

# Key and Authorization Management



- ✓ **Secure management of cryptographic keys**
- ✓ **Instant and secure key distribution over the air**
- ✓ **Smartphone serves as a tool for the complete reader configuration**
- ✓ **Supports mobile ID with LEGIC neon**

## Enabling secure applications in a mobile world

**LEGIC Orbit is the next generation of a secure key and authorization management solution. It allows a random generation of application keys and the convenient, instant and worldwide distribution of all configuration data via smartphone to readers.**

To securely manage and control high security ID solutions in a mobile environment, strong key and authorization management is mandatory. LEGIC Orbit enables the highest level of system security for applications

where users contactlessly interact with infrastructure components. Thanks to the random generation and secure management of cryptographic keys, which are never visible to anybody, customer applica-

tions like mobile ID can be reliably implemented. LEGIC Orbit lets you control the security of your solution and supports flexible management and distribution of custom application keys.

# Secure key and authorization management

## Today's challenges

The criteria for a highly secure key and authorization management solution are very diverse:

- A modern cryptographic solution that also performs well in highly sensitive areas
- Solves the conflict between secure storage and worldwide availability
- Maintains the desired ownership and control
- Reduces the exposure to external risks

To avoid sacrificing security for convenience, we designed LEGIC Orbit. It combines a highly secure cryptographic solution with a very easy way of usage.

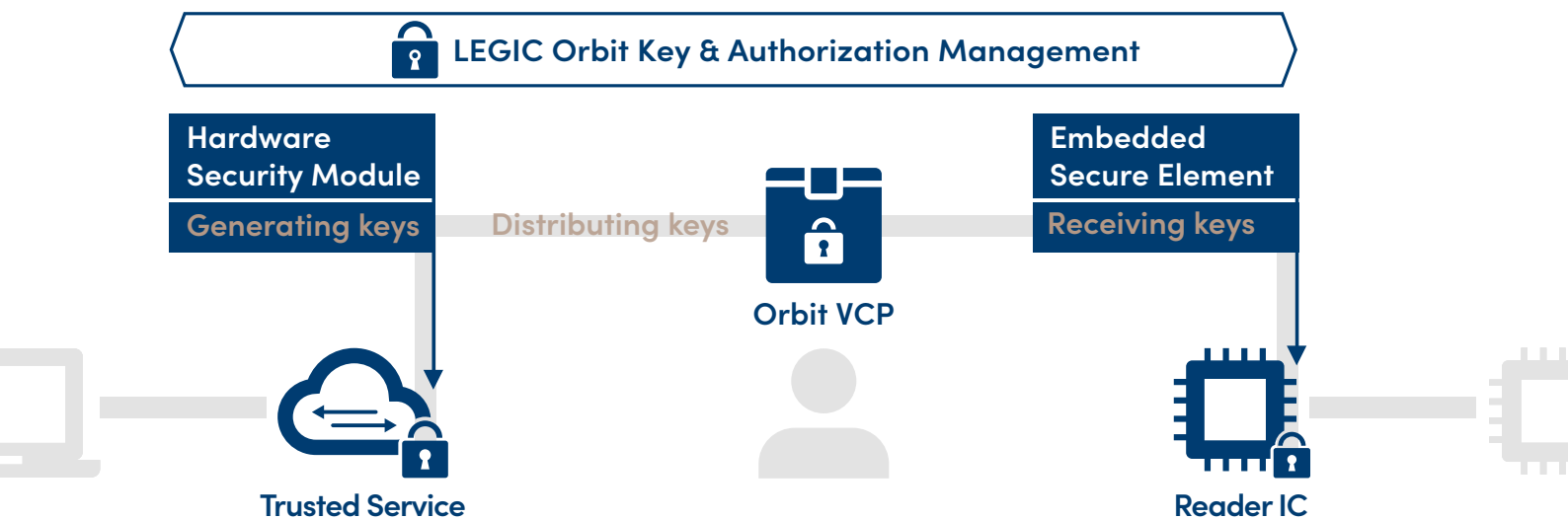
## Random key generation

To prevent manipulation of customer-specific data and to maintain data integrity, only state-of-the-art encryption methods (e.g. AES) are used. Within seconds, user-specific application keys are generated randomly in a certified, financial industry grade environment (Hardware Security Module

- HSM). These application keys are dedicated to you and never visible to anybody.

