ExtremeCloud™ SD–WAN

ExtremeCloud SD-WAN Appliance   IPsec Encrypted Tunnels

Enable Predictable User Experiences Across One Network

Accelerated Transformation

- Scaled digital transformation
- Extend fabric to branches with application visibility and control
- Simplified multi–cloud and SaaS connectivity

A Simpler WAN

- Centralized configuration and management
- Reduced security complexity
- Easier alignment of goals with outcomes through policy

Improved Operational Efficiency

- Increased site availability and resilience
- Faster root cause analysis and MTTR
- Optimize processes and automation

Better Outcomes

- Increased business agility
- Data-driven decisions
- Improved productivity
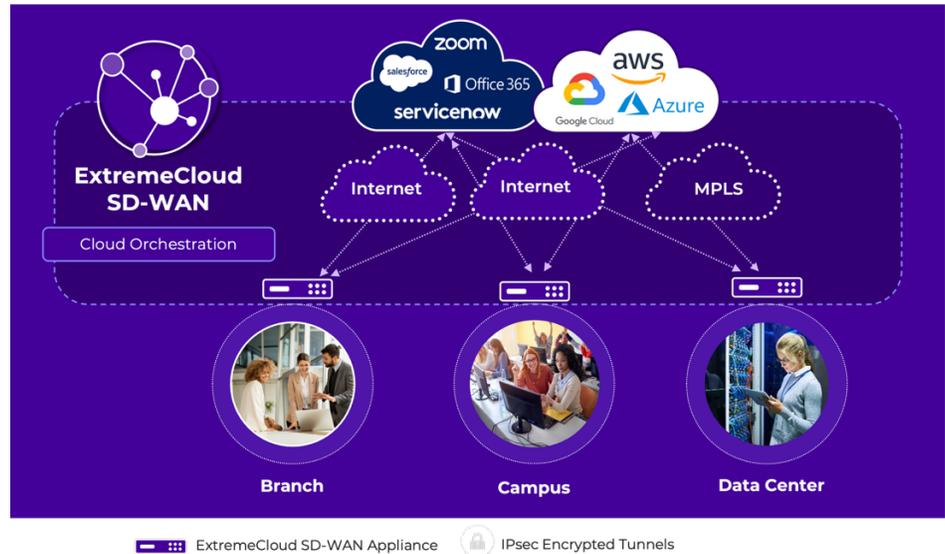
Reduce Risk and Simplify Operations

ExtremeCloud™ SD–WAN delivers a modern approach to wide–area networking that combines simplicity, security, and performance in one solution. Designed for today's distributed enterprises, it helps organizations improve application performance and reduce operational complexity. ExtremeCloud SD-WAN also secures connectivity across branch, campus, and remote sites, including use with Extreme Fabric. All of this delivered without the cost and overhead of traditional WAN architectures.

ExtremeCloud SD-WAN goes beyond basic connectivity by integrating advanced capabilities such as application performance management, WAN optimization, and built-in security. Features like zero-touch provisioning, dynamic traffic steering, and integrated firewalls help IT teams deliver consistent performance and security without manual intervention.

By combining cloud orchestration, intelligent automation, and Extreme's industry-leading support, ExtremeCloud SD-WAN accelerates time-to-value and simplifies ongoing operations. Organizations can deploy faster, troubleshoot less, and adapt quickly to changing business needs—all while reducing total cost of ownership. With ExtremeCloud SD-WAN, secure connectivity has never been easier. Extreme's fabric-ready, automated, and integrated SD-WAN also pairs with Extreme Platform ONE to make high-performance SD-WAN connectivity and Fabric extension simple.

Fabric to the Edge

- Highly scalable extension of Extreme Fabric services over low-cost internet access transport improves visibility, performance, and resilience at branches.
- Extreme SD-WAN increases performance and security for tunneled Fabric traffic.
- Zero-touch provisioning of Extreme Universal Wired (Switching) and Wireless (APs) across the network.
- Fabric hyper-segmentation enables secure connectivity, simplified compliance, and improved attack resistance against lateral threats.
- Fabric resilience enables sub-second failover.

Application Performance Management

- Predictable user experiences improve throughput.
- Auto-discovery of more than 5,000 SaaS applications, including custom application kits, streamlines deployment and identifies shadow IT.
- Intelligent application performance control analyzes and optimizes traffic to enforce an end-to-end, per-session QoS for critical application sessions, even when the network is congested.
- Advanced application performance visibility enables at-a-glance assessment and rapid troubleshooting.
- Evidence-based network refinement reduces risk.

