

Zero Touch Provisioning (ZTP)

simplifies the installation of your Kerlink gateway (aka « Deploy » phase).

What is “ZTP” ?

ZTP is the easiest way to provision, configure and onboard all Kerlink Wirnet® i-Series LoRaWAN gateways, after powered-up:

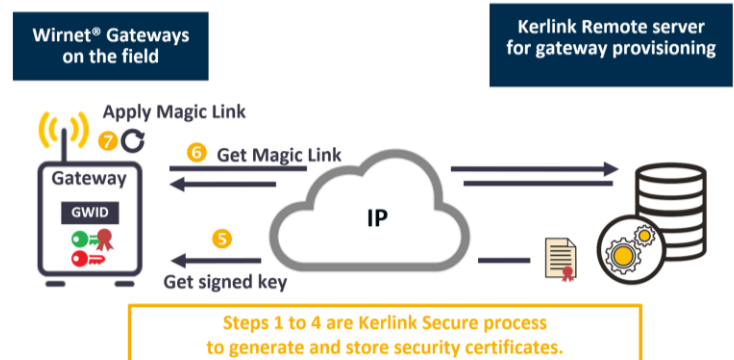
- Fully secured, very quick and totally automated, it reduces the risk of human error.
- Based on our “Magic Link” aka “ML”, a single-use URL that automatically runs personalized configuration.
- This no-touch remote configuration is used since 2021 on most of our already deployed 20K+ gateways.

ZTP makes our Kerlink Wirnet® i-Series LoRaWAN gateways “Plug and Play”.

What are the parameters automatically managed by ZTP?

ZTP leverages “Customer provisioning information”, exchanged with Kerlink Customer Support team, during the ordering phase:

- Software update (KerOS FirmWare (FW) including bsc, Lorasmp)
- LoRa configuration
 - Packet Forwarder (CPF = lorad, lorafd)
 - Regional parameters
- OpenVPN configuration
 - Secrets
 - configuration
- Gateway « Visibility » (private/public)
- Backhaul configuration
 - Ethernet (Static IP or force DHCP)
 - Wi-Fi provisioning,
 - Cellular (APN, DualWAN option)
 - Backhaul priority (GSM1, GSM2, Wifi, Ethernet)
- Customer applications (specific IPK packages)
- SPN SW upgrade (not applicable for Wirnet® iZeptoCell)
- SPN SW License (not applicable for Wirnet® iZeptoCell)



How long does it take to ZTP to configure a gateway?

- ZTP duration ~ Magic Link (ML) duration depends on the Backhaul type (Cellular, Ethernet) and radio coverage quality : usually less that 5 minutes in 4G and Ethernet; less than 10 minutes in 3G including (FW download and upgrade when needed) and configuration setup.

ZTP is offered with Kerlink Wirnet® LoRaWAN gateways

Zero Touch Maintenance (ZTM)

simplifies the ongoing operations of your Kerlink gateway! (aka « Manage & Scale » phase).

What is “ZTM” ?

ZTM is part of a new set of **Continuous Improvement Tools** designed for “Reliability, Availability & Maintenance”.
ZTM is the answer to a new maintenance paradigm for LoRaWAN networks: **making maintenance “as automated as possible”**.

Why do I need ZTM ?

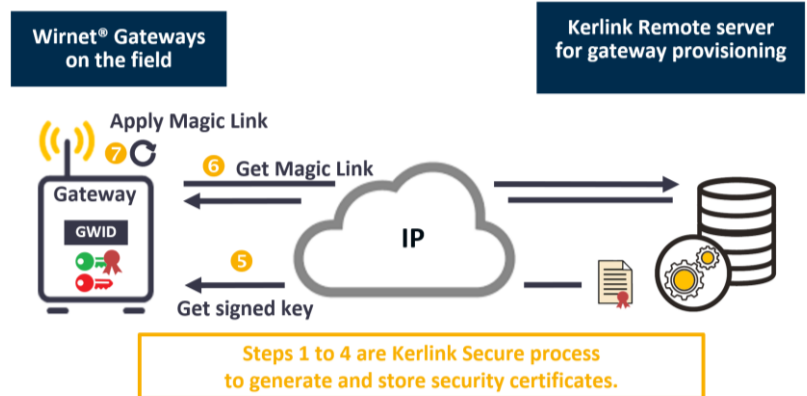
ZTM helps you to reduce operational risks:

Ensuring on time software update and new firmwares installation is a critical for network security:

- KerOS updates (security fix, new features)
- Specific software update (e.g.: Helium miner)
- Configuration update (e.g.: LoRaWAN parameters, Backhaul management ...)

ZTM helps to cut operational costs:

Deployment costs and operational friction occurred by software and firmwares updates must stay as low as possible in networks designed for massive IoT, while making it quick and easy.



How does ZTM work ?

From KerOS 5.x, all new LoRaWAN Gateways have a native ZTM embedded agent.

First, this ZTM agent is **uploading**, using a https link, indicators like connection status and maintenance-related information : CPU, backhaul status ...

Then, based on analysis done by Kerlink Customer Support team, ZTM may **download** over the air, when appropriate, firmware update and generic configuration optimization.

The upload of maintenance-related information is done every hour, using in average 25 Mbytes of Data per gateway per month.

As ZTM is an automated maintenance operation, no User Interface is made available for the Customer.

**ZTM feature is offered with
all Kerlink Wirnet® iSeries gateways**

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