## Secure key storage

Cryptographic keys are the central element for secure ID solutions and IoT projects and must be well protected. Security and control go along with convenience, as the HSM guarantees that keys are always stored securely and are available anytime. In addition, keys can be permanently removed if required or necessary.



## Orbit VCP

A Versatile Configuration Package (Orbit VCP) contains the cryptographic keys for your applications and any other configuration data for your reader. This container is transferred from the LEGIC Trusted Service to the embedded Secure Element of LEGIC reader ICs.

## Flexible distribution

The cryptographic keys are distributed over the air to all your infrastructure components. LEGIC Orbit enables the secure distribution of your custom application keys from the HSM of the LEGIC Trusted Service to the Secure Element of LEGIC reader ICs. This is end-to-end security at its best, anytime and anywhere.

## Full system control

You define the required security level of your system and use as many different keys as necessary. The right to configure readers can be freely assigned to any trusted person on site.



### Universal configuration tool

LEGIC Orbit enables you to turn an already used smartphone into a universal configuration tool and replaces complex and costly hand-held devices.

To load custom data or keys into your reader, just use a smart device with your own mobile app based on the LEGIC Mobile SDK for easy commissioning. This means that it works with any trusted person on site. The data is always secure and cannot be read by the mobile app as everything is end-to-end encrypted.



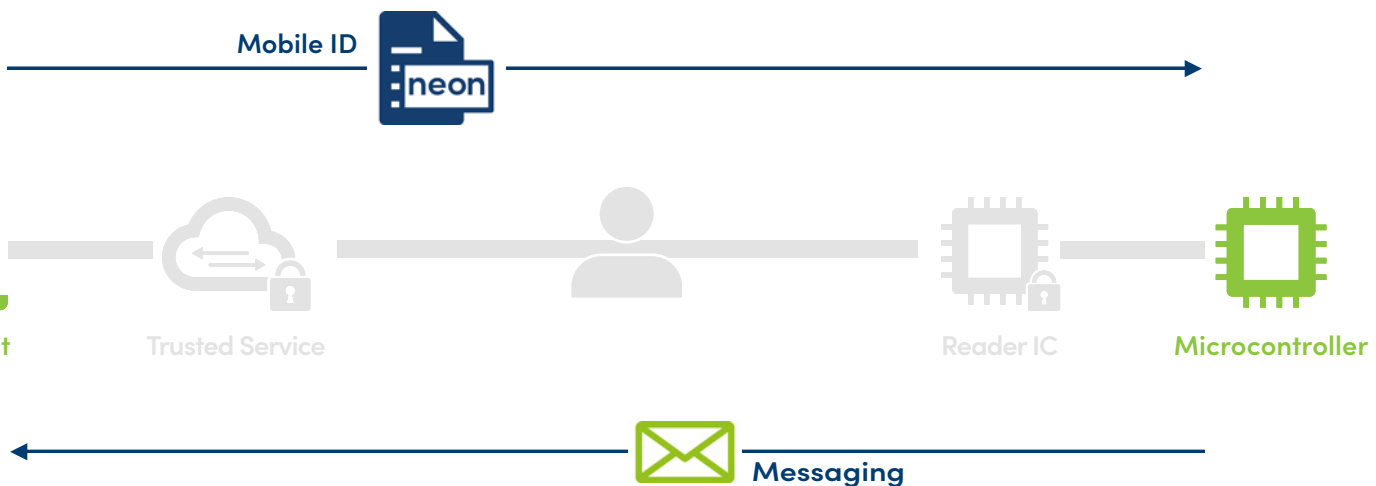
## Secure customer applications

### LEGIC Orbit adds security to customer applications

Based on the implemented end-to-end encryption, LEGIC Orbit enables you to control any other mobile service. LEGIC Orbit secures the new credential technology LEGIC

neon which is at the heart of your mobile ID solution. It also protects messaging from your microcontroller back to your management system. Starting with LEGIC neon files and messaging, a wide range of different applications are possi-

