



Extreme Networks Managed Service Provider (MSP)

Solution Guide



January 2023



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Executive Summary

Organizations are increasingly using managed network services, both to reduce technology risk and complexity and improve the speed and quality of their service delivery. Managed service providers (MSPs) who offer such network services are strategic partners, helping CIOs and their enterprises find the right balance between business goals, network performance, security, and cost. **This solution guide gives examples of new services MSPs can take to market using Extreme's portfolio.**

The mission of Extreme Networks is to help MSPs and their clients realize better outcomes through new ways of using technology. Extreme's vision for customers, the Infinite Enterprise, is characterized by three outcomes.

1

Infinite distribution of users and locations that require secure connectivity

2

The ability to scale both operationally and from a technology perspective

3

Consumer-centric experiences, demanded by IT teams as well as by users

One Network, One Cloud, One Extreme is Extreme's strategy and architecture to help MSPs and their clients achieve the Infinite Enterprise and its benefits

WHY?

New Ways, Better Outcomes

WHAT?

The Infinite Enterprise

Infinately Distributed · At Scale · Consumer-Centric

HOW?

1 Network 1 Cloud 1 Extreme



Extreme Makes Everything Simpler for MSPs with One Network, One Cloud, One Extreme

With Extreme's One Cloud managing One Network, MSPs can easily and cost effectively scale services offerings for their customers.

-  **Universal platforms:** Extreme pioneered Universal Wired and Wireless platforms to help protect customer investment. A choice of operating systems for wired and wireless devices supports multiple use cases on a single platform.
-  **Cloud choice and continuum:** Extreme provides customers with flexible options for deployment and hosting along a cloud continuum, from public to ExtremeCloud™ Edge, which can be deployed at MSP or customer premises.
-  **Third-party migration:** Extreme enables management of third-party networking, including Cisco, HPE, Juniper, Huawei and many more, enabling cost-effective management of multivendor networks. The same cloud enables centralized visibility and simple migration to Extreme solutions when the customer is ready to replace legacy third-party hardware.

Extreme solutions help MSPs organize and secure everything across One Network.

-  **End-to-end fabric:** To unify, automate, and secure the network from campus and data center to branch, Extreme built an industry-leading, standards-based network fabric. It has become the most widely deployed – with more than 5,000 deployments across customer networks today. Extreme also has the only fabric able to extend its virtualization, automation, and secure services to the branch over SD-WAN.
-  **Universal ZTNA (Zero Trust Network Access):** Coming to MSPs in 2024, ExtremeCloud™ Universal ZTNA is an easy to use, complete network access solution that unifies ZTNA, network access control (NAC), and automated switch and access point (AP) enforcement points. This secures users, devices, and applications across remote and campus environments.

Extreme helps MSPs save money through One Extreme.

-  **Universal licensing:** A simple MSP management license combines management, AIOps, TAC access, and OS support. Extreme established the simplest licensing in the industry. It offers clear business predictability that helps MSPs to deliver the best service possible, underpinned by 24x7 third-line support with no hidden cost for Extreme device software upgrades. Extreme's Universal licensing means one license per device, portable and applicable across wired and wireless platforms, whether managed through the cloud or on-premises, for both Extreme and third-party devices.

Extreme helps MSPs to work with organizations of every size and industry to reduce risk, costs, and complexity. Together, One Network, One Cloud, One Extreme provides a compelling and differentiated offer that will help MSPs set themselves apart in an increasingly crowded marketplace.



Extreme Helps MSPs Create New Ways to Better Outcomes

Extreme's MSP specialization offers differentiated capabilities and benefits for partners.



Lower risk and controlled costs

- A post-paid consumption model means MSPs only pay for active licenses and TAC support, eliminating shelfware and optimizing monetization
- Monthly consumption model helps eliminate multiple subscriptions within and across clients
- Programmatic discounts reward MSPs' breadth and depth of ordering
- Three-year pricing protection accelerates quotes and closed deals
- Every active device is covered by software, TAC, and OS support



Simplified operations

- ExtremeCloud Workspace for MSP provides one place to manage licensing, network performance, and service delivery across multiple customers with full multitenancy
- Zero-touch provisioning of devices, low-touch configuration, and other features speed up time to payment
- Granular, context-based analytics accelerate diagnostics, troubleshooting, and quality of service (QoS) optimization
- AI-based unified management decreases time to resolution, enables productivity, and makes it easier for MSPs to scale support and services



Increased revenue and growth opportunities

- Extreme's One Network, One Cloud portfolio enables several out-of-the-box solutions with the opportunity for MSPs to layer on added value
- Best-in-class wired and wireless solutions, Universal ZTNA, Extreme Fabric, SD-WAN, and other components enable new revenue opportunities
- Extreme Fabric, ExtremeCloud SD-WAN, ExtremeCloud applications, and other technologies increase account stickiness and recurring revenue opportunities



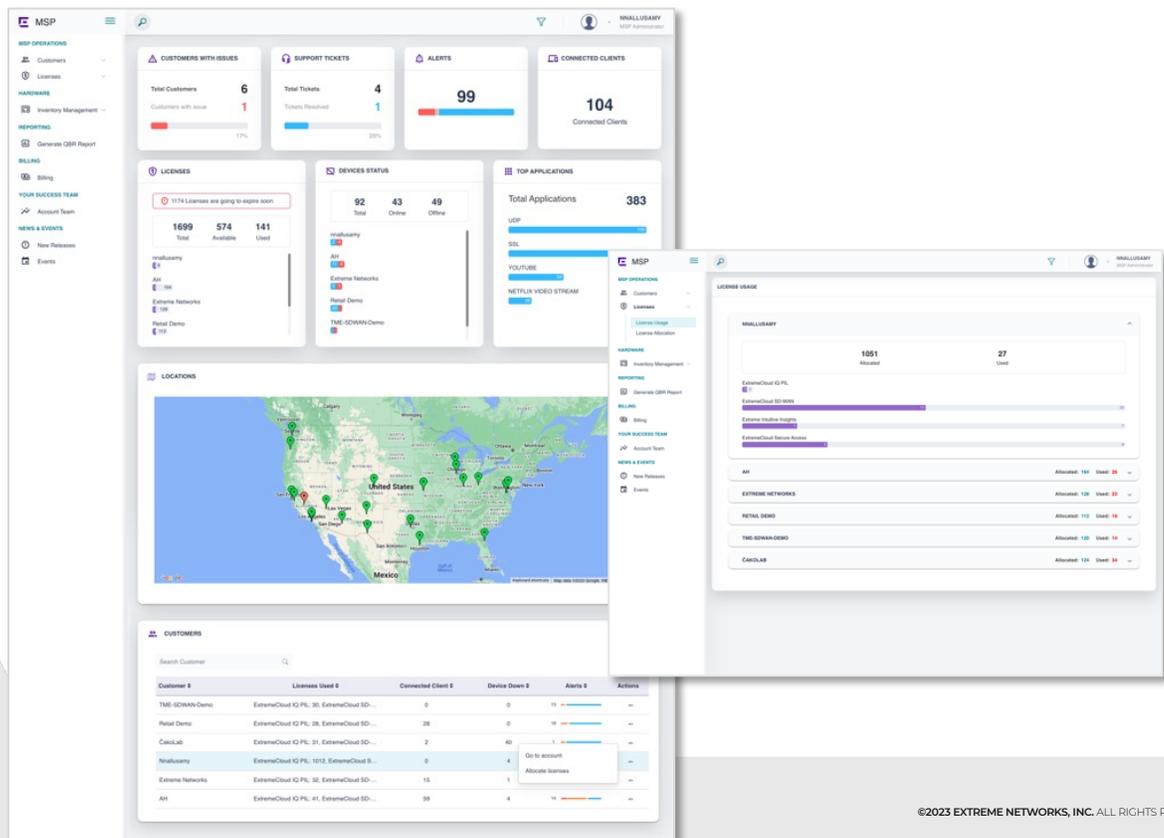
ExtremeCloud Workspace for MSP

As MSPs grow, they may face several questions. Do they have what they need in place to grow sustainably? How best can they scale their support and service teams and processes without putting SLAs at risk? How can they scale without losing efficiency and customer engagement? Managing term subscriptions, contracts, and variable pricing makes financial decisions harder for MSPs. Multiple, single-tenant solutions to manage licensing, alerts, and operations make it more difficult for MSP network operations center (NOC) teams to do their best work and meet SLAs.

