

M2M GPRS Gateway – Monitor User Manual

Version 3.20.1

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1. Introduction

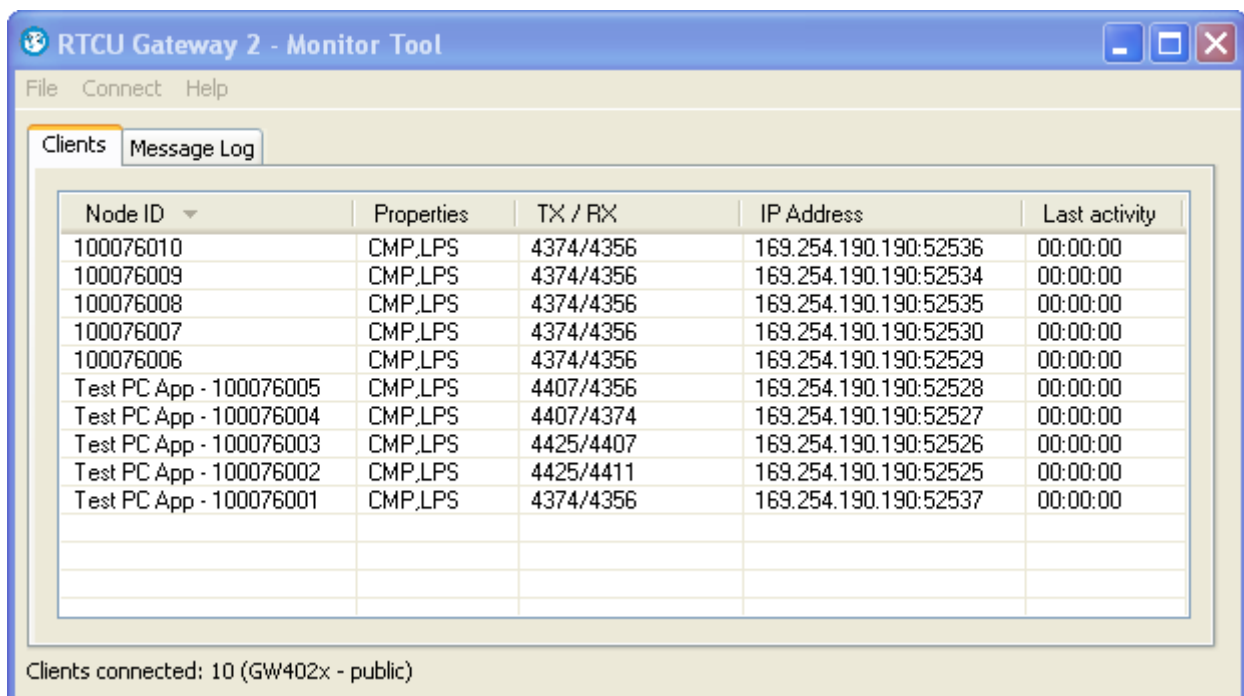
The **GPRS Gateway** is a middleware solution that allows easy communication and access to remote units connected by using TCP/IP communication technology. The product works in any network architecture and constitutes a backbone in the communication between RTCU units and back-end/client applications.

The term "**RTCU**" stands for **Remote Terminal Control Unit** and constitutes a unique combination of a programmable control-unit with the possibility of both digital- and analog I/O plus GSM / GPRS or 3G communication.

The **GPRS Gateway** fully supports the advanced **RTCU Deployment Server (RDS)** which is available as a free add-on.

2. The Monitor Tool

The "GPRS Gateway - Monitor Tool" is a monitoring and diagnostic tool for the GPRS Gateway.

