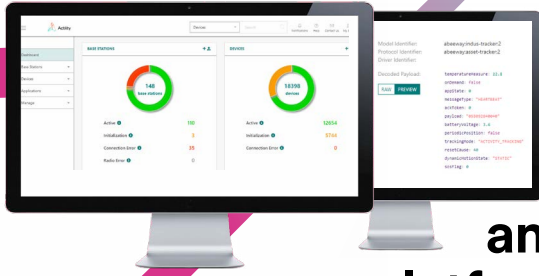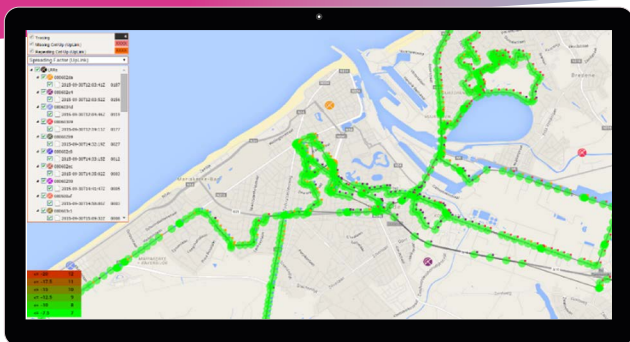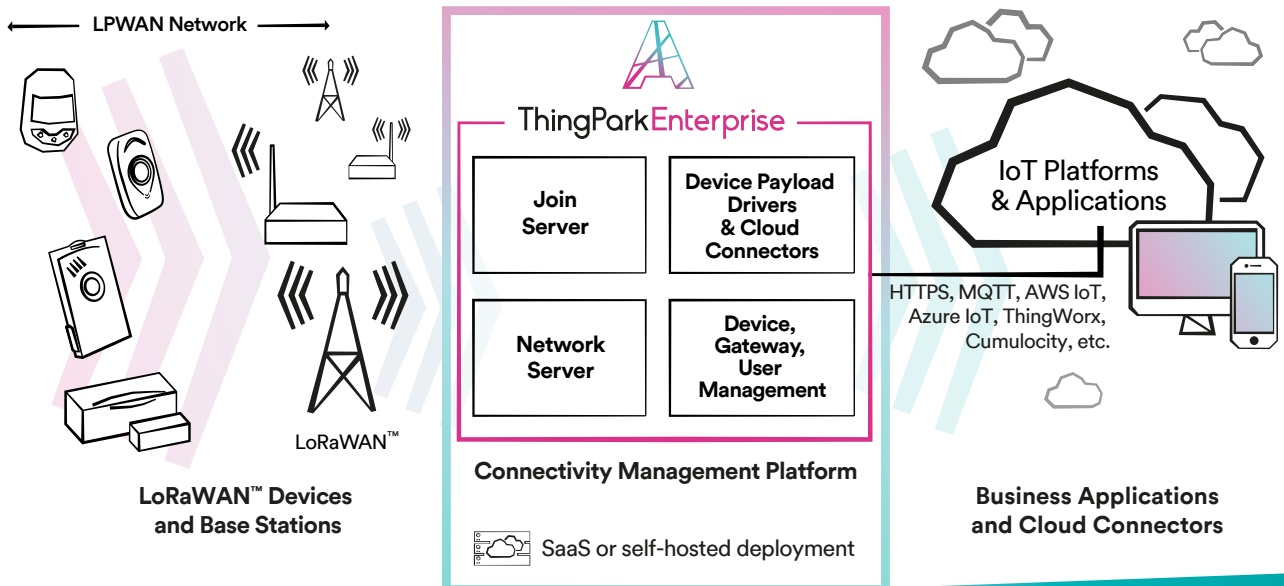# Actility

ThingParkEnterprise

The most advanced, scalable, and reliable LoRaWAN connectivity platform, trusted by well-known brands.

Dedicated to serving **private LoRaWAN® networks,** ThingPark Enterprise streamlines your digital transformation by wirelessly connecting sensors to applications for endless many uses cases. It offers **hardware-independent gateway management** with a complete set of O&M features, and **ready-to-use connectors** to all leading IoT data and application platforms. The user-friendly interface provides wizards to build a multi-gateway LoRaWAN® network and feed data to IoT applications, with **real-time monitoring** of your IoT network. Obtain comprehensive visibility into the flow of device and application traffic through payload decoding, while also monitoring the status of your gateways, devices, and network utilization.

