



The NETGEAR® Management System NMS300 delivers insight into network elements, including third-party devices.

New web-based user interface provides intuitive user experience, making it easier to monitor and administer an entire network.

### Highlights

When you need insight into your infrastructure to control and optimize network operation, the NETGEAR ProSAFE® Network Management System NMS300 provides the solution. ProSAFE NMS300 helps you configure, manage, and diagnose your network, ensuring it delivers data and services in a timely, reliable and cost effective manner. Easy to use, proactive, and secure, ProSAFE NMS300 facilitates the network administration tasks required to monitor and control sophisticated heterogeneous data networks.

Download a fully functional version of NMS300 software here: [www.netgear.com/nms300](http://www.netgear.com/nms300)

Comes with a complimentary 200-device license pack license and no expiration date.

ProSAFE NMS300 works with any managed device that uses industry-standard Simple Network Management Protocol (SNMP), such as Layer 2 switches, Layer 3 switches from any brand, wireless access points, traditional routers, servers and printers. It automatically discovers and maps up to 200 devices on your heterogeneous network without associated cost: NMS300 is free of charge up to 200 devices – and Managed access points under a Wireless Controller don't even count. Affordable additional 200-device license packs are available for campus networks.

Network statistics can be graphed in real time, or stored as historical data for trend analysis. Proactive thresholds and alerts, including Email notification, detect bottlenecks and other network problems and inform you of trouble before users start to call.

An easy-to-use Web graphical interface enables you to monitor everything from network elements to users and groups of devices – from anywhere in the network.

Optimized for NETGEAR managed network products, you can view NETGEAR-specific information, and benefit from the following exclusive features:

- Centralized firmware upgrades
- Configuration files backup, management and restore
- For select product categories, local master configuration files editing and mass-config deployment

### Screen Shots

**Available Widgets**

- Enterprise Network Map
- Device Tree View
- Device Inventory
- Alarm
- Top 10 Device
- Interface

**Device Tree View**

Group By: Location

- ShangHai
  - ShangHai AP
- GuangDong
  - s
- unknown
  - ShangHai AC
  - gs110tp\_eltecom
  - asd
  - netgearA0FCCS

**Enterprise Network Map**

World map showing device locations: 192.168.0.167, 192.168.0.137, San Jose, asdasd.

**Device Inventory Status/Device Type**

Device Status: Up (11)

Device Type: Switch (11)

**Top 10 Devices by Average CPU (Today)**

Device Name	Device Type	CPU Utilization(%)
192.168.0.118	Switch	12%
GSM7212F-2	Switch	18.22%
M4100-26-POE_111	Switch	9.48%
M5300-28G-POE+_111333	Switch	7.56%
192.168.0.124	Switch	4.84%

**Top 10 Devices by Average Memory (Today)**

Device Name	Device Type	Memory Utilization(%)
192.168.0.124	Switch	85%
192.168.0.118	Switch	85%
M5300-28G-POE+_111333	Switch	81%
M4100-26-POE_111	Switch	81%
GSM7212F-2	Switch	81%

**Latest 10 Alarms**

Alarm Name	Device Name	Severity	Alarm Time
Interface Transmitted p...	GS748T_1	Minor	04/10/2013
Interface received pack...	GS748T_1	Minor	04/10/2013
Interface received pack...	GS728TXS_1	Minor	04/10/2013
Interface Transmitted p...	GS728TXS_1	Minor	04/10/2013
Interface Transmitted p...	GS752TXS_1	Minor	04/10/2013
Interface received pack...	GS752TXS_1	Minor	04/10/2013
Interface Transmitted p...	M5300-28G-F...	Minor	04/10/2013
Interface received pack...	GS752TP_1	Minor	04/10/2013
Interface Transmitted p...	GS752TP_1	Minor	04/10/2013
Interface received pack...	M5300-28G-F...	Minor	04/10/2013

