

The Economic Benefits of Extreme Platform ONE™ and Fabric

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Executive Summary

As enterprise networks grow in complexity—driven by hybrid networking topologies, disparate endpoints, and relentless technological evolution—organizations face mounting challenges in maintaining efficiency, security, and agility. Extreme Platform ONE™ and Fabric address these challenges head-on by delivering unified, AI-powered networking solutions designed for modern enterprise demands.

Digital transformation and adoption of AI in business has increased enterprise network complexity and fueled demand for network services. Diverse and distributed users and devices, public and private cloud services, and AI workloads are leading to exponential traffic growth and demand for highly reliable and secure network services. At the same time enterprises are continuing to drive down the cost of network OpEx meaning that IT managers are forced to do more with less. ACG Research's perspective is that it is essential for enterprises to adopt network automation combined with AIOps or more advanced approaches such as 'AI for Networking' to:

- Simplify the operations of complex networks
- Accelerate the digital transformation journey
- Reduce network OpEx

This whitepaper examines how Extreme Platform ONE™ and Fabric simplify network operations, accelerate deployment, and reduce total cost of ownership (TCO) through centralized management, end-to-end automation, and robust security capabilities. By combining a single-pane-of-glass dashboard, intelligent troubleshooting, and policy-based provisioning with advanced fabric networking, enterprises can eliminate operational bottlenecks, reduce labor-intensive manual tasks, and scale securely across sites and users. The result is greater operational simplicity, faster time-to-value, and a measurable reduction in both risk and operational cost.

The results of our TCO analysis show a 5-Year cumulative TCO savings of 32% over a leading competitor primarily due to reduced labor expenses in the areas of:

- Network planning
- Security compliance management
- Configuration management
- Inventory and software license management
- Software upgrades

In our TCO analysis we assume that Extreme and the leading competitor have similar capabilities in AIOps for fault and performance management which is table stakes for current network deployments.

Introduction: The Evolving Complexity of Enterprise Networks

In today's digital landscape, enterprise networks face intense pressure from rapid technological change, increased security demands, and an increasingly distributed workforce. These evolving challenges are not isolated—each feed into and magnifies the complexity IT teams must manage daily. Understanding these dynamics is critical to appreciating the need for transformational solutions such as automation, unified management, and AI-powered optimization.

Escalating Network Complexity

Modern enterprise networks are no longer confined to static, on-premises environments. Key sources of complexity include:

- **Device Proliferation:** Enterprises now manage tens of thousands of endpoints, including IoT devices (ex. sensors, IP cameras) and mobile clients, each requiring secure, reliable connectivity.
- **Hybrid Topologies:** Networks frequently span on-premises sites, cloud, centralized data centers, remote branches, and remote access, all demanding consistent policy and management.

- **Protocol Sprawl:** The coexistence of legacy protocols alongside modern overlays (e.g., VXLAN, network fabric technologies) increases operational overhead and potential points of failure.

Rapid Technology Evolution

Emerging technologies continuously reshape the enterprise network paradigm:

- **Cloud Migration:** Core business applications, storage, and identity services are increasingly hosted in public, private, or multi-cloud environments, forcing networks to maintain seamless, high-performance interconnections.
- **Software-Defined Networking (SDN):** The move to programmable, policy-driven architectures enables agility but raises the bar for operational expertise.
- **AI and Automation:** While vital for addressing scale, these technologies require integration, and new skill sets to deliver on their promise.

Distributed Users and Workloads

Workforce expectations and business models have shifted profoundly:

- **Remote and Hybrid Work:** IT must securely connect remote employees—as well as third-party contractors—without compromising experience or exposing new vulnerabilities.
- **Edge Computing:** Data and applications increasingly run at the edge to improve performance, further decentralizing control and increasing the number of sites to manage.

Cloud Interconnections and Security

The proliferation of cloud connectivity introduces new operational and security challenges:

- **Dynamic Cloud Workloads:** Applications and data routinely move across cloud and on-premises boundaries, demanding adaptive connectivity and policy control.
- **Complex Security Posture:** As trust boundaries blur, consistent segmentation, identity-based access, and continuous compliance monitoring become essential to defend against escalating cyber threats.

The Operational Burden

Collectively, these factors strain traditional IT operations and drive up the cost of network management:

- **Manual Provisioning and Troubleshooting:** Growing complexity increases the risk and time needed for configuration, monitoring, and root-cause analysis.
- **Resource Constraints:** Skilled network personnel are increasingly scarce, making labor-intensive operations unsustainable.
- **Compliance and Auditing Pressure:** Frequent regulation changes and data privacy concerns require robust, automated enforcement and reporting.

