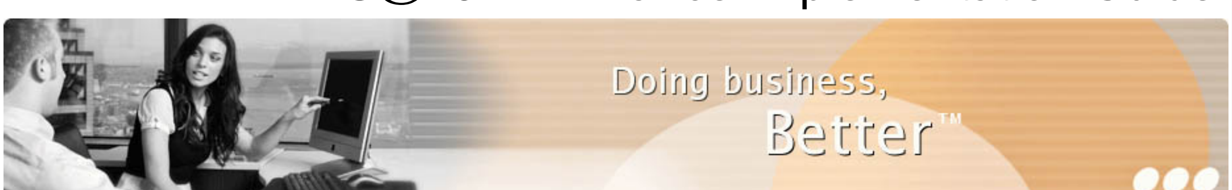
info@hand

Customer Relationship & Business Management

Your complete guide to implementing **info@hand** Finance for QuickBooks.

Learn how to install the QuickBooks Web Connector (QBWC), and **info@hand**'s Finance module. Then configure and administer them both, and initiate and monitor the synchronization between them. This guide takes you step by step through the entire process.

info@hand Finance Implementation Guide



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Disclaimer

While every effort has been made to ensure the accuracy and completeness of information included in this document, no guarantee is given, or responsibility taken, by The Long Reach Corporation for errors and omissions.

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1 Welcome

Thank you for using the **info@hand** Customer Relationship and Business Management (CRBM) System and optional **info@hand** Finance module from The Long Reach Corporation. **info@hand** is designed to help you organise and maintain information which is crucial to many aspects of your business.

- **info@hand** provides integrated management of corporate information on customer accounts and contacts, sales leads and opportunities, plus activities such as calls, meetings, and assigned tasks.
- It tracks financial performance of current projects, and organises a history of all project-related documents, status reports and activities.
- The system also enables sharing of business documents from HR policies to price lists, manages a photographic staff directory, and organises a calendar of scheduled activities.
- The system even offers multiple graphical dashboards to track your sales pipeline, the most successful lead sources, the costs and revenues from ongoing projects, financial performance, service metrics, and more.

Most importantly, the system seamlessly blends all of these capabilities into an intuitive and friendly tabbed interface.

About this Guide

This guide is current with the details of operation for **info@hand** 5.3 and later, in concert with the **info@hand** Finance for QuickBooks module. It is designed to instruct technically capable individuals in the implementation of **info@hand** Finance. This entails the installation of the **info@hand** software itself, the **info@hand** Finance module, QuickBooks Pro/Premier/Enterprise 2006/2007/2008 USA/Canada, and the QuickBooks Web Connector (QBWC). Readers are required to be familiar with the use of a personal computer, and Internet browser software such as Microsoft Internet Explorer or Mozilla Firefox, as well as having a basic familiarity with the Linux operating system, and database principles.

Who Should Read this Guide?

This **info@hand** *Finance Implementation Guide* is intended for system administration personnel who need to install and configure the system as part of its initial implementation. It is not intended for conventional users who wish to record and track company activities and outcomes, or administrators who manage user access to the system – those topics are dealt with in the **info@hand** *User Guide*.

2 Before You Begin

The **info@hand** installation targeted for synchronization with QuickBooks must be accessible via HTTPS – secure HTTP transport using Secure Socket Layer (SSL) encryption. The procedure for enabling this varies according to the operating system and web server platform in use.

For normal (browser-based) usage of the application **info@hand** may also be made available via unencrypted HTTP transport if desired, but communication with QuickBooks requires SSL encryption.

The SSL certificate used may be self-signed or signed by a recognized registrar. The procedure for generating a self-signed SSL certificate and configuring the Apache web server on Linux is summarized at the end of this document.

Overview

Synchronization between **info@hand** and QuickBooks relies on two additional components. The first component is the **QuickBooks Web Connector** (QBWC), published by Intuit to facilitate integration between web-based applications and the QuickBooks client application. This application runs on the same Microsoft Windows server as the primary QuickBooks installation for your company, and communicates with both the QuickBooks application (over COM) and your **info@hand** installation (over SSL-encrypted SOAP).

The second component is the **info@hand Finance for QuickBooks** extension module for **info@hand**. This module supplies the additional web services required by QBWC as well as a configuration interface.

The synchronization process is mediated by the QBWC application, which must actively initiate each sync request with the **info@hand** server. The frequency of this communication is configured within the QBWC application.

3 Installing **info@hand** Finance

This document starts from the assumption that you have already got **info@hand** installed and working, and it has been a productive, stable installation for at least a few weeks. There are a number of common mistakes made when installing **info@hand**, and we'd prefer you to be sure you are past them before going on to involve your accounting system!

The first thing you need to do as you prepare for implementing **info@hand** Finance for QuickBooks is to 'clone' both your **info@hand** and QuickBooks installations, so you are working in a risk-free environment.

Note: There are more than 100 different versions of QuickBooks, many of which we may not even be aware of, so it is critical that the synchronization always be attempted first with cloned installations, not with live installations, and The Long Reach Corporation accepts no support responsibility for those who do not follow this process.

Once you have created clone copies of your QuickBooks and **info@hand** installations, follow the instructions in this guide to link the two, and once the two are running successfully in synchronization, continue doing so for a period of two weeks in parallel with your current processes, until you are confident in the details and reliability of the new process. Then repeat the entire process with your live systems.

QuickBooks Setup

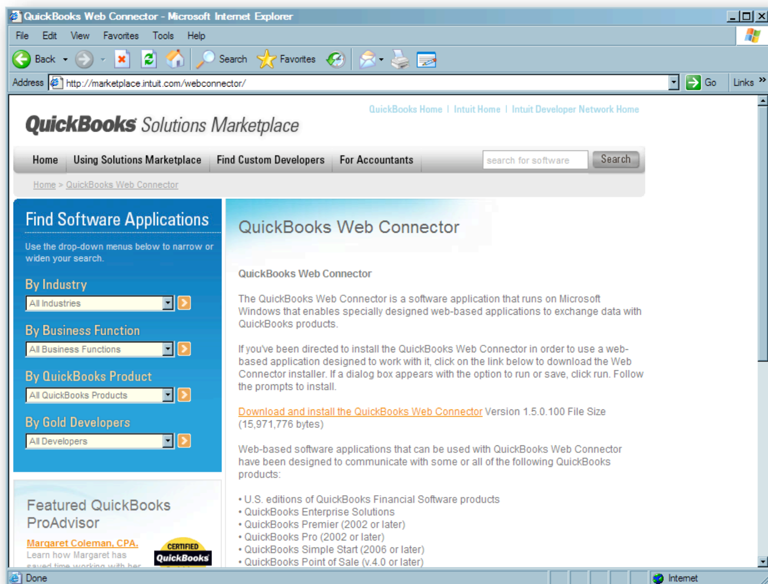
When first configuring and testing **info@hand** Finance for QuickBooks, as mentioned above, we require that you open a duplicate of your standard company file in QuickBooks, in order to allow for an opportunity to verify the data mappings and avoid any data loss. Cloning your QuickBooks database in this manner is a mandatory step in the implementation of **info@hand** Finance for QuickBooks.

