



# Device Onboarding

## The Evolution of Private LTE and 5G Networks: Onboarding Challenges Revealed

Private LTE and 5G networks are in the process of transitioning from pilots to operational and continuously growing networks. In this process, challenges are revealed concerning the current processes and tools available for device onboarding. These include complex workflows, unintuitive user interfaces, and insufficient error handling. The lack of suitable onboarding tools compels certain enterprises to use scripts and manual procedures. However, this approach introduces the risk of human error and consumes valuable time especially when the number of devices grows from a few dozen during the pilot stage to thousands and more in operational networks. Furthermore, the complexity of these methods often burdens private cellular teams with the onboarding process, rather than enabling a shift of responsibility to the operational team. This diversion of focus prevents private network teams from dedicating their full attention to their core responsibilities.

## Enhancing Network Operations with OneLayer Solution

OneLayer recognizes these inefficiencies and offers a comprehensive solution designed to accelerate the onboarding process, increase operational efficiency and security, improve network performance, and control the roles that are responsible for each part of the onboarding process.

OneLayer Device Onboarding offers an end-to-end solution, that includes provisioning, activating, authorization and segmentation, context-based modification of device profile, and deactivation in case of critical security events. Onelayer offers a platform to manage SIM cards within private LTE and private 5G networks, all in an intuitive, user-friendly user interface.





Solution Benefits:

1.

### Provide extensive device onboarding capabilities

  - All SIM profile settings are supported, including APNs, QoS profiles, roaming, and static or dynamic IP address settings.
  - Context-based modification of SIM's profile attributes based on unique insights such as device fingerprinting, identity correlation, and detection.
  - SIM allocation to devices can be efficiently monitored with comprehensive tracking capabilities.
2.

### Empowering operational autonomy

  - Optimized for fast network growth, including support for multiple use cases and users.
  - Onboarding tasks are delegated from private network teams to operational teams, allowing private network teams to focus on their core responsibilities.
  - Intuitive interface consolidates all device-related operations into a single platform.
3.

### Maintains existing security and networking frameworks

  - Complement existing organization device onboarding process and platforms (Integrate with IT/OT device management and onboarding)
  - Different levels of permissions for onboarding settings, based on the personal org role.

Provisioning



Activation

#1	IMSI:	Roaming:	APN name:	QoS profile	
<input checked="" type="checkbox"/>	<input type="text" value="313700132999990"/>	<input checked="" type="checkbox"/> ON	<input type="text" value="L3-internal"/>	<input type="text" value="1"/>	<input type="button" value="🗑"/>
	ICCID:		IP type:	IP Address:	
	<input type="text" value="8901700132000999990"/>		<input checked="" type="radio"/> Static <input type="radio"/> Dynamic	<input type="text" value="10.20.31.211"/>	

