Volume
1

INTERACTIVE REPORTING

# Sales Analysis and Reporting Products

# INTERACTIVE REPORTING

VERSION 3.3

# ADMISTRATOR'S GUIDE

INTERACTIVE REPORTING

# Interactive Reporting Administrator's Guide


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# System Requirements

## *What You Must Already Have…*

- A Microsoft-Supported Windows Operating System.
- 2+GB RAM recommended, but you can never have enough RAM.

Chapter
2

# Installation

## *Getting Interactive Reporting on to the system…*

Depending on your Operating System, you will find the appropriate installation document here http://interactivereporting.com/v33/

Chapter 3

# Administration

## *Getting Interactive Reporting ready for use…*

Administration of INTERACTIVE REPORTING is performed via the administration console. To access the Admin section, click the **'Administration'** link on the main Interactive Reporting login page shown in Figure 1. This directs to the **Administration Login Page**, Figure 2. To login use the default administration password which is **demo**.

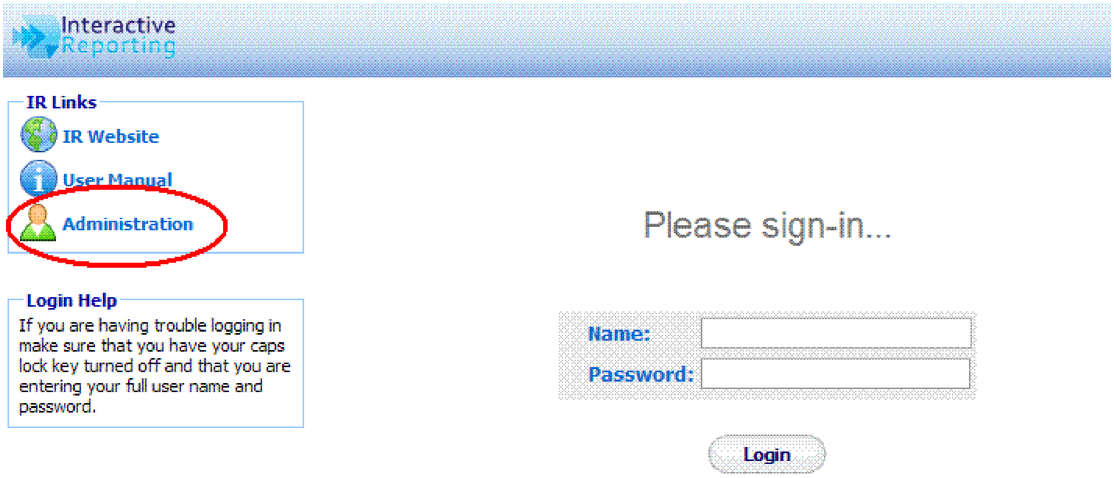



Figure 1

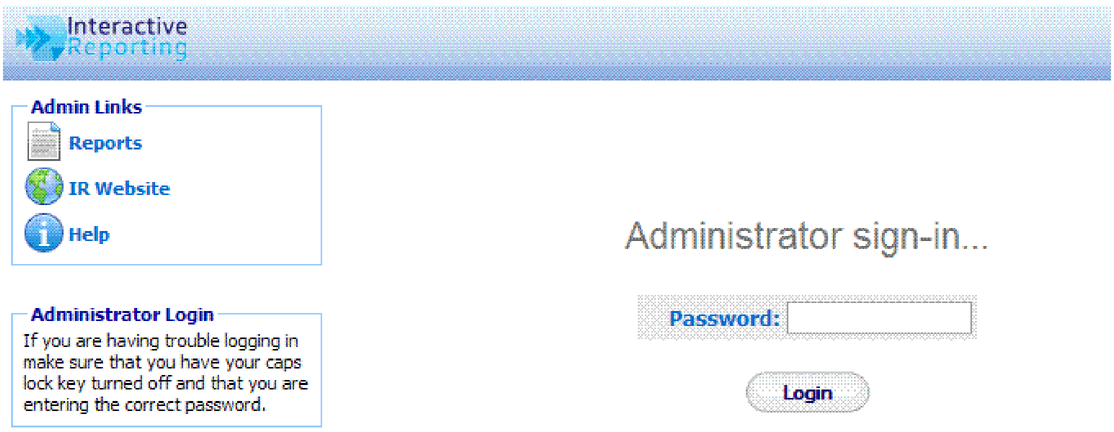
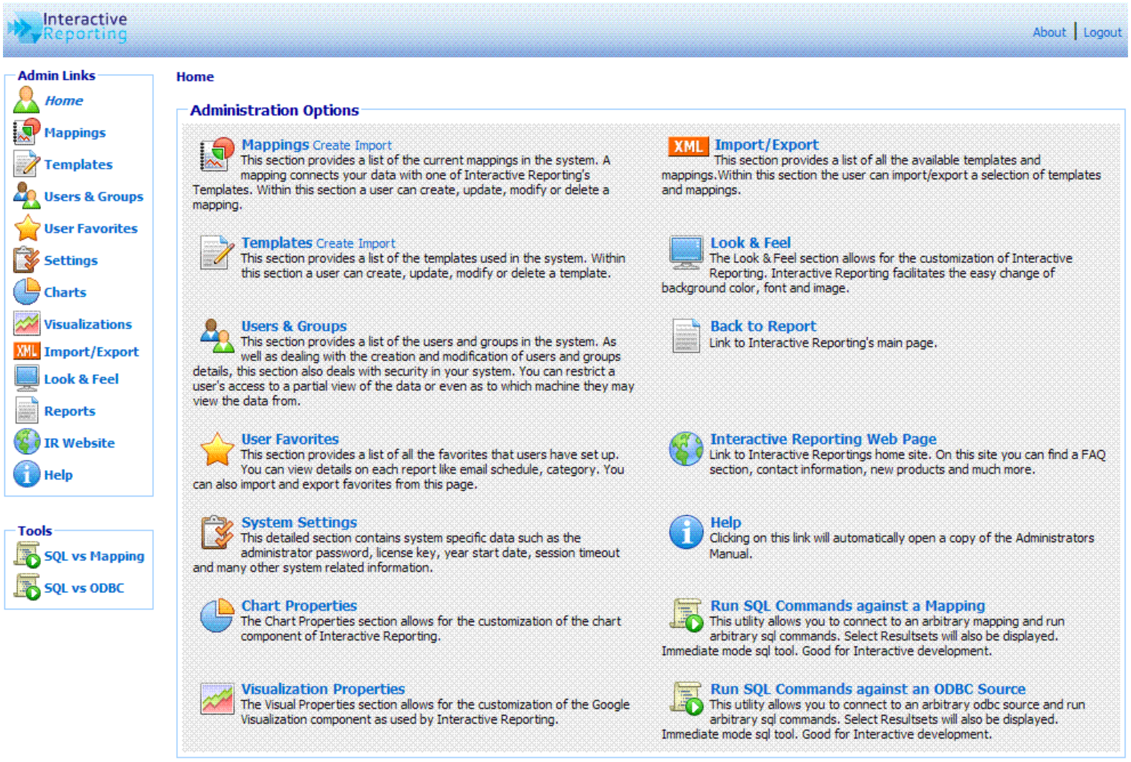



Figure 2

Once logged in, there are a number of options available to the users that are shown at the first page of the administration side, as seen in Figure 3. Each option can be reached by clicking the appropriate link name. These options are:

- **Mappings** – links to the Mapping Section.
- **Templates** – links to the Template Section.
- **Users and Groups** – allows the administration of users and groups in the system.
- **User Favorites** – allows the administration of all users' favorites
- **System Settings** – contains specific information that facilitates the system's operation.
- **Chart Properties** – sets the default values for all properties required in Chart reports.
- **Visualization Properties** – sets the default values for all properties required in Visualization reports.
- **Import/Export** – allows for the import/export of selected Templates and/or Mappings
- **Look and Feel** – allows for the customisation of the design of INTERACTIVE REPORTING
- **Back to Report** – links to INTERACTIVE REPORTING Login page (Figure 1).
- **Interactive Reporting Web Page** – links to INTERACTIVE REPORTING Home site.
- **Help** – opens a copy of the Administration Manual.
- **Tools** – links to different mode SQL tools for more Interactive development.


Interactive Reporting
About | Logout
Admin Links
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Mappings
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User Favorites
Settings
Charts
Visualizations
Import/Export
Look & Feel
Reports
IR Website
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SQL vs ODBC
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Administration Options
Mappings Create Import
This section provides a list of the current mappings in the system. A mapping connects your data with one of Interactive Reporting's Templates. Within this section a user can create, update, modify or delete a mapping.
Import/Export
This section provides a list of all the available templates and mappings. Within this section the user can import/export a selection of templates and mappings.
Templates Create Import
This section provides a list of the templates used in the system. Within this section a user can create, update, modify or delete a template.
Look & Feel
The Look & Feel section allows for the customization of Interactive Reporting. Interactive Reporting facilitates the easy change of background color, font and image.
Users & Groups
This section provides a list of the users and groups in the system. As well as dealing with the creation and modification of users and groups details, this section also deals with security in your system. You can restrict a user's access to a partial view of the data or even as to which machine they may view the data from.
Back to Report
Link to Interactive Reporting's main page.
User Favorites
This section provides a list of all the favorites that users have set up. You can view details on each report like email schedule, category. You can also import and export favorites from this page.
Interactive Reporting Web Page
Link to Interactive Reportings home site. On this site you can find a FAQ section, contact information, new products and much more.
System Settings
This detailed section contains system specific data such as the administrator password, license key, year start date, session timeout and many other system related information.
Help
Clicking on this link will automatically open a copy of the Administrators Manual.
Chart Properties
The Chart Properties section allows for the customization of the chart component of Interactive Reporting.
Run SQL Commands against a Mapping
This utility allows you to connect to an arbitrary mapping and run arbitrary sql commands. Select Resultsets will also be displayed. Immediate mode sql tool. Good for Interactive development.
Visualization Properties
The Visual Properties section allows for the customization of the Google Visualization component as used by Interactive Reporting.
Run SQL Commands against an ODBC Source
This utility allows you to connect to an arbitrary odbc source and run arbitrary sql commands. Select Resultsets will also be displayed. Immediate mode sql tool. Good for Interactive development.

Figure 3

Chapter 4

# Mapping Data Sources

## *How to Create and Operate Mappings Easily…*

A **Mapping** connects the **User's Data** (source) with one of INTERACTIVE REPORTING **Templates** (destination). In this way, data may be accessed in a simple and concise way without the need to deal with database tables and forms.

Mappings can be Created, Edited, Deleted, Cloned, Imported and/or Exported or just viewed. To access the **'Mappings'** section click on the **'Mappings'** link of either the **'Administration Options'** menu or of the **'Admin Links'** sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 4, which contains a list of all available mappings.

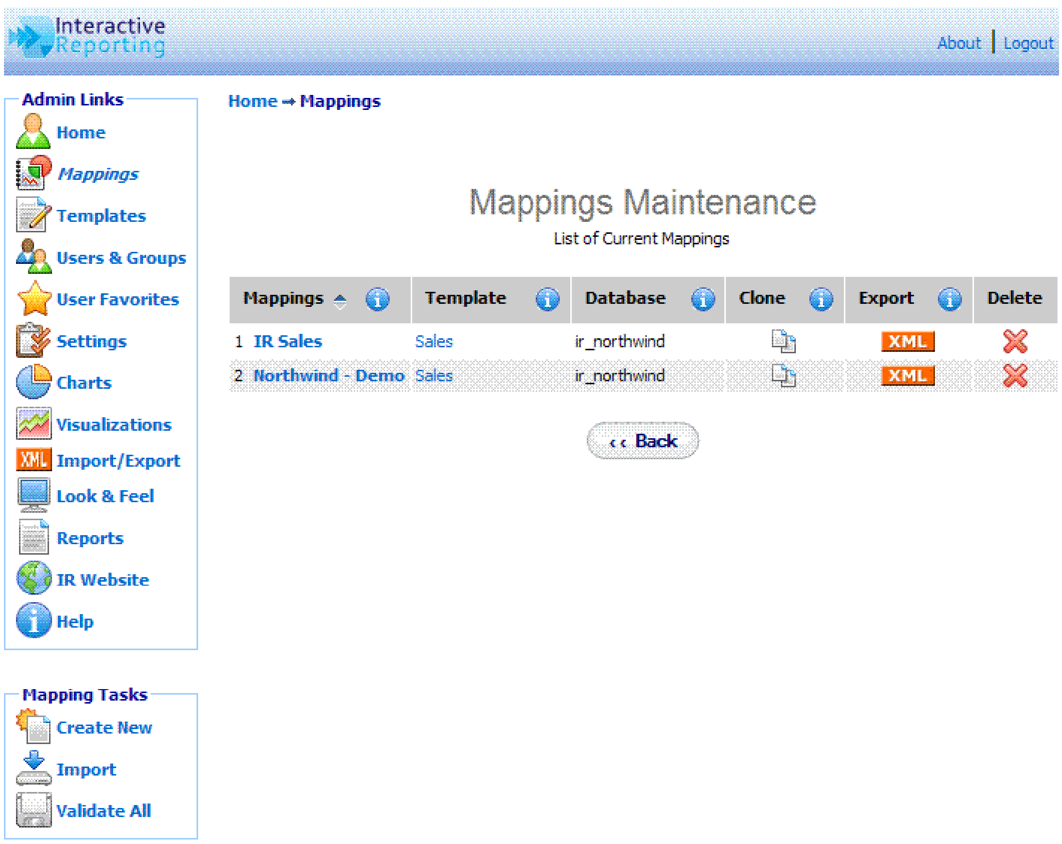



Figure 4

Each Mapping is characterised by a user-friendly name that is shown in the column **'Mappings'**. In Figure 4 there are two mappings, one called *IR Sales* and one called *Northwind – Demo*. Clicking the Mapping's Name Link allows viewing of the mapping details and/or editing the mapping's options.

- The **'Template'** Link redirects to the viewing page of the template associated with the mapping.
- The **'Database'** heading allows the user to see on which database the mapping is based.
- The **'Clone'** option creates a complete copy of the mapping. Cloning is one INTERACTIVE REPORTING most powerful tools. This is useful when the user has two very similar databases. Simply clone the first mapping and make the alterations to the cloned one. To **Clone a Mapping**, click the **'Clone'** icon next to the mapping of interest. To **Export a Mapping**, click the **'Export'** button next to the mapping. This will cause a box to pop up on screen advising the user to also export the associated template. This is important, as **a Mapping must always be correlated with a Template** - if the associated template does not exist and an import of the mapping is applied, the import will fail. After the user is notified about the template, a second popup box appears that prompts the user to save the mapping to their desired location.
- To **delete** a mapping just click the delete icon relevant to the mapping that is no longer required.

In addition to the **'Admin Links'** and **'Tools'** options, the mappings maintenance page provides the mapping tasks to create a new mapping, import an existing one, and validate all existing mappings.

## Import a Mapping

To import a mapping click the **'Import'** link of the **'Mapping Tasks'** section on the left side of the mappings maintenance page. The user is then directed to the **'Import Mapping'** page as can be seen in Figure 5. Before importing the mapping the user should ensure that the associated template is stored in the template section. The user simply enters the path where the stored mapping is located or uses the **'Browse'** button to locate the mapping if unsure of the destination path. When the destination path is provided click the **'Import'** button to proceed to the second step of the import process as shown in Figure 6.

