

Highlights

- Branch device that enables secure Fabric services extension for distributed enterprises
- Extends transparent Fabric services over MPLS-based WAN or Internet connections
- Enables security and microsegmentation end-to-end from central site to remote locations or branches
- Supports IPSec for secure encrypted connection over the Public Internet or Service Provider WAN
- Compact form factor ideal for small sites
- Two hardware models to support varying bandwidth needs
- Each model provides 6 x 1 Gigabit copper Ethernet ports, along with 2 x 10 Gigabit SFP+ fiber ports
- 1, 3 and 5-year term-based licensing model that includes software services



ExtremeAccess[™] Platform 1400 Series with Fabric Connect VPN Software

Powerful Branch Platform that Seamlessly Extends Extreme Fabric Connect Services to Remote Locations

Designed to extend the reach of Extreme Fabric Connect technology to remote sites, the ExtremeAccess Platform 1400 Series with Fabric Connect VPN software delivers fully featured network virtualization capabilities in a cost-effective hardware appliance. Optimized for remote locations, the ExtremeAccess Platform extends secure multi-service capabilities across either Service Provider WAN or Public Internet links in a compact form factor ideal for small sites. It offers a simplified, yet secure way to extend campus fabric services to branch locations.

Product Overview

The ExtremeAccess Platform 1400 Series (XA 1400) are compact general-purpose hardware appliances intended for remote site or branch deployments. Designed for use with Fabric Connect VPN (FCVPN) software, the XA 1400 enhances the value of an existing Extreme Automated Campus deployment by expanding the reach of Fabric Connect services to remote sites while delivering a consistent and uniform user experience. FCVPN software transparently extends Fabric Connect services, such as L2/L3 VSNs, over 3rd-party provider networks, including MPLS-based WANs or the Internet. In addition to secure Fabric segmentation over the WAN, FCVPN software also supports IPSec for end-to-end traffic encryption. Two models of the ExtremeAccess Platform 1400 Series are available: the XA 1440 and the XA 1480. Both are x86-based hardware appliances equipped with six (6) Gigabit Ethernet RJ45 copper ports and two (2) 10 Gigabit Ethernet SFP+ fiber ports. They also include serial and USB ports for management, as well as external flash use.

ExtremeAccess Platform 1440 (aka XA 1440): This model is intended for small site or branch applications in cases where up to 100 Mbps of WAN throughput is required. This model includes a 4-core Intel processor, 8Gb RAM and 32Gb Solid State Drive (SSD).

ExtremeAccess Platform 1480 (aka XA 1480): This model is intended for mid-sized branch or head-end appliance uses cases where up to 500 Mbps of WAN throughout is required. This model includes an 8 core Intel processor, 8Gb RAM and 64GB Solid State Drive (SSD).

Typical Deployment Scenarios

The ExtremeAccess Platform 1400 will typically be deployed to extend secure Fabric Connect services from a head-end or campus location to a remote site. Connection can be over a Service Provider WAN or Public Internet using either Fabric Extend or IPSec encrypted tunnels. In either case, Fabric Connect services can be securely extended to the remote location. Each scenario is further described below.

Fabric Services over Service Provider WANs with Fabric

Extend. In this scenario, remote sites with ExtremeAccess Platform 1400 appliances are connected over a Service Provider WAN (e.g., MPLS, Ethernet, or DSL) to the central campus or head-end site (see Figure 1). Since the Service Provider WAN is private and generally has its own builtin security, IPSec encryption is not required. Here, VSP 7000 or 8000 Series switches in the central site can act as the aggregation devices for Fabric Extend tunnels to the ExtremeAccess Platform 1400 appliances in the remote sites. In this scenario, secure Fabric Connect services (or segments) are run across Fabric Extend tunnels using a VXLAN overlay.



