GETTING AHEAD
WITH SUPERIOR SOFTWARE

The latest version of ELATEC's DevPack software has made it even easier for customers to implement their RFID projects

Companies using Radio Frequency Identification (RFID) now have a powerful new development kit from ELATEC. The newest version of ELATEC's DevPack software offers several new functions for ELATEC RFID-readers that make it even easier for customers to implement their RFID projects. In terms of security, flexibility and sustainability, this is the most advanced and comprehensive software on the market.

Radio Frequency Identification (RFID) is a convenient and adaptable solution for contactless identity verification. It has been widely adopted for user authentication and access control for a broad range of applications, including building access, secure printing, vending, car and bike share applications and more. But if RFID readers are not kept up to date with the latest security requirements, they can become a gateway for unauthorised access. That's why RFID software must always be updated with the latest security patches. Updates may also be needed to address emerging technologies or introduce new functionality, such as the ability to read Bluetooth Low Energy (BLE) or NFC mobile credentials.

ELATEC GmbH is particularly innovative in this respect. The company's DevPack has long been known for its configurability, allowing manufacturers to adapt ELATEC readers for a broad range

of applications. In August, the Puchheim-based RFID hardware developer put a new DevPack on its website for download. It provides the most advanced software capabilities in the industry.

Security and convenience

With the software development kit, ELATEC products supplied in the standard configuration can be adapted for new security requirements, technologies and functionality. The Puchheim-based company is continuously optimising the program to meet emerging market needs and make the products future-proof. Christian Rötzer, the Chief Developer at ELATEC GmbH, sums it up: "The most important thing for companies

is the issue of device security in the sense of secure handling of data, secure maintenance and safe configuration," he explains.

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"We have added an additional level to the security architecture. Companies can now choose their own cryptographic key, which means it is only known to them. This helps them protect themselves from unauthorised changes."
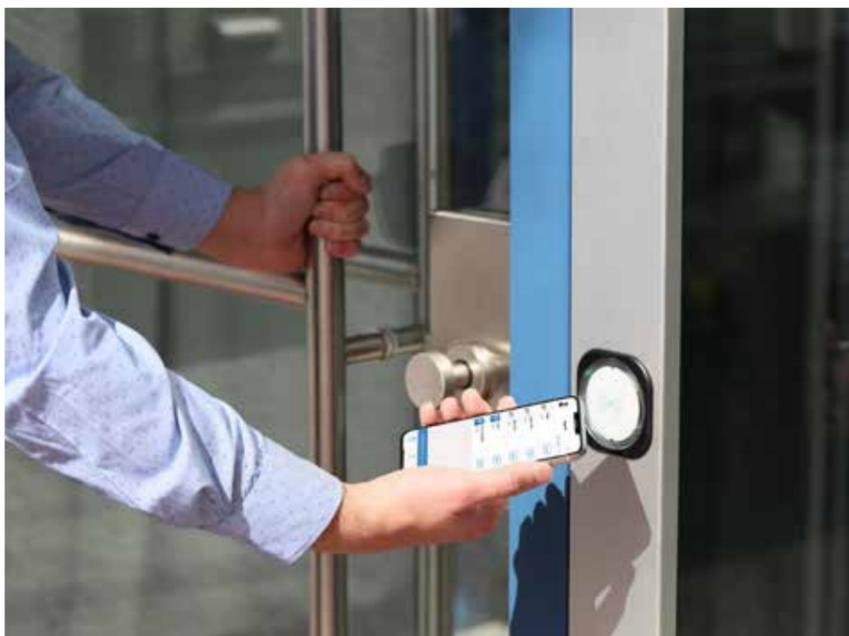
Security and configurability go hand-in-hand for ELATEC's readers. Original equipment manufacturers (OEMs) who integrate RFID readers into their applications appreciate the flexibility that ELATEC's DevPack provides, which allows them to add new technologies or functionality at any time. But secure transmission of configuration data is an essential aspect of device security. Cryptographic keys are used to enable secure configuration; without the right key, the reader's configuration cannot be changed. Data can also be encrypted so that unauthorised persons cannot access or read data on the reader or transmitted between a card or smartphone and the reader.

