

Highlights

Automation From Edge to Data Center in One Single-Pane-of-Glass

- Manage your network with automation from a single pane of glass across virtualized and cloud environments
- Bring new service online fast and reduce human error through built-in fabric provisioning
- Free up IT time to drive innovation with integrated cross domain workflow automation and automated device onboarding

Deep Visibility for Data-Driven Decisions and Fast Issue Resolution

- Get in depth visibility of users, end-devices, and applications across physical and virtual machine (VM) traffic through our Virtual Application
- Get business insights into the performance of applications and the network through streaming application telemetry and deep packet inspection
- Mitigate shadow IT and malicious applications with detailed views of workloads in physical and virtual environments

Granular Control to Strengthen Security and Compliance

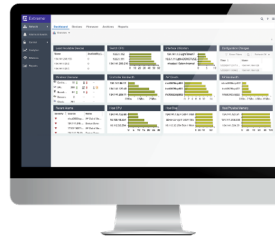
- Automatically roll-out consistent policies and automated configuration and compliance monitoring for users and devices
- Enables secure IoT access with real-time policies based on the security posture of IoT devices.
- Integrate with existing security applications such as firewalls, MDMs, endpoint security, for rapid and automated mitigation actions



ExtremeControl



ExtremeAnalytics



ExtremeManagement



Information Governance Engine

Extreme Management Center™

A better way to manage your complex network from the network edge to the data center.

The network edge is where your organization engages customers and where IoT devices connect. We integrated Extreme Management Center with our [Smart OmniEdge](#) solution, so you can deliver customer-driven experiences.

The enterprise campus has become one of the most vexing environments in which to manage IT. You need to rapidly onboard BYOD users and Internet connected devices, quickly deploy the new digital technology that your organization requires, prevent cyber-attacks at every entry point, and do it all while delivering a consistent and personalized user experience. Our [Automated Campus](#) solution makes it all possible with simplicity, security, and intelligence that are second to none.

High levels of virtualization, containerization and cloud environments, combined with enormous traffic, limit visibility in the modern data center. In addition, most data centers face challenges adapting to rapid business changes and virtual environments. Most customers have also grown tired of vendor lock-in and want an open flexible environment.

Here Extreme Management Center, part of our [Agile Data Center](#) Networking solution, provides a pragmatic path to automation based on multi-vendor architectures. It gives you the granular visibility and real-time analytics, to make data-based business decisions. Our SLX switches and routers are managed by Extreme Management Center through a single pane of glass, which reduces data center administration and offers you the full view of the network, enables embedded data center fabric automation and delivers cross domain automation with our Workflow Composer.

Our Extreme Management Center offers you all you need for data-driven insights, visibility and control with one view from the network edge to the data center. We give you the choice of hardware appliance or virtual appliance, to meet your IT infrastructure needs. Our Professional Services can help you design, deploy and optimize your network, and provide customized technical training and support tailored to your specific needs.

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The Extreme Management Center comprises the following applications:

Extreme Management Center

ExtremeControl	ExtremeAnalytics	ExtremeManagement	Information Governance Engine	ExtremeConnect
Granular policy control	Actionable business insights	Orchestration and automation	Automated configuration compliance	Integration with VMware, GCP, MS Azure, AWS, OpenStack, Security, etc.
Secure access for users and IoT devices	Network and application performance	Security with hyper-segments	Automate compliance reporting	Open API – Build your own integrations
Easy, secure onboarding	Security and forensics	Integrated workflows	GDPR, HIPAA, PCI	

ExtremeManagement™

Unified View of Users, Devices and Applications

ExtremeManagement offers a single pane of glass for your wired and wireless network - edge to data center. Zero touch provisioning (ZTP+) lets you quickly bring new infrastructure online. Together with our ExtremeControl it lets you unify the security of your wired and wireless networks with in-depth visibility and control. A granular view of users, devices and applications with an easy to understand dashboard lets you manage inventory and network topology efficiently. Policies and new services such as BYOD can be enabled through the integrated interface of ExtremeManagement and enforced at the network point of entry through ExtremeControl.

