

iabol Sync Integration

iabol Sync is an integration tool that is available for local installation. This tool is designed to use the iabol Data API technology to upload orders into iabol. These orders are then staged for processing. This workflow will support either single piece processing or batch processing.

iabol Sync includes plug-ins for: address book import, Microsoft Outlook, flat file, XML and ODBC order import. This tool is ideal for customers that have a basic integration setup or would like the flexibility to update the import mapping and scheduling imports. This tool is easy to use and available for installation upon request or within the Manage Feature section within iabol.

The purpose of this document is to provide an instructional guide for the Flat File map type. This illustration will be similar for the other supported plug-ins.

Configuring the Flat File Map:

The file flat plug-in is the most commonly used plug in. The flat file format supports both TXT and CVS formats.

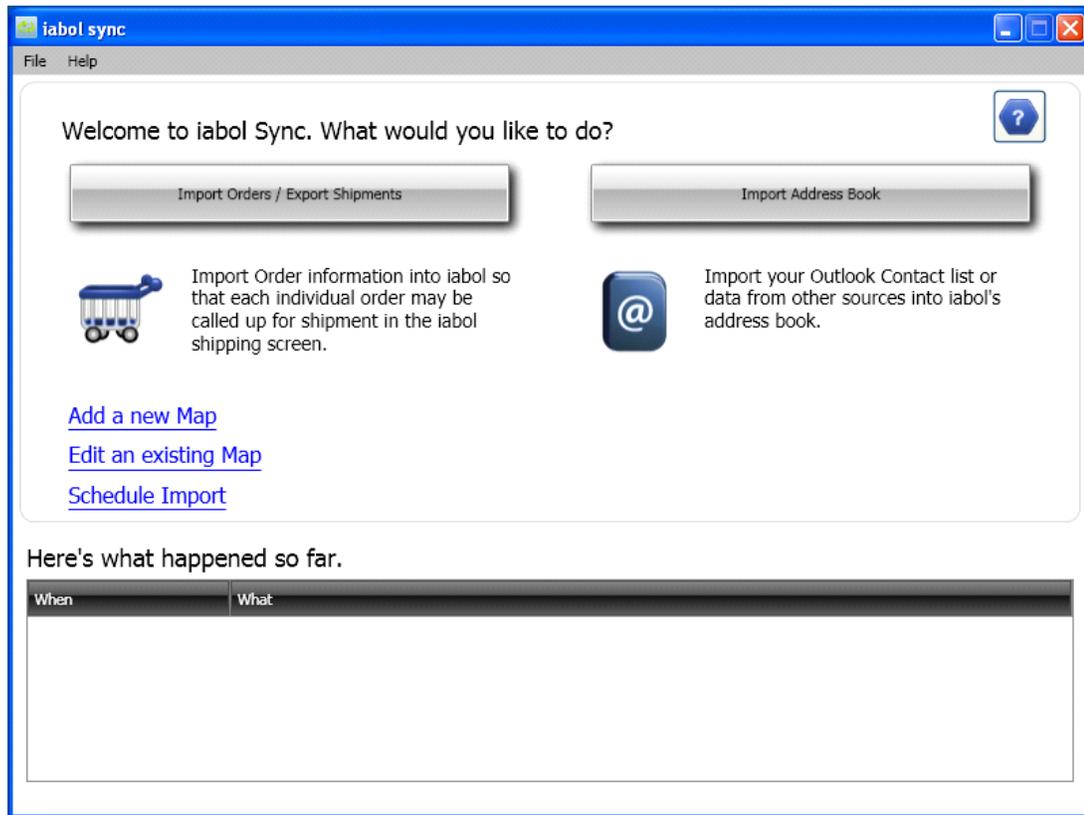
- After installing the tool, click on the iabol Sync shortcut on the desktop.



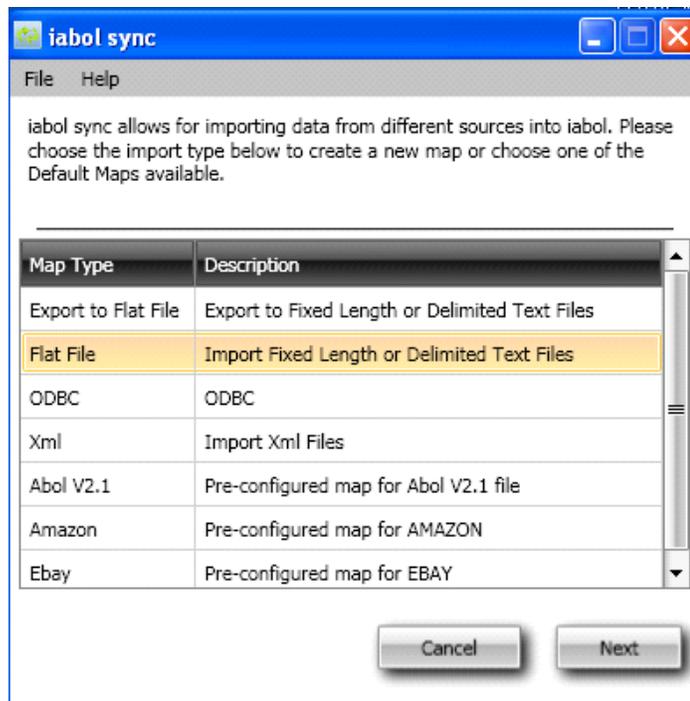
- Logon window will pop up, please provide the Username, Password and click on 'Login'. The credentials for this will be the same as the iabol login.

