Accelerate IoT with Tietoevry Connect

Overview Tietoevry Connect IoT Accelerator

tietoevry

Core Functionality

Tietoevry Connect (TEC) is an enabler and an accelerator framework for various data focused projects:

- wide range of available services
- configuration only

Focus on use case

Reduce time to market

Azure PaaS Only

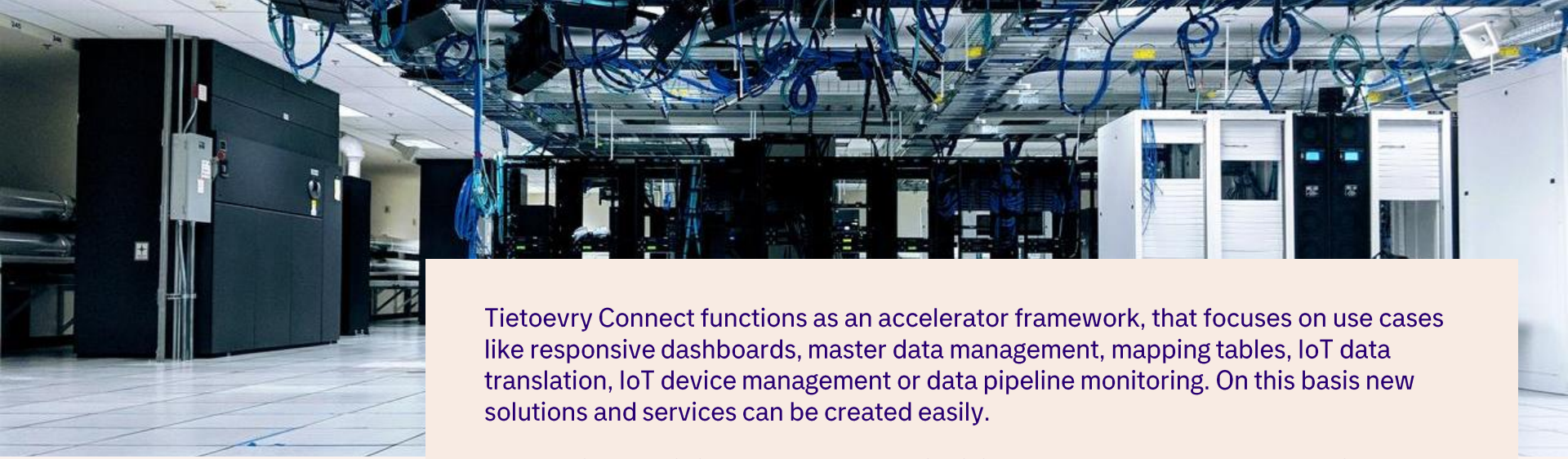
Connect

Connect API

Numerous renowned international as well as Austrian industrial companies already benefit from Tietoevry Connect. Architecture of our solution in many projects successfully supported by Microsoft.

A lot of modules already available!

- Dashboards
- Masterdata mapping
- IoT data translation
- IoT product templates
- IoT auto-signal recognition
- IoT Namespace discovery
- Device management
- IoT edge container handling
- Rules & actions
- Real Time Data quality check
- User and Access Management
- and many more!



In a nutshell

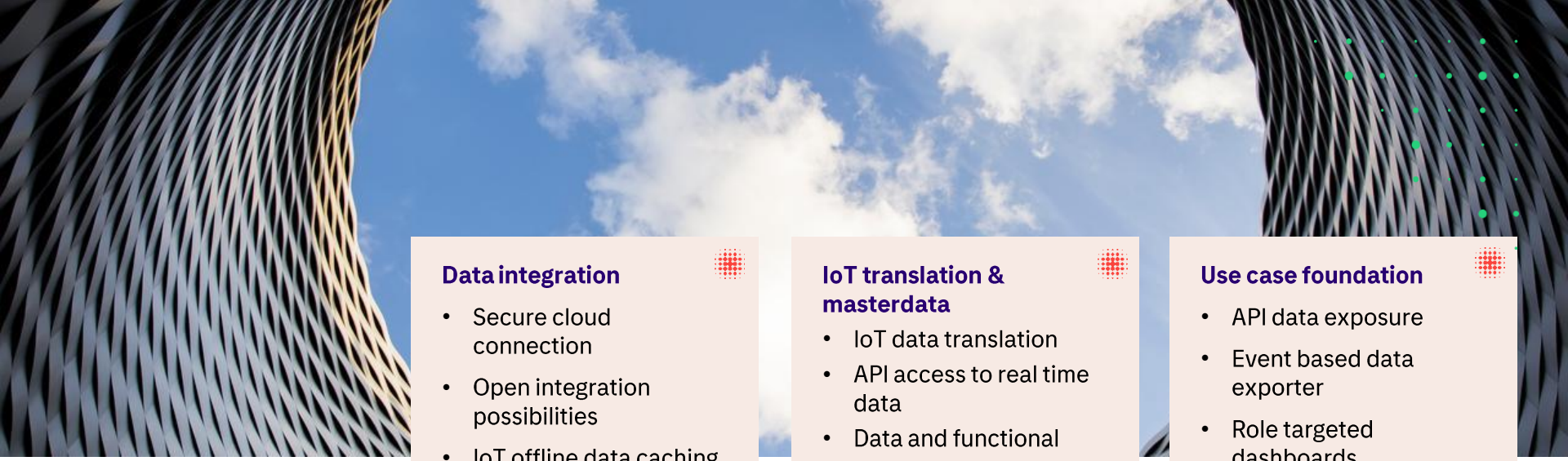
Tietoevry Connect functions as an accelerator framework, that focuses on use cases like responsive dashboards, master data management, mapping tables, IoT data translation, IoT device management or data pipeline monitoring. On this basis new solutions and services can be created easily.

