Ignition IIoT Architecture

Ignition IIoT collects data from any device at the edge of the network, publishes that data to a central broker, and pushes the data to subscribed industrial and line-of-business applications. Ignition IIoT can connect to PLCs in the field through the use of the MQTT Transmission module, field devices with Ignition Edge MQTT installed, and/or MQTT-enabled edge gateways and field devices that use the Cirrus Link Sparkplug MQTT specification. This data is published to an MQTT broker, this broker can be located on-premise, in the cloud, or a hybrid of the two. The MQTT Engine module located on an Ignition Gateway can subscribe to any data published from the broker, this data can be used in any Ignition application.

PLCs/RTUs
Connect to any PLC or RTU through the Transmission Module or Edge Gateway

Edge Gateway/ MQTT-Enabled Device
Connects edge devices to an MQTT server

MQTT Transmission Module
Use Ignition to publish to an MQTT server

Ignition Server
Ignition Gateway with all modules

Cloud Network
Cloud-hosted MQTT server

Field Device: Ignition Edge MQTT Installed
Publish device data to an MQTT server

Private Network
On-premise private network

MQTT Connections
Securely transfer data over cellular, radio, VSAT or network connections

MQTT Engine Module
Securely connects the Ignition Gateway to MQTT servers

Touch Panels
Launch clients to touch panels

DMS

Big Data

CRM

ERP

Web-Launched Clients
Launch an unlimited number of clients to any device equipped with a web-browser

Line-of-Business Applications
Any business application can subscribe to data through the MQTT server

Mobile Devices
Access projects via wireless smartphones and tablets

Web-Based Designers
Design projects concurrently with multiple designers (included)

Ignition
by inductive automation