



Technical Specification iDEAL

(IDE.003)

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1. Introduction

This document explains how to use the iDEAL API.

1.1 iDEAL API in a 'nut shell'

Payments with iDEAL works as follows:

1. Visitors must select their bank (see part 2);
2. You make a request to a URL at TargetPay with all properties of the payment. TargetPay will then return a URL to this visitor's online banking system (see part 3);
3. After the payment the visitor is redirected to your page (see part 4);
4. You check if the payment was successful (see part 5);
5. For a successful payment, you deliver the service or product to the visitor

1.2 Tests without payment

To test the order processing you can add an extra parameter to the start API in chapter 3. If you add 'test=1' you will receive a successful result value even if the transaction in internet banking was canceled, when calling the check API in chapter 5.

Instead of an actual payment in internet banking, you cancel it and are able to see what will happen as if someone had really paid. The status response will be '000000 OK' regardless of its completion. Please do not forget to remove the parameter after testing.

1.3 E-mail notifications

You can setup E-mail notifications from the screen Subaccounts/Layouts. Edit the layout number by pressing the edit icon and enter your E-mail account and payment method at the bottom of the page.

Attention: Always check the payment in the order details screen.

2. Choice of bank

2.1 Explanation

One of the requirements for using iDEAL is using the correct style of the iDEAL brand. These require the end-user to be able to select his bank from a pulldown menu (a select tag), and how the different options should be represented.

To insure that the list is allways up-to-date and complies with the requirements, you can read this list from our server. The from the select can be written with a server call. The URL is:

<https://www.targetpay.com/ideal/getissuers?ver=3&format=html>

2.2 Example

An example HTML+PHP, a list of banks are being loaded:

HTML-example code

```
<form name="bankselect">
  Choose your bank:
  <select name=bank onChange="document.bankselect.submit();">
    <?php
readfile("https://www.targetpay.com/ideal/getissuers?ver=3&format=html"); ?>
  </select>
</form>
```

2.3 XML

It is possible to call a list of banks in XML format. You can use the following URL

<https://www.targetpay.com/ideal/getissuers?ver=3&format=xml>. The results can be used in a pulldown menu.

2.4 Optional

Choosing a bank is optional. When the bankparameter or bankselection is omitted, we will present a bankselection screen to the end user.

3. Request a link to the online banking page

3.1 Request

After the customer has selected a bank, you can request a customized link to the iDEAL banking page by requesting the following URL by HTTP-GET or POST to:

<https://www.targetpay.com/ideal/start>

With the following parameters:

Parameter	Name	Format	Mandatory
rtlo	Layoutcode	Numeric	Yes
bank	ID of the Bank	Alphanumeric	No
description	Description	Text (see below)	Yes
amount	Price in cents	Numeric	Yes
returnurl	Return URL	URL	Yes
cancelurl	Cancel URL	URL	No
reporturl	Report URL	URL	No
test	Test mode	0 / 1	No
ver	API Version	Numeric	Yes

Parameter description:

Parameter	Description
rtlo	The subaccount where the sales need to be registered. To check or create a subaccount see: subaccounts.
bank	ID of the bank, selected in the previous step. When this parameter is omitted, we will present our own bank selection screen.
description	A clear description of the service. Maximum 32 characters. Only letters, numbers and the following characters: , . - _ * [] () and space.
Amount	The amount in eurocents. Possible values: minimum 84, maximum 1000000 (€ 0,84 - € 10.000)
returnurl	The URL the visitor will be redirected to after payment(see part 4).
cancelurl	The URL the visitor will be redirected to after cancellation. When omitted, the visitor is redirected to the returnurl.
reporturl	Sometimes the customer initiates a payment but does not return to the website you specified in the returnurl. In this case you do not have the possibility to verify the transaction with https://www.targetpay.com/ideal/check . If you provide a reporturl we will return the status to your reporturl for every transaction you initiate. We will add 6 parameters to the reporturl: <ul style="list-style-type: none"> - trxid, containing the transaction ID - idealtrxid, containing the iDEAL payment reference - rtlo, containing the layoutcode you specified for this transaction - status, which contains one of the result codes in § 5.2 - cname with the customer name, upon successful payment - cbank with the customer bank, upon successful payment We will call your report URL with HTTP POST.
test	Test mode. When this parameter is set to 1, the transaction can be canceled, but we will report a successful payment. See also § 1.2.
ver	Version of our iDEAL API. Enter 3 here.

3.2 Response codes

When the transfer is prepared successfully you'll receive a result in the format:

<responsecode> <space> <transactionID> <pipe> <url>

<responsecode> The response code for the request.