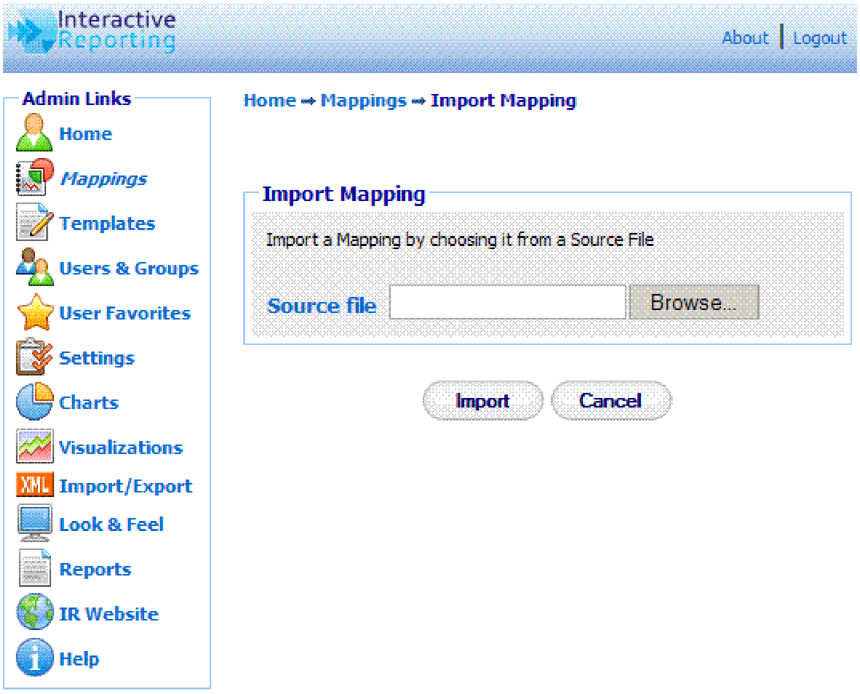



Figure 5

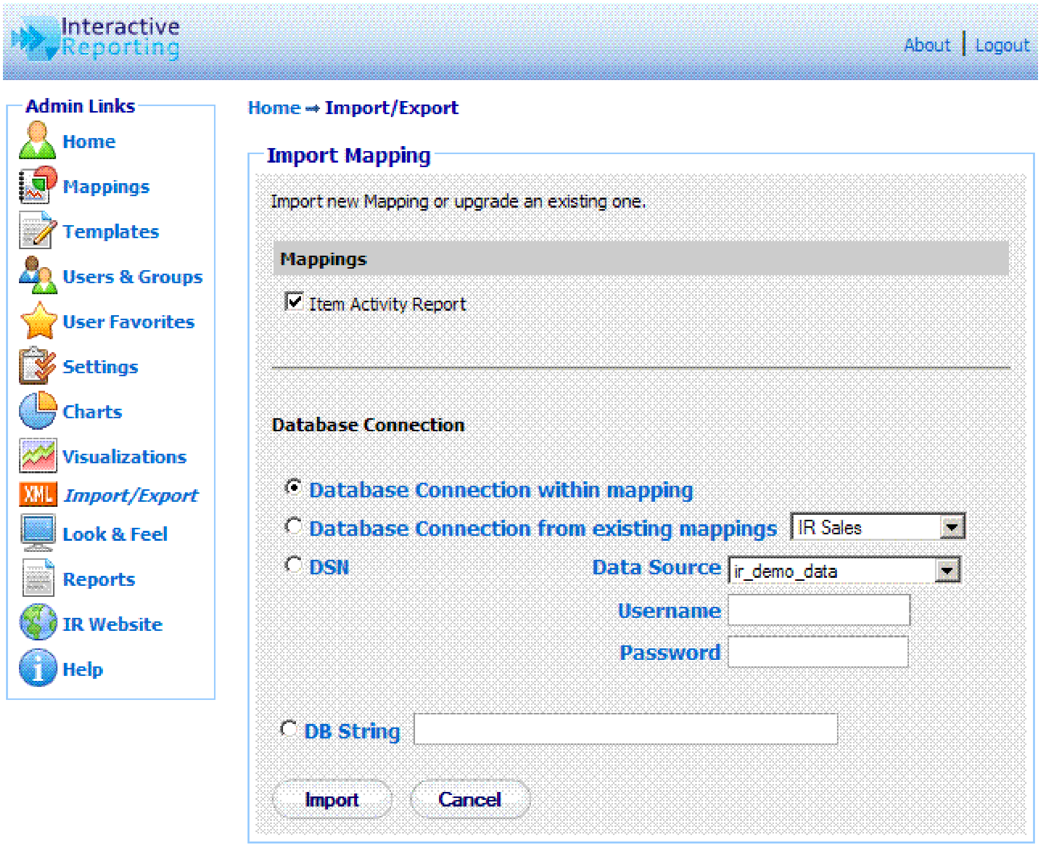



Figure 6

The user has now the option to select the mapping they wish to import and select the database connection from this mapping. The default option is to use the database connection as specified in the imported Mapping. Another option is to assign the database connection from a list of existing connections. If none of these options are desirable the user can set a new DSN or DB String connection for the new mapping. When the mapping has been selected and the database connection is provided click the **'Import'** button to return to the mappings page. Once the mapping is imported it will appear within the list of available mappings. The system administrator can now give users access to this mapping by setting their access level in the user section.

## Create New Mapping

To create a **New Mapping** click the **'Create New'** link of the **'Mapping Tasks'** section on the left side of the mappings maintenance page. The user is then directed to the **'Create New Mapping'** page as can be seen in Figure 7. First complete the name to be used for the new mapping. This information is required. Next enter a description of the mapping, note however that this is optional. Choose the associated Template for the new mapping. If the **'Template'** List is empty or the template of your choice is missing, go to the template section to create the template that suits the new mapping's requirements. The database type can be chosen from a select list, which includes Oracle, Access, MySQL, SQL Server and many more.

There are two options available to the user for the **Database Connection**. The **'DSN'** option provides a list of the system (ODBC) data sources. The user must select one and enter the username and password if applicable.

To use an ODBC data source the user must set the **'DB'** option. If there is no password, just type in the name of the data source or ODBC connection in the text box provided. If there is a password then the user must enter the following: **'DSN=NameFromControlPanel;UID=your_username;Password=your_password'**. We advise the user to use the DSN set-up.

If the ODBC data source has not been set in the ODBC control panel, one of the following options can be used:

- Access: **PROVIDER=Microsoft.Jet.OLEDB.4.0; DATASOURCE=c:\mydatastore\mydatabase.mdb**
- SQL Server: **PROVIDER=SQLOLEDB; DATA SOURCE=myServerName; INITIAL CATALOG=myDatabaseName; USER ID = myUsername;PASSWORD=myPassword**
- Oracle **PROVIDER= OraOLEDB.Oracle; DATASOURCE = YourTNSName; USER =johns; PASSWORD = johns;**

INTERACTIVE REPORTING has been tested against Access 97, 200, XP 2003, SQL Server 7,2000. For MySQL install MyODBC. Set-up an odbc Datasource in the control panel to the MySQL database. INTERACTIVE REPORTING has been tested against MySQL 4,3.23. INTERACTIVE REPORTING only works with the ORACLE ODBC Driver. Always use Oracle drivers and not Microsoft ones. This has been tested against Oracle8i, 9i and 10j. For Informix, the Informix CDSK must be installed to have access to the Informix Drivers. This has been tested against Informix 7.2.x.

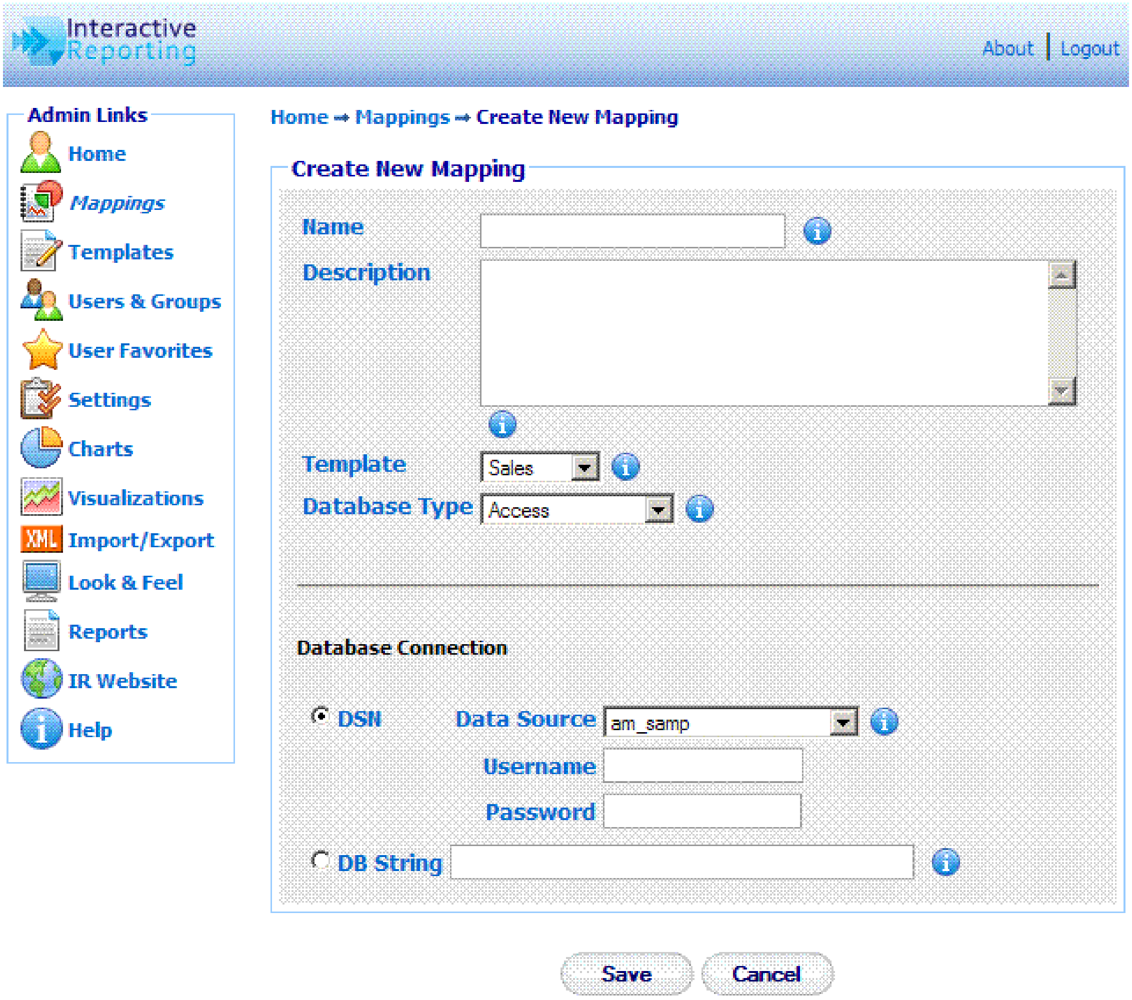



Figure 7

When finished with setting all the options for generating the new mapping's database connection, click the **'Save'** button to generate the new mapping. The user then is directed to a screen like the one shown at Figure 8, where they can proceed with mapping the main transaction table.


Figure 8

## Main Transaction Table

To map the main transaction table, the user must click the link **'Map Main Transaction Table'** of Figure 8, or the sidebar option **'Transaction Table'** of the **'Mapping Tasks'** menu. The user will then go to the first page of the **Mapping Editor**, Figure 9.

The fields in the main transaction table become visible either by selecting the table in which they are found or by specifying an SQL statement that collects the required fields from the mapped data source. To choose between the table and the SQL statement, click the appropriate radio button.

The **'Table'** list contains the tables that are available in the data source that the user is trying to map. The user can select from this list the table that contains all the fields that correspond to the main transactions. If there are constraints to be imposed, these may be performed within the **'WHERE'** field using an SQL-syntax. For example, entering '*invoice_transactions.qty=1*' would choose only those invoice entries where only a single item was sold.

The **'SQL'** option is more suitable for advanced users. If the information to encapsulate an invoice the user needs is not directly available within a single table, i.e. it either needs to be calculated or is split across several tables, then an SQL statement may be entered, which directly extracts that information. For example, if the system operates on the basis of price-codes, with a table provided for the lookup of the corresponding price, we may calculate the relevant price for each line on an invoice with the following SQL statement:

**'SELECT *, price FROM pricecodes, invoice_transactions WHERE invoice_transactions.pricecode=pricecodes.code'.**

For the Northwind example use the following SELECT statement:

**'SELECT 2.0 as currency_factor, [order details].UnitPrice AS unit_price, [Order Details].Quantity, [Order Details]. costprice,Orders.CustomerID,Orders.EmployeeID, Orders.ShipVia,[Order Details].ProductID, Products. CategoryID,Products.SupplierID,Orders.OrderID,Orders. OrderDate FROM Orders INNER JOIN ([Order Details] LEFT JOIN Products ON [Order Details].ProductID = Products.ProductID) ON Orders.OrderID = [Order Details].OrderID'**

**N.B.** The user should use this mechanism to **exclude voided transactions** from any of INTERACTIVE REPORTING reports.

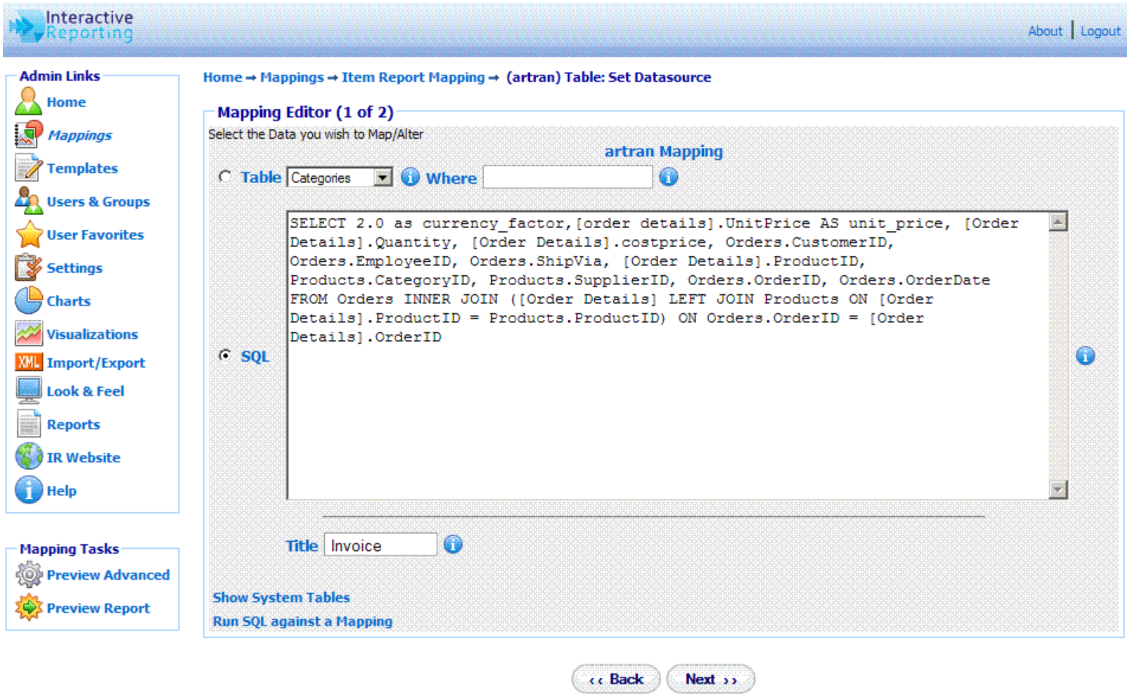



Figure 9

When finished the user must click the **'Next'** button to proceed with the mapping of the individual transaction fields. The user will then go to second page of the mapping editor of Figure 10, where they can select which elements of the main transaction table are of interest to their report and connect them to the appropriate template INTERACTIVE REPORTING fields.

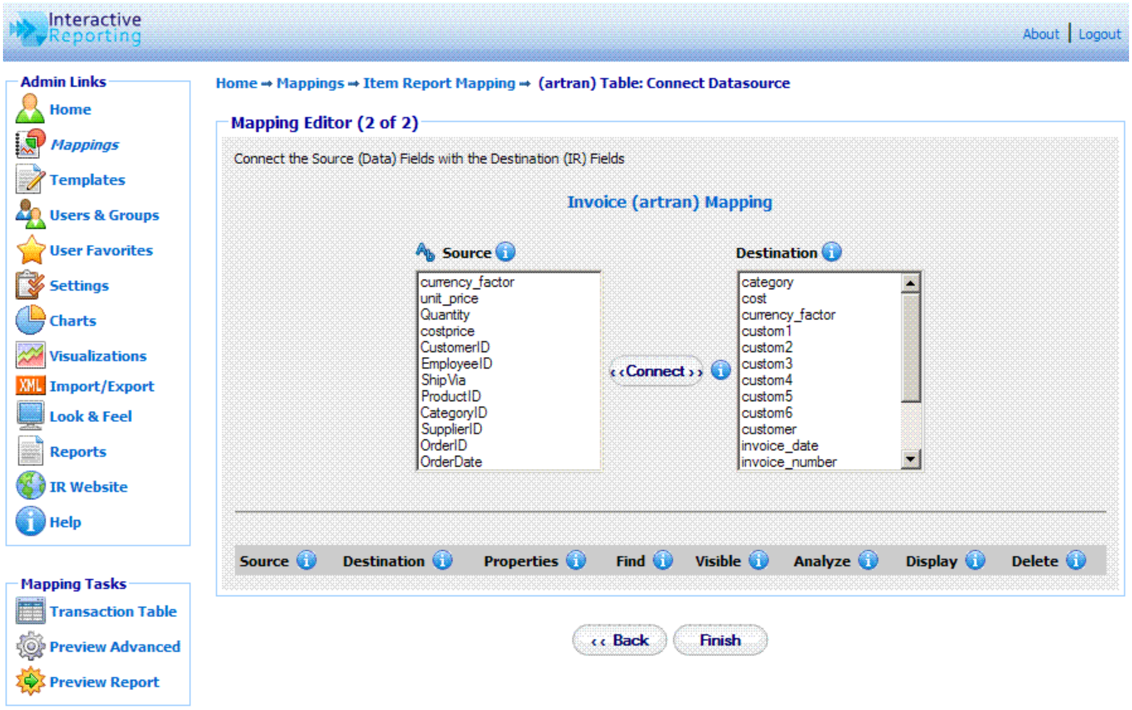



Figure 10

## Map Transaction Fields

When creating a new mapping the second page of the mapping editor mainly shows two lists. The source list that includes all the fields from the main transaction table, which have been selected from a global table or from the appropriate SQL statement, as described above. The letter symbol above the source list may order the fields alphabetically or in the order selected from the data source. The destination list contains all the fields that comprise the INTERACTIVE REPORTING template that is used with the mapping. The latter can contain numeric elements, such as *qty, cost*, that can be associated with corresponding numeric fields from the data source that will be used to construct the quantities that appear at the reports. It can include currency quantities to map currency factors. And finally, it can consist of textual elements, called **'Lookups'** that can be used to map data source fields with child attributes that can also be mapped.

