Recurring Payments
Developer Manual

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01 Recurring Payment

The Recurring Payment is a capture mode much used by merchants that work with monthly transactions; or in other words, the merchant needs to charge an amount to its client's card on a monthly basis.

It is widely used by gyms and for subscriptions to newspapers and magazines.

For this type of capture, Rede has two models that adapt to your business: Scheduled Recurring Payments, in which the payments are controlled by e-Rede through its programming; and Historic Recurring Payments, in which payments are controlled by the merchant.

02 Capture method for recurring transactions

The capture method for recurring transactions allows processing of repeated payments by a merchant that is enabled to perform recurring transactions with the credit cards of MasterCard, Diners, Visa, and Hipercard.

Upon sending a transaction to e-Rede, an additional indicator specifies whether the merchant wants the transaction to be processed as a normal transaction or a recurring one.

2.1 Schematic elements of the request

In this section, the mandatory fields are presented for each capture method, as well as XML examples of these fields. If a capture method is specified in the XML, it is highlighted to indicate that other capture methods may be used instead.

The capture method data for the recurring transaction service are transmitted into **three different places** of the scheme:

- • **Request**
    - º **Authentication** - See section 2.1.1.1.1 of the e-Rede Developers' Reference Guide
    - º **Transaction**
        - • **CardTxn** - The transaction type and authorization code - See section 2.2.1.2 of the e-Rede Developers' Reference Guide
        - • **Card** - Contains all the information about the card - See section 2.2.1.1 of the e-Rede Developers' Reference Guide
            - • **TxnDetails** - Contains details about the transaction - See section 2.1.1 of this document

When using this service, a unique extra element is provided in the main element "TxnDetails" of the transactions.

2.1.1 TxnDetails

Name of the element	TxnDetails
Position	Request.Transaction

Elements of TxnDetails		
Name of the element	Description	Values/Limitations
merchantreference	See the e-Rede Developers' Reference Guide, section 2.2.1.3	
amount		
capturemethod	Specify the transaction environment	ecomm

2.2 Example of XML Request

2.2.1 Ecomm transactions

Example of XML Request for an initial ecomm transaction

```
<Request version='2'>
        <Authentication>
                <password>******</password>
                <AcquirerCode>
                <rdcd_pv>123456789</rdcd_pv>
        </AcquirerCode>
        </Authentication>
        <Transaction>
                <TxnDetails>
                        <merchantreference>123404</merchantreference>
                        <amount currency="BRL">100.00</amount>
                        <capturemethod>ecomm</capturemethod>
                </TxnDetails>
                <CardTxn>
                        <method>pre</method>
                        <Card>
                                <expirydate>02/14</expirydate>
                                <pan>544433*********1</pan>
                        </Card>
                </CardTxn>
        </Transaction>
</Request>
```

2.2.2   Cont_auth transactions

To send a "cont_auth" transaction, merchants use the same XML Request shown in section 2.2.1, only changing the value for the capture method.

03   Historic Recurring Payment

This service enables processing of recurring payments in a merchant enabled for recurring transactions with the credit cards of MasterCard, Diners, Visa, and Hipercard.

When the first payment is made on the card, an account is also set up in e-Rede.

If you wish to make a recurring payment, the details of this account are transmitted to e-Rede, not the card details. This allows a merchant to control the timing and the value of each transaction.

3.1   Schematic elements of the request

In this section, the mandatory fields for each transaction type are presented, as well as XML examples of these fields.

For configuring recurring accounts

To authorize the first payment and to set up the account for a card, the information needs to be collected and configured in the following locations of the scheme:

Contents

- **Request**
    - º **Authentication** - See section2.1.1.1.1 of the e-Rede
      Developers' Reference Guide
    - º **Transaction**
        - **TxnDetails** - Contains details about the transaction -
          See section 2.1.1
        - **CardTxn**
            - º **Card** - This element contains details about the card which
              are only for setup purposes. These details are the same
              as for the single payments which are addressed in section
              2.2.1.1 of the e-Rede Developers' Reference Guide
        - **ContAuthTxn** - Section 3.1.1

For repeated payments

As soon as the account is set up, it is possible to make
repeated payments.