ExtremeCloud Workspace for MSP makes it simpler for MSPs to scale their infrastructure and operations while keeping service quality high. Workspace for MSP provides a multitenant management portal that reduces complexity for MSPs with unified licensing, alerting, and operations across clients.

- Licensing and inventory management makes it simpler for MSPs to know what they have and what they need to support their growing client list
- Unified operations across clients makes it easier for a growing NOC team to address client needs at scale
- Unified alerts, performance insights, and fault management make it faster for MSP NOC teams to find and resolve issues that affect SLAs
- Published APIs enable MSPs to integrate into their own management systems, with billing and ticketing APIs as well as Connectwise integration coming in April 2024

With Workspace for MSP, network planning is simpler, managing is easier, and troubleshooting is faster. That helps MSPs to grow more quickly with less risk.





Enhanced Services Help MSPs Realize Value

Extreme provides a comprehensive service portfolio backed by 100% insourced, global technical support.

- Professional services: Planning, solution upgrades, deployment, resident services
- Support services: 24x7x365 technical support, product updates, on-site maintenance services
- Premier services: Designated support, priority case-queuing, proactive management
- Customer success: Solution optimization, success planning, exclusive product training, and how-to guides



A Specialization Built to Increase MSP Revenue and Growth Opportunities

Extreme's portfolio of solutions provides a solid foundation on which MSPs can increase revenue opportunity. Extreme's approach to partnership provides opportunities for MSPs to increase market demand, sales effectiveness, and margin.

INCREASED DEMAND

ExtremeNow provides new customer co-marketing event funding. Marketing Concierge Services and market development funds provide up to a 50% match.

INCREASED EFFECTIVENESS

Dedicated partner sales and marketing resources, Customer Success Best Practices Training, product training discounts, and discounted grant writing help MSPs grow their pipeline.

INCREASED MARGINS

Integrated service portfolio offerings, volume discounts, and MSP growth volume incentives help MSPs grow their margins.



Extreme Enables a Portfolio of Differentiated Solutions

Extreme’s One Network helps MSPs connect everything together. Extreme’s One Cloud enables MSPs to transition from legacy platforms and manage everything with intelligence. Together, they enable a solution set that helps MSPs create growth and revenue.

Best-in-class hardware and transformative technologies

Universal platforms provide flexibility and scalability. Extreme Fabric helps unify, automate, and secure the network. ExtremeCloud SD-WAN extends fabric services and application performance management to branches at the network edge, helping NOC teams deliver high-quality, consistent user experiences.

Universal Wired

Extreme’s broad range of high-performance, multi-rate switches with integrated Fabric and advanced PoE securely address edge, core, and aggregation needs. A choice of operating systems enables MSPs to easily repurpose and redeploy network hardware.

Edge



Core / Aggregation



Universal Wireless

Industry-leading 6 GHz Wi-Fi technology with built-in AIOps troubleshooting, guest, IoT, and location services across a range of deployment environments. Software configuration enables MSPs to change the use case and technical capabilities of APs as needed.

Wi-Fi 6E



Wi-Fi 6



Extreme Fabric

Industry-leading, highly scalable, end-to-end fabric solution deployed in thousands of customer networks. Fabric enables a unified, automated, and secure network from data center to campus to branch, across wired, wireless, and ExtremeCloud SD-WAN environments.

ExtremeCloud SD-WAN

ExtremeCloud SD-WAN connects users, data, and applications securely and at scale. Advanced application performance visibility and control enables consistent, high-quality user experiences while reducing the risk of SLA penalties. Zero-touch provisioning, auto-discovery of more than 5,000 apps, including custom, and more save MSPs time on deployment.



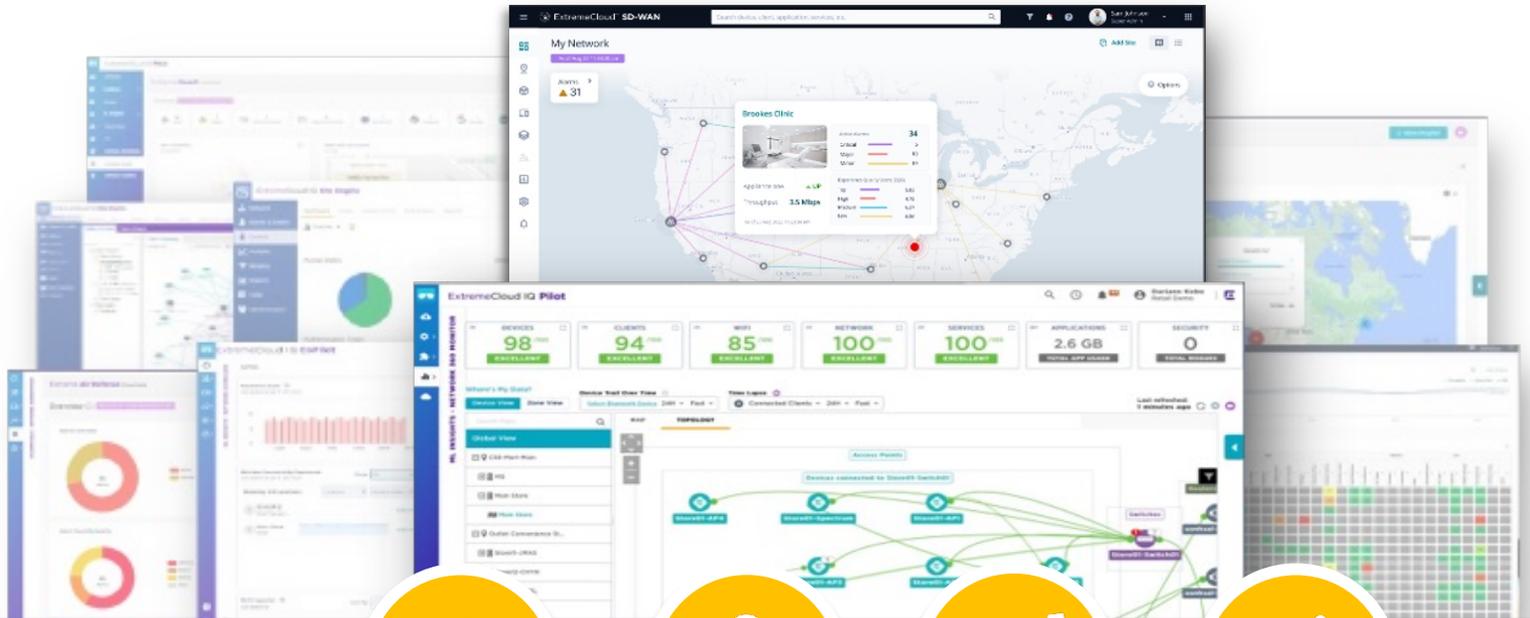
Flexible speed tiers up to 10G

XS	S	M	L	XL	XXL
Up to 250Mbps	Up to 500Mbps	Up to 750Mbps	Up to 1Gbps	Up to 2Gbps	Up to 10Gbps



Cloud Platform and Applications

Extreme's Cloud applications make it simpler to manage Extreme and third-party networking. Extreme's Cloud platform enables choice for operations, scale, and data sovereignty.