Figure 1: Secure Fabric Services over a Service Provider WAN using Fabric Extend

Fabric Services over the Public Internet with IPSec. In this scenario, remote sites with Extreme Access Platform 1400 appliances connect over the Public Internet to the central campus or head-end site (see Figure 2). Since the Internet is less secure than a Service Provider WAN, IPSec encryption on the ExtremeAccess Platform 1400 can be used to ensure a secure link. Here, ExtremeAccess Platform 1400 appliances would be deployed in both Campus (or head-end) and remote sites to perform IPSec encryption, as well as any needed fragmentation and reassembly. Secure Fabric Connect services (or segments) can then be run across the IPSec tunnels across the Public Internet.



Figure 2: Secure Fabric Services over the Public Internet using IPSec encryption

Fabric Connect VPN Software

When enabled with Fabric Connect VPN software, the ExtremeAccess Platform 1400 Series supports full-feature Extreme Fabric Connect capabilities. Based on an extended implementation of the Shortest Path Bridging (SPB) standards of IEEE 802.1aq and IETF RFC 6329, Fabric Connect offers a virtualized network that simplifies network provisioning and reduces the strain on network and IT personnel. Benefits include:

- Eliminates need to configure network-wide VLANs
- Replaces legacy protocols with a single unified protocol
- Removes the risk of network loops
- Delivers an edge-only provisioning model that seamlessly integrates with orchestration and automation
- Supports both L2 and L3 virtualization

Specific Fabric Connect features supported on the ExtremeAccess Platform with the Fabric Connect VPN software include: L2 Virtual Service Networks (VSNs), Layer 3 Virtual Service Networks, Inter-VSN Routing, IPv4 Shortcuts, and Fabric Extend Tunneling.

Advanced Layer 3 Services

The ExtremeAccess Platform 1400 with Fabric Connect VPN software also supports Layer 3 services. This enables it to address IP routing requirements, in addition to its fabricbased services. Layer 3 services include IPv4 dynamic and static routing, as well as Border Gateway Protocol with support for RIPv1/2, OSPFv2, BGPv4 and VRF.

Management

The ExtremeAccess Platform 1400 Series can be managed in a variety of ways. Simple on-box management functions are delivered by a web-based GUI and a generic CLI is available for manual configuration. Centralized management can be done via Extreme Management Center (XMC) which provides a comprehensive unified management capability.

Software and Licensing

Fabric Connect VPN (FCVPN) software hosted on the ExtremeAccess Platform 1400 is offered as a "term-based" (or subscription) license and is available in 1-year, 3-year and 5-year terms. Each FCVPN license consists of:

- 1. Right-to-Use license for the purchased term
- 2. Software Services with GTAC support for the purchased term.

FCVPN Software Services are further available in three (3) service tiers, including ExtremeWorks (EW), PartnerWorks (PW) and ExtremeWorks Premier (EWP) options.

The FCVPN license is also available in two (2) bandwidth tiers to address varying WAN throughput needs:

- 1. 100 Mbps tier available on both ExtremeAccess Platform 1440 and 1480 models
- 2. 500 Mbps tier available only on Extreme Access Platform 1480 model

WAN bandwidth refers to the aggregate WAN throughput on the specific ExtremeAccess Platform hardware appliance.

Ordering Notes

A Fabric Connect VPN (FCVPN) license is a mandatory attach for each ExtremeAccess Platform 1400 hardware appliance. The ExtremeAccess Platform appliance itself includes the base system along with external 12V/60W power adaptor and fan. Power cords and transceiver/optics are not included and must be ordered separately.

Warranty

The ExtremeAccess Platform hardware is covered under Extreme's 1-year warranty policy. For details, please visit: <u>http://extremenetworks.com/support/policies</u>. Please note that the warranty is for the hardware only. Software services are bundled and provided as part of the Fabric Connect VPN (FCVPN) order code.

