



RuggedNMS v1.5.0 Release Notes

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Overview

RuggedNMS v1.5.0

- Build date: Windows November 25, 2011 4:57 pm File Size: 231,845 kb
- Build date: Linux November 25, 2011 12:32 pm File Size: 110,275 kb

RuggedNMS runs on Debian Linux (Lenny), Windows XP, Windows 7 and Windows Server 2003/2008 providing a web based user interface supported by Microsoft Internet Explorer version 7 and above and Firefox 3.6 and above. The server installation process has been greatly simplified by RuggedCom to enable users with at least minimal technical knowledge to easily install the software. The computer that RuggedNMS is to be installed on must meet the published specifications to ensure reliable operation of the software and be dedicated to running RuggedNMS only.

The installer of this software should be able to perform basic Linux or MS Windows operations. Linux shell scripts and Windows batch files have been created to help configure and administer RuggedNMS. Please refer to the RuggedNMS User guide for a complete listing and description of these scripts.

Requirements for installation of RuggedNMS:

- 1) A computer meeting the recommended specifications as outlined in the user guide.
- 2) The desired operating system from the list of supported versions. An internet connection will be required when performing the Debian installation to retrieve any dependant packages.

Note: Please refer to the user guide for upgrade requirements.

User Guides

All user Guides are available from the RuggedCom Web site at www.RuggedNMS.com. The Web pages should be checked frequently for updates, patches and technical notes,

Changes In v1.5.0 (Bug 3701)

Network Monitor.

Type: New Feature
Products: RuggedSwitch
ID: 2828

Network Monitor allows for the automated monitoring of network traffic, at the port level, for all devices on a network that support RMON. With one click of the mouse RuggedNMS will configure RMON on all supported devices, start collecting data, analyze the data to establish a port baseline and then monitor the ports for unusual port activity. A user is notified when the port traffic rises or falls beyond predetermined thresholds. Ports that do not conform to the traffic pattern requirements are automatically excluded from collection and reporting by Network Monitor. Charts are also available to show top RMON collector contributors and a gauge that displays overall network utilization on the map.

RuggedMAX Geographical Map.

Type: New Feature
Products: RuggedMAX
ID: 3833

RuggedMAX Geographical Map allows a user to place an image of a map on the user interface and place a site (cluster of base stations) on the map. The sites on the maps will be identified by the site ids configured in the base stations. Once a site is placed on the map the Geographical Mapping application will manage the status of each site based on the underlying base station status.

RuggedMAX Base Station Detailed Status Screen.

Type: New Feature
Products: RuggedMAX
ID: 3952

RuggedMAX Base Station Detailed Status Screen displays detailed status specific to RuggedMAX Base Stations. The screen will display various status items and a list of CPEs associated with the Base Station.

The information presented is:

- 1) Basic configuration
- 2) GPS details
- 3) Traffic statistics
- 4) VLAN services
- 5) List of associated CPEs with hyperlinks to display further details about each CPE

RuggedMAX Customer Premise Equipment (CPE) Detailed Status Screen.

Type: New Feature
Products: RuggedMAX
ID: 3953

RuggedMAX CPE Detailed Status Screen displays detailed status specific to RuggedMAX CPEs. The screen will display status information for each CPE associated with a specific BS.



RuggedMAX CPE Configuration Management.

Type: New Feature
Products: RuggedMAX
ID: 3954

RuggedNMS will automatically download the CPE configuration when a configuration change is made from every CPE under management by RuggedNMS. These configuration files will be archived on the RuggedNMS server for reapplication to the device or auditing purposes.

RuggedMAX CPE Firmware Management.

Type: New Feature
Products: RuggedMAX
ID: 4040

RuggedNMS will allow for the mass upgrading of firmware on any or all RuggedMAX CPEs under management by RuggedNMS.

RuggedMAX Base Station Bulk Configuration.