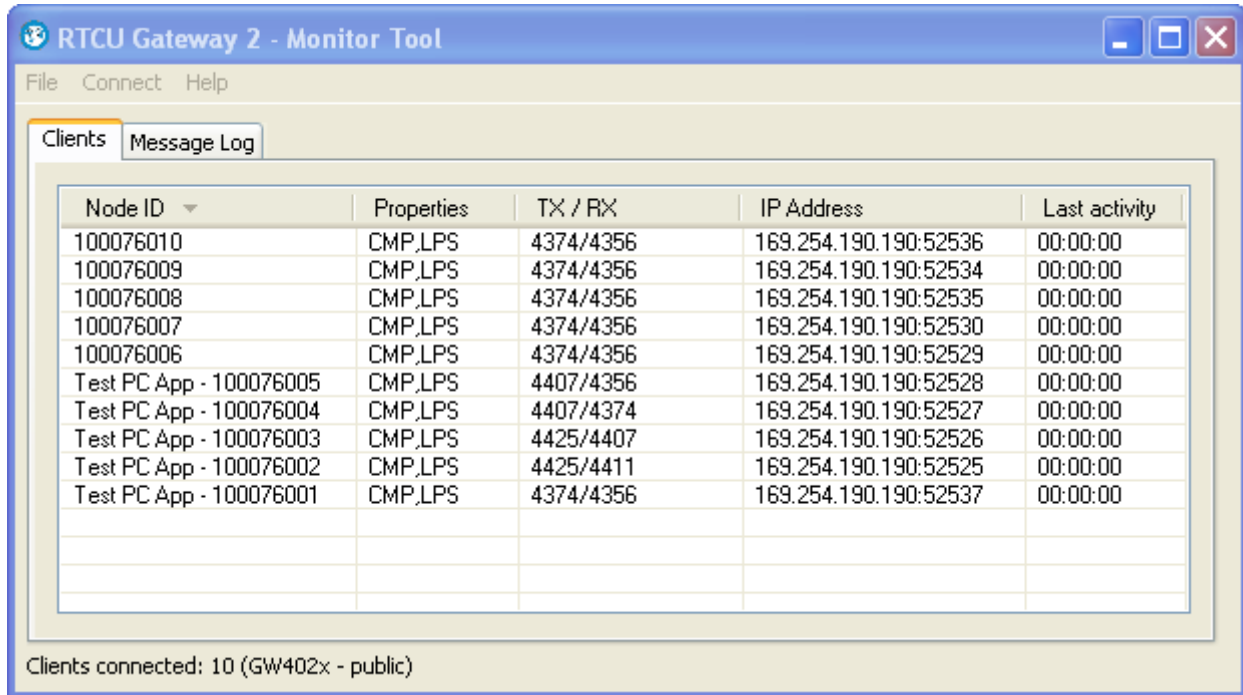


The interfaces contain the following pages. Please read on for further details.

- The [Clients](#) page lists the current connected clients and basic statics.
- The [Message Log](#) shows system messages and client communication.

2.1. Clients

The "Clients" page shows information about the clients connected to the gateway instance.



Node ID	Properties	TX / RX	IP Address	Last activity
100076010	CMP,LPS	4374/4356	169.254.190.190:52536	00:00:00
100076009	CMP,LPS	4374/4356	169.254.190.190:52534	00:00:00
100076008	CMP,LPS	4374/4356	169.254.190.190:52535	00:00:00
100076007	CMP,LPS	4374/4356	169.254.190.190:52530	00:00:00
100076006	CMP,LPS	4374/4356	169.254.190.190:52529	00:00:00
Test PC App - 100076005	CMP,LPS	4407/4356	169.254.190.190:52528	00:00:00
Test PC App - 100076004	CMP,LPS	4407/4374	169.254.190.190:52527	00:00:00
Test PC App - 100076003	CMP,LPS	4425/4407	169.254.190.190:52526	00:00:00
Test PC App - 100076002	CMP,LPS	4425/4411	169.254.190.190:52525	00:00:00
Test PC App - 100076001	CMP,LPS	4374/4356	169.254.190.190:52537	00:00:00

Clients connected: 10 (GW402x - public)

The columns contain the following:

