

Application Note: MQTT Recorder Module

By Cirrus Link Solutions

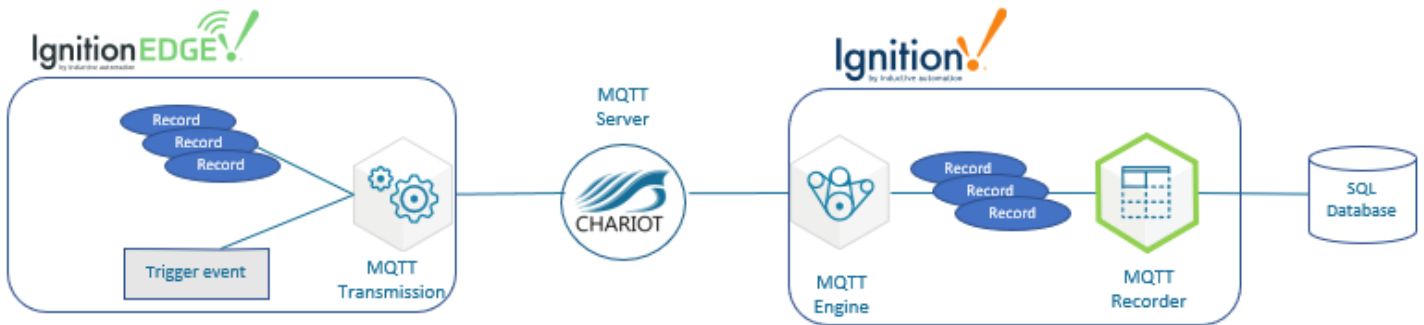


MQTT Recorder Module

The MQTT Recorder module receives a block of data from an MQTT Server and enters it as a record into a database table.

For years data has been created in PLC's, RTU's and HMI's that represent a record of information such as a ticket for a transaction. With the limitations of register-based communication protocols this information has been clumsily handled as consecutive blocks of registers. This method runs the risk of not keeping all the data together as a record event when a partial subset of the registers gets overwritten with a newer set of information. Today with the power of MQTT these records of data can be published, on event, as an immutable record which automatically builds and populates a table within a database. The record can also be time stamped and carry a SHA-256 Hash key that will guarantee that the entire contents of the record are unedited from source. The MQTT Recorder module receives these records and first automatically builds the database table, and then populates each record into the table as it is received.

Record Data sent as immutable object to database

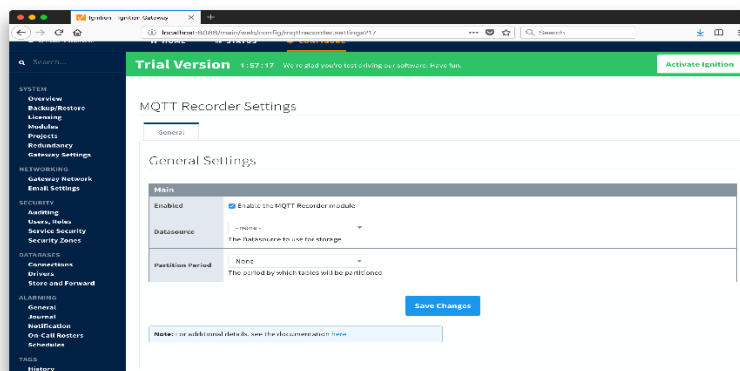


Examples of the record data applications are:

- Oil & Gas – EFM Quantitative Transaction Records (QTR's), EFM Alarms, EFM Events, P'cards for Pump of Controllers
- Any Industry – Ticket information to record a transaction event
- Pharmaceutical – Batch records for drug manufacture
- Transportation Industry – Locomotive engine events

Extremely simple to configure

For tutorials visit [MQTT Recorder Configuration](#)



Benefits

The MQTT Recorder offer the following benefits:

- Receives any RECORD object and creates the database table
- Receives any RECORD object and populates the data within the database table
- Records can be sent as an immutable object with a 256-SHA hash key for audit purposes
- Works with all databases supported by Ignition

Customer Quote:

"I've got a simple HMI built in Ignition Edge that users enter ticket information into. The fields are bound to tag values, and when the user clicks submit it writes a 1 to the record publish flag.

On the other side of the MQTT Server, I have a full version of Ignition running the Recorder module which receives the record and writes it to a database table.

I was surprised to see how easy it was to setup and get working quickly out of the box.

I think the recorder module will work great for this application. Even the store and forward worked as expected."

Trent Boudreaux – Director Technical Services – TIGA

Powered by Ignition:



Cirrus Link MQTT modules are powered by Ignition, the powerful HMI, SCADA, and MES software platform from Inductive Automation providing cross-platform compatibility, unlimited free clients, robust out-of-the-box SQL database support, and fast installation.

Leveraging the full power of the Ignition universal industrial automation platform with fully integrated HMI/SCADA functionality, the Cirrus Link MQTT Modules will unleash the true value of your IIOT Data.

Call or email us today to setup a demo

sales@cirrus-link.com – 844 824 7787

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