In order to **Map a Transaction Field**, first the user must highlight the field of interest from the source list, for example *ProductId*. Then, the user must **highlight the template field** they want it to be mapped to from the destination list, for example *item*. When both fields are selected the **'Connect'** button must be clicked. The mapped field will then appear at the list underneath the source and destination lists. Figure 11 shows the Mapping Editor page after a few data source fields have been mapped. Note that when a destination field is mapped it becomes grey and cannot be used again, where a source field can be mapped to more than one destination fields.

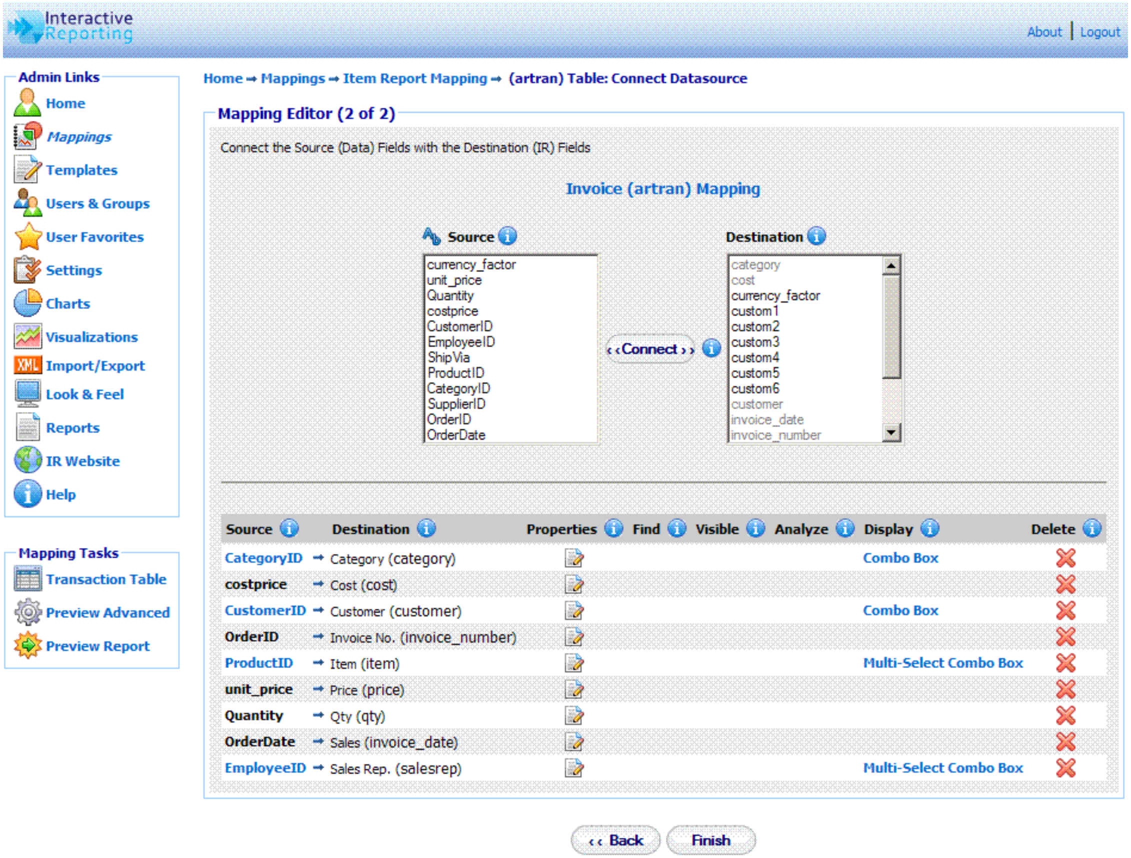



**Figure 11**

When a source field contains child attributes the user can continue further to map any of these attributes they wish. Such a source field appears as a link under the **'Source'** heading, for example *ProductId*, which could be clicked in order to map further fields from this transaction element. Clicking *ProductId* directs to the page of Figure 12. The user must then select the table value **Products**. The filter option for the particular mapped field can also be set, as well as the title of the field. When finished with these selections the user must click the **'Next'** button, to proceed to the next stage.

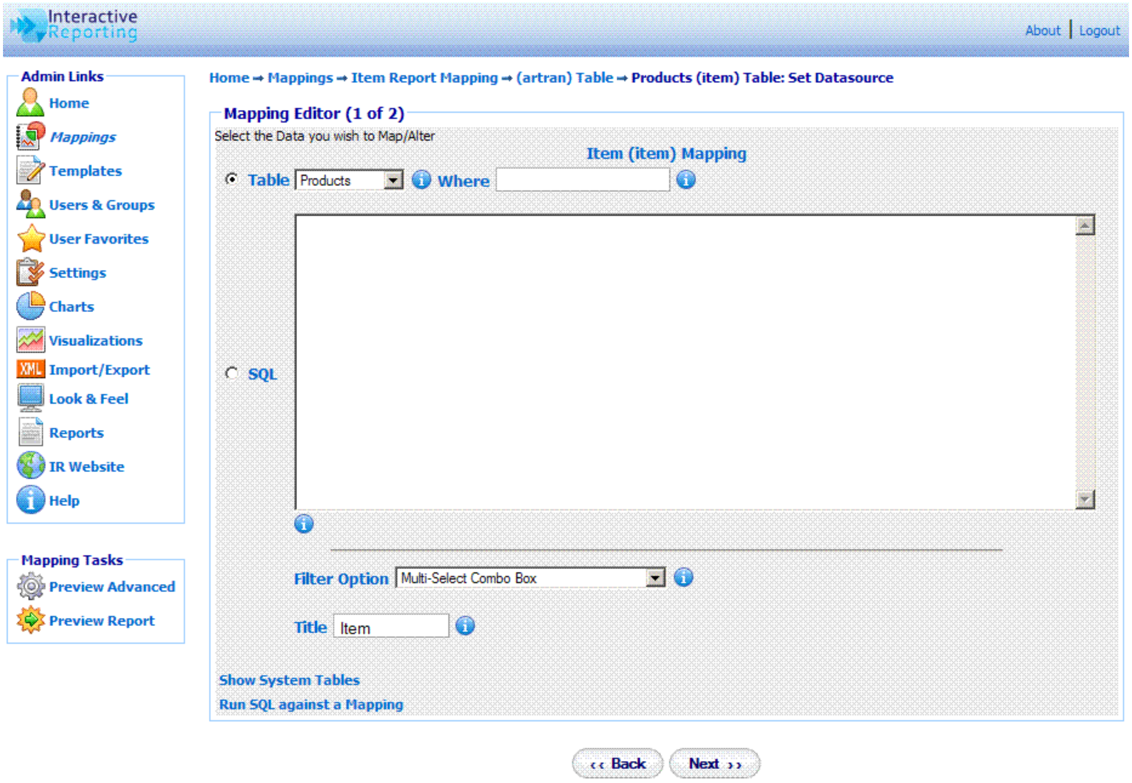



Figure 12

In the example of Figure 11, the data source *ProductID* field has been mapped to the INTERACTIVE REPORTING *item* field. Therefore, any child attributes of *ProductId* will be mapped to the child attributes of lookup *item*, as presented in Figure 13, in which the *ProductId, ProductName* and *UnitsInStock* source fields from the **Products** table have been mapped to the *item, description* and *item_custom1* INTERACTIVE REPORTING *item* attributes, respectively. In databases it is customary to supply fields with only **id/code-numbers**, for example *ProductId*, which are usually mapped to the key attribute of a lookup. However, these id/code-numbers are user-unfriendly, and such mapped fields just exhibit numbers in the reports, thereby preventing the user from easily identifying what they represent. Many databases provide tables to lookup descriptive names corresponding to these id/code-numbers. In such cases the corresponding descriptions may be mapped to the description attribute of the lookup, for example *ProductName*, to provide clarity to the reports. If the table provides fields with additional information that can be accessed within a report, these can be mapped to additional attributes of the Lookup, for example *UnitsInStock*.

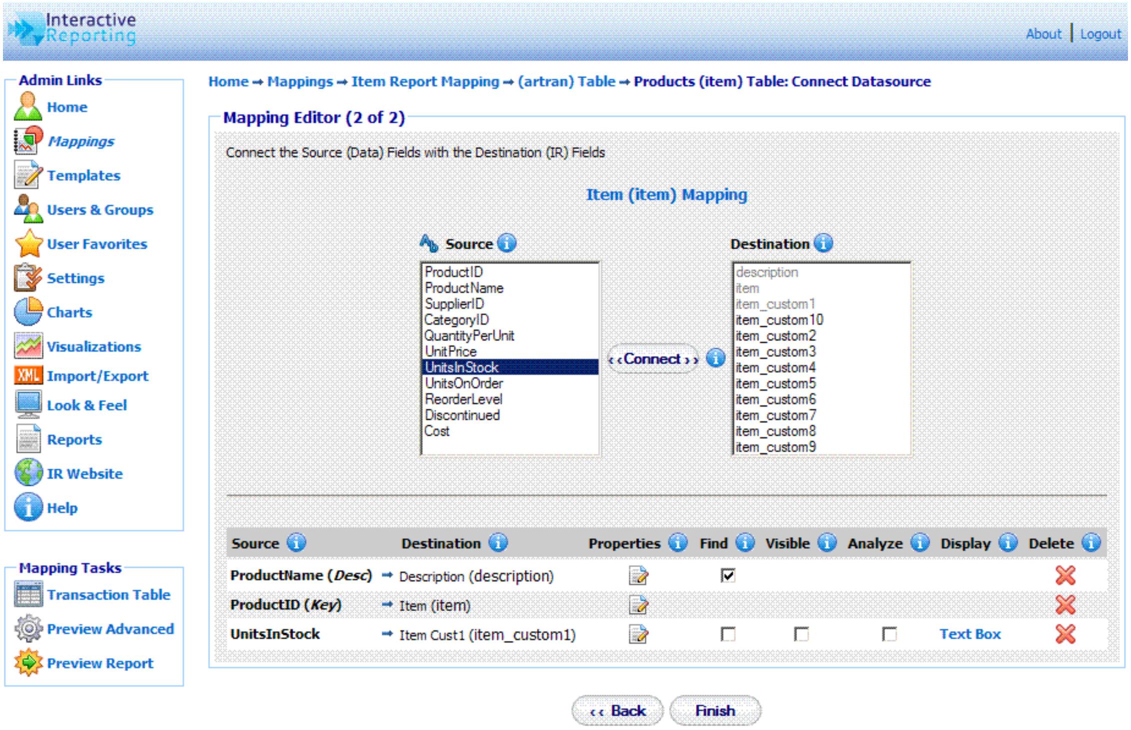



**Figure 13**

When the user finishes with the mapping of the textual field, the **'Finish'** button should be clicked. The user is then directed to the **Mapping Editor Master Screen**, shown in Figure 14. The user can then proceed with any other textual field they wish to configure, either by going to the main transaction page and following the procedure discussed above, or by clicking on the name of the next textual field they wish to map further. When done with all the fields the **'Save'** button must be clicked, and the user returns to the **Mapping List** page, Figure 4, with the new mapping included in the list.

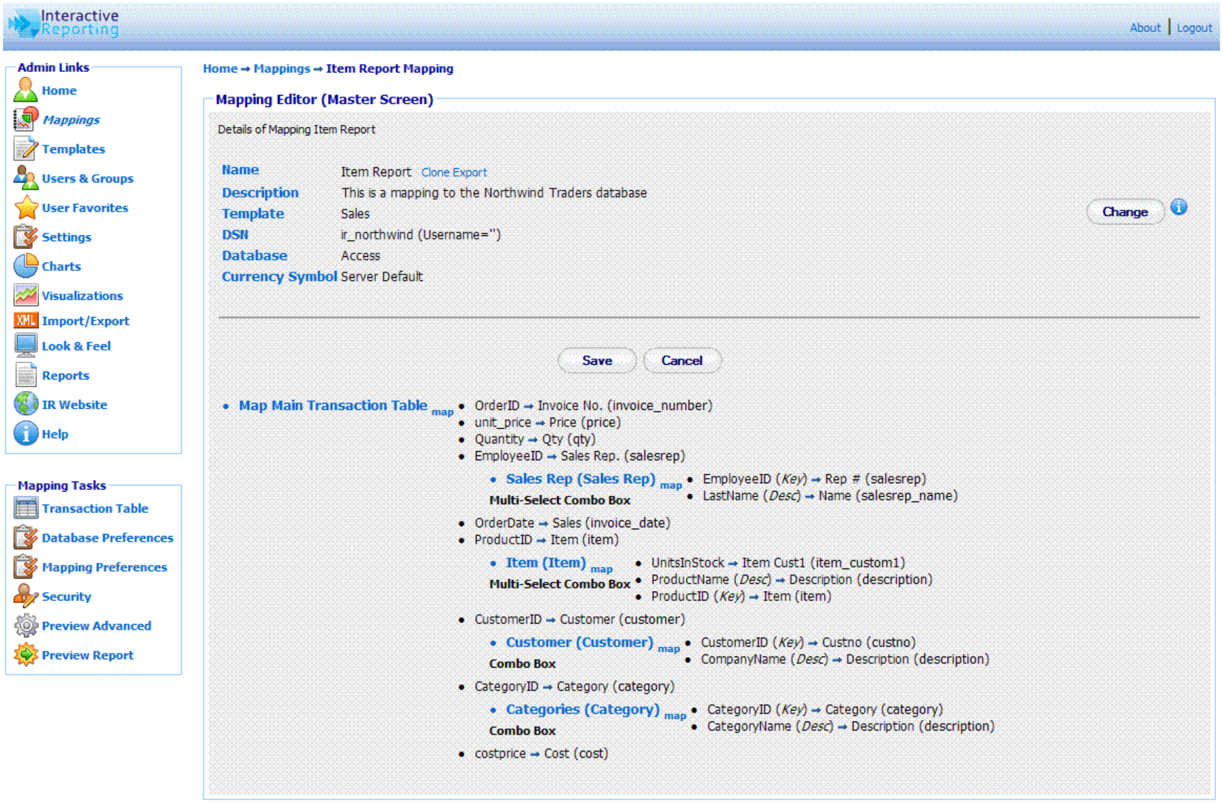



Figure 14

## Edit Mapping

When creating a new mapping or editing an existing one, a number of options can be modified, as will be explained in this section. **To Edit a Mapping**, just click on the Mapping Name in the Mappings Page (Figure 4), to be directed to the Mapping's Master Editor Screen, similar to Figure 14. The master screen contains four parts that can be edited: the **transaction table**, the **database preferences,** the **mapping preferences** and the **security**.

To edit the Transaction Table the user must click the **'Map Main Transaction Link'** of the second part of the editor page or the **'Transaction Table'** of the **'Mapping Tasks'** sidebar menu, to get to the main mapping pages of Figure 9 and Figure 11. If the user wishes to edit any individual mapped elements only, they can click the **elements' name** to go to pages such as those in Figure 12 and Figure 13. Alternatively, the user can click the **'source'** link to get directed immediately to the pages of Figures 11 or 13. In these pages, the user can perform actions in the same way as discussed when creating a new mapping. In addition, there is an extra set of options that the user can set. These are the **'Properties'**, the **'Find'** option, the **'Visible'**, the **'Analyze'** and the **'Display'** option. These are available to change depending on the type of the mapped field, whether numeric or textual, and the type of textual field, whether key, description or attribute.

When clicking the **'Properties'** icon a new browser window opens, such as the one in Figure 15. In this new window, the user can change the name of the mapped field to how they prefer it to show in reports. If the **'Filter Required'** box is ticked, this field becomes mandatory to the reports. Thus, every time a report is generated this item **MUST** have a value selected, otherwise an error will appear. Such fields are indicated on the report page by a *. The **'Link Url'** property enables the user to link to data external to the report viewed at any instance. The **'Link Url'** value can be of the form 'http://filepath?source field=%destination field%'. When a mapped field has such a url provided, when viewing a report based on that field, a **blue arrow** will appear next to each value of this field. If this blue arrow is clicked, it redirects to the appropriate external page, where information about that specific value can be viewed. Clicking the **plus** symbol next to the text box, auto completes the url with the relevant value for %destination field%. When the mapped field is numeric, for example *qty*, the properties window will provide only the option to change the name of the field.

