

Product Announcement netIOT Edge Gateway (No. 6/2019)

(Issued June 13, 2019)

Product Announcement

We are pleased to announce the general availability of software release 1.2 (version 1.2.0.0). This major version provides new features, bug fixes and security updates. All changes we made since the last public release 1.1.2.1 listed hereafter in the following tables.

The main development focus of this version was the introduction of edge analytic capabilities and the internet connectivity by an integrated LTE modem. Furthermore, a new Node-RED based OPC UA framework is preinstalled, providing a wide range of server and client functionalities. Along with the introduction of the new framework, we have replaced the Hilscher OPC UA client node. The field trial of the netIOT Diagnostic application ends with the publication of this release. As a result of the fieldtrial some improvements were implemented and the version of the application have been increased to version 1.0

The netIOT Diagnostic license can be ordered via the following part number

Product Code	Part Number	Description
NIOT-S-LIC-DIAG	1350.010	netIOT Topology / Real Time Ethernet Monitoring & Diagnostic for PC, Mobile and Tablet Devices in PROFINET networks.

In order to use the new Edge Analytic functions of the On-Premise Gateway, a new license was introduced. The license can be ordered free of charge and must be uploaded to the gateway, in order to activate the pre-installed database.

Product Code	Part Number	Description
NIOT-S-LIC-IFMX	1350.040	netIOT Edge Analytic License

Initially an LTE version of the netIOT On-Premise Edge Gateway will be available for the European market. Please ask your sales representative for the scheduled availability in other markets. The European version of the netIOT Connect Edge Gateway is scheduled for later this year.

The LTE version of the netIOT On-Premise Edge Gateway can be ordered via the following part number

Product Code	Part Number	Description
NIOT-E-TIJCX-GB-REV4EU	1321.302	netIOT Edge Gateway On-Premise (RTE / LTE)

New source for product information

Please visit the Hilscher Knowledge Base by following this link:

<https://kb.hilscher.com/display/IOT/netIOT+Edge+Gateway+Solution+Portfolio+Overview>

Summary of new implemented Features

New Feature	Description
Mobile data (LTE) support	The Edge Gateway Manager is providing a new configuration page for the LTE modem setup and status monitoring. The page is not accessible, if the LTE modem hardware is not available in the netIOT Edge Gateway model.
WLAN Client: DNS server configuration while DHCP is enabled	The DNS server configuration can be set manually, even when the client mode is using the automatic DHCP configuration mode.
Ethernet Interfaces: DNS server configuration while DHCP is enabled	The DNS server configuration can be set manually, even when the interface is using the automatic DHCP configuration mode.
DHCP server functionalities for Ethernet interfaces (except fieldbus interface)	The netIOT Edge Gateway can act as a DHCP server in a subnet. This feature is not available for RTE interfaces.
Basic Firewall NAT (Network Address Translation) support	For each interface, pre-defined firewall profiles (Block, Drop, NAT Trusted, NAT Drop and Trusted) are available. For the WLAN interface, the firewall settings can be used only in client mode.
Default port settings (80/443) can be changed	Customer, who want to use the default HTTP/HTTPS ports with own applications running in a Docker container, can change the default port settings of the netIOT Edge Gateway
Static routing support	IP routes between the connected networks can be defined. For Wi-Fi this feature is available in the client mode only.
netIOT Diagnostic serial release	First release of the integrated netIOT Diagnostic application.
OPC UA Client / Server support	OPC UA Server / Client node-set for Node-RED. For further information please refer https://www.npmjs.com/package/node-red-contrib-iiot-opcua
Informix timeseries database and database management support	The netIOT On-Premise Edge Gateway is providing Edge Analytic functionalities based on IBM Informix database now. For the database management and monitoring InformixHQ is pre-installed on the gateway and can be accessed by a new tie on the landing page of the Edge Gateway Manager. A free of charge license is required in order to activate the database on the gateway.
netIOT Connect: NPIX-RS232, NPIX-RS485, NPIX-IO	NPIX-RS232/RS485/IO module support by using the pre-installed Node-RED nodes
OAuth 2.0 support for the Asset Intelligent Network (AIN)	The SAP Asset Intelligence Network requires the OAuth 2.0 authentication.

