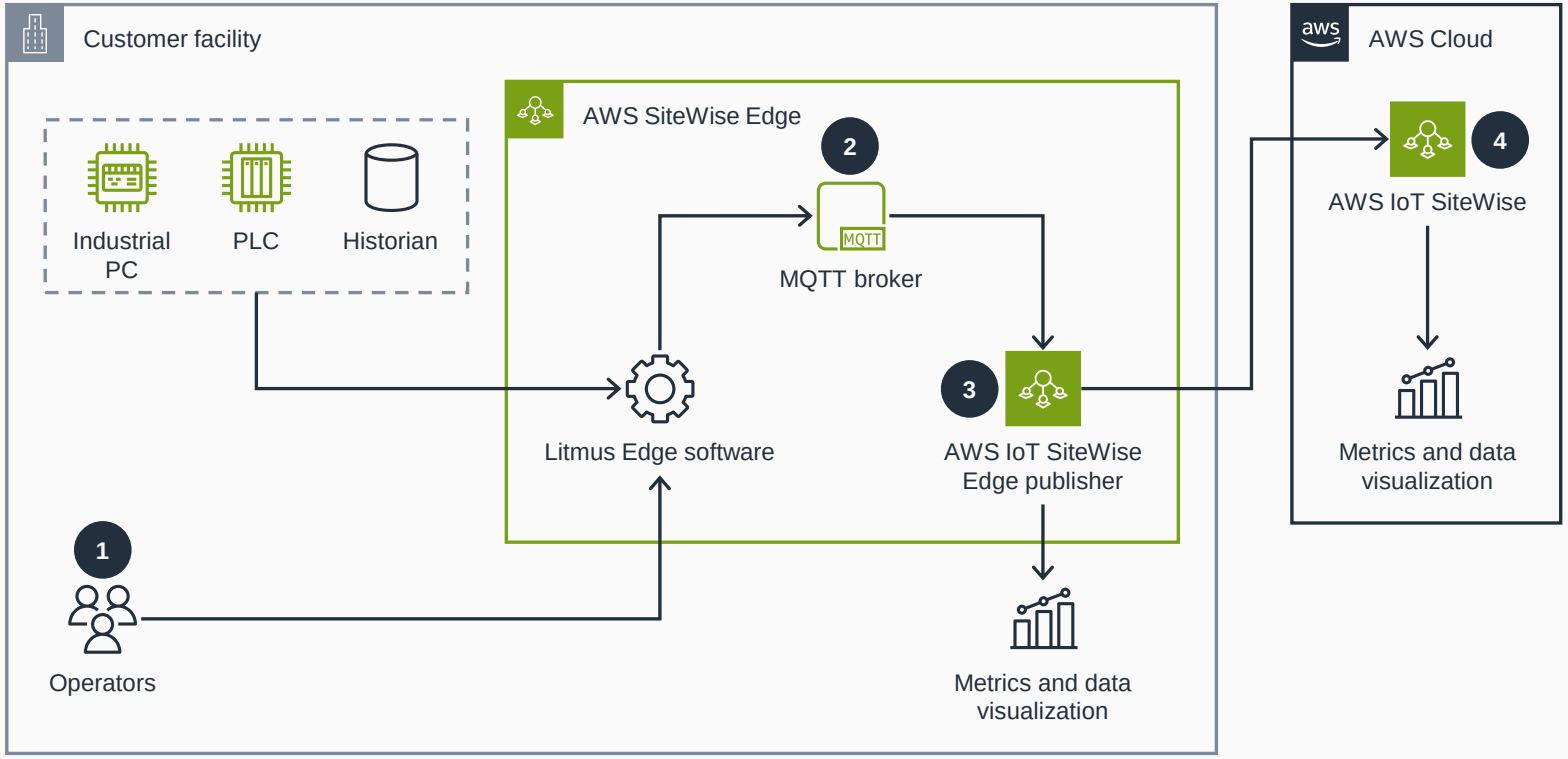
Guidance for Integrating an Industrial Data Fabric with Litmus Edge on AWS

This architecture diagram shows how to ingest near real-time data at scale from edge data sources into an industrial data fabric using Litmus Edge.



1. Litmus Edge is an industrial IoT platform that helps users collect, process, and analyze data from industrial devices. Using the Litmus Edge management software console, users can add Litmus software as a data source on **AWS IoT SiteWise Edge** gateway by the Litmus Edge container. This enables users to configure the protocols, data flows, and data conditioning.

2. After the configurations are deployed, the sensor data flows to **AWS IoT SiteWise Edge** for local monitoring, storage, and access at the edge. Data from programmable logic controllers (PLCs), Supervisory Control and Data Acquisition (SCADA), and industrial historians is collected by Litmus Edge and published as MQTT messages to the MQTT broker running on **AWS IoT SiteWise Edge**.

3. The publisher component on the **AWS IoT SiteWise Edge** gateway listens to all MQTT topics. It then securely publishes data to **AWS IoT SiteWise** in the cloud. In case of network disruption, it also addresses local buffering, storing, and forwarding of the event to **AWS IoT SiteWise**. To support decision-making on the factory floor, users can create local applications that use MQTT connectivity to visualize and monitor data in real-time at the edge.

4. Published data is correlated with corresponding assets and populated on **AWS IoT SiteWise** in the cloud, where users can visualize it either with the **AWS IoT SiteWise** Monitor or with **Amazon Managed Grafana**.

Reviewed for technical accuracy December 3, 2024

AWS Reference Architecture