In summary, modern enterprise networks are burdened by unprecedented technological diversity, operational scale, and security imperatives. Solutions that simplify operations, automate routine tasks, and unify management across environments are no longer optional—they are foundational to resilient, future-ready IT infrastructure.

Extreme Platform ONE™: Detailed Overview

Extreme Platform ONE™ is a unified, cloud-native network management platform designed to centralize and simplify network operations across diverse environments. Built by Extreme Networks, it enables IT teams to manage wired, wireless, and security infrastructure through a highly integrated, AI-powered workspace. Key architectural features and benefits include:

Unified Management and Visibility

- **Single Pane of Glass:** Platform ONE consolidates control of all Extreme devices—switches, access points, SD-WAN, ZTNA, & NAC—into one intuitive dashboard, eliminating the need for multiple management tools.
- **Multi-Tenant and Multi-Site Capabilities:** Designed natively for managed service providers (MSPs) and large enterprises, it supports isolation and central management of multiple organizations or business

units.

- **Comprehensive Topology Awareness:** The platform provides real-time, dynamic visualizations of network topology, device health, and application flows for rapid assessment and troubleshooting.

AI-powered Automation

- **Automated Troubleshooting and Event Correlation:** Platform ONE leverages AI to continuously monitor for anomalies, auto-diagnose faults, and suggest or apply remediations—reducing need for manual intervention by IT teams.
- **Predictive Analytics:** Machine learning & AI models anticipate operational issues (e.g., congestion, device failures) and recommend preventive actions for faster, more proactive management.
- **Policy-Driven Configurations:** Network and security policies can be enforced automatically across the entire infrastructure, accelerating onboarding and compliance.

Security and Compliance

- **Built-In Microsegmentation:** The platform automates network segmentation and policy enforcement—improving lateral traffic control and reducing the blast radius of potential threats.
- **Zero-Trust Principles:** Identity-based access and continuous monitoring help secure dynamic, distributed environments.
- **Automated Compliance Reporting:** Simplifies audit preparation with standardized reporting and real-time status visualization.

Deployment and Operations

- **Cloud-Native Architecture:** Designed for scalability, high availability, and seamless updates—whether managing on-premises or hybrid cloud deployments.
- **Edge-Only Provisioning:** Only edge devices need to be specifically configured; middle/core devices learn and adapt automatically, further reducing operational overhead.
- **Zero-Touch Provisioning:** Supports rapid deployment with minimal hands-on effort, including plug-and-play device onboarding

Extreme Fabric: Detailed Overview

Extreme Fabric is an advanced, unified networking architecture that leverages standards-based Shortest Path Bridging (SPB). It interconnects campuses, data centers, branches, and distributed sites within a single, seamless fabric.

Fundamental Properties

- **Single Control Protocol (IS-IS):** Replaces multiple legacy protocols with a unified, link-state control plane that supports both Layer 2 and Layer 3 connectivity—reducing protocol complexity and risk of misconfiguration.
- **Microsegmentation and Service Virtualization:** Dynamic virtual networks isolate traffic, users, and applications via microsegmentation, boosting both security and operational agility.
- **Automated Path Optimization:** Utilizes IS-IS to automatically select the shortest, fastest path for every packet, avoiding network loops and maximizing available bandwidth.

Key Functions

- **Edge-Only Service Provisioning:** VLANs and network segments are provisioned at the network edge, while the core automatically establishes optimal forwarding paths—with no manual core configuration required.
- **MAC-in-MAC Encapsulation:** Customer traffic is encapsulated, hiding endpoint details from the core and increasing both privacy and security.
- **Seamless Support for Wired & Wireless:** Fabric architecture extends uniformly across switches, fabric-aware access points, devices and 3rd party endpoints.

Automation and Scalability

- **Zero-Touch Service Instantiation:** New services and endpoints are detected and integrated into the fabric automatically, reducing time-to-service and risk of error.
- **Scalable Across Sites:** Fabric design supports large multi-site and multi-tenant networks, making it ideal for growing enterprises and service providers.

A summary of the benefits of Extreme Platform ONE™ and Fabric are provided in Table 1.

Benefit Category	Platform ONE Features	Fabric Features
Centralized Ops	Single dashboard, unified control of all devices	Seamless management across campuses, data centers, and branches
Automation	AI-powered troubleshooting, predictive analytics, self-healing	Edge-only provisioning, auto-optimized core, zero-touch service creation
Security	Automated micro segmentation, identity-based access, compliance automation	Dynamic segmentation, MAC-in-MAC privacy
Scalability	Multi-tenant, multi-site, and hybrid cloud capabilities	Scales from small sites to global networks, multi-tenant core
Rapid Deployment	Zero-touch provisioning, policy templates	Automated endpoint detection/onboarding
Operational Simplicity	Policy-based provisioning, single point of control, monitoring & visualization for fabric	No legacy protocol tuning, eliminates Spanning Tree loops
Reduced TCO	Streamlined operations, lower labor costs, fewer manual tasks	Reduces risk, error, and hands-on management at scale