Unified Management

- Unified management experience for Universal Wired, Wireless, and SD- WAN, including Fabric service visibility and configuration saves time.
- Paired with Extreme Platform ONE, SD-WAN questions are answered by Extreme AI in seconds, visualize SD-WAN in the network topology, see alerts, contracts and subscriptions in one place.
- LAN-to-WAN-to-Cloud performance monitoring powered by AI, contextual telemetry, and granular network and application performance visibility across users, devices, sites, links, and locations.
- Choice of public, private, or ExtremeCloud Edge hosting saves time and money with consistent operations.

Solution Components

Cloud-Native SD-WAN Orchestrator

- Orchestration policies for SD-WAN appliances, topology, security profiles, cloud on-ramps, and end-to-end QoE.
- Applications Anywhere simplifies and accelerates digital transformation with direct-to-internet policy definition for SaaS applications and maintenance-free cloud on-ramps —no VNF required.
- Site-to-data center-to-IaaS connectivity over any WAN transport enables flexible, secure overlay topologies.

Built-In SD-WAN Security and Segmentation

- Built-in zone-based firewall enables VPN traffic segmentation and internet traffic steering (direct-to-internet, data center backhaul, and web gateways).
- Optional bring your own security approach enables robust WAN and internet access security from leading vendors.

Flexible Ordering Approach

- ExtremeCloud SD-WAN separates software subscriptions from hardware so you can scale, upgrade, and budget on the needs for your network.
- Flexible software subscriptions with one, three, and five-year terms reduce purchase risk.
- A range of speed tiers with SD-WAN appliances to support the smallest branch to the largest data center
- 24×7×365 global technical support and comprehensive hardware replacement options keep your network running at peak performance and protect your investment.

Solution Components Overview

SD-WAN Orchestration

Features	Description	Standard	Advanced
Cloud-native	Cloud hosted and managed by Extreme Networks, integrated with ExtremeCloud	•	•
Onboarding and Configuration	Appliance template and configuration policy (overlay, security, application performance, routing, High Availability)	•	•
User Access Control	Per-user RBAC, suited for flexible delivery models, managed service vs DIY	•	•
Fabric with SD-WAN Integration	Automated, encrypted SD-WAN overlay for Fabric remote sites	•	•

Connectivity

Features	Description	Standard	Advanced
Fabric integration	Advanced application performance and dynamic WAN selection for tunneled fabric traffic	•	•
Overlay	IPsec based, full mesh, automated hub-and-spoke topology with manual spoke-to-spoke and hub-to-hub shortcuts, external VPN gateway support	•	•
Multisite Deployment Model	Full-routed, bridge-routed hybrid, full-bridged	•	•
Transparent Level 2 Connectivity	Bridge mode, fail to wire (HW model-dependent), Link State Propagation	•	•
Automated Hub-and-Spoke Topology	IPsec IKEv2, automatic tunnels set up between spokes and hubs	•	•
Custom Topologies	IPsec IKEv2, manual hub interconnection, manual site-to-site shortcut, manual site-to-IaaS	•	•
Optional High Availability	VRRP, OSPF, BGP, Level 2 proprietary synchronization	•	•

Security

Features	Description	Standard	Advanced
Secure Communications	HTTPS, TLSv2, mutual authentication, secure device enrollment	•	•
Zone based firewall	Zone based traffic segmentation	•	•
Internet access control	Zone based SaaS application access control	•	•

Application Performance Management

Features	Description	Standard	Advanced
Applications Anywhere	Automated connectivity between SD-WAN Sites and public cloud hyperscale (Azure, AWS), DTI policy for SaaS applications, application performance monitoring and QoS enforcement without hosting VNF in the VPC	•	•
Automated Application Recognition	5000+ SaaS applications and DPI dictionary	•	•
Alerting	Default alarms	•	•
Reporting	Default and custom reports based on monitoring widgets.	•	•
Integration	RESTful external API	•	•
Standard Monitoring and Troubleshooting	Appliance and application troubleshooting: MapView, Appliance360, Site360, Application monitoring	•	•
Advanced Monitoring and Troubleshooting	Real-time application monitoring, WAN optimization, WAN compression		•
Custom application support	Definition and monitoring of custom applications		•
Dynamic WAN Selection	Per-session, based on network performance, application-specific requirements, and application criticality		•
QoE-Based QoS	Per-session prioritization, based on application-specific requirements and application criticality		•
Optional WAN Optimization	Compression, SSL optimization		•

SD-WAN Appliance Technical Specifications

SD-WAN appliances provide a common set of software capabilities, differentiated by performance metrics and connectivity capabilities. Appliances are divided into two primary usage groups based on the designation of either Branch or Data Center; sizing depends on many factors, including features used, number of end points, complexity of overlay topology, and other parameters.