Home view

**DEVICES** | DISCOVERY | DEVICE CREDENTIALS | DEVICE GROUPS | INVENTORY

Filter: None | Show Filter

Rows per page: 10 | 1 / 2 | Go | Total: 13

Status	Device Name	IP Address	MAC Address	Location	Device Type	Device Model
Up	192.168.10.203	192.168.10.203	20:4e:7f:91:5d:a6		Switch	GS752TPS
Up	192.168.10.205	192.168.10.205	e0:91:f5:00:89:62		Switch	GSM7352Sv2
Up	192.168.10.206	192.168.10.206	20:4e:7f:94:31:08		Switch	GS752TXS
Up	192.168.10.208	192.168.10.208	20:e5:2a:51:b8:84		Switch	M4100-26G-POE
Up	192.168.10.209	192.168.10.209	4c:60:de:db:7a:34		Switch	M5300-52G-POE+
Up	192.168.10.213	192.168.10.213	28:c6:8e:01:9b:31		Switch	GS724Tv3
Up	192.168.10.214	192.168.10.214	28:c6:8e:17:cd:29		Switch	GS752TP
Up	192.168.10.215	192.168.10.215	10:0d:7f:49:8f:1c		Switch	GSM7224v2
Up	192.168.10.218	192.168.10.218	e0:91:f5:06:2b:dc		Switch	XSM7224S
Up	FS752TP-NMS300	192.168.10.202	a0:21:b7:b8:65:00	China	Switch	FS752TP

Inventory view

### Screen Shots



Welcome admin | [User Icon] [Logout Icon] [Home Icon] [Refresh Icon]

MONITOR CONFIGURATION DASHBOARD VIEWS NETWORK DASHBOARD

HOME	RESOURCES	MONITOR	CONFIGURATION	ALARMS	TOPOLOGY	REPORTS	JOB	USERS	ADMIN
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#### Top 10 Devices by Average CPU (Today)

Device Name	Device Type	CPU Utilization
xsmstack_238	Switch	28.78%
M5300_209-jimmy	Switch	15.31%
M4100_208-jimmy	Switch	14.56%
Unknown	Switch	12.65%
192.168.10.101	Switch	13.8%
JGSM7224_207	Switch	12.47%
GSM7212F_217	Switch	12.24%
192.168.10.120	Switch	7.44%
192.168.10.249	Switch	4.91%
GSM7224v2_2152222	Switch	4.6%

#### Top 10 Devices by Average Memory (Today)

Device Name	Device Type	Memory Utilization
192.168.10.101	Switch	34%
Unknown	Switch	34%
M5300_209-jimmy	Switch	19%
JGSM7224_207	Switch	87.38%
192.168.10.120	Switch	87%
M4100_208-jimmy	Switch	81%
GSM7212F_217	Switch	81%
192.168.10.249	Switch	79.25%
GSM7224v2_2152222	Switch	75%
xsmstack_238	Switch	73%

#### Top 10 Devices by Average Response Time (Today)

Device Name	Device Type	Average Response Time(ms)
JGSM7224_207	Switch	54.66
switch7114b6	Switch	35.66
gs752TXS-stack_229-rl	Switch	17.8
192.168.10.120	Switch	17.15
M4100_208-jimmy	Switch	7.64
gs752TXS-226	Switch	7.05
192.168.10.202	Switch	6.65
M5300_209-jimmy	Switch	6.26
GSM7212F_217	Switch	6.25
192.168.10.101	Switch	6.02

#### Top 10 Devices by Average Packet Loss (Today)

Device Name	Device Type	Packets Loss (%)
JGSM7224_207	Switch	2.54%
switch7114b6	Switch	0.45%
192.168.10.237	Switch	0.09%
xsmstack_238	Switch	0.09%

#### Top 10 Interfaces by Utilization (Today)

Device Name	Interface Name	Rx Util	Tx Util	Total
UTM9S	eth0	0.05%	0.01%	0.06%
UTM9S	defaultV...	0.04%	0.01%	0.05%
UTM9S	defaultV...	0.04%	0%	0.04%
UTM9S	eth0	0.04%	0.04%	0.04%
UTM25	lo	0.02%	0.02%	0.04%
192.168.10.232	0/23	0.02%	0.01%	0.03%
UTM50	eth0	0.03%	0%	0.03%
192.168.10.202	e5	0.03%	0%	0.03%
UTM150	lo	0.01%	0.01%	0.02%
UTM50	defaultV...	0.02%	0%	0.02%