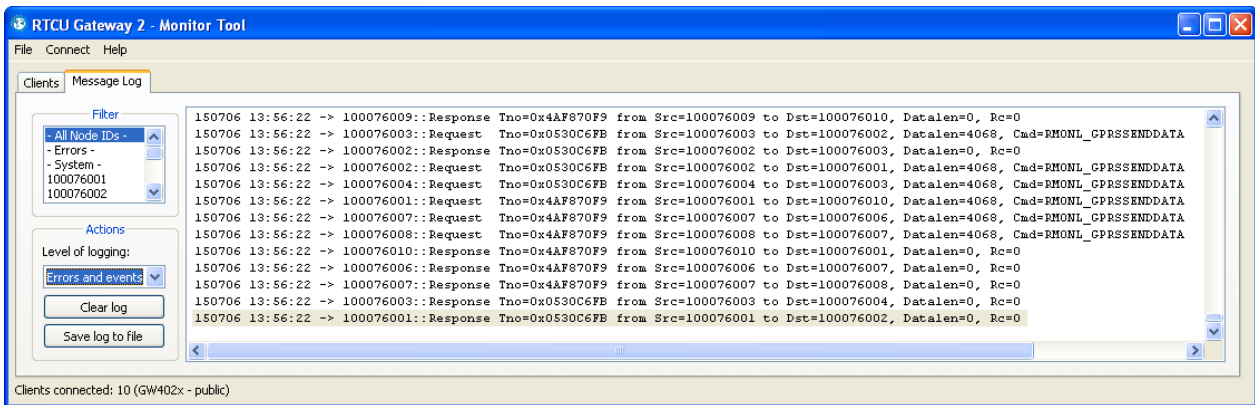
- Node ID The Node ID of the client. If the "Namelist" plug-in is installed, a text name may be shown.
- Properties Connection properties. ENC = data is encrypted, CMP = data is compressed, LPS = Large Packet Support.
- TX/RX The amount of bytes received/transmitted by the client.
- IP address The IP address of the gateway client. The address has the following format: <address>:<port>.
- Last activity The elapsed time since last client activity.

The client information is updated every 5 seconds.

When sorting the client information on the Node ID, the clients with a name text are also sorted by Node ID.

2.2. Message Log

The "Message Log" page shows the communication log of the connected gateway instance.



The entries in the log are colour-coded - red for errors, black for events, and blue for detailed events.

The "Filter" tool is used to show only messages from or to a specific Node ID. The list of Node IDs contains all Node IDs that have been active even after the log is cleared.

The only exception to this is the dynamic Node IDs that are removed from the list when they disconnect from the gateway.

The "Level of Logging" determines the type of messages the Monitor Tool receives from the gateway instance.

The available types are:

- None No log entries are received from the gateway instance.
- Errors only Only error messages are received from the gateway instance.
- Errors and events Errors, client connect/disconnect, and communication is received from the gateway instance.
- Detailed events Errors and detailed information of the events, like hexadecimal dump of data, are communicated between the clients.

The "Clear Log" button clears the message log in the Monitor Tool.

The "Log to File" button saves the filtered log to a file.

If an HTML file is selected, the log will be saved with colors. The "Courier" font will be used.

Otherwise the file will be saved as ASCII plain text.

2.3. Main Menu

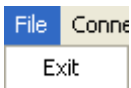
The following pages describe all the different menu items available in the Monitor Tool.



- [File](#)
- [Connect](#)
- [Help](#)

2.3.1. File

The "Exit" command ends the Monitor Tool program.



2.3.2. Connect

The "Connection Setup" dialog is where the connection to the gateway instance is configured.



Connection

The parameters have the following meaning:

IP This is the IP address of the gateway server.
 Adresse

SS

IP Port This is the IP port where the gateway server is listening for Monitor Tool connections.

Logon This is the key that is sent to the gateway server to gain access.

Key

History

The Monitor Tool remembers the connection setup for all previous gateway servers.

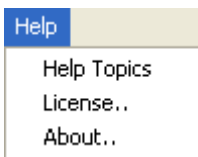
Any past connections are shown in a drop-down list with the format <address>:<port> (for example: gw.rtcu.dk:5002).

To connect to a past gateway server, select the address in the drop-down list and press the "OK" button.

The "Clear" button will erase all the stored connections.

2.3.3. Help

By using the "Help" menu, it is possible to receive help on specific items.