Extreme Management Center extends automation from the wireless edge to the datacenter and across devices of different vendors, so that you don't need to rip out any hardware when deploying our applications. To enhance managing these 3rd party devices, our dashboard shows their topology and discovery.

We help you decrease your time to service with powerful fabric provisioning built right in. To free up IT time and avoid human error we are offering cross domain workflow

automation. Canned workflows for our SLX and VDX switching and routing platforms automate onboarding these devices in your datacenter. Through the entire network, our applications help you stay compliant with industry standards through automated configuration and compliance monitoring.

Our EXOS switches can be set up as a stack with ZTP+ which enables easy deployment and reduces deployment time.

ExtremeControl™

Security Through Visibility and Control

Unify the security of your wired and wireless networks with in-depth visibility and control over users, devices and applications. ExtremeControl delivers granular policy controls that enable you to comply to policies and compliance obligations including heterogeneous endpoint environments. Locate, authenticate and apply targeted policies to users and devices as they can easily onboard to the network for secure BYOD, guest access and IoT, all through a single integrated user interface.

Learn more about [ExtremeControl](#).

ExtremeAnalytics™

Insights into Network and Application Performance

Get actionable business insights from your end-to-end network with granular details into the performance of applications and the network through application telemetry and deep packet inspection (DPI). This application speeds up troubleshooting by separating network from application performance so you can quickly identify root-causes. It monitors shadow IT, identifies and reports malicious or unwanted applications, and helps with security compliance.

Our ExtremeAnalytics Virtual Analytics Sensor extends application visibility from physical to virtual environments. It eliminates virtualization blind spots with visibility and application performance measurements between VMs on the same host or across hosts on a VMWare virtualized data center. With deep packet inspection, you can see and analyze network traffic across multiple layers for real-time accurate information analysis.

Additionally, integration with AWS, MS Azure and GCP provides a unique capability of a single analytics toolset that covers campus, data center and cloud instances.

Learn more about [ExtremeAnalytics](#).

ExtremeConnect™

Ecosystem Integration Platform

Management Center is integrated with key enterprise platforms to streamline your business processes, enable more robust data analysis and deliver seamless user experiences. ExtremeConnect offers integration with major enterprise platforms for network security, mobile management, analytics, cloud and data center solutions. Extreme Management Center is integrated into the datacenter with SLX end-point tracking and integration with VMware vCenter and vSwitch, as well as Distributed Virtual Switches. It offers visibility and policy provisioning for AWS, MS Azure and GCP.

In addition, we offer a comprehensive suite of open APIs from our network infrastructure portfolio of switches and wireless APs. This includes the classic integration methods like SNMP, Syslog and more efficient integration methods like REST-based APIs (currently under development).

Customers that are using our Extreme Management Center can take advantage of ExtremeConnect to automate day-to-day operations with integrations with third party services like security, mobile device management, analytics, etc. See a list of our Extreme Technology Partners.

Information Governance Engine

Reduce risk and ensure your network configurations comply to HIPAA, PCI and GDPR with our fully automated Information Governance Engine that analyses and assesses network configurations to help determine your compliance readiness across your wired and wireless network.

Appliance Options

Hardware Appliance Options

The following versions of Extreme Management Center Appliances are designed and tested end-to-end to ensure compatibility and performance for different size requirements:

- NMS-A-25 version supporting up to 5,000 managed devices.
- NMS-A-305 version supporting up to 10,000 managed devices.

Virtual Appliance Options

The Extreme Management Center virtual appliances must be deployed on a VMWare or Hyper-V server with a disk format of VHDX.

- The VMWare Management Center virtual engines are packaged in the .OVA file format (defined by VMware).
- The Hyper-V Management Center virtual engines are packaged in the .ZIP file format. Refer to the Release Notes for information on Virtual Appliance scalability.