#### Top 10 Interfaces by Traffic Rate (Today)

Device Name	Interface Name	Rx(bps)	Tx(bps)	Total(bps)
192.168.10.247	g1	12,832	7	12,839
JGSM7224_207	Slot0/13	12,795	4	12,799
GS752TP_214	g11	12,789	5	12,794
GS752TPS_203	1/g11	12,730	5	12,735
GSM7224v2_2152222	0/7	12,420	4	12,424
192.168.10.232	0/24	10,485	1,627	12,112
192.168.10.232	0/5	1,540	10,415	11,955
192.168.10.232	0/18	41	11,894	11,934
192.168.10.232	0/16	7	11,884	11,891
192.168.10.232	0/15	11,865	11,865	11,865

Top 10s view



Welcome roger | [User Icon] [Logout Icon] [Home Icon] [Refresh Icon]

MONITOR CONFIGURATION DASHBOARD VIEWS NETWORK DASHBOARD

MAP VIEWS NETWORK TOPOLOGY

### Network Topology

View List

- test

Save Link Delete Refresh Auto Setting Reset Help Screen Print

Device List

Search

Device Name	IP
192.168.10.209	192.168.10.209
192.168.10.215	192.168.10.215
192.168.10.205	192.168.10.205
jimmy-gsm7212f	192.168.10.217
192.168.10.208	192.168.10.208
GS7461+-SmartSwitch	192.168.10.204
192.168.10.213	192.168.10.213
192.168.10.202	192.168.10.202

Topology Mapviews

### Technical Specifications

HARDWARE AND SOFTWARE REQUIREMENTS	
System Architecture	<ul style="list-style-type: none"> <li>• B/S-based multi-tiered system</li> </ul>
Standard Server Requirement (for 200 devices)	<ul style="list-style-type: none"> <li>• 2.8 GHz dual-core CPU</li> <li>• 4GB RAM (32-bit OS) or 8GB RAM (64-bit OS)</li> <li>• 20GB HD (free space)</li> <li>• Static IP</li> </ul>
OS Support	<ul style="list-style-type: none"> <li>• Windows Server 2003 (Standard, Enterprise and Web), 32-bit and 64-bit</li> <li>• Windows Server 2008 (Enterprise) 32-bit and 64-bit</li> <li>• Microsoft Windows XP (Professional) 32-bit and 64-bit with SP3 or later</li> <li>• Microsoft Windows 7 (Professional, Enterprise and Ultimate) 32-bit and 64-bit</li> </ul>
VM Support	<ul style="list-style-type: none"> <li>• Support hypervisors include VMWare and other major ones such as Hyper-V and XenServer</li> </ul>
Installation	<ul style="list-style-type: none"> <li>• Server is installed through an automated GUI-based installer</li> <li>• Single server deployment</li> <li>• Client is web based and no installation required</li> </ul>
TCP Port Number For Web Access	<ul style="list-style-type: none"> <li>• Any unused TCP port number can be selected during NMS300 installation</li> <li>• Make sure no other service is running on selected TCP port</li> <li>• For instance, if IIS server is running on the same server where NMS300 is installed</li> </ul>
Standard Client Requirement	<ul style="list-style-type: none"> <li>• 2 GHz CPU</li> <li>• 2GB RAM</li> <li>• 3GB HD (free space)</li> </ul>
Browser Support (HTTP and HTTPS)	<ul style="list-style-type: none"> <li>• Internet Explorer 9</li> <li>• Firefox 20.0.1</li> <li>• Chrome 26.0.1410.64 m</li> </ul>
Language Support	<ul style="list-style-type: none"> <li>• English</li> </ul>
Management Interface Support	<ul style="list-style-type: none"> <li>• SNMP (v1, v2c, v3)</li> <li>• TFTP</li> <li>• Telnet/HTTP/HTTPS</li> <li>• Web GUI</li> </ul>
DISCOVERY	
Automated Device Discovery	<ul style="list-style-type: none"> <li>• Includes top-level, subcomponents and interfaces/ports as applicable</li> </ul>
Automated Link Discovery	<ul style="list-style-type: none"> <li>• Ethernet link discovery with LLDP protocol</li> </ul>
Discovery Scheduling	<ul style="list-style-type: none"> <li>• Ability to schedule discovery tasks to be executed at specified time/date(s)</li> </ul>
Device Resynchronization	<ul style="list-style-type: none"> <li>• System resynchronization with device inventory</li> </ul>
Device Resynchronization Scheduling	<ul style="list-style-type: none"> <li>• Ability to schedule device resynchronization to be executed at a specified time</li> </ul>
MONITORING	
Topology Mapping	<ul style="list-style-type: none"> <li>• Topology views displaying discovered and manually created links, including filtering</li> </ul>