Table 1: Core Benefits of Platform ONE and Fabric

Summary of Benefits

Extreme Platform ONE™ and Extreme Fabric together deliver:

- **Radical simplification of network operations through** unified, AI-powered management and automation.
- **Stronger security** via automated microsegmentation, continuous monitoring, and dynamic policy enforcement.
- **Faster, error-free deployments** with zero-touch, edge-only provisioning and automated service creation.
- **Scalable, resilient infrastructure** that adapts to business growth, technology changes, and remote/hybrid workforce demands.
- **Dramatic labor and cost savings**, as shown in enterprise TCO analyses, by eliminating routine manual work and accelerating problem resolution.

These innovations empower organizations to focus less on network maintenance and more on supporting strategic digital initiatives.

How Platform ONE and Fabric Enable Labor Savings

1. AI-powered Automation & Agentic AI Workflows

- Automated troubleshooting, remediation, and event correlation reduces manual help desk and NOC workload (e.g., Service Agent).
- Policy-driven configuration and compliance enforcement lowers need for repetitive network re-provisioning.
- Predictive analytics to preemptively identify and resolve issues.

2. Edge-Only Provisioning & Fabric Simplicity

- Services are provisioned only at the edge; the core is self-learning and auto-optimizing.
- Elimination of legacy protocols (e.g., Spanning Tree) minimizes manual tuning and troubleshooting.
- Centralized license and inventory management.

3. Unified Management & Single-Pane-of-Glass

- All Extreme devices (wired, wireless, fabric, security) are visible and controllable from a single UI, saving coordination effort.
- Role-based access and policy templates speed up configuration.

4. Automated Security & Compliance

- Built-in microsegmentation and dynamic virtual networks automate segmentation enforcement.
- AI-powered compliance management streamlines audits, monitoring, and remedial actions.

5. Simplified Upgrades and Change Management

- Automated and orchestrated software/firmware updates reduce manual interventions and reduce risk.
- Change validation via intelligent analytics.

Network TCO Model Assumptions

To quantify the benefits of Extreme Platform ONE™ and Fabric we have used a TCO model to compare three scenarios for different size networks:

- Small network
- Medium network
- Large network

The number of sites, access points, and switches for each of the three scenarios is presented in Table 2, Table 3, and Table 4.

Network Dimensions	Number of sites	Access Points per site	Switches per site	Total APs	Total Switches
Small Site	5	5	1	25	5
Medium Site	2	30	4	60	8
Totals				85	13

Table 2: Small network dimensions

Network Dimensions	Number of sites	Access Points per site	Switches per site	Total APs	Total Switches
Small Site	100	5	1	500	100
Medium Site	20	30	4	600	80
Large Site	2	250	20	500	40
Totals				1600	220

Table 3: Medium network dimensions

Network Dimensions	Number of sites	Access Points per site	Switches per site	Total APs	Total Switches
Small Site	500	5	1	2500	500
Medium Site	100	30	4	3000	400
Large Site	5	250	20	1250	100
X-Large Site	2	1000	100	2000	200
Totals				8750	1200

Table 4: Large network dimensions

In each of the scenarios we compare an Extreme enterprise wired and wireless network with a similar network from a leading competitor. The expenses considered in the TCO model are:

- Network equipment and software CapEx
- Network labor OpEx

We use competitive pricing assumptions to compare the cost of hardware and software for both Extreme and a leading competitor. The Extreme assumptions include the software expenses for Platform ONE. Extreme Fabric is included at no cost on supported Extreme switch models, however, for the competitor we include the software expenses of an equivalent to Extreme Fabric.

The main drivers of TCO savings are due to reducing labor with Platform ONE and Fabric. We consider the following task categories for labor expenses: planning, security compliance, configuration, inventory management, help desk, fault management, and software upgrades. Assumptions for the annual labor hours per access point and switch are provided in Table 5. In our comparison we assume that the leading competitor is using AIOps effectively for help desk, fault, and performance management labor reduction. Therefore, we assume there are no labor savings in these categories with the Extreme solution. However, Platform ONE provides many additional benefits in the areas of planning, security compliance management, configuration management, and inventory and software license management which reduce labor by up to 80%.

Labour	Annual Hours per AP	Annual Hours per Switch	Platform ONE Reduction in Labor
Planning	1	2	80%
Security compliance management	1	3	80%
Configuration management	0.5	1	80%
Inventory & software license management	0.5	1	80%
Help desk trouble tickets	2	2	0%
Fault & Performance management	3	2	0%
Software upgrades	0.5	1.5	20%

Table 5: Labor category assumptions

Assumptions for fully loaded labor expenses are provided in Table 6. Planning and security compliance have higher labor expenses due to higher skill levels than other areas. Help desk labor is lower than engineering labor.

