

Remote Key Loading



Decoding RKL

DieboldNixdorf.com

What is Remote Key Loading (RKL)?

Discover the power of our industry-leading Remote Key Loading (RKL) solution, and find out how your financial institution (FI) will benefit from a secure, compliant, efficient and universal solution that can be seamlessly implemented across a diverse ATM fleet. RKL is the process of distributing a terminal master key from a central administration point to an Encrypted PIN Pad (EPP) or PIN Entry Device (PED).

WHAT ARE KEYS?

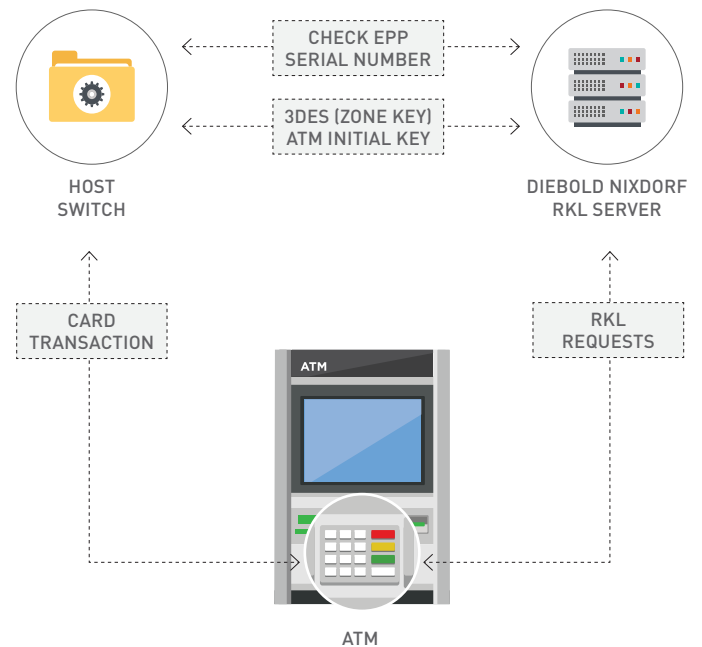
Keys are essentially strings of numbers that allow you to take information, secure it, then transmit it. That information can only be decrypted when a private key is entered. The secrecy of keys is critical for ensuring security and protecting information. That's why there are public and private keys. The public key essentially "unlocks" the private key, which is further enhanced by security checks. And, there are multiple keys to create an intentionally complex code so ATMs cannot be tampered with during the key-loading process.

WHY USE RKL?

Before RKL, a two-person team had to physically load new keys. That means one technician arrived on the scene with half of the key, and programmed the key into the ATM EPP or PED. Then, another technician physically plugged in the other half of the key code. This two-person manual key loading might have been a secure process before—but not in today's 24/7 environment. Manual key loading opens up opportunities for fraud and errors. (After all, the process is performed by humans.)

- Manual key loading creates security gaps.
- It's costly and time-consuming as financial institutions (FIs) must depend on two technicians to complete the process.

RKL HOST INTEGRATION



RKL Streamlines and Secures the Key-loading Process.

RKL allows the master key to be distributed from a central administration point directly to the EPP or PED. Code keys are sent between the central processing center and ATM.

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1 1 1 1 1 1 1 1 1 1 1 1 1 1
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RKL improves operating efficiency—It decreases ATM downtime.

RKL enhances security, guarding ATMs against tampering.

RKL is more convenient for consumers and FIs—it ensures more uptime, greater security and improved efficiency.



RKL Advances & Challenges

MANAGING MULTIPLES (ATMS, MANUFACTURERS, MODELS)

Because of RKL's clear benefits, it has become the standard method across the globe for loading new ATM keys. Many ATM manufacturers offer RKL capabilities—but their solutions are linear and focused on their brand and their system. This is challenging because FIs are “managing multiples”:

- Diverse, multi-vendor ATM fleets with machines from multiple manufacturers
- ATM fleets with a multiple models from a single manufacturer
- Multiple vendors that service an ATM fleet

With all these variables at play, how effective are your ATM manufacturer's RKL capabilities?

RKL CLASSES & PROTOCOLS

There's another layer that can make RKL complicated to understand and implement: RKL protocols fall into one of two classes—signature-based or certificate-based—and vendors may have multiple RKL protocols all based within the same class.

