

In-field Provisioning

Kudelski IoT provides device manufacturers and IoT end-user companies with a simple solution for the in-field credential provisioning of IoT devices.



CONTEXT

Device provisioning and key management are the essential first steps in creating and operating any secure IoT product. Each device must be given a unique identity so that the device is recognized and allowed to

join the network and communicate securely. Today's solutions for device provisioning are time consuming, difficult to scale and prone to human error, and it's time for a better solution.

OUR APPROACH

Securely manage the entire lifecycle of your IoT devices

Our approach simplifies the entire device production and distribution chain, removes room for human error and fully automates the process of assigning keys and certificates to IoT devices. Our solution can be used with any chipset or device and is pre-integrated with several major semiconductor manufacturers.

Reduce cost and complexity

Chipsets and devices can be managed through their entire production flow without the complexity of handling sensitive customer credentials. This leads to faster production and simplified logistics while reducing human error and guaranteeing trust throughout the process.

Automate and scale

Our solution enables chipset and device manufacturers and end-user customers to securely provision millions of devices without requiring any key management (PKI) infrastructure. Kudelski IoT keySTREAM automates the entire process and enables zero-touch provisioning at scale.

Manage the entire IoT lifecycle

keySTREAM is a device security management platform that enables customers to manage the full IoT lifecycle from provisioning through end of life. Customers have full control over all their devices through our easy-to-use console or through integration with their own Device Management System.

WHO ARE WE?

30 years of secure device management experience

The Kudelski Group has managed the secure provisioning process of devices for our customers for more than three decades. With more than 400 million devices in the field, we have the expertise and operational experience required to manage the security lifecycle of solutions for consumer, medical, industrial, media, automotive or any other connected ecosystem.



CUSTOMER JOURNEY

Secure. Scale. Manage.

1 Setup

Customers can create a tenant and with just a few clicks set up a device profile configuration. This allows device management at scale as any arbitrary number of devices can be automatically attached to a device profile. keySTREAM provides pre-defined templates for easy configuration, e.g., for zero-touch onboarding of devices on an AWS or Azure cloud.

2 Own your devices

keySTREAM supports several models for taking ownership over devices

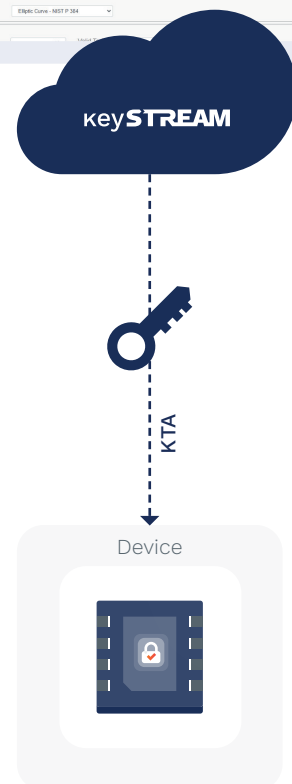
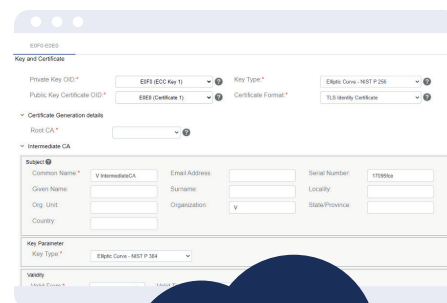
- **Delegate** – manage ownership assignment during manufacturing. A chipset manufacturer/OEM/ODM can assign ownership to customers based on chipset identifiers.
- **Take** – first-come-first-served approach to taking ownership of a device.
- **Claim** – customers prove possession of a chipset/device.

3 Onboarding

When devices connect for the first time, they will be automatically onboarded onto the customers' keySTREAM tenant and appear in the device management. From now on, they can be managed through keySTREAM. As pre-configured per device profile, devices will now automatically be provisioned with credentials. Once this zero-touch provisioning process is done, the devices can now perform their intended IoT business function.

4 Lifecycle management

Customers can manage the full security lifecycle of their devices from keySTREAM. Transferring ownership, creating new credentials or deleting credentials, revoking devices or managing their disposal or refurbishment.



Device firmware is pre-configured with the keySTREAM Trusted Agent (KTA).

SECURING THE FUTURE OF IoT

Our products and services

SECURITY CONSULTING SERVICES

We work with you to assess your security threats and opportunities and help you create a product that is secure by design.

IoT SECURITY LAB SERVICES

We assess the security of your new and existing products and provide actionable insights.

SECURE IP HARDWARE ROOT OF TRUST

We provide core technology to implement robust security foundations into your SoC.

keySTREAM LIFECYCLE MANAGEMENT

We provide a proven system enabling you and your customers to manage the entire security lifecycle of your product(s).