Product Specifications

External Ports/Slots

| Model | Ports/Slots |
|--------|--|
| XA1440 | 6 x 10/100/1000BASE-T ports (RJ-45) • Full/Half-Duplex at 10/100Mb on Ports 1-4 • Full Duplex only on Ports 7-8 and at 1Gb on Ports 1-4 2 x 1/10Gb SFP+ ports 1 x Serial (console port RJ-45) 1 x USB Micro-B management port 2 x USB A ports for external USB flash |
| XA1480 | 6 x 10/100/1000BASE-T ports (RJ-45) • Full/Half-Duplex at 10/100Mb on Ports 1-4 • Full Duplex only on Ports 7-8 and at 1Gb on Ports 1-4 2 x 1/10Gb SFP+ ports 1 x Serial (console port RJ-45) 1 x USB Micro-B management port 2 x USB A ports for external USB flash |

Weights and Dimensions

| Part Number | Weight | Physical Dimensions |
|-------------|----------------|--|
| XA1440 | 3.75 lb/1.7 Kg | 9.84 in W/1.73 in H/9.92 in D 250 mm/44 mm/252 mm |
| XA1480 | 3.75 lb/1.7 Kg | 9.84 in W/1.73 in H/9.92 in D 250 mm/44 mm/252 mm |

Power Specifications

| | XA1440/XA1480 |
|-------------------------------|------------------|
| Voltage Input Range (nominal) | 90-264 VAC |
| Line Frequency Range | 47 to 63 Hz |
| Power Cord Input Plug | IEC/EN 60320 C13 |

Minimum/Maximum Power Consumption and Heat Dissipation

| Switch Model | Minimum Heat Dissipation (BTU/hr) | Minimum Power Consumption (Watts) | Maximum Heat Dissipation (BTU/hr) | Maximum Power Consumption (Watts) |
|--------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| XA1440 | 23 | 6.7 | 64 | 18.6 |
| XA1480 | 54 | 15.7 | 95 | 27.6 |

General

CPU/Memory

XAP 1440

- 4 Core Denverton CPU
- 8GB RAM
- 32GB SSD

XAP 1480

- 8 Core Denverton CPU
- 8GB RAM
- 64GB SSD

Performance and Scale

Layer 2

- MAC Address: 2000 in XA1440, 4000 in XA1480
- Port-based VLANs: 500
- MSTP Instances: 12
- LACP Links per Group: 8 Active

Layer 3 IPv4 Routing Services

- ARP Entries: 2000 in XA1440, 4000 in XA1480
- IP Routes: up to 15,488
- RIP Interfaces: 200
- OSPF Interfaces: 48
- BGP Peers: 12
- VRF Instances: 24 (including GRT)

Fabric Connect

- NNI Interfaces/Adjacencies: 255
- BCB/BEB Nodes per Region: 550
- L2 Virtual Service Networks (L2 VSNs): 124
- L3 Virtual Service Networks (L3 VSNs): 24 (including IP shortcuts)
- Fabric Extend Tunnels: 255
- Fabric Extend with IPSec: 64

QoS and Filtering

- IPv4 ACE: 500 Ingress and 500 Egress
- QoS priority queues: 8

Operations and Management

• Mirrored Ports: 7

Environmental

Environmental Specifications

EN/ETSI 300 019-2-1 v2.1.2 - Class 1.2 Storage EN/ETSI 300 019-2-2 v2.1.2 - Class 2.3 Transportation EN/ETSI 300 019-2-3 v2.1.2 - Class 3.1e Operational EN/ETSI 300 753 (1997-10) - Acoustic Noise ASTM D3580 Random Vibration Unpackaged 1.5G

Environmental Compliance

EU RoHS 2011/65/EU (EU) 2015/863 EU WEEE 2012/19/EU EU REACH EC No 1907/2006 China RoHS SJ/T 11363-2014 Taiwan RoHS CNS 15663(2013.7)

Operating Conditions

Temp: 0° C to 40° C (32° F to 104° F) Humidity: 10% to 90% relative humidity, non-condensing Altitude: 0 to 2,000 meters (6,566 feet)