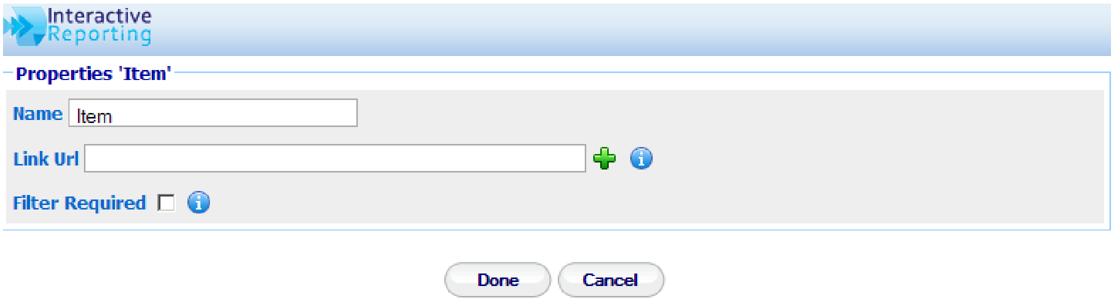



**Figure 15**

The **'Find'** option, when checked, results in a search icon (a magnifying glass) being displayed next to the particular field on the filters section of the INTERACTIVE REPORTING wizard or advanced pages. This allows the user **to perform searches** on this element.

The **'Visible'** option, allows a mapped field to appear in the filters section of the Interactive Reporting wizard or advanced pages. Note, however, that this field will not be included in the **'Analyze By'** list.

The **'Analysis'** box, if ticked, allows the user to analyze by this field.

The **'Display'** option is associated with the format of the mapped field in the filter section of the main reporting page. This can be set by clicking the link value associated with the appropriate field, see Figure 11 and Figure 13, or by selecting a value from the **'Filter Option'** list of pages like the one in Figure 12. There are nine display types to choose from:

1. **Combo Box**: displays a select list from which only one value can be selected at a time.
2. **Combo Box w/code**: displays a select list from which only one value can be selected at a time. Each value is shown with its associated code.
3. **Multi-Select Combo Box**: displays a select list from which multiple values can be selected. The first value is 'All', which means a report will be generated with all values included if this option is selected.
4. **Multi-Select Combo Box w/code**: displays a select list from which multiple values, with their associated codes, can be selected. The first value is **'All'**, which means a report will be generated with all values included if this option is selected.
5. **Multi-Select Combo Box (w/o All)**: the same as the 'Multi-Select Combo Box' type but without the 'All' option.
6. **Multi-Select Combo Box w/code (w/o All)**: the same as the 'Multi-Select Combo Box w/code' type but without the 'All' option.

7. **Text Box**: displays a blank box into which the user may enter their desired value. If the **'Find box'** is also selected, only the selected data will be displayed in the search box.
8. **Text Box w/code**: displays a blank box into which the user may enter their desired value. If the 'Find box' is also selected, when a search is performed, the codes will be displayed along with the search data.
9. **None**: the mapped field does not appear at the filters section. Note that when this type is selected the **'Filter Required'** and **'Find'** options are not applicable.

Once the user is satisfied with all the options, they must click **'Finish'** to save the changes in the system. When the mapping process is completed it is essential to click the **'Save'** button of the master editor. If this is not done a red exclamation mark will appear next to the mapping name in the mapping list. This indicates that when the user attempts to access the unsaved mapping to generate reports a warning will appear notifying them that the mapping needs to be validated.

To edit the database preferences the user must click either the **'Change'** button at the first part of the page or the **'Database Preferences'** option of the **'Mapping Tasks'** menu. The user then goes to a page as shown in Figure 16, in which they can change any of the data source options presented there.

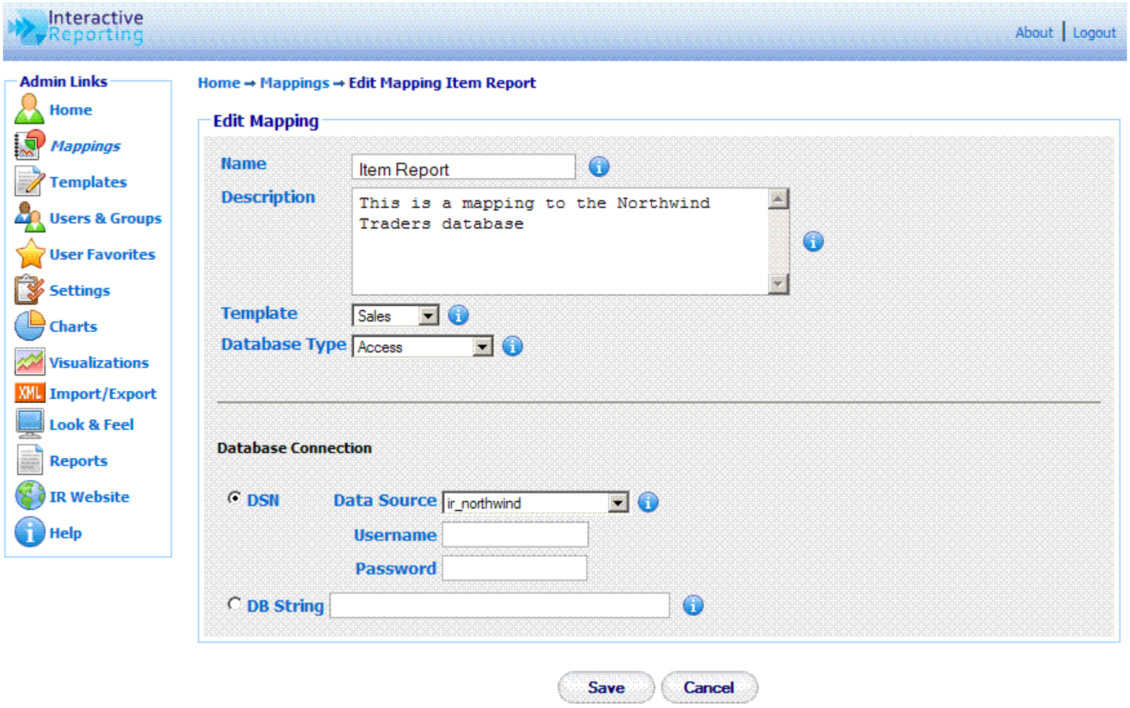



Figure 16

## Mapping Preferences

In addition to editing the mapping elements, the user can also edit the mapping preferences. These refer to overwriting some of the system settings and/or modifying the Graphical User Interface (GUI) for the particular mapping. To edit the mapping preferences the user must click the **'Mapping Preferences'** option of the **'Mapping Tasks'** sidebar menu. The user gets directed to the page of Figure 17. This page contains three parts, the **'System Preferences',** the **'Report Configuration'** and **'Security'**. In order to select which one to view, the user must click on the corresponding header titles of Figure 17.

In the **'System Preferences'** tab, Figure 17, the user can set the currency symbol to be used at the reports, and they can overwrite some of the system settings. To perform the latter, the user must set the **'Use Default System Values'** option to **'No'**. Then, the remaining options are enabled and the user can select to alter any of them. When the user generates reports based on this mapping the selected system preferences will be utilised, even though other mappings retain the system settings (to be discussed in detail in a following chapter).

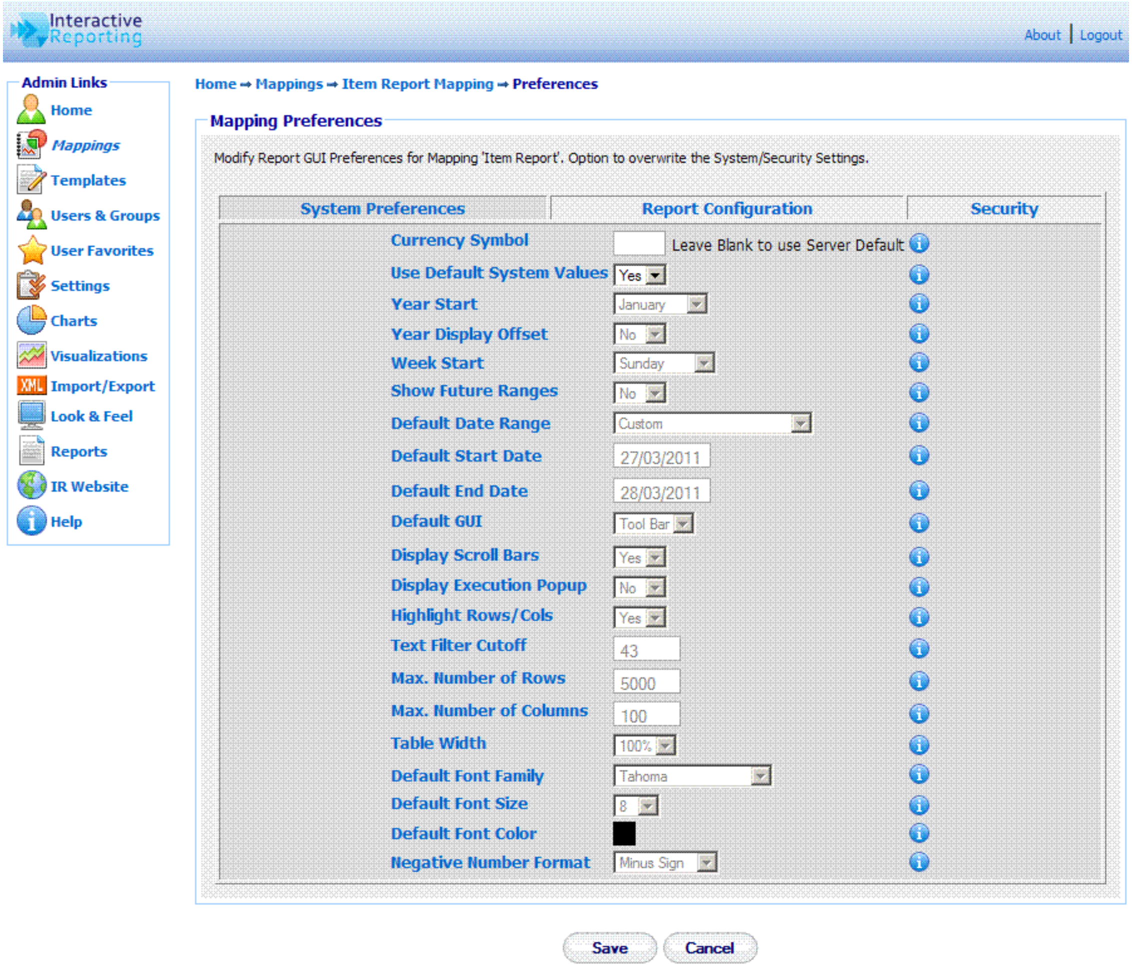



**Figure 17**

In the **'Report Configuration'** tab, Figure 18, the user can decide on which features of INTERACTIVE REPORTING they wish to retain. The **'Disabled'** list should contain the features that the user doesn't need and the **'Enabled'** list should hold the INTERACTIVE REPORTING features to be used. To move a feature between the lists, the user must highlight the feature of interest, and either double click on it or click any of the appropriate buttons between the two lists As an example, let's assume that the user doesn't want to generate reports through the Wizard interface, that they don't need any filters, and they don't want to use the paging option. The user must then highlight the **Wizard, Filters** and **Paging** options (for multiple selections hold the Ctrl key while highlighting the required values) and click the '<' button. When running reports these elements of INTERACTIVE REPORTING will be absent.

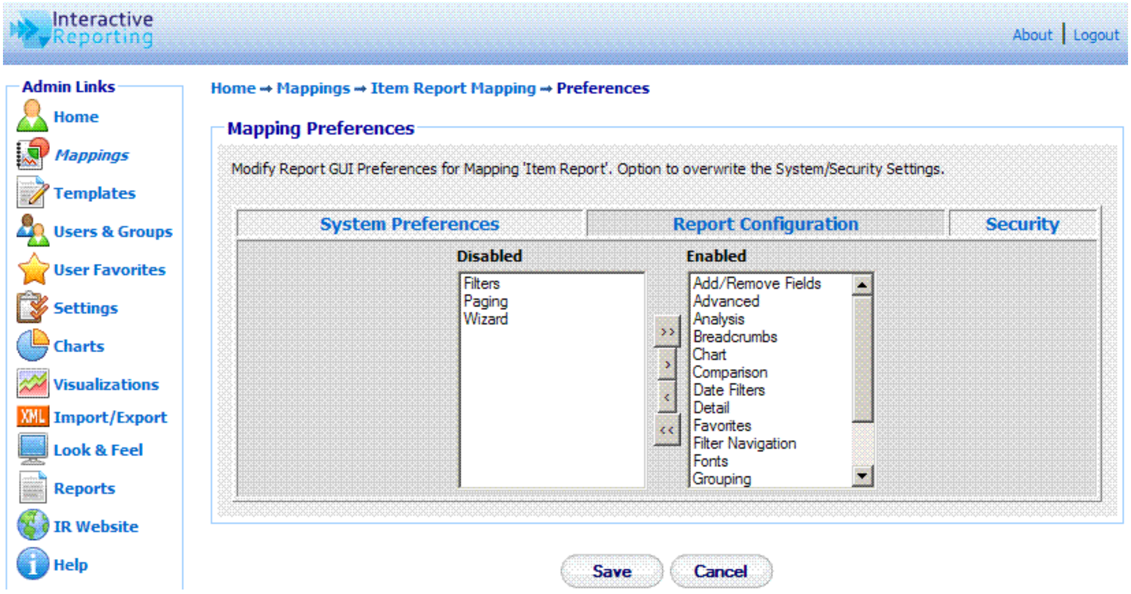



Figure 18

In the **'Security'** tab, Figure 19, the user can select whether they wish to apply any security settings to the particular mapping when viewing the associated reports. To change the security settings for this mapping only, the user must set the **'Use Values from Template'** option to **'No'.** When the user finishes with the system preferences, the report configuration and the security set up they must click the **'Save'** button to return to the master editor page, where they can save all their changes and finish with the editing of the mapping.


Figure 19

## Security

In addition to editing the mapping elements, the user can also view which users have access to the particular mapping and which access level correspond to each user. To edit the security settings the user must click the **'Security'** option of the **'Mapping Tasks'** sidebar menu. The user gets directed to the page of Figure 20. The user can then select who should have **Full Access, No Access,** or **Restricted to** the relevant template fields for the particular mapping.

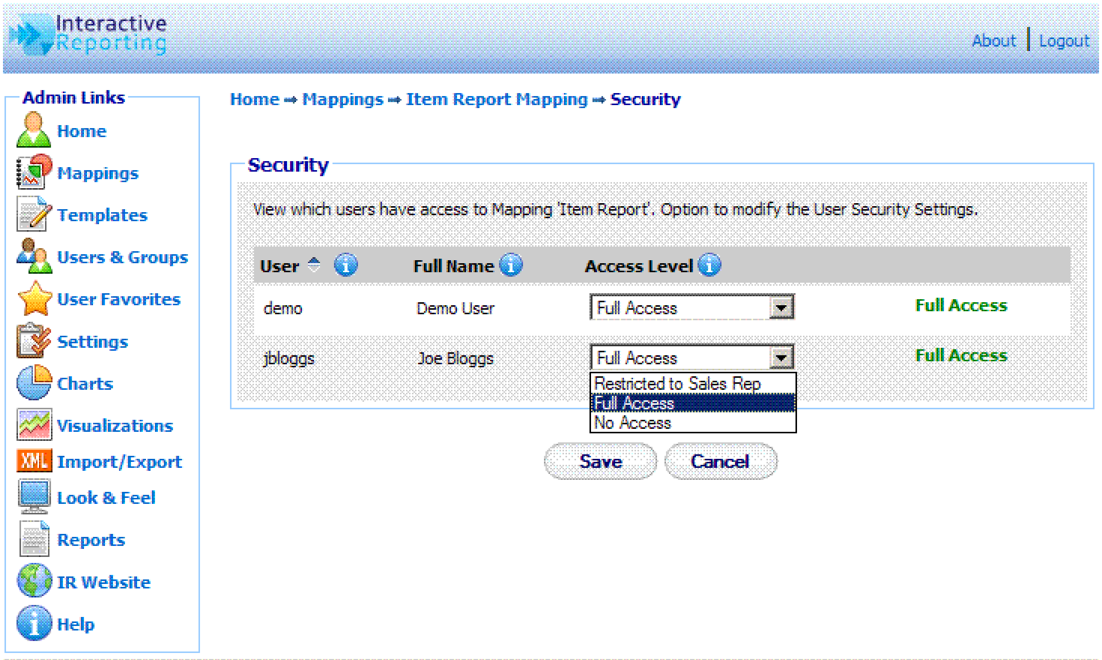



Figure 20

## Preview

When a user is editing a mapping from the mapping editor master page, Figure 14, or any of the table editor pages, Figures 12 and 13, they have the option to preview what they have edited directly from the Interactive Reporting side. This can be achieved by clicking the **'Preview Advanced'** or **'Preview Report'** options from the **'Mapping Tasks'** sidebar menu. The **'Preview Advanced'** option directs the user directly to the **'Advanced'** report interface associated with the particular mapping, as seen in Figure 21. From that page the user can generate reports based on the mapping that they have created up to this point. If the user wishes to return to the mapping editor page from where the preview option was selected to modify further the mapping, they can click the **'Edit'** link at the header of the advanced page.