Applications

Network management

Unified management of wired, wireless, SD-WAN, and IoT devices. Capabilities include AIOps, Digital Twin virtual staging, location and guest analytics, and more



Security

Layered security across the entire infrastructure with application and NAC solutions, air interface protection, Fabric hyper-segmentation, and secure SD-WAN



Analytics

Granular, context-based network analytics including diagnostics and troubleshooting



WAN Edge

SD-WAN connectivity between campus, data center, cloud, and branch with application performance management that enables exceptional user experiences



Platform

Multiple deployment options

Including public and ExtremeCloud Edge MSPs have options to address data privacy and sovereignty requirements



Multitenancy

Multitenancy in Workspace for MSP makes it simpler and more cost-effective for MSPs to manage multiple customers securely and at scale



Secure by design

Extreme exceeds other vendors with leading platform security standards and data privacy regulatory compliance



Twenty one global PoPs

Points of presence across all three major hyper-scalers, such as Amazon Web Services, Microsoft Azure, and Google Cloud Platform, provide data residency choice



The Building Blocks to New and Recurring Revenues and Stickier Accounts



Managed Wi-Fi

Wi-Fi is now critical to most enterprises. Extreme Managed Wi-Fi offers a range of 6 GHz Wi-Fi for indoor (AP5010) and outdoor (AP5050) APs to help MSPs deliver high capacity, secure wireless experiences for consumers and IoT applications across a range of environments. ExtremeCloud IQ with Pilot and CoPilot provides granular, context-based wireless analytics to support diagnostics, troubleshooting, and quality of experience (QoE) optimization. Guest Wi-Fi, guest and location service analytics, and built-in wireless security management enable a robust Wi-Fi solution.



Managed SD-LAN

Whether at the campus or the branch, Universal Wired and Wireless together enable a common approach to connectivity. Wired access solutions provide multi-gigabit (2.5G/5G/10G) support for increased Wi-Fi 6E bandwidth capabilities. Power over Ethernet (PoE) switch capabilities support up to 90W for Wi-Fi 6 and 6E AP requirements. Simple licensing, portable and poolable across wired and wireless platforms, helps control costs. Extreme Fabric provides virtualization, automation and security services that connect everything together.



Managed Enterprise

ExtremeCloud SD-WAN extends Fabric services and visibility end-to-end, across campuses, data centers and branches, enabling the same services at every site. This enables MSPs to turn even the most complex, distributed enterprise network into a single, hyper-segmented LAN. Zero-touch provisioning, instant actions, sub-second failover, service elasticity, and more, combined with Extreme's Universal Platforms for wired and wireless access and SD-WAN, provide building blocks for MSPs to offer a robust, resilient, and secure end-to-end network that is easier for them to manage.



Enhanced Application Performance Management

A growing number of small branches and branches of one create new complexity for MSP NOC teams to manage. ExtremeCloud SD-WAN and Universal ZTNA enable MSPs to help enterprises connect their users and sites to private, SaaS, and IaaS cloud workloads. Unified management, advanced security, and advanced application performance visibility and control enable consistent, high-quality user experiences and productivity without increased complexity and effort for IT teams. Maintenance-free cloud on-ramps to AWS and Azure streamline cloud migration.



Small Branch and Micro-branch WAN

A growing number of small branches and branches of one create new complexity for MSP NOC teams to manage. ExtremeCloud SD-WAN and Universal ZTNA enable MSPs to help enterprises connect their users and sites to private, SaaS, and IaaS cloud workloads. Unified management, advanced security, and advanced application performance visibility and control enable consistent, high-quality user experiences and productivity without increased complexity and effort for IT teams. Maintenance-free cloud on-ramps to AWS and Azure streamline cloud migration.



Secure Connectivity

ExtremeControl, wireless security management, and ExtremeCloud SD-WAN together enable secure connectivity to network resources from anywhere. Extreme and ExtremeCloud SD-WAN together provide hyper-segmented access to resources when users are on-premises, whether at the campus, data center, or branch. ExtremeCloud Universal ZTNA (coming in 2024) helps protect devices and applications anywhere.



Consumer Experience Solutions

ExtremeCloud IQ's guest and location analysis provides business insights and personalized user engagements. Enhanced network visibility provides a better understanding of guest behavior to improve merchandising and flow-through, target advertising, and more, with insights into dwell time, lines, staffing, location-specific performance, guest Wi-Fi usage, and more. Paired with Extreme's Enhanced Application Performance Management solution, the two create an opportunity to offer clients end-to-end and granular visibility into and control over user experiences.



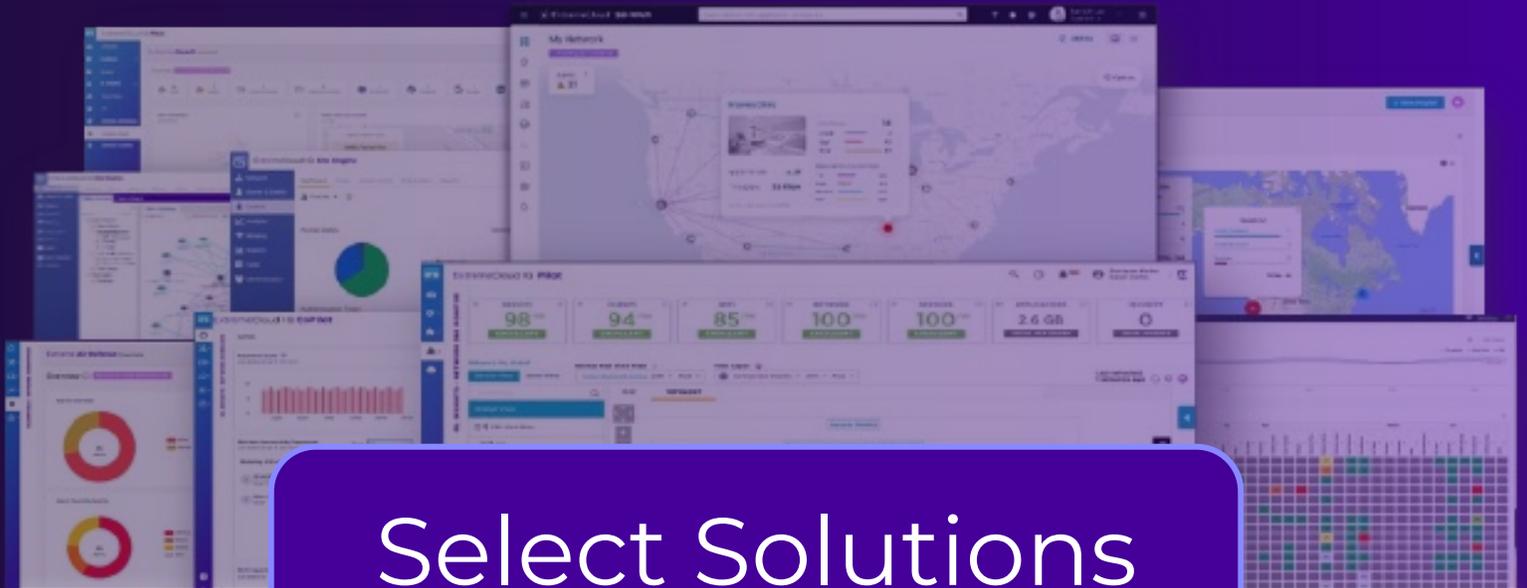
Low-latency Edge Networking

Apps, users, and data at the network edge are all exploding. Extreme Universal Wireless devices with OT radios, ExtremeCloud IQ, ExtremeCloud Universal ZTNA, and ExtremeCloud Edge enable MSPs to help their enterprise customers manage it all in ways that deliver low latency performance and security. Support for Bluetooth Extreme's Universal Wireless devices enable low-cost, low-power IoT use cases. Universal ZTNA enables secure connectivity and hyper-segmentation of device traffic. ExtremeCloud Edge helps ensure sensitive client data never leaves their network.



The High Availability Network

Few organizations can afford unplanned downtime. In many industries, uptime is a critical requirement, whether it comes to manufacturing goods, delivering healthcare services, or keeping the public safe. Extreme's Universal Platforms, Extreme Fabric, and ExtremeCloud SD-WAN together enable site-specific resilience, transport independence, and sub-second failover for enterprises that need maximum uptime.