Improvements introduced since version 1.1.2.1

Component	Improvement
NTP default configuration	The date / time configuration has been set to an external NTP server by default, in order to prevent time related malfunctions.
Introduction of a disclaimer note	The disclaimer has to be confirmed, when the admin password change is forced after a first start.
Edge Gateway Manager / User Management	The user must re-enter the current valid password, before he can change it.
Runtime limited licenses	A runtime limitation can be activated for licenses. This may be useful in presentation or proof of concept scenarios.
Node-RED	The user can update the pre-installed nodes now. Nodes containing binary/c-code are still not updateable.
Portainer update to Version 1.20	The update is providing the latest Docker management features of Portainer. With this version the integration into the Edge Gateway User Management is not possible anymore. From now Portainer is providing his own User Management. Please set the Portainer password after a gateway first start or software recovery.
Update OpenSSL to v1.1.1a	Solved vulnerabilities: CVE-2018-0734, CVE-2018-0735, CVE-2018-0737
Update Mosquitto MQTT Broker to v1.5.6	Solved vulnerabilities: CVE-2018-12550, CVE-2018-12551, CVE-2018-12546, CVE-2018-20145, and CVE-2018-12543
Update of Azure IoT Hub node to version 0.4.7	For further information please refer https://www.npmjs.com/package/node-red-contrib-azureiothubnode
Update of Node-RED to version 0.19.5	For further information please refer https://www.npmjs.com/package/node-red
Update of Node-RED Dashboard to version 2.13.2	https://www.npmjs.com/package/node-red-dashboard

Component	Improvement
Update of Node.js to version 8.14	Solved vulnerabilities: CVE-2018-12121, CVE-2018-12122 and CVE-2018-12123

Minor fixes since version 1.1.2.1

Component	Bugfix
Date Time configuration	Date becomes invalid after switching to NTP synchronized and back to Manual
Edge Server	Performance improvement in the SNMP scan module and bug fixes in the PROFINET module Wrong user permission (read only) is displayed, even the user has read/write permissions.
Fieldbus Configurator Web Interface for PROFINET	GSDML view under Firefox in Web Configurator is empty, whereas it does work under Chrome
Edge Gateway Manager / PKI Setup	In some cases the connection get lost, when selecting a Root Certificate Certificate viewer does not display special characters correctly Filtering root certificates does not display all matching certificates The public key of a selected certificate is not displayed anywhere - neither in the certificate nor in the key details. A warning message indicates that the user wants to replace a root certificate, even it is a service certificate.
Fieldbus Configurator Web Interface for EthernetIP	Product Code and Product Name don't match with the information in the EDS file
Edge Gateway Manager / User Management	Empty notification box, when trying to delete the "admin" account. The first attempt to create a new user displays an error message. Only the second attempt to create a user is successful.

Component	Bugfix
Edge Gateway Manager / Control Panel	<p>Multiple error messages are displayed in the browser window, when the IP connection gets lost</p> <p>The uptime information in the Infocenter was set to zero after restarting the Edge Server service.</p> <p>Error message when trying to save the time settings</p> <p>Chronologically sorting of Syslog-Table entries doesn't work</p>
OPC UA Server for Edge (embedded)	<p>Common Name updated to "Hilscher OPC UA Server for Edge"</p> <p>Devices can be displayed multiple times</p>
Edge Gateway Manager / Package Manager	<p>After installing a package, the Installed packages list does not contain it (requires clicking "Refresh")</p> <p>Package list must only show packages newly installed or updated by the user.</p>
Edge Gateway Manager / Wi-Fi Configuration	<p>MAC address truncated</p> <p>Access point mode does not allow all standard-conformant characters for the pre-shared key.</p> <p>Wrong order when jumping between input fields by pressing the "Tab" / "Shift-Tab" button in Access Point mode.</p>
Asset Intelligence Network Connector (SAP AIN)	<p>Indicator whether the connection to the Edge Server service was successful, after pressing the "Try connection button"</p>
netIOT Diagnostic Application	<p>Jitter values exceeding 100% (e.g. 100.23%).</p> <p>"Current network load" tile displays values exceeding 100% (e.g. 100.01%).</p> <p>Device status is not updated in case of "Error frames" events.</p> <p>Get list of available snapshots fails.</p>
Edge Gateway Manager / Field interface configuration	<p>Passive Fieldbus configuration mode does not work if user clicks "Change mode" buttons in the wrong order</p> <p>Edge Gateway Manager might become unresponsive when switching from passive field mode to active</p>
Security improvements	<p>cookie handling, command injections, caching directives, ...</p>