

Highlights

Deliver a Superior User Experience

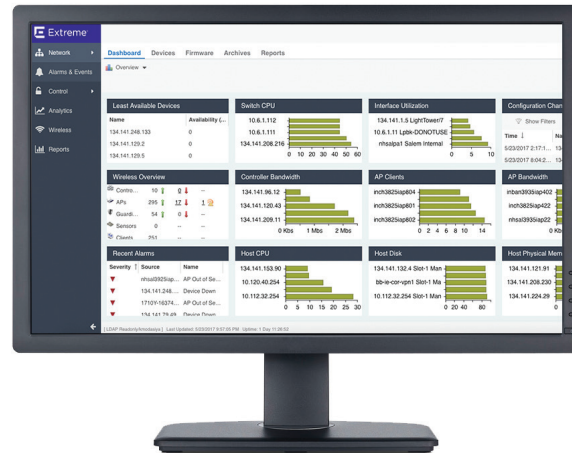
- Mitigate performance issues quickly with data-driven insights into network and application performance across your wired and wireless network
- Monitor user experience by correlating network and application performance with user and device activities
- Track user adoption and usage of applications to make the right business decisions

Increase Operational Efficiency

- Manage your entire network securely and efficiently from a single pane of glass that integrates automation, visibility and control
- Increase time-to-value with Zero Touch Provisioning + (ZTP+)
- Optimize workflows with flexible groupings and filtering for reporting and large scale editing

Keep Your Network Secure

- Make real-time decisions based on actionable data from the network about policies, devices, applications and people
- Easily enforce policies across the entire infrastructure for QoS and bandwidth
- Reduce the risk of implementing new technologies such as BYOD and IoT with fully automated policy setting and testing



Extreme Management Center

Insights, Visibility and Control for Superior Quality of User Experience

Your organization is changing fast, so is your network. You need to implement new technologies to drive new business outcomes while limiting operational expenses. Imagine an IT team that focuses on innovative and revenue generating activities such as new IoT implementations and still keeps the network safe. Delivers superior application experiences to staff, partners and customers.

Our Extreme Management Center was designed, so your network can support your business objectives.

It empowers you to deliver a superior quality of experience to your end-users through a single pane of glass. It works across your wired and wireless network, from the edge to the private cloud.

Our Extreme Management Center provides a true 360 degree view of your wired and wireless network, users, devices and applications with context and scale through integrated management, analytics and policy. It is designed to give you granular insights, visibility and automated control across your networks, while taking advantage of enhanced capabilities in convergence with our Identity Engines portfolio. Extreme Management Center supports Ethernet Routing Switches and our Virtual Services Platforms that lets you leverage unique virtualization technologies for real-time service agility.

With Extreme Management Center, you can distinguish network from application performance and correlate with user and device activities to troubleshoot issues fast. Actionable insights from the network let you make real-time decisions on policies, devices, applications and people. This way, the implementation of new technologies such as IoT can be automated and securely executed.

The Extreme Management Center gives 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.

Extreme Management Center

A Single Pane of Glass For Your Wired and Wireless Network - From Datacenter to Edge

Our Extreme Management Center offers you all you need to get data-driven insights, visibility and control into your wired and wireless network. It comprises the following product components that are all tightly integrated into one single pane of glass.

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 connect to the network for secure BYOD, guest access and IoT, all through a single integrated user interface. Get more information on [ExtremeControl](#).

ExtremeAnalytics

Insights into Network and Application Performance

Get actionable business insights from your end-to-end network with our ExtremeAnalytics. Our solution 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 assesses security compliance. Get more information on [ExtremeAnalytics](#).

ExtremeManagement

Unified View of Users, Devices and Applications

ExtremeManagement offers a single pane of glass for your wired and wireless network - datacenter to edge. Zero touch provisioning 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. Get more information on [ExtremeManagement](#).

ExtremeConnect

Ecosystem Integration Platform

Our Extreme 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 datacenter solutions. See a list of our [Extreme Technology Partners](#).

In addition, we offer a comprehensive suite of open APIs from our network infrastructure portfolio of switches and wireless access points. This includes the classical 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 through open APIs and integrate with 3rd party services like security, mobile device management, analytics, etc. ExtremeConnect offers an open northbound API for customized integrations. Our open APIs are REST-based interfaces both at the network element level and at the system level. For ExtremeAnalytics we support highly efficient real-time telemetry interfaces like IPFIX, Netflow, SFLOW Google Pub/Sub, and Amazon Kinesis.

Information Governance Engine

Reduce risk and ensure your network configurations comply to HIPAA and PCI with our fully automated Information Governance Engine that analyses and assesses network configurations for compliance across your entire 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.

- 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.

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.

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		
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.
Environmental		
Operating	ASHRAE Class A2 - Continuous Operation. 10°C to 35°C (50°F to 95°F) with maximum rate of change not to exceed 10°C per hour. ASHRAE Class A3 - Includes operation up to 40°C for up to 900 hrs per year. ASHRAE Class A4 - Includes operation up to 45°C for up to 90 hrs per year.	ASHRAE Class A2 - Continuous Operation. 10°C to 35°C (50°F to 95°F) with maximum rate of change not to exceed 10°C per hour. ASHRAE Class A3 - Includes operation up to 40°C for up to 900 hrs per year. ASHRAE Class A4 - Includes operation up to 45°C for up to 90 hrs per year.
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

Management Center and OS 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 v5 and v6 (64-bit only) 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)
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.

The Extreme Management Center can be ordered on a per device basis. To simplify ordering for customers that use 3rd party network management software we offer per-user pricing for ExtremeControl and ExtremeAnalytics.

Per-User Subscription Pricing for ExtremeControl and ExtremeAnalytics

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.

Per-Device Pricing for 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.

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.

Hardware Appliance

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.

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, please go to: <http://www.extremenetworks.com/product/management-center>