In addition, the preferences for your QuickBooks company file may need to be adjusted:

- For US editions of QuickBooks, Sales Tax tracking must be enabled in order to allow synchronization of Estimates (Quotes) and Invoices, otherwise only Account (Customer) and Product (Item) data will be managed. You are also advised to set up standard and corresponding tax rates in both QuickBooks and **info@hand** to simplify the configuration process, if these have not yet been defined.
- For Canadian editions of QuickBooks, we recommend enabling multiple currency support.
- In order to import **info@hand** Quotes, QuickBooks support for Estimates must be enabled.
- For compatibility with the **info@hand** Product Catalog, Inventory Tracking should be enabled in QuickBooks.
- Payment terms, payment methods and shipping providers used in **info@hand** will need QuickBooks equivalents, and vice versa; you may create these manually to simplify the configuration process later.
- The company file may be opened in single or multi-user mode, but in order to link with the Web Connector for the first time, you must be logged in using the QuickBooks administrative user.

Installing QuickBooks Web Connector

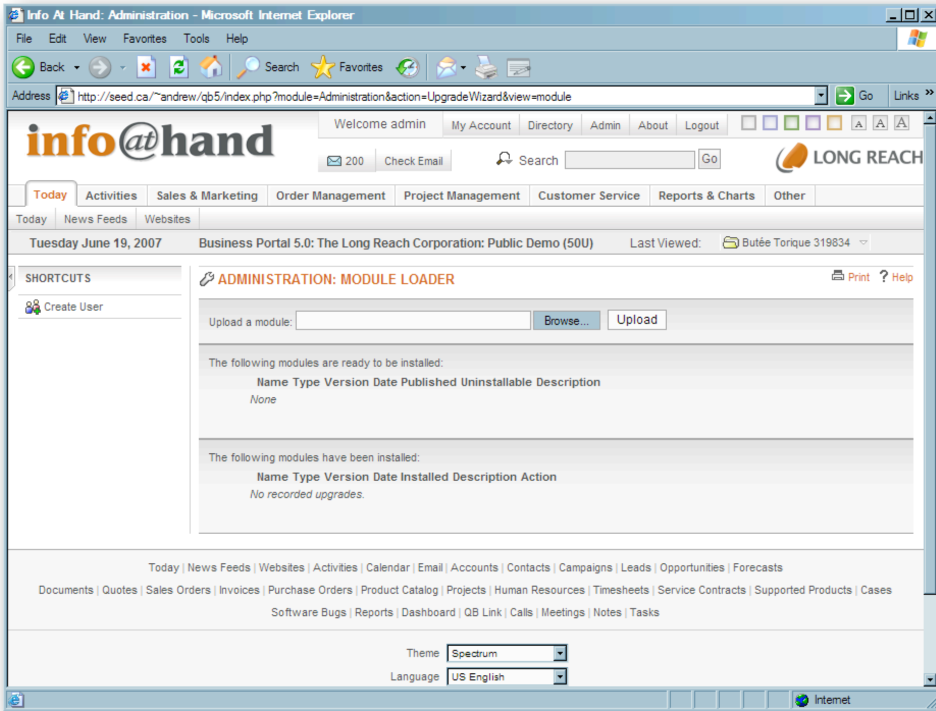
To begin the implementation process, download and install the QuickBooks Web Connector application, available from the QuickBooks Solutions Marketplace at http://marketplace.intuit.com/webconnector/. This page should provide a download link for QBWebConnectorInstaller.exe, which installs QBWC as well as the Microsoft .NET 2.0 library if it has not been previously installed. Versions 1.5.x or 2.0.x of the Web Connector are recommended, and later versions are expected to be equally compatible. However, the earlier 1.0.x release is not supported.



A reference view of the Web Connector download page

Once the Web Connector has been installed, you can move on to the installation of the QuickBooks integration component for **info@hand**. This is performed within the **info@hand** administration interface, and so you must be logged into the application using an account with administrator credentials.

Follow the Admin link at the top of the page, and select Module Loader from the list of Administration actions. On the following page, click the Browse button and select the **info@hand Finance** module installer you have downloaded previously (IAH-5.x-FinanceQB-X.Y-RRRR.zip where X.Y is the **info@hand** Finance release number, and RRRR is the SVN revision number). Press upload, and a record of the uploaded module should appear in the module listing below. Now press the *Install* button to the right of that record, and confirm the module installation. You will then be returned to the Module Loader screen, and a record of the newly installed module should now be displayed in the section for recorded upgrades.