With a new Remote Upgrade option, devices can now be upgraded securely and conveniently using an activation code sent via e-mail. This is an alternative option to the Upgrade Card, which must be physically near the device to transmit the data for an upgrade. Remote Upgrades are faster and more convenient for IT managers, allowing devices to be upgraded remotely without managing physical cards and visiting each device. Now, readers can be upgraded from the standard configuration to add advanced functionality or new card or mobile technologies with just a few clicks.

The new DevPack offers more convenience to developers with MultiBIX firmware images. Rötzer explains: "We now offer configuration files that work uniformly for all devices. It is no longer necessary to differentiate between core, mini- and nano-based readers. The selection of templates has never been easier." Previously, developers
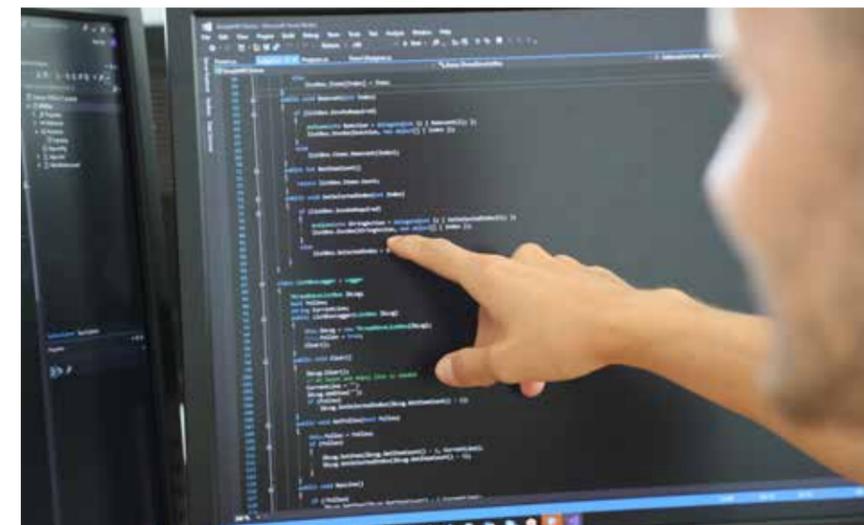
had to select the device to be configured in AppBlaster. AppBlaster is an all-purpose configuration tool that is the heart of the DevPack software kit. With the new DevPack, it is no longer necessary to select the type of reader you are configuring before creating the firmware image. MutliBIX images are applicable to all ELATEC devices. This reduces confusion and adds convenience for OEMs who may use multiple types of readers for different applications.

Another innovation introduced in the new DevPack is the Mirror Image function. This allows firmware updates across proprietary interfaces. Almost any device interface can now be used, such as RS-485 (via OSDP), NFC and BLE. This even gives companies the ability to develop firmware updates themselves.

Support for Apple VAS, Transact, KleverKey and Safetrust

With the DevPack, ELATEC has also renewed its commitment to making the devices universally compatible with technologies, communication

protocols and applications around the globe. The newest DevPack adds support for Apple VAS as well as applications from Transact, KleverKey and SafeTrust.

The Apple Value-Added Services (VAS) protocol enables Near-Field Communication (NFC) with the iPhone and other Apple devices for payment processing, loyalty programs and other applications. BLE applications have been more widely embraced than NFC by developers in large part because BLE has been equally supported by both Android and Apple. But NFC, with its shorter communication range, is more appropriate for mobile payment, smartphone-enabled access control solutions and other short-range user authentication scenarios.

The DevPack also supports Transact, Kleverkey and Safetrust, which are applications for mobile access authorisation and payment for iOS and Android. These partnerships will allow ELATEC readers to be used for seamless mobile access, payment or user authentication using Transact, KleverKey or Safetrust virtual credentials. Mobile access and payment solutions are rapidly overtaking RFID card technologies as consumers embrace smartphones for management of nearly every aspect of their lives. With the DevPack, ELATEC is well-positioned to help its customers prepare for the rapid changes in the world of secure authentication and access control.

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