



VoicePay®

Internet Merchant Technical Integration Guide V1.3

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1 About This Guide

Welcome to the VoicePay[®] Internet Merchant Technical Integration Guide. This guide explains in detail how to integrate your internet based business to the VoicePay[®] payment processing system and take advantage of our patented VoicePay[®] voice biometric technology. It provides step-by-step instructions on how to simply and quickly get up and running with our services as well as detailed reference material.

This guide assumes a basic working knowledge of HTML and forms but you may not need in-depth knowledge of these concepts to integrate with us and process payments through VoicePay[®], depending upon your business requirements.

In addition to this guide we have a team of specialists providing technical support during your integration with VoicePay[®]. To receive support please visit our website - <http://www.voice-pay.com> – and go to the Contact section for details on how to log support calls with us.

2 Introduction – VoicePay^{®1}



VoicePay[®] is your one-stop payments provider. We offer secure processing of credit and debit card payments both online and over the phone and our rates are amongst the most attractive available anywhere.

We can process payments for your business worldwide in multiple currencies and our anti-fraud technology virtually eliminates chargebacks. In addition we offer the unique VoicePay[®] voice authenticated payment account for individuals which allows consumers to authorize transactions using their own unique voice signature.

VoicePay[®] enables payments and purchases to be undertaken by your customers in 3 ways

1. Using a credit or debit card over the Internet
2. Using a VoicePay[®] account over the Internet
3. Using VoicePay[®] Mobile to make payments from anywhere.

If you choose to integrate with VoicePay[®] in the standard internet merchant method then your customer will be presented with a branded version of our hosted payment pages which will present them with a choice of these 3 payment options.

¹ Registered EU Trademark, USA Pending

3 VoicePay® Internet e-commerce

When your customer is ready to pay for their goods or services, your site should present a “Pay Now” button that, when clicked, sends a complete purchase request to the VoicePay® payment network.

The purchase request is sent as a HTML FORM containing a description of the goods/services purchased, total cost, and details of your merchant account.

If the purchase consists of more than one item, your shopping system must total all the items into a single description and cost (Total = £/\$ 35.87) and submit a final single total purchase value.

There are seven pieces of information that must be sent in order for the purchase to be processed. These are:

store_id	Your VoicePay® Profile (store) ID
cart_id	Your reference for the transaction (max of 255 characters).
amount	The total basket price (including tax & shipping). This is expressed in major units to 2 decimal places. For example 14 pounds 50 pence is sent as “14.50” The value excludes currency symbols/names.
currency	The currency code that the purchased is priced in, this is a 3 character code, defined as follows e.g.: GBP = Pounds Sterling EUR = Euro USD = US Dollars
description	Your description of the item(s) being purchased. This will be displayed to the customer on the payment pages (max of 255 characters).
test	Indicates if this is a live or a test transaction. 0 = Live 1 = Test
check	This is a security value used to ensure that no-one has tampered with the request, such as trying to change the price. The data received by the payment page is used to generate a new security check value, which is compared with the value set here. The transaction will only be processed if both values match. For details please see ‘ 3.2 Message Digest ’

When the purchase information is received by the VoicePay® server, it is checked to ensure that all the required data is present, and that the security check is valid. Once the security test has been passed, a secure payment page will be displayed to the customer confirming the details of the purchase they are making, and offering a range of payment options:

1. Traditional e-commerce payment using a credit or debit card
2. VoicePay® account purchase – purchaser must either hold or create an e-account and must be able to receive a VoicePay® authorisation phone call
3. VoicePay® Secure ID purchase – a number up to 10 digits long is displayed. The purchaser has access either to the VoicePay® VoIP module or chooses or prefers to use their mobile phone to make their purchase.

The payment information the customer supplies is processed, and the result (authorised or declined) is displayed. If the transaction does not authorise, the customer is given the option of trying again (ideally with a different card) or cancelling the transaction.

If the transaction is authorised, or the customer cancels the transaction, then the customer is presented with a “Click here to continue” link to your “Return” URL’s.

3.1 Obtaining the results of the transaction

Using the VoicePay® admin system, you can configure callbacks for each of the three possible outcomes of a transaction (authorised, declined or cancelled)

To configure your callback URL’s, login to the Administration System (<https://secure.voice-pay.com/>). Select *Integration*→*Purchase Settings*:

Store Details	
Store	Test Store (Store ID 1)
Cart Details	
» Hash Type	SHA256
» Secret Key	YourSecret
» Referrer	
» Delivery	None
» Lifetime	10
» Currency List	Enabled
Callbacks	
Authorised	http://yoursite.com/callback1
Failed	http://yoursite.com/callback2
Cancelled	http://yoursite.com/callback3
Password	
Return	
» Authorised	http://yoursite.com/return1
» Cancelled	http://yoursite.com/return2

The VoicePay® server will directly contact the callback URL's given, passing details of the purchase (including the cart_id and amount) back to your site. You can use these details to update your record of the transaction.

These callbacks are not mandatory, and you can leave the URL blank if you do not want a particular callback to happen. For example, you may only want a callback in the event that the transaction was authorised.

NOTE: The 'Failed' callback does not indicate that the transaction will not be processed, only that the attempt just made was not authorised. The customer can try again, perhaps using a different card. Only the 'Authorised' and 'Cancelled' callbacks indicate that processing of the transaction has finished.

Once the transaction is authorised (or cancelled) the customer will be presented with a page showing them the results of the transaction, including the auth code if relevant, and giving them a link to return to your site. This link is taken from the 'Return' section shown above.