SD-WAN Appliances for Branch Offices

Model	ipe-30so	ipe-30ax	ipe-40ax-v2
Tier	Small	Small	Medium
WAN Interfaces	3xGE 10/100/1000Base-TX		
LAN Interfaces	1xGE 10/100/1000Base-TX		2xGE 10/100/1000Base-TX
Link State Propagation	Yes		
WAN Interface Operation	Bridged (802.3), Routed		
Application Performance	Visibility, Control, Dynamic WAN Selection, Cloud Application Database (more than 5000 Applications)		
WAN Optimization	No	Compression, deduplication, including HTTPS	
Network and Routing	IPv4: Static, BGP, BFD, local preferences, OSPF, DHCP Relay, DHCP Client, NAT		
Security	Direct-to-Internet, Stateful Firewall, Zone Based Firewall		
Overlay	IPsec based, full-mesh, automated Hub and Spoke topology with manual Spoke-to-Spoke and Hub-to-Hub shortcuts, external VPN Gateway support		
High Availability	VRRP for routed mode, proprietary for hybrid and bridge mode		
Throughput* (RFC 2544)	300 Mbps	300 Mbps	600 Mbps

* Throughput test conducted using RFC-2544 methodology. Actual throughput can vary based on factors including MTU, number of tunnels, number of applications and flows.

SD-WAN Appliances for Data Center

Model	ipe-420ax	ipe-2200ax-T	ipe-2200ax-F
Tier	Medium	Large	Large
WAN Interfaces	3xGE 10/100/1000Base-TX	3xGE 10/100/1000Base-TX	3x GE 10GBase-SR/LR LC*
LAN Interfaces	2xGE 10/100/1000Base-TX	2xGE 10/100/1000Base-TX	2x GE 10GBase-SR/LR LC*
Bypass (Fail-to-wire)	2 interface pairs	No	No
Link State Propagation	Yes		
WAN Interface Operation	Bridged (802.3), Routed		
Application Performance	Visibility, Control, Dynamic WAN Selection, Cloud Application Database (5000+ Applications)		
WAN Optimization	Compression, Deduplication, including HTTPS.		
Network and Routing	IPv4: Static, BGP, BFD, local preferences, OSPF, DHCP Relay, DHCP Client, NAT		
Security	Direct-to-Internet, Stateful Firewall, Zone Based Firewall		
Overlay	IPsec based, full-mesh, automated Hub and Spoke topology with manual Spoke-to-Spoke and Hub-to-Hub shortcuts, external VPN Gateway support		
High Availability	VRRP for routed mode, proprietary for hybrid and bridge mode		
Throughput** (RFC 2544)	1.0 Gbps	1.5 Gbps	8.0 Gbps

* Optics must be purchased separately

** Throughput test conducted using RFC-2544 methodology. Actual throughput can vary based on factors including MTU, number of tunnels, number of applications and flows.

ExtremeCloud SD-WAN Appliance Ordering Information

ExtremeCloud SD-WAN enables financially efficient SD-WAN solutions with flexible packages and terms that reduce purchase risk.

Part Number	Product Description	Extreme Platform ONE SD-WAN Subscription Tier Required (Standard or Advanced)
SDW-EP1-30SO-A	SDWAN Small Tier Appliance ipe-30so	Small
SDW-EP1-30AX-A	SDWAN Small Tier Appliance ipe-30ax	Small
SDW-EP1-40AXV2-A	SDWAN Medium Tier Appliance ipe-40axV2	Medium
SDW-EP1-420AX-A	SDWAN Medium Tier Appliance ipe-420axV2	Medium
SDW-EP1-2200AXT-A	SDWAN Large Tier Appliance ipe-2200ax-T	Large
SDW-EP1-2200AXF-A	SDWAN Large Tier Appliance ipe-2200ax-F	Large

ExtremeCloud SD-WAN Software Subscription Ordering Information

SD-WAN subscriptions have two feature levels. For basic connectivity without the need for application visibility, dynamic WAN selection or security, the Standard subscription is sufficient. To take advantage of all the application performance management and security features, the Advanced subscription required. The Advanced or Standard must be a whole deployment selection, as mixed feature levels is not supported. A detailed breakdown of Advanced vs Standard subscriptions can be seen in the tables of the Solution Components Overview section. High availability is included if two appliances are in the same site running as active and backup. In that case, one subscription will be counted and be counted toward the highest model. Additionally, 5 Remote visibility and control (RVC) destinations are included per one Advanced Large subscription.