Labour Categories	Annual Cost
Planning	\$180,000.00
Security compliance management	\$200,000.00
Configuration management	\$120,000.00
Inventory & software license management	\$120,000.00
Help desk trouble tickets	\$50,000.00
Fault & Performance management	\$120,000.00
Software upgrades	\$120,000.00

Table 6: Fully loaded labor expenses

Network TCO Results – Small Network

The TCO results for the small network scenario are presented in Table 7, Figure 1, and Figure 2.

	Competitor	Extreme	Dollar Savings	Savings
Cum CAPEX	\$221,355	\$182,355	\$39,000	18%
Cum OPEX	\$293,679	\$166,833	\$126,846	43%
Cum TCO	\$515,034	\$349,188	\$165,846	32%

Table 7: 5-Year Cumulative TCO comparison of Extreme with a leading competitor in a small network

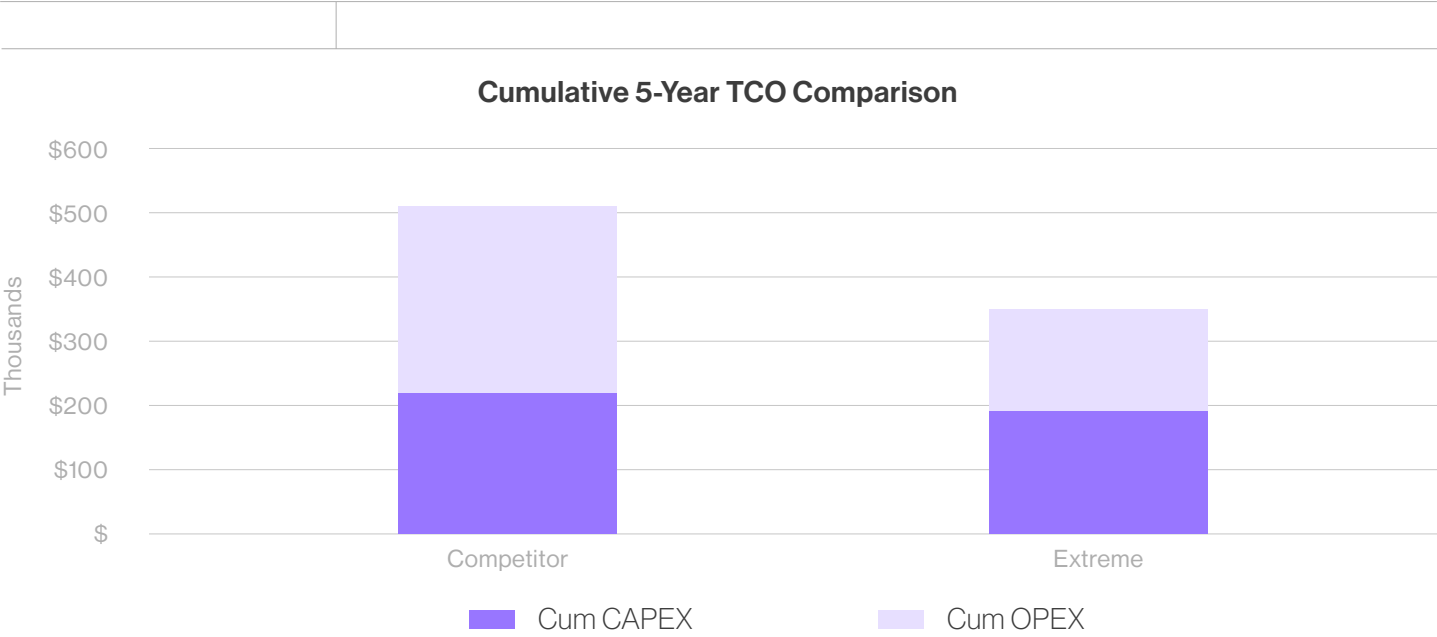


Figure 1: 5-Year Cumulative TCO comparison of Extreme with a leading competitor in a small network

The breakdown of labor savings presents a comparison of total labor expenses over five years between Extreme Networks and a leading competitor across various operational categories typical in enterprise wired and wireless network environments. The largest areas of savings are security compliance, planning, configuration management, and inventory and license management.