Note: For ExtremeControl and ExtremeAnalytics Hardware and Virtual Appliance requirements, please refer to respective data sheets.

Hardware Appliance Specifications

Category	NMS-A-25 (86100)	NMS-A-305 (86101)
Appliance Specifications		
Storage	480GB Enterprise SSD	960GB Enterprise SSD
Networking	2 x 1GbE	2 x 1GbE
Graphic Ports	Front VGA, Rear VGA	Front VGA, Rear VGA
Serial	RJ45	RJ45
USB	2 x Front, 3 x Rear	2 x Front, 3 x Rear
TPM Version 2.0	Yes	Yes
Appliance Scale Number	Unrestricted	NMS-ADV-U
Maximum APs	12,500	25,000
Maximum Wireless MUs	50,000	100,000
Maximum Managed Devices	5,000	10,000
Access Control End-System	100,000	200,000
Statistics Retention (Days)	180	180
Power Specifications		
Power	750W 80+ Platinum Hot Pluggable	750W 80+ Platinum Hot Pluggable
Power Supply Type	AC Redundant	AC Redundant
AC Input Voltage	90V to 132V and 180V to 264V	90V to 132V and 180V to 264V
AC Input Frequency	47Hz to 63Hz	47Hz to 63Hz
Physical		
Rackmount	1U Rack	1U Rack
Dimensions (WxDxH)	16.93"x27.95"x1.72"	16.93"x27.95"x1.72"
Weight	29 lb. (13.15kg) Max.	29 lb. (13.15kg) Max.
Shipping	-40°C to 70°C (-40°F to 158°F)	-40°C to 70°C (-40°F to 158°F)
Humidity (Shipping)	50% to 90%, non-condensing with a maximum wet bulb of 28°C (at temperatures from 25°C to 35°C)	50% to 90%, non-condensing with a maximum wet bulb of 28°C (at temperatures from 25°C to 35°C)
Vibration (Unpackaged)	5Hz to 500Hz 2.20 g RMS Random	5Hz to 500Hz 2.20 g RMS Random
Warranty		
Hardware	1 Year Parts and Labor	1 Year Parts and Labor

System Requirements

Operating Systems

- Windows 64-bit (qualified on the English version of the operating systems)
- Windows Server® 2008 Enterprise (64-bit only) and 2008 R2
- Windows Server® 2012 Enterprise (64-bit only) and 2012 R2 Windows® 8 and 8.1 (64-bit only)
- Linux 64-bit
- Red Hat Enterprise Linux WS and ES v6 and v7 SuSE Linux versions 10, 11, and 12.3 (64-bit only)
- Ubuntu 11.10, 12.04, and 13.04 (64-bit only)
- VMware® (64-bit Management Center Virtual Appliance) VMware ESXi™ 5.1, 5.5, 6.0 or 6.5 server
- Hyper-V (64-bit Management Center Virtual Appliance) Hyper-V virtual appliances are supported on Windows Server
- 2012 R2 running Hyper-V Server 2012, 2016

Supported Web Browsers

- Microsoft Edge and Internet Explorer version 11
- Mozilla Firefox 34 and later
- Google Chrome 33.0 and later

Standards Compliance: Regulatory/Safety

- UL60950-1 - 2nd edition - CSA C22.2 No.60950-1-07 + A1:2011 (USA/Canada)
- EN60950-1: 2006 + A1: 2010 + A11: 2009 + A12: 2011 (Europe)
- IEC60950-1 2nd edition (International)
- CE - Low Voltage Directive 2014/35/EU (Europe)

Emissions/Immunity

- CE EMC Directive 2014/30/EU (Europe) (International)
- FCC, 47 CFR Part 15/ICES-003 - Emissions (USA/Canada)
- CISPR 32: 2012 +AC: 2013 - Emissions (International)
- EN55022: 2010 +AC: 2011 - Emissions (Europe)

Emissions/Immunity (cont.)