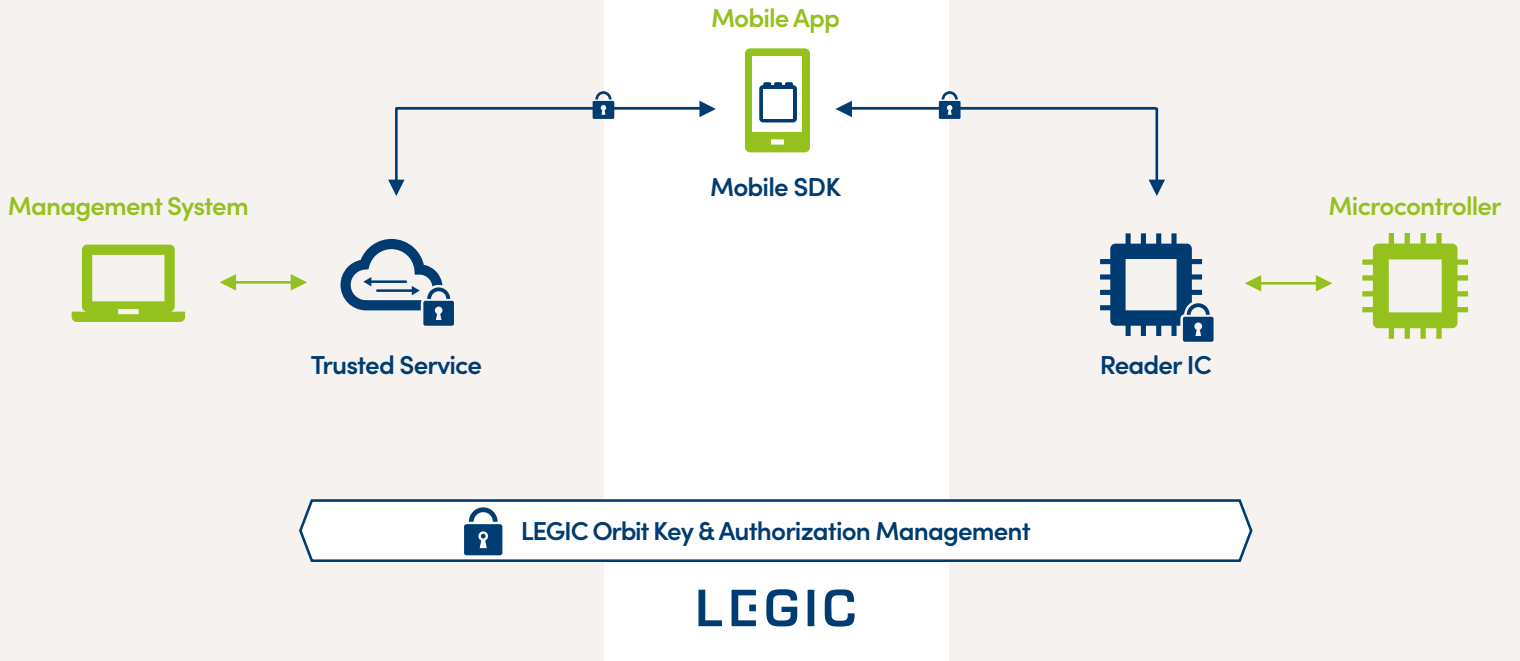
ble. All of them benefit from LEGIC Orbit, giving you peace of mind that security is taken care of.



You

Your Users

Your Infrastructure



### Overview of the LEGIC technology platform in a mobile environment

# LEGIC Orbit grants you full control over all your applications in a mobile environment

#### Advantages of LEGIC Orbit

- Randomly generated application keys stored in a certified Hardware Security Module
- Secure and flexible distribution of application keys and other configuration data over the air
- Any smartphone can serve as configuration tool
- Smoothly integrated into the proven LEGIC ecosystem

#### LEGIC Orbit - how to get it?

To benefit from the LEGIC Orbit advantages, all you need is a LEGIC Connect account and compatible LEGIC reader ICs. LEGIC Orbit is an integral part of these components. Contact our staff at LEGIC for more details.