5 Year Cumulative Labor Expense Comparison

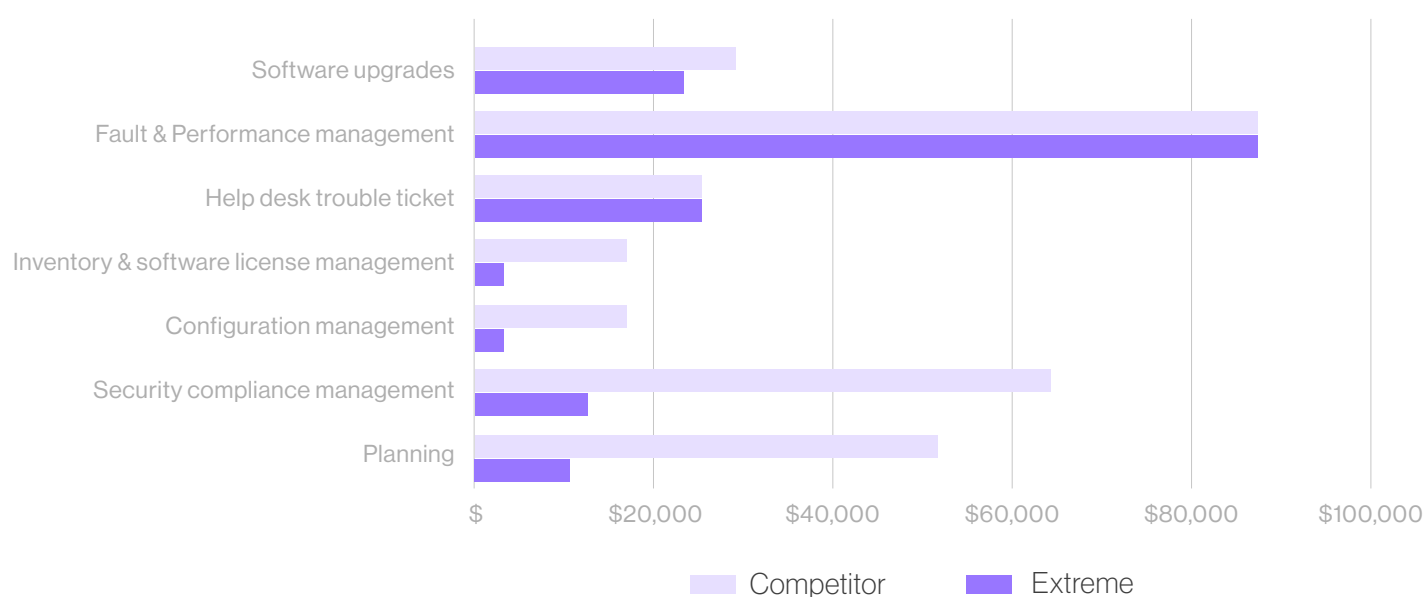


Figure 2: 5-Year Cumulative TCO breakdown of the OpEx comparison in a small network

Network TCO Results – Medium Network

The TCO results for the medium network scenario are presented in Table 8, Figure 3, and Figure 4.

	Competitor	Extreme	Dollar Savings	Savings
Cum CAPEX	\$3,913,200	\$3,253,200	\$660,000	17%
Cum OPEX	\$5,411,635	\$3,089,179	\$2,322,457	43%
Cum TCO	\$9,324,835	\$6,342,379	\$2,982,457	32%

Table 8: 5-Year Cumulative TCO comparison of Extreme with a leading competitor in a medium network

