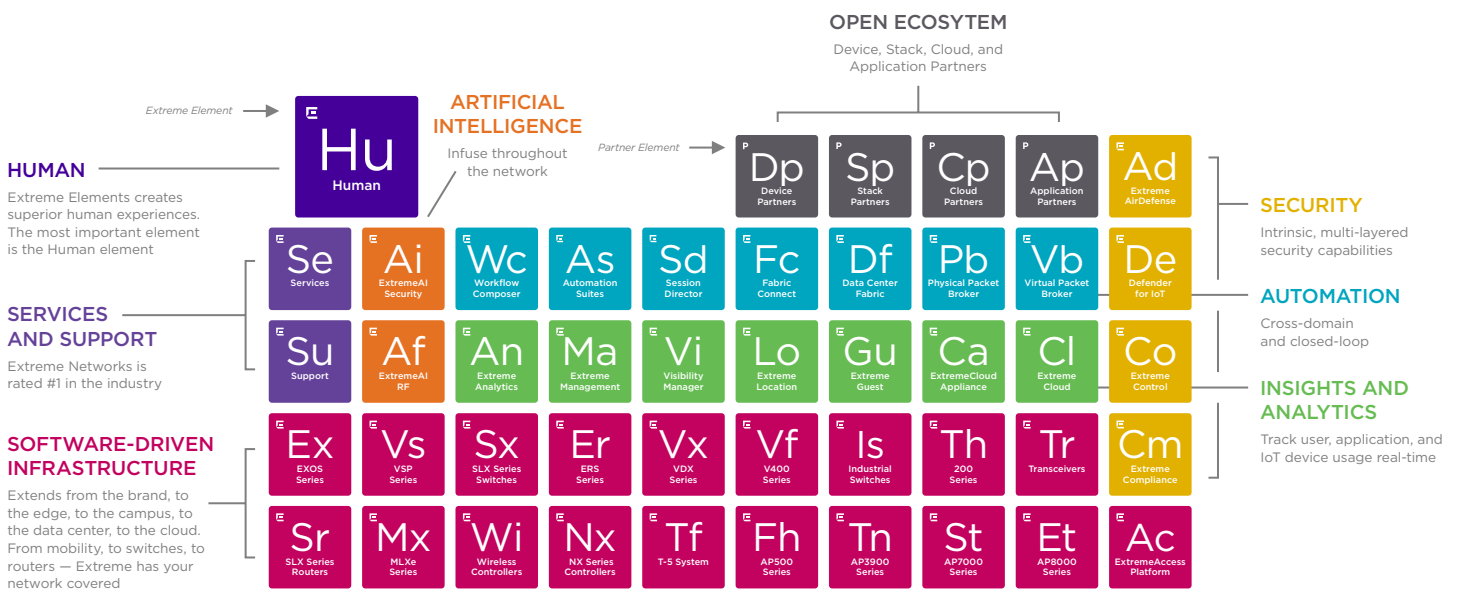# Extreme Elements™

The Building Blocks of the Autonomous Enterprise

Delivering better outcomes and next-generation experiences rely on connecting humans to technology. These connections require more than just newer hardware – they require an intelligent network. A network that is more agile and aware and that can anticipate and respond to customers' needs pro-actively. A network that can serve as the nervous system of the autonomous enterprise – capable of delivering next-generation human experiences.

OPEN ECOSYTEM
Device, Stack, Cloud, and Application Partners

Extreme Element →

Hu Human

ARTIFICIAL INTELLIGENCE
Infuse throughout the network

Partner Element →

HUMAN
Extreme Elements creates superior human experiences. The most important element is the Human element

SERVICES AND SUPPORT
Extreme Networks is rated #1 in the industry

SOFTWARE-DRIVEN INFRASTRUCTURE
Extends from the brand, to the edge, to the campus, to the data center, to the cloud. From mobility, to switches, to routers — Extreme has your network covered