We provide the fitting feature for each individual use case on a modular basis.

The accelerator is developed on the basis of angular, .net and Microsoft Azure PaaS services. It can run directly in Azure cloud (CSP or existing enterprise subscription).

The solution consists of a graphical (Connect), interface part (Connect API) and configured Azure PaaS services.

tietoevry Connect Connect API



Tietoevry Connect core features

Data integration

- Secure cloud connection
- Open integration possibilities
- IoT offline data caching
- 'Machine Learning on the Edge' Device management & edge container handling
- Namespace discovery
- Gateway management

IoT translation & masterdata

- IoT data translation
- API access to real time data
- Data and functional access
- Install base definitions
- Multi tenant
- DAMA data quality in real time
- Service quality dashboard
- Azure datalake integration out of the box

Use case foundation

- API data exposure
- Event based data exporter
- Role targeted dashboards
- Notifications
- Responsive & adaptive
- AI integration in IoT pipelines
- Reporting
- Active Directory integration

Value areas

Machines
Production Lines Equipment

- Device or Machine
- Sensors
- Gateways, IPCs, Edge compatible

→ Asset Managers (OT)

Corporate Units
Global Roles

- Masterdata
- Global hierarchy and fleet
- Device management
- Data translation
- Trend analysis

→ Fleet Management
→ Corporate view

Business
Consumers

- Status
- Quality or condition checks
- Inspections
- Archive
- Reports

→ Service management
→ Digitation or
→ Optimization roles

Tietoevry Connect

Easy & quick onboarding
Real time insights

Fully configurative
Extendible, scale
Central, translated data

Get more value out of data

Modules and features included in the accelerator

Authentication

- Custom JWT Authentication provider
- Azure AD Authentication with Group Mapping

User Management

- User and group handling
- Language
- Timezone support
- Personal profiles

Access Management

- Access per functionality
- Access on data
- API, SignalR services
- AD mapping possible

Dashboard

- Dashboard manager
- Pre-defined widgets
- Responsive dashboard

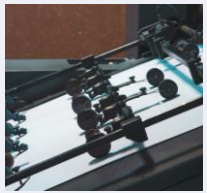
Masterdata

- Masterdata / tag handling
- Inherited Types
- User and access management
- Configurable dashboards
- Auto-generated nodes
- Mapping tables

General

- Multi-language
- User Profile properties (extendible)
- Responsive
- “Terms of Use” acknowledgement
- Application parameters

Modules and features included in the accelerator



IoT Accelerator

- IoT channel configuration
- Inherited channels
- Auto-signal recognition
- Push data
- Real-time status views

IoT Accelerator

- Device Management
- Device und data pipeline monitoring
- Bi-directional communication
- Azure IoT Hub integration
- Namespace discovery

IoT Accelerator

- IoT data pipelines & routing (IoT to SQL, IoT to Azure datalake, API ...)
- API data access
- User based notifications
- Browser and e-mail notifications