A screenshot of the iabol sync login window. The window has a blue title bar with the text 'iabol sync' and standard Windows window controls. The main area is white and contains the iabol sync logo (a green circular arrow icon) and the text 'iabol sync'. Below this, it says 'Please login using your iabol username and password.' There are two input fields: 'Username' and 'Password'. A 'Login' button is located at the bottom right of the window.

- The following screenshot displays the Homepage. This offers the available features within the iabol Sync tool and displays the recent activity. Since there currently is no map available, select 'Import Orders / Export Shipments'.



- A new window is popped up for the user to choose from the Map Types. There are pre-configured maps as well for Amazon and EBay but I will focus mainly on the Flat File in this User Guide.



- After choosing the Flat File map type, click on 'Next' button. This step is dedicated to configuring the importing method.

The screenshot shows the 'Flat File Map Creation' dialog box in the 'iabol sync' application. The dialog has a blue title bar with the application name and standard window controls. It features a 'File' and 'Help' menu bar. The main area is titled 'Flat File Map Creation' and contains a text input field for the map name, a 'Source File' input field with a 'Choose' button, and radio buttons for 'File Type' (Delimited and Fixed Length). Below these are radio buttons for 'Duplicate Data Handling' (Always Insert, Do Not Insert Duplicate Records, Update Existing Record (Existing Batch), and Update Existing Record (New Batch)). At the bottom, there are checkboxes for 'Allow for partial File Imports. Skip bad Records' and 'Limit the number of records within a single batch to not more than:' followed by a small text input field. 'Cancel' and 'Next' buttons are at the bottom right.

- Enter the name for the map. This will be the name that will be used to execute this import map.
- Browse to the file which will be used for the layout and the mapping for the shipment data.
- Select the type of file format for Delimited or Fixed Length formats.
- Select the type of duplicate handling that should be used:
 - *Always Insert* – each order will be treated independently and will be uploaded into iabol
 - *Do Not Insert Duplicate Records* – the reference number that is uploaded must be unique
 - *Update Existing Record (Existing Batch)* – the previous order with the same reference number would be updated within the prior batch

- *Update Existing Record (New Batch)* – the previous order with the same reference number would be updated and would be included within the new batch
 - Exception Handling:
 - Allow for partial File Imports – this option is to allow the import to ignore any of the orders that may be poorly formatted and cause the import to fail. This allow for these orders to be handled on a one-off basis rather than requiring the error to be handled prior to import.
 - Batch Limit – this option is available for those shippers uploading a large data file and would like the file separated into smaller segments. This allow for smaller processing units and is suggested for customers using a laser printer.
Example: Specify 50 records in a file. This will only allow 50 shipments per batch from the file. For example: if you have 200 records in the file, 4 batches of 50 shipments will be uploaded to the staging environment.
 - Select 'Next' when completed.
- The next step is dedicated to specifying the data source layout.
Hint: Providing a header row in the file helps with the mapping of the fields.

The screenshot shows the 'iabol sync' application window. The title bar includes the application name and standard window controls. Below the title bar is a menu bar with 'File' and 'Help'. The main content area contains the following text: 'We need a little information about the file you are importing. Choose from the options below or enter your specific criteria in case the pre-populated values don't apply to your import. Click on [Preview] to validate your settings.' To the right of this text is a blue question mark icon. Below the text are several input fields: 'Row Delimiter' set to 'End of Line', 'Col. Delimiter' set to 'Comma {','}', 'Text Qualifier' set to 'Double Quotes {""}', and 'Skip Rows' set to '0'. There are two checkboxes: 'File contains a header row that has the column names in it' (checked) and 'Allow for importing data into multiple shippers (see Help)' (unchecked). A 'Preview' button is located to the right of the input fields. At the bottom of the window are 'Back' and 'Next' buttons.

- Always click on 'Preview' to validate your settings. Click on 'Next'.

- The next step is dedicated to mapping the fields in the import file to the fields available within iabol for processing.

