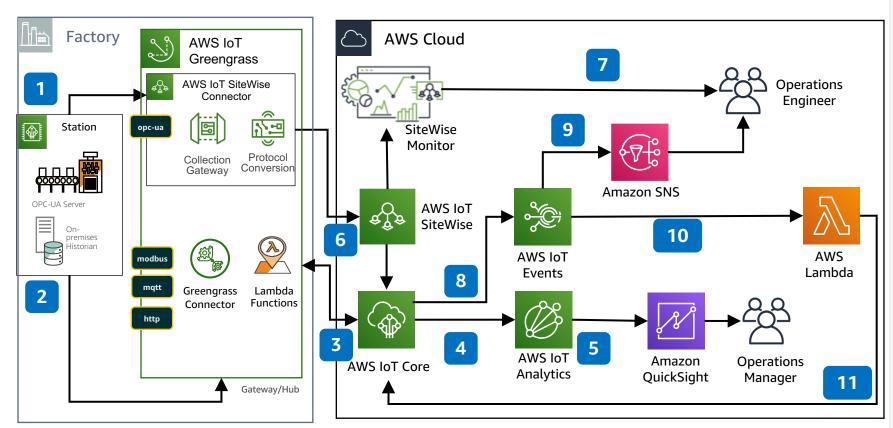
## AWS Industrial IoT

## **Asset Condition Monitoring Reference Architecture**

Create a solution to monitor the health of factory equipment, detect fault conditions, and respond to events using AWS IoT SiteWise, AWS IoT Greengrass, AWS IoT Core, and AWS IoT Events.





## **AWS Reference Architecture**

## **Description**

- Configure the AWS IoT SiteWise Connector on AWS IoT Greengrass to connect and collect data from a factory historian using OPC-UA.
- Configure Greengrass Connector for AWS Lambda functions to interface with local Modbus, MOTT, or HTTP traffic.
- Configure rules within AWS IoT Core to trigger events that send messages to AWS IoT Events and AWS IoT Analytics.
- In AWS IoT Analytics, set up a channel, pipeline and data store to analyze your data from the factory machines.
- Derive insights from analyzed data using 5 Amazon QuickSight on the AWS IoT Analytics data source.
- Use **AWS IoT SiteWise** to model and create assets that represent on-premises devices, equipment and processes, and ingest their data into AWS.
- Create a custom web portal using AWS IoT **SiteWise Monitor** functionality to visualize factory data and industrial KPIs in near realtime.
- Use **AWS IoT Events** to detect complex events and to trigger messages for human alerts and factory response commands.
- Publish Amazon SNS messages based on input events to send notifications.
- 10 Create an AWS Lambda function to send mitigation command back to asset on certain events through AWS IoT Core.
- Use AWS IoT Core to forward commands to **AWS IoT Greengrass** to execute mitigation actions on assets.