Packaging and Storage Specifications

Temp: -40° C to 70° C (-40° F to 158° F) Humidity: 10% to 95% relative humidity, non-condensing Packaged Shock (half sine): 180 m/s2 (18 G), 6 ms, 600 shocks Packaged Vibration: 5 to 62 Hz at velocity 5 mm/s, 62 to 500 Hz at 0.2 G

Packaged Random Vibration: 5 to 20 Hz at 1.0 ASD w/–3 dB/oct. from 20 to 200 Hz

Packaged Drop Height: 14 drops minimum on sides and corners at 42 inches (<15 kg box)

Regulatory and Safety

North American ITE UL 60950-1 UL 62368-1 Complies with FCC 21CFR 1040.10 (U.S. Laser Safety) CDRH Letter of Approval (US FDA Approval) CAN/CSA 22.2 No. 60950-1-07 CAN/CSA No. 22.2 62368-1-14

European ITE

EN 60950-1, EN 62368-1 EN 60825-1Class 1 (Lasers Safety) 2014/35/EU Low Voltage Directive

International ITE

CB Report & Certificate per IEC 60950-1 & IEC 62368-1 AS/NZS 60950-1 (Australia/New Zealand) IEC 62368-1 GB 4943.1-2011 CNS 14336-1

EMI/EMC Standards

North American EMC for ITE FCC CFR 47 part 15 Class A (USA) ICES-003 Class A (Canada)

European EMC Standards

EN 55032 Class A EN 55024 EN 61000-3-2,2014 (Harmonics) EN 61000-3-3 2013 (Flicker) EN 300 386 v1.6.1 (EMC Telecommunications) 2014/30/EU EMC Directive EN 55011 Class A

International EMC Certifications

CISPR 32, Class A (International Emissions) AS/NZS CISPR32

CISPR 24 Class A (International Immunity)

IEC 61000-4-2/EN 61000-4-2 Electrostatic Discharge, 4kV Contact, 8 kV Air, Criteria A IEC 61000-4-3/EN 61000-4-3 Radiated Immunity 10V/m, Criteria A

IEC 61000-4-4/EN 61000-4-4 Transient Burst, 1 kV, Criteria A

IEC 61000-4-5/EN 61000-4-5 Surge, 2 kV L-L, 2 kV L-G, Level 3, Criteria A

IEC 61000-4-6 Conducted Immunity, 0.15-80 MHz, 3V/m unmod. RMS, Criteria A

IEC/EN 61000-4-11 Power Dips & Interruptions, >30%, 25 periods, Criteria C IEC 61000-4-8/EN 61000-4-8

CISPER 11 Class A GB/T 9254-2008

Country Specific

VCCI Class A (Japan Emissions) ACMA RCM (Australia Emissions) CCC Mark (China) KCC Mark, EMC Approval (Korea) EAC Mark (Custom Union) NRCS/SABS (South Africa) BSMI Mark (Taiwan) Analtel Mark (Brazil)