- **Request**
    - º **Authentication** - See section 2.1.1.1.1of the e-Rede
      Developers' Reference Guide
    - º **Transaction**
        - **TxnDetails** - Contains details about the transaction -
          Section 2.2.13 of the e-Rede Developers' Reference Guide
    - º **HistoricTxn** - See section 3.1.2

For reversals/cancellations of transactions/accounts

Reversals/cancellations of transactions/accounts are performed with
the same data used for reversals of transactions involving credit cards:

- **Request**
    - º **Authentication** - See section 2.1.1.1.1 of the e-Rede

       Developers' Reference Guide
    - º **Transaction**
        - **HistoricTxn** - Section 3.1.2

3.1.1 ContAuthTxn

This element must be inserted with the setup and recurring payment requests. It has one attribute and no secondary element.

Name of the element	ContAuthTxn
Position	Request.Transaction

Attributes de ContAuthTxn			
Attributes	Attribute of the element	Description	Values/Limitations
type	ContAuthTxn	Indicates if it is a "setup" or a "recurring payment" transaction	setup historic

XML example of ContAuthTxn elements

<ContAuthTxn type="setup"></ContAuthTxn>

<ContAuthTxn type="setup" />

<ContAuthTxn type="historic" />

3.1.2 HistoricTxn

This element is required for recurring payments, transaction reversals, and account cancellations. It must not be inserted with the setup transaction.

Name of the element	HistoricTxn
Position	Request.Transaction

Elements of HistoricTxn		
Name of the element	Description	Values/Limitations
method	Indicates the type of tansaction	pre auth cancel
reference	For payments: the **ca_reference** element of the account from which the payment is made	It must be a valid account
	For reversal/cancellation: the **ca_reference** element of the account or payment to be cancelled	It must be a valid transaction/account

XML example of HistoricTxn elements

```
<HistoricTxn>
        <method>auth</method>
        <reference>4700200040912890</reference>
</HistoricTxn>

<HistoricTxn>
        <method>cancel</method>
        <reference>4700200040919424</reference>
</HistoricTxn>
```

Contents

3.2 Example of XML Requests

Example of XML Request for account setup
The initial transaction will be processed as an ecomm transaction

```
<Request version='2'>
        <Authentication>
                <AcquirerCode>
                <rdcd_pv>123456789</rdcd_pv>
        </AcquirerCode>
                <password>********</password>
        </Authentication>
        <Transaction>
                <ContAuthTxn type="setup"/>
                <TxnDetails>
                        <merchantreference>385036349305556</merchantreference>
                        <amount currency="BRL">1001.00</amount>
                        <capturemethod>ecomm</capturemethod>
                </TxnDetails>
                <CardTxn>
                        <Card>
                                <expirydate>01/14</expirydate>
                                <pan>544433*********1</pan>
                        <Cv2Avs>
                                <cv2>321</cv2>
                        </Cv2Avs>
                        </Card>
                <method>auth</method>
                </CardTxn>
        </Transaction>
</Request>
```

Contents

Example of XML Request for a recurring payment

```
<Request version='2'>
        <Authentication>
        <AcquirerCode>
                <rdcd_pv>123456789</rdcd_pv>
        </AcquirerCode>
                <password>********</password>
        </Authentication>
        <Transaction>
                <ContAuthTxn type="historic"/>
                <TxnDetails>
                <merchantreference>3851231</merchantreference>
                <capturemethod>cont_auth</capturemethod>
                <amount currency="BRL">18.50</amount>
                </TxnDetails>
                <HistoricTxn>
                        <reference>5300200040925092</reference>
                        <method>auth</method>
                </HistoricTxn>
        </Transaction>
</Request>
```

Example of an XML Request for reversal/cancellation of a transaction/account

```
<Request version='2'>
        <Authentication>
                <password>********</password>
                <AcquirerCode>
                <rdcd_pv>123456789</rdcd_pv>
        </AcquirerCode>
        </Authentication>
        <Transaction>
                <HistoricTxn>
                        <method>cancel</method>
                        <reference>4800200040644359</reference>
                </HistoricTxn>
        </Transaction>
</Request>
```

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3.3 Elements of the response

Besides the elements addressed in this section, the responses for this service contain the elements of the general responses highlighted in section 2.1.1.2 of the e-Rede Developers' Reference Guide.

