



# ***Setcom Implementation Guide***

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## **Setcom Implementation Guide**

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## Introduction

The Setcom Implementation Guide provides instructions for using the following features:

- Shopping Cart Buttons
- Buy Now Buttons (Single item purchase)
- Checkout Buttons (Use with your own shopping cart)
- Auto-Redirect
- Auto-Post
- Synchro

## Shopping Cart Buttons

When you use Setcom's free Shopping Cart, your customers can purchase multiple items with a single payment. The Shopping Cart is ideal for merchants who wish to sell goods that can be shipped (physical goods) and therefore needs to collect the shipping and billing information and other optional information.

Save time and money with Setcom's free Shopping Cart:

- Easy to implement – requires only HTML codes; no CGI scripting necessary;
- No up-front costs – the Shopping Cart is provided free of charge;
- Sell with ease – we provide you with free tools to manage and report on your sales.

## What We Provide

### *Shopping Cart*

A customisable "shopping cart" that allows a shopper to purchase multiple items and pay with a single payment.

### *Shipping and Billing Forms*

These forms are used to capture relevant details for billing and shipping fulfilment.

### *Tax Calculator*

Automatically collects sales tax for website payments.

### *Shipping Calculation*

Shipping cost is calculated for each order according to the destination.

### *Payment Processing*

Real-time, secure, credit card authorisation and settlement is provided to ensure payment is received using Visa and MasterCard.

### *Payment Management and Reporting*

Complete payment management and reporting.

## Shopping Cart Variables

In order for the cart to operate the merchant has to post information to the Setcom secure servers in the following format. These parameters are passed to the Setcom server via an HTTP form post.

Setcom secure servers URL: <https://www.setcom.com/secure/>

Field Name	Required (Y/N)	Description
MerchantIdentifier	Yes	Used for identifying who the merchant is, and that the items in the cart are related to this merchant. Provided by Setcom.
<b>Item Information</b>		
LIDSKU	Yes	Merchant-defined product code.
LIDDesc	Yes	Description of the product as it would appear in the cart.
LIDPrice	Yes	The actual price of the product that is being sold. Please include the cent value in decimal format, e.g. If the product is ZAR10, the price field would be 10.00. No other formatting is required: for instance, ZAR1,000.00 for the price would be in the price field 1000.00.
LIDQty	Yes	Quantity of products to add into the shopping cart. Default is 1 (one).
LIDColor	No	Optional product colour. Example: red, blue, etc.
LIDSize	No	Optional product size. Example: S, M, L, XL.
LIDHeight	No	Product height used for calculating volumetric shipping cost.
LIDWidth	No	Product width used for calculating volumetric shipping cost.
LIDLength	No	Product length used for calculating volumetric shipping cost.
LIDWeight	No	Product weight used for calculating volumetric shipping cost.
ShippingRequired	Yes	Is shipping required for this product? Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul>
IsVoucher	No	Used to define if this product is a voucher. Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul> Remember to load vouchers before using this feature.

Option1name	No	First option field name.  Let your customers specify information about their purchases by creating an option field. You can use Option fields to specify things like color, size, or gift-wrapping. Options must not change the price of an item, but let you collect additional information from your customer without extra email communication. Each Button may have up to two option fields, and you may use a drop-down menu or text box to collect the information.
Option1value	No	First option field value(s).
Option2name	No	Second option field name.
Option2value	No	Second option field value(s).
<b>Transaction Information</b>		
CurrencyAlphaCode	Yes	Used to specify the currency of the product. Valid options are: <ul style="list-style-type: none"> <li>• USD</li> <li>• EUR</li> <li>• GBP</li> <li>• ZAR</li> </ul>
MerchCustom	No	Merchant defined value. Can be used to keep track of the order. This is a pass-through variable. If omitted, Setcom creates a numeric reference for you.
<b>Display Information</b>		
KeepShopping	Yes	Used to specify the URL to display in the “Keep Shopping” button on the cart. Remember to include the http://
TemplateID	No	Sets the Custom Payment Page Template for payment pages associated with this button/link. The value of TemplateID is the same as the Template Name you chose when adding or editing the page style. You can add and edit Custom Payment Page from the <b>Selling Preferences</b> subtab of the <b>Profile</b> tab. The TemplateID variable has a maximum length of 30 characters. Valid character set is alphanumeric only, plus underscore. It cannot include spaces.

Redirect	No	<p>Used to specify the URL to automatically redirect back to the merchant website.</p> <p>We will add the product to the cart and redirect back to the specified URL passing along the following variables in the URL query string:</p> <ol style="list-style-type: none"> <li>1. cartCurrency – Alpha code of the basket currency, e.g. USD, EUR, GBP, ZAR.</li> <li>2. cartTotalAmount – The total amount of cart in URL encoded format using decimal format, e.g. a cart total of 1.00 will be encoded as "1%2E00".</li> <li>3. cartTotalQty – The total quantity of products in the cart, e.g. 2 of Product_001 and 5 of Product_002 will return 7.</li> </ol> <p>The merchant can then use the values from these variables to display a summary cart to the buyer.</p> <p>Example of the redirect string:</p> <pre>http://www.merchantsite.com/index.asp? cartCurrency=USD&amp;cartTotalAmount=1%2E00&amp; cartTotalQty=7</pre> <p>Remember to include the http://</p>
<b>Buyer Information</b>		
BuyerInformation	No	Setting the BuyerInformation field to "1" (one) allows our system to pre-populate the new user sign-up form.
Title	No	<p>Buyer's title.</p> <p>Valid options are:</p> <ul style="list-style-type: none"> <li>• Mr</li> <li>• Mrs</li> <li>• Ms</li> <li>• Miss</li> <li>• Dr</li> <li>• Prof</li> </ul>
FirstName	No	Buyer's first name.
LastName	No	Buyer's last name.
Address1	No	Buyer's delivery street address line 1.
Address2	No	Buyer's delivery street address line 2.
City	No	Buyer's delivery city.
State	No	Buyer's delivery state or province.
PostalCode	No	Buyer's delivery postal or zip code.
Country	No	Buyer's delivery country in ISO 3166 format e.g. set to "US" for United States of America. See Appendix 1.
Email	No	Buyer's primary email address.
MobileNumber	No	Buyer's primary mobile phone number.
WorkNumber	No	Buyer's primary work phone number.
HomeNumber	No	Buyer's primary home phone number.