File Help

Use this screen to map your fields from your source to the iabol layout. Please refer to the Help section in case this screen is confusing

QA_Test

Add Virtual Column Add Script Notification

| Source Column | Destination Column (iabol) | Transformation |
|---------------|-----------------------------|----------------|
| Orderid | <input type="text"/> Lookup | Add |
| weight | <input type="text"/> Lookup | Add |
| Shiptoname | <input type="text"/> Lookup | Add |
| shiptoattn | <input type="text"/> Lookup | Add |
| shiptoaddr1 | <input type="text"/> Lookup | Add |
| shiptoaddr2 | <input type="text"/> Lookup | Add |
| shiptocity | <input type="text"/> Lookup | Add |
| shiptostate | <input type="text"/> Lookup | Add |
| shiptozip | <input type="text"/> Lookup | Add |
| shiptocountry | <input type="text"/> Lookup | Add |

Preview Cancel Save Map Save Map and Import File

Mapping Features:

- *Source Column* – is the corresponding column header from the source file.
- *Destination Column* – the iabol field that this value will be mapped to.
- *Lookup* – the list of available iabol fields to map the data to. The list is provided below. As you will see, the available lists are grouped into categories for ease, identify the field and use. The remaining fields are general shipment fields that can be mapped to.

Please choose your destination column from the list below. Double click on the column you want to select to get back to the previous screen.

Order

- ▶ ShipFromAddress
- ▶ ShipToAddress
- ▶ Multipiece
- ▶ LineItem
- ▶ LabelStrings
- AccountNbr
- CustManifestNbr
- TrailerNbr
- ReferenceNbr
- ShipDate
- Weight
- ShipRef1
- ShipRef2
- ShipRef3
- ShipRef4
- ShipRef5
- ShipRef6

- *Transformation* – provides the ability to update the source data when the specified value matches the source value. This provides an easy way to manage system differences or providing mass updates. Example: needing to translate an internal service name (Ground) to the iabol service name (UPS Ground – 4008).

Other Features:

- *Add Virtual Columns*: Adds a virtual column to the file to store a value which will be static instead of making a new map for each file layout. Example: all of your products are manufactured in the United States, so you can default your country of manufacture field to US.
- *Add Script*: Allows for C# scripting manipulating data across all fields. This is especially helpful when trying to define routing logic for a variety of conditions. Example below:

If the weight is less than 1lbs ship it via Service 1

If the weight is above 3lbs and the Package ID starts with "AB" then ship via Service 2

If the weight is above 3lbs and the insurance amount is >\$500 then ship via Service 3

Otherwise ship via Service 4

Resource for scripting support: <http://msdn.microsoft.com/en-us/library/618ayhy6%28VS.80%29.aspx>.

- *Notification*: Allow for generating email notification for a successful upload or errors.

Use this screen to configure the notification settings for this import Map

Send Email only when an Error occurred

Send Email on Error or Success

Send From Email Address: johndoe@emailsite.com

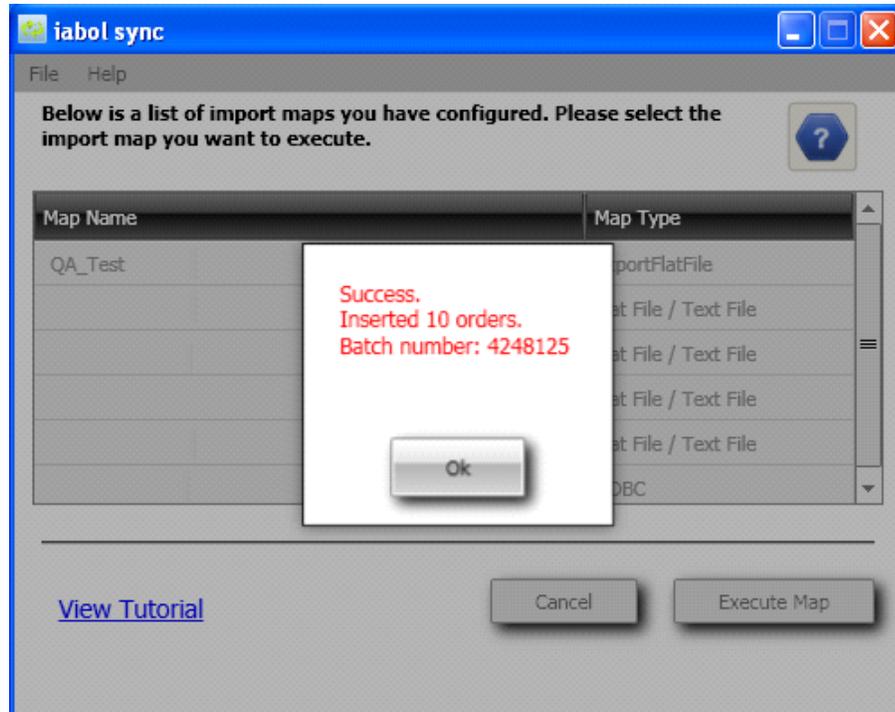
Send To Email Address: support@iabol.com