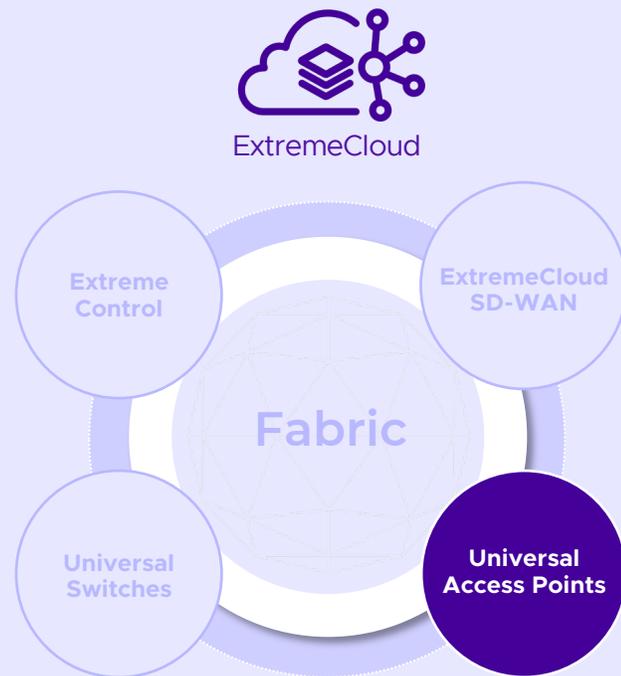
Select Solutions in Detail



Managed Wi-Fi

As demand for wireless connectivity increases for both users and IoT, the need for always-on, reliable access goes up. As more devices and users compete for bandwidth, balancing mission-critical applications and premium user experiences against necessary but lower priority traffic becomes more challenging.

As Wi-Fi networks, devices, and usage grow, securing access to wireless networks and the security of data and services that run over wireless networking gets more complex. Segmenting Wi-Fi traffic becomes even more important as security and compliance risks increase.



Recommended Products

A Managed Wi-Fi service enables MSPs to deliver a seamless and secure Wi-Fi experience to end users with an easy to manage service set.

- Universal platforms with 6 GHz Wi-Fi technology and support for multiple operating systems and use cases increase customer choice and value
- Built-in wireless security management reduces risk and complexity while helping to keep both guest and enterprise data secure and segmented
- Unified management of connectivity and QoE for guests, employees, IoT, and third-party devices with ExtremeCloud IQ helps MSP NOC teams save time
- Guest and location analytics enable MSPs to help clients better align their network infrastructure, policy, and business outcomes
- AIOps capabilities with actionable insights help MSPs deliver premium digital experiences by finding and fixing wireless issues more quickly



What Managed Wi-Fi Enables

Flexible solutions for today's wireless needs

- Choice of operating systems enables different features and use cases
- Multiple radios enable both consumer and IoT use
- Bluetooth capabilities enable low-power, low-cost hybrid IT/OT, IoT, and machine-to-machine use cases, guest engagement services, and more
- Multiple mounting options, such as wall plate, ceiling mount, pole mount, and underseat placement, support deployments in offices, auditoriums, dormitories, stores, warehouses, patios, yards, and other locations

Reduced risk

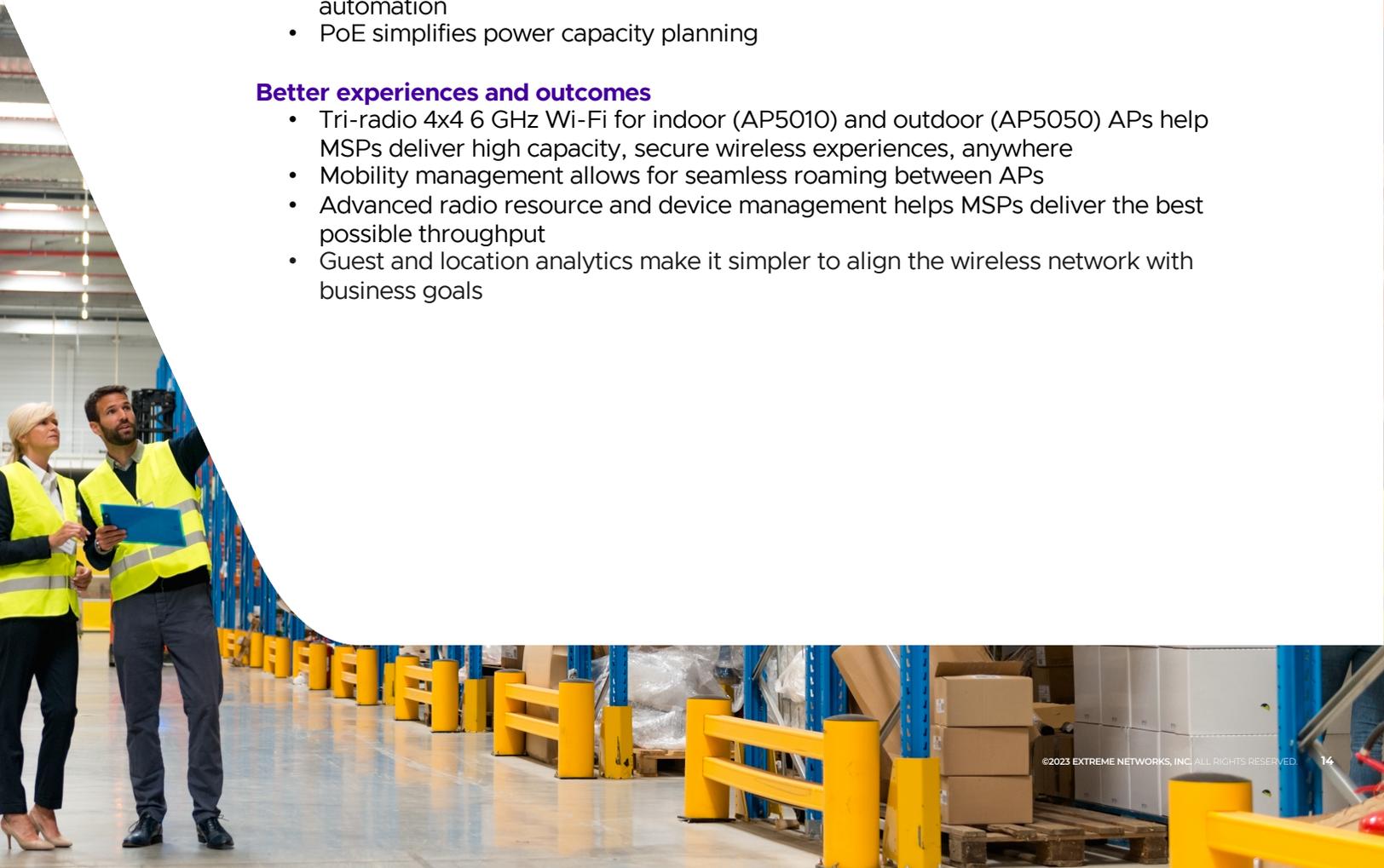
- 24x7x365 WLAN network monitoring with an extensive threat library, and multidimensional detection and forensics reduces the risk and impact of threats
- Layer 2-7 firewall protects against DoS attacks against both MAC and IP layers
- Policy enforcement with instant notification and response based on policy violations accelerates response
- Real-time rogue device scanning with auto-termination accelerates response and protects the network until a device can be physically removed

Simplified operations

- AI-based management capabilities proactively recognize common issues and reduce time spent on troubleshooting, while helping to keep the network optimized
- QoS optimization enables the MSP NOC team to deliver consistent, high-quality consumer experiences by aligning goals with outcomes through policy and automation
- PoE simplifies power capacity planning

Better experiences and outcomes

- Tri-radio 4x4 6 GHz Wi-Fi for indoor (AP5010) and outdoor (AP5050) APs help MSPs deliver high capacity, secure wireless experiences, anywhere
- Mobility management allows for seamless roaming between APs
- Advanced radio resource and device management helps MSPs deliver the best possible throughput
- Guest and location analytics make it simpler to align the wireless network with business goals





Architecture at a Glance

A range of Universal Wireless devices provides a spectrum of capabilities, from value to premium, to help MSPs respond to the needs of their customers.