## Shopping Cart Sample HTML Code

In order to use Setcom's shopping cart, individual product information is passed to us via HTML codes that are implemented on the merchant's website.

### **Standard Add to Cart HTML Code**

The coding required behind each product on the merchant web site is as follows:

```
<FORM METHOD="POST" ACTION="https://www.setcom.com/secure/">
<INPUT TYPE="HIDDEN" NAME="MerchantIdentifier" VALUE="1234567890">
<INPUT TYPE="HIDDEN" NAME="CurrencyAlphaCode" VALUE="USD">
<INPUT TYPE="HIDDEN" NAME="LIDSKU" VALUE="PRO_001">
<INPUT TYPE="HIDDEN" NAME="LIDDesc" VALUE="Product Description 1">
<INPUT TYPE="HIDDEN" NAME="LIDPrice" VALUE="1.00">
<INPUT TYPE="HIDDEN" NAME="LIDQty" VALUE="1">
<INPUT TYPE="HIDDEN" NAME="ShippingRequired" VALUE="1">
  <INPUT TYPE="HIDDEN" NAME="KeepShopping"
VALUE="http://www.me.com/pl">
<INPUT TYPE="SUBMIT" VALUE="Add to Cart">
</FORM>
```

Note: This will have to be set up for each product.

### **View Cart Link**

We recommend that a link be added on the merchant's site to view the shopping cart. Below is an example of the HTML code that can be used:

```
<A HREF="https://www.setcom.com/secure/">View Cart</A>
```

To view the cart in a certain currency use:

```
<A HREF="https://www.setcom.com/secure/?currencyalphacode=USD">View
US$ Cart</A>
```

## Buy Now Buttons (Single item purchase)

Setcom makes it easy to accept donations and payments for a single items or services using the Buy Now Button. Your customer will not see our shopping cart. Collecting the shipping address can be turned on or off using the "ShippingRequired" variable.

Benefits of using the Buy Now Buttons:

- Easy to implement – requires only HTML codes; no CGI scripting necessary;
- No up-front costs – the Buy Now Buttons are provided free of charge;
- Sell with ease – we provide you with free tools to manage and report on your sales;

## What We Provide

### *Optional Shipping forms*

These forms are used to capture relevant details for billing and shipping fulfilment.

### *Optional Tax Calculator*

Automatically collects sales tax for website payments.

### *Optional Shipping Calculation*

Shipping cost is calculated for each order according to the destination.

### *Payment Processing*

Real-time, secure, credit card authorisation and settlement is provided to ensure payment is received using Visa and MasterCard.

### *Payment Management and Reporting*

Complete payment management and reporting.

## Buy Now Button Variables

By understanding how the Buy Now Button HTML code works, you can edit the attributes of your buttons or create appropriate Buy Now code “on the fly” for each payment. This can be used to collect aggregated payments with your shopping cart.

To integrate Buy Now Buttons with your shopping cart, your shopping cart will need to populate the necessary Buy Now fields when your customers proceed to checkout.

The following table lists all of the available variables for a Buy Now Button.

Setcom secure servers URL: <https://www.setcom.com/secure/>

Field Name	Required (Y/N)	Description
ButtonAction	Yes	Identifies this as a Buy Now Button. Should be set to “ <b>buynow</b> ”. This variable is required and should not be changed. Changing this argument will cause your Buy Now to malfunction.
MerchantIdentifier	Yes	Used for identifying who the merchant is, and that the items in the cart are related to this merchant. Provided by Setcom.
<b>Transaction Information</b>		
CurrencyAlphaCode	Yes	Used to specify the currency of the product. Valid options are: <ul style="list-style-type: none"> <li>• USD</li> <li>• EUR</li> <li>• GBP</li> <li>• ZAR</li> </ul>
MerchCustom	No	Merchant-defined value. Can be used to keep track of the order. This is a pass-through variable. If omitted, Setcom creates a numeric reference for you.

Field Name	Required (Y/N)	Description
<b>Display Information</b>		
TemplateID	No	Sets the Custom Payment Page Template for payment pages associated with this button/link. The value of TemplateID is the same as the Template Name you chose when adding or editing the page style. You can add and edit Custom Payment Page from the <b>Selling Preferences</b> subtab of the <b>Profile</b> tab. The TemplateID variable has a maximum length of 30 characters. Valid character set is alphanumeric only, plus underscore. It cannot include spaces.
<b>Buyer Information</b>		
BuyerInformation	No	Setting the BuyerInformation field to "1" (one) allows our system to pre-populate the new user sign-up form.
Title	No	Buyer's title. Valid options are: <ul style="list-style-type: none"> <li>• Mr</li> <li>• Mrs</li> <li>• Ms</li> <li>• Miss</li> <li>• Dr</li> <li>• Prof</li> </ul>
FirstName	No	Buyer's first name.
LastName	No	Buyer's last name.
Address1	No	Buyer's delivery street address line 1.
Address2	No	Buyer's delivery street address line 2.
City	No	Buyer's delivery city.
State	No	Buyer's delivery state or province.
PostalCode	No	Buyer's delivery postal or zip code.
Country	No	Buyer's delivery country in ISO 3166 format e.g. set to "US" for United States of America. See Appendix 1.
Email	No	Buyer's primary email address.
MobileNumber	No	Buyer's primary mobile phone number.
WorkNumber	No	Buyer's primary work phone number.
HomeNumber	No	Buyer's primary home phone number.
<b>Item Information</b>		
LIDSKU	Yes	Merchant defined product code.
LIDDesc	Yes	Description of the product as it would appear in the cart.
LIDPrice	Yes	The actual price of the product that is being sold. Please include the cent value in decimal format, e.g. If the product is ZAR10, the price field would be 10.00. No other formatting is required: for instance, ZAR1,000.00 for the price would be in the price field 1000.00.
LIDQty	Yes	Quantity of products to add into the shopping cart. Default is 1 (one).
LIDColor	No	Optional product colour. Example: red, blue, etc.
LIDSize	No	Optional product size. Example: S, M, L, XL.
LIDHeight	No	Product height used for calculating volumetric shipping cost.