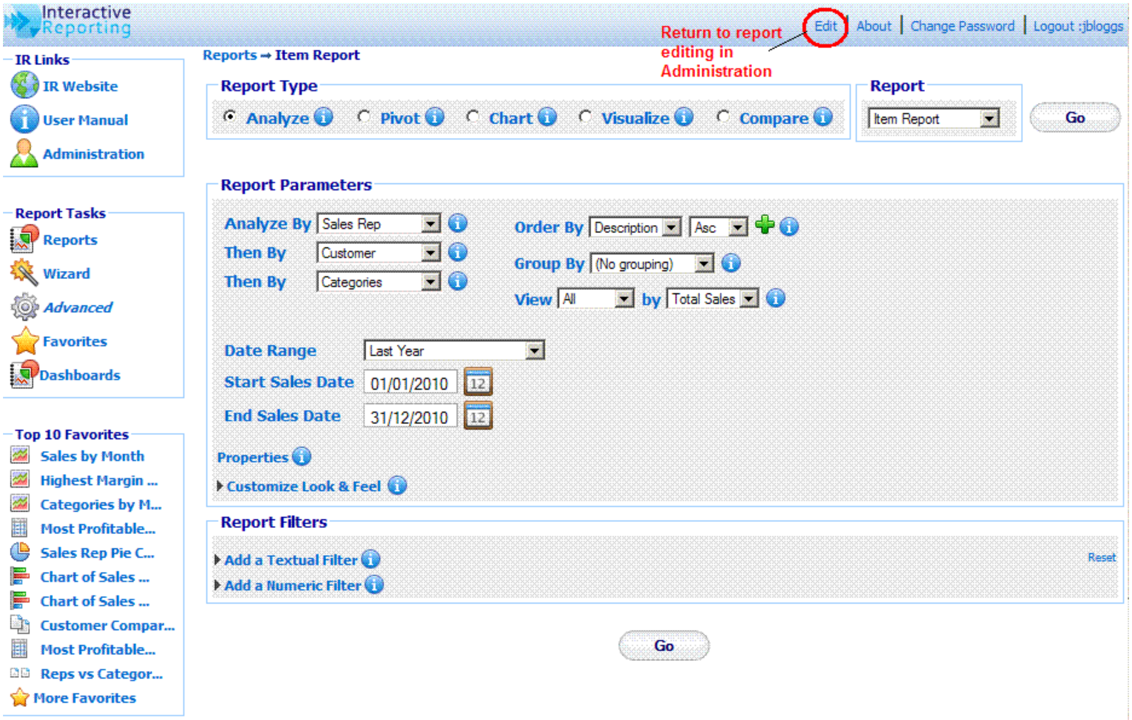
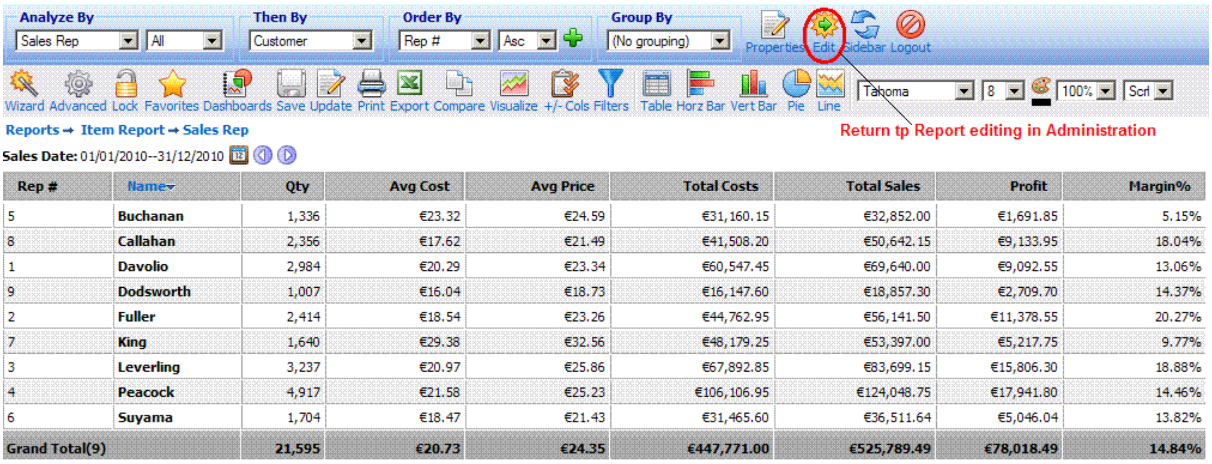



**Figure 21**

The **'Preview Report'** option directs the user directly to the report page generated from the particular mapping, as seen in Figure 22. From that page the user can go on with viewing reports based on the mapping that they have created up to this point. If the user wishes to return to the mapping editor page from where the preview option was selected to modify further the mapping, they can click the **'Edit'** button at the toolbar section of the report page.

Note that if the user tries to preview a mapping to which they have no access to, an error message will be displayed, recommending the user to first obtain access to the mapping and then try to preview it.



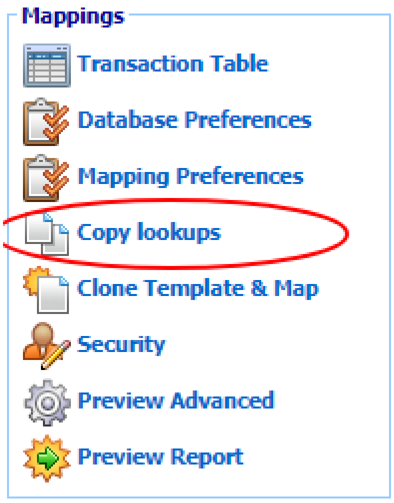

| Rep # | Name | Qty | Avg Cost | Avg Price | Total Costs | Total Sales | Profit | Margin% |
|---|---|---|---|---|---|---|---|---|
| 5 | Buchanan | 1,336 | €23.32 | €24.59 | €31,160.15 | €32,852.00 | €1,691.85 | 5.15% |
| 8 | Callahan | 2,356 | €17.62 | €21.49 | €41,508.20 | €50,642.15 | €9,133.95 | 18.04% |
| 1 | Davolio | 2,984 | €20.29 | €23.34 | €60,547.45 | €69,640.00 | €9,092.55 | 13.06% |
| 9 | Dodsworth | 1,007 | €16.04 | €18.73 | €16,147.60 | €18,857.30 | €2,709.70 | 14.37% |
| 2 | Fuller | 2,414 | €18.54 | €23.26 | €44,762.95 | €56,141.50 | €11,378.55 | 20.27% |
| 7 | King | 1,640 | €29.38 | €32.56 | €48,179.25 | €53,397.00 | €5,217.75 | 9.77% |
| 3 | Leverling | 3,237 | €20.97 | €25.86 | €67,892.85 | €83,699.15 | €15,806.30 | 18.88% |
| 4 | Peacock | 4,917 | €21.58 | €25.23 | €106,106.95 | €124,048.75 | €17,941.80 | 14.46% |
| 6 | Suyama | 1,704 | €18.47 | €21.43 | €31,465.60 | €36,511.64 | €5,046.04 | 13.82% |
| Grand Total(9) | | 21,595 | €20.73 | €24.35 | €447,771.00 | €525,789.49 | €78,018.49 | 14.84% |

**Figure 22**

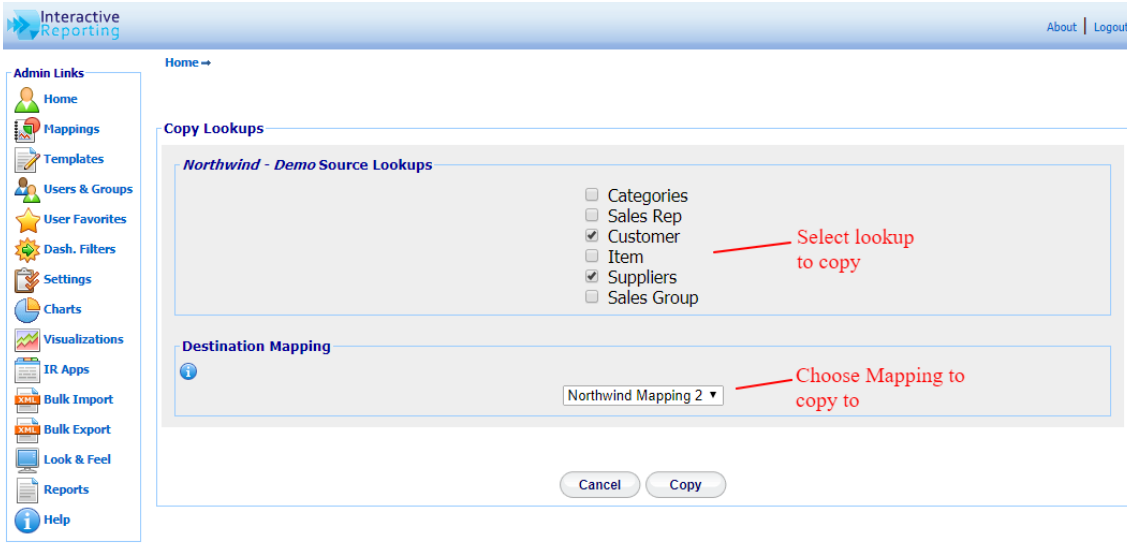
## Copy a Mapping

It is possible to copy lookups from one mapping to another if both mappings have been created using the same Template.

To do so, click into the mapping from which you want to copy the lookup(s). Now select Copy Lookups from the left-hand margin.



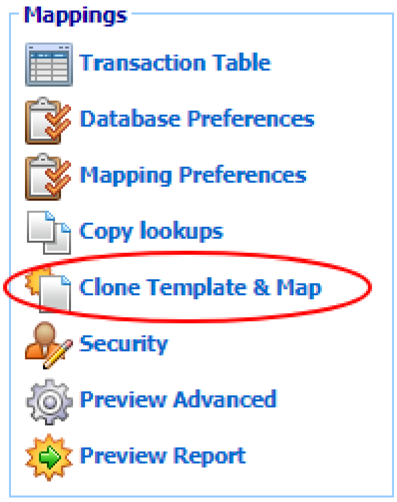

Click to choose the lookups you want to copy, then select the Mapping to which you want to copy these lookups:



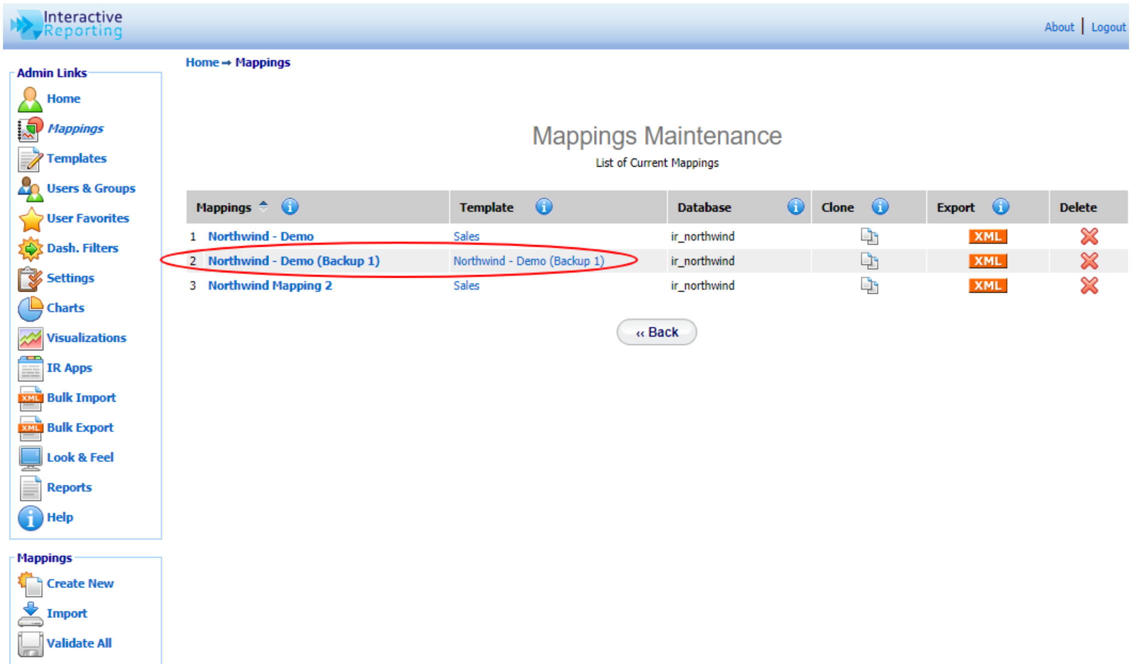

## Clone Template and Mapping

It is possible to clone a mapping by clicking on the Clone button on the Mappings screen. One issue that might arise from this is the Cloned Mapping shares a template with the Original Mapping. You may wish to begin with a cloned mapping connected to a clone of the associated Template.

To do so, select the Mapping you wish to work with from the Mappings Screen. Now select **'Clone Template & Map'** from the left-hand margin.




This creates a new Mapping and associated Template, each with the same name as the original Mapping, followed by the word "*(Backup 1)*". *Subsequent clones of the same Template & Mapping will increment the Backup number.*



Chapter
5

# Templates

## *How to Create and Operate Templates Easily…*

INTERACTIVE REPORTING allows the user to easily modify database criteria, without having to deal with database tables or forms by using Templates. A template must be created for each database that is to be made available to the users.


**Figure 23**

Templates can be Created, Edited, Deleted, Cloned, Imported and/or Exported or just viewed. To access the 'Templates' section click on the **'Templates'** link of either the **'Administration Options'** menu or of the **'Admin Links'** sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 24, which contains a list of all available templates.

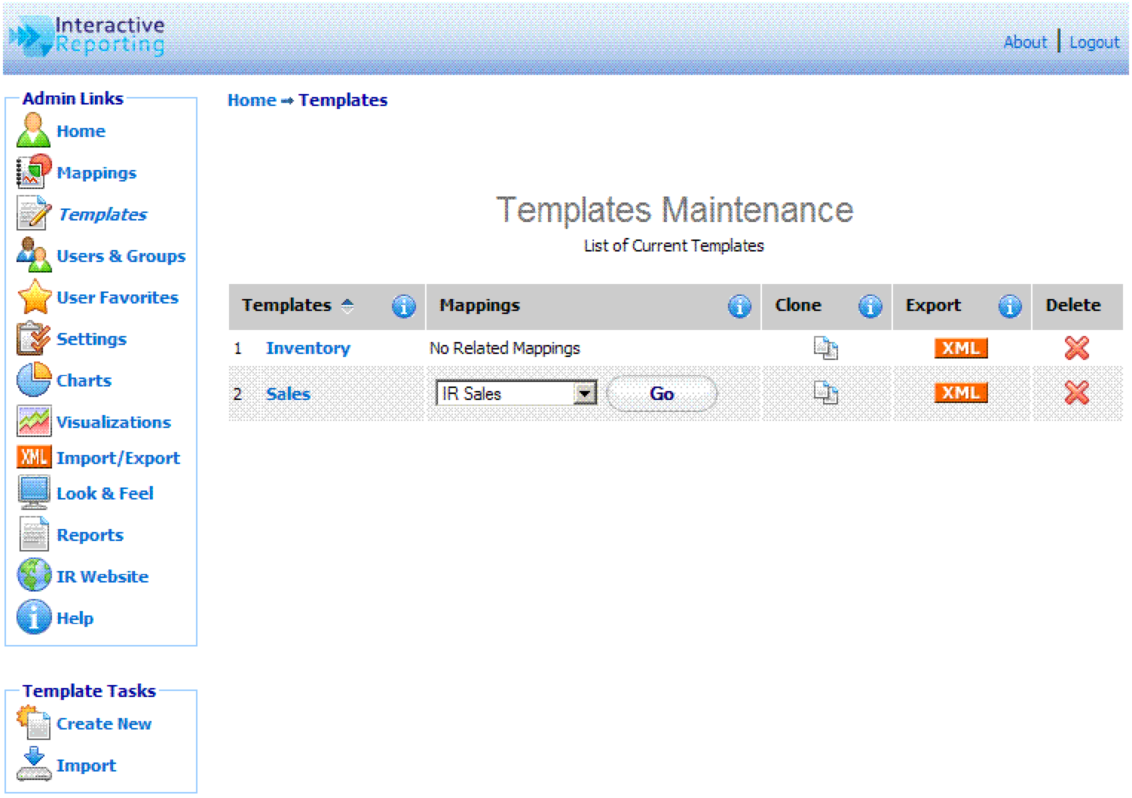



Figure 24

Each template is characterised by a user-friendly name that is shown in the column **'Templates'**. In Figure 24 there are two templates, one called *Inventory* and one called *Sales*. Clicking the template's name link allows viewing the template details and/or editing the template's options. The **'Mappings'** column shows all the mappings that have been created based on the particular template. If a template has been used for more than one mapping, these are shown in the form of a select list. To go to a specific mapping related to that particular template, select it from the list and click the **'Go'** button next to the mapping list. The **'Clone'** option creates a complete copy of the template. Cloning a template can save time in creating a new one, and reduces the testing time. To clone a template, click the **'Clone'** icon next to the template of interest. To export a template, click the **'Export'** button next to it. This will cause a box to pop up on screen prompting the user to save the template to their desired location. To delete a template just click the delete icon relevant to the template that is no longer required.