SECURITY
Intrinsic, multi-layered security capabilities

AUTOMATION
Cross-domain and closed-loop

INSIGHTS AND ANALYTICS
Track user, application, and IoT device usage real-time

Elements:
Dp Device Partners, Sp Stack Partners, Cp Cloud Partners, Ap Application Partners, Ad Extreme AirDefense
Se Services, Ai ExtremeAI Security, Wc Workflow Composer, As Automation Suites, Sd Session Director, Fc Fabric Connect, Df Data Center Fabric, Pb Physical Packet Broker, Vb Virtual Packet Broker, De Defender for IoT
Su Support, Af ExtremeAI RF, An Extreme Analytics, Ma Extreme Management, Vi Visibility Manager, Lo Extreme Location, Gu Extreme Guest, Ca ExtremeCloud Appliance, Cl Extreme Cloud, Co Extreme Control
Ex EXOS Series, Vs VSP Series, Sx SLX Series Switches, Er ERS Series, Vx VDX Series, Vf V400 Series, Is Industrial Switches, Th 200 Series, Tr Transceivers, Cm Extreme Compliance
Sr SLX Series Routers, Mx MLXe Series, Wi Wireless Controllers, Nx NX Series Controllers, Tf T-5 System, Fh AP500 Series, Tn AP3900 Series, St AP7000 Series, Et AP8000 Series, Ac ExtremeAccess Platform

Introducing Extreme Elements

Extreme Elements provides the building blocks enterprises need to build the right architecture to fulfill the specialized demands of their business. Unlike other vendors, Extreme does not offer one-size-fits-all solutions because we recognize every business and human experience is different.

Extreme Elements provides enterprises the flexibility to pick and choose the elements they need to yield positives outcome for their business. It provides a self-sustaining foundation – the autonomous network – with elements that adapt and work together in harmony.

Extreme Elements Components

The central element is the Human element. Every product, application and service Extreme designs and brings to market delivers a superior human experience. We are relentless in our commitment to delivering customer-driven networks that help businesses accelerate their digital transformation and deliver better outcomes to their users.
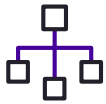
Software-Driven Infrastructure	Insights and Analytics	Closed-Loop Automation	Open Ecosystem	Security	Artificial Intelligence	Services and Support

- **Software-Driven Infrastructure** — An infrastructure that continuously learns, and self optimizes, adjusting resources in real time depending on the needs of your users and customers. Extreme software-driven Infrastructure extends from the edge, to the campus core, to the cloud and to the datacenter. Offering a comprehensive portfolio of next generation switches, routers, and mobility products, businesses can pick and choose the elements they need.

- **Insights and Analytics** — Comprehensive insights and analytics so businesses can track user, application, and IoT device usage in real-time; identify anomalous behavior, and automatically resolve issues without human intervention. For example, ExtremeAnalytics is a network-based business intelligence solution that captures and analyzes context-based application traffic to deliver meaningful intelligence about applications, users, locations and devices.

- **Closed-Loop Automation** — Delivering cross-domain and closed-loop automation so businesses can optimize network performance from the end device to the application. By automating manual changes and updates, enterprises can optimize network performance, enable greater business agility, and accelerate the rollout of new services. For example, Extreme fabric automation solutions enable fast setup for the most demanding network architectures, and the cross-domain Extreme Workflow Composer automation solution extends the benefits beyond the network domain to security, storage, compute and operations.

- **Open Ecosystem** — An open and standards-based ecosystem that allows businesses to build exactly the architecture and applications they require to fulfill the specialized demands of their enterprise. Extreme has partnerships with leading cloud, stack, application and device technology innovators to develop unique solutions that solve real-world problems. In Extreme Elements partner elements are denoted with a "P"; Extreme products and services with an "E'.

- **Security** — Delivering multi-layered network security capabilities without complexity. Extreme security elements can help protect your organization by gaining visibility and control over your connected users, devices and applications, segmenting your network with ease and scale and creating a holistic security eco-system through integration with best of breed security vendors.