Wi-Fi 6 E



AP3000/X



AP4000



AP5010



AP5050D



AP5050U

Wi-Fi 6



AP302W



AP305C/CX



AP410C



AP460C/
S6C/S12C

Value

- Wi-Fi 6E 2x2 indoor (AP3000)
- Wi-Fi 6 2x2 indoor/external antenna (AP305C/CX) and wall plate (AP302W)
- External antenna (AP3000X)

Mid-tier

- Wi-Fi 6E 2x2 indoor (AP4000)
- Wi-Fi 6 4x4 indoor (AP410C) and outdoor (AP460C)
- Sector antenna (AP460S)

Premium

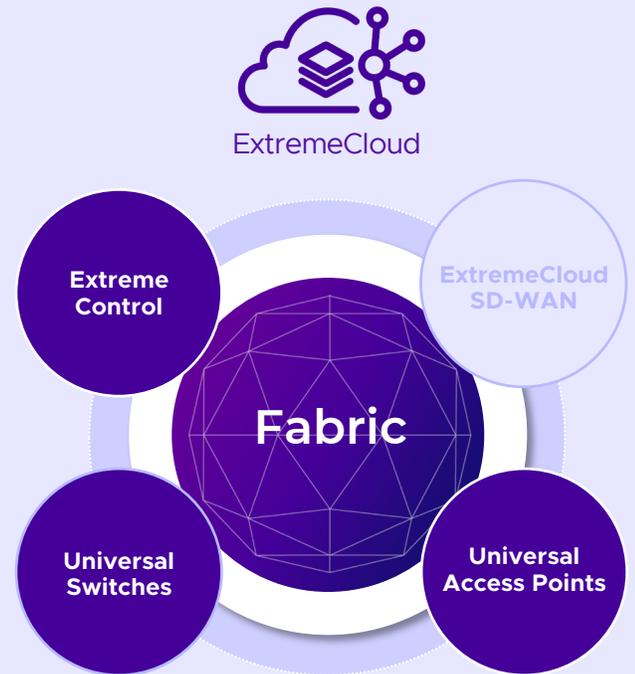
- Wi-Fi 6E 4x4 indoor (AP5010) and outdoor (AP5050U/D)
- Underseat (AP5050U)
- Directional antennas (AP5050D)



Managed SD-LAN

Whether it is at the campus or the branch, as the network grows, so does its complexity. Many networks are built up over time, with a mix of vendors and devices that make management, security, and compliance more difficult.

Most networks require several elements and network management systems. Troubleshooting issues between the user, APs, switches, and the data center can be time-consuming. Extending security and resilience to branches can be time-consuming and expensive.



Recommended Products

Universal Wired and Wireless along with Extreme Fabric, ExtremeControl, and ExtremeCloud IQ Site Engine enable a scalable, secure approach to delivering consumer-centric and secure connectivity that is easier to manage.

- Universal platforms provide MSPs with an improved deployment experience through simple, streamlined licensing, consistent warranty, and powerful cloud management
- Extreme Fabric enables end-to-end security, resilience, and automation, reducing touch points, manual errors, security and compliance risks, and more
- Security by design provides a defense in layers that includes Extreme Fabric hyper-segmentation, service elasticity, stealthy design, ExtremeControl NAC, and wireless security management
- Multivendor support for third-party networking including Cisco, HPE, Juniper, Huawei and many more, enables cost-effective management now and migration when the MSP and clients are most ready
- Guest and location analytics enable MSPs to help clients better align their network infrastructure, policy, and business outcomes



What a Managed SD-LAN Enables

Flexible solutions

- Choice of operating systems for both Universal Wired and Wireless devices enables different features and use cases
- Wired access solutions featuring PoE switch capabilities provide multi-gigabit (2.5G/5G/10G) support for increased Wi-Fi 6E and 7 bandwidth capabilities
- 200G+ uplinks for 6E and 7 AP backhaul help futureproof the network
- Power over Ethernet (PoE) switch capabilities make planning simpler with support up to 90W for Wi-Fi 6 and 6E AP requirements
- Bluetooth capabilities enable low-power, low-cost hybrid IT/OT, IoT, and machine-to-machine use cases, guest engagement services, and more

Reduced risk

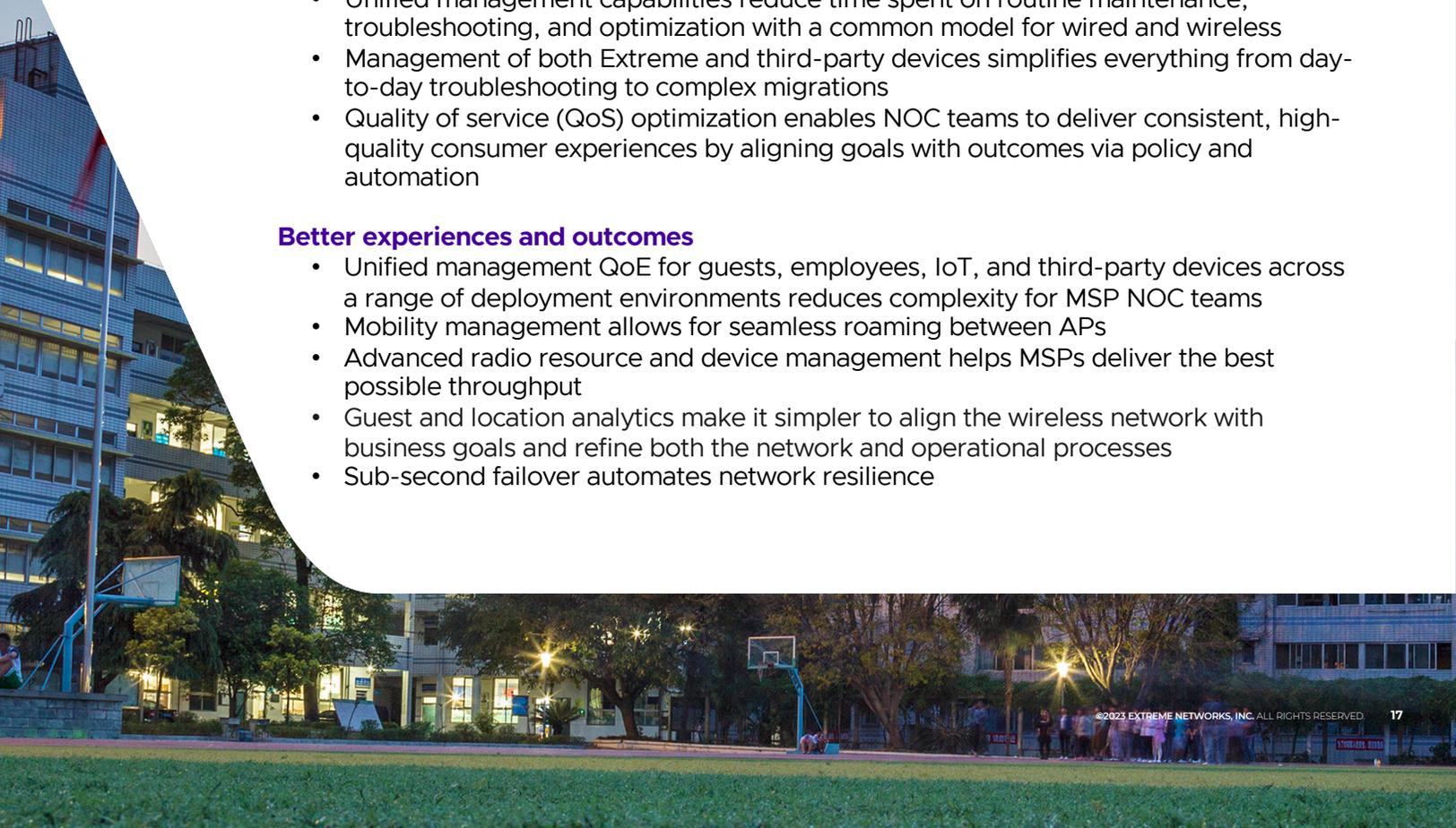
- Unified NAC policy across wired and wireless environments with enforcement at the point of network access, and rogue device scanning help keep threats out
- Layer 2-7 firewall protects against DoS attacks against both MAC and IP layers
- 24x7x365 WLAN network monitoring with an extensive threat library, and multidimensional detection and forensics reduces the risk and impact of threats
- Extreme Fabric's hyper-segmentation, service elasticity, and stealthy design reduce attack surface, protect the network from east-west threat migration, and simplify compliance efforts

