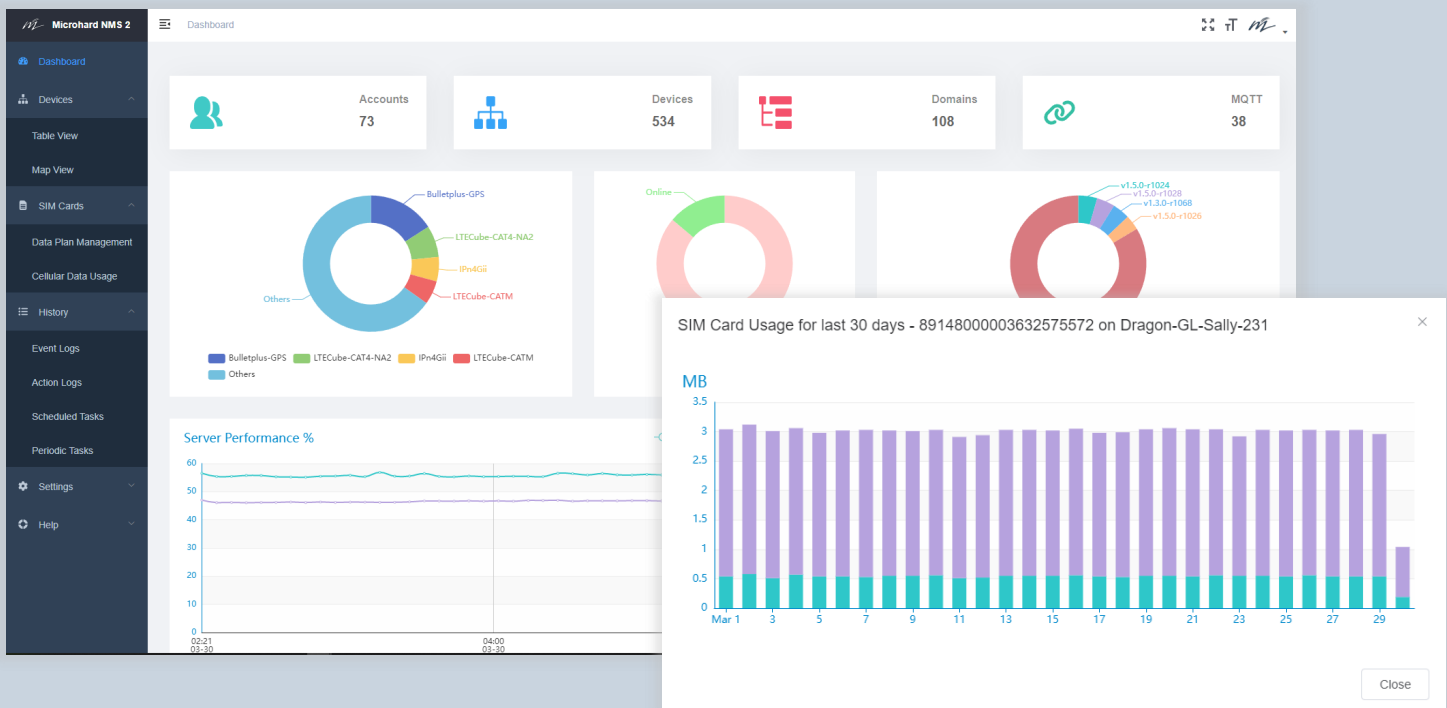


# NMS 2 On Premise



Microhard NMS 2 is a powerful on premise server application that allows users to visually monitor, troubleshoot and perform centralized upgrade/configuration operations for Microhard Cellular Modems. Locations of the units in the network can be positioned on a detailed map interface with precise GPS coordinates. Using MQTT and/or UDP reporting network devices can be monitored in real time and managed to prevent, identify and resolve problems.



## Features

- Detailed graphical representation of Microhard Cellular Devices
- On Premise (Self Hosted) Windows Server and Linux based software with multi-user capabilities
- MQTT & UDP device management
- Data Usage Reports & Alerts
- AT Command Interface for single or multiple device configuration changes
- Precise mapping capabilities via Lat/Long or automatic GPS coordinates
- Quickly identify offline devices
- Customizable Email Alerts
- Centralized wireless firmware upgrade and configuration capabilities
- Schedule and automate configuration and firmware changes
- Advanced event and action logging, task history
- View and export event logs
- Monitor Cellular & network traffic, RSSI/RSRQ etc, uptime of the entire network
- Backup/Restore device configurations