Field Name	Required (Y/N)	Description
LIDWidth	No	Product width used for calculating volumetric shipping cost.
LIDLength	No	Product length used for calculating volumetric shipping cost.
LIDWeight	No	Product weight used for calculating volumetric shipping cost.
ShippingRequired	No	Is shipping required for this product? Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul>
IsVoucher	No	Used to define if this product is a voucher. Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul> Remember to load vouchers before using this feature.
Option1name	No	First option field name.  Let your customers specify information about their purchases by creating an option field. You can use Option fields to specify things like color, size, or gift-wrapping. Options must not change the price of an item, but let you collect additional information from your customer without extra email communication. Each Button may have up to two option fields, and you may use a drop-down menu or text box to collect the information.
Option1value	No	First option field value(s).
Option2name	No	Second option field name.
Option2value	No	Second option field value(s).

### Buy Now Button Sample HTML Code

The code for a Buy Now Button with 2 items would look similar to the following code:

```
<FORM METHOD="POST" ACTION="https://www.setcom.com/secure/">
<INPUT TYPE="HIDDEN" NAME="ButtonAction" VALUE="buynow">
<INPUT TYPE="HIDDEN" NAME="MerchantIdentifier" VALUE="1234567890">
<INPUT TYPE="HIDDEN" NAME="CurrencyAlphaCode" VALUE="USD">
<INPUT TYPE="HIDDEN" NAME="LIDSKU" VALUE="PRO_001">
<INPUT TYPE="HIDDEN" NAME="LIDDesc" VALUE="Product Description1">
<INPUT TYPE="HIDDEN" NAME="LIDPrice" VALUE="1.00">
<INPUT TYPE="HIDDEN" NAME="LIDQty" VALUE="1">
<INPUT TYPE="SUBMIT" VALUE="Buy Now">
</FORM>
```

### Checkout Buttons (Use with your own shopping cart)

Checkout buttons allow you to sell multiple items to buyers using your existing shopping cart application.

## Checkout Button Variables

To integrate the Checkout Buttons with your shopping cart, your shopping cart will need to populate the necessary Checkout Button fields when your customers proceed to checkout. Collecting the shipping address can be turned on or off using the “ShippingRequired” variable.

The following table lists all of the available variables for a Checkout Button.

Setcom secure servers URL: <https://www.setcom.com/secure/>

Field Name	Required (Y/N)	Description
ButtonAction	Yes	Identifies this as a Checkout Button. Should be set to “ <b>checkout</b> ”. This variable is required and should not be changed. Changing this argument will cause your Checkout to malfunction.
MerchantIdentifier	Yes	Used for identifying who the merchant is, and that the items in the cart are related to this merchant. Provided by Setcom.
<b>Transaction Information</b>		
CurrencyAlphaCode	Yes	Used to specify the currency of the product. Valid options are: <ul style="list-style-type: none"> <li>• USD</li> <li>• EUR</li> <li>• GBP</li> <li>• ZAR</li> </ul>
MerchCustom	No	Merchant-defined value. Can be used to keep track of the order. This is a pass-through variable. If omitted, Setcom creates a numeric reference for you.
<b>Display Information</b>		
TemplateID	No	Sets the Custom Payment Page Template for payment pages associated with this button/link. The value of TemplateID is the same as the Template Name you chose when adding or editing the page style. You can add and edit Custom Payment Page from the <b>Selling Preferences</b> subtab of the <b>Profile</b> tab. The TemplateID variable has a maximum length of 30 characters. Valid character set is alphanumeric only, plus underscore. It cannot include spaces.
<b>Buyer Information</b>		
BuyerInformation	No	Setting the BuyerInformation field to “1” (one) allows our system to pre-populate the new user sign-up form.
Title	No	Buyer’s title. Valid options are: <ul style="list-style-type: none"> <li>• Mr</li> <li>• Mrs</li> <li>• Ms</li> <li>• Miss</li> <li>• Dr</li> <li>• Prof</li> </ul>
FirstName	No	Buyer’s first name.

Field Name	Required (Y/N)	Description
LastName	No	Buyer's last name.
Address1	No	Buyer's delivery street address line 1.
Address2	No	Buyer's delivery street address line 2.
City	No	Buyer's delivery city.
State	No	Buyer's delivery state or province.
PostalCode	No	Buyer's delivery postal or zip code.
Country	No	Buyer's delivery country in ISO 3166 format e.g. set to "US" for United States of America. See Appendix 1.
Email	No	Buyer's primary email address.
MobileNumber	No	Buyer's primary mobile phone number.
WorkNumber	No	Buyer's primary work phone number.
HomeNumber	No	Buyer's primary home phone number.

For each of the items in your shopping cart, define a new set of values that correspond to each additional item. Append the additional item number to the variable names, starting with 0 and increment by one for each item included in the shopping cart.

For example:

The first item's variable names would be LIDSKU, LIDDesc, LIDPrice and LIDQty

The second item's variable names would be LIDSKU1, LIDDesc1, LIDPrice1 and LIDQty1

The third item's variable names would be LIDSKU2, LIDDesc2, LIDPrice2 and LIDQty2

Our system will automatically add all of the totals for the items passed by multiplying the LIDPrice by the LIDQty.

Important: The x values must increment by one continuously in order to be recognised. If you skip from item #1 to item #3 without defining an item #2, the third item will be ignored.

Field Name	Required (Y/N)	Description
<b>Item Information</b>		
LIDSKU $x$	Yes	Merchant defined product code.
LIDDesc $x$	Yes	Description of the product as it would appear in the cart.
LIDPrice $x$	Yes	The actual price of the product that is being sold. Please include the cent value in decimal format, e.g. If the product is ZAR10, the price field would be 10.00. No other formatting is required: for instance, ZAR1,000.00 for the price would be in the price field 1000.00.
LIDQty $x$	Yes	Quantity of products to add into the shopping cart. Default is 1 (one).
LIDColor $x$	No	Optional product colour. Example: red, blue, etc.
LIDSize $x$	No	Optional product size. Example: S, M, L, XL.
LIDHeight $x$	No	Product height used for calculating volumetric shipping cost.
LIDWidth $x$	No	Product width used for calculating volumetric shipping cost.

