

Release note Nexus Card SDK 5.3

Version: 5.3

Release Date: 2018-03-16

Introduction

Nexus is proud to announce the availability of Nexus Card SDK 5.3.

Main new features

Card SDK supports SAM AV1/AV2

With this version of Card SDK we introduce SAM AV1/AV2 Modules for Mifare DESFire EV1. The SAM is a Cryptochip used to store the DESFire Keys that are necessary for Card Encoding in a secure environment. The keys will never leave the chip during the encoding procedure, for example, key derivation will be done on the chip. SAM AV1/AV2 are today available for DESFire EV1. Due to limitations in the latest DESFire specification, full support for EV2 with SAM is not yet possible.

New Mifare DESFire EV2 features supported

With this version of Card SDK we support:

- Mifare DESFire EV2 additional key sets
- Mifare DESFire EV2 additional access rights
- Mifare DESFire EV2 Delegated Application Management (DAM)

Detailed feature list

Features

JIRA ticket no	Description
SDK-14	Mifare DESFire EV2 additional key sets With the DESFire EV2 the concept of "additional key sets" was introduced. This makes it possible to define - on top of the default key set per application - additional key sets. This makes it possible for cards that are already in operation to switch to other key sets (and make the previous ones deprecated) without changing the chip encoding. The new Card SDK version supports this concept of additional key sets.
SDK-15	Mifare DESFire EV2 additional access rights With this version of Card SDK we support the new EV2 additional access rights. EV2 allows to set up to 8 different access right sets per file. EV1 supported only one set per file, which is still possible in Card SDK.

SDK-16	<p>Mifare DESFire EV2 Delegated Application Management (DAM) This version of Card SDK supports the also DAM Keys for EV2. 3 different DAM keys on PICC level (Auth, Mac and enc) can be defined.</p>
SDK-90	<p>Introducing MRZ Reading as new encoding type With this version of Card SDK we introduce MRZ reading as a new standard encoding type. We integrated the 3M Passport Reader AT9000 MK2 as a standard device for reading the MRZ code of national ID cards and passports. The scanner is connected via the Configuration Manager. Fields to be read can be defined in an Encoding Description.</p>
SDK-91	<p>Automated download of the PRIME PKI encoder Nexus Card SDK can now download the Java-based PKI encoder of Nexus PRIME dynamically. In former releases the PKI encoder of a certain PRIME version was statically packaged in the Card SDK setup. Now, from Card SDK 5.3 and PRIME 3.7 on, this encoder is downloaded on demand and also updated if the PRIME server provides a new version.</p>
SDK-140	<p>Card SDK supports SAM AV1/AV2 With this version of Card SDK we introduce SAM AV1/AV2 Modules for Mifare DESFire EV1. The SAM is a Cryptochip used to store the DESFire Keys that are necessary for Card Encoding in a secure environment. The keys will never leave the chip during the encoding procedure, for example, key derivation will be done on the chip. SAM AV1/AV2 are today available for DESFire EV1. Due to limitations in the latest DESFire specification, full support for EV2 with SAM is not yet possible.</p>
SDK-169	<p>Improved user experience when capturing signatures via TWAIN Capturing signatures with signature pads is today done via TWAIN interface. In previous releases of Card SDK, the user got multiple capturing dialogs presented. It is now possible to suppress these dialogs. The feature is tested and released with the StepOver Signature Pads.</p>
SDK-177	<p>QR-code scanning introduced as encoding type This version of Card SDK now also provides QR-code scanners as a standard encoding type. This means that scanning of bar codes is now available as Card SDK feature. We integrated the Datalogic Magellan 1100i as our standard scanning device in Card SDK.</p>
SDK-179	<p>Native SAM support for Interflex DESFire Encoding As part of the DESFire SAM story in the Card SDK release we are also happy to announce that DESFire Encodings for the Allegion/Interflex PACS systems can also be done with our new native SAM integration in Nexus Card SDK. This means that we now can execute Interflex DESFire Encodings (using a SAM) in combination with any other DESFire encoding within the same encoding step and in the same reader. This also means that the Interflex DESFire Encoding is no longer limited to specific readers, but can be executed with any of the DESFire Encoders that Card SDK supports.</p>

Corrected bugs

JIRA ticket no	Description
SDK-3	Scanning documents via a TWAIN connected scanner could show duplicated preview dialogs in former releases. This has been fixed now, and duplicate dialogs can now be suppressed.
SDK-71	Corrected card production service so that it works for "Fast User Switching" as well. In former releases, Card SDK was not working properly if multiple users were logged in on the same Windows client and sessions were switched between these users.
SDK-96	Memory leak fixed. It could cause crashes when printing layouts with logos and background images.

SDK-97	In the previous release, the IDMailX component was removed due to deprecation of the functionalities. Nevertheless, some Card SDK integrations of our partners still reference the library in their software. We added the component again to avoid broken links in our partner's applications, but encourage all of our customers to remove this component from their integration.
SDK-125	Image Enhancement was quite slow when running Card SDK on Windows 10. This is fixed now.
SDK-134	Fixed Capturing with Canon EOS 750D. The camera was not working properly in the last Card SDK versions.
SDK-164	Fixed setting of DESFire Application Keys in the number range 0x1* to 0xD*. Tthe Keys in that number range were not working correctly.
SDK-173	The enumeration of the available printers did not list all available printers in some cases. This has been fixed now.

Contact

Contact Information

For information regarding support, training and other services in your area, please visit our website at www.nexusgroup.com/.

Support

Nexus offers maintenance and support services for Nexus Card SDK to customers and partners. For more information, please refer to the Nexus Technical Support at www.nexusgroup.com/support/, or contact your local sales representative.