



EMV® Specification Bulletin No. 301
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Update ParseAndStoreCardResponse

This Specification Bulletin changes the ParseAndStoreCardResponse routine for the handling of proprietary tags.

Applicability

This Specification Bulletin applies to:

- *EMV Contactless Specifications for Payment Systems, Book C-2, Kernel 2 Specification, Version 2.11 – June 2023.*

Related Documents

- *None*

Effective Date

- *1 April, 2024*
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Description

This Specification Bulletin introduces an update for the ParseAndStoreCardResponse service. The service no longer returns FALSE when the update conditions of a data object returned from the card do not include the RA Signal

In this case, the data object returned from the card will now be ignored.

Specification Changes

Change in section 4.1.3 the ParseAndStoreCardResponse as follows:

Boolean ParseAndStoreCardResponse(TLV String)

~~TLV Encoding Error := FALSE~~

Parse TLV String according the Basic Encoding Rules in [ISO/IEC 8825-1] ~~and set TLV Encoding Error to TRUE if parsing error, then return FALSE.~~

If TLV String is not a single constructed or primitive data object, then ~~set TLV Encoding Error to TRUE return FALSE.~~

~~IF [TLV Encoding Error]~~

~~THEN~~

~~Return FALSE~~

~~ELSE~~

FOR every primitive TLV in TLV String

{

~~IF [NOT (IsKnown(T) AND~~

~~class of T is Private class³ AND~~

~~NOT update conditions of T include RA Signal)]~~

THEN

 IF [IsKnown(T)]

 THEN

 IF [(IsNotPresent(T) OR IsEmpty(T))

 AND

~~update conditions of T include RA Signal~~

 AND

 L is within the range specified by Length field of the data object with tag T in the data dictionary in Annex A

 AND

 TLV is included in the correct template (if any) within TLV String⁴

]

 THEN

 Store LV in the TLV Database for tag T

 ELSE

 Return FALSE

 ENDIF

ELSE

³ As defined in Annex B of [EMV Book 3], the tag is Private class if bits b7 and b8 of the first byte of the tag are both set to 1b.

⁴ Data objects must be included in the correct template as indicated in the data dictionary in Annex A. Data objects for which no template is indicated ("–") must not be returned in a template from the card.

```
IF [IsPresent(T)]
THEN
    IF [IsEmpty(T) AND update conditions of T include RA Signal]
THEN
        Store LV in the TLV Database for tag T
    ELSE
        Return FALSE
    ENDIF
    ENDIF
ENDIF
ENDIF
}
Return TRUE
ENDIF
```

Without change indication this becomes:

Boolean ParseAndStoreCardResponse(TLV String)

Parse TLV String according the Basic Encoding Rules in [ISO/IEC 8825-1]. If parsing error, then return FALSE.

If TLV String is not a single constructed or primitive data object, then return FALSE.

FOR every primitive TLV in TLV String

{

IF [update conditions of T include RA Signal]

THEN

IF [IsKnown(T)]

THEN

IF [(IsNotPresent(T) OR IsEmpty(T))

AND L is within the range specified by Length field of the data object
with tag T in the data dictionary in Annex A

AND TLV is included in the correct template (if any) within TLV String⁵]

THEN

 Store LV in the TLV Database for tag T

ELSE

 Return FALSE

ENDIF

ELSE

 IF [IsEmpty(T)]

 THEN

 Store LV in the TLV Database for tag T

 ELSE

 Return FALSE

 ENDIF

ENDIF

ENDIF

}

Return TRUE

⁵ Data objects must be included in the correct template as indicated in the data dictionary in Annex A.
Data objects for which no template is indicated ("–") must not be returned in a template from the card.

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