

IGSGateway
The Innovative Gateway Solutions Gateway Interface
Installation and Configuration Notes
(version 1.0.1)

Obtaining the IGSGateway Code

The latest **Snapshot Release** of the **IGSGateway** can be downloaded from the following locations in the **IGSGateway Online Repository**. The current release (at the time of this writing) is **IGSGateway-1.0.1**, but make sure that the latest release is downloaded.

Latest release:

<http://sourceforge.net/projects/igsgateway/files/IGSGateway-1.0.1/IGSGateway-1.0.1.zip/download>

Current Branch: <https://igsgateway.svn.sourceforge.net/svnroot/igsgateway/branch>
Current Snapshot: <https://igsgateway.svn.sourceforge.net/svnroot/igsgateway/tags>
Current Production: <https://igsgateway.svn.sourceforge.net/svnroot/igsgateway/trunk>

System Requirements

The **IGSGateway** has been designed to be used with a **minimum** of the following software release levels:

Software	Minimum Version
PHP	5.2.6
Apache	2.2
ZendFramework	1.7.2

The **IGSGateway** was developed on *Fedora 13* and tested on *Fedora 10* and *Fedora 14* (Linux) using the **ZendFramework** library, version **1.7.2** and Apache 2.2.6. It has been tested on *Microsoft Windows XP Professional*, *Microsoft Windows Vista* and *Microsoft Windows 7* with *WinAMP*, *EasyPHP* and *XAMPP*. It has also been successfully installed and tested on *FreeBSD 7* and *FreeBSD 8* (Unix Server).

IGS Gateway Field Data Specification

Development of the **IGSGateway** is based upon the Innovative Gateway Solution's **Interface Field Data Specification** available at

[http://www.innovativegateway.com/downloads/Interface Field Data.pdf](http://www.innovativegateway.com/downloads/Interface%20Field%20Data.pdf)

Refer to the field data specification for details about field names and content.

Modifications

The downloaded **IGSGateway** must be modified to work on the server upon which it has been installed (URL). Most of the configuration is done in the IGSSConfig.xml module. However, if the ZendFramework library is not included in the php include path, the file Client.php will need to be modified to find the ZendFramework in order to use the IGSSConfig.xml file.

Client Software Modifications

In the **IGSGateway** project, the following files require modification, as follows:

Client.php

Check your php configuration (*include_path* in the **php.ini** file) using a text editor or by using the *phpinfo* command on your web server (look for the *include_path* setting under **PHP Core**).

If the **ZendFramework** library is not in the php include path, and you cannot get access to modify the **php.ini** file, it must be defined in the **Client.php** file.

Open the Client.php file and locate the following lines:

```
--
28 // *****
29 //
30 //      Installation configuration.
31 //
32 // *****
33
34 $production = true;
35 $zend = null;
36
```

Modify **ONLY** the highlighted line, replacing *null* with the absolute path to the **ZendFramework** library directory. This will look something like:

```
28 // *****:
29 //
30 //      Installation configuration.
31 //
32 // *****:
33
34 $production = true;
35 $zend = '/usr/share/php/Zend';
36
```

IGSConfig XML Configuration

The configuration options for the **IGSGateway** are stored in a **Zend_Config_XML** file structure.

?? xml	version="1.0"
▼ e configdata	
e copyright	copyright 2011, EarthWalk Software. Created by Jay Wheeler.
▼ e production	
▶ e form	
e timezone	America/Denver
▶ e gateway	
▶ e options	
▼ e paths	
e installroot	/IGSGateway
e zendlibrary	/usr/local/lib/ZendFramework-1.7.2/library
▼ e development	
a extends	production
▶ e form	
▶ e gateway	
▶ e options	

As can be seen in the image above, the **development** section extends, or overlays, the **production** section if the development option is used. Any fields appearing in this section will override the associated setting in the production section when the development option is used. For further details and an in-depth discussion about how this works, refer to the **Zend_Config_XML** section of the **ZendFramework Programmer's Reference Guide, version 1.7.2**.

