



- 1** Kalki.io telemetry headend is a data acquisition middleware with 40+ communication protocol support to collect data from field devices and enables Azure apps to manage them remotely. Kalki.io support DNP3.0, IEC61850, IEC101/104, MQTT, OPC UA and many other legacy and standard protocols.
- 2** Azure IoT Hub connects the devices virtually for further data processing. It enables a security-enhanced bidirectional communication between IoT applications and devices.
- 3** Azure Event Hubs transforms and stores the data. It provides a distributed stream processing platform with low latency and seamless integration.
- 4** Alternative 1: Azure Stream Analytics is a real time analytics service. It's easily extensible with custom code and built-in machine learning capabilities for more advanced scenarios.
- 5** Azure Functions is a serverless compute service, which allows you to run small pieces of code (called "functions") without worrying about application infrastructure. With Azure Functions, the cloud infrastructure provides all the up-to-date servers you need to keep your application running at scale.

- 6** Azure Notification Hubs allow you to send notifications to a wide range of mobile platforms and can allow notification of operators and administrators on certain events or alerts which require immediate attention.
- 7** Alternative 2: Azure Data Lake stores and further analyzes the data. Azure Data Lake is a massively scalable data lake with enterprise-grade security and auditing, which allows batch, stream and interactive analytic programs to run with simplicity.
- 8** Explore your data with visual reports and collaborate, publish and share them with others. Power BI integrates with other tools, including Microsoft Excel, so you can get up to speed quickly and work seamlessly with your existing solutions.
- 9** Alternative 3: Store and analyze the data using Azure Time Series Insights (TSI). The telemetry processor in the Industrial IoT platform forwards contextualized samples to TSI and other consumers.
- 10** The Time Series Insights Explorer is a web application you can use to visualize the telemetry.