Within the configured return URL's, it is possible to include details of the transaction by including parameters after the URL. Note, this is not a secure method of sending this information as it is relayed via the customers browser and could be tampered with.

To do this, include @@[field]@@ in the URL, for example

http://yoursite.com/return.cgi?cart=@ @cart_id@ @&ref=@ @tran_ref@ @

We strongly advise the use of callbacks to return data to your site instead of including it in the return URL. Callbacks are made directly from the VoicePay® server to your site, preventing any user from being able to tamper with the data. Not all fields can be used within the return URL's. Also, the size of a URL is limited, so including too much information in it can cause the link to fail.

Please note that although the callback URL in the illustration uses a standard http connection, we also sending callback messages to secure https connections. We strongly advise that secure connections are used wherever possible.

Callback/Return fields:

Field	Description	Area
store_id	Your VoicePay® Profile (store) ID	Both
cart_id	A reference from your site for this transaction	Both
cart_cost	The cost of the items purchased	Both
cart_currency	The currency code that the purchased is priced in.	Both
cart_desc	The description of the item(s) purchased.	Both

tran_ref	VoicePay® transaction reference	Both
tran_testmode	0 = Live, 1 = Test	Both
auth_status	A = Authorised, C=Cancelled, anything else = failed	Both
auth_code	Authorisation code from the acquiring bank, only sent if auth_status = 'A'	Both
auth_message	Text message describing the authorisation result	Both
error_code	Code indicating why the transaction failed	Both
Check	The security value generated using your chosen hash type and the following parameter values (separated by :) <i>secret_key:cart_id:cart_desc:cart_cost:cart_currency:tran_ref:auth_status</i>	Both
bill_name	Customers name	Callback
bill_address	Customers address	Callback
bill_postcode	Customers post/zip/area code (if supplied)	Callback
bill_country	Customers country	Callback
bill_email	Customers email address	Callback
bill_tel	Customers telephone number (if supplied)	Callback
Password	Optional password as configured in the callbacks section of the merchant admin system.	Callback

The Area column shows if this field is available in callbacks only, return URLs only or both.

3.2 Message Digest

To protect the purchase data from tampering, the transaction request includes a message digest generated from the cart data and a pre-set secret key. One of 3 algorithms can be used to generate this digest – MD5, SHA1 or SHA256.

This digest value is sent as part of the request. The same calculation is then done by the VoicePay® server, and the two digest values are compared. Only if the two digest values match will the transaction be processed.

Each section of data is separated using a ':' character, and the data must be organised in the exact sequence shown, otherwise the check will fail.

`secret_key:store_id:cart_id:amount:currency:test:description`

In the following example, an item costing £13.99 is being sold. This item has a description of "CD Collection" and is being sold by store 1.

`<FORM action="https://secure.voice-pay.com/gateway/standard" method="post">`

```
<input type="hidden" name="store_id" value="1">
<input type="hidden" name="cart_id" value="Cart001">
<input type="hidden" name="amount" value="13.99">
<input type="hidden" name="currency" value="GBP">
<input type="hidden" name="description" value="CD Collection">
<input type="hidden" name="test" value="1">
<input type="hidden" name="check"
  value="a661070510ef18f8ca3d79363705247500d74d31dc5f5518e7cfdbecf1b02372">
<input type="submit" value="Buy now">
</FORM>
```

This store has a pre-set secret key of 'YourSecret'. The security check value was generated using the SHA256 digest algorithm on the following data:

YourSecret:1:Cart001:13.99:GBP:1:CD Collection

Important note: At no time should the actual pre-set secret key used in the digest generation ever be included in any FORM or other web page that is held on your server.

Of the 3 digest algorithms available, SHA256 is the most secure. We would advise using SHA256 where possible. If your system is unable to generate SHA256, then SHA1 should be used. MD5 is the least secure of the digest algorithms, and should not be used if at all possible. The option of MD5 is given only to retain compatibility with older systems that can not generate SHA1 or SHA256 digests.

We also support the possibility of no hashing (select 'None' for the Hash Type menu). Where the HashType of None is selected, you should remove the 'check' parameter from your FORM submission.

NOTE: We strongly advise against the use of no hashing at all.

3.3 Optional Additional Data

If your site already knows information such as the customers' name, address, email or phone number, then this can be included in the purchase request.

The information supplied will be pre-set into the payment FORM, though the user is free to edit this information before proceeding with the transaction.

Field	Use
name	Customers billing name
address	Customers billing address, not including the postcode or country. Multiple lines should be separated using the newline character. The HTML sequence will also be treated as a newline.
postcode	Customers billing post/area/zip code
country	Customers billing country. This must be sent as a 2 character ISO3166 country code.
tel	Customers billing telephone number
email	Customers email address
delv_name	Customers delivery name
delv_address	Customers delivery address, not including the postcode or country. Multiple lines should be separated using the newline character. The HTML sequence will also be treated as a newline.
delv_postcode	Customers delivery post/area/zip code
delv_country	Customers delivery country. This must be sent as a 2 character ISO3166 country code.
delv_tel	Customers delivery telephone number

NOTE: No 'delv_' parameter values are stored by Voice Commerce, should you require any of this information to complete your order, you should retain this information on your own servers..

4 Testing your VoicePay® Integration

You can test your integration using the following test Visa card numbers.

NOTE: These test card numbers can only be used in the test environment.

Card Number	Expiry Date	CVV
4000000000000002	Any valid expiry date, such as 11/2011	123
4111111111111111	Any valid expiry date, such as 11/2011	555