Simplified operations

- Automation and instant actions make it simpler to deploy and provision network devices, including third-party, and services, without the cost and complexity of external controllers
- Unified management capabilities reduce time spent on routine maintenance, troubleshooting, and optimization with a common model for wired and wireless
- Management of both Extreme and third-party devices simplifies everything from day-to-day troubleshooting to complex migrations
- Quality of service (QoS) optimization enables NOC teams to deliver consistent, high-quality consumer experiences by aligning goals with outcomes via policy and automation

Better experiences and outcomes

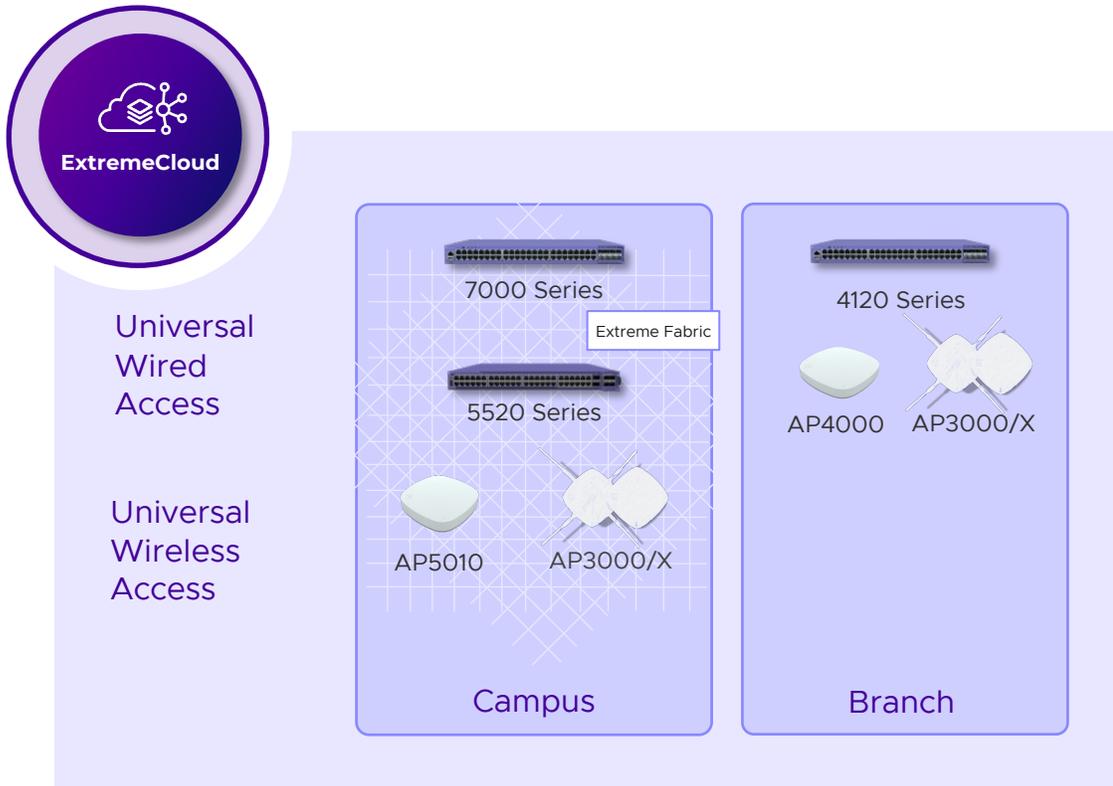
- Unified management QoE for guests, employees, IoT, and third-party devices across a range of deployment environments reduces complexity for MSP NOC teams
- Mobility management allows for seamless roaming between APs
- Advanced radio resource and device management helps MSPs deliver the best possible throughput
- Guest and location analytics make it simpler to align the wireless network with business goals and refine both the network and operational processes
- Sub-second failover automates network resilience





Architecture at a Glance

A portfolio of Universal Wireless and Wired access devices, all managed by ExtremeCloud IQ, helps MSPs deliver the best value.



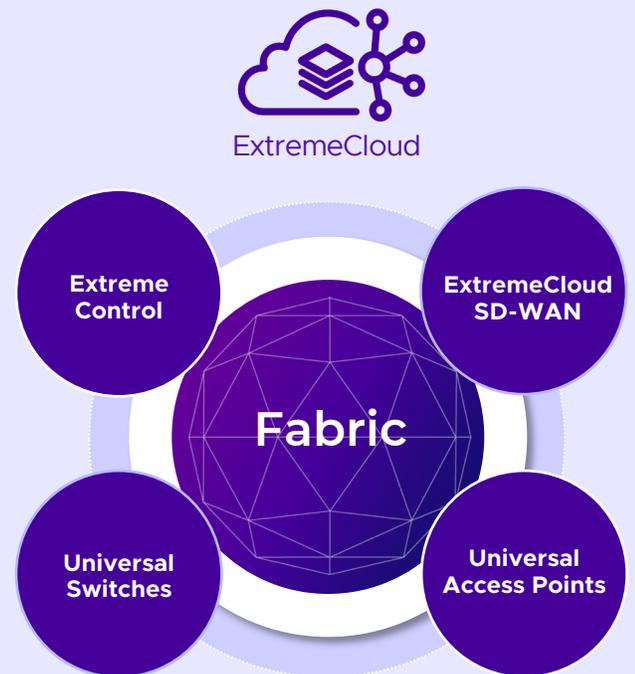
- Extreme 7000 Series switches address high-performance core or aggregation needs with end-to-end secure network segmentation and advanced policy capabilities
- Extreme 4000 and 5000 Series switches provide high performance, multi-rate, multi-gigabit capacity for edge needs
- Multi-gigabit and 90W PoE simplifies deployment
- A range of Wi-Fi 6E and 7 APs helps MSPs deliver the best consumer experience
- 6 GHz tri-radio 4x4 Wi-Fi APs support, a choice of operating systems, and multiple deployment options enable a wide range of deployments and use cases
- 200G+ uplinks for 6E and 7 APs backhaul help deliver exceptional performance today and futureproof the network



Managed Enterprise Network

Enterprises are becoming more distributed. As they do, it becomes harder to scale performance and resilience to remote sites. More time spent on manual provisioning and configuration as the network grows means less time to spend on activities with higher impact on business outcomes.

Network hacking is also increasingly sophisticated, relying more frequently on a growing number of entry points and flat open networks behind the security perimeter. Regulatory compliance requirements add further complexity.



Recommended Products

A Managed Enterprise combines Extreme Universal Wired, Extreme Fabric, and ExtremeCloud SD-WAN, enabling MSPs to provide a secure, cost-effective, and low-risk means to extend Fabric services from data centers and campuses to the entire network.

- Universal platforms provide an improved deployment experience for MSPs through simple, streamlined licensing, consistent warranty, and powerful cloud management
- Security by design provides a defense in layers that includes unified NAC, wireless security management, and Extreme Fabric security services
- End-to-end Extreme Fabric virtualization, automation, and security services reduce complexity and manual touch points
- ExtremeCloud SD-WAN extends Fabric over low-cost internet access transport
- Unified management and application performance visibility and control from the LAN to the WAN and into the cloud help MSP NOC teams deliver the best possible application experiences, network-wide
- Guest, location, and application performance analytics enable MSPs to help clients better align their network infrastructure, policy, and business outcomes



What Managed Enterprise Enables

Best-in-class value

- Best-in-class Universal Wired and Wireless devices with software-defined features provide unique choice and continuing value
- Wired access solutions featuring PoE switch capabilities provide multi-gigabit (2.5G/5G/10G) support for increased Wi-Fi 6E and 7 bandwidth capabilities
- 200G+ uplinks for 6E and 7 AP backhaul help future-proof the network
- A range of SD-WAN subscriptions and appliances from 250Mbps to 10Gbps provide customer choice and scalability