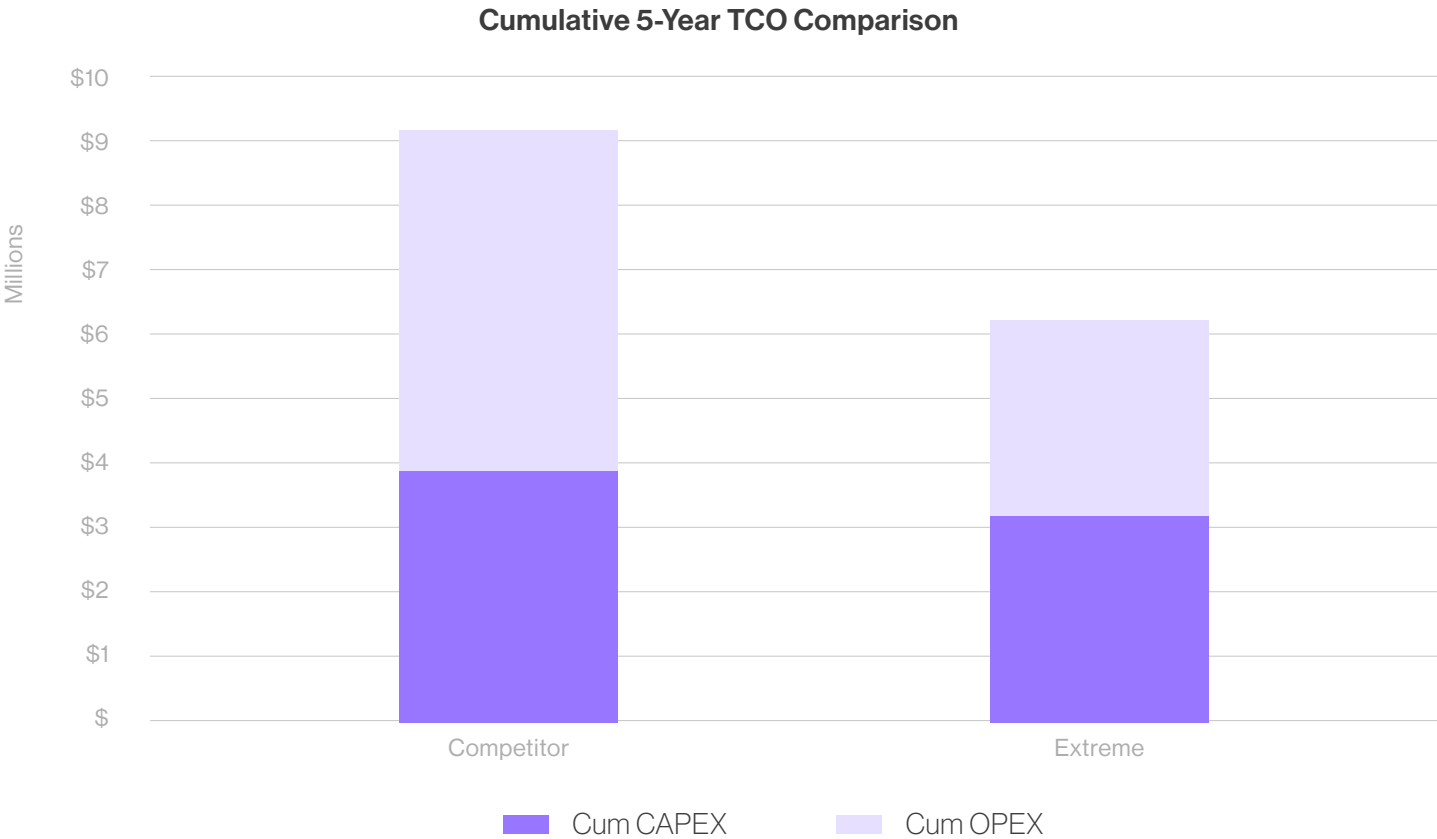


Figure 3: 5-Year Cumulative TCO comparison of Extreme with a leading competitor in a medium network

