

# **MDS PulseNET**

# Network Management Software

Monitoring and managing the health of your network is a critical consideration when designing, purchasing, and deploying equipment for your communications system. Equally important is ensuring that you maximize your network's return on investment by increasing system throughput and uptime, improving the utilization of networked devices, and finally, supporting the deployment of maintenance resources when problems surface.

MDS PulseNET Network Management Software was designed specifically for MDS Industrial Communication systems and satisfies the real-time needs of customers who are responsible for managing them. With PulsePAK add-on, support for specific 3rd party devices allows you to discover, monitor, and take action on your multi-vendor network. MDS PulseNET software is unique, as it requires no customization to get started – offering true, out-of-the box functionality.

MDS PulseNET (Standard) is provided at no charge with all purchases of GE MDS devices.

# Key Benefits - Return on Network Investment

## • Driving Resource Efficiency

Notify and deploy maintenance resources with the intelligent data required to quickly resolve equipment and radio issues

#### • Improving Network Performance

Access historical network and equipment performance trends to optimize availability through predictive maintenance

## • Leveraging MDS Expertise

Purpose-built and pre-loaded with recommended performance thresholds, eliminating guesswork

## • Single "Pane of Glass" for managing MDS and 3rd party devices

Support for SNMP (MIB-II) compliant devices and a growing list of external vendor device support of monitoring and management

#### • Low Cost of Ownership

Per device licensing with no additional server licenses required

# Purpose-Built

- Designed to provide out-of-the-box functionally for MDS devices
- Pre-loaded MDS device performance rules and thresholds eliminate guesswork
- High Availability configuration supports application redundancy and geo-redundancy

# Rapid Deployment

- Intuitive installation and admin set-up
- Automatic device discovery
- Out-of-box, pre-defined and manageable number of alerts
- Integrated with MDS LaunchNET for "Zero-touch" device provisioning (optional)
- Optimized for Virtual and Cloud based servers

# **Robust Monitoring**

- Provides historical performance data and trending of:
- Received Signal Strength Indicator (RSSI)
- Signal Noise Ratio (SNR)
- Error rate
- Data throughput
- Round-trip delay time
- Transmitter power
- Changes in modulation scheme
- · GPS connectivity and coordinate tracking

# Easy to Use

- Management by exception
- Pre-built, intuitive work flows
- User-configurable navigation
- Multiple pre-defined report options
- "Complimentary" database for 3<sup>rd</sup> party application integrations





## Product Function - PulseNET vs PulseNET Enterprise

	PulseNET	
System	Standard	Enterprise
Web-based platform for easy user access	•	•
Windows & Linux installations supported	•	•
Single graphical user interface installation program	•	•
Downloadable software and updates	•	•
Automated discovery of IP based devices	•	•
Automated network topology maps	•	•
Purpose-built workflows for mission-critical networks	•	•
Supports SNMP versions 1, 2c and 3	•	•
Integrated database supplied with installation		•
Predefined best practices management for MDS devices	•	•
Data Collection - Scalable to thousands of nodes via multiple systems / distributed polling	Up to 500 Devices	•
Monitoring and management of third party devices 1		•
Support for third-party SNMP MIB-II compliant devices		•
High-availability server installation capable		•
GPS aware mapping - automatic or manually located on GPS aware maps		•
LAN Monitoring - basic fault/performance monitoring of network devices		•
Custom rules, dashboards, and collections capable		•
Fault	Standard	Enterprise
Real-time color coded textual alarms and status icons	•	•
Device availability reports	•	•
Alarm filtering and notification	•	•
Syslog server	•	•
Built-in RF health alerting for industrial wireless networks	•	•
Root cause correlation based on network dependencies	•	•

 $<sup>1 \</sup>quad \text{Out-of-the-box capability for monitoring third-party devices is enhanced in each release. Please contact} \\$ a GE MDS Sales Represenative to determine if a specific third-party devices is supported by the current version of PulseNET Enterprise.

# **PulseNET System Requirements**

#### **Recommended System**

- Quad Core CPU at 2 GHZ+
- 16 GB of RAM available
- 120 GB+ of available disk storage

## Supported Operating Systems (64-bit) \*

- Windows 10 Pro
- Windows Server 2012/R2, 2016 w/current updates, 2019
- Red Hat Linux 7 or greater
- SuSe Linux Enterprise Server 11 or greater
- Virtualized environments supported

#### Software

- Java 8 or newer (for the installer)
- \* English only OS installations supported

#### **Worldwide Contact Center**

Web: www.GEGridSolutions.com/contact Direct Call: 1-844-379-9630 Email: INDC.MDSInsideSales@ge.com

# PulseNET Enterprise System Requirements

#### **Recommended System**

- Quad Core CPU at 2 GHz+
- 16 GB of RAM available
- 240 GB of available disk storage

#### Supported Operating Systems (64-bit) \*

- Windows Server 2012/R2, 2016 w/current updates, 2019
- Red Hat Linux 7 or greater
- SuSe Linux Enterprise Server 11 or greater
- Virtualized environments supported

## **Software**

• Java 8 or newer (for the installer)

# LDAP and Radius support

**Fault Management** 

SNMP trap forwarding

receiving<sup>2</sup>

Configuration

bandwidth remotes

demand & scheduled)

Radio configuration change diary

GE via PulsePAKs)1

diagnostic workflows

model / configuration

handwidth etc.)

(memory, CPU, etc)

User level accounting

System

and HTTP(s)

assignment

Performance

Alert integration with third-party network management

Notifications to 3<sup>rd</sup>-party manager of managers via

Fully integrated graphical interface for SNMP trap

Configuration Push to multiple devices immediately & scheduled (Orbit SD other non-GE via PulsePAKs) Scheduled configuration collections separate from performance polling - Extremely important in low

Provisioning of selected configuration parameters (on-

Firmware push (Orbit, SD, Mercury, iNET-I/II, other non-

Performance dashboard with purpose-built prescriptive

Inherited performance collections based on vendor /

Performance collections for diagnostics (I.e. RSSI, SNR,

Tracking of configuration and firmware for MDS devices User forced out when inactive for extended periods Remote access shortcuts to devices for Telnet, SSH

Centralized to streamline security and control

Limit operator device groups based on admin

Role based security (admin vs. operator)

Retains collections for comparison year-over-year Performance dashboards for third parties<sup>1</sup> Self-monitoring of PulseNET Enterprise system

## • Microsoft Internet Explorer 11+

Supported Web Browsers

- Microsoft Edge 41.16299.402+
- Mozilla Firefox 52+
- Google Chrome 55+

(others may also be functional but are not supported)

**PulseNET** 

Enterprise

Enterprise

Enterprise

**Enterprise** 

Standard

Standard

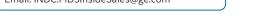
Standard

45 Day Limit

Standard

# **Ordering Information**

Software & Device License	1 Device
PulseNET	PN-1
PulseNET Enterprise	PNE-1
PulseNET Enterprise Upgrade	PNEUP-1
Maintenance (1 year)	1 Device
PulseNET	PNM-1
PulseNET Enterprise	PNEM-1





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<sup>2</sup> Feature planned for a future release of PulseNET and PulseNET Enterprise.