Reduced risk

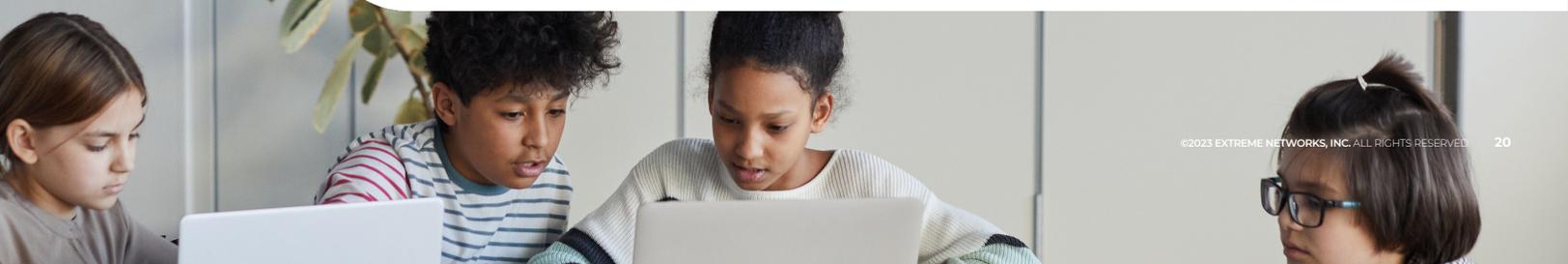
- Unified NAC policy across wired and wireless environments with enforcement at the point of network access, and rogue device scanning help keep threats out
- 24x7x365 WLAN network monitoring with an extensive threat library, and multidimensional detection and forensics reduces the risk and impact of threats
- Extreme Fabric's hyper-segmentation, service elasticity, and stealthy design reduce attack surface, protect the network from east-west threat migration, and simplify compliance efforts
- Dynamic role-based policy assigns appropriate network access at switches and access points
- IPsec tunnels protect all traffic in transit over the WAN while optional MACsec protect traffic in transit over the data link layer
- Cloud choice and continuum enable a cloud at the customer edge for customers that need data sovereignty

Simplified operations

- Zero-touch provisioning and instant actions save time and effort onsite for new sites and services
- Auto-discovery and configuration of Fabric-capable switches across the network: campus, data center, and branch, help save time
- Advanced algorithms help automate bandwidth management and WAN selection to better align intended performance with user QoE
- Unified management of wired, wireless and SD-WAN, including third-party devices, reduces alert fatigue and makes it easier to identify faults and complex performance issues

Better experiences and outcomes

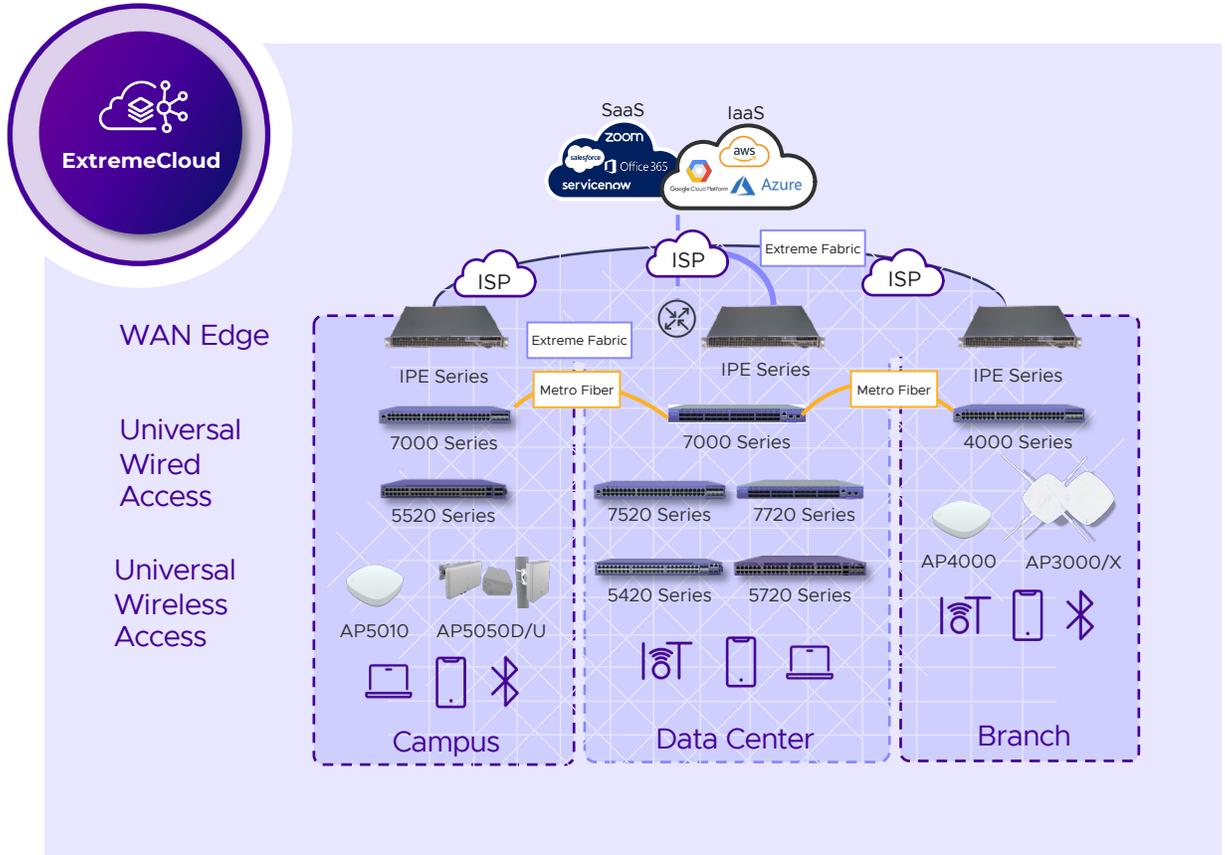
- Granular visibility, including Fabric traffic, makes it simpler to find and fix issues, improve QoE, and meet SLAs
- Advanced algorithms help automate bandwidth management and WAN selection to better align intended performance with user QoE
- Sub-second failover and transport independence automate network resilience
- Low-cost, flexible internet access transport helps control bandwidth costs and improve business agility





Architecture at a Glance

A selection of Universal Wireless, Wired, and SD-WAN devices, connected by Extreme Fabric over low-cost internet access transport and managed with ExtremeCloud helps MSPs deliver the best value.

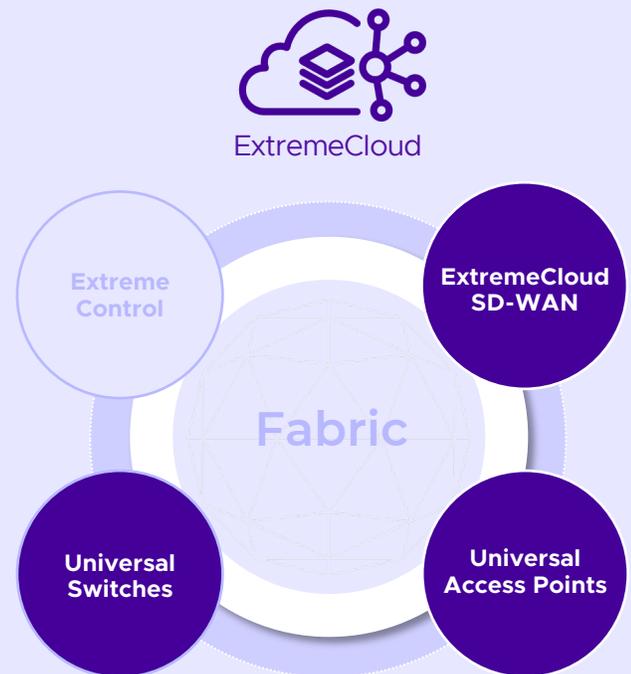


- In the LAN, fabric-native Extreme 7000 Series switches address high-performance core or aggregation needs with end-to-end secure network segmentation and advanced policy capabilities
- Fabric-aware Extreme 4000 and fabric-native 5000 Series switches provide high performance, multi-rate, multi-gigabit capacity for edge needs
- Fabric-aware Wi-Fi 6E and 7 APs enable high-quality consumer experience
- ExtremeCloud IQ Site Engine provides on-premises unified management, security, guest and location analytics, and more
- In the WAN, ExtremeCloud SD-WAN IPE Series appliances support a range of speed tiers, from 250Mbps up to 10Gbps
- ExtremeCloud SD-WAN Orchestrator makes it simpler for MSP NOC teams to set and automatically enforce policies for application performance, internet access security, and more



Enhanced Application Performance Management

The rate of business and technology change is unprecedented. Productivity has never been more important. However, the challenges to delivering consistent, high-quality user experiences for high-bandwidth SaaS, IaaS, and data center applications across increasingly hybrid work environments have never been higher. Pressure on IT departments to maintain user QoE while migrating applications to the cloud in particular makes application performance management even more complex.