Rule Engine Smart Actions

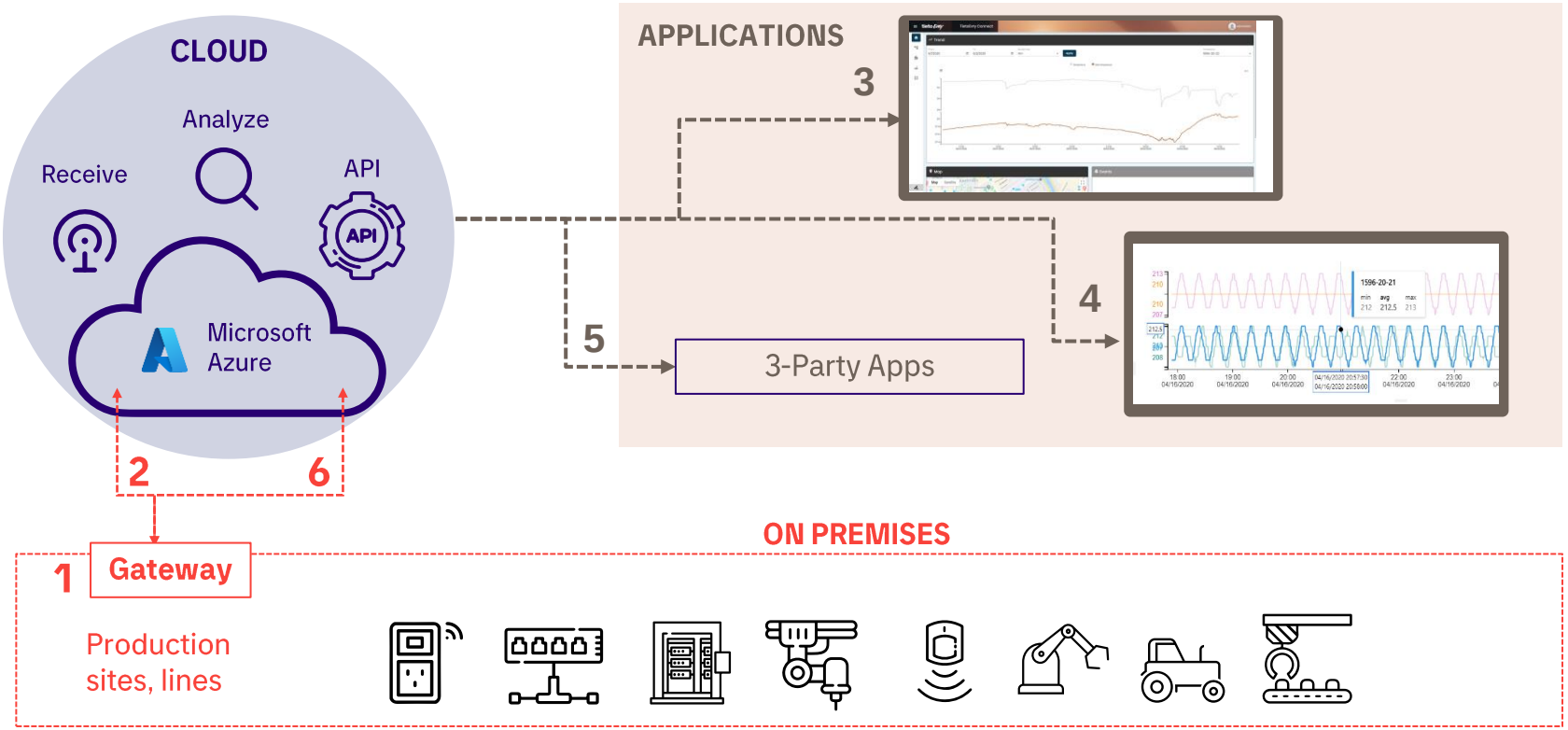
- Listen on Stream Data
- Take Actions, integrate 3rd Party Applications
- Event Log, API-Action, SMS, E-Mail, Browser Notifications ...

