

# TrackCentral Network Server

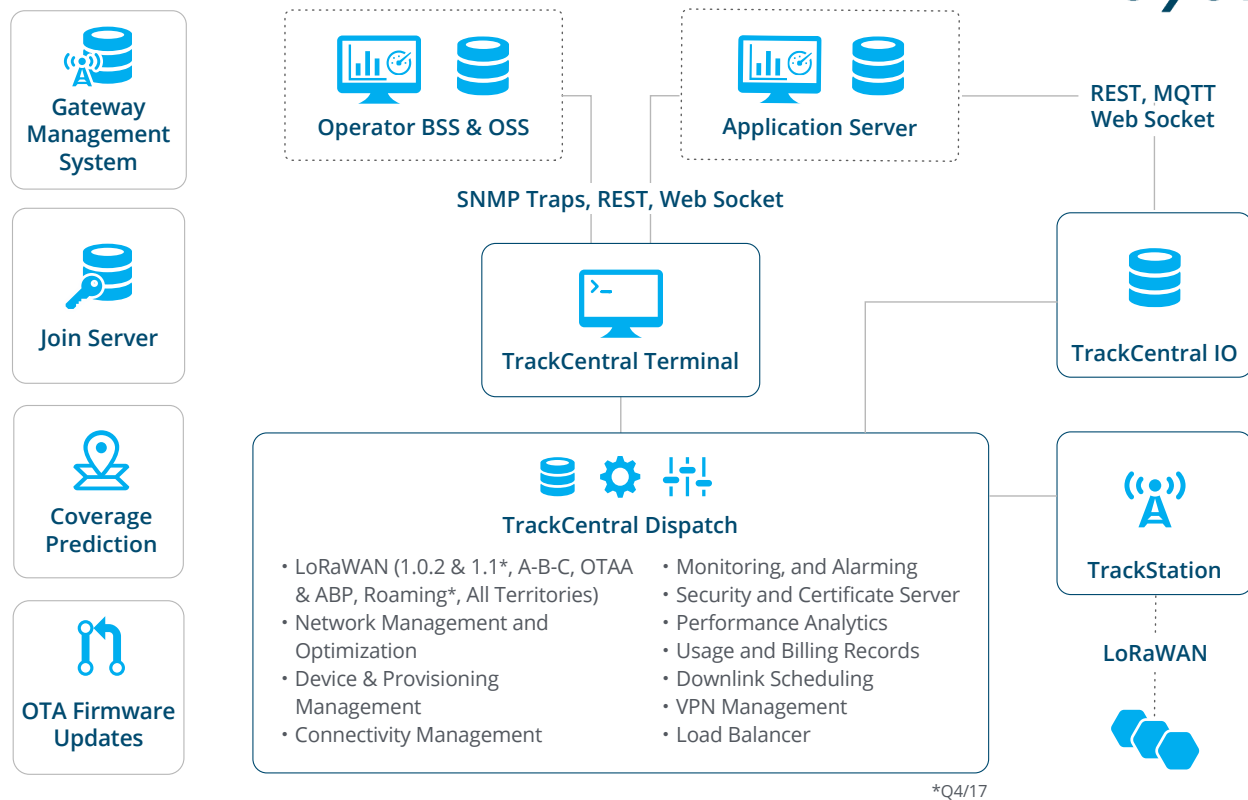
## OVERVIEW

TrackCentral is the first next-generation LoRa network server designed specifically for LPWAN infrastructure following the inside-out hybrid deployment model with indoor and outdoor gateways of different channel configurations. Its multi-dimensional scale-out architecture allows to connect and manage not only billions of devices but also millions of gateways. TrackCentral further provides full multi-tenancy support for maximum privacy, and LoRaWAN roaming across public and private networks for maximum interoperability.

## CORE FEATURES

- LoRaWAN 1.0 and 1.1
- LoRaWAN Class A and C; Class B when finalized by the LoRa Alliance
- Activation-by-Personalization (ABP) and Over-the-Air-Activation (OTAA)
- Multi-dimensional scale-out for inside-out hybrid deployments
- Full multi-tenancy among network operators and application owners
- LoRaWAN-compliant and interoperable Join Server
- LoRaWAN roaming for public and private networks
- As hosted service or on-premise installation





## MULTI-TENANCY & SECURITY

- Full multi-tenancy among network operators and application owners that, by default, does not grant the network operator access to application-level plain data or application keys.
- Separate ready-to-use application-router component for application owners providing application-level encryption/decryption and key management.
- Different operator-configurable dashboards for network operators and application owners with fine-grained access control.

## DEVELOPER SUPPORT

- Support for isolating developer accounts on development infrastructure from production infrastructure.
- Flexible simulation of devices to facilitate application server development and regression testing.
- Ready-to-use LoRaWAN-compliant device library to ease LoRa Alliance device certification and for implementing operator-specific extensions and policies.

## SYSTEM/DEPLOYMENT FLEXIBILITY & OPERATIONS

- Auto-configuration of newly deployed gateways without operator intervention.
- Remote gateway configuration and management for all widely commercially available LoRa gateway models.
- LoRaWAN-compliant Join Server for both ABP and OTAA devices.
- Support for Virtual Private Networks with remote management of gateways and devices.
- Provisioning of arbitrary device populations on different infrastructure (shared, virtualized, physical).
- Integration with existing billing systems by providing billing and usage records.
- Integration with existing BSS & OSS infrastructure via standard protocols such as web interfaces and SNMP.
- Flexible simulation environment for validating policies and algorithms in a lab environment before going live.

## ADD-ON SERVICES

- Coverage prediction for inside-out hybrid deployments.
- Over-the-air firmware updates for devices including on-device library.