Event Monitoring	<ul style="list-style-type: none"> <li>• SNMP trap reception with defined trap attribution, severity and descriptions</li> </ul>
Alarm Escalation	<ul style="list-style-type: none"> <li>• Alarm generation based on pre-defined event definitions</li> </ul>
Alarm/Event Actions	<ul style="list-style-type: none"> <li>• Pre-defined and user defined actions triggered by events and alarms</li> <li>• Support for alerts via email with SMTP configuration</li> </ul>
Monitor Data	<ul style="list-style-type: none"> <li>• Device details</li> <li>• Port details</li> </ul>
Real-time Key Performance Metrics collection	<p>Temperature, Memory utilization, CPU Utilization, Total Inbound SNMP Traps, TCP Connection Attempt Failures, UDP Inbound Errors, Outbound IP Discards, Disk Temperature, Inbound IP Discards, Inbound TCP Errors, Disk Space Used, Inbound IP Address Errors, Disk Space Utilization, Total Disk Space, Inbound IP Header Errors, Total IP Discards, Fan Speed, Outbound IP No Route Discards, Uptime, Inbound ICMP Errors, Inbound ICMP Echo Requests, Total Outbound SNMP Traps, Outbound ICMP Echo Replies, Inbound UDP No Port, Established TCP Connections, Total SNMP Traps</p>
Active Monitoring with Trending	<ul style="list-style-type: none"> <li>• Device, port, interface monitoring, historical data persistence, thresholding &amp; graphing (30 days max)</li> </ul>
Reports	<ul style="list-style-type: none"> <li>• Device inventory, device availability, port status, interface status reports, firmware</li> </ul>
<b>CONFIGURATION (SUPPORTED NETGEAR DEVICES ONLY)</b>	
Configuration File Backup	<ul style="list-style-type: none"> <li>• Device configuration file backup for applicable devices</li> <li>• 1:1 and 1:Many based on static or dynamic device groups</li> <li>• Immediately or scheduled</li> </ul>
Mass-configuration	<ul style="list-style-type: none"> <li>• Text-based configuration files can be edited and promoted as "Master" configuration files</li> <li>• Master configuration files are available for mass deployment</li> <li>• This is a useful way to make a "pattern" configuration file to deploy to several devices at once</li> <li>• Variables such as IP address or other identifiers can be excluded from mass-configuration</li> </ul>
Configuration File Restoration	<ul style="list-style-type: none"> <li>• Device configuration file restoration for applicable devices</li> <li>• 1:1 and 1:Many based on static or dynamic device groups</li> <li>• Immediately or scheduled</li> </ul>
Device Firmware Update	<ul style="list-style-type: none"> <li>• Automated deployment of selected version of firmware, immediately or scheduled</li> </ul>
Firmware Pre-load Configuration	<ul style="list-style-type: none"> <li>• Firmware versions may be pre-loaded into the application</li> </ul>
File Comparison	<ul style="list-style-type: none"> <li>• Color-coded, line-adjusted text comparison of two selected devices or stored files</li> </ul>
Device configuration	<ul style="list-style-type: none"> <li>• Direct access/cut-through (HTTP/Telnet)</li> </ul>
Built-in File Server	<ul style="list-style-type: none"> <li>• Support TFTP protocol</li> </ul>
<b>SUPPORTED NETGEAR DEVICES (All other products: support of discovery and node status SNMP monitoring only)</b>	
Managed Switches – M4100 series	<ul style="list-style-type: none"> <li>• M4100-D10-POE Managed Switch Layer 2+ With Static L3 Routing (FSM5210P v1h1)</li> <li>• M4100-26-POE Managed Switch Layer 2+ With Static L3 Routing (FSM7226P v1h1)</li> <li>• M4100-50-POE Managed Switch Layer 2+ With Static L3 Routing (FSM7250P v1h1)</li> <li>• M4100-D12G Managed Switch Layer 2+ With Static L3 Routing (GSM5212 v1h1)</li> <li>• M4100-D12G-POE+ Managed Switch Layer 2+ With Static L3 Routing (GSM5212P v1h2)</li> <li>• M4100-12GF Managed Switch Layer 2+ With Static L3 Routing (GSM7212F v1h2)</li> <li>• M4100-12G-POE+ Managed Switch Layer 2+ With Static L3 Routing (GSM7212P v1h2)</li> <li>• M4100-26G Managed Switch Layer 2+ With Static L3 Routing (GSM7224 v2h2)</li> <li>• M4100-50G Managed Switch Layer 2+ With Static L3 Routing (GSM7248 v2h2)</li> <li>• M4100-26G-POE Managed Switch Layer 2+ With Static L3 Routing (GSM7226LP v1h1)</li> <li>• M4100-24G-POE+ Managed Switch Layer 2+ With Static L3 Routing (GSM7224P v1h2)</li> <li>• M4100-50G-POE+ Managed Switch Layer 2+ With Static L3 Routing (GSM7248P v1h1)</li> </ul>