Field Name	Required (Y/N)	Description
LIDLengthx	No	Product length used for calculating volumetric shipping cost.
LIDWeightx	No	Product weight used for calculating volumetric shipping cost.
ShippingRequiredx	No	Is shipping required for this product? Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul>
IsVoucherx	No	Used to define if this product is a voucher. Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul> Remember to load vouchers before using this feature.

## Checkout Button Sample HTML Code

The code for a Checkout Button with 2 items would look similar to the following code:

```
<FORM METHOD="POST" ACTION="https://www.setcom.com/secure/">
<INPUT TYPE="HIDDEN" NAME="ButtonAction" VALUE="checkout">
<INPUT TYPE="HIDDEN" NAME="MerchantIdentifier" VALUE="1234567890">
<INPUT TYPE="HIDDEN" NAME="CurrencyAlphaCode" VALUE="USD">
<INPUT TYPE="HIDDEN" NAME="LIDSKU" VALUE="PRO_001">
<INPUT TYPE="HIDDEN" NAME="LIDDesc" VALUE="Product Description1">
<INPUT TYPE="HIDDEN" NAME="LIDPrice" VALUE="1.00">
<INPUT TYPE="HIDDEN" NAME="LIDQty" VALUE="1">
<INPUT TYPE="HIDDEN" NAME="LIDSKU1" VALUE="PRO_002">
<INPUT TYPE="HIDDEN" NAME="LIDDesc1" VALUE="Product Description2">
<INPUT TYPE="HIDDEN" NAME="LIDPrice1" VALUE="10.00">
<INPUT TYPE="HIDDEN" NAME="LIDQty1" VALUE="1">
<INPUT TYPE="SUBMIT" VALUE="Buy Now">
</FORM>
```

## Back-End Integration

### Introduction

Auto-Redirect, Auto-Post and Synchro allow the Setcom Shopping Cart, and Buy Now buttons to be fully integrated with the merchant's back-end system.

### Auto-Redirect or Auto-Post?

Before integrating to the merchant's back-end system, you will need to decide if the Auto-Redirect or the Auto-Post is right for you.

With the Auto-Redirect, your customer will be redirected back to your website once the payment is completed. Setcom will also pass along certain variables, which you will need to pass back to Setcom for verification. Once verified, Setcom will pass back the transaction details, including buyer, financial, shipping and billing information.

The Auto-Post will display Setcom's Payment Confirmation Page to your customer and perform an HTTP post to a script residing on your web server. Setcom will also post through certain variables, which you will need to pass back to Setcom for verification. Once verified, Setcom will pass back the transaction details, including buyer, financial, shipping and billing information.

## Configuring Auto-Redirect and Auto-Post

Once you are ready to accept payments and have decided which implementation to use, you will need to define the Auto-Redirect or the Auto-Post URL. To define this:

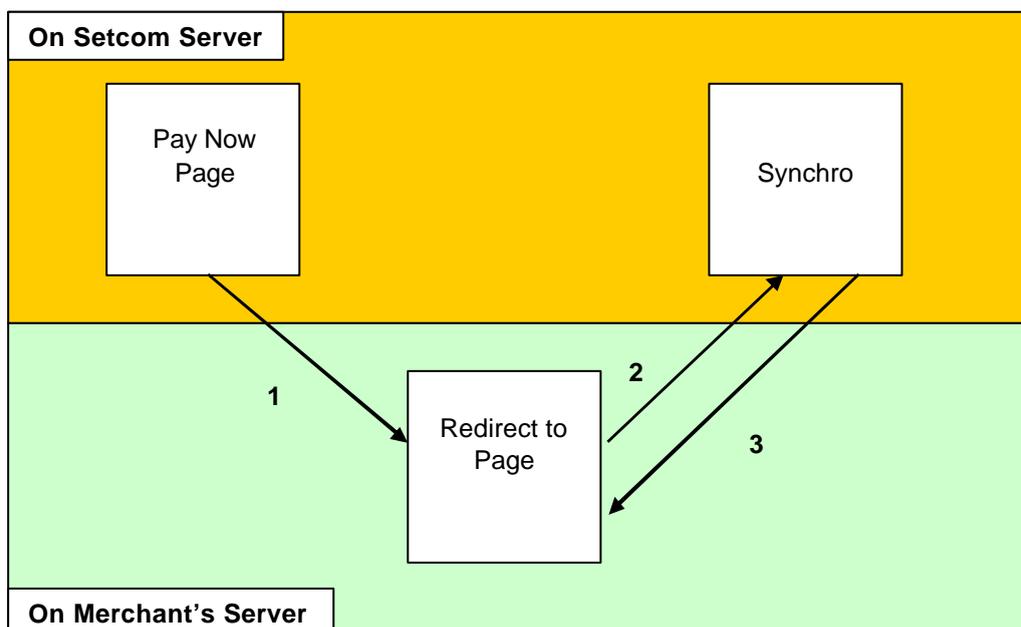
1. Open a new browser window.
2. Go to <https://www.setcom.com/useradmin/>.
3. Login to your Setcom Account.
4. Select "Profile" from the top navigation bar.
5. Select "Selling Preferences" from the sub-navigation bar.
6. Select "Website Payment Preferences" from the menu.
7. In this window, enter a fully qualified URL ([http://www.domain.com/cgi/your\\_script](http://www.domain.com/cgi/your_script)) for either the Redirect URL or the Post URL.

## Auto-Redirect

Once the payment has been completed, Setcom will redirect your customer back to your website as defined in the Redirect URL. Setcom will pass along the following variables:

1. txid – A unique transaction ID generated by Setcom's system;
2. checksum – A unique checksum generated by Setcom for security reasons;
3. parity – A random parity field generated by Setcom for security reasons.

These variables have no meaning and need to be submitted back to Setcom for verification. Receiving the variables does not mean that the payment was successful; it only means that your customer has completed the transaction.