Send Test Email Save Cancel

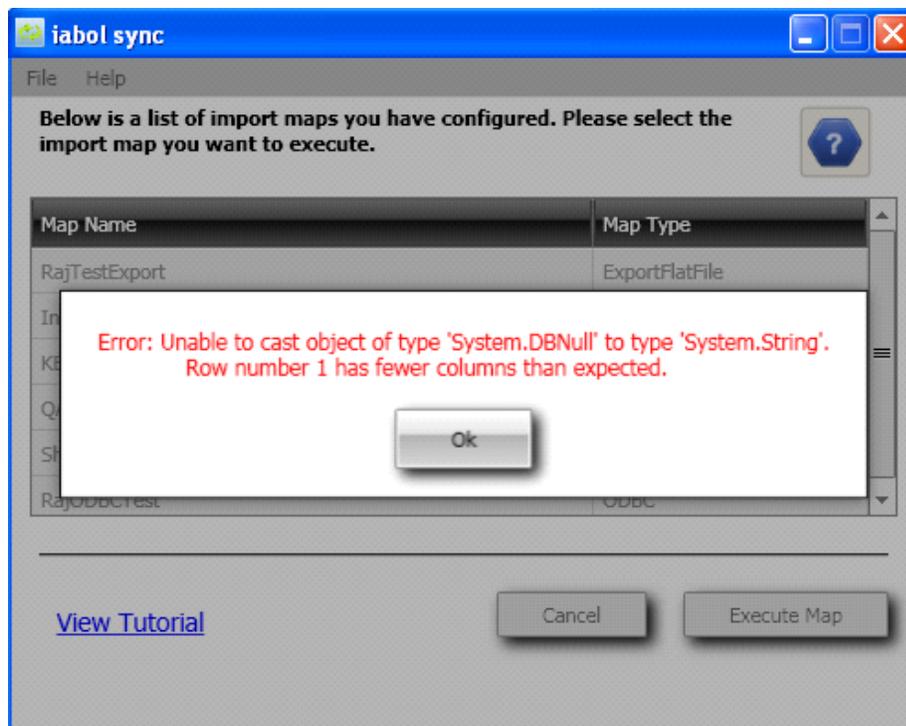
- Next step would be to either 'Save Map' or 'Save Map and Import'.

If the end user clicked on 'Save and Import File' they will either see a success message or error.