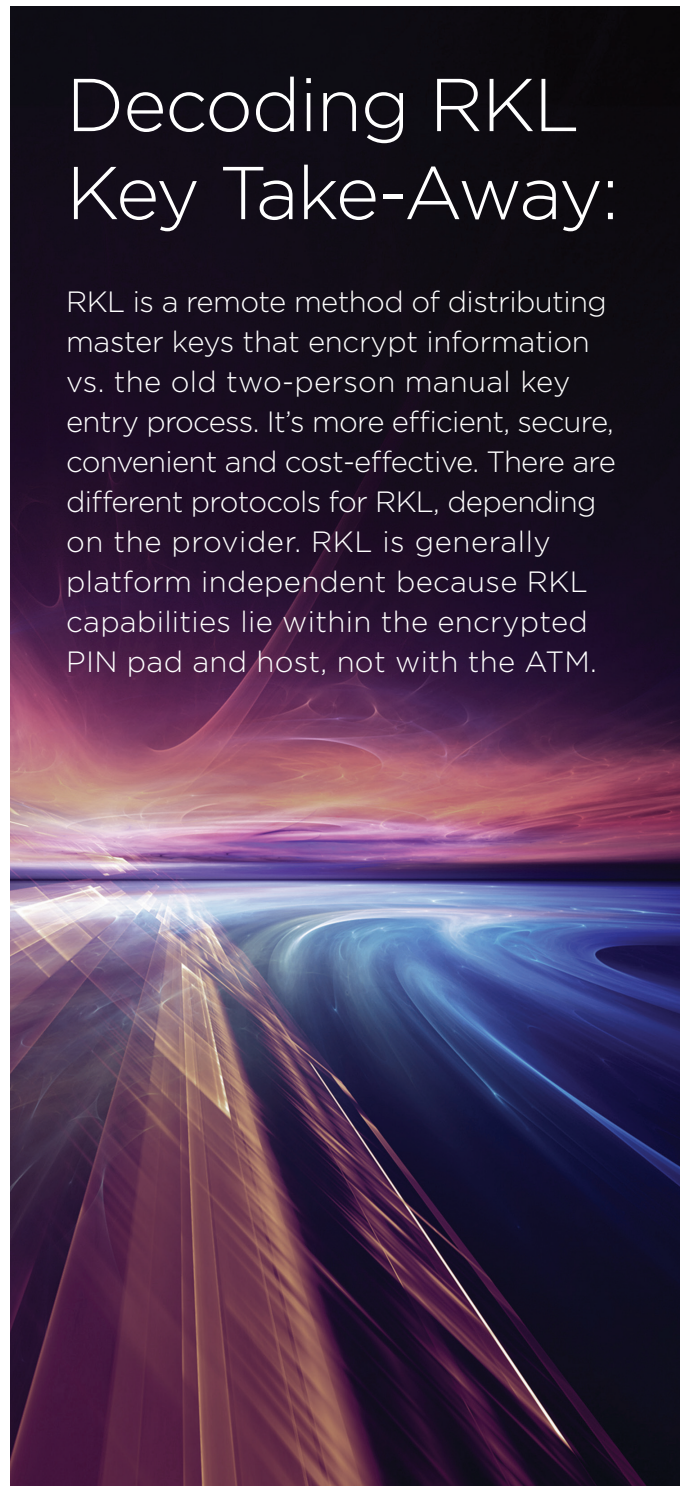
Signature-Based

This protocol has a digital signature. It's a simpler data structure using a code key that encrypts the digital key. The digital key is sent to an encrypted PIN pad. The PIN pad decodes the key and uses security checks to prevent fraud.

Certificate-Based

This protocol uses certificates to transmit information rather than using keys. Certificates involve more information than a signature-based protocol. More data is sent at a time via certificate. This solution is not ideal for dial-up networks. The industry-standard TR-34 RKL protocol is certificate based.

With two different RKL classes, an FI might have ATMs in its fleet that are signature-based and certificate-based, and different types of protocols within each class, which all require different RKL solutions. **Our solution supports both classes.**



The Diebold Nixdorf Remote Key Loading Solution

The RKL Solution by Diebold Nixdorf addresses the challenge of “multiples” with a multi-vendor solution that uses signature/certificate techniques specified by ANSI standards. This allows for mutual authentication between the RKL server and EPP, and a secure session for the Initial Key Transport.

KEY BENEFITS

- **It's universal.** It can be implemented across ATM fleets with terminals from multiple manufacturers, different models and various vendors.
- **It's secure.** A central RKL server first communicates the Initial Key to the host (switch). Then the RKL server establishes an initial, secure session for transmitting the Initial Key to the ATM. From then on, the ATM communicates with the host (not the server).
- **Verifies** that EPP serial numbers are included in a bank's inventory before completing a transaction.
- **Communicates directly** from the RKL service to ATMs.
- Requires no intervention from bank staff or technicians if new software is installed or an EPP is decommissioned. An RKL request is simply launched again, following the secure protocol.
- **It's a single solution** banks can use for any type of ATM fleet because the RKL Service executes a specific RKL protocol for every ATM manufacturer.
- **Supports non-ATM terminals**, including pin-pad payment readers.
- **Enables integration** with RKL protocols for either additional EPP/PED models or new EPP/PED firmware revisions, so FIs can stay compliant with the latest PCI requirements.

DECODING RKL: THE DIEBOLD NIXDORF RKL SOLUTION DIFFERENCE

Our RKL Solution eliminates costs associated with manual key loading—there's no need for staff to transfer keys, or for two separate technicians to physically load keys into the EPP or PED. Additionally, our RKL Solution enables bilateral authentication. A secure session is established with the host (switch) before the initial key is downloaded. And, because it has an RKL protocol for every ATM manufacturer, RKL Solution is the only Remote Key Loading answer your organization needs.

Explore how the Diebold Nixdorf RKL solution can improve efficiency, boost security and reduce costs. **Contact your Diebold Nixdorf representative today.**



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