The configuration is divided into the following sections for the purpose of discussion:

paths	Installation and library paths.
gateway	IGS Gateway server parameters.
options	Response format options.
form	Transaction specific parameters, such as default values, merchant fields and processing flow.

paths

This discussion refers to the following subsection of the configuration file:

?? xml	version="1.0"
▼ e configdata	
e copyright	copyright 2011, EarthWalk Software. Created by Jay Wheeler.
▼ e production	
▶ e form	
e timezone	America/Denver
▶ e gateway	
▶ e options	
▼ e paths	
e installroot	/IGSGateway
e zendlibrary	/usr/local/lib/ZendFramework-1.7.2/library
▼ e development	
@ extends	production
▶ e form	
▶ e gateway	
▶ e options	

installroot

the absolute path to the installation directory for the **IGSGateway** software.

zendlibrary

the absolute path to the installation directory for the **ZendFramework** library.

gateway

This section describes the gateway characteristics:

?? xml	version="1.0"
▼ <input type="checkbox"/> configdata	
<input type="checkbox"/> copyright	copyright 2011, EarthWalk Software. Created by Jay Wheeler.
▼ <input type="checkbox"/> production	
▶ <input type="checkbox"/> form	
<input type="checkbox"/> timezone	America/Denver
▼ <input type="checkbox"/> gateway	
<input type="checkbox"/> username	gatewaytest
<input type="checkbox"/> pw	GateTest2002
<input type="checkbox"/> upg_auth	zxcvkljh
<input type="checkbox"/> url	https://transactions.innovativegateway.com/servlet/com.gateway.aai.Aai
<input type="checkbox"/> useragent	Mozilla/4.0
<input type="checkbox"/> target_app	WebCharge_v5.06
▼ <input type="checkbox"/> options	
<input type="checkbox"/> response_mode	simple
<input type="checkbox"/> response_fmt	delimited
<input type="checkbox"/> delimited_fmt_field_delimiter	=
<input type="checkbox"/> delimited_fmt_include_fields	true
<input type="checkbox"/> delimited_fmt_value_delimiter	
<input type="checkbox"/> test_override_errors	0

username

IGS assigned **username**.

pw

IGS assigned **password**.

upg_auth

required code. Do not change unless instructed to by Innovative Gateway Solutions.

url

the connection to the Innovative Gateway Solutions Gateway merchant gateway server.

useragent

browser compatibility name - Mozilla/4.0 works fine at this time.

target_app

the current IGS gateway application version string. Currently, this is **WebCharge_v5.06**.

options

The options fields are defined in the Interface Field Data Specification guide from Innovative Gateway Solutions. The option settings should not need changing unless the front-end (**ClientView.php**) is modified, or the **redirectresult** form option (with **redirectraw=1**) is being used:

?? xml	version="1.0"
▼ <input type="checkbox"/> configdata	
<input type="checkbox"/> copyright	copyright 2011, EarthWalk Software. Created by Jay Wheeler.
▼ <input type="checkbox"/> production	
▶ <input type="checkbox"/> form	
<input type="checkbox"/> timezone	America/Denver
▶ <input type="checkbox"/> gateway	
▼ <input type="checkbox"/> options	
<input type="checkbox"/> response_mode	simple
<input type="checkbox"/> response_fmt	delimited
<input type="checkbox"/> delimited_fmt_field_delimiter	=
<input type="checkbox"/> delimited_fmt_include_fields	true
<input type="checkbox"/> delimited_fmt_value_delimiter	
<input type="checkbox"/> test_override_errors	0
▶ <input type="checkbox"/> paths	

response_mode

indicates response location methodology. Should be set to simple.

response_fmt

the return data type.

delimited_fmt_field_delimiter

value of the delimiter separating field names from their values.

delimited_fmt_include_fields

must be set to true.

delimited_fmt_value_delimiter

value of the character used to separate name-value pairs.

test_override_errors

any value with a username of gatewaytest will override errors and force approval.

form

The form settings control the operation of the forms processing by the **IGSGateway**.