The element **CardTxn** will also be inserted, as described in section 2.2.3.1 of the e-Rede Developers' Reference Guide.

3.3.1 ContAuthTxn

Name of the element	ContAuthTxn
Position	Response

Elements of ContAuthTxn	
Name of the element	Description
ca_reference	The reference number of the continuous authority account. Included in the response from e-Rede after a successful account setup
account_status	Provides additional information about the status of the account

Example of the element ContAuthTxn

```
<ContAuthTxn>
        <account_status>Account setup. ECOMM transaction
   sent successfully</account_status>
        <ca_reference>4500200040151462</ca_reference>
</ContAuthTxn>
```

Contents

3.4 Example of XML Responses

3.4.1 Successful responses

Example of an XML Response for a successful setup

```
<Response version='2'>
      <CardTxn>
            <authcode>100001</authcode>
            <card_scheme>Mastercard</card_scheme>
            <country>Australia</country>
      </CardTxn>
      <ContAuthTxn>
            <account_status>Account setup. ECOMM transaction sent
      successfully</account_status>
            <ca_reference>4700200040641889</ca_reference>
      </ContAuthTxn>
      <gateway_reference>4700200040641890</gateway_reference>
      <merchantreference>setupreference12345680</merchantreference>
      <mode>…</mode>
      <reason>ACCEPTED</reason>
      <status>1</status>
      <time>…</time>
</Response>
```

Example of an XML Response for a successful recurring payment

```
<Response version='2'>
      <CardTxn>
            <authcode>779099</authcode>
            <card_scheme>Mastercard</card_scheme>
            <country>Australia</country>
      </CardTxn>
      <ContAuthTxn>
            <account_status>Using account ref 4500200040925092. CONT_AUTH
      transaction complete</account_status>
      </ContAuthTxn>
```

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```
        <gateway_reference>5000200040925117</gateway_reference>
        <merchantreference>385036359953704</merchantreference>
        <mode>…</mode>
        <reason>ACCEPTED</reason>
        <status>1</status>
        <time>…</time>
</Response>
```

Example of an XML Response for an account successfully cancelled

```
<Response version='2'>
        <gateway_reference>4400200040943162</gateway_reference>
        <information>Continuous authority account cancelled</information>
        <merchantreference>4500200040925092</merchantreference>
        <mode>…</mode>
        <reason>CANCELLED</reason>
        <status>1</status>
</Response>
```

3.4.2 Rejection responses or failures

**Example of an XML Response for a rejected setup.
The initial payment was rejected and, therefore,
the account cannot be set up.**

```
<Response version='2'>
        <CardTxn>
                <authcode>DECLINED</authcode>
                <card_scheme>Mastercard</card_scheme>
                <country>Australia</country>
        </CardTxn>
        <ContAuthTxn>
                <account_status>Account not setup. ECOMM transaction was not
            successfully authed</account_status>
        </ContAuthTxn>
        <gateway_reference>5300200040641890</gateway_reference>
```

```
        <merchantreference>…</merchantreference>
        <mode>…</mode>
        <reason>DECLINED</reason>
        <status>7</status>
        <time>…</time>
</Response>
```

Example of an XML Response for a rejected recurring payment