Managed Switches – M5300 series	<ul style="list-style-type: none"> <li>• M5300-28G Managed Switch Layer 2+ With Static L3 Routing (GSM7228S v1h1)</li> <li>• M5300-52G Managed Switch Layer 2+ With Static L3 Routing (GSM7252S v1h1)</li> <li>• M5300-28G-POE+ Managed Switch Layer 2+ With Static L3 Routing (GSM7228PS v1h2)</li> <li>• M5300-52G-POE+ Managed Switch Layer 2+ With Static L3 Routing (GSM7252PS v1h2)</li> <li>• M5300-28GF3 Managed Switch Layer 3 With Dynamic Routing (GSM7328FS v2h1)</li> <li>• M5300-28G3 Managed Switch Layer 3 With Dynamic Routing (GSM7328S v2h2)</li> <li>• M5300-52G3 Managed Switch Layer 3 With Dynamic Routing (GSM7352S v2h2)</li> </ul>
Managed Switches – M7100 series	<ul style="list-style-type: none"> <li>• M7100-24X Managed Switch Layer 2+ With Static L3 Routing (XSM7224 v1h1)</li> </ul>
Managed Switches – M7300 series	<ul style="list-style-type: none"> <li>• M7300-24XF XSM7224S Managed Switch Layer 2+ With Static L3 Routing (XSM7224S v1h1)</li> </ul>
Managed Switches – legacy	<ul style="list-style-type: none"> <li>• JGSM7224 Managed Switch Layer 2 (JGSM7224 v2h1)</li> <li>• FSM726 Managed Switch Layer 2 (FSM726 v3)</li> <li>• GSM7224 Managed Switch Layer 2+ With Static L3 Routing (GSM7224 v2h1)</li> <li>• GSM7248 Managed Switch Layer 2+ With Static L3 Routing (GSM7248 v2h1)</li> <li>• GSM5212P Managed Switch Layer 2+ With Static L3 Routing (GSM5212P v1h1)</li> <li>• GSM7212F Managed Switch Layer 2+ With Static L3 Routing (GSM7212F v1h1)</li> <li>• GSM7212P Managed Switch Layer 2+ With Static L3 Routing (GSM7212P v1h1)</li> <li>• GSM7224P Managed Switch Layer 2+ With Static L3 Routing (GSM7224P v1h1)</li> <li>• GSM7228PS Managed Switch Layer 2+ With Static L3 Routing (GSM7228PS v1h2)</li> <li>• GSM7252PS Managed Switch Layer 2+ With Static L3 Routing (GSM7252PS v1h2)</li> <li>• GSM7328FS Managed Switch Layer 3 With Dynamic Routing (GSM7328FS v1h1)</li> <li>• GSM7328S Managed Switch Layer 3 With Dynamic Routing (GSM7328S v2h1)</li> <li>• GSM7352S Managed Switch Layer 3 With Dynamic Routing (GSM7352S v2h1)</li> </ul>
Smart Switches - standalone	<ul style="list-style-type: none"> <li>• GS108T-200 Smart Switch</li> <li>• GS110TP Smart Switch</li> <li>• GS510TP Smart Switch</li> <li>• FS728TP-200 Smart Switch</li> <li>• FS752TP Smart Switch</li> <li>• GS716T-200 Smart Switch</li> <li>• GS724T-300 Smart Switch</li> <li>• GS748T-400 Smart Switch</li> <li>• GS724TP Smart Switch</li> <li>• GS748TP Smart Switch</li> <li>• GS728TP Smart Switch</li> <li>• GS728TPP Smart Switch</li> <li>• GS752TP Smart Switch</li> <li>• XS712T Smart Switch</li> </ul>
Smart Switches - stackable	<ul style="list-style-type: none"> <li>• GS724TS Smart Switch</li> <li>• GS748TS Smart Switch</li> <li>• GS724TPS Smart Switch</li> <li>• GS748TPS Smart Switch</li> <li>• GS728TS Smart Switch</li> <li>• GS728TPS Smart Switch</li> <li>• GS752TS Smart Switch</li> <li>• GS752TPS Smart Switch</li> <li>• GS728TXS Smart Switch</li> <li>• GS752TXS Smart Switch</li> </ul>

