Thales Instant Connect: eSIM provisioning connectivity service for the IoT

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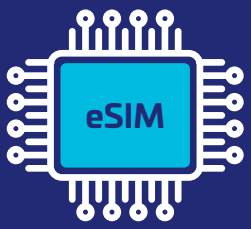

eSIM provisioning is pivotal in ensuring IoT devices have seamless connectivity from the onset.

As the demand for cellular IoT intensifies, understanding the nuances of eSIM deployment becomes crucial for enterprises to streamline their processes.

THALES INSTANT CONNECT

More and more consumer and IoT devices are eSIM-compliant. To date, these devices have to rely on some form of primary connectivity (e.g. WiFi, smartphone tethering via Bluetooth, bootstrap...) before activating a full mobile subscription.

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eSIM for IoT connectivity

With the demand for cellular IoT growing fast, enterprises need to scale up their capabilities by leveraging eSIM technology to streamline IoT deployment.

Currently, there are two main channels for deploying eSIM devices into the market:

#1. CONSUMER DEVICES DEPLOYED WITHOUT A MOBILE SUBSCRIPTION LOADED INSIDE THE ESIM.

When the end user purchases and powers up the device, it will not be connected to a network. The end user needs to connect the device to Wi-Fi or another device using Bluetooth and then download a mobile subscription to the eSIM.

#2. IOT DEVICES WITH A MOBILE SUBSCRIPTION PRELOADED.

In contrast, many IoT devices need cellular IoT connectivity from their first boot without human intervention.

For this reason, these devices are usually deployed with a mobile subscription preloaded (sometimes known as bootstrap) in the IoT eSIM. When the device is powered up, it will be connected to the cellular network and ready for use.

The main problem with the bootstrap solution is that the concerned IoT enterprise will likely end up managing multiple eSIM SKUs (Stock Keeping Units), one for each mobile network operator it uses.

There's more.

At the point of manufacture, the enterprise operating the IoT device needs to know where it will be deployed and preload the corresponding mobile subscription. This limits flexibility and introduces delays to the manufacturing process. Management of multiple SKUs also makes logistics more complex.

The solution: eSIM provisioning with Thales Instant Connect.

eSIM provisioning is the process of remotely assigning and managing credentials on an embedded SIM (eSIM) for IoT devices. This ensures seamless connectivity and streamlined management for OEMs in particular.

Introducing Thales Instant Connect

Thales Instant Connect (TIC) is a versatile solution built by Thales, specifically for eSIM devices. It's beneficial to both Mobile Network Operators (MNOs) and device manufacturers in Consumer and IoT markets.

For manufacturers, TIC minimizes the eSIM stock-keeping units (SKUs) during device production. Consequently, they can produce globally compatible devices, vital for quickly responding to business opportunities wherever they appear.

For MNOs, TIC is a cost-effective method to manage connectivity use cases, particularly as a large number of devices require long-term connectivity with minimal data usage. Through TIC, MNOs are well-positioned to become the preferred connectivity providers for such devices.

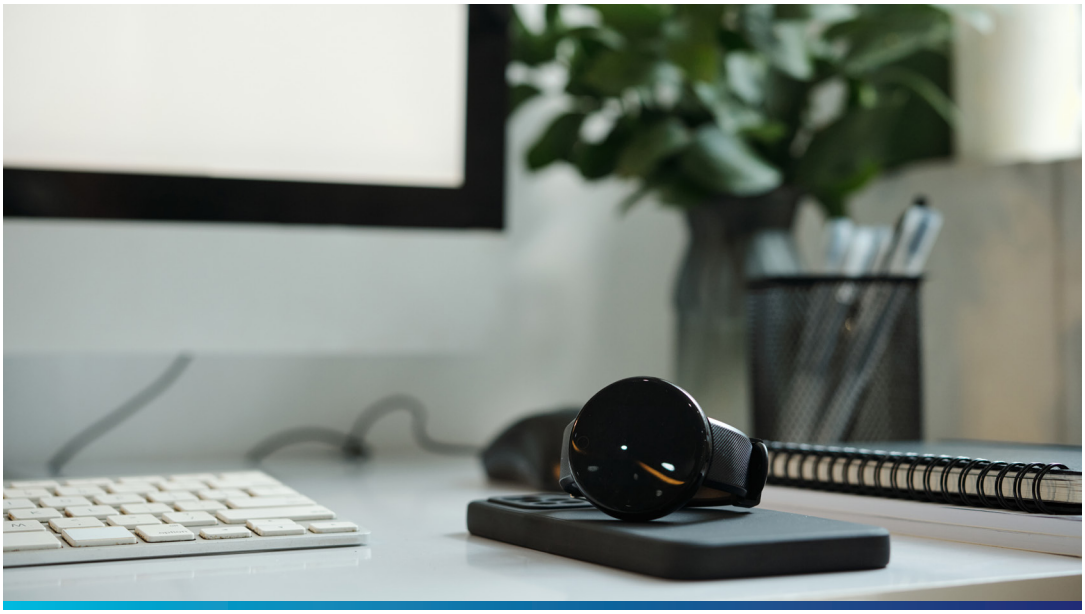
THALES INSTANT CONNECT FOR IOT OEMS AND SERVICE PROVIDERS

Creating devices with varying eSIM SKUs based on the end MNO or customer can complicate manufacturing and logistics processes, making the commercialization of devices slow and dependent on the MNO.

This issue is now addressed with Thales eSIM equipped with TIC - a unified eSIM SKU solution. In essence, the eSIM includes an initial cellular connectivity service that activates immediately out-of-the-box, offering global coverage. This service is initial because it facilitates the download of the final MNO chosen for the device.

With this, device makers enjoy the simplicity of a single eSIM SKU and the flexibility to defer the selection of the final connectivity provider until after the device's manufacture, extending through the deployment process.

THALES INSTANT CONNECT FOR CONSUMER OEMS



Generally, smartphones and other consumer devices equipped with eSIM lack cellular connectivity upon their initial power on. These devices require an MNO profile download via Wi-Fi or Bluetooth to establish a cellular connection.

The introduction of Thales' TIC changes this scenario. With TIC, the devices gain immediate out-of-the-box cellular connectivity, without end-user involvement. TIC provisions this initial cellular connection post device power-on, eliminating the initial need for Wi-Fi or Bluetooth. Owing to this immediate connectivity, devices can swiftly download the MNO profile post power-on, enabling the end-user to start utilizing their connected device instantly.

This process ensures a smooth eSIM connectivity activation journey for the end-user and enables device manufacturers to deliver a superior user experience to their customers.

THALES INSTANT CONNECT FOR MOBILE NETWORK OPERATORS

eSIM technology is catalyzing cellular connectivity for millions of IoT devices. This trend presents an excellent opportunity for MNOs to deliver connectivity services for new use cases.

With the introduction of the TIC solution, Thales offers an inventive method for MNOs to seize this opportunity. The solution significantly cuts down on the network resources required to provide cellular connectivity to millions of devices. The resulting savings in resources allows MNOs to present competitive propositions to IoT service providers, keeping them prepared with adequate resources to support future business ventures.

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