```
<Response version='2'>
        <CardTxn>
                <authcode>NOT AUTHORISED</authcode>
                <card_scheme>American Express</card_scheme>
        </CardTxn>
        <ContAuthTxn>
                <account_status>Using account ref 3900200040457927.
        CONT_AUTH transaction complete</account_status>
        </ContAuthTxn>
        <gateway_reference>3800200040465541</gateway_reference>
        <merchantreference>…</merchantreference>
        <mode>LIVE</mode>
        <reason>DECLINED</reason>
        <status>7</status>
        <time>…</time>
</Response>
```

Example of an XML Response for which the account cannot be found or has already been cancelled

```
<Response version='2'>
        <gateway_reference>4500200040373397</gateway_reference>
        <information>Failed to find live CA account with
          reference=47002000405791371</information>
        <merchantreference>historicreference12345690</merchantreference>
        <reason>Failed to find corresponding CA account</reason>
        <status>192</status>
        <time>…</time>
</Response>
```

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04 Scheduled Recurring Payment

This service enables processing of recurring payments by a Merchant enabled for Recurring Transactions with the credit cards of MasterCard, Diners, Visa, and Hipercard, and without the need to develop a system for sending individual transaction requests to e-Rede.

4.1 Elements of the request

This section presents the mandatory fields for each transaction type, as well as XML examples of these fields. Because not all the fields are mandatory, the following legend is used:

- R – Required
- O – Optional

To set up a recurring account

The information needed to set up an account is transmitted into various places of the transaction:

- **Request**
  - º **Authentication** - See section 2.1.1.1.1 of the e-Rede Developers' Reference Guide
  - º **Transaction**
    - **CardTxn** - The transaction type and authorization code - See section 2.2.1.2 of the e-Rede Developers' Reference Guide
      - º **Card** - Contains all the information about the card. These details are the same as for single payments - See section 2.2.1.1 of the e-Rede Developers' Reference Guide

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• **ContAuthTxn** - Contains all the information about the payments that must be made from the account - See section 4.1.1

º **LastPayment** - Allows the specification of a final payment - See section 4.1.3

For reversals/cancellations of transactions/accounts

Reversals/cancellations of transactions/accounts are done with the same data used for reversals of credit card transactions:

• **Request**

º **Authentication** - See section 2.1.1.1.1 of the e-Rede Developers' Reference Guide

º **Transaction**

• **HistoricTxn** - Details the "Cancel" method and the reference number of the payment/account to be cancelled - See section 2.2.1.4 of the e-Rede Developers' Reference Guide

4.1.1 ContAuthTxn

This element must be inserted when setting up an account

Name of the element	ContAuthTxn
Position	Request.Transaction

Elements of ContAuthTxn

Name of the element	Description	Values/Limitations	
method	Indicates the transaction type	pre auth	R
start_date	The date on which the first regular payment will be made. Subsequent payments will be based on this date. It must occur by the day following submission of the transaction	ISO 8601 Ext (YYYY-MM-DD). It must occur by the day after the current day or by the date of the FirstPayment	R
period	The frequency of the payments	weekly monthly quarterly annual	R
amount	The amount of each regular payment		R
number_of_payments	Used to restrict the number of regular payments to be collected. Not equivalent to the total number of payments if the first and/or final payment is set	Must be an integer. It cannot contain more than 99 payments (including the first and last payment)	O
LastPayment	Details of the final payment to be made. Occurs in addition to the regular payments. See section 4.1.3		O

Attributes de ContAuthTxn

Attributes	Attribute of the element	Description	Values/Limitations
currency	amount	Currency in the ISO 4217 alphabetic format; for example: BRL	The default value is BRL

Contents

Example of the ContAuthTxn element. The monthly payments will be charged until cancellation of the account

```
<ContAuthTxn>
        <method>auth</method>
        <start_date>2013-10-01</start_date>
        <period>monthly</period>
        <amount currency="BRL">25.00</amount>
</ContAuthTxn>
```

Example of the ContAuthTxn element with the first and last payment