Telecom Standards CE 2.0 Compliant

IEEE 802.3 Media Access Standards IEEE 802.3ab 1000BASE-T IEEE 802.3ae 10GBASE-X

Ordering Information

| Part Number | Product Name | Product Description | |
|------------------|---|--|--|
| | ExtremeAccess Platform Hardware | | |
| XA1440 | ExtremeAccess Platform 1440 | ExtremeAccess Platform 1440 hardware appliance with 6 x 10/100/1000Mbps Base-T ports and 2 x 1/10Gb SFP+ ports, includes Fan and one 12V external power adapter. Power Cord ordered separately | |
| XA1480 | ExtremeAccess Platform 1480 | ExtremeAccess Platform 1480 hardware appliance with 6 x 10/100/1000Mbps Base-T ports and 2 x 1/10Gb SFP+ ports, includes Fan and one 12V external power adapter. Power Cord ordered separately | |
| XN-2P-RMKIT-XA | Two Post Rack Mount kit for XA 1400 | Optional two post rack mount kit for ExtremeAccess Platform 1400 models. Includes brackets for front mount of chassis in a two-post rack. | |
| XA1400-PWR-ADPT | 12V/60W External Power Adapter for XA 1400 | Spare 12V/60W External Power Adapter for ExtremeAccess Platform 1400 models | |
| | | ExtremeAccess Software Options | |
| FCVPN100-EW-1YR | FCVPN 100Mb RTU App Lic and EW TAC 1YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 1YR Right-to-Use (RTU) term license - includes ExtremeWorks Support (24x7x365 TAC and eSupport) | |
| FCVPN100-PW-1YR | FCVPN 100Mb RTU App Lic and PW TAC 1YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 1YR Right-to-Use (RTU) term license - includes PartnerWorks Plus Support (24x7x365 TAC and eSupport) | |
| FCVPN100-EWP-1YR | FCVPN 100M RTU App Lic and EWP TAC 1YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 1YR Right-to-Use (RTU) term license - includes ExtremeWorks Premier Support (24x7x365 TAC and eSupport) | |
| FCVPN100-EW-3YR | FCVPN 100M RTU App Lic and EW TAC 3YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 3YR Right-to-Use (RTU) term license - includes ExtremeWorks Support (24x7x365 TAC and eSupport) | |
| FCVPN100-PW-3YR | FCVPN 100M RTU App Lic and PW TAC 3YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 3YR Right-to-Use (RTU) term license - includes PartnerWorks Plus Support (24x7x365 TAC and eSupport) | |
| FCVPN100-EWP-3YR | FCVPN 100M RTU App Lic and EWP TAC 3YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 3YR Right-to-Use (RTU) term license - includes ExtremeWorks Premier Support (24x7x365 TAC and eSupport) | |
| FCVPN100-EW-5YR | FCVPN 100M RTU App Lic and EW TAC 5YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 5YR Right-to-Use (RTU) term license - includes ExtremeWorks Support (24x7x365 TAC and eSupport) | |
| FCVPN100-PW-5YR | FCVPN 100M RTU App Lic and PW TAC 5YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 5YR Right-to-Use (RTU) term license - includes PartnerWorks Plus Support (24x7x365 TAC and eSupport) | |
| FCVPN100-EWP-5YR | FCVPN 100M RTU App Lic and EWP TAC 5YR | Fabric Connect VPN App at 100Mbps Bandwidth Tier, 5YR Right-to-Use (RTU) term license - includes ExtremeWorks Premier Support (24x7x365 TAC and eSupport) | |
| FCVPN500-EW-1YR | FCVPN 500M RTU App Lic and EW TAC 1YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 1YR Right-to-Use (RTU) term license - includes ExtremeWorks Support (24x7x365 TAC and eSupport) | |
| FCVPN500-PW-1YR | FCVPN 500M RTU App Lic and PW TAC 1YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 1YR Right-to-Use (RTU) term license - includes PartnerWorks Plus Support (24x7x365 TAC and eSupport) | |
| FCVPN500-EWP-1YR | FCVPN 500M RTU App Lic and EWP TAC 1YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 1YR Right-to-Use (RTU) term license - includes ExtremeWorks Premier Support (24x7x365 TAC and eSupport) | |
| FCVPN500-EW-3YR | FCVPN 500M RTU App Lic and EW TAC 3YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 3YR Right-to-Use (RTU) term license - includes ExtremeWorks Support (24x7x365 TAC and eSupport) | |
| FCVPN500-PW-3YR | FCVPN 500M RTU App Lic and PW TAC 3YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 3YR Right-to-Use (RTU) term license - includes PartnerWorks Plus Support (24x7x365 TAC and eSupport) | |
| FCVPN500-EWP-3YR | FCVPN 500M RTU App Lic and EWP TAC 3YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 3YR Right-to-Use (RTU) term license - includes ExtremeWorks Premier Support (24x7x365 TAC and eSupport) | |
| FCVPN500-EW-5YR | FCVPN 500M RTU App Lic and EW TAC 5YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 5YR Right-to-Use (RTU) term license - includes ExtremeWorks Support (24x7x365 TAC and eSupport) | |
| FCVPN500-PW-5YR | FCVPN 500M RTU App Lic and PW TAC 5YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 5YR Right-to-Use (RTU) term license - includes PartnerWorks Plus Support (24x7x365 TAC and eSupport) | |
| FCVPN500-EWP-5YR | FCVPN 500M RTU App Lic and EWP TAC 5YR | Fabric Connect VPN App at 500Mbps Bandwidth Tier, 5YR Right-to-Use (RTU) term license - includes ExtremeWorks Premier Support (24x7x365 TAC and eSupport) | |

