
EG4 MTConnect Interface

User's Manual

This document describes how to access monitoring data from the Packet Power EG4 Ethernet Gateways using the MTConnect protocol. For additional Packet Power product information please visit www.packetpower.com or contact support@packetpower.com.

⚠ NOTE: the user is assumed to be familiar with MTConnect terminology and operations of any particular MTConnect client software and hardware used to retrieve the data.

Data architecture	1
Accessing monitoring data via MTConnect	2
Overview	2
Step-by-step instructions	3
EG4: Enable MTConnect and choose the monitoring nodes to expose via MTConnect	3
putty: Establish communication with the EG4	4

Data architecture

This section summarizes how data received from monitoring nodes is exposed via the MTConnect interface.

- The MTConnect interface exposes data from a selected set of monitoring nodes
- For each monitoring node, MTConnect exposes a fixed set of monitoring channels
- Channels exposed via MTConnect include:
 - Voltage
 - Current
 - Power
 - VA
 - Energy
 - Temperature
 - PowerFactor
 - Frequency
- The specific list of channels exposed for any given node depends on the node type and configuration (e.g. phase type, availability of temperature probes etc.).

Accessing monitoring data via MTConnect

Overview

This section provides an overview of steps required to establish data flow from the EG4 to a MTConnect client.

Components

This example uses:

- Software:
 - basic telnet client (e.g. putty)
- Hardware
 - Packet Power EG4 Ethernet Gateway with an MTConnect software license

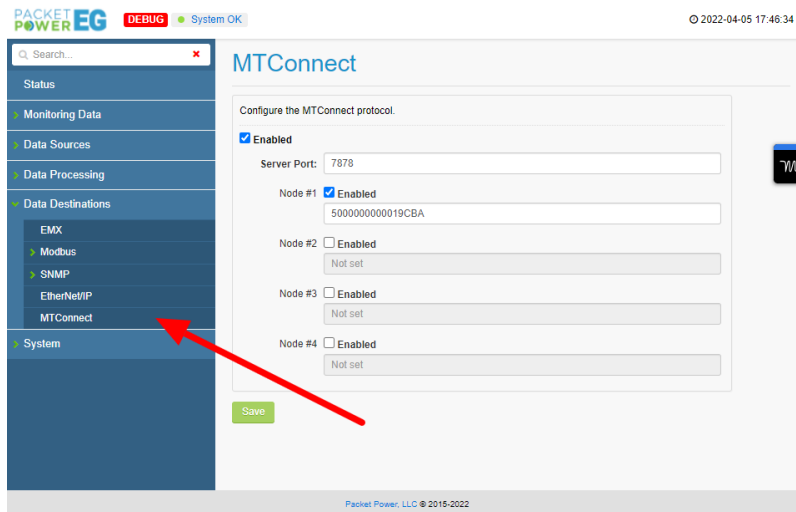
Summary

1. On your Packet Power EG4 web console:
 - a. Make sure your Packet Power EG4 is receiving the desired monitoring data and supports MTConnect (the appropriate license has been installed)
 - b. Configure the MTConnect interface on the Packet Power EG4 to expose monitoring data from selected monitoring nodes
 - c. Configure the TCP/IP port (default:9999) used to expose the data
 - d. Enable the interface
2. In the MTConnect receiver software
 - a. Specify the IP address of the EG4 and the port number specified above

