Easy Path to EMV 21 Release Note

ICO-OPE-00105-V1-EN

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1. Package description

1.1. Packaging

"Easy Path to EMV" is provided as an additional package to the Telium SDK. This version is compliant with the SDK 9.2.1 and the Add-On CAD30 3.1.

1.2. Main evolutions

- Certified with the latest EMVCo test cases version 4.3.a.
- Many fixes and evolutions required by regions (see chapter 2, page 5), among:
  - Add support for CDA mode 3,
  - Support a maximum total Issuer Script Length of 1024 bytes,
  - Support for Amount Authorised bigger than a 32 bits number,
  - Add option to read the card transaction log during a transaction,
  - Support for the ICS option 'Selectable Kernel Configurations' and 'Deletable TACs',
  - Remove SDT libraries.

1.3. Certifications

At the date of May 31 2012, EMV DC version 0465 is certified for the following configurations:

2FWW_6 (baseline, all options enabled), 2EDE_4, 26DE_3

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1.4. Contents

Components

30650465	EMV DC certified kernel.	
34210468	EMV Engine.	*[Updated]*
34219468	EMV Engine with IAC traces.	*[Updated]*
34200127	EMV Custom.	*[Updated]*
8440420127	EMV Custom CGUI Resources.	*[Updated]*
34230505	EMV Comm.	*[Updated]*
36220403	YES Protocol.	*[Updated]*
36780210	EMV Tool.	*[Updated]*

Libraries

DEL.lib version 0104.	
EmvDcInterface.lib version 0117.	
EngineInterface.lib version 0114.	*[Updated]*

Documents

EMV CUSTOM documentation.	*[Updated]*
EMV DC Interface Library documentation.	
EMV CUSTOM parameters management.	

Custom application

Source code of an EMV application that can be customized.	*[Updated]*

Communication component

Source code of a communication component that can be customized.	*[Updated]*

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2. Detailed changes

2.1. General changes

FT	SUPTEL	Description
-	-	Remove SDT version of the static libraries.

2.2. Changes between EMV DC versions 0430 and 0465

FT	SUPTEL	Description
-	-	Certified with the latest EMVCo test cases version 4.3.a.
9874	-	The track 2 expiration date shall not be checked. This test is not required by EMVCo and some Chinese cards contain '0000'.
10601	-	PBOC (China) defines the length of tag Cardholder Name Extended to 1-19 instead of 27-45.
10744 11905	-	The total Issuer Script Length is now 1024 bytes.
10868	3109	Bug fix concerning duplicated AIDs in some cases.
11727	-	Add support for CDA mode 3.
11732	-	The order of the tags that appear in the response of a READ RECORD during PSE may cause an AID to be ignored.
12266	-	In few cases, the TSI bit "Offline Data Authentication" was set while the Offline Data Authentication was not performed.
11639	3692	The transaction is now aborted if EXTERNAL AUTHENTICATE response includes some data bytes.
11837	-	Amount Authorised (Binary) is now optional. If not present, Amount Authorised (Numeric) is now used, without truncation. Required by currencies that needs more than 32 bits numbers.
11904	-	Add support for tags longer than 264 bytes.
12158	-	Card traces of EMVTool now manage long card commands (more than 160 bytes).

2.3. Changes between EMV ENGINE versions 0463 and 0468

FT	SUPTEL	Description
11595	3565	In some cases with an application of type $0x51$, the displayed name in the Telium Manager menus were not correct.
11837	-	Amount Authorised (Binary) is now optional. If not present, Amount Authorised (Numeric) is now used, without truncation. Required by currencies that needs more than 32 bits numbers.
12044	3938	ENGINE can now read the card transaction log during a transaction. The application can enable it by setting the tag TAG_CUST_LOG_DURING_TR to $0x01$.
12069	-	ENGINE can now send tags longer than 264 bytes to EMV DC. It is especially required for Issuer Scripts.
12070	-	Use TlvTree to communicate with EMVTool.

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2.4. Changes between ENGINE Interface Library versions 0113 and 0114

FT	SUPTEL	Description
-	-	`Engine_GetDataElements()` and `Engine_GetProprietaryDataElements()` now support more than 50 tags and values longer than 264 bytes.
-	-	`Engine_GetDataElement()` and `Engine_GetProprietaryDataElement()` now support values longer than 264 bytes.

2.5. Changes between EMV CUSTOM versions 0122 and 0127

FT	SUPTEL	Description
11729	-	Do not generate key beep during PIN entry when using CGUI with 'beep on key' Telium Manager option enabled (key beep during PIN entry is not PCI PTS approved).
11875	-	The cardholder language selection was not cleared, so it was used for the next transaction.
12044	3938	Enable the read of the card transaction log during a transaction.
12131	-	Use the new TlvTree interface of EMV COMM and YES PROTOCOL.
12212	-	Add 'Selectable Kernel Configurations' and 'Deletable TACs' ICS options.

2.6. Changes between EMV COMM versions 0504 and 0505

FT	SUPTEL	Description
12130	-	Interface with CUSTOM now uses TlvTree data, enabling long tags (especially required for Issuer Scripts).

2.7. Changes between YES PROTOCOL versions 0402 and 0403

FT	SUPTEL	Description
12130	-	Interface with CUSTOM now uses TlvTree data.

2.8. Changes between EMV Tool versions 0208 and 0210

FT	SUPTEL	Description
12071	-	TrackIAC now uses TlvTree data, removing all previous limitations (in terms of number of tags and maximum value length).
12158	-	Card traces now uses accurately sized buffers, enabling long card commands (more than 160 bytes).

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WARNING: You shall respect the integrity of the Easy Path to EMV components (c.f. list) **and never mix components from different versions of Easy Path to EMV,** except following INGENICO requirements.
INGENICO only guarantees a standard package. Partial or modified packages cannot be neither downloaded, nor supported, nor guaranteed by INGENICO.

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