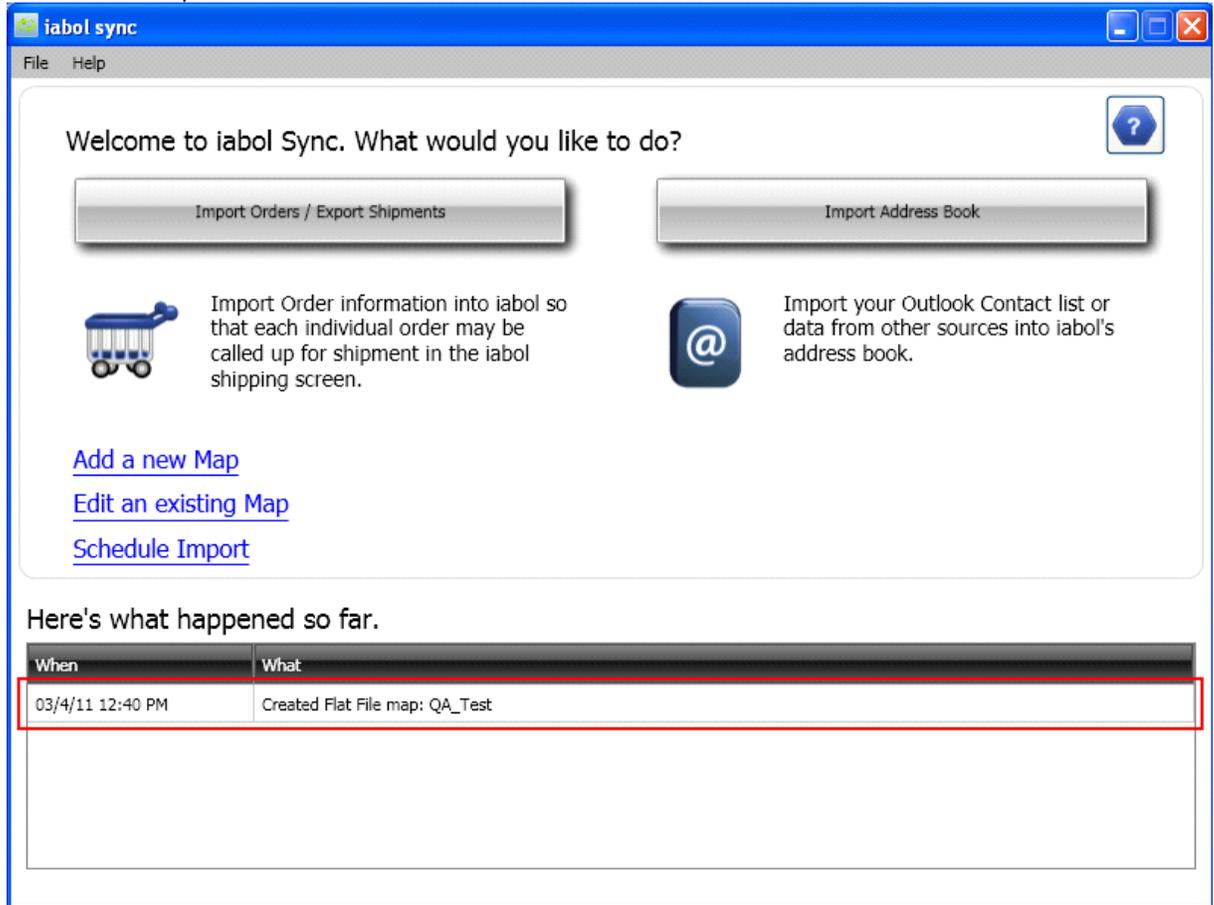
- **Success**



- **Error**



- If the end user clicked on 'Save Map' then the end user is directed to the home page, where they will see the map was created.

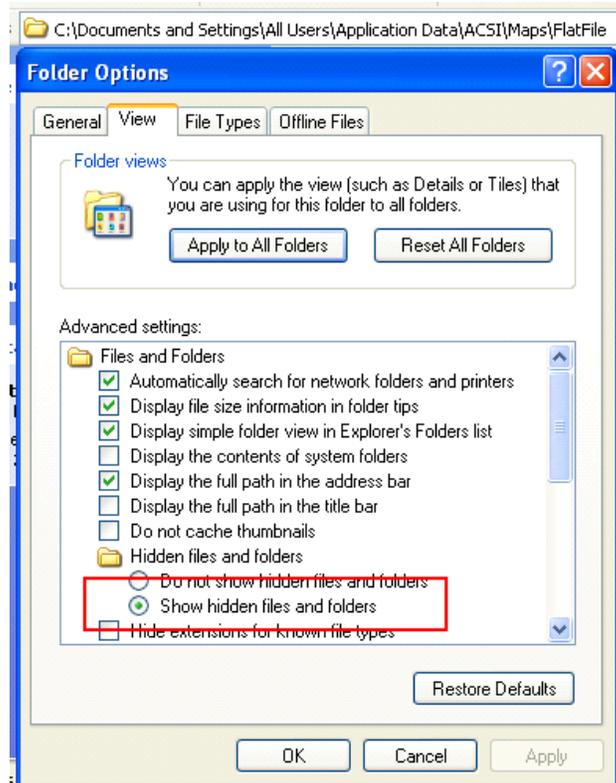


The directory structure for the Flat File maps:

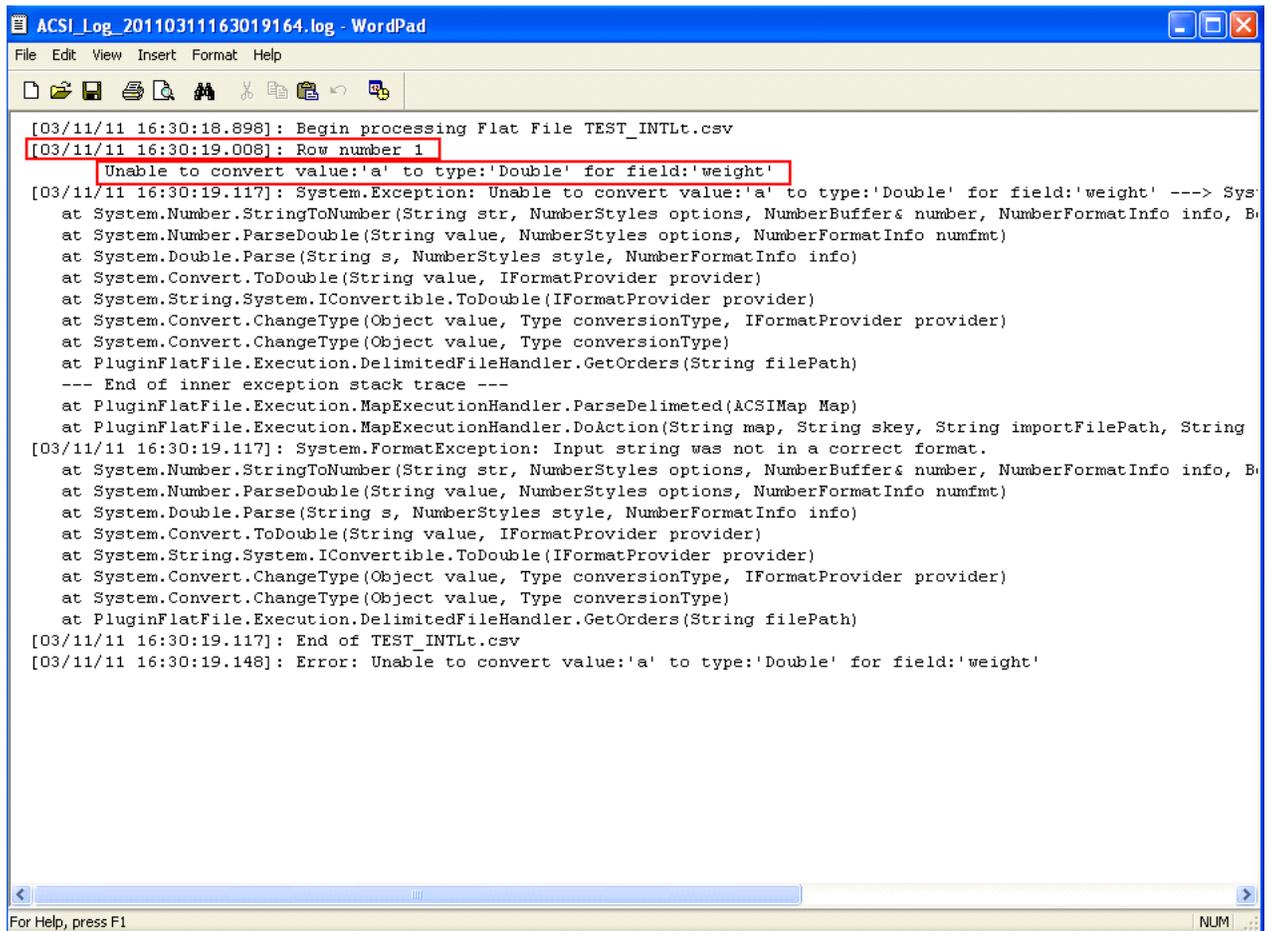
WIN7 / VISTA : C:\ProgramData\ACSI\Maps\FlatFile