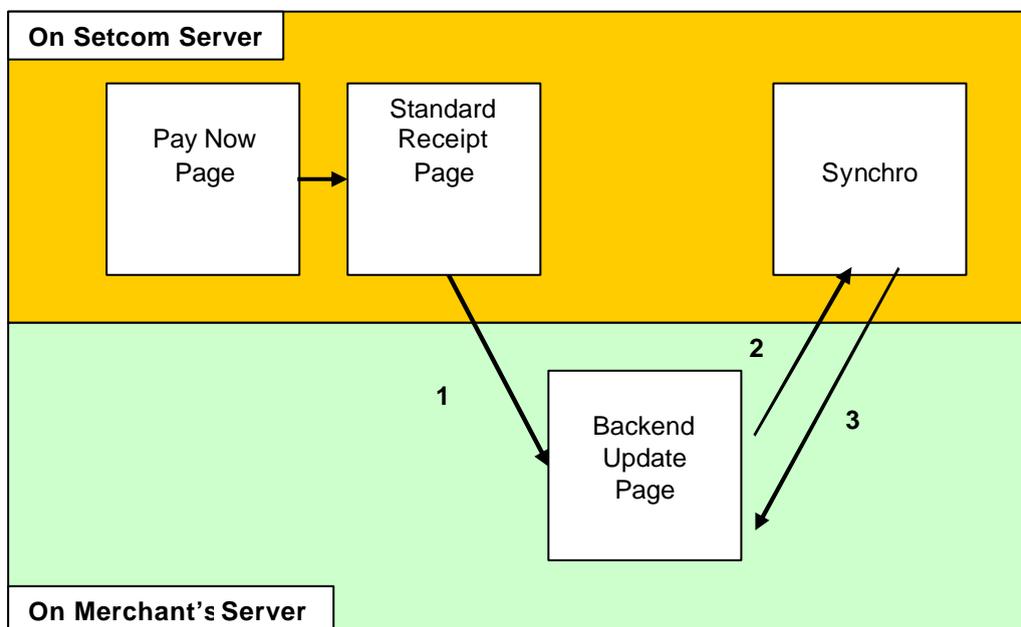
1. The buyer is redirected back to the merchant's web page (Redirect to Page). As part of the URL we will pass txnid, checksum and parity to the merchant's web page.
2. After receiving the Auto-Redirect variables, your system needs to use the Setcom Synchro Web Services or Setcom Synchro HTTP Services to send the txnid, checksum, parity, Identifier, Usrname and pwd back to Setcom's Synchro system (See Request Message Format below).
3. Once verified, Setcom will send the transaction details, including buyer, financial, shipping and billing information (See Response Message Format below) which is used to generate the merchant's receipt page and update merchant's system.

## Auto-Post

After the payment has been completed, the Setcom's Payment Confirmation Page is displayed to your customer and the following variables are posted through to your web server, using a normal HTTP form post method:

1. txnid – A unique transaction ID generated by Setcom's system;
2. checksum – A unique checksum generated by Setcom for security reasons;
3. parity – A random parity field generated by Setcom for security reasons.

These variables have no meaning and need to be submitted back to Setcom for verification. Receiving the variables does not mean that the payment was successful; it only means that your customer has completed the transaction.



1. The buyer is shown the standard Setcom Receipt Page. Setcom's server then post txnid, checksum and parity to the merchant's web page (Backend Update Page).
2. After receiving the Auto-Post variables, your system needs to use the Setcom Synchro Web Services or Setcom Synchro HTTP Services to send the txnid, checksum, parity, Identifier, Usrname and pwd back to Setcom's Synchro system (See Request Message Format below).

3. Once verified, Setcom will send the transaction details, including buyer, financial, shipping and billing information (See Response Message Format below) which is used to update merchant's system.

## Synchro

Synchro is used to verify and retrieve transaction details. After receiving the Auto-Redirect or Auto-Post variables, your system needs to pass these variables back to Setcom for verification. Once verified, Setcom will send the transaction details, including buyer, financial, shipping and billing information. Only partial buyer's credit card or bank account details will be passed back.

We offer the following options to verify the Auto-Redirect and Auto-Post variables:

1. Setcom Synchro Web Services - Using XML and Setcom's Synchro Web Service, the merchant can verify the Auto-Redirect and Auto-Post variables and retrieve the transactions details in XML format.
2. Setcom Synchro HTTP Services - Using a backend HTTP Form Post and Setcom's Synchro HTTP Services, the merchant can verify the Auto-Redirect and Auto-Post variables, and retrieve the transactions details.

Because both the Auto-Redirect and Auto-Post use the same variables and message request format, variable verification and data retrieval can be done using any of the above two methods. The only difference between these methods is in the way the communication between you and Setcom occurs.

Both methods will utilise Setcom's industry standard 128-bit SSL security certificates for message encryption. Always ensure that all communication requests to Setcom are sent to a URL starting with **https://www.setcom.com**

### ***Request Message Format***

For the variable verification, you will need to submit the following information to Setcom:

Field Name	Required (Y/N)	Description
Identifier	Yes	MerchantIdentifier as used in the Shopping Cart or Buy Now buttons. Provided by Setcom.
Username	Yes	Merchant's username, this will usually be the email address.
Pwd	Yes	Merchant's password.
tnxid	Yes	A unique transaction ID generated by Setcom's system. Passed to you in Auto-Redirect or Auto-Post.
checksum	Yes	A unique checksum generated by Setcom for security reasons. Passed to you in Auto-Redirect or Auto-Post.
parity	Yes	A random parity field generated by Setcom for security reasons. Passed to you in Auto-Redirect or Auto-Post.

### ***Using Setcom Synchro Web Services***

Merchants should access Setcom Synchro Web Services at the following URL:

<https://www.setcom.com/secure/components/synchro.cfc?wsdl>

Be sure to include the **?wsdl** variable at the end of the URL.