The **'Template Tasks'** offer the ability to create a new template and import an existing one.

## Import a Template

To import a template click the **'Import'** link of the **'Template Tasks'** section on the left side of the templates maintenance page. The user is then directed to the **'Import Template'** page as can be seen in Figure 25. The user simply enters the path where the stored template is located or uses the **'Browse'** button to locate the template if unsure of the destination path. When the destination path is provided click the **'Import'** button to button to proceed to the second step of the import process as shown in Figure 26. The user has now the option to select the template they wish to import. When the template has been selected click the **'Import'** button to return to the templates page. Once the template is imported it will appear within the list of available templates.

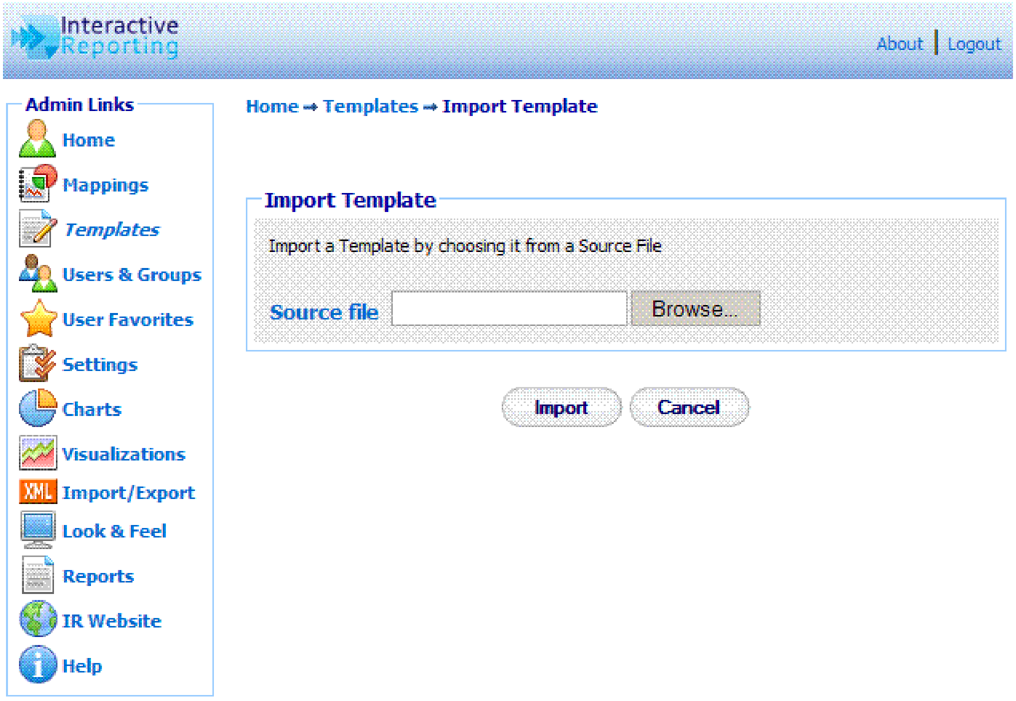



Figure 25

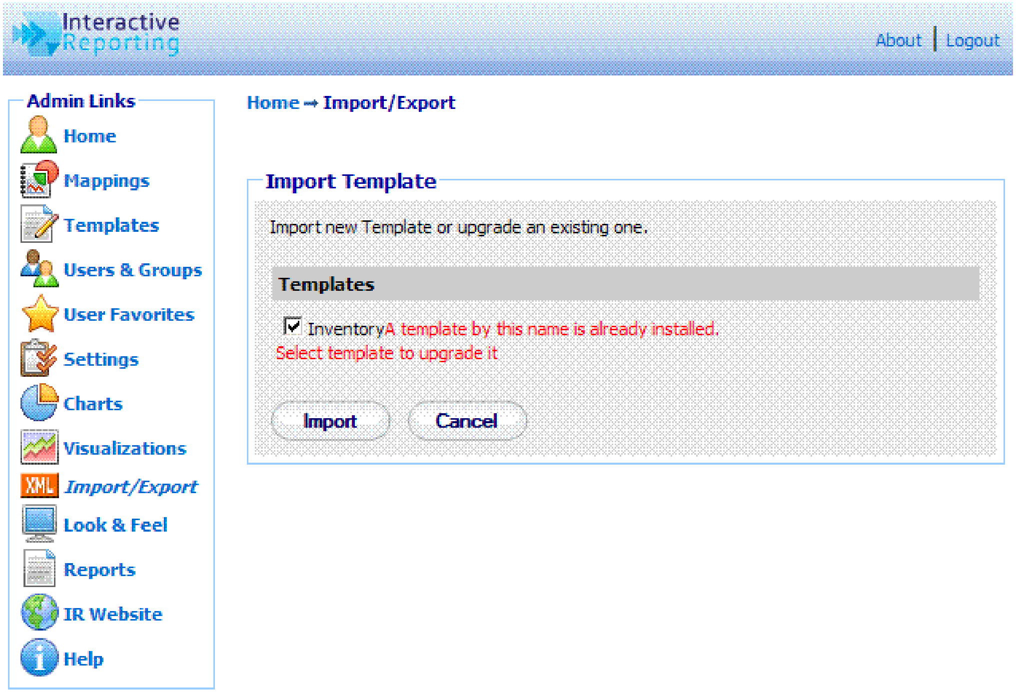



Figure 26

## Create New Template

To create a new template, click the **'Create New'** link of the **'Template Tasks'** section on the left side of the templates maintenance page. The user is then directed to the **'Create New Template'** page as can be seen in Figure 27. First complete the name to be used for the new template. Next enter a description of the new template. When creating a new template the **'Advanced'** link should not be clicked, as lookups must be added before it provides additional functionality. Once the data has been entered the user must press the **'Save'** button to continue to the next step in which they can enter variables, calculated variables and lookups, Figure 28. Once the template preferences have been set, the user can add all the variables, calculated variables and lookups to constitute the new template, and can configure the different report types based on this template.

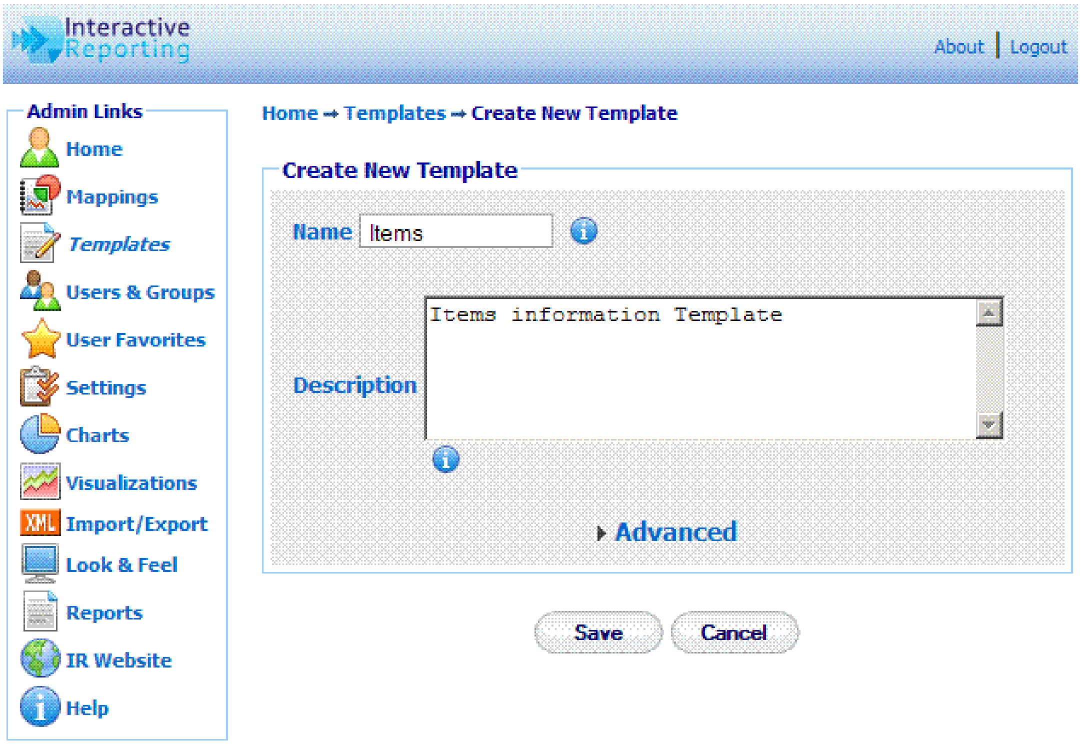



Figure 27

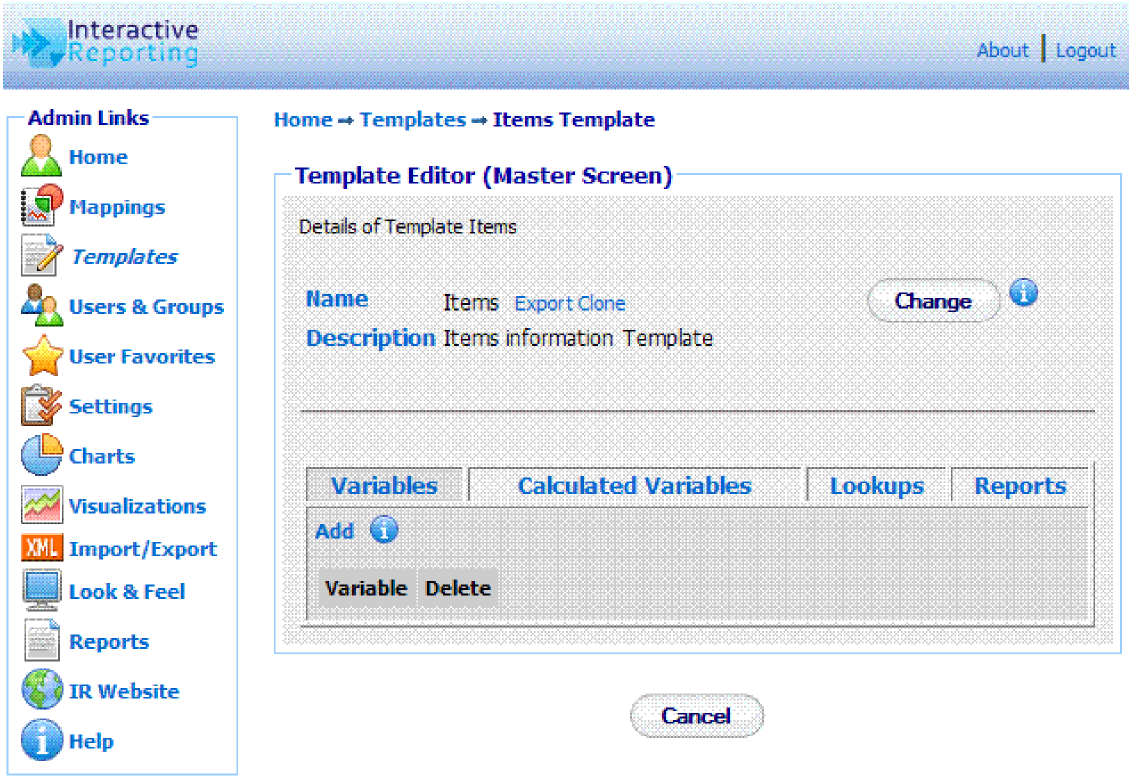



Figure 28

## Variables

This list contains numeric or currency quantities that are used for the evaluation of the Calculated Variables. To add a new variable, click the **'Add'** link of the **'Variables'** tab to be directed to the **'Add Variable'** page, Figure 29.

First, the user must give a name to the new variable, for example *qty*. The **'Name'** field should not be left blank and it should be unique. Try to make the name of the variable as user friendly and descriptive as possible. This field cannot contain spaces. Valid variable names can begin only with text, and they can contain only text, numbers or the underscore (_). The **'Type'** option determines whether the variable is going to be numeric or currency. By clicking on the **'Advanced'** link more options become available. The **'Default Value'** should be either blank or numeric. The **'Required'** field determines whether this variable should be mandatory when used in a mapping. If **'Yes'** is chosen the variable must always be mapped in the principal table. When finished, click the **'Save'** button to return the template editor master screen.

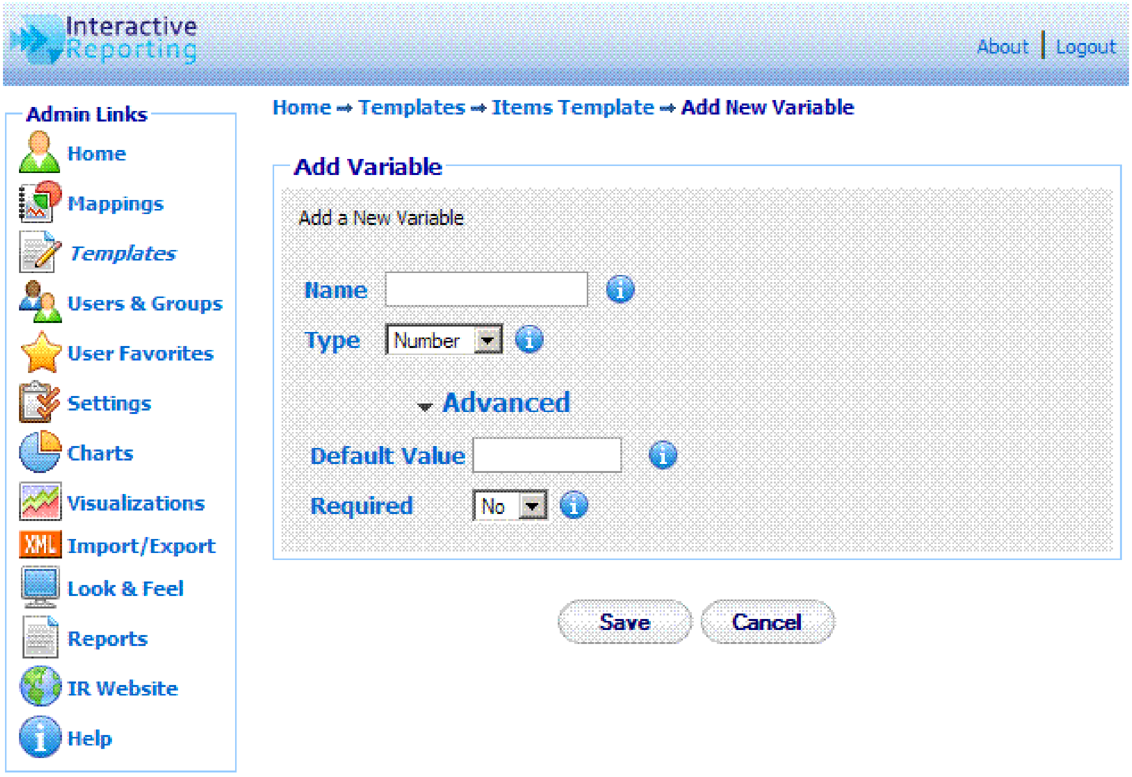



Figure 29

## Calculated Variables

The **'Calculated Variables'** are the numeric quantities that appear in the reports. To add a new calculated variable, first click on the **'Calculated Variables'** tab of the template editor master screen, Figure 29, and then click the 'Add' link to be directed to the **'Add Calculated Variable'** page, Figure 30.

First, the user must give a title to the new calculated variable, for example *Avg Cost*. The **'Title'** field should not be left blank, and it should be unique. Try to make it as user friendly and descriptive as possible. This field cannot contain spaces. Valid titles can begin only with text, and they can contain only text, numbers or the underscore **(_)**. The user must then select the type of the calculated variable, i.e. whether it is going to be a number, a currency, a percentage field or whether it is going to be a date.

