Automatic Payment Confirmation (APC) Guide

A step by step guide to integrating APC with your website.

All the information you need to confirm Nochex payments.

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IMPORTANT
Customers are always recommended to back up their code before making any significant changes, such as the ones detailed in this document.

Please Note

This guide is not intended to teach how server-side language work, it is assumed that you already have an understanding of server-side language programming (for example ASP/PHP). If you do not have this experience we strongly recommend that you contact your web developer to make the changes you wish.

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Introduction to Nochex and APC

About Nochex

Nochex is a UK based, independently-owned provider of secure online payment solutions. Established in 1999, the company's payment system is now installed on thousands of websites and integrated into a significant number of software packages.

Nochex' account holders can accept e-money online payments without the need for an expensive internet merchant bank account or payment gateway. By replacing two costly services with an all-in-one e-Money account, backed up by friendly and responsive customer services, Nochex' customers can put all their efforts into building their online businesses.

The Nochex system allows account holders to accept the following credit and debit cards:

Introduction to APC

Once your Nochex Payment Page is up and running you may wish to add further integration between Nochex and your website. With Automatic Payment Confirmation (APC) this is possible; this allows you to integrate your Nochex payments with your back-end operations. So you will get immediate confirmation and authentication of the Nochex payments you receive.

Using APC offers a wide range of extra functionality, such as

- o Process your customers payments in real time
- o Give immediate feedback to your customers
- o Store your Nochex payments in your own database
- o Ideal for online products, such as website membership

APC can be integrated into the Nochex payment system so you don't have to log into the Nochex system to confirm that payments have been made.

Your customers will also benefit from APC as they will get an immediate response to the order they have placed in addition to the Nochex transaction email.

What is APC?

APC confirms and authenticates any payment that is made into your account by communicating with your server. To start using APC you are first required to create a *listener*, the following information explains what a listener exactly is and how to implement one.

APC Listener

APC Listener

To detect and process APC responses you will require a *listener*, this is script or code that will wait for an APC response.

After your listener has received a response it is required to send the same information back to the Nochex server to confirm the details are matching. Once these checks have been made and you know the transaction has been successful you can carry out various actions such as:

- o   Update order status (For example: Processing to Paid).
- o   Update list of customer details
- o   Enable customers to download media e.g. purchasing an eBook

Your APC listener can be written in any scripting language or programming language you choose, example code that could be used is included in this document or found here.

To enable the APC listener you will need to host it on your web server and enter the URL into the Call back URL field within the Payment Page Setup, for further details on how to achieve this follow the instructions below.

Creating a Listener

You can write your APC listener in any programming or scripting language you wish, however below is what functionality must be included when creating your APC listener:

1. Wait for an HTTP POST from the Nochex server.

2. Once received, construct a HTTP POST to Nochex with all the form variables you received exactly as you received them. Your POST should be sent to:
   https://www.nochex.com/apcnet/apc.aspx

3. Wait for response from Nochex server either "AUTHORISED" or "DECLINED".

4. If the response is "AUTHORISED", you need to do the following checks:
   - o   Check the "transaction_id" against the previous Nochex transaction you have processed to ensure it is not a duplicate.
   - o   Make sure the "to_email" is the email address registered in your Nochex account
   - o   Check that the amount, transaction date and other variables match the transaction on your website.
   - o   Once you have completed the above checks, you may update your database based on the information provided.

5. After all checks have been carried out and you have confirmed they are valid details, carry out any further actions you wish.

6. If you received a "DECLINED" notification, it should be treated as suspicious and investigated.

Setting up Call back URL/ Responder URL

After you have logged in to your Nochex account, follow these instructions to setup your Call back URL:

1. Click Payment Page Setup, from the Control Panel.
2. Specify the URL for your listener in the **Call back URL** field.

You can also set up the call back URL within the HTML form POST to Nochex using the below parameter.

Parameter Name	Description
callback_url	The URL that Nochex will send a notification to once a payment is made.