The Method Name is: `tnx_synchro`

The Web Service Arguments are:

identifier  
 username  
 pwd  
 txnid  
 checksum  
 parity

### ***Using Setcom Synchro HTTP Services***

Merchants should access Setcom Synchro HTTP Services at the following URL:

<https://www.setcom.com/secure/components/synchro.cfc?wsdl>

Be sure to include the **?wsdl** variable at the end of the URL.

Back-end HTTP Post from your server must be used. When posting through the variables, be sure that the form variables are properly encoded and all special characters have been escaped. Setcom will provide the transaction details as Synchro response in the file content on the URL above.

The HTTP Post form variables are:

Method= `tnx_synchro`  
 identifier  
 username  
 pwd  
 txnid  
 checksum  
 parity

### ***Response Message Format***

Setcom will reply to your message request with a XML formatted message containing the transaction details. Each message needs to be evaluated carefully before processing the response. All messages are UTF-8 encoded.

A typical response will look like the example below:

```
<?xml version="1.0" encoding="UTF-8" ?>
<tnx_synchro>
<outcome>
  <status>Complete</status>
```

```

        <transaction_id>becebf25-a7d2-4130-b658</transaction_id>
    </outcome>
    <member>
        <identifier>1234567890</identifier>
        <username>testseller1@setcom.com</username>
        <reference>583658</reference>
    </member>
    <buyer>
        <username>testbuyer@setcom.com</username>
        <shipping_address>
            <title>Mr</title>
            <firstname>Test</firstname>
            <lastname>Buyer</lastname>
            <email_address>testbuyer@setcom.com</email_address>
            <street1>Building 1</street1>
            <street2>1 Setcom Way</street2>
            <city>London</city>
            <state>London</state>
            <zip>W1J8NE</zip>
            <country>UNITED KINGDOM</country>
            <contact_number />
        </shipping_address>
        <billing_address>
            <title>Mr</title>
            <firstname>Test</firstname>
            <lastname>Buyer</lastname>
            <email_address>testbuyer@setcom.com</email_address>
            <street1>Building 1</street1>
            <street2>1 Setcom Way</street2>
            <city>London</city>
            <state>London</state>
            <zip>W1J8NE</zip>
            <country>UNITED KINGDOM</country>
            <contact_number />
        </billing_address>
    </buyer>
    <payment_instrument>
        <type>Credit Card</type>
        <brand>Visa</brand>
        <card_name>Test Buyer</card_name>
        <card_number>XXXX-XXXX-XXXX-0002</card_number>
    </payment_instrument>
    <financial>
        <amount_total>50000</amount_total>
        <amount_sub_total>50000</amount_sub_total>
        <amount_shipping>0</amount_shipping>
        <amount_tax>0</amount_tax>
        <amount_insurance>0</amount_insurance>
        <amount_promo>0</amount_promo>
        <currency>USD</currency>
    </financial>
    <additional_information>
        <shipping_option />
        <tax_option />
        <insurance_option />
    </additional_information>
    <line_items count="1">
        <lid>
            <sku>PROD001</sku>
            <description>Product Description 1</description>
            <price>50000</price>
            <quantity>1</quantity>
            <weight>0</weight>
        </lid>
    </line_items>

```

```

    <height>0</height>
    <width>0</width>
    <length>0</length>
    <color />
    <size />
    <handling>0</handling>
    <require_shipping>0</require_shipping>
    <is_voucher>0</is_voucher>
    <option1name />
    <option1value />
    <option2name />
    <option2value />
  </lid>
</line_items>
<custom_fields>
  <comments />
  <custom_field>
    <name></name>
    <value></value>
  </custom_field>
  <custom_field>
    <name></name>
    <value></value>
  </custom_field>
</custom_fields>
<transactions count="1">
  <transaction_id>becebf25-a7d2-4130-b658</transaction_id>
  <type>funds_purchase</type>
  <seller_reference>583658</seller_reference>
  <buyer_reference />

  <statement row="1">
    <type>funds_received</type>
    <date_added>20060719114853</date_added>
    <reference>13464</reference>
    <error_code>0</error_code>
    <authorization_number />
    <transaction_key />
    <amount>50000</amount>
    <fee>-2485</fee>
    <tax>0</tax>
    <rolling_reserve>0</rolling_reserve>
    <nett>47515</nett>
    <balance>47515</balance>
    <rolling_reserve_balance>0</rolling_reserve_balance>
    <funds_available>20060719114853</funds_available>
    <rolling_reserve_available>20060719114853
    </rolling_reserve_available>
  </statement>
</transactions>
</tnx_synchro>

```

Elements	Child Element	Description
outcome	status	The transaction status. Valid outcomes are: Valid options are: <ul style="list-style-type: none"> <li>• Complete</li> <li>• Declined</li> <li>• Pending</li> </ul>
	transaction_id	Setcom's reference to the transaction. It must be stored by the merchant.

Elements	Child Element	Description
member	identifier	MerchantIdentifier as used in the Shopping Cart or Buy Now buttons. Provided by Setcom.
	username	Merchant's username.
	reference	Merchant's reference to this transaction. Generated by the merchant and passed to Setcom using MerchCustom field in the Shopping Cart, Buy Now and Checkout Buttons.
buyer	username	The buyer's username.
shipping_address	title	Buyer's title. Valid options are: <ul style="list-style-type: none"> <li>• Mr</li> <li>• Mrs</li> <li>• Ms</li> <li>• Miss</li> <li>• Dr</li> <li>• Prof</li> </ul>
	firstname	Buyer's first name.
	lastname	Buyer's last name.
	email_address	Buyer's primary email address.
	street1	Buyer's delivery street address line 1.
	street2	Buyer's delivery street address line 2.
	city	Buyer's delivery city.
	state	Buyer's delivery state or province.
	zip	Buyer's delivery postal or zip code.
	country	Buyer's delivery country.
	contact_number	Buyer's primary phone number.
billing_address	title	Buyer's title. Valid options are: <ul style="list-style-type: none"> <li>• Mr</li> <li>• Mrs</li> <li>• Ms</li> <li>• Miss</li> <li>• Dr</li> <li>• Prof</li> </ul>
	firstname	Buyer's first name.
	lastname	Buyer's last name.
	email_address	Buyer's primary email address.
	street1	Buyer's billing street address line 1.
	street2	Buyer's billing street address line 2.
	city	Buyer's billing city.
	state	Buyer's billing state or province.
	zip	Buyer's billing postal or zip code.
	country	Buyer's billing country.
	contact_number	Buyer's primary phone number.
payment_instrument	Type	The payment type used for the transaction.
	Brand	The payment brand used for the transaction.
	card_name	The cardholder's name, if available.
	card_number	Partial card number.