SD-WAN Subscriptions including ExtremeWorks TAC & OS support

Part Number	Term (yr)	Appliance tier	Feature level	Product Description
EP1-SDW-ADV-S-S-C-EW	1	Small	Advanced	Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S per year
EP1-SDW-ADV-S-S-C-EW-3YR	3			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S for three (3) years
EP1-SDW-ADV-S-S-C-EW-5YR	5			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S for three (5) years
EP1-SDW-ADV-M-S-C-EW	1	Medium	Advanced	Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier M per year
EP1-SDW-ADV-M-S-C-EW-3YR	3			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier M for three (3) years
EP1-SDW-ADV-M-S-C-EW-5YR	5			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier M for five (5) years
EP1-SDW-ADV-L-S-C-EW	1	Large	Advanced	Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier L per year
EP1-SDW-ADV-L-S-C-EW-3YR	3			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier L for three (3) years
EP1-SDW-ADV-L-S-C-EW-5YR	5			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier L for five (5) years
EP1-SDW-STD-S-S-C-EW	1	Small	Standard	Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S per year
EP1-SDW-STD-S-S-C-EW-3YR	3			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S for three (3) years
EP1-SDW-STD-S-S-C-EW-5YR	5			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S for five (5) years
EP1-SDW-STD-M-S-C-EW	1	Medium	Standard	Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier M per year
EP1-SDW-STD-M-S-C-EW-3YR	3			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier M for three (3) years
EP1-SDW-STD-M-S-C-EW-5YR	5			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier M for five (5) years
EP1-SDW-STD-L-S-C-EW	1	Large	Standard	Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier L per year
EP1-SDW-STD-L-S-C-EW-3YR	3			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier L for three (3) years
EP1-SDW-STD-L-S-C-EW-5YR	5			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EW TAC OS Support for one (1) device of Tier L for five (5) years

ExtremeCloud SD-WAN Subscriptions including ExtremeWorks Premier TAC & OS support

Part Number	Term (yr)	Appliance tier	Feature level	Product Description
EP1-SDW-ADV-S-S-C-EWP	1	Small	Advanced	Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S per year
EP1-SDW-ADV-S-S-C-EWP-3YR	3			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S for three (3) years
EP1-SDW-ADV-S-S-C-EWP-5YR	5			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EW TAC OS Support for one (1) device of Tier S for five (5) years
EP1-SDW-ADV-M-S-C-EWP	1	Medium	Advanced	Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier M per year
EP1-SDW-ADV-M-S-C-EWP-3YR	3			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier M for three (3) years
EP1-SDW-ADV-M-S-C-EWP-5YR	5			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier M for five (5) years
EP1-SDW-ADV-L-S-C-EWP	1	Large	Advanced	Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier L per year
EP1-SDW-ADV-L-S-C-EWP-3YR	3			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier L for three (3) years
EP1-SDW-ADV-L-S-C-EWP-5YR	5			Extreme Platform ONE SD-WAN Advanced Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier L for five (5) years
EP1-SDW-STD-S-S-C-EWP	1	Small	Standard	Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier S per year
EP1-SDW-STD-S-S-C-EWP-3YR	3			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier S for three (3) years
EP1-SDW-STD-S-S-C-EWP-5YR	5			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier S for five (5) years
EP1-SDW-STD-M-S-C-EWP	1	Medium	Standard	Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier M per year
EP1-SDW-STD-M-S-C-EWP-3YR	3			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier M for three (3) years
EP1-SDW-STD-M-S-C-EWP-5YR	5			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier M for five (5) years
EP1-SDW-STD-L-S-C-EWP	1	Large	Standard	Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier L per year
EP1-SDW-STD-L-S-C-EWP-3YR	3			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier L for three (3) years
EP1-SDW-STD-L-S-C-EWP-5YR	5			Extreme Platform ONE SD-WAN Standard Networking Right-to-use and EWP TAC OS Support for one (1) device of Tier L for five (5) years

ExtremeCloud SD-WAN Subscriptions including ExtremeWorks Premier TAC & OS support

Warranty

All ExtremeCloud SD-WAN appliances are covered under Extreme's Warranty policy. For warranty details, please visit our Policies and Warranties page.

Hardware RMA support

For SD-WAN appliances, RMA support is highly recommended to ensure minimal disruption should there be any hardware issues. Choices including advanced hardware replacement, onsite, next business day and others are available.

Power Cords

Power cords are not included with the SD-WAN appliances in support of our green initiatives but can be ordered separately.

Optics/Transceivers

For a list of the optics and transceivers supported on the ExtremeCloud SD-WAN Appliances, refer to our Extreme Optics Compatibility Tool.

Maintenance Services

Extreme's maintenance and support services are provided by in-house engineering experts. We have a rate of over 90% first-person resolution, ensuring efficient operation of your business-essential network.

With 24x7x365 phone support, advanced parts replacement, and on-site support, we augment your staff with expert resources to help you mitigate critical network issues fast. Visit our Extreme Maintenance Services for more information.