The next part of the calculated variable editor determines the expression that evaluates the variable. The user must select the appropriate function, such as **'Sum'**, **'Weighted Sum'**, **'Conditional Sum'**, **'Min'**, **'Max'**, **'Count'**, **'Derived Sum'** and **'Derived Weighted Sum'**. The required formula must then be entered in the text box provided. The **'Sum'** formula can contain numbers, mathematical expressions, functions of variables or lookups, dates. If the function selected is the **'Weighted Sum'**, the expression will require both a numerator and a denominator and two text boxes will appear. The formula text fields can be filled either by editing directly the text boxes or by choosing a field from the list that appears above them and clicking the **'Add'** button next to it to insert the selected field automatically into the text box required. The mathematical operators next to field list are used in the expression text boxes. The user can either type them into the text boxes or they can click on any operator to directly insert it at the position of the cursor/caret of the expression text boxes. Care should be taken not to have the denominator equal to 0.

When selecting the function for the calculated variable, there is also the option to set conditions on the report data when displayed. This is performed via the function option **'Conditional Sum'**. When choosing this option two text boxes appear, the upper text field will correspond to the condition of interest, and the lower text field will hold the value if this condition is true. The **'Derived Sum'** and **'Derived Weighted Sum'** functions are similar to the **'Sum'** and **'Weighted Sum'** respectively, with the difference that these expressions can now contain previously defined Calculated Variables.

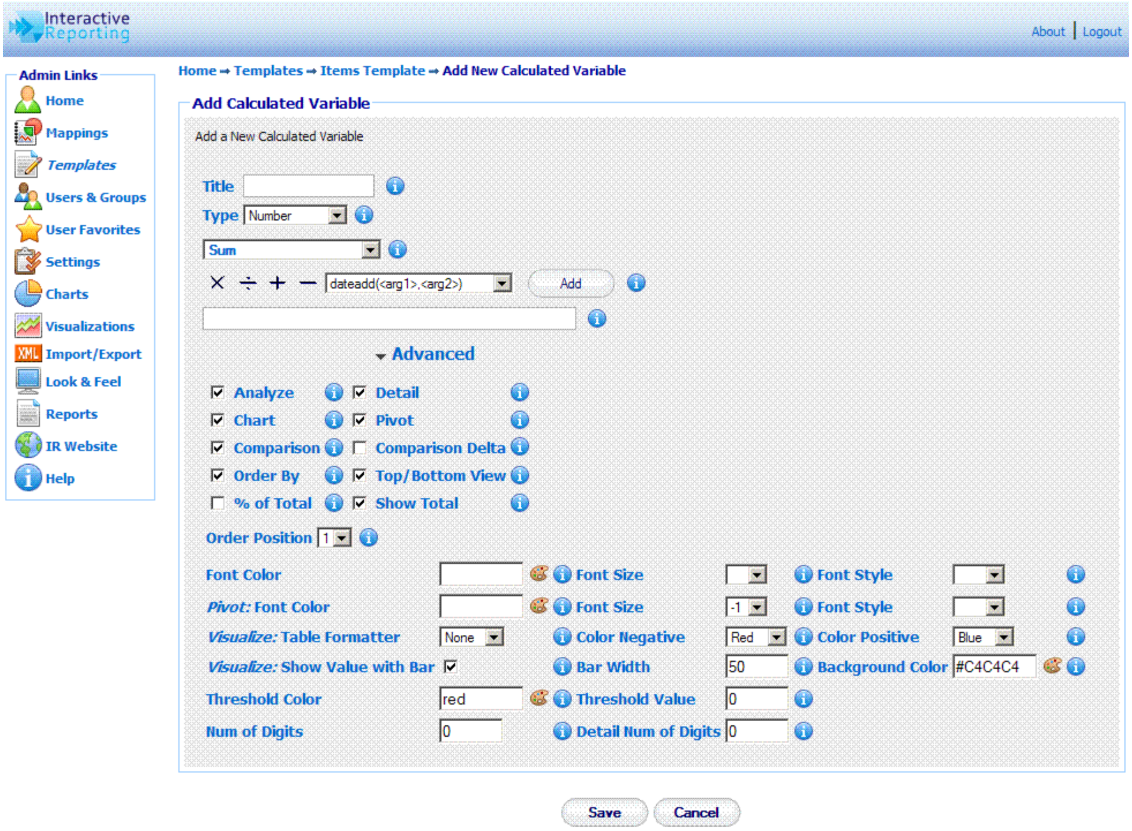



**Figure 30**

If the user wishes to proceed with a more detailed editing of the calculated variable, they should click the **'Advanced'** link to reveal more options, as shown in Figure 30. The user can then select to which type of reports, such as **Analyze, Detail, Pivot, Chart** or **Compare**, the calculated variable should appear by checking the appropriate options. They can select whether to allow the option to order by this particular calculated variable, or whether it should be contained in the list of fields for which top and bottom results should be viewed by. If the **'% of Total'** choice is checked, an extra column appears in the report under the calculated variable heading, showing its respective percentage value. If the '**Show Total'** choice is unchecked the calculated variable will have no total value in the reports. **The 'Order Position'** determines the order that the calculated variable should appear at the report. The optional font options format the calculated variable's value when appearing in analysis and comparison reports. There are additional font options to format the calculated variable's value when appearing in a pivot report, when the **'All'** pivot option is selected. The user can also set the default values for the visualization table formatters' options. If a **'Threshold Value'** is provided, any values lower than this threshold will appear with a different colour at the reports to distinguish them as special values. The different colour for this threshold value is determined by the **'Threshold Colour'** option. A default value of red is selected. The **'Threshold Value'** value is also used as the default basis value for the visualization table formatters. The **'Num of Digits'** option deals with the possibility that customers may require information that contains fractions of items, and thus allows the user to specify the limit of the digits output to the screen. For example, if **'Num of Digits'** is set to 4, a datum of 6.25 in the *Qty* field will be displayed as 6.2500. The default values of this option are 2 for type of calculated variable set to currency and for the **'Weighted Sum'** and **'Derived Weighted Sum'** functions, and 0 otherwise. However, the user can put any value of their choice. The **'Detail Num of Digits'** sets the calculated variable's decimal number of digits specifically for detail reports.

When finished with all the options for the new calculated variable, the user must click the **'Save'** button to return to the master template editor screen.

## Lookups

The **'Lookups'** list contains the INTERACTIVE REPORTING fields that compose the destination list of the mapping editor page. To add a new lookup, first click on the **'Lookups'** tab of the template editor master screen, Figure 28, and then click the **'Add'** link to be directed to the **'Add Lookup'** page, Figure 31.

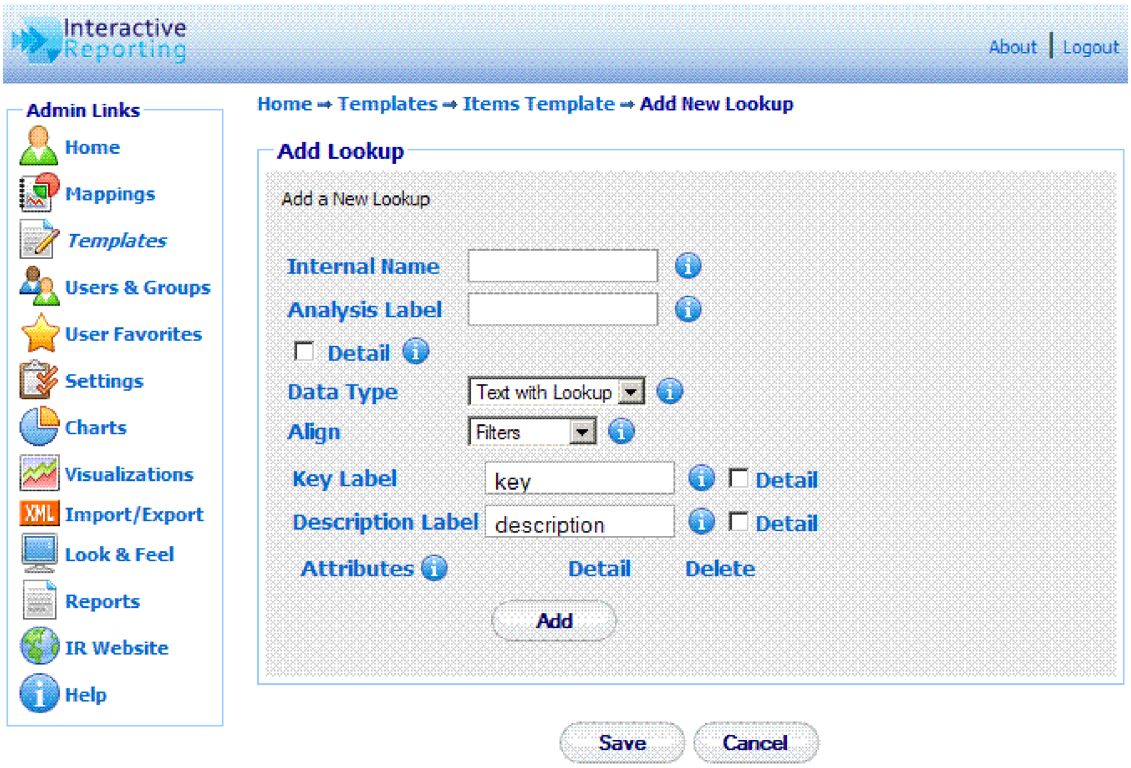



Figure 31

First, the user must give a name to the new lookup, for example *item*. The **'Internal Name'** field should not be left blank, and it should be unique. Try to make it as user friendly and descriptive as possible. This field cannot contain spaces. Valid titles can begin only with text, and they can contain only text, numbers or the underscore (_). The **'Analysis Label'** is used to provide the name that a lookup will have when mapped, and it is the label to be used within the database. This field cannot remain blank. If the **'Detail Report'** option is checked, the lookup will appear in any **Detail** Analysis Report.

The **'Data Type'** field can have one of three values: **'Date'**, **'Text'** or **'Text with Lookup'**. If **'Date'** or **'Text'** is selected the **'Add Lookup'** page changes to the one shown in Figure 32 or Figure 33, respectively.

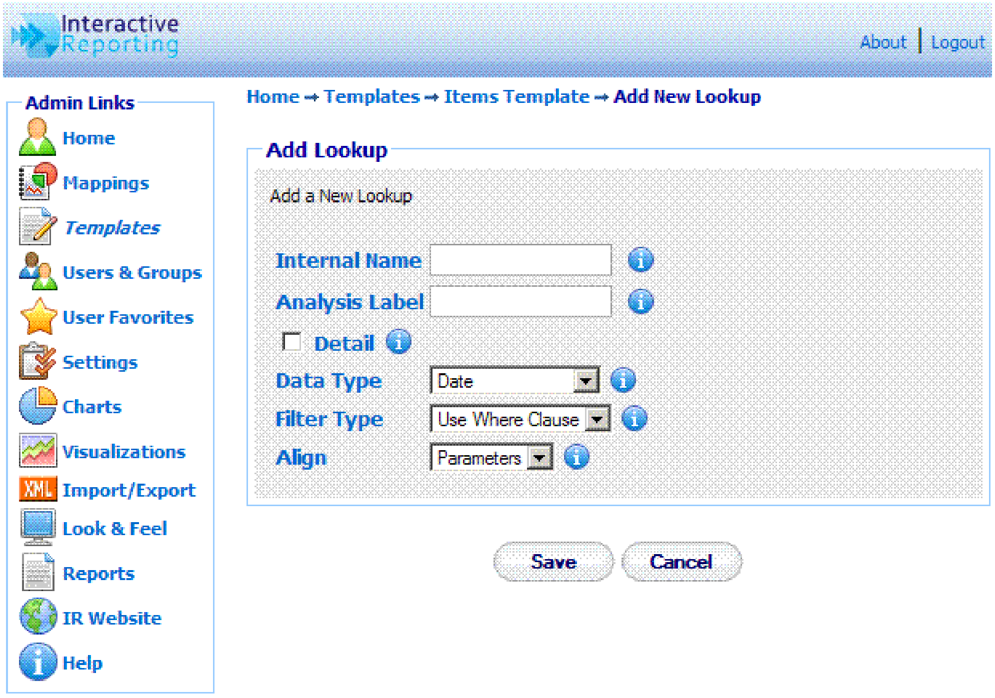



Figure 32

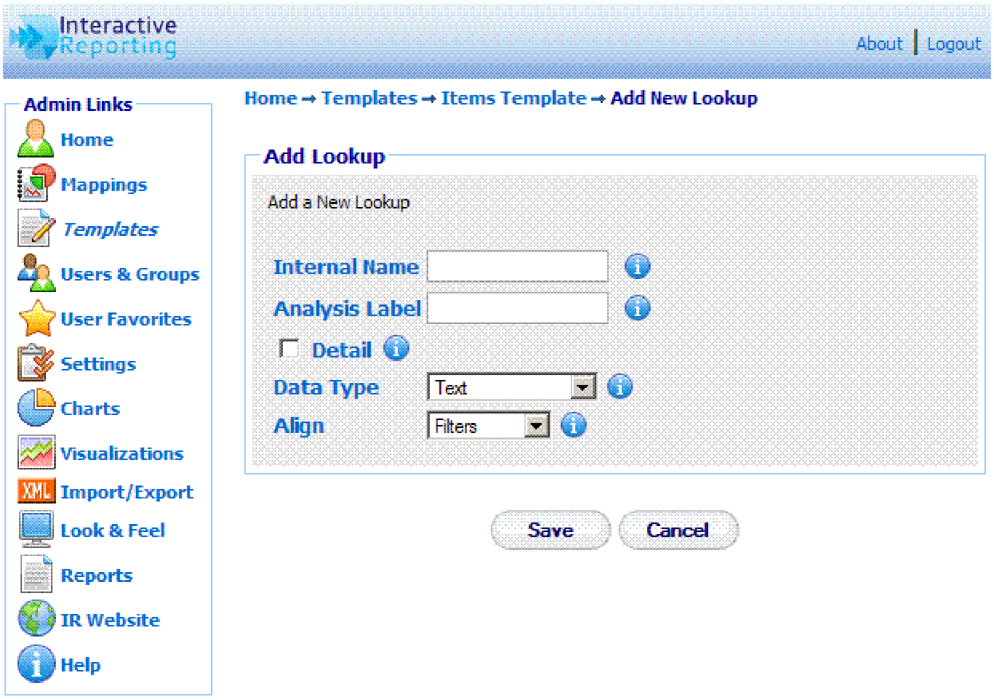



Figure 33

**'Dates'** and **'Text'** lookups cannot have attributes, whereas the **'Text with Lookup'** option allows for the determination of child attributes to that lookup, which can be used to map more fields from a textual table of the source database. For **'Dates'** lookups there is also the option to select what type of filter the particular date field can be. It can either be used in the Where clause statement that generates the report data, or it can be added as a dynamic filter in the sql statement that defines a mapping.

The **'Align'** field determines the side at which the lookup will be displayed at the **'Advanced'** interface page. The default option is **'Parameter'** for **'Date'** lookups, and **'Filters'** for **'Text'** and **'Text with Lookup'**, determining to which part of the advanced or wizard pages of the client side the specific lookup should appear if mapped.

If the user has selected to add a **'Text with Lookup'**, they must proceed with completing the options for the attributes that will relate to, as shown in Figure 31. The **'Key Label'** corresponds to the first attribute of the lookup. Its default value is set to 'key', but it can be changed to any other name.  The **'Description Label'** is the second attribute of the lookup. Its default value is set to **'description'**, but it can be changed to any other name. Both the key and description attributes can be added to the **Detail** Analysis report by checking the **'Detail'** options next to them. Apart form these two default attributes the user can add more custom attributes by clicking the **'Add'** button under the **'Attributes'** section.

When finished with all the options for the lookup, the user must click the **'Save'** button to return to the master template editor screen.

## Reports

The **'Reports'** tab of the master template editor provides a supplementary way to configure the various report types by selecting which fields to appear at each report. This option should be exploited only after the lists of variables, calculated variables and lookups, have been completed, so that all the added fields are present to each report type as appropriate. The options available under the **'Reports'** tab are: **'Analysis Report'**, **'Detail Report'**, **'Comparison Report'**, **'Comparison Delta'**, **'Chart Report'** and **'Pivot Report'**, as seen in Figure 34. When clicking any of these options the user is then allowed to add or remove fields that they desire to have or not in the selected type of report.