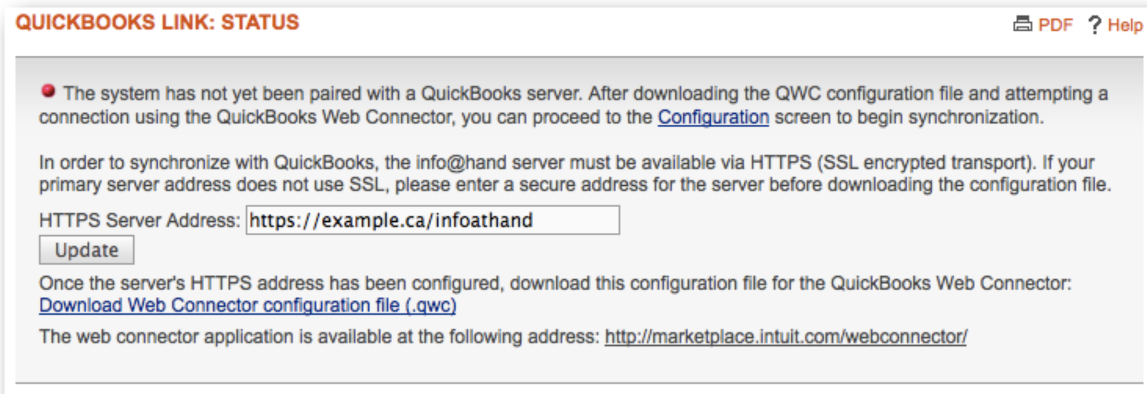


A view of the Module Loader screen before any modules have been added

Downloading the Web Connector Configuration File

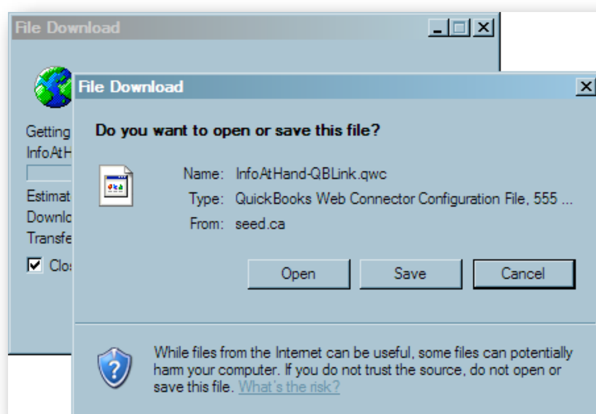
Once the **info@hand** Finance module has been installed, a new **Finance** (**QB)** tab should be visible within the **info@hand** application. If using the Grouped Tabs interface option, this will likely be displayed underneath the catch-all grouped tab **Other**, otherwise it should appear at the very end of the module tab list.

Navigate to the Finance (QB) module and you should see the synchronization status screen. This page displays the status of the synchronization module, allows you to view and update the SSL-enabled address of the **info@hand** server, and provides download links for both the QuickBooks Web Connector application and the **info@hand** Finance configuration file for QBWC. This last link is labelled **Download QWC File**; once the SSL address of the server has been properly configured, follow this link to obtain the QWC file and set up the QBWC with the proper connection details.



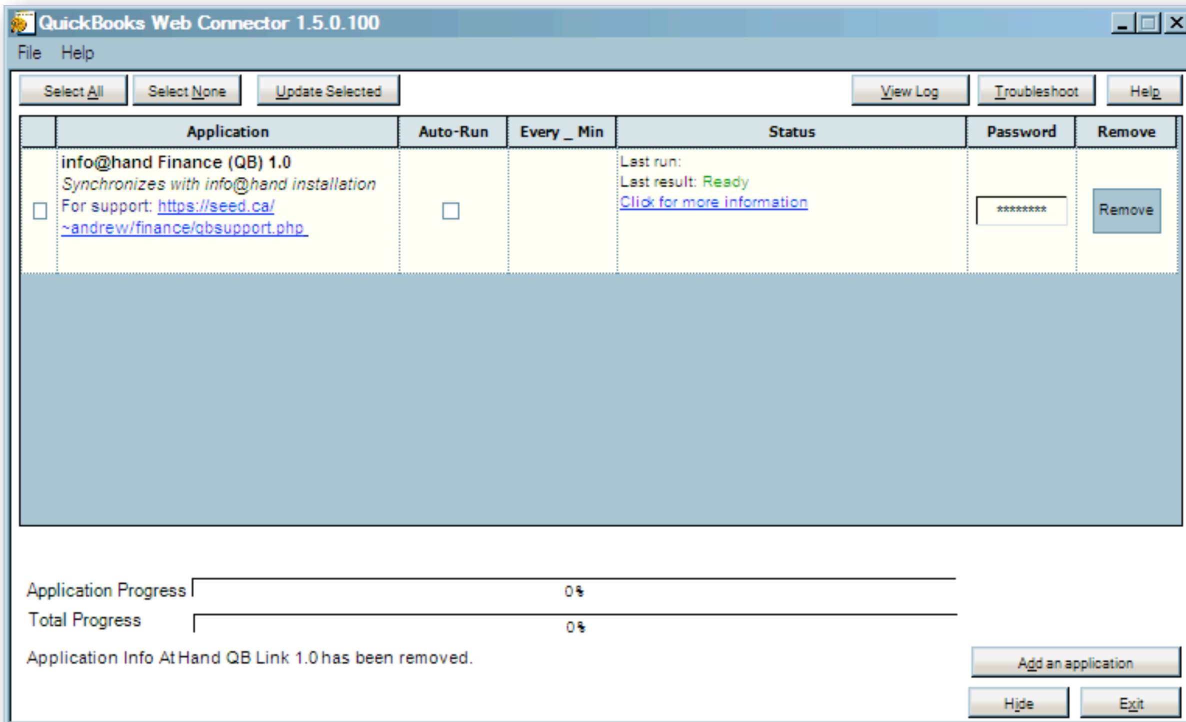
The initial info@hand Finance (QB) status screen

If accessing the **info@hand** application from a browser window on your QuickBooks server, you may simply Open the resulting file in order to load the QuickBooks Web Connector and add this new configuration. Otherwise, you will have to transfer the file (InfoAtHand-QBLink.qwc) to your QuickBooks server before opening it.



Configuring the Web Connector

After opening the .QWC configuration file, the QuickBooks Web Connector application will be launched. You will be prompted for a password – this is the password for your **info@hand** administrator user (the one used to download the configuration file). QBWC will then display the newly-registered **info@hand Finance (QB)** web service, along with some basic configuration options.