Type: New Feature
Products: RuggedMAX
ID: 3955

RuggedNMS will present an interface to allow a user to modify the configuration of a select group of parameters and then apply the configuration to any or all Base Stations under management. The user will be presented with a template configuration from a BS of their choice on top of which they may make changes. The modified configuration can then be applied to the selected group of BSs in one of two ways:

- 1) Only apply the changes made to the template configuration. Using this choice could mean that each BS may have different configurations but the changed parameters will be consistent.
- 2) Make the configuration consistent on all selected BSs. When this selection is made RuggedNMS will delete the configuration parameters on the BS and apply the configuration from the template on the screen.

RuggedNMS can only manage a select group of BS configuration parameters including:

- 1) General operating parameters
- 2) Frame settings
- 3) Service Profiles
- 4) Service Flows
- 5) Classifiers
- 6) Neighbor BS configuration
- 7) DCD Trigger settings
- 8) SNMP configuration

ROX2 Firmware Management.

Type: New Feature
Products: RuggedBackbone
ID: 4039

RuggedNMS will allow for mass firmware upgrading for any or all ROX2 devices under management by RuggedNMS. This capability is supported for both PPC and i386 based devices.

ROX2 Configuration Management.

Type: New Feature

Products: RuggedBackbone

ID: 4038

RuggedNMS will automatically download the ROX2 configuration when a configuration change is made from every ROX2 device under management. These configuration files will be archived on the RuggedNMS server for reapplication to the device or auditing purposes.

ROX2 Debug File Download Support.

Type: New Feature

Products: RuggedBackbone

ID: 4394

RuggedNMS allows a user to download several files useful for debugging problems by ROX2 developers and support staff. There is now a button on the device screen selected under the “Upload Archived ROX 2 Configuration File” menu selection that facilitates this action.

New Mapping Filter Type.

Type: New Feature

Products: RuggedNMS

ID: 3957

A new device display filter has been added to the map which allows a user to enter the IP address or device name for a single device and RuggedNMS will display that device and all devices attached to the device on the map.

Display Port Name on the Map for Units Running ROX2.

Type: Enhancement

Products: RuggedBackbone

ID: 3463

When a map is viewed in RuggedNMS both the interface index and name will be displayed when hovering over the link between two devices. Previously only the interface index was displayed.

Display Port Name on the Map for Units Running ROX1.

Type: Enhancement

Products: RuggedRouter

ID: 4092

When a map is viewed in RuggedNMS both the interface index and name will be displayed when hovering over the link between two devices. Previously only the interface index was displayed.

RuggedNMS Must Support the Upload of ROS Compressed Images.

Type: Enhancement

Products: RuggedSwitch

ID: 4416



RuggedNMS now supports the upload of ROS compressed firmware images that have the file extension .zb.

RuggedNMS Does Not Display RuggedAir Devices on Configuration Management Screens.

Type: Enhancement
Products: RuggedAIR
ID: 4423

Starting with ROS version 3.9.1 a unique system identifier for RuggedAir devices was created. RuggedNMS can now identify these devices and include them when listing all ROS devices in the user interface. RuggedNMS can now also uniquely identify RuggedAir devices and display a RuggedAir icon on the map.

RuggedNMS To Show Different Icons for Each Type of ROX2 Devices on the Map.

Type: Enhancement
Products: RuggedBackbone
ID: 4457

RuggedNMS can now display different icons on the map to differentiate the different platforms running ROX 2. These platforms include:

- 1) 5000 family
- 2) 1500 family
- 3) RuggedRouter family

RuggedNMS Statistics Collectors Must be Extended for RuggedMAX Devices.

Type: Enhancement
Products: RuggedMAX
ID: 4640

RuggedNMS was collecting RuggedMAX statistics collection for a maximum of 7 days before the data was overwritten. This has now been extended to collect for a total of 366 days before old data is overwritten.

Map cannot Display Bandwidth Utilization Less than 0.1 Percent.