```
<ContAuthTxn>
        <method>auth</method>
        <start_date>2013-10-01</start_date>
        <period>weekly</period>
        <number_of_payments>5</number_of_payments>
        <amount currency="BRL">10.00</amount>
        <LastPayment>…</LastPayment>
</ContAuthTxn>
```

4.1.2 LastPayment

This optional element allows a final payment to be made with a variation in the amount and timing compared to the regular transactions.

The element can only be inserted if the "number_of_payments" element is specified (section 4.1.1). If this element is inserted into a transaction, its secondary elements must also be inserted.

Name of the element	LastPayment
Position	Request.Transaction.ContAuthTxn

Elements of LastPayment		
Name of the element	Description	Values/Limitations
date	The date on which the last payment is made	DDMMYYYY must occur at least one day after the last regular payment
amount	The amount for the last payment may vary in relation to the regular payments. The currency symbol can be specified, if necessary	

Example of the LastPayment element

```
<LastPayment>
        <amount currency="BRL">20.00</amount>
        <date>2013-10-01</date>
</LastPayment>
```

4.2 Example of XML Requests

Example of Request for an initial charge of R$ 7.50, followed by regular weekly payments of R$ 5.00 until receipt of a Request for cancellation of the account

```
<Request version='2'>
    <Authentication>
            <AcquirerCode>
                    <rdcd_pv>123456789</rdcd_pv>
            </AcquirerCode>
            <password>********</password>
    </Authentication>
    <Transaction>
```

```
<CardTxn>
    <Card>
        <expirydate>11/16</expirydate>
        <pan>544433*********1</pan>
        <Cv2Avs>
            <cv2>132</cv2>
        </Cv2Avs>
    </Card>
</CardTxn>
    <ContAuthTxn>
        <method>auth</method>
        <start_date>2013-10-01</start_date>
        <period>weekly</period>
        <amount currency="BRL">5.00</amount>
    </ContAuthTxn>
    <TxnDetails>
        <merchantreference>383914410763889</
merchantreference>
        <capturemethod>ecomm</capturemethod>
        <amount currency="BRL">5.00</amount>
    </TxnDetails>
</Transaction>
</Request>
```

Example of Request for nine quarterly payments of R$ 69.99

```
<Request version='2'>
    <Authentication>
        <AcquirerCode>
            <rdcd_pv>123456789</rdcd_pv>
        </AcquirerCode>
        <password>********</password>
    </Authentication>
    <Transaction>
    <CardTxn>
        <Card>
            <expirydate>06/15</expirydate>
            <pan>3434*********3</pan>
            <Cv2Avs>
                <cv2>321</cv2>
```

Contents

```
                                </Cv2Avs>
                        </Card>
                </CardTxn>
                <ContAuthTxn>
                        <method>auth</method>
                        <start_date>2013-10-01</start_date>
                        <period>quarterly</period>
                        <amount currency="BRL">69.99</amount>
                        <number_of_payments>9</number_of_payments>
                </ContAuthTxn>
                        <TxnDetails>
                                <merchantreference>annual0000432432a</
merchantreference>
                                <capturemethod>ecomm</capturemethod>
                                <amount currency="BRL">69.99</amount>
                        </TxnDetails>
                </Transaction>
</Request>
```

Example of Request for an initial charge of R$ 30.00, then twelve regular payments of R$ 10.00 on the first day of each month, and then a final payment of R$ 20.00

```
<Request version='2'>
        <Authentication>
                <AcquirerCode>
                        <rdcd_pv>123456789</rdcd_pv>
                </AcquirerCode>
                <password>********</password>
        </Authentication>
        <Transaction>
                <CardTxn>
                        <Card>
                                <expirydate>01/16</expirydate>
                                <pan>544433*********1</pan>
                                <Cv2Avs>
                                        <cv2>321</cv2>
                                </Cv2Avs>
                        </Card>
```

