



Technical Specification iDEAL

(IDE.001)

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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 check" API in chapter 5. If you add 'test=1' you will receive a successful result value even if the transaction in internet banking was cancelled.

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 always 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 JavaScript include. There are two URL's available:

Dutch: <https://www.targetpay.com/ideal/issuers-nl.js>

English: <https://www.targetpay.com/ideal/issuers-en.js>

2.2 Example

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

HTML-example code

```
<form name="bankselect">
  Choose your bank:
  <select name=bank onChange="document.bankselect.submit();">
    <script src="https://www.targetpay.com/ideal/issuers-nl.js"></script>
  </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.php?format=xml>. The results can be used in a pulldown menu.

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	Numeric	Yes
description	Description	Alphanumeric	Yes
currency	Currency	Numeric	No
amount	Price in cents	Alphanumeric	Yes
language	Language	Alphanumeric	No
returnurl	Return URL	Alphanumeric	Yes
reporturl	Report URL	Alphanumeric	No
cinfo_in_callback	Consumer info	0 / 1	No

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.
description	A clear description of the service. Only letters or numbers, maximum 32 characters.
currency	Currency, currently only euro's are accepted: 'EUR' (field is not required, reserved for future use)
Amount	The amount in eurocents. Possible values: minimum 84, maximum 1000000 (€ 0,84 - € 10.000)
Language	The visitor's language for use in iDEAL, currently only Dutch is available: 'nl' (field is not required, reserved for future use)
returnurl	The URL the visitor will be redirected to after payment(see part 4). Note 1: This URL may not point to an intranet address. Note 2: Keep in mind: No & sign is allowed in the return url. You can only use one parameter. In part 6 you find an example how to omit this problem
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 3 parameters to the reporturl: <ul style="list-style-type: none">- trxid, containing the iDeal transaction ID- rtlo, containing the layoutcode you specified for this transaction- status, which contains one of the result codes in § 5.2 If cinfo_in_callback=1 cname, ccity and cbank will be added. ccity will always be empty We will call your report URL with HTTP POST.

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 16-digit ID (required to check for transaction status requests);

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

Example of a **valid** request:

```
000000 30626804185492|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 customers have finished paying or press 'cancel' during the banking process, they will automatically be redirected to your site (to the return URL you supplied). An additional parameter 'trxid' will be supplied, which contains the transaction ID. This is the same as in the previous step.

example:

<http://www.yoursite.nl/iDealReturnFile.php?trxid=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
test	test request yes or no	0 / 1	No

Parameter description:

Variabele	Explanation
rtlo	Layoutcode (same as in 5.1)
trxid	Transaction ID, returned in the previous step (16 digit Alphanumeric)
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 cinfo_in_callback=1

000000 OK|name|Bankaccount|

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. Response to transaction status request contains no status.	The bank responded with an SO1000 error. Please try again later

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($_POST['status'])) {
    HandleReporturl($_POST['rtlo'], $_POST['trxid'], $_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.php";
    $strResponse = httpGetRequest($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){

$url= "https://www.targetpay.com/ideal/start?".
"rtlo=".$rtlo.
"&bank=".$bank.
"&description=" .urlencode($description).
"&amount=".$amount.
"&returnurl=" .urlencode($returnurl).
"&reporturl=" .urlencode($reporturl);

$strResponse = httpGetRequest($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;
$test=0; // Set to 1 for testing as described in paragraph 1.3
$url= "https://www.targetpay.com/ideal/check?".
"rtlo=".$rtlo.
"&trxid=".$trxid.
"&once=".$once.
"&test=".$test;
return httpGetRequest($url);
}

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

function HandleReporturl($rtlo, $trxid, $status ){
if( substr($_SERVER['REMOTE_ADDR'],0,10) == "89.184.168" ||
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_RETURNTRANSFER, 1) ;
    $strResponse = curl_exec($ch);
    curl_close($ch);
    if ( $strResponse === false )
        die("Could not fetch response " . $url );
    return $strResponse;
}
?>

```

6.2 Multiple Parameters in the returnurl

Some banks only accept one custom parameter in the returnurl. If you do so, the bank will respond with 'BR1200 Invalid version number' message. You may omit this problem by encoding multiple parameters into one real parameter like this:

<http://www.uwsite.nl/preparse.php?token=param1-value1,param2-value2>

On your site you add the preparse.php script which decodes these parameters and redirects to your own returnurl, like iDealExample.php

preparse.php

```

<?
$token=$_GET["token"];
if (!$token) { die(); }

$url = false;
$a = explode ("", $token);

foreach ($a as $k) {
    list ($_var, $_val) = explode("-", $k, 2);
    $url .= "&$_var=$_val";
}

// uitlezen van de iDeal parameters
foreach ($_GET as $k => $v) {
    if ($k!="token") {
        $url .= "&$k=$v";
    }
}

// Stel deze URL in op uw site
$url = "http://www.yoursite.nl/iDealExample.php?".substr($url,1);
Header ("Location: $url");
?>

```