Elements	Child Element	Description
financial	amount_total	The total amount of the transaction in the <b>smallest monetary unit, e.g. cents.</b>
	amount_sub_total	The sub total amount of the transaction in the smallest monetary unit, e.g. cents.
	amount_shipping	The shipping cost for the transaction in the smallest monetary unit, e.g. cents.
	amount_tax	The tax for the transaction in the smallest monetary unit, e.g. cents.
	amount_insurance	The insurance cost for the transaction in the smallest monetary unit, e.g. cents.
	amount_promo	The gift certificate or discount coupon amount for the transaction in the smallest monetary unit, e.g. cents.
	currency	The transaction currency. Valid options are: <ul style="list-style-type: none"> <li>• USD</li> <li>• EUR</li> <li>• GBP</li> <li>• ZAR</li> </ul>
additional_information	shipping_option	Description of the shipping method.
	tax_option	Description of the tax.
	insurance_option	Description of the insurance option.
line_items	sku	Merchant defined product code.
	description	Description of the product as it would appear in the cart.
	price	The actual price of the product that is being sold in the <b>smallest monetary unit, e.g. cents.</b>
	quantity	Quantity of product.
	weight	Product weight.
	height	Product height.
	width	Product width.
	length	Product length.
	color	Product colour.
	size	Product size.
	handling	Product handling cost in the <b>smallest monetary unit, e.g. cents.</b>
	require_shipping	Used to define if shipping is required for this product. Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul>
	is_voucher	Used to define if this product is a voucher. Valid options are: <ul style="list-style-type: none"> <li>• 1 for Yes</li> <li>• 0 for No</li> </ul>
	option1name	First option field name.
	option1value	First option field value(s).
	option2name	Second option field name.
	option2value	Second option field value(s).
custom_fields	comments	Comments entered by the shopper in the cart are passed back to you in this field.
	custom_field: name	Custom field name.
	custom_field: value	Custom field value.

Elements	Child Element	Description
transactions	Transaction_id	Setcom's reference to the transaction. It must be stored by the merchant.
	type	The statement entry name.
	seller_reference	Merchant's reference to this transaction. Generated by the merchant.
	buyer_reference	Buyer's reference to this transaction. Generated by the buyer.
statement	type	The statement entry name.
	date_added	The date when the statement entry was made. In <i>yyyymmddHHmmss</i> format.
	reference	A unique reference to the statement entry. Generated by Setcom.
	error_code	The error code for the statement entry. Only error code 0 (zero) is successful.
	authorization_number	The authorisation number for the statement entry, if available.
	transaction_key	The transaction key for the statement entry, if available.
	amount	The amount for the statement entry in the <b>smallest monetary unit, e.g. cents.</b>
	fee	The fee charged by Setcom in the <b>smallest monetary unit, e.g. cents.</b>
	Tax	Tax charged on the Setcom fee in the smallest monetary unit, e.g. cents.
	rolling_reserve	Amount reserved for the rolling reserve in the smallest monetary unit, e.g. cents.
	nett	The nett amount of the entry.
	balance	The Setcom account balance at time of the entry in the smallest monetary unit, e.g. cents.
	rolling_reserve_balance	The Setcom rolling reserve balance at the time of the entry in the smallest monetary unit, e.g. cents.
funds_available	The date the funds will be available.	
rolling_reserve_available	The date the rolling reserve will be available.	

The following must be evaluated:

1. Check the value of the **status** element in the **outcome** node. If this is NOT set to **Complete**, then the transaction should be treated as being DECLINED. Only approved transactions will be sent through with an outcome status of **Complete**. Typical outcome statuses include:
  - Complete
  - Declined
  - Pending
2. Check that the details in the **member** element are your details.
3. Check that the **amount\_total** is correct.
4. Check that the **currency** is correct.
5. Use the **reference** under the member element to link to your system transaction number.
6. Store the **Transaction\_id**

## Synchro Error Codes

Error Code	Description
WB00001	The XML request string could not be passed. Check that the XML request string is formatted correctly and conforms to the schema documents as provided.
WB00002	The member login failed. Ensure that the <b>identifier</b> , <b>username</b> and <b>password</b> element values are correct.
WS00003	The transaction details could not be retrieved. Ensure that the <b>tnxid</b> , <b>checksum</b> and <b>parity</b> element values are set correctly.
TSYNC00001	An exception occurred while validating the XML response. Please see the error description in the message response for more details.
TSYNC00002	Unable to locate transaction. Please retry. If the error persists, please contact support@setcom.com

## Catalogue & Mall Listing

Using the catalogue allows you to quickly create a product catalogue for your website. All products in the catalogue are also listed in the Setcom Mall. The look and feel of your catalogue can also be customised using the Custom Payment Page Templates.

To manage your catalogue:

- Open a new browser window and go to <http://www.setcom.com/useradmin/>.
- Login using your email address and password.
- Once logged in, select "Selling Tools" from the top navigation bar.
- Select "Catalogue and Mall Listing" from the sub navigation bar.

On the main screen the following options are available:

- Add Product Categories: This allows you to add product categories to your catalogue.
- Edit Product Categories: This allows you to edit your previously defined product categories.
- Add Products: This allows you to add product to your catalogue.
- Edit Products: This allows you to edit your previously defined products.

To customise the look and feel of your catalogue and shopping cart:

- Select "Profile" from the top navigation bar.
- Select "Custom Payment Pages" from the sub navigation bar.

Using the interface provided, you can define a "payment template" which contains the look and feel for your catalogue. This look and feel is also carried across to the shopping cart. Be sure to set your custom template to be the primary template.

### Linking to the Catalogue

Now that you have added your categories and products, you will need to direct traffic to your catalogue by adding a link on your website or email. You will find this link on the Catalogue and Mall Listing page.

