KEYSTONE

by irdeto

Product Brief

Secure Digital Key on your Mobile Device

Drive efficiencies into your commercial fleet operation

Keystone by Irdeto is a secure, policy-based digital key solution that enables more efficient management of commercial vehicle fleets by removing the need to handle physical keys, optimizing for time spent where it matters: on the road.

THE CHALLENGE

Department of Transport (DOT) Hours of Service rules dictate that a maximum of 11 hours of a 14-hour shift can be spent driving. However, the real-life numbers are much lower, with an average of 7.3 hours of productive driving1. Inefficiencies add up: personal time, preparation time, paperwork, loading / unloading time, etc.

Much of this productive drive time can be captured by removing the archaic procedures surrounding key management and route dispatch, where drivers usually spend time waiting on paperwork or keys before starting their route.

Additionally, lost keys, delays and miscommunication can result in immobilizing expensive tractor trailers for an extended period.

WHY KEYSTONE by Irdeto?

While many solutions address the key management problem by providing a key safe, this usually shifts the problem by asking drivers to use ID tags or PIN codes instead of keys.

Keystone's approach simply consists in removing the physical key.

KEYSTONE DIGITAL KEY

Drivers can now simply use their smartphone to review their route, unlock the truck and start their drive, without having to fill in paperwork or visit a dispatch office – allowing more time spent where it counts, on the road, driving.

Keystone consists of a mobile app and an optional fleet management system as well as an easy to install hardware module and wiring harness. Keystone can also be retrofitted into existing hardware modules.

It allows simple and convenient control of vehicles:

- Lock / unlock the truck doors either based on proximity (using Bluetooth BLE technology) or remotely.
- Precondition the vehicle while approaching.
- Authorize the drive based on profile & policy securely stored on their mobile device.

Driving time, which was previously wasted, therefore increases.

Once keys have been issued to the driver's mobile device, a network connection is no longer needed to access the vehicle. Furthermore, a secondary access mechanism using NFC cards can be used for cases where the mobile device's battery is depleted.

As your driver is getting ready for work he gets a notification on his Android phone for the day's route.

Today's route is 202 miles from Paducah to Louisville in tractor #455 in bay #22.

The driver does not have to go to the dispatch office but instead walks straight to bay #22 upon entering the yard, saving a mile of walking and time spent getting keys.

As your driver approaches his tractor, it flashes its lights to let them know where it is, unlocks the door, and starts the electrical system.

After the end of his shift, the driver's digital key is revoked and he can no longer access the tractor. The next driver approaches the tractor for her shift, the tractor lets her know where it is and unlocks as she approaches to start her shift.

[1]: JB Hunt; White Paper, 660 Minutes: How Improving Driver Efficiency Increases Capacity

DRIVING PROFITABILITY

Thanks to Keystone by Irdeto, fleet managers can focus on what is most important: assigning tractors, drivers and routes to maximize fleet efficiency unlocking the value of the most important assets, drivers and their vehicles.

Keystone offers an easy-to-use web interface to create, allocate and delete digital keys, drivers, vehicles and mobile devices.

Keystone streamlines processes by assigning jobs to specific drivers at specific times together with the correct digital key, only valid for the duration of the job.

Digital keys can be revoked automatically from the driver's mobile device if and when they are not needed anymore, allowing for smarter, more flexible fleet allocation, at any given time.

In addition to digital key management, the Keystone Fleet Manager cloud can provide services for:

- Tracking vehicles and collecting usage data (such as fuel consumption and mileage).
- Managing inspection checklists and daily checks, directly from the mobile device.
- Triggering actions based on geofencing: delivering a temporary and limited key to yard personnel when the truck reaches its destination, for example.
- Managing multiple drivers' digital key policies based on skills: maintenance staff, drivers, washers, etc. Each digital key policy can be fine-tuned to allow only specific features at specific times.

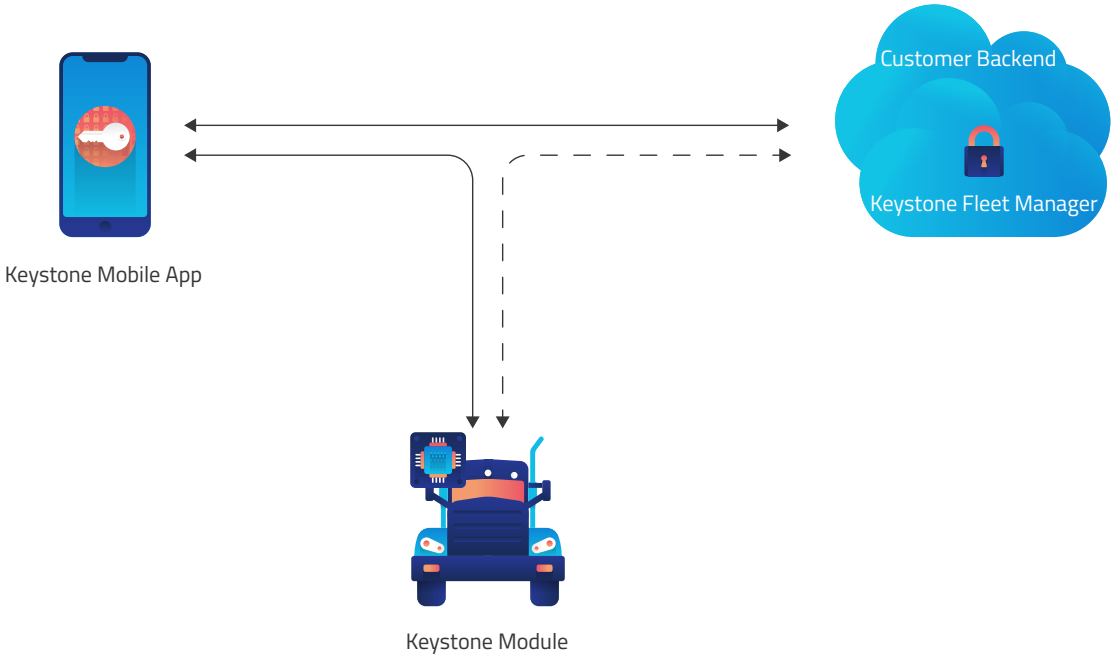
SECURITY AT THE CORE

Security within the Keystone ecosystem is the result of Irdeto's 50 years of expertise in providing cybersecurity solutions in hostile environments.

With its vast experience in stopping hackers and hacking tools & technologies, Irdeto is ideally and uniquely suited to provide value to companies whose businesses are based on the security of software and secure control of assets.

Irdeto knows, from our customer implementations, that software security knowledge and experience is critical to successful and secure deployments of new and innovative technology into the market.

THE KEYSTONE by Irdeto ECOSYSTEM



For more information about Keystone by Irdeto, please visit: https://irdeto.com/keystone/