WINDOWS XP : C:\Documents and Settings\All Users\Application Data\ACSI\Maps\FlatFile

**Make sure the 'Show hidden files and folders is checked.*

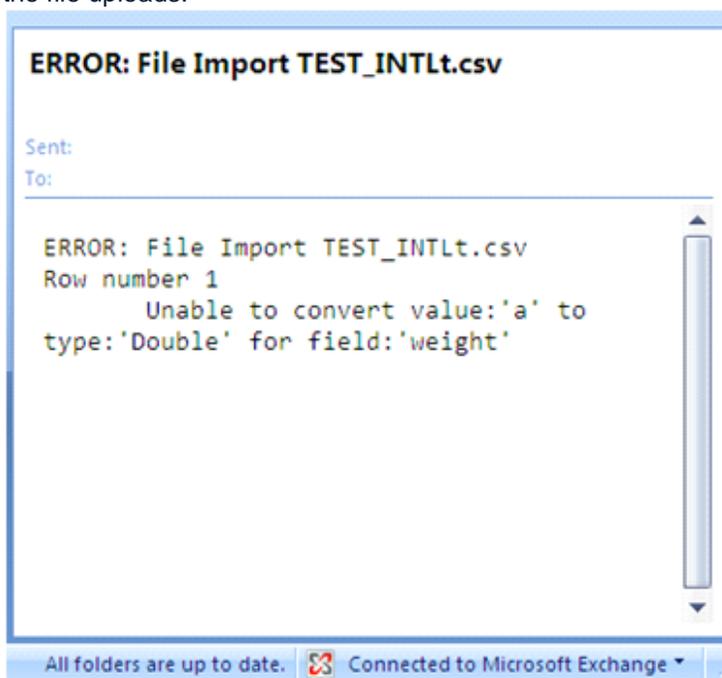


- Troubleshooting Steps.
There are log files written to the directory of the installation.
For example: C:\Documents and Settings\All Users\Application Data\ACSI\Logs