Type: Enhancement
Products: RuggedNMS
ID: 3463

The RuggedNMS map previously could not display percentage utilization for each interface lower than 0.1 percent due to space restrictions displaying the graphical bandwidth option. With this enhancement utilization will be shown as follows:

- 1) The map will display the word "low" for utilization less than 0.01 percent. When a user hovers over the link of interest a popup will show the utilization to resolution of .00001 percent.
- 2) If the utilization is between 9 and 0.01 the user interface will show two decimal places (e.g. 0.56% or 5.23%)

- 3) For 10 and above it will display one decimal place (e.g. 36.7%).
- 4) Utilization below 0.00001 will be displayed as 0%.

File Transfer Sessions may Hang between the Base Station and RuggedNMS.

Type: Major
Products: RuggedMAX
ID: 3451

If connectivity is lost between RuggedNMS and a Base Station during a file transfer the RuggedNMS session may hang. This will stop all pending file transfers and require a RuggedNMS application restart to fix the problem. This case is now handled correctly using an inactivity timer to monitor and terminate hung file transfer sessions.

File Transfer Sessions may Hang between a Switch and RuggedNMS.

Type: Major
Products: RuggedSwitch
ID: 4665

If connectivity is lost between RuggedNMS and a Switch during a file transfer the RuggedNMS session may hang. This will stop all pending file transfers and require a RuggedNMS application restart to fix the problem. This case is now handled correctly using an inactivity timer to monitor and terminate hung file transfer sessions.

Map Displays Down Link as Active until Next Rescan Interval.

Type: Minor
Products: RuggedNMS
ID: 3480

Under certain circumstances a link status trap may not get processed properly for the topological map and hence the displayed status can be inconsistent until the pollers run. Additional logic was added to the mapping server process to handle these circumstances properly.

Map May Show Incorrect Status for Newly Discovered Devices.

Type: Minor
Products: RuggedNMS
ID: 3490

If a newly discovered device goes down before being acknowledged by an operator the device status will be incorrect. Instead of displaying the device in red background (down) the device will be displayed with an amber background (alert). This problem has been fixed.

Map does not Display Bandwidth between Open and Closed Aggregated Groups.

Type: Minor
Products: RuggedNMS
ID: 3492



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The Map will now provide bandwidth information between open and closed aggregated groups. This problem has been fixed.

The Map Doesn't Display Links Connected to a Deleted Node after Rediscovering the Node.

Type: Minor

Products: RuggedNMS

ID: 4097

RuggedNMS now correctly detects rediscovered devices and displays the links for a device if that device is deleted from the database and then subsequently rediscovered. This problem has been fixed.

Unable to Hide Links from an Aggregated Group on the Map.

Type: Minor

Products: RuggedNMS

ID: 3541

Links displayed between an aggregated group and nodes can now correctly managed and hidden. This problem has been fixed.

Multiple Links between Two Devices Sometimes Overlap on the Map.

Type: Minor

Products: RuggedNMS

ID: 3543

Multiple links between two devices on the map may overlap and not be distinguishable under certain conditions. Sometime when a map is first drawn or when links age out and are then redrawn they will appear as a single link on the topological map. This problem has been fixed and each will be displayed.

Hiding an Aggregated Group will not Hide the Group Label on the Map.

Type: Minor

Products: RuggedNMS

ID: 3578

When a label is assigned to a collapsed group by an operator the label remained visible when the group was hidden. RuggedNMS now handles the labels assigned to groups and the label will be hidden when the collapsed group is hidden. This problem has been fixed.

RuggedNMS Collects Port Path Cost Incorrectly.

Type: Minor

Products: RuggedSwitch

ID: 3749

If the port path cost on a switch is configured with a cost style set to 16 bits RuggedNMS will not collect the cost properly. This information will now be collected from a MIB that supports 16 bit parameters. This problem has been fixed.

RuggedNMS Map Does Not Work When the Default Web Port is Changed.