- **Artificial Intelligence and Machine Learning (AI/ML)** — These technologies are infused throughout the entire network, helping enterprises make smarter, faster decisions that deliver better outcomes and experiences. For example, ExtremeAI RF is Extreme's AI powered solution for Wi-Fi RF management and ExtremeAI Security is our AI powered solution for IoT device security and automated threat remediation. Both solutions provide IT with proactive resolutions rather than the traditional reactive mode; freeing up time for IT to focus on value-add initiatives.

- **Services** — Offering a diverse range of services all built to maximize the effectiveness of your network to fuel business growth, and create a long-lasting partnership.

- **Support** — Rated Number One in the industry in a Gartner peer review, Extreme's talented and highly-trained support professionals are a 100% in-sourced team of experts in products, solutions, and applications.
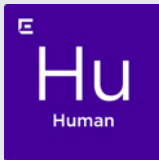
Deliver New Human Experiences

Extreme Elements can be put together to create new human experiences and business outcomes. Whether you are a school looking to enhance digital citizenship and student safety, a retail store wishing to enhance the in-store shopping experience or a hospital focused on delivering enhanced patient care and experience, Extreme Elements can help you build your future.

| Vertical	Use Case	Description	Extreme Elements
Healthcare	**Enhanced Patient Care and Experience**	Drive better patient outcomes and experience, while maintaining safety and compliance.	Se Services · Su Support · Hu Human · Co Extreme Control · Cm Extreme Compliance · Ma Extreme Management · An Extreme Analytics · Af ExtremeAI RF · Af ExtremeAI RF · Gu Extreme Guest · Fh AP500 Series · Wi Wireless Controllers · Vs VSP Series · De Defender for IoT · Fc Fabric Connect · Ap Application Partners · Ro Robotics

What's Important — High video/audio/data communication bandwidth for telehealth; network security for IoT and robotics-based healthcare delivery; high localized bandwidth for AR/MR headsets. Mobile connectivity of patient and guests to Internet, patient entertainment systems, privacy of clinical data, tracking of patient and guest flow through facility, simplified network management. Regulatory compliance.

| Vertical	Use Case	Description	Extreme Elements
K-12	**Digital Citizenship and Student Safety**	Deliver tightly managed network and Internet access (digital citizenship) and controlled physical security (physical safety).	Se Services · Su Support · Hu Human · Co Extreme Control · Ma Extreme Management · An Extreme Analytics · Fh AP500 Series · Wi Wireless Controllers · Ex EXOS Series · Ap Application Partners · Vo Video Surveillance · Fr Facial Recognition

What's Important — Integration of network access control with Active Directory and web filter. Being able to control network access and Internet application access based on student identity, location, time of day, and device. Facial recognition helps control access to campus for student safety.

Vertical	Use Case	Description	Extreme Elements
Higher Ed	**High-Performance Computing**	Supercomputing and high-performance workstations, databases, and interconnects for solving the world's most compute-intensive challenges.	Se Services · Su Support · Hu Human · Ma Extreme Management · Df Data Center Fabric · Sx SLX Series Switches · Mx MLXe Series

What's Important — Highest possible bandwidth, lowest-achievable latency, and high-performance interconnects to local and remote users.

Vertical	Use Case	Description	Extreme Elements
Retail	**Enhanced In-Store Shopping Experience**	Deliver an augmented, personalized, and mobile centric in-store shopping experience, which aligns with the digital expectations of today's guest and improves the connection between brand and customer.	Se Services · Su Support · Hu Human · Lo Extreme Location · Gu Extreme Guest · Fh AP500 Series · Ad Extreme AirDefense · Mo Mobile Applications · Ps Point of Sale · Ap Application Partners

What's Important — Seamless guest onboarding and access to in-store network; Strong, secure, always-on Wi-Fi; Understanding of customer analytics, preferences and behaviors; Engage with onsite customers in a targeted, contextual way; support and enable digital campaigns and platforms.

For more information, check out the Extreme Elements exploration application: www.extremenetworks.com/extreme-elements