

GE MDS PulseNET Enterprise and Standard Release Notes

Version 6.0

Date of Release

March 2025

Software Description

GE PulseNET is a software application used for monitoring devices in Industrial Communications Networks. GE PulseNET Standard Edition monitors up to 500 devices, while GE PulseNET Enterprise is intended for large-scale operations with 25,000+devices. For additional information, visit the **GE MDS website.**

Additional GE PulseNET Documentation

PulseNET Enterprise and Standard - Installation Guide

PulseNET Enterprise and Standard - User Guide

PulseNET Enterprise and Standard - Admin Guide

New Features

- Added support for licensing version 4 all existing V3 licenses will be put into a 1-week expiry window upon upgrading. Before upgrading, please contact GE Support at GEMDS.techsupport@ge.com as a replacement V4 license must be retrieved. [S-7061, S-7064, S-7065]
- Removed PulsePAK license All supported devices are now available without PulsePAK [S-6712, S-7033]
- Support for Two-Factor Authentication [2FA] [S-6155]
- Multiple improvements to the GE LaunchNET and PulseNET user interface and background processes. [S-7313]
- Added Service and Host Monitoring UI for HA environments [S-5204, S-6835]
- Added rule to track Evaluation License Expiry [S-5557]
- Added IP import feature to ICMP, Dlink, and SNMP Discovery menus [S-5646]
- Added Bulk Alias Update feature to PulseNET import .csv of IP and Serial Number to change Alias in bulk [S-5750]
- Added fileManagement script to ensure that database logs are being rolled over, preventing storage issue [S-5848]



- Added feature to backup Orbit configuration files in PulseNET [S-5902 S-6881, S-6928]
- PulseNET installer now deploys support-grab-logs.bat script to install folder. In case of installation failure, this can be run to assist in troubleshooting [S-5905]
- Database collection now includes UI, System Notifications, and Rules for monitoring the performance of HA servers [S-6148]
- Added Serial Ports tab to relevant Orbits Device Detail view [S-6163]
- Added service locking during HA upgrades to prevent duplicate services [S-6370, S-6866]
- Added Map Configuration menu to PulseNET for new mapping features [S-6585]
- Added menu to display YANG models currently in database. [S-6666, S-6909]
- Added support for reporting on device certificates [S-6681, S-7127, S-7128]
- Enhanced security for passwords in Change Management database [S-6711]
- Response Time and Error Rate combined into single column. Modulations metrics now hidden by default [S-6784]
- Added support for Netconf values: aprild, snmpEngineSrc, requestDns, and requestRouters [S-6790]
- Added hover window in UI with more information on Oper Status [S-6841]
- Security enhancements relating to viewing HTML of password fields [S-6932]
- Underlying ActiveMQ version increased to 5.18.4 [S-7053]
- Added support for GE yang model 9.6.4 [S-7081]
- 8gb installation option has been removed, minimum 16gb now default. [S-7108]
- Added stingmongo and HA information to the Host & Service Monitoring UI [S-7138, S-7146]
- Created new Orbit Certificate canned report [S-7154]
- Created new Orbit Configuration canned report that includes NetConf values [S-7158]
- Orbit Cellular Values added to LAN Columnizer [S-7225]



Fixed Issues

- Resolved issue with Orbit Certificate Reboot Status not reporting correctly [S-6577, S-6578]
- Removed unnecessary heap space log files from generation [S-6650]
- Removed Netconf password change for Orbit Devices. Password change now performed via SSH menu [S-6717]
- Fixed issue with Auth Mode not populating for Mercury devices [S-6759]
- Limited Network Interface and Throughput In/Out metric to two decimal places [S-6761, S-6762]
- Fixed issue with Admin/Oper Status showing no value [S-6766]
- Corrected issue where TransNET Device Configuration values were sometimes blank [S-6775]
- Updated SSH Timeout for command requests to 1 minute, preventing early timeout [S-6800]
- IP address not displaying in the Alert View [S-4526]
- Added support to view database statistics in Host Monitoring menu [S-6862]
- Resolved issue with NETCONF string sent for Orbit firmware change [S-6903]
- Restricted incompatible characters from being entered in Orbit password field [S-6925]
- No Results message now displays when Device Filter doesn't match any devices [S-6975]
- Corrected OID value for Last RSSI on Orbit LN [S-6994]
- Fixed issue with Custom Data headers not displaying in reports [S-7016]
- Log API requests for device discovery/authorization in the Audit log. [S-7117]
- Corrected issue with Modulations metrics not displaying on Orbit LN [S-7039]
- Fixed issue with database logs increasing past rollover threshold. [S-7120]
- Corrected several issues related to blank report data. [S-7186, S-7193]
- Removed duplicate certificate entries in Change Diary [S-7206]

