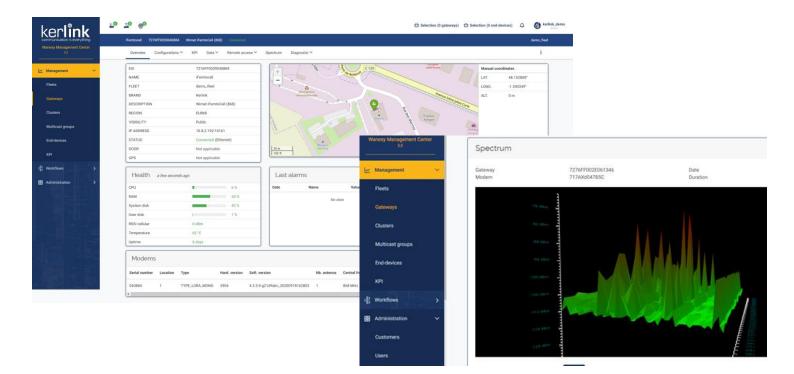


## Wanesy<sup>®</sup> Management Plane

aka (WMP) will help you to solve your operational challenges: simplify your network deployment, maximize the Quality of Service, identify any need of network densification and optimize LoRa radio band usage.

## A large set of Key Performance Indicators and Management features

- Gateway Monitoring
- System monitoring
  - Hardware monitoring (CPU, RAM, Disk, Temperature, door, installation time, location)
  - Software monitoring (KerOS version, packages, licenses, logs)
- Backhaul monitoring and priorization (Ethernet, Wi-Fi, Cellular modem: delays, data counters, status up/down)
- LoRa Radio Monitoring (noise management with Spectrum analysis, channel occupancy, duty cycle)
- **Provisioning & Configuration:** New intuitive User Interface designed in co-creation with customers, unitary or massive import via CSV, workflows.
- KPI
- on Gateway health (Link Status, CPU, RAM, Temperature) Uplink (numbers, ratios, DownLink (numbers, ratios), Network (Ping)
- on End-devices when integrated with LNS:
  Uplink, DownLink (numbers, ratios)



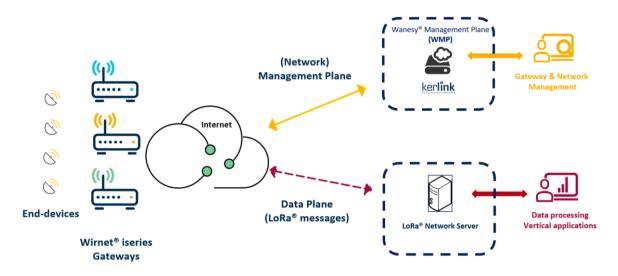
- Wanesy Management Plane (WMP) Monthly fee per Gw includes:
- $\checkmark$  Corrective and Evolutive Maintenance of Gateway Firmware
- $\checkmark$  Corrective and Evolutive Maintenance of Wanesy Management Plane
- ✓ SW Licence of Wanesy Management Plane
- $\checkmark$  Access to Kerlink Technical Support Bronze Service-Level Agreement



## Can I use WMP with my actual « LoRa® Network Server » ?

Yes! As Kerlink has decided to split Management Plane (Gw management) and Data Plane (LNS).

No operational impacts nor risks, no need to swap/migrate existing "LoRa<sup>®</sup> Network Server". WMP is only using OpenVPN to setup a secure connection with the Wirnet<sup>®</sup> Gateways.



## How to simplify and decrease costs of « Operations »?

In order to simplify your operational tasks, Kerlink is changing the Maintenance paradigm of LoRaWAN networks, splitting Maintenance operations in 2 families : **« automated maintenance » and « interactive maintenance ».** 

- « Automated maintenance » is covering Firmware updates, security updates and configuration updates that are done <u>now</u>, <u>massively on fleets of Gw</u>, in an automated way thanks to the brand new feature « Zero Touch Maintenance » (aka ZTM). ZTM feature is offered with all Kerlink Wirnet<sup>®</sup> iSeries Gateways;
- «Interactive maintenance » is covering operations that are done using <u>a real-time remote connection</u> to Gw: remote control, debug, GW status, Alarms, KPI and visualization via WebUI.
  WMP is the best tool, designed with Kerlink unique expertise on LoRa® Gateways, to connect in a centralized mode to the Gw in an « Interactive » way.

Kerlink is certified ISO9001: 2015 by AFNOR certification.

The Quality Management System gives high priority to Customer satisfaction and progress implementation.





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