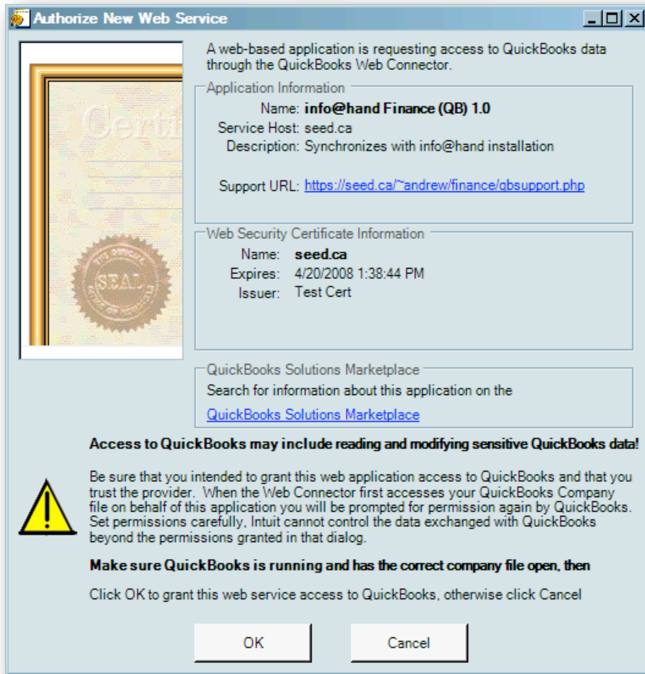


QuickBooks Web Connector with the info@hand Finance (QB) web service displayed

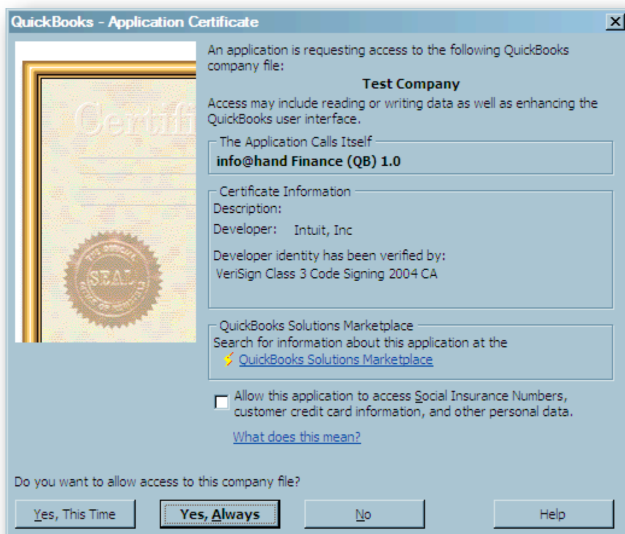
In this window you may configure the run interval for the synchronization process. Until the module configuration is complete, you will probably want to leave **Auto-Run** unchecked, check the **info@hand Finance (QB) 1.3** web service entry and press **Update Selected** to initiate the synchronization procedure manually.

If QBWC displays an error message instead of adding the new web service, the most likely cause is a faulty SSL implementation. If using a self-signed SSL certificate, be sure to import your self-generated certificate authority (CA) certificate into the system registry. In this case it is suggested to place the certificate (.crt or .cer) file on the Windows server desktop, then right-click on the file and select **Install Certificate..** from the resulting pop-up menu.

At this point you should be able to initiate a connection attempt with the **info@hand** server (select and 'Update' the web service). First, ensure you have the QuickBooks application running with the appropriate company file opened. As the Web Connector application attempts to communicate with QuickBooks for the first time, you will be prompted by both QBWC and by QuickBooks itself whether to allow this access. This procedure also asks you to confirm the validity of your web server's SSL certificate.



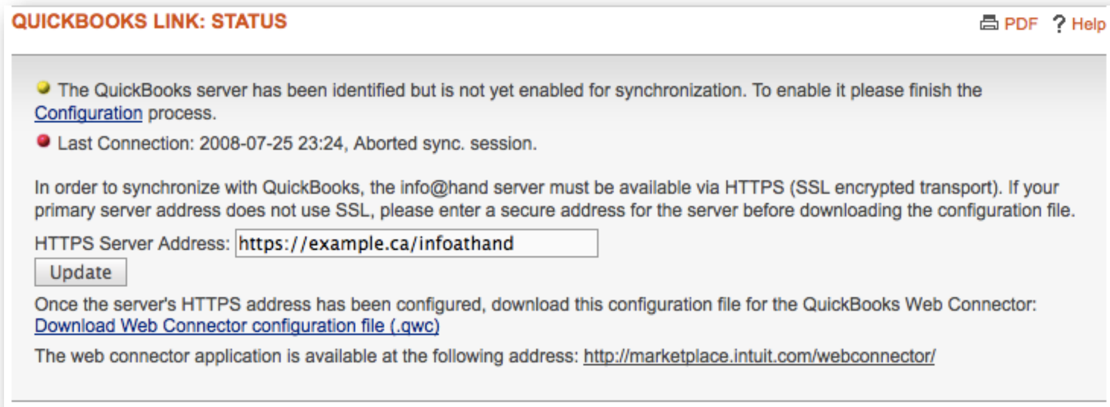
Authorizing QBWC to synchronize with the web service



Authorizing QuickBooks to communicate with the QBWC application

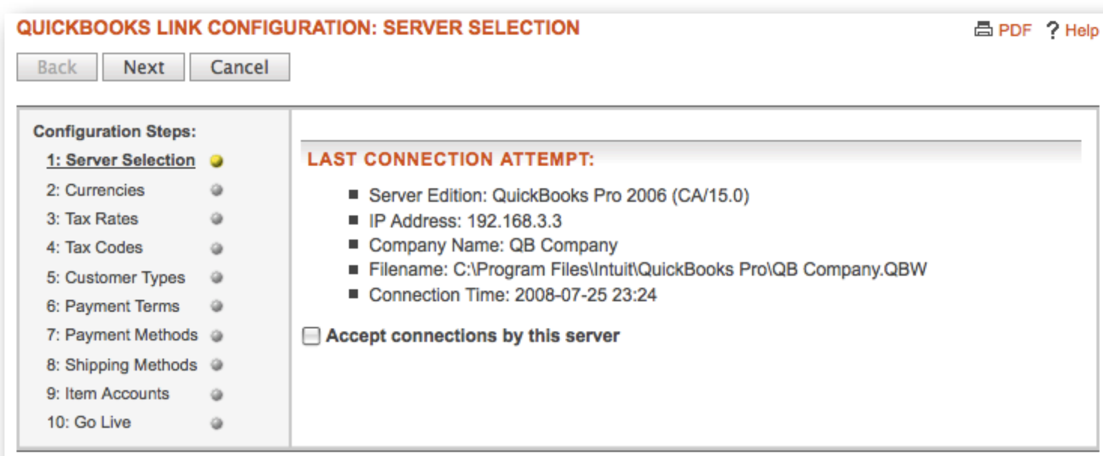
Configuring info@hand Finance

If you now return to the **info@hand** Finance module **Status** screen in a web browser, the status indicator and message should have been updated to an intermediate state. This indicates that a connection attempt has been detected, but configuration is required before full synchronization with the QuickBooks server can be enabled.



The Status screen after a successful connection attempt

You may now proceed to the **Configuration** page where you will be prompted to accept synchronization with the QuickBooks server. Check the details of the server information to ensure the correct server and company information are displayed before selecting the check-box and continuing on to the next step of the configuration.