```
                    </CardTxn>
                    <ContAuthTxn>
                    <method>auth</method>
                    <start_date>2013-10-01</start_date>
                    <period>monthly</period>
                    <amount currency="BRL">10.00</amount>
                    <number_of_payments>12</number_of_payments>
                            <LastPayment>
                                    <amount currency="BRL">20.00</amount>
                                    <date>2013-04-20</date>
                            </LastPayment>
                    </ContAuthTxn>
                    <TxnDetails>
                            <merchantreference>382684637615741</merchantreference>
                            <capturemethod>ecomm</capturemethod>
                            <amount currency="BRL">10.00</amount>
                    </TxnDetails>
            </Transaction>
        </Request>
```

4.3 Elements of the response

Besides the elements discussed in this section, the responses from
this service will contain the general response elements highlighted
in section 2.1.1.2 of the e-Rede Developers' Reference Guide.

4.3.1 ContAuthTxn

Name of the element	ContAuthTxn
Position	Response

Elements of ContAuthTxn	
Name of the element	Description
account_status	Displays information about the status of the account

Contents

XML example of the ContAuthTxn element

```
<ContAuthTxn>
        <account_status>Account setup. First transaction due to be
            batched on 30/06/2012</account_status>
</ContAuthTxn>
```

4.4 Example of XML Responses

Example of an XML Response for an account that has been successfully set up

```
<Response version='2'>
        <ContAuthTxn>
                <account_status>Account setup. First transaction due to be
            batched on 09/10/2012</account_status>
        </ContAuthTxn>
        <gateway_reference>4200200040373186</gateway_reference>
        <information>Continuous Authority account set up</information>
        <merchantreference>382684637615741</merchantreference>
        <mode>…</mode>
        <reason>ACCEPTED</reason>
        <status>1</status>
        <time>…</time>
</Response>
```

Example of XML Response for a type of card that is not supported by the service

```
<Response version='2'>
        <gateway_reference>4200200040609090</gateway_reference>
        <information>Continuous authority is not supported on
         this card</information>
        <merchantreference>383914408564815</merchantreference>
        <mode>…</mode>
        <reason>CA Not Supported</reason>
        <status>92</status>
        <time>…</time>
</Response>
```

Example of an XML Response for an invalid initial date

```
<Response version='2'>
        <gateway_reference>4600200040609088</gateway_reference>
        <information>The date of the first payment must be from
         tomorrow onwards</information>
        <merchantreference>12345612</merchantreference>
        <mode>…</mode>
        <reason>Invalid Date</reason>
        <status>94</status>
        <time>…</time>
</Response>
```

05 Response codes for recurring payments with a card

Below is a table with the specific response codes for Recurring Payment transactions.

Code	General Return Code	Description
90	Invalid Value	Invalid value. The value entered does not match the required format
91	Field Missing	The field displayed in the <information> element is mandatory and was not filled in
92	CA Not Supported	Historic and Recurring Scheduled transactions are not supported for this type of card
93	Invalid Card	Invalid card. The card provided will expire before the first payment is made

94	Invalid date	There was a problem with the dates provided. The <information> element details what the problem is: • The date of the last payment must be at least one day after the last regular payment • The initial date is invalid • The initial date is invalid if the first/last transaction is invalid
95	Invalid cancellation	There was a problem with the cancellation transaction. The causes may be: • The reference provided does not correspond to an account for recurring transactions • The account has already been cancelled
96	Invalid last payment	A final payment can only be specified when there is a set number of recurring payments
97	No CA support	Your account has not been enabled to process continuous authority transactions. Contact e-Rede support to obtain this setup
191	Field not applicable to CA setup	The fields used in the scheduled recurring transactions are not applicable in the historic recurring transactions. Check the <information>element to see which field was incorrectly filled in
192	Failed to find corresponding CA account	The reference provided does not match an active Recurring Payment account
194	Invalid use of CA environment attribute	The attribute of the environment is only valid for credit card transactions that use the "cont_auth" capture method

Resolve everything in one call.

Rede Call Center:

4001 4433
(capitals and metropolitan areas)

0800 728 4433
(other localities)

Rede Web Portal:
userede.com.br