

# IoT service platform for secure, flexible device management



Designed for easy, secure deployment and management devices in the Internet of Things (IoT), this service platform lets you choose the options, so you can optimize costs while benefiting from advanced levels of device security.

To protect data, ensure privacy, and prevent cyberattacks, IoT devices are increasingly required to use authentication, based on keys and certificates. NXP's EdgeLock 2GO cloud service gives device OEMs a secure, simple, and flexible way to provision and manage device credentials, over the entire device lifecycle and, because NXP is fully authorized to provide certificates for standards such as Matter or Qi Wireless Charging, EdgeLock 2GO saves time when pursuing device certification.

### **Key Features**

- · Highly flexible approach to IoT security
- Provisioning services for credential injection and maintenance
- Secure key injection leverages device's hardware capabilities
- Approved Product Attestation Authority (PAA) for Matter device certificates

## **Key Benefits**

#### Security

- Deliver end-to-end security from chip to cloud, based on a certified Trust Anchor
- Manage security independent of device manufacturing and supply chain
- Protect the entire device lifecycle, from day one of deployment

#### **Flexibility**

- Tailor the options for every type of IoT device rollout
- Support every type of IoT device, from sensor to edge-computing platform
- Accelerate time-to-market with late-stage device configuration in the field

#### Ease of use

- Zero-touch onboarding of devices into the cloud
- Simplified maintenance of credentials during device lifetime
- Easy management of even large fleets of IoT devices

#### **Approved for Matter**

- Approved PAA for Matter device certificates
- Secure injection of device attestation keys into silicon
- Flexible options for delivery of device attestation certificates

NXP's EdgeLock 2GO service saves device OEMs from having to establish and maintain an infrastructure for device provisioning, which is an expensive and complex undertaking. For OEMs deploying devices certified for Matter or Qi Wireless Charging, the undertaking is especially challenging, since becoming a Matter- or Qi-certified provider of attestation certificates is an even more ambitious undertaking. What's more, enabling the infrastructure to support ongoing credential management and secure updates adds to the expensive of device provisioning, and increases the complexity of maintaining a secure deployment.

## A Simpler Way to Manage Credentials

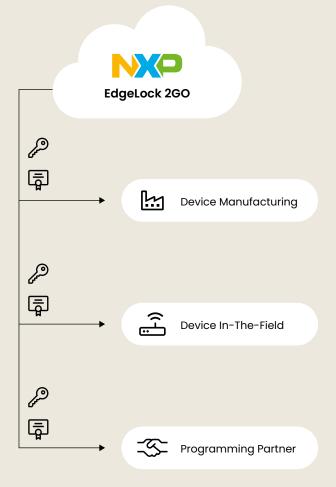
Device OEMs can sidestep all these issues by using NXP's turnkey EdgeLock 2GO service for credential management. NXP is a recognized leader in IoT security and one of the few semiconductor manufacturers that not only provides comprehensive device provisioning for a wide range of IoT use cases, but is also a fully authorized provider of certificates for Matter and Qi. Our EdgeLock 2GO cloud service gives device OEMs a secure, simple, and flexible way to provision and manage device credentials, over the entire lifecycle of the device, from manufacturing to deployment and retirement.

EdgeLock 2GO is secure, in that it provides end-toend protection with NXP's security infrastructure and hardware-based root of device, and it's simple, in that device OEMs aren't forced to create a security infrastructure for their manufacturing sites. EdgeLock 2GO is also flexible, in that it's compatible with PKI and IoT services, and is fully approved for popular standards, including Matter and Qi.

## **Three Ways to Provision Trust**

To maximize flexibility and reduce time-tomarket, EdgeLock 2GO offers three ways to perform trust provisioning:

- At device manufacturing At the point of manufacture, EdgeLock 2GO lets OEMs securely provision devices with keys and certificates, with different configurations for different products, and is set up to safely include contract manufacturers in the process.
- 2. In the field EdgeLock 2GO can also be used to provision devices in the field, with credentials provided at commissioning, and can be used to add, update, and revoke credentials throughout the device's time in the field.
- 3. Through a Programming Partner Device manufacturers can request one of NXP-selected partners to securely provision secure elements, secure authenticators, and compatible MCU products with certificate authorities and device credentials secured with NXP EdgeLock 2GO. Device manufacturers receive parts that are already provisioned and ready to use.



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### **Features**

Cortificate Authority	- Configure the Cartificate Authority for your devices
Certificate Authority	Configure the Certificate Authority for your devices  Link to your Book Of a fall in any your AND Book Of
	Link to your Root CA of choice or use NXP Root CA
	Use NXP-approved root for Matter and Qi Wireless Charging
Device Key Pairs	• RSA 1024- to 409-bit
	ECC keys different curves including
	- ECC NIST (192- to 521-bit)
	– Brainpool (160- to 512- bit)
	- Twisted Edwards Ed25519
	– Montgomery Curve25519
	– Koblitz (192- to 256-bit)
X.509 Certificates	Select the Certificate Authority for your devices
	Customize device-certificate fields (common name, validity period, key usage, etc.)
Other Keys and Data Provisioning	Firmware verification and decryption keys
	AES-128 and AES-256 keys
	HMAC key
	Public keys and certificates
	Sensitive or non-sensitive binary data (hashes of host software, passwords, etc.)
Web Portal for Setup and Monitoring	Use the EdgeLock 2GO web portal to configure product credentials
	Monitor device provisioning
	Define limits and alerts to protect against overproduction
REST API for Automation	Automatically configure new credentials for new projects
	Automate the provisioning and monitoring of your devices

# How to get started

Enjoy a 6-month free trial for up to 10 devices.

# Choose one of the following options to get started:

- Online form: submit your request here.
- Email request: contact us at <a href="mailto:edgelock2go.info@">edgelock2go.info@</a>
  <a href="mailto:nxp.com">nxp.com</a>. Please include your company name and the email address of the first user.

## **Additional resources**

EdgeLock 2GO portal

**Development boards** 

<u>List of compatible products</u>