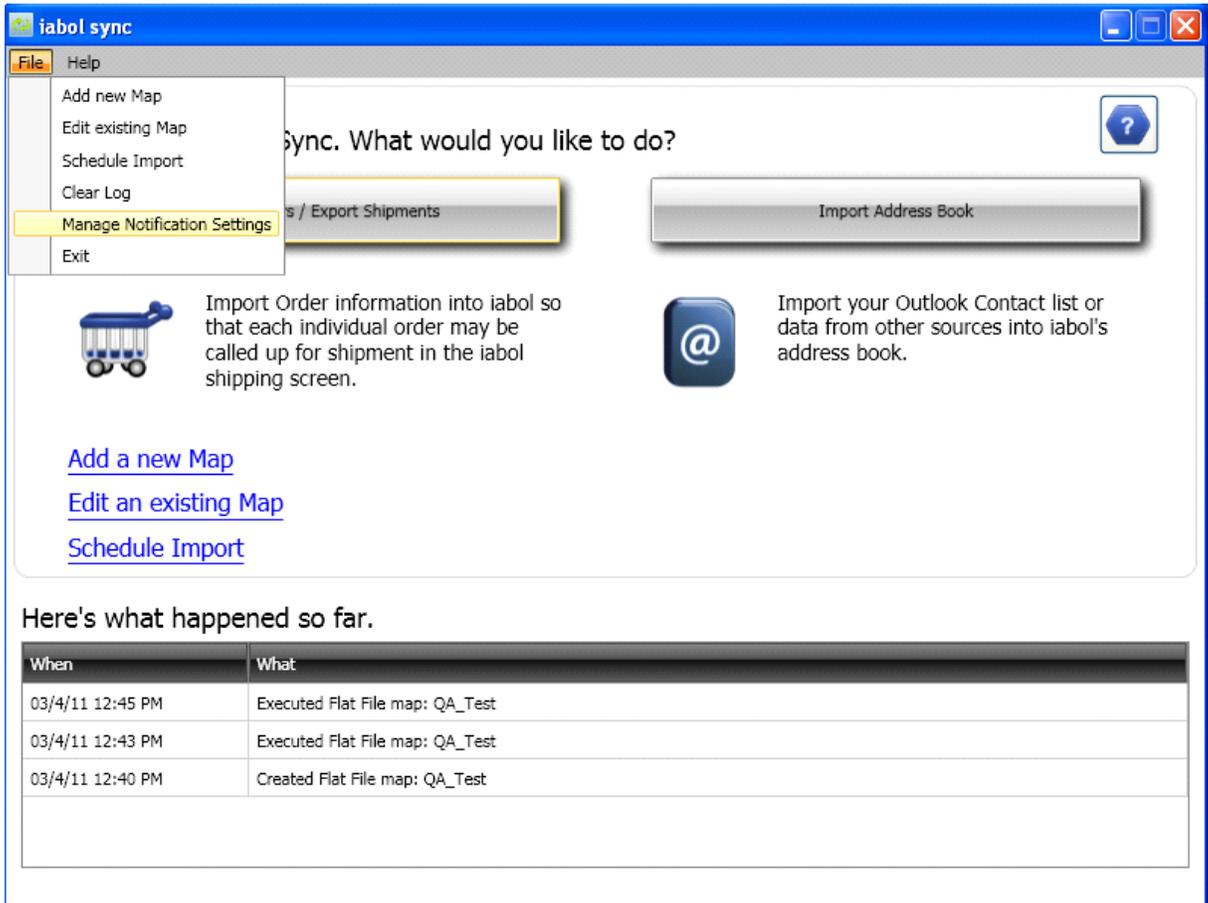


```
[03/11/11 16:30:18.896]: Begin processing Flat File TEST_INTLt.csv
[03/11/11 16:30:19.008]: Row number 1
Unable to convert value:'a' to type:'Double' for field:'weight'
[03/11/11 16:30:19.117]: System.Exception: Unable to convert value:'a' to type:'Double' for field:'weight' ---> Sys
at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer& number, NumberFormatInfo info, B
at System.Number.ParseDouble(String value, NumberStyles options, NumberFormatInfo numfmt)
at System.Double.Parse(String s, NumberStyles style, NumberFormatInfo info)
at System.Convert.ToDouble(String value, IFormatProvider provider)
at System.String.System.IConvertible.ToDouble(IFormatProvider provider)
at System.Convert.ChangeType(Object value, Type conversionType, IFormatProvider provider)
at System.Convert.ChangeType(Object value, Type conversionType)
at PluginFlatFile.Execution.DelimitedFileHandler.GetOrders(String filePath)
--- End of inner exception stack trace ---
at PluginFlatFile.Execution.MapExecutionHandler.ParseDelimited(ACSIMap Map)
at PluginFlatFile.Execution.MapExecutionHandler.DoAction(String map, String key, String importFilePath, String
[03/11/11 16:30:19.117]: System.FormatException: Input string was not in a correct format.
at System.Number.StringToNumber(String str, NumberStyles options, NumberBuffer& number, NumberFormatInfo info, B
at System.Number.ParseDouble(String value, NumberStyles options, NumberFormatInfo numfmt)
at System.Double.Parse(String s, NumberStyles style, NumberFormatInfo info)
at System.Convert.ToDouble(String value, IFormatProvider provider)
at System.String.System.IConvertible.ToDouble(IFormatProvider provider)
at System.Convert.ChangeType(Object value, Type conversionType, IFormatProvider provider)
at System.Convert.ChangeType(Object value, Type conversionType)
at PluginFlatFile.Execution.DelimitedFileHandler.GetOrders(String filePath)
[03/11/11 16:30:19.117]: End of TEST_INTLt.csv
[03/11/11 16:30:19.148]: Error: Unable to convert value:'a' to type:'Double' for field:'weight'
```

