SONY

Secure provisioning made easy

A flexible, vendor-agnostic platform for over-the-air access management

CRIOTIVE

Unlock the potential of IoT

A unique, hardware-independent provisioning service for your electronic locks

Criotive is a cloud-based access management service, that's compatible with all major electronic lock brands.

It simplifies the job of distributing access rights to residents, employees or visitors. Administrators send virtual 'keys' to their end user's smart phone (for touch-transfer to a card) or connected wearable device.

As a solution provider, you can take advantage of Criotive to digitise your offer. No previous experience of cloud services or in-house expertise for OTA provisioning is needed. Unlike a one-off hardware or software sale, the service is infinitely scalable and generates a steady flow of revenue for your business.

Pling! You've got access.

With Criotive, data travels securely between the service provider and end user's connected device via an encrypted channel.
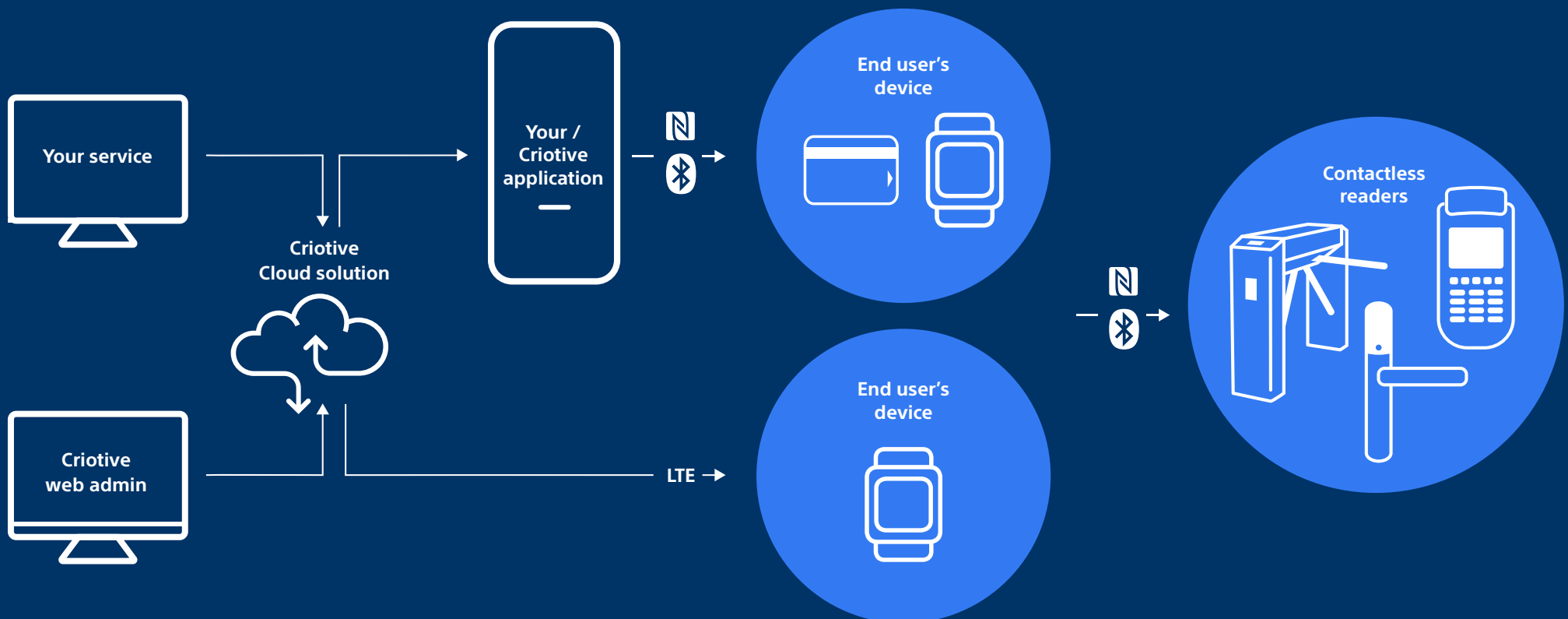
Business administrators simply add the names of users and locks in their company's web application.*

They can then apply the company's access control policy to individuals or groups of users and start distributing access rights over the air.

When an administrator adds a new user to an access group, the user is notified via email or text message. He or she then downloads the dedicated app and can start to receive access rights over the air – to a mobile phone/card or connected wearable device.

Locks or access points are opened via Bluetooth (BT) or Near Field Communication (NFC).

Your service

Criotive Cloud solution

Criotive web admin

Your / Criotive application

End user's device

End user's device

LTE

Contactless readers

* Criotive comes complete with APIs and SDKs to facilitate building of client-side software.

Who, when and where? You decide.