<transactieId> The 9-digit ID (required to check for transaction status requests);

<url> The URL you can redirect the customer to;

Example of a **valid** request:

```
000000 123456789|https://ideal-  
et.abnamro.nl/nl/ideal/identification.do?randomizedstring=1684152718&trxid=306268041854  
92
```

You can redirect your visitor to the returned URL with a HTTP 302 or JavaScript response.

Error codes:

Response code	Description
TP0001 No layoutcode.	No layoutcode registered
TP0002 Amount too low.	Amount too low (minimum 0,84 euro)
TP0003 Amount too high.	Amount too high (maximum 10.000 euro)
TP0004 No or invalid return URL.	No or invalid return URL
TP0005 No bank ID.	No bank ID
TP0006 No description.	No description
TP0016 No iDEAL approval for this account yet.	No iDEAL approval for this account
TP0017 Incorrect rtlo code.	Incorrect rtlo code
TP0019 Account disabled.	Account disabled
TP9999	Account blocked due to supposed abuse
TP9997 Internal error, failed to create transaction. TP9997 ING is performing maintenance.	To many retries to create a transaction. Probably an issuer disturbance.
TP9998 Failed to create transaction.	The bank does not return a Transaction
TP9999 Internal error	Mail techsupport@targetmedia.nl for investigation
TP9999 Your account has been blocked.	iDeal has been blocked for technical or compliance issues.
IX1600	Required field missing
SO1000	Error in system
SO1200	System too busy. Please try again later
SO1400	Unavailable due to maintenance

In case of an error, please check your parameters before contacting TargetPay.com

4. Customer is redirected

If the customer finished paying or pressed 'cancel' during the banking process, they will automatically be redirected to your site (to the return URL you supplied). Additional parameters will be supplied: 'trxid', which contains the transaction ID; and 'idealtrxid', which contains the iDEAL reference.

example:

<http://www.yoursite.nl/idealReturnFile.php?trxid=123456789&idealtrxid=30626804185492>

5. Payment status request

5.1 Request

When the user returned to your site, you can check the payment status with an request to TargetPay to the following URL:

<https://www.targetpay.com/ideal/check>

Parameter list:

Variabele	Name	Format	Mandatory
rtlo	Layoutcode	Numeric	Yes
trxid	Transaction ID	Numeric	Yes
once	'Already checked' notification?	0 / 1	Yes

Parameter description:

Variabele	Explanation
rtlo	Layoutcode (same as in 5.1)
trxid	Transaction ID, returned in the previous step (9 digits)
once	<p>If you supply '1' our application will only return the 'OK' status once. If you'd request the URL again with the same Transaction ID you'll receive the TP00014 (already used) response code.</p> <p>If you'd used '0' our application will keep returning 'OK' for each request with this Transaction ID. If you doubt on this value, use '1' to be sure your application won't deliver the service or product twice if the visitor would Refresh his browser window.</p>

5.2 Response codes

Response for a valid payment:

000000 OK

If the payment is not valid (yet) the following response will be returned:

Response code	Description
TP0010 Transaction has not been completed, try again later.	
TP0011 Transaction has been cancelled	
TP0012 Transaction has expired	The timeout for a transaction is 10 minutes
TP0013 The transaction could not be processed or TP0013 Internal Error	
TP0014 Already used	
TP0020 Layoutcode not entered.	
TP0021 Transaction ID not entered.	
TP0022 No transaction found with this ID.	
TP0023 Layoutcode does not match this transaction.	