← LPWAN Network →

LoRaWAN™

**LoRaWAN™ Devices
and Base Stations**

ThingParkEnterprise

Join Server	Device Payload Drivers & Cloud Connectors
Network Server	Device, Gateway, User Management

Connectivity Management Platform

SaaS or self-hosted deployment

IoT Platforms & Applications

HTTPS, MQTT, AWS IoT, Azure IoT, ThingWorx, Cumulocity, etc.

**Business Applications
and Cloud Connectors**

SaaS   Self-hosted on-premises

Leverage advanced network planning and monitoring tools embedded in ThingPark Enterprise: Network Coverage, Spectrum Analysis, Network Survey, and Wireless Logger.
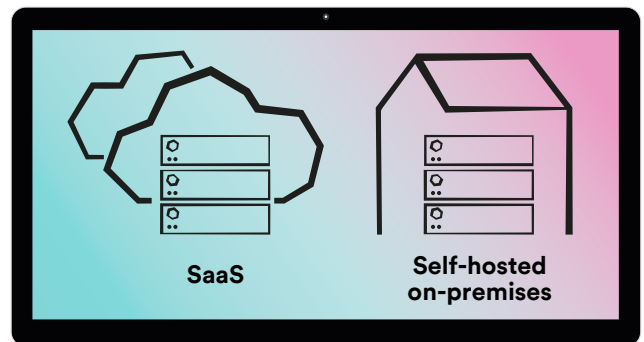
Choose between our flexible deployment options to either leverage our regional ThingPark Enterprise SaaS platforms (Europe, USA, APAC) or opt for self-hosted deployment, on-premises or in the cloud (TPE-OCP).

Reliability:
- Geo-redundant, high-availability platform offering full disaster recovery and data replication
- Frame buffering on the gateway when backhaul connection is down, avoiding frame loss with graceful streaming of buffered data upon connection recovery

Security:
- End-to-end cryptographic security, trusted by several tier-1 operators
- Support for IPsec and TLS between the ThingPark Enterprise and the gateways, TLS with the application platforms
- Secure key management with AES-128
- Supports built-in JS and also external ThingPark Activation
- DoS and replay attack mitigation

Low touch:
- Zero-touch gateway bootstrapping and maintenance

Deployment flexibility:
- SaaS or self-hosted (private cloud or on-premises)
- Works with all sub-GHz ISM bands globally

Manageability:
- Flexible definition of user roles and permissions, supports multi-tenancy
- Remote gateway management

Interoperability and integration:
- Works will all leading GW brands (based on ThingPark LRR client and also Semtech Basic Station), and any LoRaWAN-compatible end-device
- Pre-integrated with all leading data and application platforms (AWS, Azure, ThingsBoard, etc.) , supports HTTP, MQTT, and Kafka
- Supports the largest device codec library for payload decoding, extensible with custom codecs
- Provides REST APIs to expose all network, device, and user management functionality for integration with 3rd party platforms

Platform monitoring:
- Alarm management

Advanced features:
- LoRaWAN geo-location based on triangulation
- Roaming with public, private, and community networks
- Firmware Update Over-the Air (FUOTA)
- Multicast management
- Class A, B, and C
- OTAA and ABP modes
- LoRaWAN relay
- 3rd generation ADR, optimized for most-efficient RF and end-device battery consumption based on the years and millions of device use
- All RF regions, and all LoRaWAN link-layer versions
- Actility, as one of the three co-inventors of LoRaWAN, and a founding board member of the LoRa Alliance, is committed to implementing the latest and greatest LoRaWAN features

Network planning and monitoring tools:
- Tools for network coverage planning, spectrum analysis, network survey, and network traffic monitoring

Support:
- Carrier-grade support and maintenance, including 24/7 monitoring of the SaaS platform
- ISO9001 QA certified, covering the development and testing processes (1,500+ tests and 6 weeks of field testing)

Learn more about key features:

Discover supported deployment options and hardware sizing for your self-hosted ThingPark Enterprise:

Contact us: