Hub & Spoke Architecture

The hub and spoke architecture consists of two pieces. The hub piece consists of a central Ignition Gateway with Vision, Reporting and Mobile Modules and a database server. The spoke piece consists of a stripped-down Ignition Gateway with OPC UA and SQL Bridge Modules, dedicated for data logging. Each site is fully independent, operating with its own history, alarms, and clients, with the client Gateway being used for coordination and long-term history storage.

Remote Field Devices

PLCs

Edge Gateway

Local Devices

Data Logging Boxes

PLCs

Gateway

MQTT Connections*

MQTT Enabled Devices

PLCs

PLCs

Database

Database

Gateway

Clients

Clients

Database

Remote Site SCADA

Internet/Cloud Server

Local Site SCADA

Central Ignition Gateway

Database

Central Site SCADA

Web-Launched Ignition Clients

* MQTT connections require an MQTT broker, the MQTT Modules, and MQTT-enabled devices or Edge Gateways in the field.

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