Reporting

- PowerBi Embedded
- Report per Group

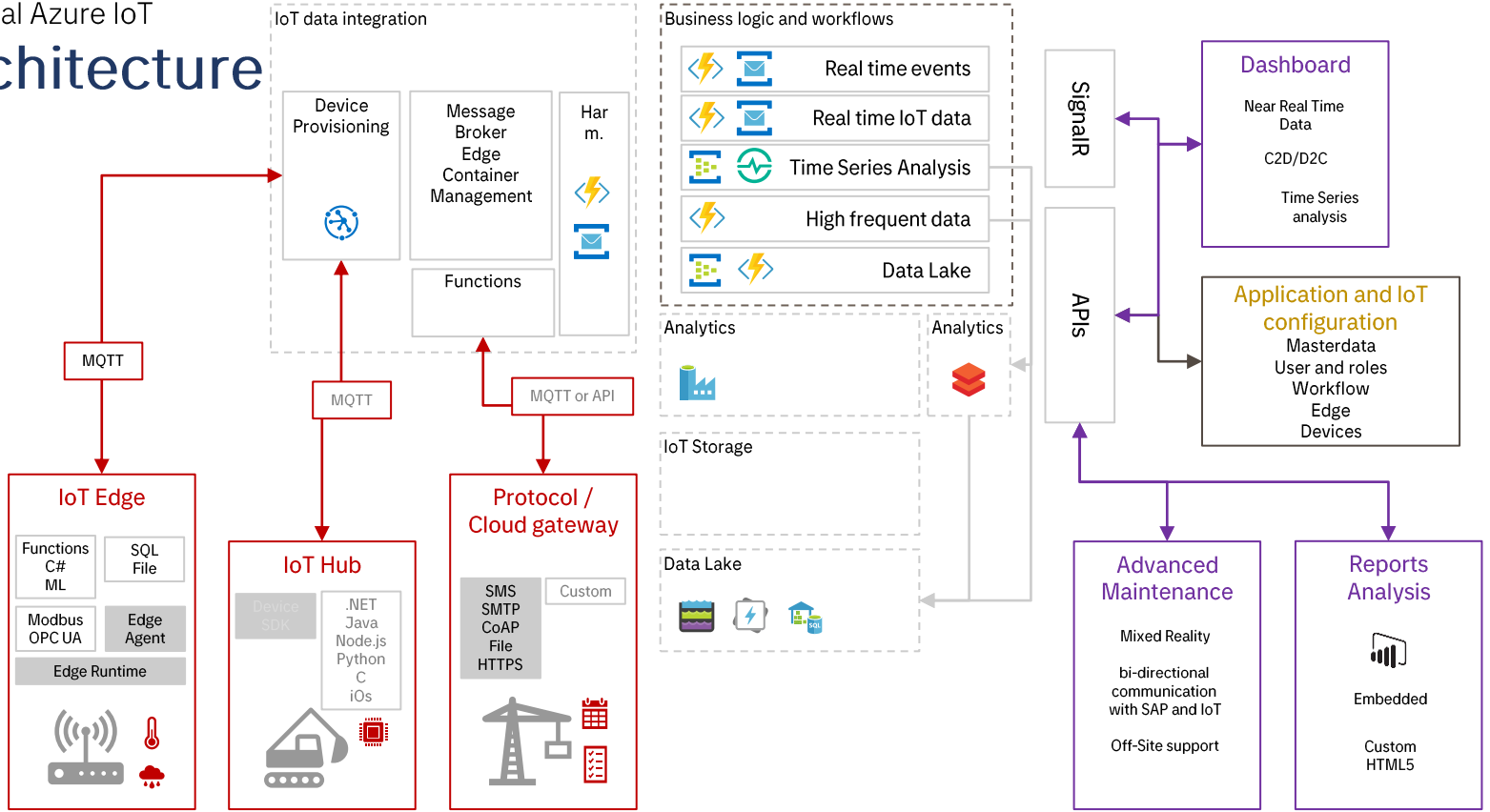
... and many more ...