6. Examples

6.1 iDeal example

Copy this example code to a file iDealExample.php and set the 5 parameters in the top to make iDeal transactions. You may connect this script to your webshop by adding code to the functions StartTransaction, HandleReporturl and to the result of the returnurl.

```
<?php

// Enter these parameters first.
$rtlo=xxxxx;
$description="Targetpay iDeal Example Script";
$amount=100;
$returnurl="http://uwsite.nl/iDealExample.php";
$reporturl="http://uwsite.nl/iDealExample.php";

// Bank has been selected. Now we start the transaction.
if( isset($_GET['bank'])) {
    $url = StartTransaction($rtlo, $_GET['bank'], $description,
        $amount, $returnurl, $reporturl);
    header( "Location: ". $url );
}

// De consument komt vanaf de bank terug op de returnurl.
// Hier controleren we de transactiestatus
if( isset($_GET['ec']) && isset($_GET['trxid'])){
    // 000000 OK betekent succesvol. We kunnen het product leveren
    if(($status = CheckReturnurl( $rtlo, $_GET['trxid'] ))=="000000 OK" ){
        // Voeg hier programmacode toe om de orderstatus bij te werken.
        die( "Status was Successful...<br>Thank you for your order" );
    }
    // Bij alle andere statussen producten niet leveren
    // Voeg hier zelf programmacode toe om de status bij te werken
    else die( $status );
}

// De reporturl wordt vanaf de Targetpay server aangeroepen
if ( isset($_POST['rtlo'])&&isset($_POST['trxid'])&&isset($_POST['idealtrxid'])&&
isset($_POST['status'])) {
    HandleReporturl($_POST['rtlo'], $_POST['trxid'], $_POST['idealtrxid'], $_POST['status'] );
}

// Hier begint het proces met het selecteren van de bank
SelectBank();

// Paragraaf 2: Selecteer de bank

function SelectBank(){

    $url="https://www.targetpay.com/ideal/getissuers?ver=3&format=html";
    $strResponse = httpGetRequest($url);
    echo "<html>";
    echo "<form method='get' name='idealform'>";
```

```

echo "<select name=\"bank\">".$strResponse."</select>";
echo "<INPUT TYPE=\"submit\" VALUE=\"Continue..\"></form>";
echo "</html>";
}

// Paragraaf 3. Start de transactie door een redirect url
// naar de bank op te vragen
function StartTransaction( $rtlo, $bank, $description, $amount, $returnurl, $reporturl){
    $test=0; // Set to 1 for testing as described in paragraph 1.3
    $url= "https://www.targetpay.com/ideal/start?".
    "rtlo=".$rtlo.
    "&bank=".$bank.
    "&description=".urlencode($description).
    "&amount=".$amount.
    "&returnurl=".urlencode($returnurl).
    "&reporturl=".urlencode($reporturl).
    "&test=".$test.

    "&ver=3";

    $strResponse = httpGetRequest($url);
    $aResponse = explode('|', $strResponse );

    # Bad response
    if ( !isset ( $aResponse[1] ) ) die('Error' . $aResponse[0] );

    $responsetype = explode ( ' ', $aResponse[0] );
    $trxid = $responsetype[1];

    // Hier kunt u het transactie id aan uw order toevoegen.

    if( $responsetype[0] == "000000" ) return $aResponse[1];

    else die($aResponse[0]);

}

// Paragraaf 5. Vraag de status op vanuit de returnurl
function CheckReturnurl($rtlo, $trxid){
    $once=1;
    $url= "https://www.targetpay.com/ideal/check?".
    "rtlo=".$rtlo.
    "&trxid=".$trxid.
    "&once=".$once;
    return httpGetRequest($url);
}

// reporturl handler
// Update uw orderstatus en lever het product indien $status="000000 OK"

function HandleReporturl($rtlo, $trxid, $idealreference, $status ){
    if( substr($_SERVER['REMOTE_ADDR'],0,9) == "78.152.58" ){
        // Update uw orderstatus hier
        // .....
    }
}

```

```

// De reporturl hoort OK terug te geven aan Targetpay.
die( "OK" );
}else{
die("IP address not correct... This call is not from Targetpay");
}
}
}

function httpGetRequest($url){
$ch = curl_init( $url );
curl_setopt($ch, CURLOPT_POST, 0);
curl_setopt ($ch, CURLOPT_RETURNTRANSFER, 1) ;
$strResponse = curl_exec($ch);
curl_close($ch);
if ( $strResponse === false )
die("Could not fetch response " . $url );
return $strResponse;
}
?>

```

7. Migrate from versions 1 or 2

If you use iDEAL API version 1 or 2, please pay attention to the following changes, when migrating to version 3:

7.1 Changes between version 1 and version 2

- Cancel URL added to the start API, so you can specify a separate page where the user is redirected to in case of cancellation.
- Test parameter added to the start API.
- Return URLs are no longer limited to one GET parameter.
- cinfo_in_callback parameter removed from the start API. This information is now sent to your report URL by default.

7.2 Changes between version 2 and version 3

- Bank parameter became optional in the start API. Therefore, you are no longer required to make your own bank selection screen.
- Communication between your and our system is no longer based on the iDEAL payment reference (16 digits) but on a separate ID (9 digits) instead. To communicate the iDEAL payment reference, we send it to the return URL and the report URL.
- Test parameter removed from the check API. Use the test parameter in the start API to test.
- Fixed a bug in the check API regarding the test mode: canceled test payments will now be reported as paid (000000 OK) by the check API.
- Bank codes are now alphanumeric SEPA codes with a length of 8 characters.