Recommended Products

Extreme's Enhanced Application Performance Management capability combines Extreme Universal platforms and ExtremeCloud applications to help MSPs deliver the best possible network and application user experiences.

- Universal platforms for wired, wireless, and SD-WAN enable MSPs to deliver consistent, high-quality, and scalable application performance
- End-to-end QoE policies with automated performance control make it easier to align performance goals with business outcomes
- Unified management of connectivity and QoE for guests, employees, IoT, and third-party devices across a range of deployment environments saves MSP time
- Built-in resilience, advanced security, and a range of deployment options enable high-quality, consistent performance with lower risk and cost



What Enhanced Application Performance Management Enables

Quick deployment

- A portfolio of wired, wireless, and SD-WAN devices with software-defined features provides unique choice and lasting value
- Zero-touch provisioning, instant actions, and auto-discovery of more than 5,000 apps, including custom, saves time on setup and configuration
- Maintenance-free cloud on-ramps and one-click, policy-enabled local breakout to trusted SaaS applications, improve efficiency and productivity without adding complexity

Reduced risk

- 24x7x365 WLAN network monitoring with an extensive threat library, and multidimensional detection and forensics reduces the risk and impact of threats
- Layer 2-7 wireless firewall protects against DoS attacks against both MAC and IP layers
- Built-in stateful WAN firewalls, optional internet access security, and the ability to route traffic to third-party secure web gateways provide a defense in layers while improving customer choice at the WAN
- Digital Twin virtual staging reduces the risk of network changes
- Cloud choice and continuum enable a cloud at the customer edge for customers that need data sovereignty

Simplified operations

- Unified management of wired, wireless, and SD-WAN, including third-party devices, reduces alert fatigue and makes it easier to identify faults and complex performance issues
- Auto-discovery of more than 5,000 SaaS applications, as well as customized private app identification toolkits, streamline setup, and identify shadow IT
- AI-based anomaly detection reduces the noise so NOC teams can focus on relevant data and make more informed decisions
- LAN-to-WAN-to-cloud performance monitoring enables analysis of issues that impact user experience, including SaaS applications and IaaS applications hosted with AWS, Google Cloud Platform, and Microsoft Azure

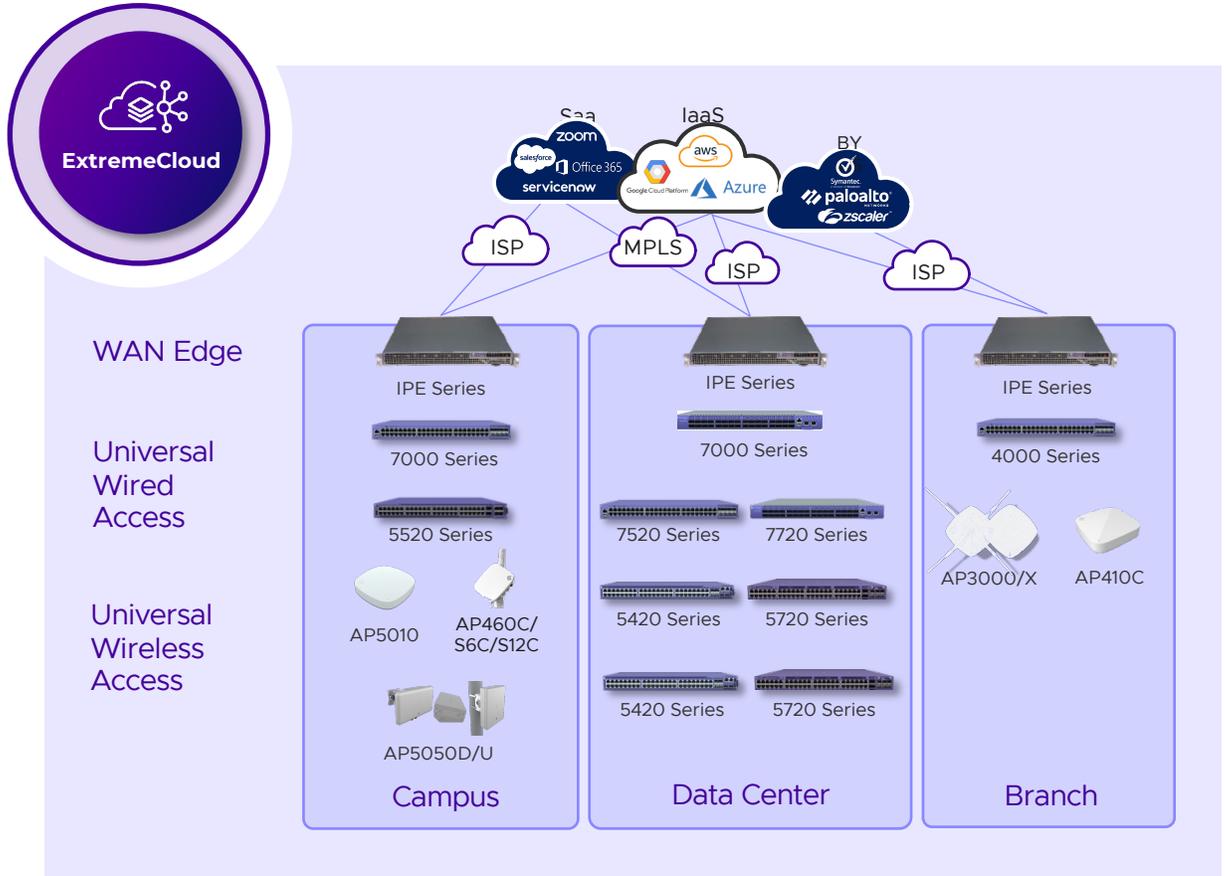
Better experiences and outcomes

- Granular application performance visibility makes it simpler to set QoE policies and find and fix issues to meet SLAs
- Advanced algorithms help automate bandwidth management and WAN selection to better align intended performance with user QoE
- Sub-second failover and transport independence automate network resilience
- Proactive alarms and events reduce the risk of minor issues becoming major outages that affect user experience and productivity
- Connectivity Experience summarizes the client's experience into a single quality index score to easily track, identify, and troubleshoot connectivity issues



Architecture at a Glance

A selection of Universal wireless, wired, and SD-WAN devices managed with ExtremeCloud helps MSPs deliver the best value.



- In the LAN, Extreme Wired and Wireless devices provide high performance and security, and advanced policy capabilities
- In the WAN, ExtremeCloud SD-WAN IPE Series SD-WAN appliance supports a range of speed tiers, from 250Mbps up to 10Gbps, helping ensure high-quality, consistent user experiences and application performance for organizations and sites of any size
- ExtremeCloud SD-WAN Orchestrator enables policy-based control of application performance and internet access security and automates policy implementation
- Extreme's Applications Anywhere capability enables secure, visible, direct to internet SaaS and IaaS access from remote sites, while maintenance-free cloud on-ramps simplify migration of workloads to IaaS hyperscalers such as AWS and Microsoft Azure
- Built-in WAN optimization helps ensure performance even when the network is under duress



Differentiate and Monetize with One Network, One Cloud, One Extreme

Extreme's One Network, One Cloud, One Extreme approach enables MSPs to launch low risk differentiated propositions quickly, increasing revenue and profitability. Flexible solutions, such as Managed Wi-Fi, campus, SD-LAN, and application performance management, help MSPs create new and recurring revenue opportunities. One Cloud enables MSPs to deliver high quality consumer-centric experiences at scale for their Infinite Enterprise customers via Universal Platforms and third-party device management. One Network simplifies secure connectivity for infinitely distributed customers with consistent, granular policies and automation that MSPs can extend across campus, data center, and branch via SD-WAN. One Extreme helps MSPs save money with simple, universal licensing. Together, this enables MSPs to profitably scale their operations while keeping their clients at the center of their business.

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