Templatized: Sensor > Device > Cloud > Application



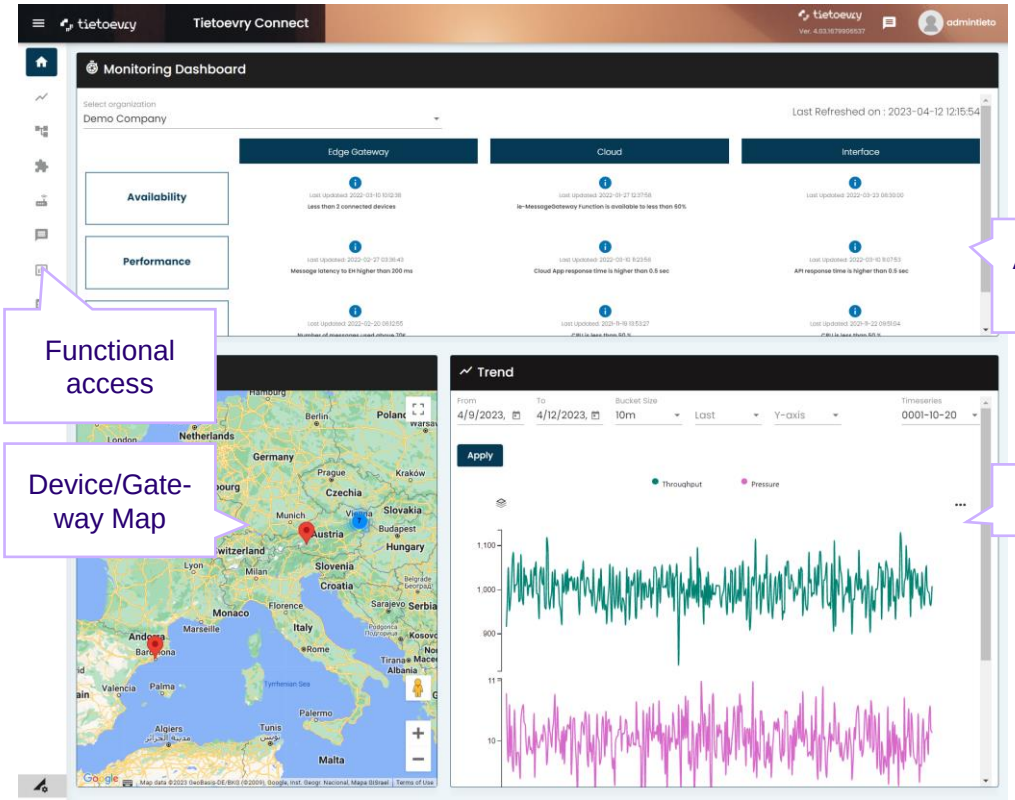
General Azure IoT

Architecture

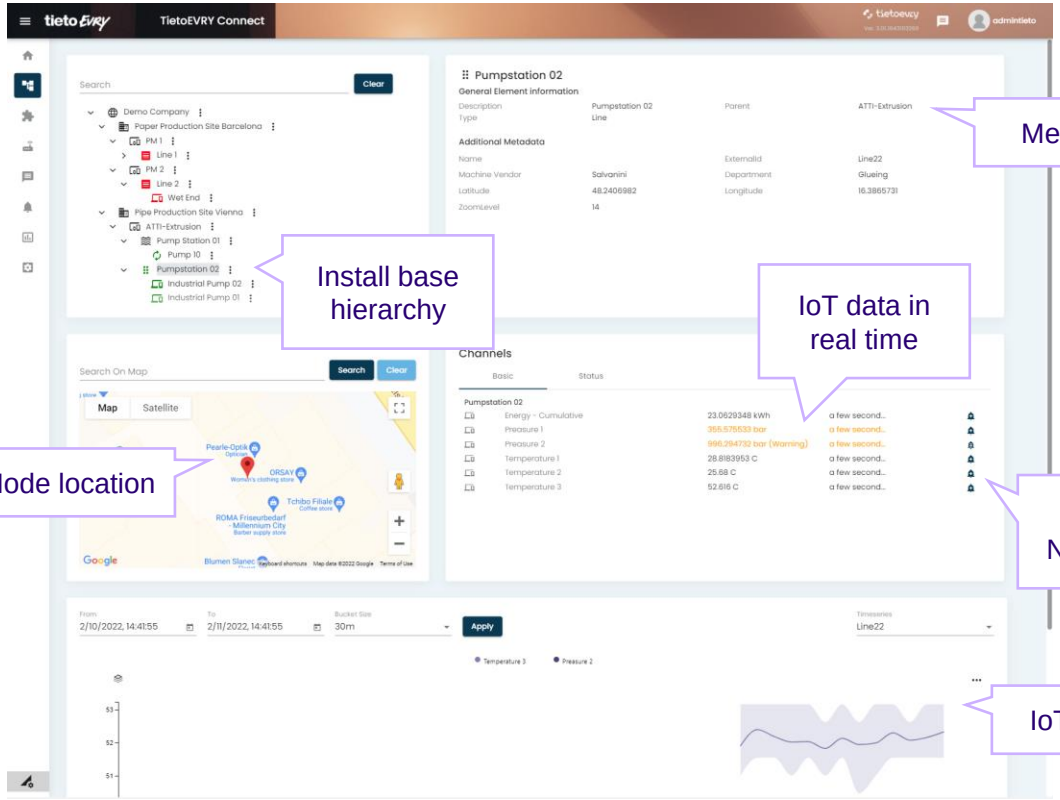


