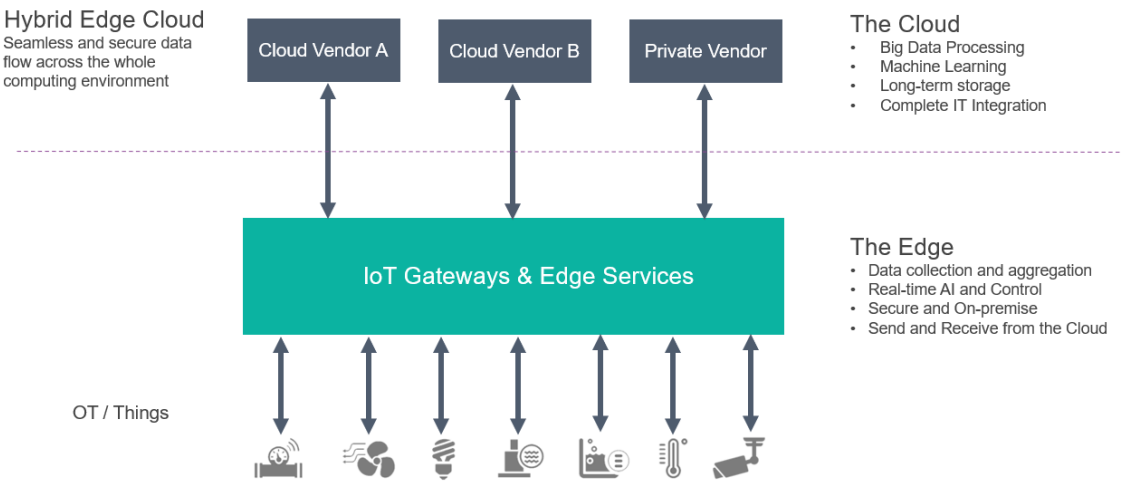
IOTech Cloud Connectivity

Seamless Data Flow to and from the Cloud

Edge computing focuses on the processing of operational data at the edge of the network. That means performing data collection functions and running decision making and control algorithms as close to the edge sensors and OT devices as possible. However, it is also clear that cloud computing continues to provide much value in the Industrial IoT space.

This means that most systems require a hybrid solution consisting of both edge and cloud components working together in a cohesive way. Users require the ability to utilize cloud resources for heavy-duty applications, while using edge computing for lighter-weight processing and local, real-time insights. IOTech's edge software products enable seamless yet secure data sharing between your edge and cloud environments.



IOTech Cloud Connectivity Key Benefits

Easy Cloud Integration

IOTech provide out-of-the-box integration to the main cloud vendor platforms including AWS, Microsoft, Google and IBM. To begin streaming data, the user just configures their cloud endpoint identifiers and specifies their security credentials. Simple, quick and no coding is required

Bridging the OT/IT Divide

IOTech's device connectors can connect and acquire data from the OT devices and then steam it northbound to public clouds, private clouds and other IT endpoints. Data can be delivered to where it needs to go via typical IoT protocols including MQTT, REST and Kafka

Bi-Directional Connectivity and Data Flow

To operate seamlessly, a hybrid edge and cloud architecture requires two-way data flow. Insights gained from either the edge or the cloud, along with key control and monitoring metrics need to be dynamically shared with the rest of the system. IOTech connectors support the streaming of edge and cloud data in both directions

Aggregation and Sensor Fusion

IOTech Edge Central™ is an open edge data platform which supports both extensive southbound OT connectivity, data aggregation and sensor fusion, provision of AI and edge decision making, and easy-to-configure bi-directional cloud integration. It is a complete edge platform and has open APIs that allow users to add any additional northbound and southbound connectivity that is required

Real-Time and Resource-Constrained

Edge Central is an open edge data platform which provides exceptionally fast and efficient connectivity and data flow. Its extremely lightweight implementation allows data to flow from OT devices to cloud endpoints with minimal overhead but also allows for dynamic and real-time edge data processing when needed

System Management and Orchestration

An edge IoT system of any scale will require management and orchestration, usually from a cloud or centralized location. Edge Manager provides an edge management solution that can be hosted on-premise or in the cloud, and can support the essential tasks of managing both devices and applications across the edge cloud divide