Form Example

```
<form method="POST" action="https://secure.nochex.com/">
<input type="hidden" name="merchant_id" value="yourmerchantid">
<input type="hidden" name="amount" value="55.60">
<input type="hidden" name="callback_url" value="http://yourhost.com/apchandler.php">
<input type="submit" value="Pay on Credit or Debit Card with Nochex"
</form>
```

APC Step-by-Step

How APC works

1. A customer visits your website and decides to use the Nochex payment option.

2. The customer is then directed to the Nochex payment page where they enter their details and make a payment.

3. After the customer has confirmed the payment, they are then directed to the Nochex confirmation page:

4. Once the payment has been made, the Nochex server will post a confirmation to your APC listener. The confirmation includes the information about the transaction, such as the customer's address, the amount paid as well as a security key unique to that transaction.

5. Once your server receives the confirmation, the APC listener should return all of the information posted to you to the Nochex APC authentication page including the unique security key to ensure it is the same transaction.

6. The Nochex authentication page will then respond to your server with an "AUTHORISED" or "DECLINED" message.

7. When your server receives the "AUTHORISED" response, you should check the details to make sure that the amount and email address match to those that were sent. However if a "DECLINED" response is received it should be treated as suspicious and investigated.

8. Once you have checked all the relevant data you can update your database or carry out any other actions you wish and then continue with the purchase process.

APC Diagram
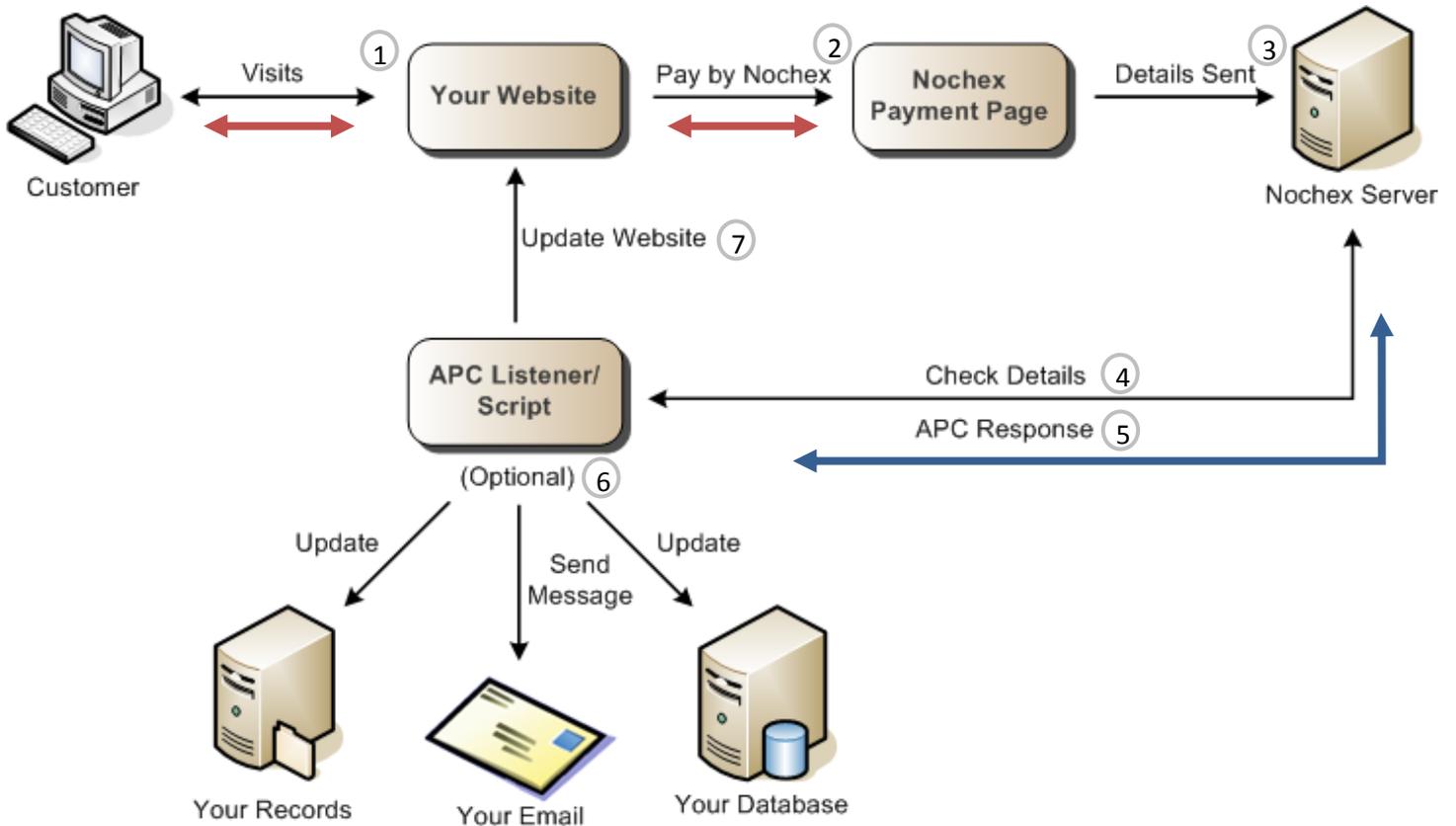
Legend:

The red arrows show the customer's experience, they just see the immediate effects. They will see the updated webpage after APC has been successful, if you

The blue arrow shows the APC token and what route it takes round the system.

Steps:

1. A customer visits your website.

2. Your customer decides to pay using Nochex, which you have integrated into your

3. Once your customer has entered all their details they will be sent to the Nochex

4. The details you received are then posted back to the Nochex server using your APC listener.

5. The Nochex server will then send an APC response to your APC listener with either an "AUTHORISED" or "DECLINED" response; for the purpose of this diagram we assume it was the "AUTHORISED" response.

6. You can implement various optional actions within your APC listener, some of which include; sending an email with the APC response to your email address and updating your database or records.

7. After the optional actions and checking of details are complete you can then update your website, either to show a success URL or the current status of your customer's order.

APC Variables

Variable	Value	Description	Example
to_email	Transaction specific	Email address of the payment recipient.	merchant@nochex.com
from_email	Transaction specific	Email address of the payment sender.	customer@nochex.com
transaction_id	Transaction specific	Unique code generated to distinguish transactions.	1793359
transaction_date	Transaction specific	Date/time stamp of transaction.	15/02/2010 17:20:46
order_id	Transaction specific	Transaction specific code, order id as passed by you, the merchant. Your customer is not able to view or edit this. It must be unique per transaction.	999999
amount	Transaction specific	Full amount of the customer's payment.	5.99
security key	Transaction specific	System generated key (for Nochex use).	16736
status	Live or Test	Used to distinguish a test transaction where no money has been sent, from a live transaction where money has been sent.	test

These are the variables that will be processed between your server and the Nochex server. It is important that every variable is passed to the Nochex server exactly as it was received.

Shopping Cart Integration

If you have integrated a shopping cart into your website make sure that Nochex is a supported payment option and that APC functionality is supported. To find how to use Nochex as a payment option within your cart, you should visit the carts website and find an integration guide showing how to make Nochex a payment option. Some shopping carts do not have Nochex as a standard payment option, but you can install Nochex using one of our modules. The below list contains some of the shopping carts we integrate with that use APC to update orders.

Cart	Integration Instructions
CubeCart	https://support.nochex.com/kb/faq.php?id=131
ecwid	https://support.nochex.com/kb/faq.php?id=135
LemonStand	https://support.nochex.com/kb/faq.php?id=141
Magento	https://support.nochex.com/kb/faq.php?id=143
osCommerce	https://support.nochex.com/kb/faq.php?id=147
Prestashop	https://support.nochex.com/kb/faq.php?id=148
Virtuemart	https://support.nochex.com/kb/faq.php?id=156
WordPress: WooCommerce	https://support.nochex.com/kb/faq.php?id=158
WordPress: WP E-commerce	https://support.nochex.com/kb/faq.php?id=159
ZenCart	https://support.nochex.com/kb/faq.php?id=160

To view our full list of integrated shopping carts and software click here.