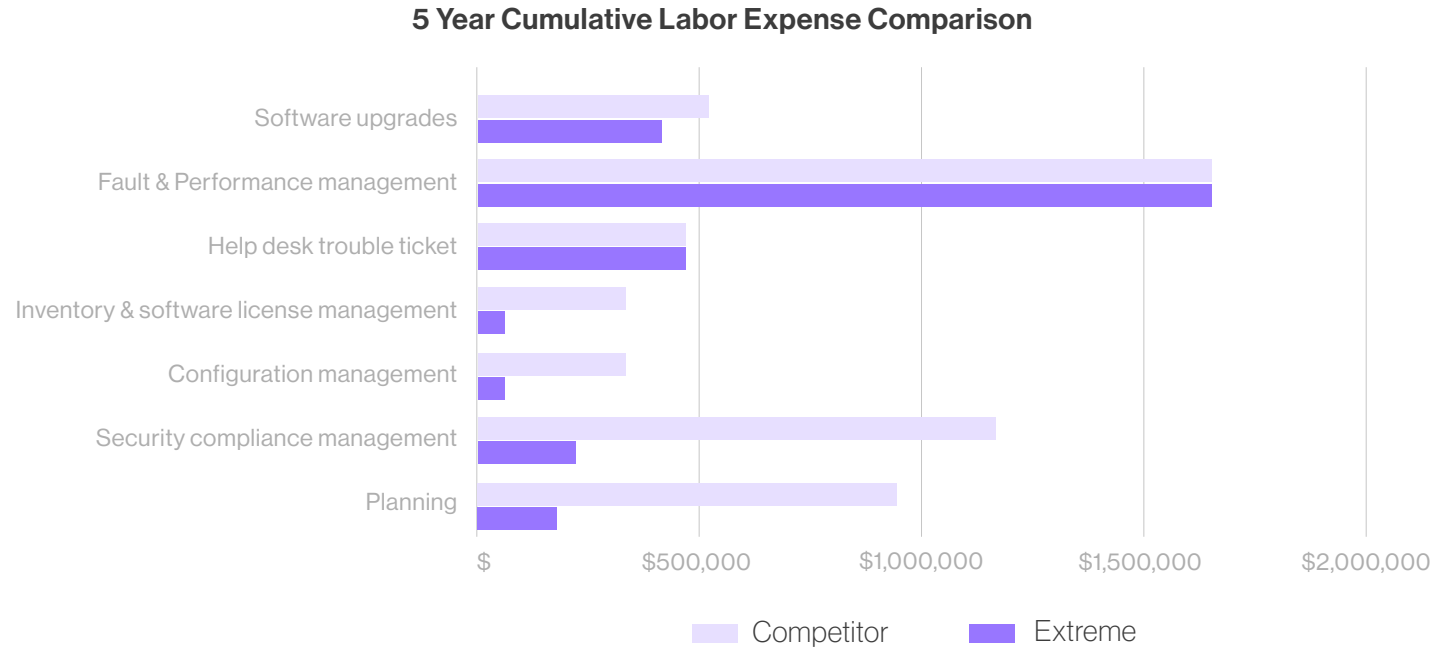


Figure 4: 5-Year Cumulative TCO breakdown of the OpEx comparison in a medium network

Network TCO Results – Large Network

The TCO results for the large network scenario are presented in Table 9, Figure 5, and Figure 6.

	Competitor	Extreme	Dollar Savings	Savings
Cum CAPEX	\$21,368,250	\$17,768,250	\$3,600,000	17%
Cum OPEX	\$29,580,152	\$16,887,469	\$12,692,683	43%
Cum TCO	\$50,948,402	\$34,655,719	\$16,292,683	32%

Table 9: 5-Year Cumulative TCO comparison of Extreme with a leading competitor in a large network

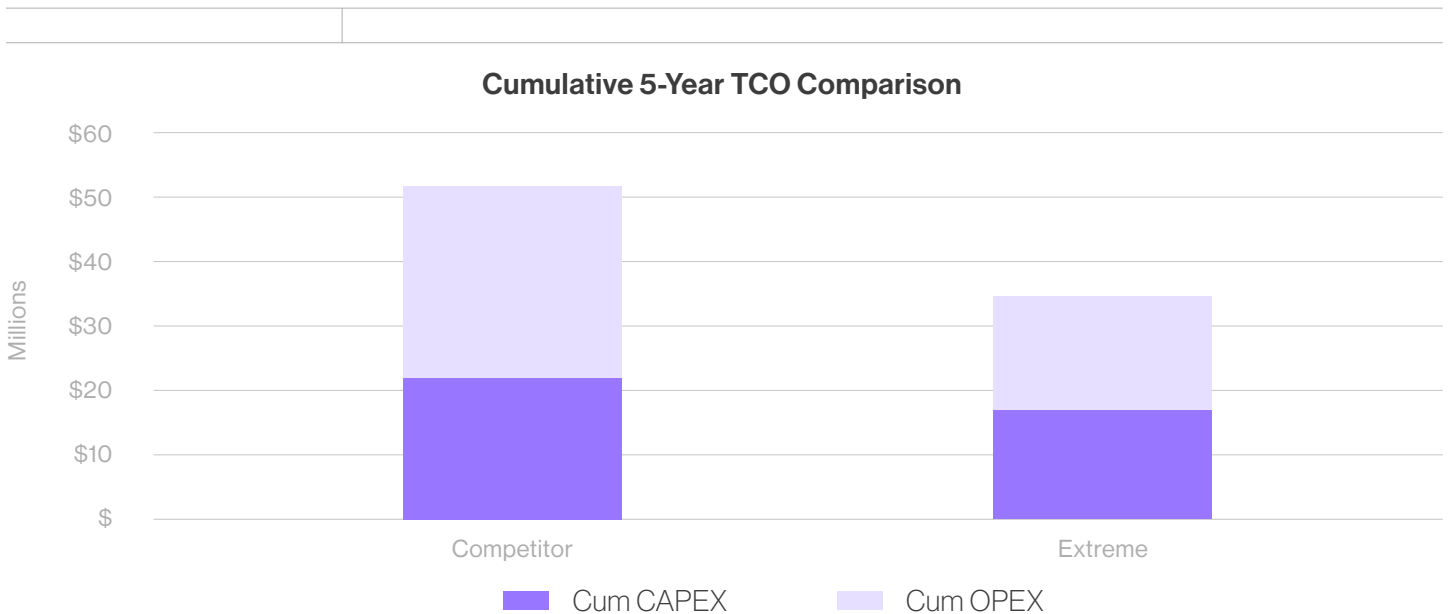


Figure 5: 5-Year Cumulative TCO comparison of Extreme with a leading competitor in a large network