| Part Number | Product Name | Product Description | | |
|---------------------------|-------------------------------|--|--|--|
| 10Gb Optical Transceivers | | | | |
| 10301 or AA1403015-E6 | 10Gb SR SFP+ module | 10GBASE-SR SFP+, 850 nm, LC, 300m OM3 MMF, 400m OM4 MMF | | |
| 10302 | 10Gb LR SFP+ module | 10GBASE-LR SFP+, 1310 nm, LC, 10 km SMF | | |
| AA1403011-E6HT | 10Gb LR SFP+ module, HT | 10GBASE-LR SFP+, 1310 nm, LC, 10 km SMF, up to 85C | | |
| AA1403015-E6HT | 10Gb SR SFP+ module, HT | 10GBASE-SR SFP+, 850 nm, LC, 300m OM3 MMF, 400m OM4 MMF, up to 85C | | |
| AA1403019-E6 | 10Gb Direct Attach Cable, 3m | Direct Attach Cable (SFP+), 3m passive copper | | |
| AA1403020-E6 | 10Gb Direct Attach Cable, 5m | Direct Attach Cable (SFP+), 5m passive copper | | |
| AA1403022-E6 | 10Gb Direct Attach Cable, 7m | Direct Attach Cable (SFP+), 7m passive copper | | |
| AA1403018-E6 | 10Gb Direct Attach Cable, 10m | Direct Attach Cable (SFP+), 10m passive copper | | |
| 10304 | 10GBASE-CR SFP 1m | 10BASE-CR SFP+ pre-terminated twin-ax copper cable with link length of 1m | | |
| 10305 | 10GBASE-CR SFP 3m | 10BASE-CR SFP+ pre-terminated twin-ax copper cable with link length of 3m | | |
| 10306 | 10GBASE-CR SFP 5m | 10BASE-CR SFP+ pre-terminated twin-ax copper cable with link length of 5m | | |
| 10307 | 10GBASE-CR SFP 10m | 10BASE-CR SFP+ pre-terminated twin-ax copper cable with link length of 10m | | |
| 1Gb Optical Transceivers | | | | |
| AA1419048-E6 | SFP 1000BASE-SX DDI (LC) | 1000BASE-SX Small Form Factor Pluggable (SFFP) connector type: LC | | |
| AA1419049-E6 | SFP 1000BASE-LX DDI (LC) | 1000BASE-LX Small Form Factor Pluggable (SFFP) connector type: LC | | |
| 10051H | 100BASE-SX SFP, Hi | 1000BASE-SX SFP, MMF 220 & 550 meters, LC connector, Industrial Temp | | |
| 10052H | 100BASE-LX SFP, Hi | 1000BASE-LX SFP, MMF 220 & 550 meters, SMF 10km, Industrial Temp | | |
| 10053H | 100BASE-ZX SFP, Hi | 1000BASE-ZX SFP, SMF 70km, Industrial Temp | | |

Power Cords

ExtremeAccess Platform 1400 power cords can be ordered separately but need to be specified at time of ordering. For

details on power cord availability, please refer to <u>www.extremenetworks.com/product/powercords/</u>.



http://www.extremenetworks.com/contact

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