

M!DGE3 - Release Notes

Release 2.0.16.0

2023-02-24

- Main component versions:
 - CNF version: 17
 - Web client version: 1.59.2
- New features:
 - System
 - GNSS implemented – time synchronization, position
 - Sleep mode – wake on Sleep input implemented
 - Interfaces
 - Network interface (Ethernet bridge) can be configured without any Ethernet port attached
 - Diagnostics
 - NTP status extended
- Fixed bugs:
 - Cellular interface
 - Cellular interface naming in Statistics fixed
 - Monitoring
 - Ethernet interface monitoring did not work correctly in case only one direction (Tx or Rx) was enabled. Fixed: it is now possible to monitor either both directions or one direction only.

Release 2.0.14.0

2022-12-16

- Main component versions:
 - CNF version: 16
 - Web client version: 1.58.0
- New features:
 - System
 - Sleep low power mode implemented
 - Sleep mode related event implemented
 - OTH-W3-WIFI adapter driver implemented
 - Several Events were updated to provide a possibility of sending SNMP and SMS notification
 - Routing
 - Routing option to set Metric for each routing rule implemented
 - Babel – Network neighbor authentication implemented
 - IPsec – List of active IPsec associations and Traffic selectors in the Status field now provides better formatting
 - IPsec – Traffic selectors filtering rules are now extended by IP protocol option
 - Interfaces – Cellular interface
 - Default MTU changed to 1430 Bytes
 - Cellular connection down event implemented
 - Security
 - Security subsystem updated (StrongSwan)
 - Firewall
 - L3 Firewall Input – Block list implemented
 - Diagnostics

- Monitoring output enriched by translation of several EtherTypes
- List of *Diagnostics > Information > SMS* messages is now sorted to show newest records first
- Firmware upgrade screen now provides more information about installed FW and version of FW in archive in order to find out which update files can be used for the unit FW upgrade
- Web interface
 - Input field component size was optimized
 - All input fields are now validated on blur (after the input is completed)
 - *Diagnostic > Event* page Severity filter groups were updated
 - Monitoring File output is refreshed automatically
 - Notifications from Remote device are now identified by the Remote unit's name and/or address
 - User interface is redirected to Status page after successful firmware upgrade
 - Notification messages are sorted in descendent order in order to provide newest messages on top of the previous
 - *Diagnostics > Information > Static tab* renamed to *System* to better reflect its content
 - All dialog and modal windows updated to a new version of modal component
 - Activating firmware over Remote access is now supported. Firmware file to a Remote unit needs to be transferred using Firmware distribution service
 - New menu *Settings > Services*
 - SNMP and SMS configurations moved here
 - Timeout of all requests from web interface to a unit is now 120 seconds
- Fixed bugs:
 - Serial interface
 - SAIA S-BUS: The first answer was not transmitted if operating in a SavePlus mode – fixed
 - Monitoring
 - Known issue “Monitoring of the IPsec encrypted packets on the Cellular interface does not work correctly” – fixed
 - Monitoring activated on disabled ETH port led to recovery mode – fixed
 - Web interface
 - Various layout and disable field fixes (Attach to network interface, ETH ports)
 - Update of Web inactivity timeout parameter fixed
 - *Diagnostics > Tools > ICMP ping* Source address does not offer WWAN interface address as it was not correct in all circumstances
 - Status info fields extra refresh suppressed
 - Sharing configuration files between RipEX2 and MIDGE3 minor fixes
 - Return to *Settings > Firewall > SNAT* and *DNAT* screens from Notification area – fixed
 - Web inactivity timeout calculation improved
 - System
 - Unit RTC update is now blocked when Tamper is active
 - Known issue “Disabling HTTP protocol together with Ethernet configuration changes can lead to unit recovery restart” – fixed

Release 2.0.13.0

2022-09-13

- Available functionality:
 - COM2, COM3 expansion board
 - Cellular interface
 - World wide LTE module
 - Link testing
 - Profile switching
 - SMS - notification, statistics, status read

- Ethernet ports: Disable; speed control
- VPN tunnels:
 - IPsec
 - GRE L2 and L3
- Static routing
- BGP, OSPF and Babel dynamic routing protocols
- Firewall: L3 (Input, Forward, Output) and L2 (Blacklist, Whitelist)
- Source NAT (NAPT), Destination NAT (NAPT)
- QoS
- COM port protocols:
 - Async Link, COMLI, DNP3, DF1, IEC101, Mars-A, Modbus RTU, PR2000, RDS, Siemens 3964R, SAIA S-BUS, UNI, Transparent
- Terminal server protocols:
 - Async Link, COMLI, DNP3, DF1, IEC101, Mars-A, Modbus RTU, Modbus TCP, PR2000, RDS, Siemens 3964R, SAIA S-BUS, UNI, Transparent
- Real-time Monitoring of all interfaces
- SNMPv3: Event log notifications; Following groups available to read: "System Group" MIB-II available, Event log; All statistics data;
- Syslog incl. logging to a remote server
- Time synchronization - NTP Server and Client
- User interface - Additional Advanced generic menu for all implemented configuration features;
- Diagnostic information:
 - Statistic counters for all interfaces
 - Detailed Event log with filtering options
 - Export option of all Statistics data and Event log to an external csv file
 - Historical statistics - 'any' required time interval
 - Differential statistics - short term interval
 - Status information available for the following modules: NTP; System information; Ethernet interfaces; Cellular interface; Static routing; IPsec; Supply voltage; Temperature measurement; NAT; Firewall L2, L3;
 - Auto refresh option for all Status fields
 - Status screen providing overview of Major and Critical events in last 7 days
 - Status screen providing realtime information about system status
 - Ethernet link down events
 - Cellular interface - signal strength
 - Unit HW values (temperatures, voltage) monitored, events triggered when threshold is reached, Hot standby switch over possibility on such an event
 - Configurable Diagnostic package
- Diagnostic tools
 - ICMP ping available via web interface
 - Monitoring saved to a file; Monitoring direct record to a file
 - RSS ping diagnostic tool
 - Routing diagnostic provides next hop interface for the given IP address
- Unit service tasks
 - Factory settings - from web interface or by pressing HW button
 - Unit reboot - from web interface or by pressing HW button
 - Default configuration and Total purge available
- Remote access (fast remote configuration)
 - Indicated by a specific web browser tab icon (favicon)
 - Old firmware version (in the Remote unit) warning message
- Multiple user accounts
- Password complexity; Password lockout

- RADIUS authentication and authorization
- Service access via the USB port: USB/WiFi and USB/ETH adapters available; service address and DHCP range configurable
- Service access protocols (HTTP, SSH) can be disabled; Service access protocols (HTTP, HTTPS, SSH) default UDP port numbers can be changed
- Web interface localizations: English; Russian
- Web interface improvements (unsorted)
 - Notification center
 - Remote access with reconnect option
 - All the time displays (including monitoring) and inputs are now localized according to a configured Time zone
 - Help screen for configuration windows and Diagnostics - Statistics
 - Title bar indicates menu position and active Remote access connection
 - Automatic logout is performed when the “Web inactivity timeout” expires
 - Compressed communication to limit amount of transferred data
 - Firmware update can be done using smaller firmware patches (over an older installed FW version)