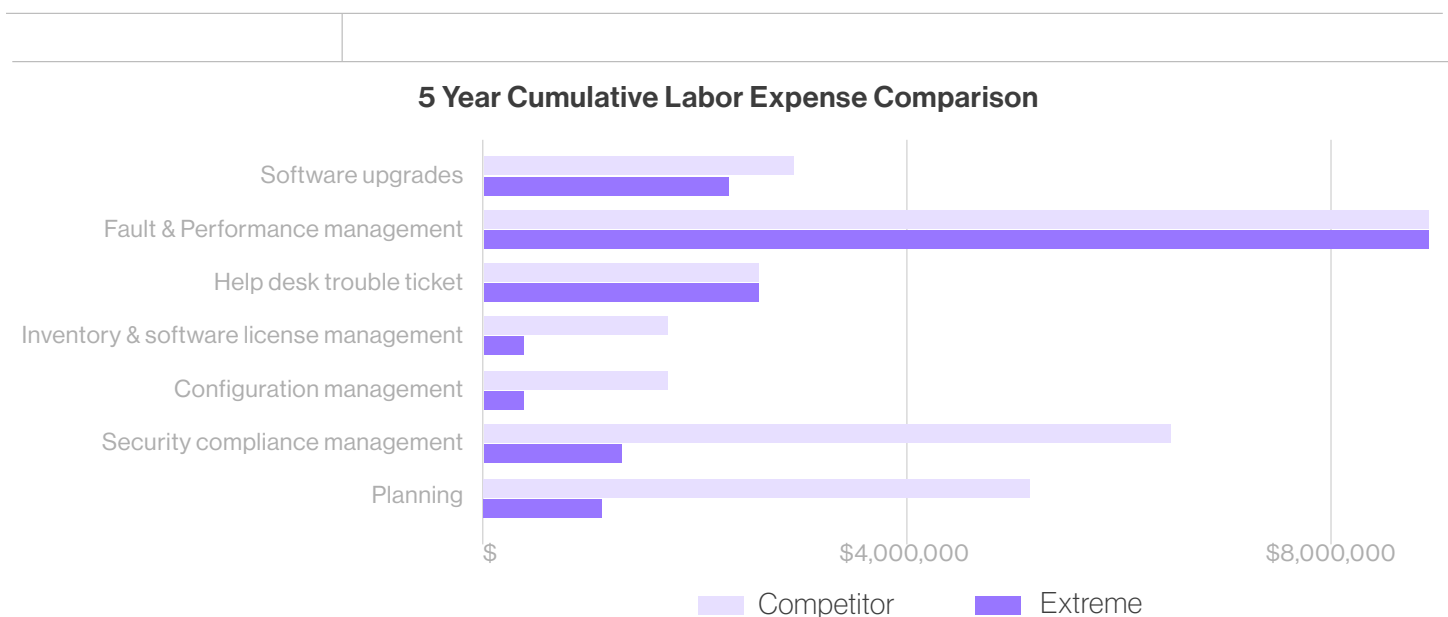


Figure 6: 5-Year Cumulative TCO breakdown of the OpEx comparison in a large network

Summary of Results

In each of the scenarios the AIOps benefits of Platform ONE and the network management benefits of Fabric result in an overall TCO savings of 32%. This savings is primarily driven by labor savings. There are small differences in CapEx due to the fact the Extreme Fabric is offered free of charge as compared to competitors that charge for similar products.

Key Insights

- **Fault & Performance Management**

This is by far the highest category for labor costs but both Extreme and the leading competitor have comparable AIOps capabilities in fault and performance management.

- **Security Compliance Management and Planning**

The competitor's labor costs in "Security Compliance Management" and "Planning" are substantially higher than Extreme's. This is a result of Platform ONE advantages in this area.

- **Software Upgrades, Inventory & License Management, and Configuration Management**

In these operational tasks, Extreme consistently shows lower labor costs. The most dramatic cost difference is seen in "Inventory & Software License Management" and "Configuration Management," where Extreme's expenses are only a fraction of the competitors. This is due to Platform ONE's AI Expert, AI Canvas, and agentic AI automation capabilities.

- **Help Desk Trouble Tickets**

Labor costs are similar between the two, indicating that both vendors provide comparably efficient solutions for end-user support and troubleshooting.

Conclusion

Enterprises can no longer rely on legacy networking practices to meet the dynamic challenges of today's digital-first environment. Extreme Platform ONE™ and Fabric provide a cohesive solution that transforms network infrastructure from a source of complexity into a driver of agility and value. With automated provisioning, unified management, and security built into the fabric of their operations, organizations can focus IT resources on innovation rather than maintenance.

By adopting Extreme's next-generation networking platforms, enterprises achieve not only significant economic benefits—such as lower TCO and streamlined operations—but also improve user experience, security posture, and scalability. The path forward for IT leaders is clear: Embracing AI-powered automation and unified management through solutions like Extreme Platform ONE™ and Fabric is essential for sustaining competitive advantage in an increasingly connected world.

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