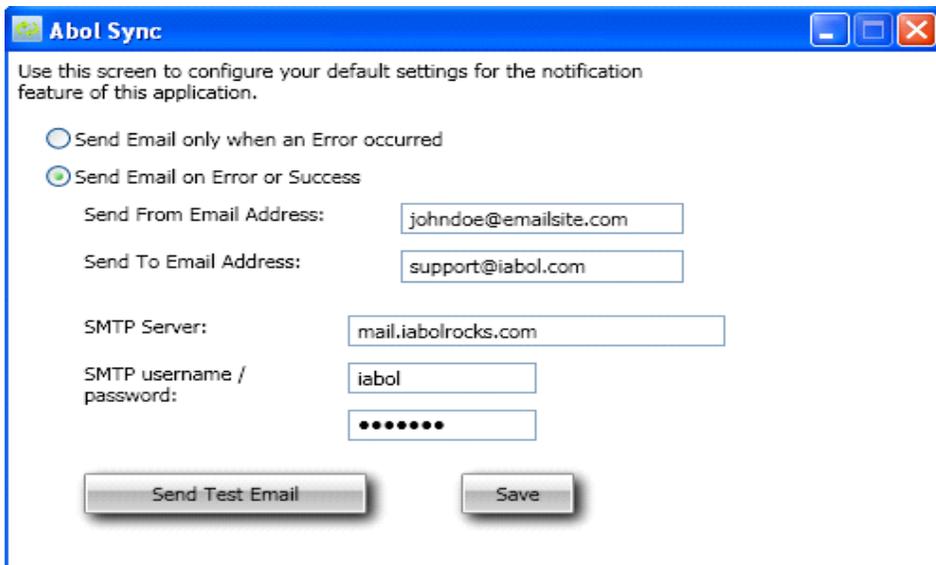
The email notification setting will automatically send an email if there is a success or failure when the file uploads.



- Email Notification Feature. Click on File – Manage Notification Settings.



- There are 2 settings for email notification
 - Send Email only when an Error occurred
 - Send Email on Error or Success
- End user is required to set up the email SMTP Server information and email address.



- The notification is also available at the mapping window as well.

File Help

Use this screen to map your fields from your source to the iabol layout. Please refer to the Help section in case this screen is confusing

QA_Test

Add Virtual Column Add Script **Notification**

| Source Column | Destination Column (iabol) | Transformation |
|---------------|-------------------------------|----------------|
| Orderid | Order.ReferenceNbr | Lookup Add |
| weight | Order.Weight | Lookup Add |
| Shiptoname | Order.ShipToAddress.name | Lookup Add |
| shiptoattn | Order.ShipToAddress.attn | Lookup Add |
| shiptoaddr1 | Order.ShipToAddress.addr1 | Lookup Add |
| shiptoaddr2 | Order.ShipToAddress.addr2 | Lookup Add |
| shiptocity | Order.ShipToAddress.city | Lookup Add |
| shiptostate | Order.ShipToAddress.state | Lookup Add |
| shiptozip | Order.ShipToAddress.zip | Lookup Add |
| shiptocountry | Order.ShipToAddress.countrycc | Lookup Add |

Preview Cancel Save Map Save Map and Import File

The email notification can be setup here as well.

The screenshot shows the 'iabol sync' application window. At the top, there is a menu bar with 'File' and 'Help'. Below the menu bar, a message reads: 'Use this screen to map your fields from your source to the iabol layout. Please refer to the Help section in case this screen is confusing'. A dropdown menu shows 'QA_Test'. Below this are four buttons: 'Add Virtual Column', 'Change Source File Layout', 'Add Script', and 'Notification'. The main area contains a table with columns 'Source Column', 'Destination Column (iabol)', and 'Transformation'. The table has several rows with source columns like 'shiptoph', 'shiptoem', 'descriptio', 'explineite', 'expquant', 'expprice', 'scheduleb', 'expdesc', 'expweight', and 'expctrymfr'. Each row has a 'Destination Column' field and a 'Transformation' field (mostly 'Lookup'). To the right of each row is an 'Add' button. A dialog box is open in the center, titled 'Use this screen to configure the notification settings for this import Map'. It contains two radio buttons: 'Send Email only when an Error occurred' (unselected) and 'Send Email on Error or Success' (selected). Below the radio buttons are two text input fields: 'Send From Email Address' with the value 'johndoe@emailsite.com' and 'Send To Email Address' with the value 'support@iabol.com'. At the bottom of the dialog are three buttons: 'Send Test Email', 'Save', and 'Cancel'. At the bottom of the application window are three buttons: 'Preview', 'Cancel', and 'Save Map'.

QA_Test

Add Virtual Column Change Source File Layout Add Script Notification

| Source Column | Destination Column (iabol) | Transformation |
|---------------|----------------------------|----------------|
| shiptoph | | Lookup |
| shiptoem | | Lookup |
| descriptio | | Lookup |
| explineite | | Lookup |
| expquant | | Lookup |
| expprice | | Lookup |
| scheduleb | | Lookup |
| expdesc | | Lookup |
| expweight | | Lookup |
| expctrymfr | | Lookup |

Use this screen to configure the notification settings for this import Map

Send Email only when an Error occurred

Send Email on Error or Success

Send From Email Address johndoe@emailsite.com

Send To Email Address support@iabol.com

Send Test Email Save Cancel

Preview Cancel Save Map