The individual items:

- [Help Topics](#)
- [License](#)
- [About](#)

2.3.3.1. Help Topics

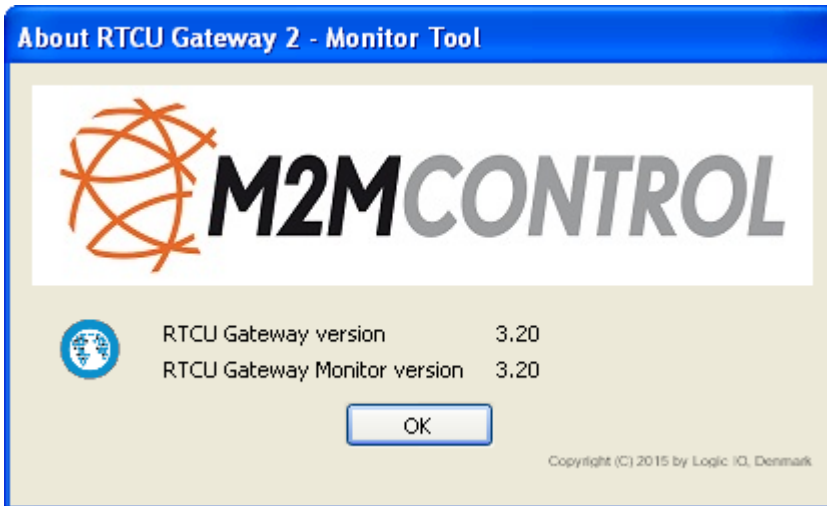
This command will start the "Windows Help" system. You will be presented with the contents of the Monitor Tool help manual.

2.3.3.2. License

This command shows the license information of the connected gateway instance.

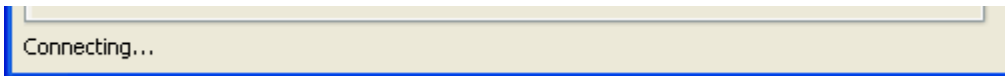
2.3.3.3. About

This command shows the current version number of the GPRS Gateway Monitor Tool program and the GPRS Gateway service instance it is connected to.



2.4. Status Bar

The status bar at the bottom of the main window shows the connection status.



The following connection status are possible:

Not connected	Not connected to a gateway instance.
Connecting...	Trying to open a connection to the gateway instance.
Logging on...	Sending connection credentials to the gateway instance.
Network error!	Connection failed. This may happen during an attempt to connect to a version 1.xx gateway.
Gateway not found!	Either the IP address or the IP port is wrong or the gateway is not running.
Incorrect key!	The gateway rejected the access key.
Wait.. Another client is already connected.	The gateway is busy. Someone else is connected to it.
Clients connected: # (..)	Connected to the gateway instance. # is the number of clients connected, and the name of the gateway instance is shown in the parentheses.

3. Trouble Shooting Guide

Error	Reason	Solution
"Logging to file failed, buffer overflow."	<p>The log file system cannot keep up. This may be a result of:</p> <ol style="list-style-type: none"> 1. No more disk space. 2. Slow disk performance. <p>Please note that when this message occurs, the log information will be incomplete as not all messages are saved.</p>	<p>Possible solutions:</p> <ol style="list-style-type: none"> 1. Remove old log files on the server. 2. Lower the file log level on the server.
"Monitor log buffer overflow..."	<p>The monitor log cannot keep up. This may be a result of:</p> <ol style="list-style-type: none"> 1. Slow communication media. 2. Extreme gateway traffic. <p>Please note that when this message occurs, the log information will be incomplete as not all messages are received.</p>	<p>Possible solutions:</p> <ol style="list-style-type: none"> 1. Lower the log level in Message Log. 2. Lower the log level in Message Log.
"No client is connected."	<p>Normally this is the result of:</p> <ol style="list-style-type: none"> 1. Client port is already in use. 2. Missing port forwarding in gateway. 3. Connection blocked by firewall. 	<p>Possible solutions:</p> <ol style="list-style-type: none"> 1. See the system log for error messages: "... failed to find port ..." 2. Check your gateway configuration. 3. Check your firewall configuration.

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