Known Issues



- Issue with User Session that does not expire. Removed Option to be selected. Will add back in future release [S-7475]
- Issue with setting home page, when user sets home page it may cause the user not to be able to login. [S-7491]
- Export DLINK Master Seeds button is unavailable when master seed is selected in DLINK Configuration [S-7499]
- Missing trigger availability collection for ICMP only [S-7479]
- DLINK clusters are not supported in this release. [S-6922]
- Values not displaying on Device Detail for an SD radio after configuration change. Workaround is to click the browser refresh button. [S-2869] [Enterprise Only]
- The use of SNMPv3 with the GE Reason has shown inconsistent results. Recommend using SNMPv1 or SNMPv2c [Enterprise Only]
- On single server installations when forwarding external traps, the from IP address is set to 127.0.0.1 [S-4512] [Enterprise Only]
- Time discrepancy if the timezone of the local computer is different than the PulseNET server [S-2841]
- To utilize Zero Touch Provisioning [ZTP] with LaunchNET requires the PulseNET server to be running HTTP: and not HTTPS: [S-4348]
- Freewave FGR2 and FGRplus devices can only be authorized as Freewave HTPlus for now. [S-4789]
- Intermittent issue when migrating devices from PulseNET Standard to PulseNET Enterprise [S-7685]
- Intermittent issue with High Availability 3-Server or 4-Server installation. On the Arbiter server, the "stingmongo-log" service doesn't start automatically. Must be manually started first time. Either find this service directly in the Services menu, or run the start.bat file in the GE_MDS\PulseNET directory [S-7712]
- Reporting "Run Now" view is not able to run without modifying first [S-7801]
- Error when enabling SNMP Trap for Rule without alert message [S-7799]
- Issue deleting reports that have a Device Filter instead of Group selected [S-7819]
- Some dashboard metrics have incorrect label of "count" rather than "dBm" [S-7825]
- Issue with discovering a SNMP device directly into Staging group. [S-7828]
- The support_log_bundle script points to C: drive. Must be manually modified to point to other drives [S-7827]



- Orbit LN/NX collection schedules must be placed in certain order or data may be missed [S-7831]
- Intermittent issue with some LN network interfaces not populating in Device Detail [S-7830]
- Linux is not supported for this version but support will be re-added in future. [S-7733, S-7734]

GE PulseNET Install File Validation

To validate there has been no corruption in the installation file, a SHA256 hash code is available for download separately from the installer on the GE PulseNET download page.

GE PulseNET Migration and Upgrade Process

Customers with an existing GE PulseNET 4.x environment will need to migrate to the 4.5 platform, and then to GE PulseNET 5.x version before running the GE PulseNET 6.0 upgrade.

Customers with an existing GE MDS PulseNET 5.x environment should obtain the GE MDS PulseNET 6.0 upgrade tool and follow the steps in the **GE PulseNET Installation Guide**.

Important Note: For the migration and upgrade processes to be successful, the new system MUST be licensed properly before the migration is attempted.

Secure Deployment Guidelines

GE recommends securing the PulseNET server using a defense in depth approach. Some key security considerations when deploying the PulseNET application include ensuring:

- **1.** Electronic and physical access to the PulseNET server is limited to only authorized individuals and clients
- 2. The host server is dedicated to the PulseNET application only
- **3.** The PulseNFT server is not accessible from the Internet
- **4.** The principle of least privilege is applied to the host operating system



- **5.** The PulseNET host server is appropriately hardened and maintained to the current patch level as indicated in these release notes and applicable setting as indicated by the National Checklist Program
- **6.** Ensure that users with local logon privileges to the PulseNET server do so with accounts which uniquely identify them
- **7.** Firewall rules should be established which allow only those engineers' workstations to connect to the PulseNET server.



About GE MDS

Over two decades ago GE MDS began building radios for business-critical applications. Since then we have installed millions of radios in countries across the globe. We overcame impassable terrain, brutal operating conditions, and complex network configurations to succeed. We also became experts in wireless communication standards and applications worldwide. The result of our efforts is that today thousands of organizations around the world rely on GE MDS wireless networks to manage their critical assets

Thanks to our durable products and comprehensive solutions, GE MDS is the wireless leader in industrial automation— including oil and gas production and transportation, water/wastewater treatment, supply, and transportation, electric transmission and distribution, and many other applications.

GE MDS is also at the forefront of wireless communications for private and public infrastructure and online transaction processing. As your wireless needs change, you can continue to expect more from GE MDS. We'll always put the performance of your network above all.

GE MDS ISO 9001 Registration

GE MDS adheres to the internationally-accepted ISO 9001 quality system standard.

To GE Customers

We appreciate your patronage. You are our business. We promise to serve and anticipate your needs. We will strive to give you solutions that are cost effective, innovative, reliable and of the highest quality possible. We promise to engage in a relationship that is forthright and ethical, one that builds confidence and trust. Data sheets, frequently asked questions, application notes, firmware upgrades and other updated information is available on the GE MDS Web site.

Manual Revision and Accuracy

This manual was prepared to cover a specific version of our product. Accordingly, some screens and features may differ from the actual version you are using. While every reasonable effort has been made to ensure the accuracy of this guide, product improvements may also result in minor differences between the manual and the product shipped to you. If you have additional questions or need an exact specification for a product, please contact our Customer Service Team using the information below. In addition, manual updates can often be found on the GE MDS Web site.

About End 2 End Technologies

End 2 End [E2E] Technologies offers a unique combination of wireless communications and information technology expertise. We improve efficiency, reduce risk and lower the cost of industrial field operations via modernization and management of our customer's wireless communications networks. From initial planning through lifecycle support we assist your team in adopting a wireless solution that keeps communication costs low while maximizing network reliability and performance. For more information visit us at www.e2etechinc.com.



Customer Support

If you have problems, comments, or questions pertaining to the GE MDS PulseNET application, please contact GE MDS via one of the methods below:

Phone: 585-241-5510

Email: gemds.techsupport@ge.com

Fax: 585-242-8369

License Credits

GE MDS PulseNET contains several third party components. Please refer to the complete list of these components at www.e2etechinc.com/legal/