The first Configuration screen after a successful connection attempt

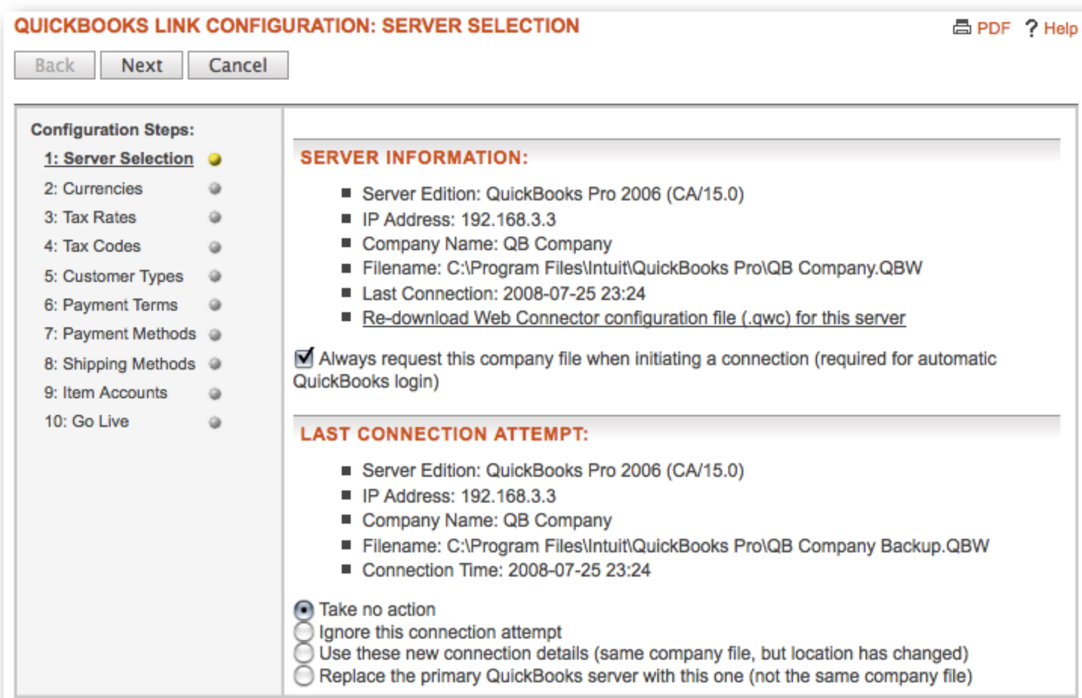
Automatically Opening the Company File

In order to allow automatic syncing between QuickBooks and **info@hand** Finance, there are two simple requirements. First, you must select the checkbox on the first Configuration screen labeled, "**Always request this company file when initiating a connection (required for automatic QuickBooks login)**". When checked, the Web Connector will attempt to open the specified company file whenever a sync is begun. For this operation to succeed the company file itself must be configured for automatic login when being accessed by **info@hand** Finance. This may be configured under the Integrated Applications panel of the QuickBooks company file preferences.

Note: Because the Web Connector relies on communicating with QuickBooks, a graphical application, it cannot be run as a Windows service. To support automatic synchronization despite reboots of the server, you will need to configure the operating system to log in automatically, ideally as a user with the minimum privileges to access the QuickBooks company file and execute the the Web Connector.

Unrecognised Connection Attempts

During the course of configuring **info@hand** Finance, or as a result of maintenance operations, the QuickBooks company file may fail to be recognised. Under these circumstances a second section will appear on the first Configuration page, Server Selection. The *Last Connection Attempt* section shows the details of the last attempted connection by a server or company file which was **not** identifiable as the current recognised server. Synchronization with the new server or company file will **not** proceed unless this situation is resolved, although any later connections by the primary server will continue to be processed normally.



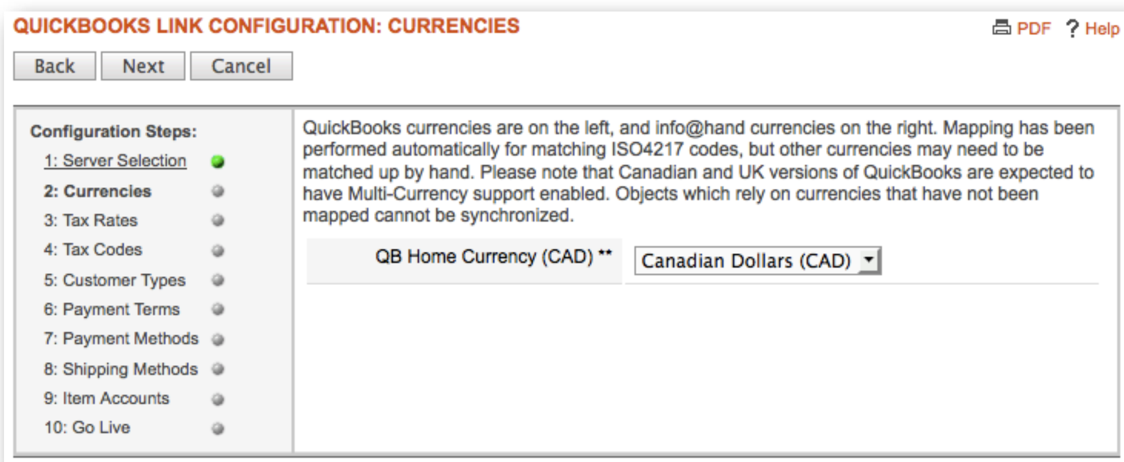
The first Configuration screen after an unrecognised connection attempt

Each QuickBooks server is uniquely identified by the combination of its filename and its Owner ID and File ID properties; the IP address and software version are allowed to vary. Every new .QWC (QuickBooks Web Connector configuration) file downloaded from the module Status page will contain a unique File ID, and so loading a new .QWC file into the Web Connector before running the synchronization process will produce this result. Moving or renaming the QuickBooks file will also require re-verification of this step.

Resolving this situation is straightforward, but requires some attention to detail. The options for handling the unrecognised connection attempt are as follows:

- **Take no action**
  This is the default option, and produces no change in configuration. The last connection attempt will remain visible and other options may be chosen later.
- **Ignore this connection attempt**
  If the details of this connection indicate an authorized connection attempt, or an accidental connection using the wrong company file, then you may safely choose to ignore (and hide) it.
- **Use these new connection details**
  If your company file has simply been moved or renamed, then select this option in order to allow synchronization to pick up where it left off. Please note that if you have in fact opened a new or different company file then this is not the right option.
- **Replace the primary QuickBooks server with this one**
  Only when you are in fact attempting to connect with a new company file and forget the old synchronization state, select this option. All records of transferred data will be forgotten as long as the new connection is active. This change of server may be reverted by opening the old company file and attempting another Update using the Web Connector, but sustained synchronization with multiple servers is not supported.

