



EMV®

3-D Secure

Payment Token Message Extension

Version 1.0

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Introduction

This document describes the EMV Payment Token Message Extension and identifies how 3-D Secure (3DS) components can use this extension to provide or receive token-related information after a Payment Token has been de-tokenised.

This message extension is applicable only for Message Version Numbers 2.1.0 and 2.2.0.

For Message Version Number 2.3.0 and above, the information is conveyed using the EMV Payment Token Information data element.

Supporting Documentation

Implementers of this extension should reference:

- *EMV® 3-D Secure Use Case—3-D Secure with Payment Token*
- *EMV® 3-D Secure—Protocol and Core Functions Specification*
- *EMV® Payment Tokenisation Specification—Technical Framework*

Payment Token Message Extension Data Elements

Table 1: Payment Token Message Extension Data Elements

Data Element/Attribute Name	Description	Source	Length/Format/Values	Inclusion
Assigned Extension Group Identifier Attribute Name: <code>id</code>	A unique identifier for the extension.	3DS Server DS	Length: 14 characters JSON Data Type: String Values accepted: <ul style="list-style-type: none">• A000000802-003	AReq = R
Criticality Indicator Attribute Name: <code>criticalityIndicator</code>	A Boolean value indicating whether the recipient must understand the contents of the extension to interpret the entire message.	3DS Server DS	JSON Data Type: Boolean Value accepted: <ul style="list-style-type: none">• false	AReq = R
Extension Name Attribute Name: <code>name</code>	The name of the extension data set as defined by the extension owner.	3DS Server DS	Length: 17 characters JSON Data Type: String Value accepted: <ul style="list-style-type: none">• EMV Payment Token	AReq = R
Payment Token Data Attribute Name: <code>data</code>	The Payment Token data carried in the extension.	3DS Server DS	Length: Variable, Maximum 8059 characters JSON Data Type: Object See Table 2	AReq = R

Table 2: Payment Token Data

Data Element/Attribute Name	Description	Source	Length/Format/Values	Inclusion
Extension Version Number Attribute Name: <code>version</code>	Version number of the token message extension.	3DS Server DS	Length: 3 characters JSON Data Type: String Value accepted: <ul style="list-style-type: none">• 1.0	AReq = R
Payment Token Attribute Name: <code>token</code>	Payment token used to initiate the EMV 3DS transaction.	3DS Server DS	Length: Variable, 13-19 characters JSON Data Type: String Value accepted: <ul style="list-style-type: none">• Format represented ISO 7812	AReq = O
Token Additional Data Attribute Name: <code>tokenAdditionalData</code>	Additional information about the Payment Token from the Token Service Provider.	3DS Server DS	Length: Variable, maximum 500 characters JSON Data Type: Object	AReq = O
Token Assurance Method Attribute Name: <code>tokenAssuranceMethod</code>	An updatable value that allows the Token Service Provider to communicate the ID&V performed. It is determined or updated as a result of the ID&V Method(s) and ID&V Actor.	DS	Length: 2 characters Note: If the TAM value is spaces, representing No Value Set, then the data element will not be present. JSON Data Type: String Values accepted: Refer to EMV Tokenisation Technical Framework .	AReq = O
Token Requestor ID Attribute Name: <code>tokenRequestorId</code>	An 11-digit numeric value that identifies each unique combination of Token Requestor and Token Domain(s) for a given Token Service Provider.	DS	Length: 11 characters JSON Data Type: String Refer to EMV Tokenisation Technical Framework .	AReq = O

Data Element/Attribute Name	Description	Source	Length/Format/Values	Inclusion
Token Cryptogram Attribute Name: tokenCryptogram	A cryptogram, containing a transaction-unique value, typically generated using the Payment Token, Payment Token related data and transaction data. Cryptogram derivation methods may vary by scenario and may be Payment System-specific.	3DS Server	Length: Variable, maximum 4000 characters JSON Data Type: String Refer to EMV Tokenisation Technical Framework .	AReq = O
Token Cryptogram Validity Indicator Attribute Name: tokenCryptogramValidityIndicator	Identifies if the Token Cryptogram has been verified and the outcome of that verification.	DS	Length: 2 characters JSON Data Type: String Values accepted: <ul style="list-style-type: none">• 01 = Verified• 02 = Failed• 03 = Not Performed• 04–79 = Reserved for EMVCo future use (values invalid until defined by EMVCo)• 80–99 = Reserved for DS use Note: If the element is not provided, the expected action is for the ACS to interpret as 03.	AReq = O
Token Status Indicator Attribute Name: tokenStatusIndicator	Identifies the current status of the Payment Token.	3DS Server DS	Length: 40 characters JSON Data Type: String	AReq = O

EMV Payment Token Message Extensions Sample

Authentication with EMV Payment Token—Authentication Request

This is a sample extension that may be included in the AReq message by the 3DS Server or DS after obtaining the underlying PAN and token properties. The ACS may consume this additional token information as part of its risk evaluation process.

```
"messageExtension": [  
    {"name": "EMV Payment Token",  
     "id": "A000000802-003",  
  
     "criticalityIndicator": false,  
     "data": {  
         "token": "1234567890123456",  
         "tokenRequestorId": "00012345678",  
         "tokenAssuranceMethod": "00",  
         "tokenCryptogram": "MTIzNDU2Nzg5MDA5ODc2NTQzMjE=",  
         "tokenCryptogramValidityIndicator": "01",  
         "tokenStatusIndicator": "active",  
         "version": "1.0",  
     },  
    }  
]
```