 Appliance-based Cloud Platform |
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HARDWARE

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|-------------------------------|--|
| Management | <ul style="list-style-type: none"> • Central Management • Zero Touch Deployment • Auto Discovery • Auto Provisioning • OTA Firmware Upgrade • TLS Encryption • Keep Alive Detection • Account Management • NTP • Email Alert • Event log • Disaster Recovery • Container management |
| Routing | <ul style="list-style-type: none"> • Network Address Translation (NAT) • WAN type: Static IP, DHCP, PPPoE • DHCP Server/ Client • Static Route Assignment • Dynamic Route OSPF/BGP • Virtual Server/ 1 to 1 NAT • Policy-based Routing |
| Security | <ul style="list-style-type: none"> • Stateful Firewall • ACL by IP/ Protocol/ Application • Tunnel Isolation • Management IP • TACACS+ • URL Filter • DDoS Mitigation |
| VLAN | <ul style="list-style-type: none"> • Configure the VLAN for Each Port • Support DHCP Server for Different VLAN |
| QoS | <ul style="list-style-type: none"> • Bandwidth management • Priority management • Session control by IP/ Protocol/ Application |
| VPN | <ul style="list-style-type: none"> • Split Tunnel (Internet access from local) • Complete Tunnel (Internet access to remote) • Site to Site • Site to Client (Work From Home) • Hub-Spoke/P2P Mesh |
| Adaptive WAN Selection | <ul style="list-style-type: none"> • Multiple WAN • Auto Failover • Threshold Configurable • Traffic Steering • Application Aware • WAN Optimization |
| Package Analysis | <ul style="list-style-type: none"> • Traffic Flow History • Top Application by Volume • Top Source by Volume |
| Monitoring | <ul style="list-style-type: none"> • Manage Status • VPN Connection Status • System Information • Traffic Statistics • Tunnel Quality • WAN Quality • Container status |
| Management Interface | <ul style="list-style-type: none"> • SSH(v2) • HTTP/ HTTPS • Web-based • Restful API |