Completing the Configuration



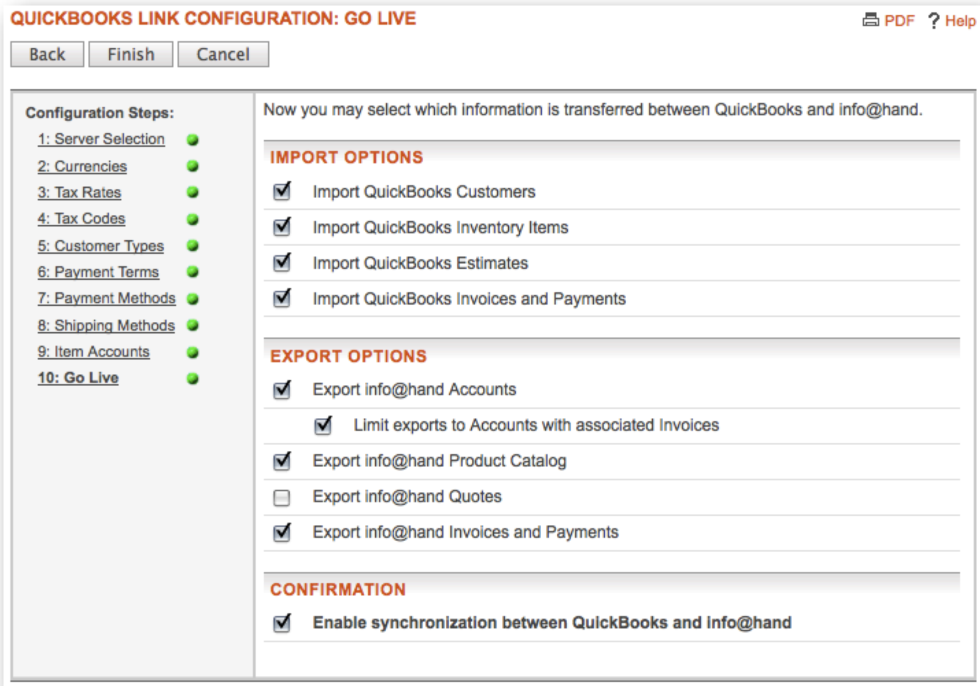
Configuring currency mapping between QuickBooks and info@hand

Complete the configuration steps by mapping QuickBooks records to **info@hand** ones. Certain mappings are required in order for the synchronization to proceed:

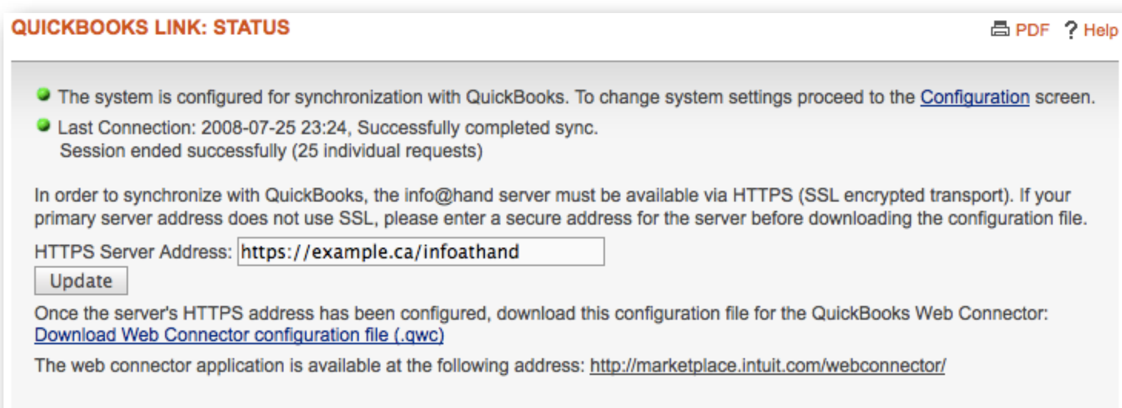
- Objects which rely on unmapped currencies, tax codes or tax rates, payment terms or shipping methods can not be transferred until the required mappings are configured. This means, for example, that an Invoice priced in Euros cannot be exported to QuickBooks unless the Euro currency has been associated with its QuickBooks equivalent.
- All "Item Accounts" are currently required. If you do not have appropriate financial Accounts defined within your QuickBooks company file then they will need to be created. After creating the new Accounts in QuickBooks, run the Web Connector update process again in order to make them available inside the Configuration panel.

- The **info@hand** payment type list may need to be updated to allow a proper mapping and export of Payments. The standard payment type list (**terms_dom**) can be edited using the Dropdown Editor, and does not normally distinguish between different credit card types - it groups them all under the *Credit Card* option.

Once you have completed all the configuration steps, the last step will prompt you to enable synchronization with this server. You can select which specific data types are to be transferred in each direction (either only imported, only exported, or both imported and exported). By checking this box and finishing the setup, you enable the two systems to transfer data freely each time the synchronization process is invoked by the QuickBooks Web Connector.



The final info@hand Finance Configuration screen



The Status screen after the Configuration process has been completed

The Synchronization Process

Once the server has been identified and properly configured, the next Update run by the QuickBooks Web Connector will begin the transfer of business data between QuickBooks and **info@hand**. Data is transferred in a predictable sequence:

- First, the QuickBooks Items must be merged with the **info@hand** Product Catalog, Assemblies, and Discounts lists. Standard Items are created in QuickBooks in order to represent **info@hand**'s manually edited line items and shipping costs.
- Next, QuickBooks Customers are synchronized with the **info@hand** (Customer) Account list; these are imported in alphabetical order.
- Finally, QuickBooks Estimates, Invoices and Received Payments are brought into **info@hand**, followed by any additional Quotes, Invoices and Incoming Payments stored in **info@hand** being transferred to QuickBooks. Objects to be imported from QuickBooks are first registered (with a status of Pending Import) and then retrieved in detail during a later stage.

Please note that a single Update via the Web Connector is limited to 5,000 individual requests, and so installations with large amounts of data may be required to run the process several times before these initial steps have been completed.

Once the initial synchronization is complete, only updated records in either application will need to be transferred.

In certain environments it may be desirable to enable synchronization in only one direction - either to only export data to QuickBooks, or to only import from QuickBooks to **info@hand**. This is supported, with minor caveats:

- If Importing from QuickBooks is disabled, then records on the QuickBooks side can be modified independently and the changes will *not* be recognised in **info@hand**. On the other hand, later modifications to the record in **info@hand** can still trigger a subsequent update of the QuickBooks record, overriding any changes since the previous export, unless synchronization of that record is manually disabled (see the **Disable Sync** operation under *Inspecting the Sync*).
- Similarly, if Exporting to QuickBooks is disabled, then imported objects may be freely modified in **info@hand**, but risk having their changes overwritten if the related object is later modified in QuickBooks and then (automatically) re-imported. In either of these cases, there is no guarantee that **info@hand** and QuickBooks will both have consistent data, unless editing on one side is disallowed by company policy.
- It is possible to enable the synchronization in stages, for example by only exporting data or only importing, then later activating the other direction as well. Similarly, you may decide to sync only Accounts, and only later activate Quote/Estimate and Invoice syncing. Please be aware, however, that disabling one or more aspects of the synchronization will not undo previous data transfers.

