

# 3DSV2 - Direct Interface - Recurring payments



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## Introduction

This page specifies the parameters to be used for authentication and authorization of payments

- recurring with a defined number of installments of the same amount;
- other recurring, ie recurring payments of variable amounts and / or of indefinite duration;
- soucription, also called NX or installments.

## Workflow

These payments are realized in two steps :

1. an order phase associated with the first installment payment, initiated by the buyer on the e-merchant pages called CIT, Customer Initiated Transaction ;
2. a second realize payment requests for following installments initiated by the merchant called MIT Merchant Initiated Transaction. The shopper is not present.

The payment request for the first installment must be authenticated with a challenge.

The card number can be entered by the buyer or retrieved from a card on file created previously.

The following requests are transmitted :

- without prior authentication request ;
- by referencing the first authorization.

## Validation of authentication and authorization requests

Here, you find the values objects for web service interface (cf. authentication an dauthorization processing).

First, the common values to authentication and authorization requests, then the authorization specifics value.

## First request

### Common values for authentication and authorization requests, then the specifics of the authorization

The tables below give the values and the presence of the different fields for the specific case of NX and recurring payments

Parameter	Mandatory	Comment
version	O	La version doit être supérieure ou égale à 28
Objet Payment		

amount	F	Amount of the first installment. The other installments must have an amount less than or equal to that of the first.
action	O	122 : authorization for a recurring payment with constant amount and fixed duration. 123 : authorization + capture for recurring payment with constant amount and fixed duration. 124 : authorization for an installment payment, NX, or installment. 125 : authorization + capture for an installment payment, NX, or installment. 128 : authorization for other recurring payments. 129 : authorization + capture for other recurring payments.
mode	O	CPT
cumulatedAmount	O	0
<b>Objet Order</b>		
amount	F	Order total amount.
<b>Objet Recurring</b>		
firstAmount	O	First installment amount (priority on payment.amount).
amount	C	Following installments amount. Mandatory for action codes : 122, 123, 124, 125. Empty for action codes : 128, 129.
billingCycle	C	Frequency, for example 40 for a monthly recurrence Mandatory for action codes : 122, 123, 124, 125. Empty for action codes : 128, 129.
billingLeft	C	Total installments number (3 for payment 3 times, ...). Mandatory for action codes : 122, 123, 124, 125. Empty for action codes : 128, 129.
billingRank	O	1 for first installment.
endDate	C	Last installment date (take a margin that includes the time necessary to repeat the last payment request in error case). Mandatory for action codes : 122, 123, 124, 125. Empty for action codes : 128, 129.
<b>Objet Buyer</b>		
ip	C	Must be valued when the buyer uses a web browser.
<b>Objet ThreeDSInfo</b>		
ChallengeInd	F	Payline forces the challenge request into the request sent to the ACS. This is a DSP2 regulatory. The merchant is not required to complete this field.
browser	C	Must be valued when the buyer uses a web browser.
sdk	C	Must be valued when the buyer is logged in via a mobile application using a sdk plugin.

## Spécificités autorisation

Authorization can be done with a

- doAuthorization;
- doImmediateWalletPayment;

Parameter	Mandatory	Comment
<code>authentication3DSecure.md</code>	O	
<code>authentication3DSecure.pares</code>	O	

## Save payment data in Payline wallet

This step allows payment data to be stored in a Payline wallet.

It is only possible if the authorization has been done with a `doAuthorization`.

It is optional.

You must use the `createWallet` web service specifying:

1. the contract number
2. the wallet identifier
3. the Payline transaction identifier given in response to the `doAuthorization`.

## Other installments

Payment requests for other installments are initiated by the merchant without the shopper, there is no authentication.

## Authorization settings

The authorization request can be realized using :

- [doAuthorization](#);
- [doImmediateWalletPayment](#) ;
- [doScheduledWalletPayment](#) .

Parameter	Mandatory	Comment
<code>linkedTransactionID</code>	C	Value returned in the first authorization response in the 'linkedTransactionId' parameter.  If the initial authorization is realized before the RTS SCA application, refer to "Grand fathering" description below.  Optional for 128/129 actions with using of <a href="#">doImmediateWalletPayment</a> or <a href="#">doScheduledWalletPayment</a> if the wallet was created with the first installment transaction (Payline uses the <code>linkedTransactionID</code> stored when the wallet was created).  Mandatory in other cases.
<code>resultContainer</code>	C	Value returned in the first authorization response in the 'resultContainer' parameter.  Missing if Grand fathering,  Optional for 128/129 actions with using of <a href="#">doImmediateWalletPayment</a> or <a href="#">doScheduledWalletPayment</a> if the wallet was created with the first installment transaction (Payline uses the <code>linkedTransactionID</code> stored when the wallet was created).  Mandatory in other cases.
<b>Objet Payment</b>		
<code>action</code>	O	Same value as in previous calls.
<code>mode</code>	O	CPT
<code>amount</code>	O	Installment amount (priority ib recurring.amount).

cumulatedAmount	C	Sum of amounts already authorized.  Missing for 'other recurring payments'.
<b>Objet Recurring</b>		
billingRank	C	2 for the 2nd installment, 3 for the 3rd, etc ...  Mandatory for action codes : 122, 123, 124, 125. Recommended for action codes : 128, 129, value strictly greater than 1.
.. others fields		Same value as in previous calls.

## Authenticated amount

The table below specifies the amount to be provided for authentication request for each payment type.

Payment	Payment code	Authenticated amount
recurring with defined installments number and same amount	122 or 123	Total amount : sum of installments amount
other installments	128 or 129	First installment amount.  For American Express, Mastercard, the other installments amount must not exceed that of the first one.  (TO BE CONFIRMED).
NX, installments	124 or 125	Total amount : sum of installments amount

## Grand fathering

This paragraph deals with recurring and Nx payments initiated before DSP2 application and which could not retrieve the initial authorization reference from the authorization server.

For each installment payment request, the merchant :

- sends as initial transaction identifier the value: '\*\*PV4-999999999999'
- retrieves the transaction identifier in the response to the payment request
- if this identifier is different from '\*\*PV4-999999999999', stores it and uses it as the initial transaction identifier in subsequent payment requests.

The resultContainer is never sent.

## Card change and renewal

This paragraph process the case of changing the card for a recurring payment or n times in progress.

The change is realized by the buyer on the merchant web pages.

The merchant offers his shopper to modify his payment data.

The merchant realizes a recurring payment request with variable amount and with an unlimited duration (code 128).

The merchant retrieves the identifier (linkedTransactionId) and the resultContainer.

The merchant can continue the installment request using the new identifier and the new resultContainer.

## Linked pages

- [3D Secure 2.0 - Comply with DSP2](#)
- [3DSv2 - Acquirer exemption](#)
- [3DSV2 - Direct Interface](#)
- [3DSV2 - Direct Interface - Authentication and Authorization](#)
- [3DSV2 - Direct Interface - JSON container format](#)

- [3DSV2 - Direct Interface - Recurring payments](#)
- [3DSV2 - Direct Interface - SDK Mobile partner](#)
- [3DSV2 - Functionalities](#)
- [3DSv2 - Increase frictionless](#)
- [3DSV2 - La liste des impacts Codes retour](#)
- [3DSV2 - Mail Order / Telephon Order \(MO /TO\) Payments](#)
- [3DSv2 - Webpage Interface](#)
- [Codes - ChallengeCancelInd](#)
- [Codes - ChallengeInd](#)
- [Codes - threeDSReqPriorAuthMethod](#)