## Appendix 1

Acceptable country code list in ISO 3166 format.

Country Name	Code
ÅLAND ISLANDS	AX
ALBANIA	AL
ALGERIA	DZ
AMERICAN SAMOA	AS
ANDORRA	AD
ANGOLA	AO
ANGUILLA	AI
ANTARCTICA	AQ
ANTIGUA AND BARBUDA	AG
ARGENTINA	AR
ARUBA	AW
AUSTRALIA	AU
AUSTRIA	AT
BAHAMAS	BS
BAHRAIN	BH
BANGLADESH	BD
BARBADOS	BB
BELGIUM	BE
BELIZE	BZ
BENIN	BJ
BERMUDA	BM
BHUTAN	BT
BOLIVIA	BO
BOSNIA AND HERZEGOVINA	BA
BOTSWANA	BW
BOUVET ISLAND	BV
BRAZIL	BR
BRITISH INDIAN OCEAN TERRITORY	IO
BRUNEI DARUSSALAM	BN
BULGARIA	BG
BURUNDI	BI
CAMBODIA	KH
CANADA	CA
CAPE VERDE	CV
CAYMAN ISLANDS	KY
CHAD	TD
CHILE	CL
CHINA	CN
CHRISTMAS ISLAND	CX
COCOS (KEELING) ISLANDS	CC
COMOROS	KM
CONGO	CG
COOK ISLANDS	CK
COSTA RICA	CR
COTE D'IVOIRE	CI
CROATIA	HR
CUBA	CU

<b>Country Name</b>	<b>Code</b>
CZECH REPUBLIC	CZ
DENMARK	DK
DJIBOUTI	DJ
DOMINICA	DM
DOMINICAN REPUBLIC	DO
ECUADOR	EC
EGYPT	EG
EL SALVADOR	SV
ERITREA	ER
ESTONIA	EE
ETHIOPIA	ET
FALKLAND ISLANDS (MALVINAS)	FK
FAROE ISLANDS	FO
FIJI	FJ
FINLAND	FI
FRANCE	FR
FRENCH GUIANA	GF
FRENCH POLYNESIA	PF
FRENCH SOUTHERN TERRITORIES	TF
GAMBIA	GM
GERMANY	DE
GIBRALTAR	GI
GREECE	GR
GREENLAND	GL
GRENADA	GD
GUADELOUPE	GP
GUAM	GU
GUATEMALA	GT
GUINEA-BISSAU	GW
GUYANA	GY
HAITI	HT
HEARD ISLAND AND MCDONALD ISLANDS	HM
HOLY SEE (VATICAN CITY STATE)	VA
HONDURAS	HN
HONG KONG	HK
HUNGARY	HU
ICELAND	IS
INDIA	IN
IRELAND	IE
ISRAEL	IL
ITALY	IT
JAMAICA	JM
JAPAN	JP
KENYA	KE
KIRIBATI	KI
KOREA - REPUBLIC OF	KR
KUWAIT	KW
LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA
LATVIA	LV
LESOTHO	LS
LIBYAN ARAB JAMAHIRIYA	LY
LIECHTENSTEIN	LI

<b>Country Name</b>	<b>Code</b>
LITHUANIA	LT
LUXEMBOURG	LU
MACAO	MO
MACEDONIA	MK
MADAGASCAR	MG
MALAWI	MW
MALAYSIA	MY
MALDIVES	MV
MALTA	MT
MARSHALL ISLANDS	MH
MARTINIQUE	MQ
MAURITANIA	MR
MAURITIUS	MU
MAYOTTE	YT
MEXICO	MX
MICRONESIA (FEDERATED STATES OF)	FM
MOLDOVA	MD
MONACO	MC
MONGOLIA	MN
MONTSERRAT	MS
MOROCCO	MA
MOZAMBIQUE	MZ
MYANMAR	MM
NAMIBIA	NA
NAURU	NR
NEPAL	NP
NETHERLANDS	NL
NETHERLANDS ANTILLES	AN
NEW CALEDONIA	NC
NEW ZEALAND	NZ
NICARAGUA	NI
NIUE	NU
NORFOLK ISLAND	NF
NORTHERN MARIANA ISLANDS	MP
NORWAY	NO
OMAN	OM
PAKISTAN	PK
PALAU	PW
PANAMA	PA
PAPUA NEW GUINEA	PG
PARAGUAY	PY
PERU	PE
PITCAIRN	PN
POLAND	PL
PORTUGAL	PT
PUERTO RICO	PR
QATAR	QA
REUNION	RE
ROMANIA	RO
RWANDA	RW
SAINT HELENA	SH
SAINT KITTS AND NEVIS	KN

<b>Country Name</b>	<b>Code</b>
SAINT LUCIA	LC
SAINT PIERRE AND MIQUELON	PM
SAINT VINCENT AND THE GRENADINES	VC
SAMOA	WS
SAN MARINO	SM
SAO TOME AND PRINCIPE	ST
SAUDI ARABIA	SA
SENEGAL	SN
SERBIA AND MONTENEGRO	CS
SEYCHELLES	SC
SINGAPORE	SG
SLOVAKIA	SK
SLOVENIA	SI
SOLOMON ISLANDS	SB
SOUTH AFRICA	ZA
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	GS
SPAIN	ES
SRI LANKA	LK
SURINAME	SR
SVALBARD AND JAN MAYEN	SJ
SWAZILAND	SZ
SWEDEN	SE
SWITZERLAND	CH
TAIWAN	TW
TANZANIA	TZ
THAILAND	TH
TIMOR-LESTE	TL
TOKELAU	TK
TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
UGANDA	UG
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UNITED STATES MINOR OUTLYING ISLANDS	UM
UNITED STATES OF AMERICA	US
URUGUAY	UY
VANUATU	VU
VENEZUELA	VE
VIET NAM	VN
VIRGIN ISLANDS (BRITISH)	VG
VIRGIN ISLANDS (U.S.)	VI
WALLIS AND FUTUNA	WF
WESTERN SAHARA	EH
YEMEN	YE
ZAMBIA	ZM