Type: Minor

Products: RuggedNMS

ID: 4490

RuggedNMS allows for the configuration of the listening port for the web based interface. The default port is 8080 but can be changed in the configuration files however the mapping system did not work properly if the port was changed. This problem has been fixed so that the default port can be changed to any value and RuggedNMS will work properly.

CPE Report Shows Link Up Time in Seconds Instead of Days.

Type: Minor

Products: RuggedMAX

ID: 4706

The Link Up Time chart for a RuggedMAX CPE was displaying the up time in seconds instead of days. This problem has been fixed.

Map Does Not Update DA Link When Root Bridge Changes in Certain Conditions.

Type: Minor

Products: RuggedSwitch

ID: 3481

The problem happened when the current Root Bridge is giving away its role as a Root Bridge and the new Root Bridge is outside the ring of the last Root Bridge. This problem has been fixed.

Known Issues**None**



Upgrade Instructions

Follow the instructions in the install guides for upgrade procedures. The configuration files for RuggedNMS 1.5, located in the “etc” folder, are not compatible with the configuration files from previous versions. All previous configuration changes are automatically saved by the RuggedNMS installer and are available for reference in the “etc-backup” directory with a date/time stamp from when the installation was done. You cannot copy the archived configuration files from previous versions of RuggedNMS™ to the new installation of RuggedNMS so the configuration files will have to be updated in RuggedNMS 1.5.

Binary/User Guide Version Numbering System

RuggedNMS has a three digit version numbering system of the form X.Y.Z where each digit is a number starting from zero. The 'X.Y' digits represent the functional version of RuggedNMS whereas the 'Z' digit represents the binary patches. The 'X' digit is incremented for a major functional updates of the product. The 'Y' digit is incremented for a minor functional updates of the product. The 'Z' digit is incremented for bug fixes, cosmetic enhancements and other minor issues.

User guides follow the same format. In general, a user guide will have the same 'X.Y' digits as the firmware to which it corresponds.

Type of Changes

Each change to the firmware is categorized according to the table below to provide a guide as to whether the change justifies upgrading. As well, each change lists an internal RuggedCom change number.

Change Type	Description
Critical	Critical changes fix problems that prevent the basic operation of the device and have no workaround. Any critical changes merit a device upgrade under all circumstances.
Major	Major changes fix problems that prevent the basic operation of the device but do have a workaround. Any major changes merit a device upgrade if the workaround is not acceptable.
New Feature	New features add significant new capability to the device. Such changes may change the basic operation of the device, the user interface, and how the device is configured. New features only merit a device upgrade if the feature is required.
Enhancement	Enhancements improve existing device capability and do not significantly change the basic operation of the device, the user interface, or how the device is configured. Enhancements only merit a device upgrade if the feature is required.
Minor	Minor changes fix non-vital problems that may or may not have a workaround. Minor changes do not necessarily merit a device upgrade unless the specific problem applies.
Cosmetic	Cosmetic changes have negligible impact on device operation and include such updates as spelling mistakes, user interface adjustments, and help text improvements. Cosmetic changes rarely merit a device upgrade.
Security	Security changes usually do not have a discernable impact on normal device operation other than to improve the unit's defensive response to known exploits and vulnerabilities. This might include such updates as enhanced protection against newly discovered denial-of-service (DOS) attacks. It is left entirely to the customer's discretion to decide whether or not a security change is appropriate to merit a device upgrade.



Contacting RuggedCom

For further information on this release or technical support of any nature, please contact RuggedCom at the

Corporate Headquarters

RuggedCom Inc.
300 Applewood Cres., Unit #1
Concord, Ontario
Canada, L4K 5C7

Toll-free: 1(888) 264-0006
Tel: (905) 856-5288
Fax: (905) 856-1995

Web: www.RuggedCom.com
Email: support@RuggedCom.com

US Corporate Headquarters

RuggedCom
1930 Harrison St., Suite-307
Hollywood, Florida
USA, 33020

Tel: (954) 922-7975

Technical Support:

Toll Free: 1(866) 922-7975