Wireless Products	<ul style="list-style-type: none"> <li>• WC7520 Wireless Controller</li> <li>• WC9500 Wireless Controller</li> <li>• WNDAP660 Access Point</li> <li>• WNDAP620 Access Point</li> <li>• WNDAP360 Access Point</li> <li>• WNDAP350 Access Point</li> <li>• WNAP320 Access Point</li> <li>• WNAP210 Access Point</li> <li>• WG103 Access Point</li> <li>• WMS5316 Wireless Management System</li> </ul>
Security Products	<ul style="list-style-type: none"> <li>• FVS318G ProSafe Firewall</li> </ul>
<b>SUPPORT ENTITLEMENT</b>	
Warranty	<ul style="list-style-type: none"> <li>• NETGEAR 90-day Warranty</li> </ul>
Technical Support	<ul style="list-style-type: none"> <li>• Basic technical support within 90 days from the date of NMS300 License purchase</li> <li>• Basic technical support within 90 days from the date of supported NETGEAR devices purchase</li> <li>• Basic and Advanced technical support when NETGEAR Managed devices are covered by the ProSupport OnCall 24x7 service contract (PMB)</li> <li>• Basic and Advanced technical support when NETGEAR Managed devices are NETGEAR Managed switches covered by Lifetime Technical Support</li> </ul>
<b>ORDERING INFORMATION</b>	
Current NMS300 version	<ul style="list-style-type: none"> <li>• NETGEAR PROSAFE NETWORK MANAGEMENT SYSTEM NMS300 V1.2.0.16</li> </ul>
Procurement	<ul style="list-style-type: none"> <li>• Download fully functional version of NMS300 software here: <a href="http://www.netgear.com/nms300">www.netgear.com/nms300</a></li> <li>• Comes with complimentary 200-device license pack</li> <li>• Managed Access Points under NETGEAR Wireless Controllers don't count as "devices"</li> </ul>
Upgrades	<ul style="list-style-type: none"> <li>• Free NMS300 v1.x minor upgrades included</li> <li>• <a href="http://www.netgear.com/nms300">www.netgear.com/nms300</a></li> </ul>
Additional Device License Packs	<ul style="list-style-type: none"> <li>• NMS300L2-10000S (200-additional device license pack)</li> <li>• Electronic license: key is delivered by email</li> <li>• License key is registered in ADMIN \ LICENSE MANAGEMENT section of NMS300 Web GUI</li> <li>• First NMS300L2-10000S license key will add 200 devices to NMS300 counter (new maximum allowed: 400 devices)</li> <li>• Each new NMS300L2-10000S license key will increment NMS300 counter by 200 devices</li> </ul>