



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*
-

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 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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