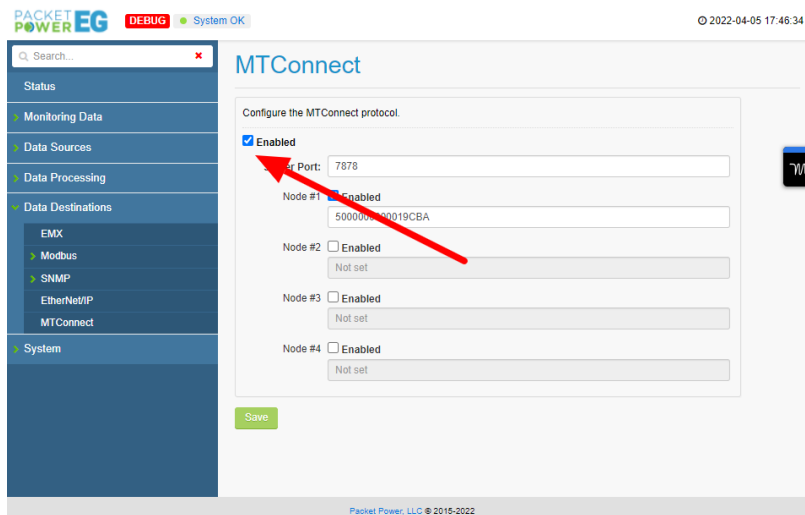
Step-by-step instructions

EG4: Enable MTConnect and choose the monitoring nodes to expose via MTConnect

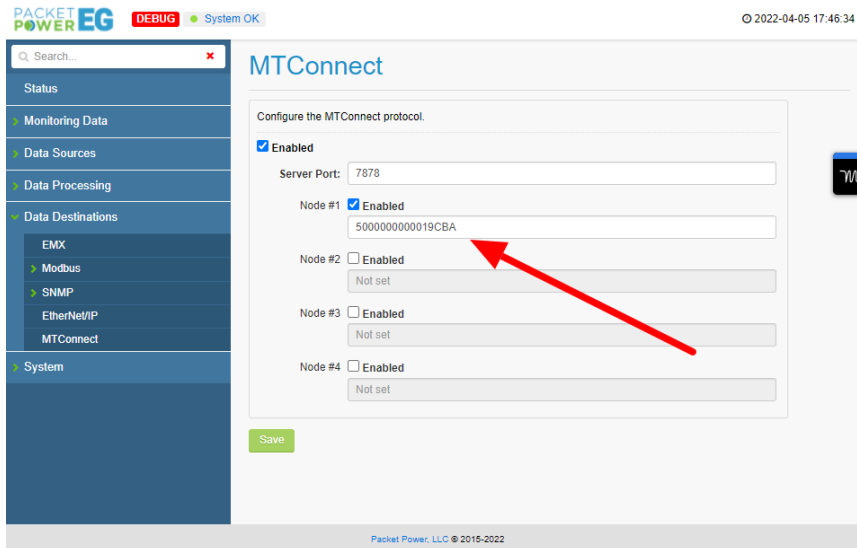
1. Verify that MTConnect interface is licensed on the gateway - MTConnect should be one of the options under the **Data Destinations** menu.



2. Enable the MTConnect interface. Verify that all options are correct. Click Save.



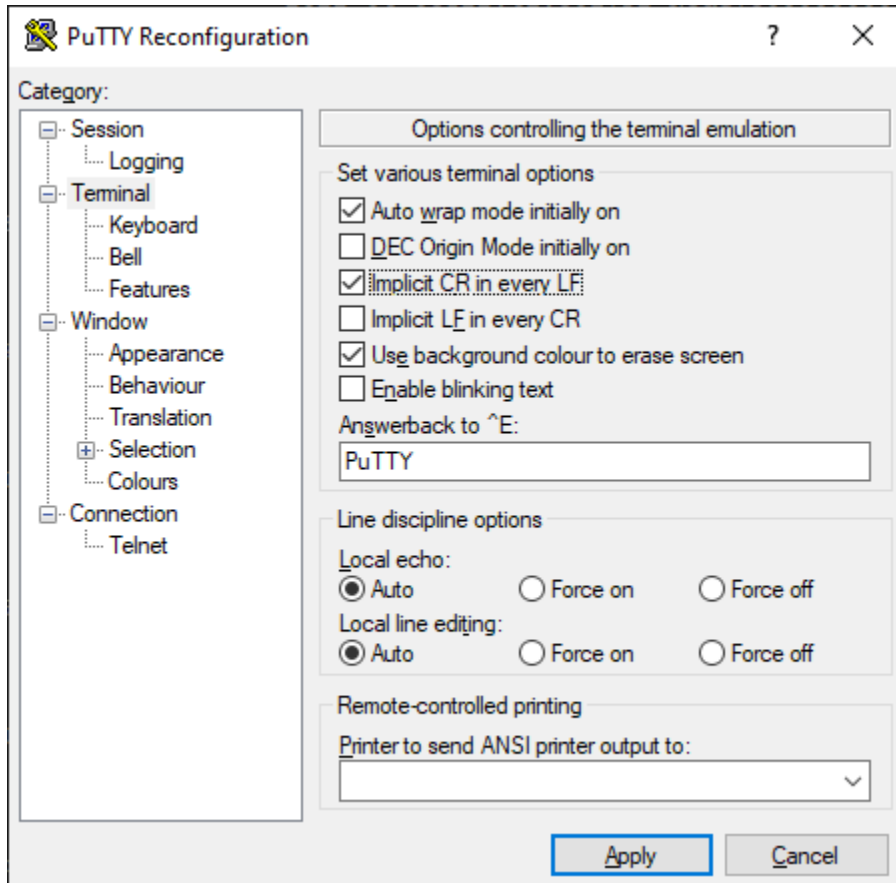
3. Select the nodes to be exposed via MTConnect by entering theory 16-character ID