?? xml	version="1.0"
▼ <input type="checkbox"/> configdata	
<input type="checkbox"/> copyright	copyright 2011, EarthWalk Software. Created by Jay Wheeler.
▼ <input type="checkbox"/> production	
▼ <input type="checkbox"/> form	
<input type="checkbox"/> formurl	https://localhost/IGSGateway/Client.php
<input type="checkbox"/> rawresult	0
<input type="checkbox"/> usedefaultdata	1
▶ <input type="checkbox"/> defaultdata	
<input type="checkbox"/> merchantinclude	0
<input type="checkbox"/> merchantvisible	0
▶ <input type="checkbox"/> merchantfields	
<input type="checkbox"/> timezone	America/Denver
▶ <input type="checkbox"/> gateway	
▶ <input type="checkbox"/> options	
▶ <input type="checkbox"/> paths	

formurl

This is the *url* address of the **IGSGateway** code.

rawresult

If 0, the internal forms processing is used.

If 1, the received result will be returned without processing.

usedefaultdata

when set to non-zero, indicates that the information in the defaultdata template should be used to pre-fill new input forms. If set to 0, blanks will be used to pre-fill input text fields.

defaultdata

contains a template of field names and values used to pre-fill the input form when **usedefaultdata** is set to non-zero.

These fields are defined in the *Interface Field Data Specification* guide from Innovative Gateway Solutions.

defaultdata	
reference	
trantype	sale
trans_id	
authamount	
cardtype	mc
ccnumber	
ccidentifier1	
month	
year	
fulltotal	
ccname	
baddress	
baddress1	
bcity	
bstate	
bzip	
bcountry	
bphone	
email	

<input type="checkbox"/> merchantinclude	0
<input type="checkbox"/> merchantvisible	0
▼ <input type="checkbox"/> merchantfields	
<input type="checkbox"/> field_capture	
<input type="checkbox"/> xsubjectnotify	
<input type="checkbox"/> xheader	
<input type="checkbox"/> xemailflds	

merchantinclude

If set to 1, special **merchantfields**, which may be pre-filled with the merchant data, are included in the transaction.

If set to 0, do not include special *merchantfields* in the transaction.

merchantvisible

Applies when **merchantinclude=1**.

If set to 1, the **merchantfields** will be *visible on the default input form* for modification.

If set to 0, the fields will be *hidden*, and will contain the information entered into **merchantfields**.

merchantfields

The four available merchant fields can be pre-filled with data by setting the values here. The fields are defined in the ***Interface Field Data Specification*** guide from Innovative Gateway Solutions.

Apache 2.2 Server Configuration Modifications

Add the following to the bottom of the httpd.conf configuration file (or the alias folder), after modifying both Aliases and Directory paths to point to the installation folder on the target server:

```
Alias /IGSGateway/ "/IGSGateway/"

<Directory "/IGSGateway/">
    Options Indexes
    AllowOverride ALL
    Order allow,deny
    Allow from all
</Directory>
```

Restart the Apache server to implement the changes.

PHP 5.2.6 Configuration Requirements

Check your php configuration (*include_path* in the **php.ini** file) using a text editor or by using the *phpinfo* command on your web server (look for the *include_path* setting under **PHP Core**).

If the **ZendFramework** library is not in the php include path, and you cannot get access to modify the **php.ini** file, it must be defined in the **Client.php** file.

Pragmatics

The **IGSGateway** is started by sending an empty HTTP request to

<http://your.server.name/IGSGateway/Client.php>

Alternatively, the IGSGateway can be started by POSTing an HTTP request to the same address.

The processing of a transaction proceeds as follows:

1. If the transaction is not an HTTP POST request containing a field named **submit** with a value of **submit**, the ClientView logic will return a default input form containing **defaultfields**, and optionally **merchantfields**, from the IGSGateway.xml configuration file.
2. If the transaction is an HTTP POST request and it contains a field named **submit** with a value of **submit**, the ClientTransaction logic adds the required **gateway** and **options** configuration data from the IGSSConfig.xml file and passes the transaction to the IGS Merchant Gateway server for processing.
3. The response handling is controlled by the setting of **rawresult**.
 - If **rawresult = 0**, the response is decoded by the Gateway class and passed to the ClientView class to format and display the response in a web page. This is the default action.
 - If **rawresult = 1**, the response is passed through unchanged.

This response behavior is summarized in the following table:

rawresult	Response Action
0	Gateway class decodes response and sends to ClientView for output to web page.
1	Gateway class returns the original response headers and body sent by the Gateway server.