Data Restrictions

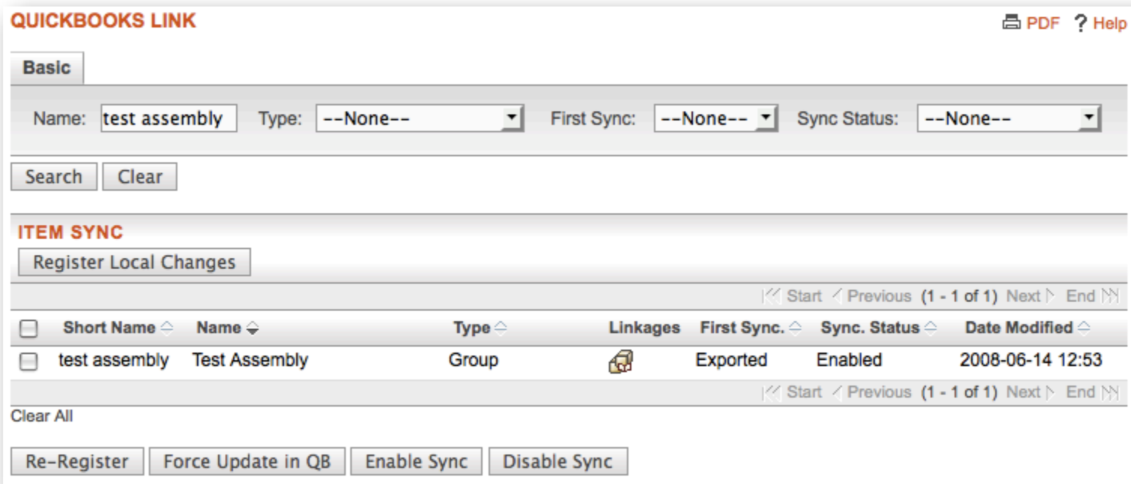
There are certain conditions which may act as obstacles to the synchronization. The majority of these are caused by incompatibilities between the **info@hand** and QuickBooks data models. The known restrictions are listed below:

- **info@hand** treats Assemblies, Products, Discounts, and Tax Rates independently, while QuickBooks merges them into a single *Item* list. This means that the unique identifiers for these objects must be unique between all these related collections, for objects that are to be transferred to QuickBooks. For Products and Assemblies the unique identifier used is the **Manufacturer's Part Number**. For Discounts and Tax Rates, the **Name** is used. So this means, for example, that you may not have the same Manufacturer's Part Number used for both an Assembly and for a Product, if you expect to be able to synchronize them both with QuickBooks.
- Because of a QuickBooks restriction, the unique identifiers for data in the modules listed above must furthermore be limited to **31 characters** in length. This is significantly less than the standard field length for these fields in **info@hand**. Before attempting a synchronization process, both the uniqueness and length of these fields may need to be rectified. A procedure for dealing with these issues is described in the next section.
- *Entity* names in QuickBooks must also be unique. Currently, this means that an existing *Customer*, *Vendor*, *Employee*, or *Other Name* in QuickBooks may prevent the export of an **info@hand** Account into QuickBooks if the two happen to share the same name (the comparison is case-insensitive). *Entity* (and hence **info@hand** Account) names are limited to **41 characters**.
- Products in the **info@hand** Product Catalog are exported as either Inventory or Non-Inventory items in QuickBooks depending on their *Inventory Tracking* setting. Products with a *Manually Updated* or *Automatically Adjusted* inventory quantity will be exported from **info@hand** to QuickBooks as Inventory Items.

  Note: It is not possible to change the Inventory or Non-Inventory status of an item in QuickBooks once it has been synchronized from **info@hand** and used in an Invoice, so you must make *absolutely* sure that all the Products in your **info@hand** Product Catalog have the correct setting for *Inventory Tracking* before you perform a sync. And once you have your trial sync complete, be sure to check all the items in QuickBooks have the desired Inventory or Non-Inventory status before you proceed with your production sync.
- Quotes and Invoices may only be transferred to QuickBooks if their currency matches that of the associated Billing Account. Likewise, Payments must match the currency of their associated Invoices to be exported from **info@hand** to QuickBooks.
- Various non-English characters are automatically replaced with their ASCII (non-accented) equivalents if possible, or a question mark otherwise, when exporting data to QuickBooks.

Inspecting The Sync

You may inspect the current state of the shared data on a record-by-record basis using the *Entity Sync*, *Item Sync*, and *Estimate/Invoice Sync* links in the **info@hand** Finance module shortcut menu. Search filters are provided at the top of this panel in order to filter records by name, type, or sync direction, and isolate any records that have sync issues.



Inspecting the current state of Item synchronization

On this screen the Type column holds the type of the record as represented in QuickBooks, while the Linkages column contains small icon links to the related records in **info@hand**. First Sync may be one of the values:

- **Imported**: Objects brought in from QuickBooks;
- **Exported**: Objects sent to QuickBooks; or
- **Not Synced**: Objects which have not yet been transferred in either direction.

The Sync. Status column contains one of several values:

- **Enabled**: The object has been previously transferred, and is ready to be updated again if and when necessary.
- **Pending Import**, **Pending Export**, **Pending Update**: The specified operation (*import*, *export*, or *update*) is due to be performed on the next sync, if possible. The *Pending Update* state has the further implication that the related **info@hand** object will override any changes on the QuickBooks side.
- **Import Error**, **Export Error**, **Update Error**: The specified operation failed in a non-recoverable way. To re-enable synchronization of this object once the reason for the error has been resolved, use the *Enable Sync* button described below.
- **Import Blocked**, **Export Blocked**, **Update Blocked**: The specified operation would be performed at the next synchronization, but something about the current state of the server configuration or the related object is preventing it. In this case you can hover the mouse over the comment icon next to the Sync. Status in order to see a brief description of the issue.

The *Register Local Changes* button on these screens may be used to trigger registration of new and updated objects in **info@hand**; this same operation is also performed on every sync. Below the list are four more buttons for record-level operations. Each of these operates on the records selected (checked) in the list above.