# NMS 2 On Premise



Dashboard / Devices / Table View

Status	MQTT	Device Name	Domain	MAC Addr	IP Addr	Product	Software Ver.	RSSI	IMEI	Carrier	SIM	Module	Carrier Firmware Ver.	Uptime	Last Contacted
Online	✓	BP-13	BoTest	000F92029535	192.16.8.1	Bulletplus-GPS	v1.3.0-r1086	N/A	356406061081245	N/A	N/A	LH930	FIH7160_V1_1_VWV_01.1...	13:13:49.9	2023-03-30 08:26:56
Online	✓	BP-14	BoTest	000F9206101A	192.168.221.14	Bulletplus-GPS	v1.3.0-r1086	N/A	866834040185345	N/A	N/A	EC25	EC25AFFAR07A08M4G...	42:17:55.53	2023-03-30 08:26:13
Online	✓	BP-26-Paul	1-test domain	000F9204FF97	N/A	Bulletplus-GPS	v1.3.0-r1077-23	N/A	867698040065404	N/A	N/A	EG25	EG25QGBR07A06M2Q...	49:13:19.15	2023-03-30 08:26:10
Online	✓	BP-21-Paul	default	000F92061345	192.168.221.21	Bulletplus-GPS	v1.3.0-r1069.5	N/A	867698040066915	N/A	N/A	EG25	EG25QGBR07A06M2Q...	0:0:5.7	2023-03-30 08:25:44
Online	✓	BP-22-Paul	default	000F9206601C	192.168.221.22	Bulletplus-GPS	v1.3.0-r1069.5	N/A	N/A	NOT REGIS...	N/A	N/A	N/A	0:0:3.6	2023-03-30 08:26:17
Online	✓	BPLE910_505firmware	1-test domain	000F92083106	166.247.44.43	Bulletplus-GPS	v1.3.0-r1084	-82	358148062832337	VerizonWirel...	89148000004082513363	LE910	DOB v.2.0.20.00.005/20.0...	27:0:26.58	2023-03-30 08:22:55
Online	✓	BPLE910_505firmware	1-test domain	000F92082D45	10.104.26.210	Bulletplus-GPS	v1.3.0-r1056	-54	358148062833301	CAN740	8917401010000015114	LE910	DOB v.2.0.20.00.505/20.0...	2:15:39.23	2023-03-30 08:23:16
Online	✓	BPLE910_505firmware	1-test domain	000F9208302C	173.181.200.45	Bulletplus-GPS	v1.3.0-r1056	-50	358148062840272	TELUS	8912230102126832975	LE910	DOB v.2.0.20.00.505/20.0...	26:19:22.29	2023-03-30 08:25:57
Online	✓	BPLE910_505firmware	1-test domain	000F92083143	173.181.200.44	Bulletplus-GPS	v1.3.0-r1056	-61	358148062832477	TELUS	8912230102126832967	LE910	DOB v.2.0.20.00.505/20.0...	6:20:50.22	2023-03-30 08:26:11

Dashboard / Devices / Device Details

### Device General

Device Name	BulletCAT9-VZW-52	Domain Name	USA-Office
Description	myBulletCAT9	IP Address	100.89.195.193
MAC Address	000F92069023	Product Type	G5 - BulletCAT9
Software Version	v1.5.0-r1044	Hardware Version	1.0
Status	Online	Uptime	60 days 6 hours 30 minutes 26 seconds
Last Contacted	2022-08-19 11:25:44.0	Last MQTT Publish Time	2022-08-19 11:25:44.0
Last UDP Report Time	2022-08-12 17:22:09.0	Last WebClient Accessed	2022-08-19 09:55:28.0

### Carrier0

Last Updated	2022-08-19 11:25:44.0	APN	VZWINTERNET
Module Type	L850	Firmware Version	18500.5001.02.03.25.20;Bull@Apr 4 2020:16:18:43)
IP Address	100.89.195.193	IMEI	863212031210310
DNS 1	198.224.172.135	IMSI	311480468867061
DNS 2	198.224.175.135	Sim Card Number	89148000004713612136
Activity Status	Connected	Sim Card Number 2	89148000004713612136
Phone Number	+17252216970	Home/Roaming	Home
RSSI (dBm)	-61	RSRQ (dB)	-7
Carrier Network	Verizon	Core Temperature (°C)	47.32
Cell Info (MCC:MNC:LAC)	311:480:5223	Supply Voltage (V)	12.18
Cell ID	5352206	Service Type	E-UTRAN

- The Dashboard provides a snap shot of the network health to quickly take stock of online and offline units.
- The detailed view device summary shows information such as the MAC and IP Addresses, Device Name, Carrier, SIM, Service & Radio Type, RSSI/RSRQ, etc.
- Quick link to specific device's WebUI Configuration.
- Powerful Filter to show only devices of interest.
- Map View allows robust mapping capabilities, with easy to view device status.
- Detailed device Information for Cellular Carrier, General/System info and interface data.

Dashboard / Devices / Map View

UserDevice  
 Last Contacted: 2022-06-29 16:14:24  
 Location: 51.141838, -114.05945 (Cellular)  
 MAC Addr: 000F920C566B  
 Status: Offline

Upgrade Task: 1 Device

Upgrade Type: System Firmware  
 Firmware Option: Latest Version  
 Upgrade Server: default  
 Schedule Option:  Now  Specific Time  Periodic  
 Schedule Time: 2022-08-19 13:54:37  
 Interval: 1 Week

Cancel Confirm

- Device Details provide general information about the device such as hardware & firmware versions, date/time last contacted, configuration details.
- Carrier details provides current APN, Connection Status, Roaming info, Cell ID, SIM Card Info, Temperature and Supply Voltage etc.
- Device local network settings and statistics
- Activity and log history of network events for specific interfaces such as Ethernet, Serial/USB interfaces, VPN status and statistics.
- Advanced logging capabilities, export Event Logs.
- Web Service for upgrades and configuration backup/restore.
- Customizable Email Alerts for events.

NMS2 Requirements	
OS	Windows Server
OS Version	2019 or 2022
Storage	500GB SSD or Better
RAM	32GB or Better
CPU	Intel Core i7-2600 @ 3.4GHz or Better



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