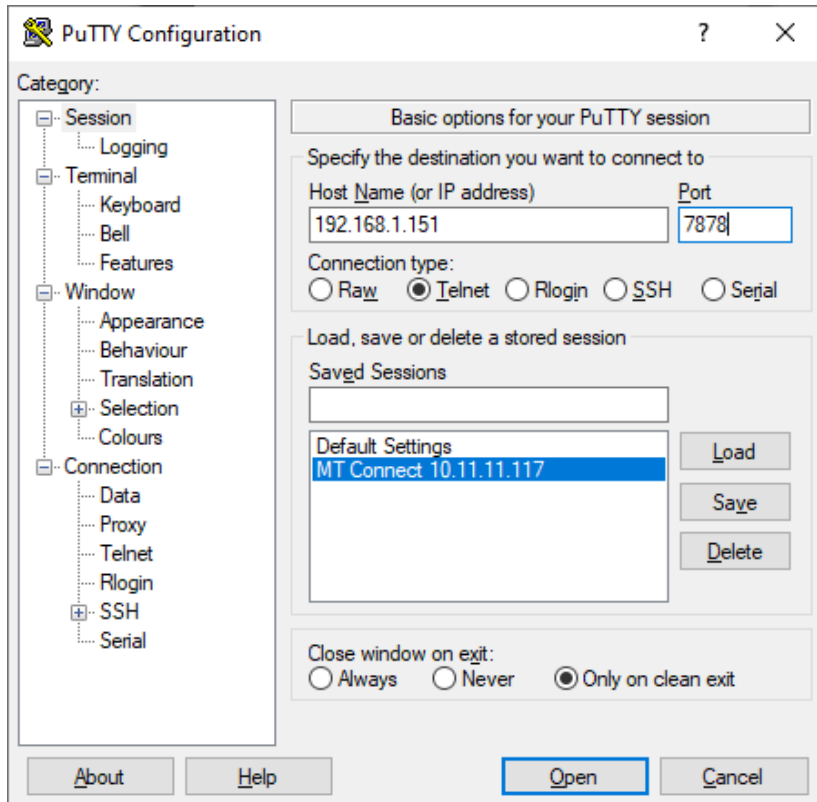
numbers.

putty: Establish communication with the EG4

1. Install putty (or a similar telnet client) - you can download putty from [here](#).
2. Configure putty for “Implicit CR in every LF” via the Terminal options menu:



3. Configure putty for a telnet connection to the EG4. Enter the EG4 IP address (192.168.1.151 below), port number (7878 below) and select telnet protocol:



4. Click Open

5. Data for the selected nodes should start getting reported:

```
192.168.1.151 - PuTTY
2022-04-05T22:43:48Z | P2_Node | 5000000000019CBA | P2_Energy | 3075319.2
2022-04-05T22:43:47Z | P2_Node | 5000000000019CBA | P2_Power | 1193.2
2022-04-05T22:43:47Z | P2_Node | 5000000000019CBA | P2_Power1 | 197.2
2022-04-05T22:43:47Z | P2_Node | 5000000000019CBA | P2_PowerFactor4 | 1.0
2022-04-05T22:43:48Z | P2_Node | 5000000000019CBA | P2_VAR | 1192.8
2022-04-05T22:43:49Z | P2_Node | 5000000000019CBA | P2_Energy1 | 508016.5
2022-04-05T22:43:49Z | P2_Node | 5000000000019CBA | P2_Energy2 | 510439.8
2022-04-05T22:43:51Z | P2_Node | 5000000000019CBA | P2_Energy3 | 511916.6
2022-04-05T22:43:48Z | P2_Node | 5000000000019CBA | P2_Energy4 | 513351.1
2022-04-05T22:43:49Z | P2_Node | 5000000000019CBA | P2_Energy6 | 515279.8
2022-04-05T22:43:49Z | P2_Node | 5000000000019CBA | P2_EnergyA | 3075319.4
2022-04-05T22:43:48Z | P2_Node | 5000000000019CBA | P2_Power3 | 198.6
2022-04-05T22:43:51Z | P2_Node | 5000000000019CBA | P2_Power4 | 198.9
2022-04-05T22:43:51Z | P2_Node | 5000000000019CBA | P2_Power5 | 200.2
2022-04-05T22:43:53Z | P2_Node | 5000000000019CBA | P2_EnergyB | 0.0
2022-04-05T22:43:53Z | P2_Node | 5000000000019CBA | P2_VoltageAngleLL3 | 0.0
2022-04-05T22:43:53Z | P2_Node | 5000000000019CBA | P2_VoltageB | 120.6
2022-04-05T22:43:53Z | P2_Node | 5000000000019CBA | P2_Energy | 3075320.4
2022-04-05T22:43:53Z | P2_Node | 5000000000019CBA | P2_Power3 | 198.9
2022-04-05T22:43:53Z | P2_Node | 5000000000019CBA | P2_VAR | 1192.8
2022-04-05T22:43:54Z | P2_Node | 5000000000019CBA | P2_Energy1 | 508016.8
2022-04-05T22:43:55Z | P2_Node | 5000000000019CBA | P2_Energy2 | 510440.1
2022-04-05T22:43:54Z | P2_Node | 5000000000019CBA | P2_Energy5 | 516316.0
2022-04-05T22:43:56Z | P2_Node | 5000000000019CBA | P2_Energy6 | 515280.2
2022-04-05T22:43:54Z | P2_Node | 5000000000019CBA | P2_EnergyA | 3075321.0
2022-04-05T22:43:54Z | P2_Node | 5000000000019CBA | P2_Power2 | 198.1
2022-04-05T22:43:54Z | P2_Node | 5000000000019CBA | P2_PowerFactorA | 1.0
2022-04-05T22:43:56Z | P2_Node | 5000000000019CBA | P2_VoltageA | 121.3
2022-04-05T22:43:55Z | P2_Node | 5000000000019CBA | P2_Power4 | 198.9
2022-04-05T22:43:55Z | P2_Node | 5000000000019CBA | P2_Power5 | 200.2
2022-04-05T22:43:56Z | P2_Node | 5000000000019CBA | P2_Current1 | 1.6
2022-04-05T22:43:57Z | P2_Node | 5000000000019CBA | P2_Current3 | 1.6
2022-04-05T22:43:57Z | P2_Node | 5000000000019CBA | P2_Power1 | 197.1
2022-04-05T22:43:56Z | P2_Node | 5000000000019CBA | P2_Power6 | 199.7
2022-04-05T22:43:56Z | P2_Node | 5000000000019CBA | P2_PowerA | 1192.9
2022-04-05T22:43:57Z | P2_Node | 5000000000019CBA | P2_PowerFactor1 | 1.0
2022-04-05T22:43:56Z | P2_Node | 5000000000019CBA | P2_PowerFactor2 | 1.0
2022-04-05T22:43:57Z | P2_Node | 5000000000019CBA | P2_PowerFactor5 | 1.0
2022-04-05T22:43:57Z | P2_Node | 5000000000019CBA | P2_Power3 | 198.8
2022-04-05T22:43:57Z | P2_Node | 5000000000019CBA | P2_VAR | 1193.9
2022-04-05T22:44:00Z | P2_Node | 5000000000019CBA | P2_Current6 | 1.6
2022-04-05T22:43:59Z | P2_Node | 5000000000019CBA | P2_Energy | 3075322.8
2022-04-05T22:44:00Z | P2_Node | 5000000000019CBA | P2_Energy5 | 516316.3
2022-04-05T22:43:59Z | P2_Node | 5000000000019CBA | P2_Power2 | 198.2
2022-04-05T22:44:00Z | P2_Node | 5000000000019CBA | P2_PowerB | 0.0
2022-04-05T22:43:59Z | P2_Node | 5000000000019CBA | P2_PowerFactor6 | 1.0
2022-04-05T22:44:00Z | P2_Node | 5000000000019CBA | P2_PowerFactorC | 1.0
2022-04-05T22:43:59Z | P2_Node | 5000000000019CBA | P2_VoltageC | 120.6
2022-04-05T22:44:00Z | P2_Node | 5000000000019CBA | P2_Current1 | 1.6
```