Access rights are like virtual keys. Once sent, they are instantly ready to use and can be updated, revoked or prolonged remotely, in real time. They can be granted for a specific time period - by the day, hour or week depending on the situation - or even indefinitely. They can also be logged, creating a record of who has had access to different areas at different times.

All of this saves a huge amount of time, reduces the need for physical check-ins and improves security at your site.

Places

Promotions

Payments

The first service product to be offered on the Criotive platform is secure provisioning of access rights to physical places.

Other services such as payments or promotions can be added on the same platform. For example, hotels can add the promotions functionality to promote special events for VIP guests; sports stadiums can add the payments functionality to offer no-cash payments on food and drinks. (See more on pages 9–10)

Thanks to integration with the secure element, businesses can rest assured that only authorised people get access to their places, promotions and payments offer.

Don't get locked in. Get Criotive.

Vendor-agnostic platform

The openness and flexibility of Criotive is unique on today's market. Unlike competing services, it is not dependent on a specific lock hardware or operating system. This means that most companies with electronic locks can enjoy the benefits of secure provisioning with a common platform and no major infrastructure investments.

Scalable and futureproof

Based on digital technologies, there's no limit to the number of users you can have in your access management system, and no limit to the number of access points.

Since the software can be easily upgraded in the future, neither is there any risk of obsoletion.

Simplicity improves security

Complex access management systems often lead to breaches in security as staff struggle to apply the company's access policy correctly.

With Criotive, there's no such risk. The user simply selects a specific person (or group), time and place and clicks 'OK' to send a virtual key over the air.

Quicker and easier for everyone

Business users save time and effort:

- Reduced need for manual card programming
- Fewer face-to-face meetings with end users

Straightforward flexible user interface:

- Select individuals or groups
- Select time-limited access
- Select place-restricted access
- Grant, revoke and prolong access rights over the air
- Offer promotions and payments on same platform
- Make changes on the fly

Offer end users a seamless experience:

- No need to check in at reception or admin office
- Receive instant access (virtual keys) remotely
- Get smooth payments functionality and access to special promotions

Where does Criotive add value?

On the following pages, we show three typical use cases. In reality, any enterprise or organisation that needs to restrict access can benefit from Criotive. Science parks, office buildings, university campuses, retail stores. The list is endless.

Healthcare

In hospitals, nursing homes and elderly care homes, Criotive enables secure control over entrances, staff lockers etc. It supports the battle against drug diversion by allowing administrators to grant time-restricted access to medicine cabinets and to keep a log of users.

Criotive facilitates the daily work of administrators who have to keep track of hundreds of staff coming and going every day. Via the web interface, they can grant and revoke access rights quickly and easily.

Benefits for administrators:

- Easy administration, web interface + app
- Access control, key rules, access by authorisation
- Access log capability

Benefits for staff:

- Valid keys for a particular period
- Limited access by authorisation
- Keys submitted over-the-air, no need to pick up at an admin office

Hotels & facility management

Hotels chains often have legacy lock hardware from different vendors. The same is true of residential property owners, or facility management companies. Standardising and modernising all these locks requires a big investment.

Criotive lets such companies bring their access management systems up-to-date just by adding a software service on top of their existing infrastructure. No major investments needed.

Benefits for business owners:

- Easy administration (more cost-efficient)
- Room key - OTA prior to arrival
- Up-sell deals and services
- Control and visibility of staff access

Benefits for guests:

- Smooth, hassle-free customer experience
- One access card for everything
- No need to carry cash or credit cards

Stadiums & theme parks

To keep queues short, theme parks or stadiums need to get large numbers of visitors through their turn-styles as efficiently as possible. With access rights sent to their phone or a connected wearable device, visitors can pass through smoothly. With the addition of the Criotive payments module, VIP guests and season ticket holders can easily take advantage of your bar at half-time, cash-free.

Benefits for staff:
- Easy handling of access rights for staff, restricted by function: carousel operators, regular staff and maintenance
- Paperless ticket handling and cashless payment
- Security – no physical keys to keep track of

Benefits for guests:
- Manage tickets and payments easily
- Book rides in advance
- Reduce queueing time
- Receive promotions

CRIOTIVE

Criotive is a secure, flexible platform for remote, over-the-air distribution of access rights – from the service provider to the end-user's connected device such as a phone, card or wearable. The platform is end-to-end encrypted, based on open standards, technology-agnostic and fully scalable. It reduces both the manual work involved in programming key cards and the need to meet end-users in person. Thanks to an intuitive user interface, Criotive makes managing access rights quick and easy, regardless of the number of users or devices.

Want to know more?

Contact us on **criotive@sony.com** and find out how Criotive can add value to your organisation.

https://iot.sonynetworkcom.com/criotive/