Tietoevry Connect examples

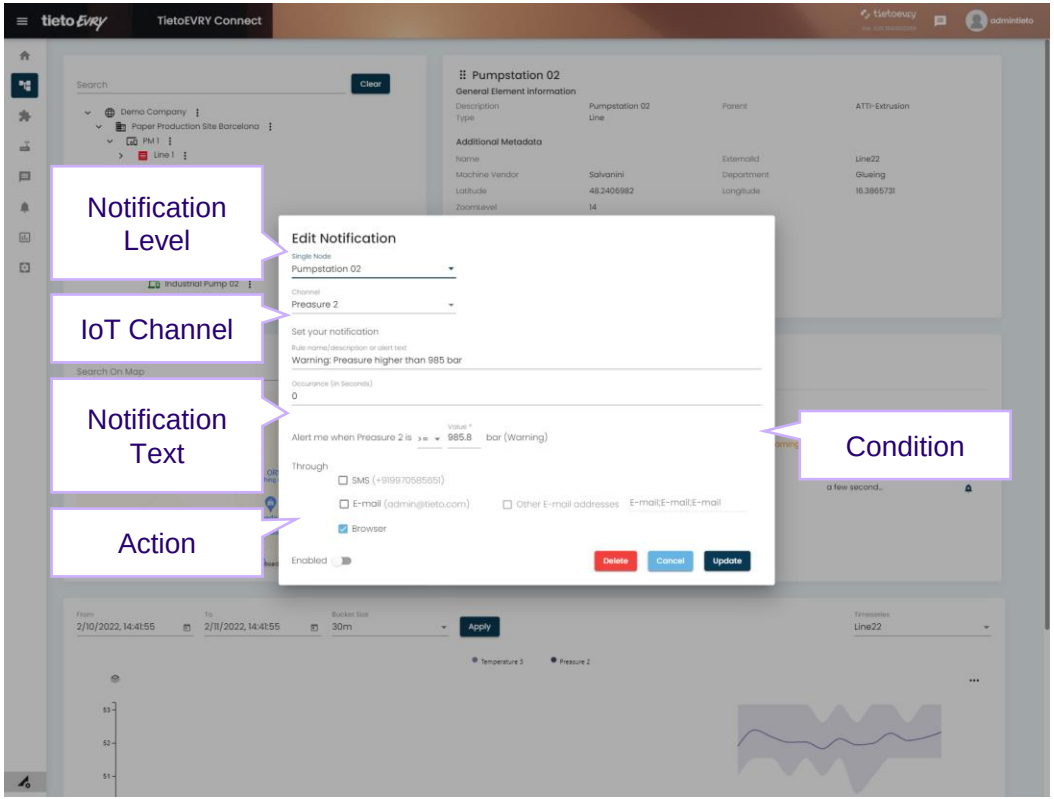
Dashboards – role targeted dashboard



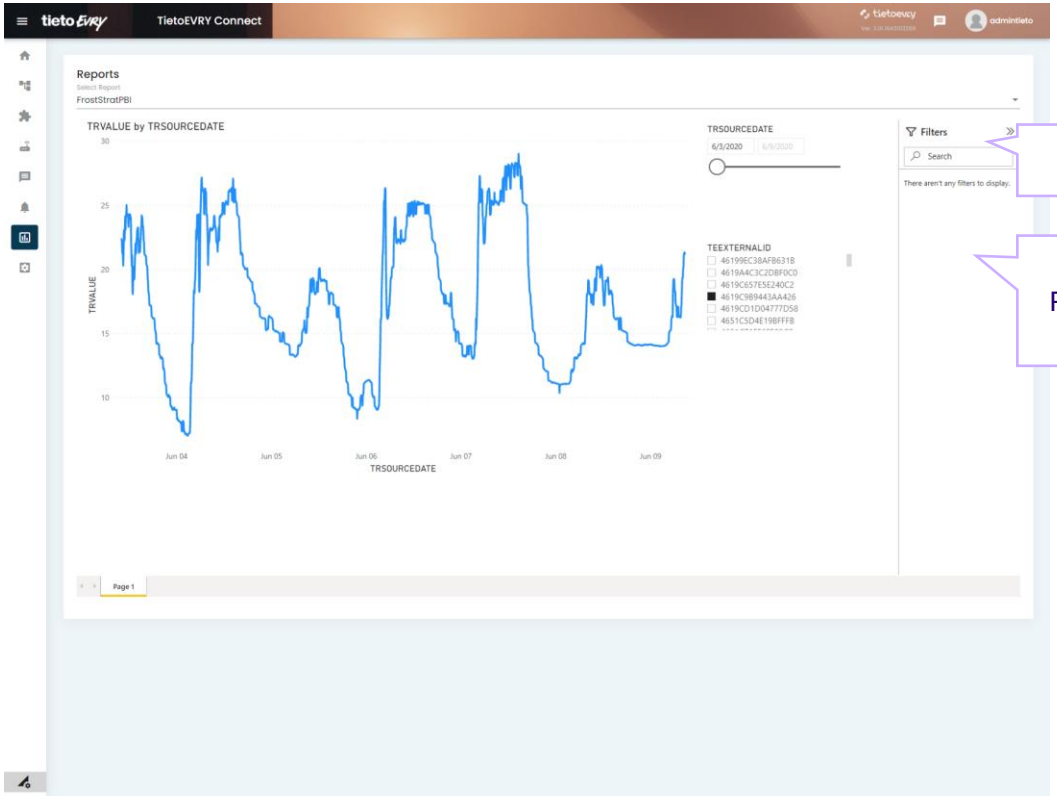
Plant details – Metadata, IoT data and trends