- EN55024: 2010 - Immunity (Europe) (International)
- EN61000-3-2 - Harmonics (Europe) (International)
- EN61000-3-3 - Voltage Flicker (Europe) (International)
- VCCI Emissions (Japan)
- AS/NZS 3548 Emissions (Australia/New Zealand)
- BSMI CNS13438 CNS14266 Class A (Taiwan)
- KCC Class A KN-22/KN-24 Certification (Korea)

Ordering Information

Extreme Management Center provides cost-efficient choices enabling enterprises to address their priorities, optimize their budget and demonstrate quick time-to-value. Management Center models range from a cost-efficient entry solution to full functionality for device intensive enterprises as well as a subscription-based licensing model for full functionality scaled to the size of your network. Flexible upgrade options support business growth.

Extreme Management Center can be ordered on a per device basis. To simplify ordering for customers that use third-party network management software we offer per-user pricing for ExtremeControl and ExtremeAnalytics.

Per-User Subscription Pricing

ExtremeControl (97207-27001)

Includes unlimited number of end-system licenses up to performance limit and ExtremeWorks for these licenses, priced per user per year.

ExtremeAnalytics (97208-27001)

Includes unlimited number of end-system and flows per minute licenses up to performance limit and ExtremeWorks for these licenses, priced per user per year.

Note: Per-user subscription pricing does not include sensor and any other hardware appliance

Per-Device Pricing

Extreme Management Center

A subscription model including all of NMS-ADV- XX, unrestricted ExtremeControl end-system licenses up to performance limits, unrestricted ExtremeAnalytics flow licenses up to performance limits, ExtremeWireless RADAR, ExtremeWireless AP capacity upgrades for controllers up to performance limits, and ExtremeWorks for these products. This part requires the associated per device service parts 97201-27001, 97202-27001 and/or 97203-27001.

Part Number	Description
86100	Extreme Management Appliance -NMS-A-25, manages up to 5K devices.
86101	Extreme Management Appliance -NMS-A-305, manages up to 10K devices.

NMS-BASE-XX

Includes basic wired/wireless management features as well as inventory management policy management, and basic user interface. 3 remote client connections are included.

NMS-XX

Includes basic wired and wireless management features as well as inventory management, policy management, access control management and virtual appliances (requires ES licenses), and the full featured user interface. 50 remote client connections are included.

NMS-ADV-XX

Includes basic wired and wireless management features as well as inventory management, policy management, access control management, and the full featured interface.

In addition, Management Center Advanced includes advanced wireless management, with triangulated location, location tracking, wireless coverage maps and other advanced mapping functionality, the Connect API, ability to install on a primary server, redundant server and lab server, a 500 end-system license for Access Control, and virtual Access Control appliances for full Access Control deployment flexibility (require end-system licenses if needed in addition to the 500 included), 3000 flows per Minute Application Analytics license and Application Analytics virtual engines, 100 remote clients are included.

Warranty

As a customer-centric company, Extreme Networks is committed to providing quality products and solutions. In the event that one of our products fails due to a defect, we have developed a comprehensive warranty that protects you and provides a simple way to get your product repaired or media replaced as soon as possible.

The Management Center appliance comes with a one year warranty against manufacturing defects. Software warranties are ninety (90) days and cover defects in media only. For full warranty terms and conditions please go to:

<http://www.extremenetworks.com/support/policies>

Service and Support

Extreme Networks provides comprehensive service offerings that range from Professional Services to design, deploy and optimize customer networks, customized technical training, to service and support tailored to individual customer needs. Please contact your Extreme Networks account executive for more information about Extreme Networks Service and Support.

Additional Information

For additional technical information on Management Center, visit the [Extreme Management Center](#) page.



<http://www.extremenetworks.com/contact>

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