- **Re-Register**: This operation will look up the **info@hand** object(s) associated with the selected synchronization records, and updates the registered object name and synchronization status if necessary. When an *export* or *update* action has been previously blocked by the presence of incompatible data, this operation can be used to verify that the blocked action is now possible. For example, if a Product has a Manufacturer's Part Number longer than 31 characters it will be registered with a Sync. Status of *Export Blocked*. In this case the proper course of action is to edit the associated product, assign a shorter part number, Re-Register the record on this page, and verify that the status has been changed to *Pending Export*.
- **Force Update in QB**: This operation changes the Sync. Status of the selected records to *Pending Update*, and has the effect of overriding any un-synchronized changes in the QuickBooks company file. Upon the next synchronization, the QuickBooks record will be updated using the related **info@hand** object details.
- **Enable Sync**: This operation is used to cancel the *Error* status for selected records, which may come about as a result of an unexpected issue during the synchronization. Upon the next sync the failed action will be re-attempted. This operation can also be used to re-enable synchronization when it has been explicitly disabled using the *Disable Sync* operation.
- **Disable Sync**: To prevent exporting or updating of a record in QuickBooks, this operation may be used to change the Sync. Status of the selected records to *Disabled*.

4 SSL Certificates

Creating a Self-signed Certificate in Linux

In a new directory:

1. Create an RSA private key.
   `openssl genrsa -des3 -out server.key 1024`
2. Create a certificate signing request.
   `openssl req -new -key server.key -out server.csr`
   The Common Name given must correspond to the host name of the server.
3. Create an RSA private key for your private certificate signing authority (CA).
   `openssl genrsa -des3 -out ca.key 1024`
4. Create a self-signed certificate from your CA private key.
   `openssl req -new -x509 -days 365 -key ca.key -out ca.crt`
   In this case the Common Name is a plain identifier for the server.
5. Copy apps/{demoCA, openssl.cnf} from the OpenSSL distribution to the working directory.
6. Sign the server's private key with self-generated CA's certificate, as per the signing request.
   ```
   openssl ca -policy policy_anything -config openssl.cnf -cert ca.crt
   -in server.csr -keyfile ca.key -days 365 -out server.crt
   ```
7. Generate a second key file with no password to avoid prompting at Apache startup.
   ```
   cp server.key server.key.withpasswd
   openssl rsa -in server.key.withpasswd -out server.key
   ```

Sample Apache Configuration for SSL

In `httpd.conf`, comment the Port setting:

```
  # Port 80
```

Uncomment the following lines:

```
LoadModule ssl_module         libexec/httpd/libssl.so
AddModule mod_ssl.c
```

The Server name must match the SSL server certificate Common Name:

```
ServerName iahserver.local
```

Add a version of the following (with custom settings appropriate for your server) to the end of this file.

```
<IfModule mod_ssl.c>

  Listen 80
  Listen 443

  # Some MIME-types for downloading Certificates and CRLs
  AddType application/x-x509-ca-cert .crt
  AddType application/x-pkcs7-crl .crl

  # Initial Directives for SSL

  # Enable SSLv3 but not SSLv2
  SSLProtocol all -SSLv2
  SSLPassPhraseDialog builtin
  SSLSessionCache dbm:/var/run/ssl_scache
  SSLSessionCacheTimeout 300
  SSLMutex file:/var/run/ssl_mutex
  SSLRandomSeed startup builtin
  SSLLog /var/log/httpd/ssl_engine_log
  SSLLogLevel info

  ##
  ## SSL Virtual Host Context
  ##
  <VirtualHost 127.0.0.1:80>
    # Just to make this explicit
    DocumentRoot "/var/www/html"
    ServerName iahserver.local
    ServerAdmin admin@iahserver.local
    SSLEngine off
  </VirtualHost>
  <VirtualHost 127.0.0.1:443>
    # General setup for the virtual host
    DocumentRoot "/var/www/html"
    # ServerName must match the server you entered into the CSR
    ServerName iahserver.local
    ServerAdmin admin@iahserver.local
    ErrorLog /var/log/httpd/error_log
    TransferLog /var/log/httpd/access_log
    # SSL Engine Switch:
    # Enable/Disable SSL for this virtual host.
    SSLEngine on
```

```
    # enable SSLv3 but not SSLv2
    SSLProtocol all -SSLv2
    SSLCipherSuite ALL:!ADH:!EXPORT56:RC4+RSA:+HIGH:+MEDIUM: \
      +LOW:+SSLv2:+EXP:+eNULL
    # Path to your certificates and private key
    SSLCertificateFile /etc/httpd/ssl.key/server.crt
    SSLCertificateKeyFile /etc/httpd/ssl.key/server.key
    <Files ~ "\.(cgi|shtml|phtml|php3?)$">
      SSLOptions +StdEnvVars
    </Files>
    <Directory "/var/www/cgi">
      SSLOptions +StdEnvVars
    </Directory>
    # Correction for browsers that don't always handle SSL
    #  connections well
    SetEnvIf User-Agent ".*MSIE.*" \
      nokeepalive ssl-unclean-shutdown \
      downgrade-1.0 force-response-1.0
    # Per-Server Logging:
    # The home of a custom SSL log file. Use this when you want a
    # compact non-error SSL logfile on a virtual host basis.
    CustomLog /var/log/httpd/ssl_request_log \
      "%t %h %{SSL_PROTOCOL}x %{SSL_CIPHER}x \"%r\" %b"
  </VirtualHost>
</IfModule>
```

5 System Software Compatibility

Compatible Versions of OS, Web Server, MySQL, PHP

Stack Components	Versions	Comments
Operating System		
Linux	*Any distribution: Red Hat RHEL or Fedora, Suse, Gentoo, etc..*	*Any version that runs PHP will work fine.*
Windows Server	*2000, 2003, 2008*	
Mac OS	*X*	
Web Server		
	Apache 1.3.x, 2.0.x, 2.2.x	*Supports any version that runs PHP*
	Internet Information Server (IIS)	*Not Supported*
Database		
	MySQL 4.1.2 or higher	*MyISAM Tables required*
	Microsoft MS-SQL	*Not Supported*
PHP		
	5.1.0, 5.1.2, 5.1.4, 5.1.6	
	5.2.0, 5.2.4, 5.2.5, 5.2.6	
Browser		
	IE 6.x, IE 7.x. IE 8.x	
	Safari 3.x, 4.x	
	Firefox 1.x, 1.5.x, 2.x, 3.x	

Note: MySQL 4.1.2 or later is required. In **info@hand** 5.3, all data is now stored in UTF8 and MySQL 4.1.2 is the oldest MySQL release that supports all of the UTF8 functionality required.

Recommended Stacks

Linux Stack

- PHP version 5.2.6
- MySQL 5.0.67
- Apache 2.2.10
- RedHat Fedora Core 10

Windows Stack

- PHP version 5.2.6
- MySQL 5.0.51b
- Apache 2.2.9
- Microsoft Windows Server 2003

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