Details – Metadata, IoT data and trends



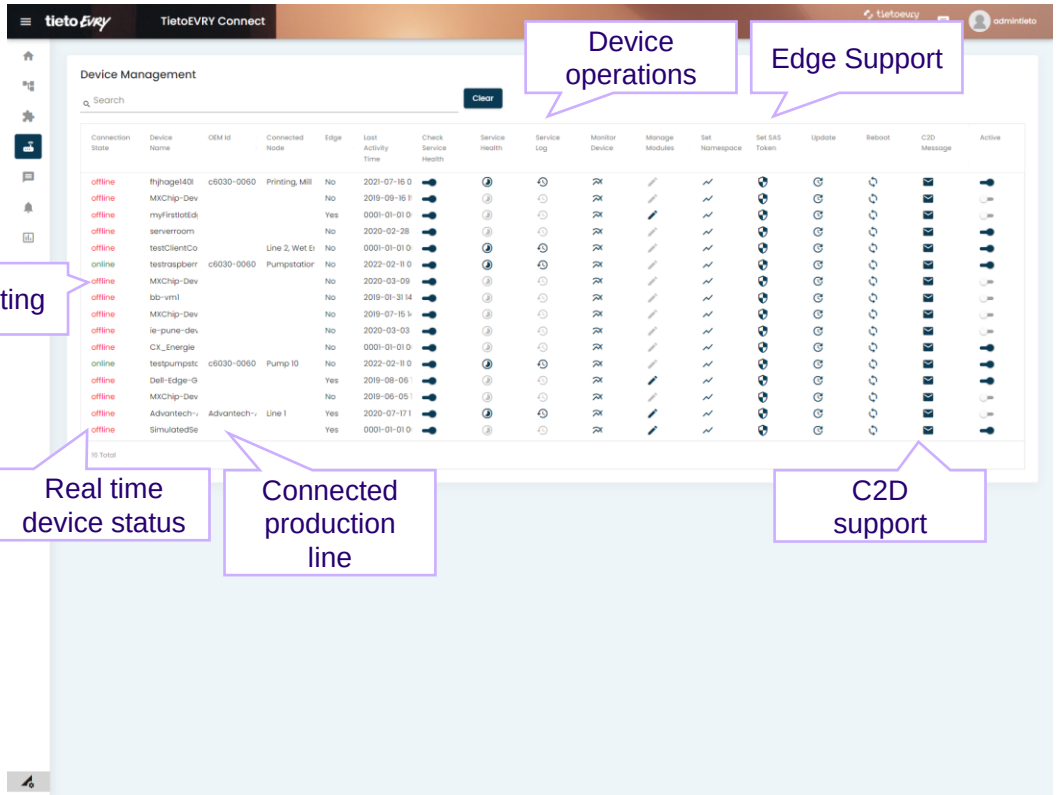
PowerBi integration



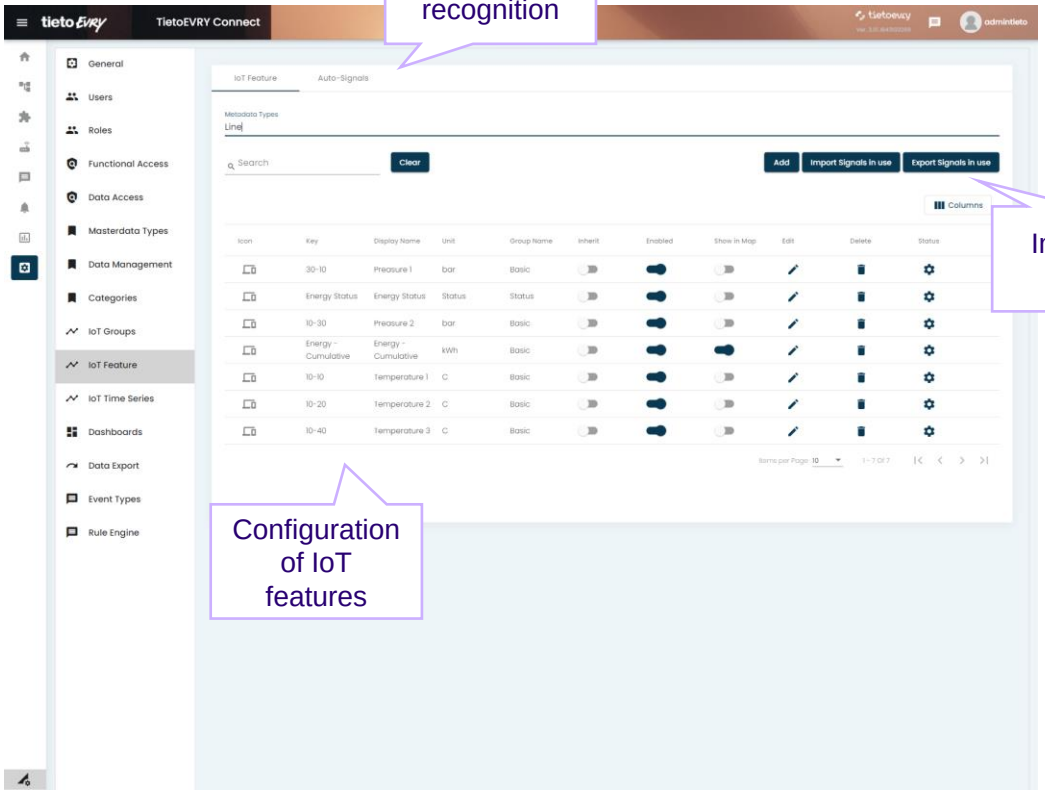
Power BI interaction