Note:

If you are using a shopping cart always ensure that it supports APC with Nochex. After you have found that it can support APC functionality with Nochex read their documentation on how to implement it into your site.

Also make sure that your host supports APC functionality, if they don't you should ask them to support it.

Example Code

To download code samples of APC handlers simply follow the below links. There are PHP, ASP and .NET examples available.

- ASP Example

- C# Example

- CURL Example

- PHP Example

- VB Example

Testing APC

To test your APC file simply create a HTML POST to Nochex and include the parameter "callback_url" with the value of where your APC handler is stored. Look at the below code to get an idea of how to implement the test. Change <yourmerchantID> to your Nochex email address/merchant ID and <yourcallbackURL> to the location of your APC handler. Ensure that a mail/debug function is present in your APC handler so after you have completed a test transaction you will be informed whether APC has been successful or not.

```
<form method="POST" action="https://secure.nochex.com">
<input type="hidden" name="merchant_id" value"<yourmerchantID>"/>
<input type="hidden" name="amount" value"1.00"/>
<input type="hidden" name="test_transaction" value"100"/>
<input type="hidden" name="callback_url" value"<yourcallbackURL>"/>
</form>
```

You can also complete a test transaction from your Nochex control panel. Just follow these steps:

1. Login to your Nochex account
2. At the control panel select "Payments Page Setup" (only available if you have a merchant account)
3. Enter your APC handler URL in the "Call back URL" field and click "Save Changes"
4. Click the "Test Transaction" button at the bottom of the page and complete a test transaction
5. Your APC handler code should contain a mail/debug function so after an APC response is obtained you know the result

Debugging APC

If APC doesn't work correctly there is a handy method of debugging your code. Add a mail function within your code that sends an email to you at different places within the code. Firstly have one that emails you right at the beginning of the code so you know for sure that the file is actually being called. Then have an email function sending the variables as this enables you to check at certain intervals in your code, whether or not the right information is being stored and are being sent correctly.

Below is a PHP code example implementing the mail function in two different places and as always when a declined response is received an email is sent with the debug details:

```php
<?php
// Payment confirmation from http post

$your_email = 'you@domain.com';  // your merchant account email address

mail($your_email, "APC", "Being called?");

function http_post($server, $port, $url, $vars) {
.
.
.
.
   }

$response = http_post("ssl://www.nochex.com", 443, "/apcnet/apc.aspx", $_POST);
// stores the response from the Nochex server
$debug = "IP -> " . $_SERVER['REMOTE_ADDR'] ."\r\n\r\nPOST DATA:\r\n";
foreach($_POST as $Index => $Value)
$debug .= "$Index -> $Value\r\n";
$debug .= "\r\nRESPONSE:\r\n$response";


mail($your_email, "APC", $debug);


if (!strstr($response, "AUTHORISED")) {  // searches response to see if AUTHORISED is present if it
isn't a failure message is displayed
   $msg = "APC was not AUTHORISED.\r\n\r\n$debug";  // displays debug message
}
else {
   $msg = "APC was AUTHORISED."; // if AUTHORISED was found in the response then it was
successful
   // whatever else you want to do
}

mail($your_email, "APC Debug", $msg);  // sends an email explaining whether APC was successful
or not, the subject will be "APC Debug" but you can change this to whatever you want.
?>
```

APC Troubleshooting Tips

"DECLINED" Message

If you receive a DECLINED response:

- o Go back and carefully check your code, make sure that each variable is passed to the Nochex server without changing them at all.

- o Ensure that you are posting the information to the right URL, https://nochex.com/apcnet/apc.aspx

No Message Received

If your APC listener/script doesn't send an email to you when it should:

- o Make sure you have APC enabled by contacting us.

- o Check that the APC listener is actually being called by creating a test email script as shown on page 15, if by doing this you receive an email you can conclude that it is a problem with your APC listener code.

- o Check your code carefully to ensure the right email address is being used.

- o Check that your firewall settings aren't blocking the HTTP POST messages from Nochex.

- o Look back at this guide and the examples in it, try to use these examples and expand on them as they are all working examples