Available Reports per Role

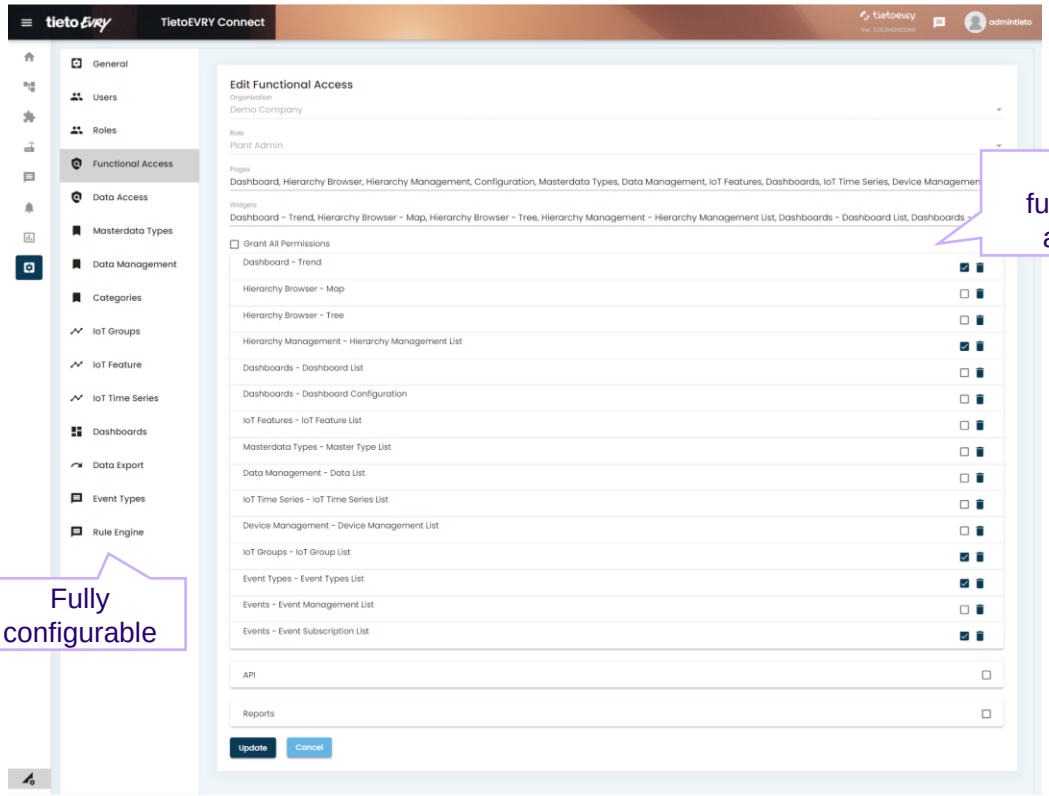
Manage Gateways



IoT configurations



Configurations



Deep functional access

Fully configurable

Thank you

Thomas Tropper