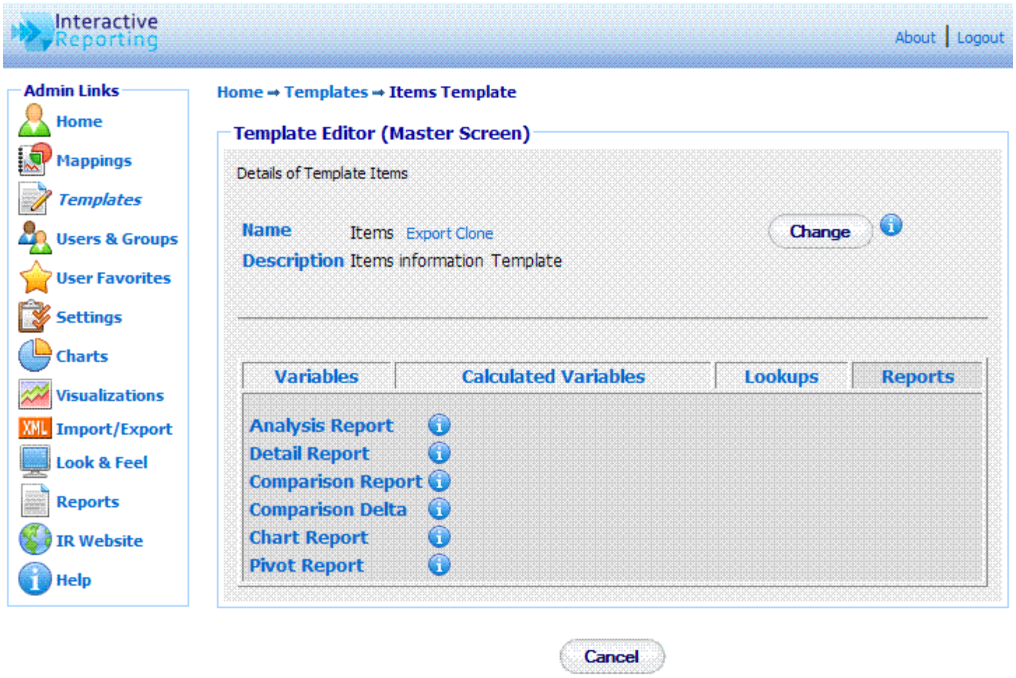



**Figure 34**

Figure 35 shows how a user can configure an Analysis report. The user has been taken to this page by clicking the **'Analysis Report'** option of Figure 34. The **'Choose'** list contains all the fields that can appear at an analysis report. To select which ones should be shown in such a report either highlight the desired fields and click the appropriate buttons to move them to the 'Analysis' list or double click on each field of interest. The green arrows allow the user to change the order of the selected fields. Highlighting any selected field and clicking the up or down arrow will move this field up or down by one position. When finished with the selection of fields click the **'Save'** button to return to the master template editor page. In a similar fashion the user can configure the rest of the options of the **'Reports'** tab.

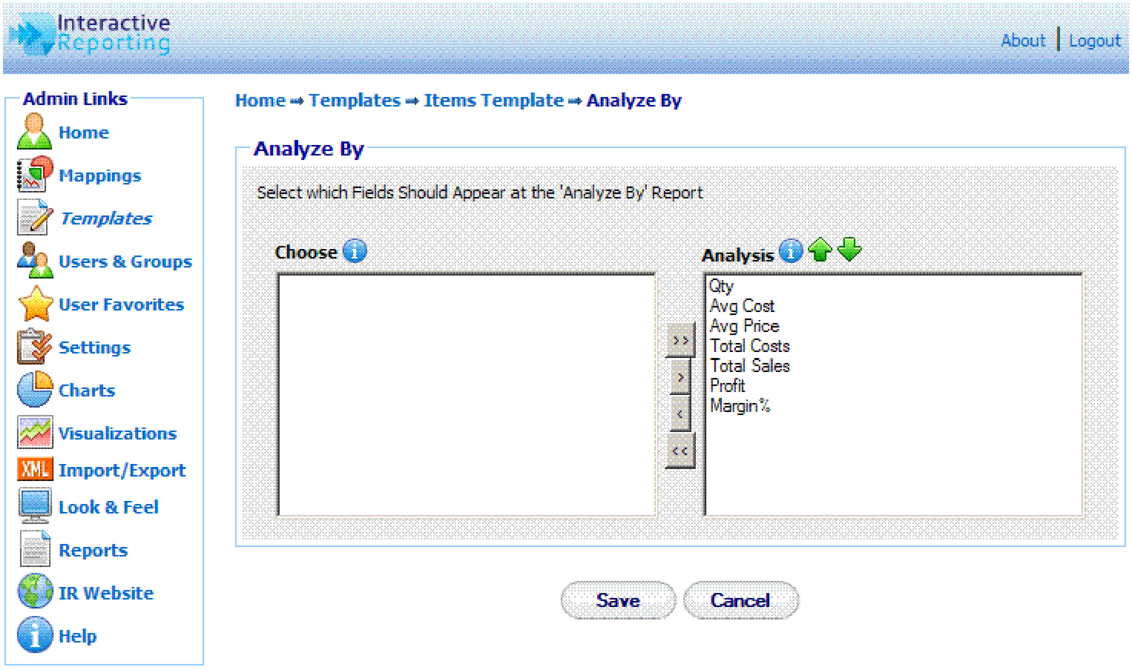



Figure 35

## Edit Template

When creating a new template or editing an existing one, a number of options can be modified, as will be explained in this section. To edit a template, just click on the template name in the templates page (Figure 24) to be directed to the template's master editor screen, shown in Figure 36. The master screen contains five parts that can be edited: the **Template Preferences**, the **Variables**, the **Calculated Variables** the **Lookup Lists,** and the **Reports.**

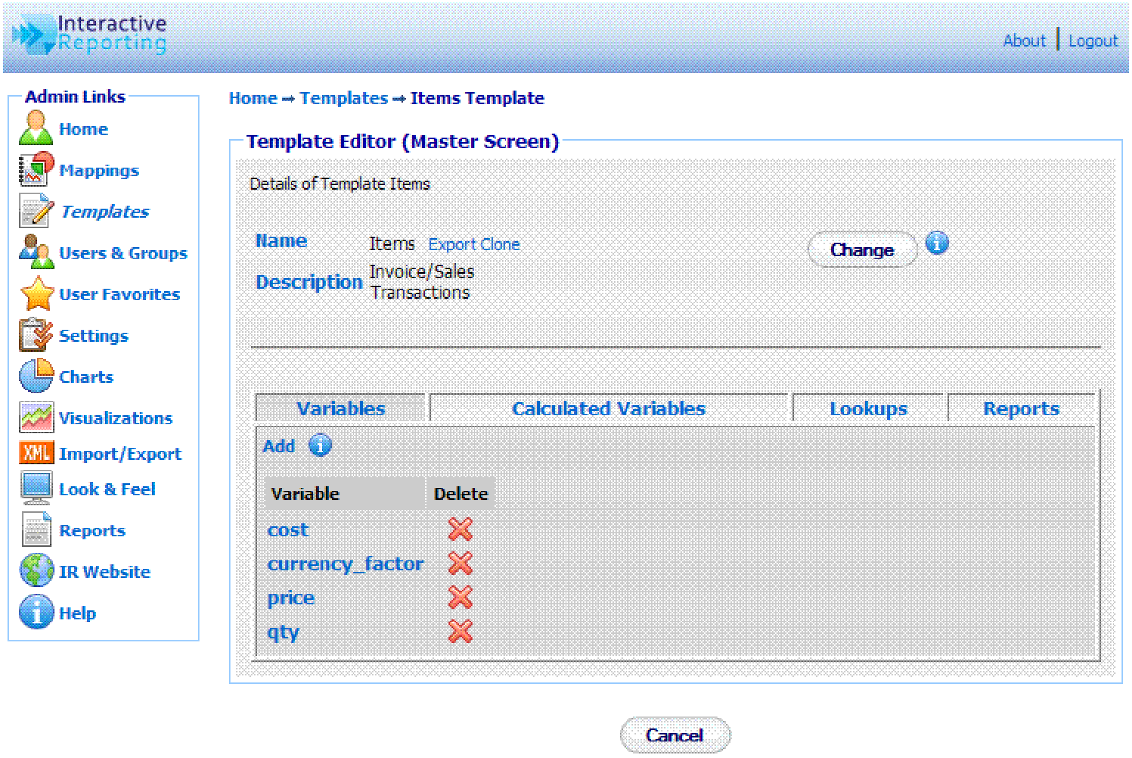



Figure 36

To edit the template preferences the user must click the **'Change'** button at the first part of the page. The user then goes to a page as shown in Figure 37, in which they can change any of the template options presented there. Clicking the **'Advanced'** link when editing a template allows the user to edit the default and restricted analyze by options, as well as the user and group security fields. The **'Num Default DropDowns'** denotes the number of **'Analyze By'** and **'Then By'** lists that should appear in the INTERACTIVE REPORTING Wizard and Advanced Pages. Its value ranges from 1 to 10 such lists. The **'Default Analyze By 1'** field gives the default field of the **'Analyze By'** list when the user has been granted full access. The **'Default Analyze By 2'** to **'Default Analyze By 10'** field value corresponds to the default value of the subsequent **'Then By'** lists when the user has been granted full access. The equivalent restricted analyze by values provide the default values when the user has only limited access. The **'User Security'** field determines at which level data will be displayed in the report. As an example, if **'User Security'** has been assigned to *salesrep* and the access level has been set to **'Restricted to User Key'**, as will be discussed at a later section, only the data related to a particular sales representative will be shown at the report. Similarly, the **'Secondary User Security'** and **'Group Security'** fields are associated with a secondary and group restriction level, respectively, that can be imposed to the data. Clicking the **'Save'** button returns the user to the master template editor page.

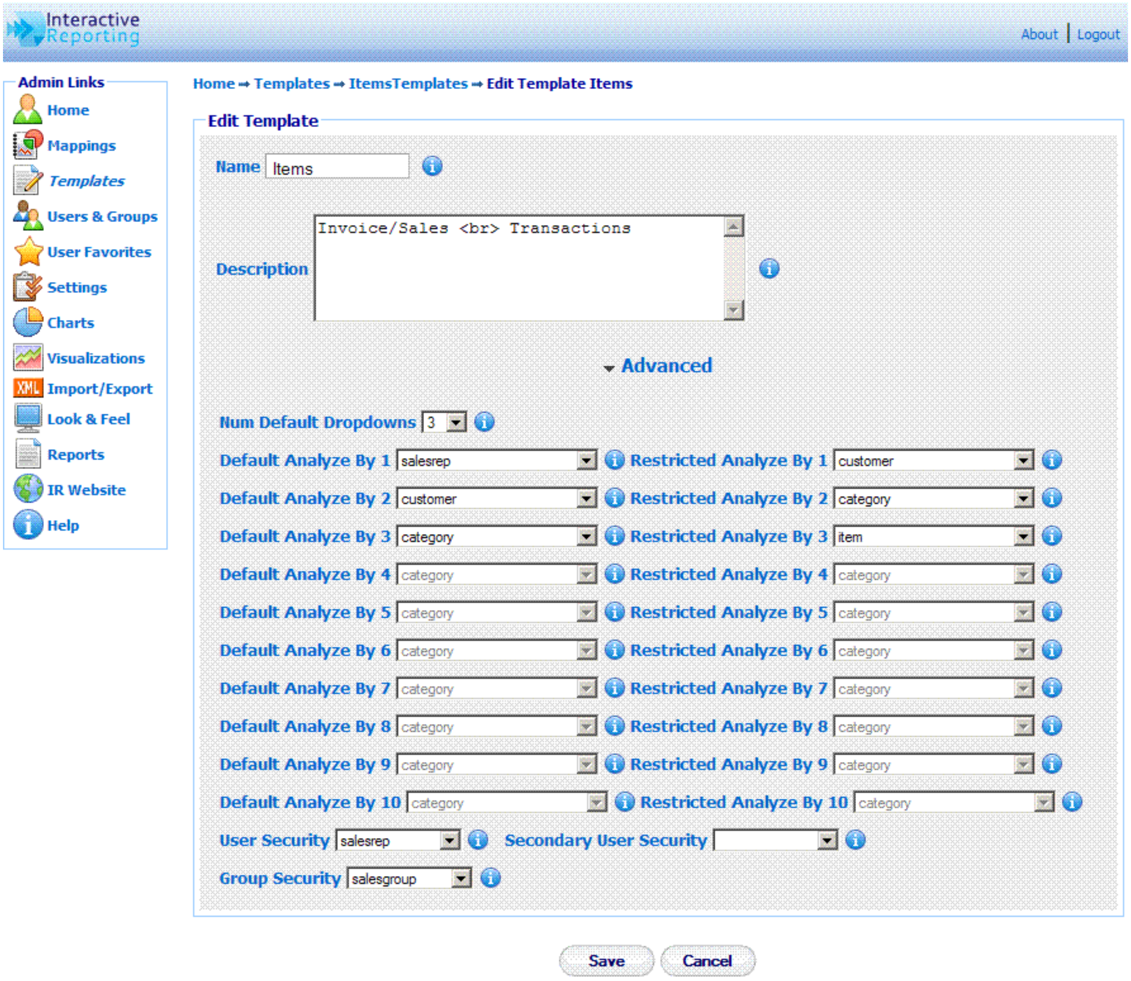



Figure 37

To edit any quantity of the variables, calculated variables, lookups or report lists, first the user must click on the appropriate tab on the master template editor page, and then click on the name of the quantity they want to modify. The user is then directed to a page like the one shown in Figure 20, 30, 31 or 34 respectively, and they can proceed with changing any options they prefer as discussed in the **'Create Template'** section.

Chapter

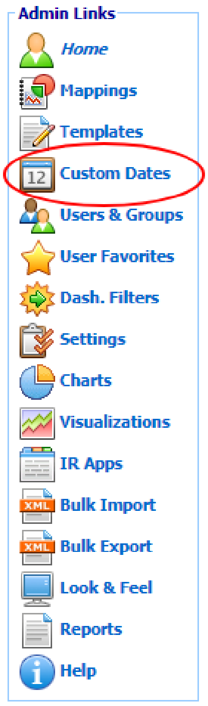
6

# Managing Date-ranges

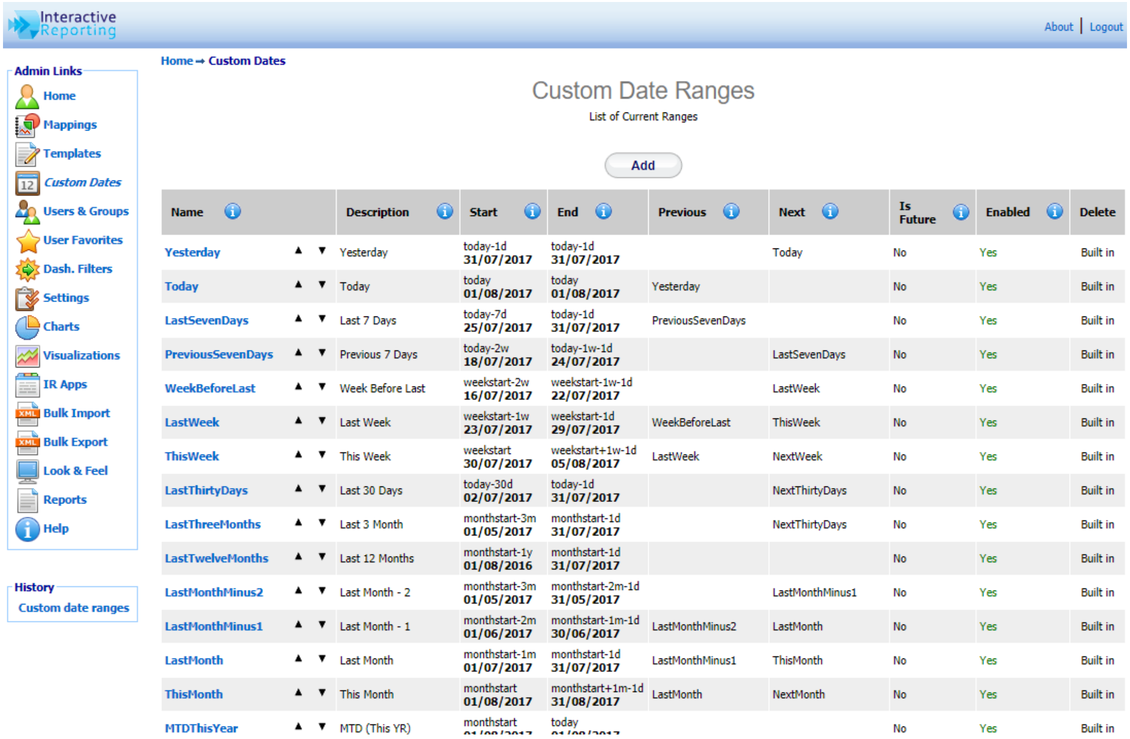
## Custom Dates...

INTERACTIVE REPORTING comes with a list of Date-Ranges preinstalled such as *Last Year*, *This Week*, *Year to Last Month*, etc.. These date-ranges are selectable by users when running reports. The actual to/from dates used in each report will vary depending on when these are run so if a new custom Date-Range not already on this list is required, Interactive Reporting needs to be instructed on how to calculate these dates: **'Custom Dates'**.

To view/ edit Custom Dates, select **'Custom Dates'** from the left-hand margin in the Admin section. *(Contact software support if this option does not show on your installation.)*



Here you see a list of pre-existing Custom Date Ranges.




To best see how each of these date-ranges look, click its name. You will see, for example, that both the start and end date for **'Yesterday'** is defined as ***today-1d***.

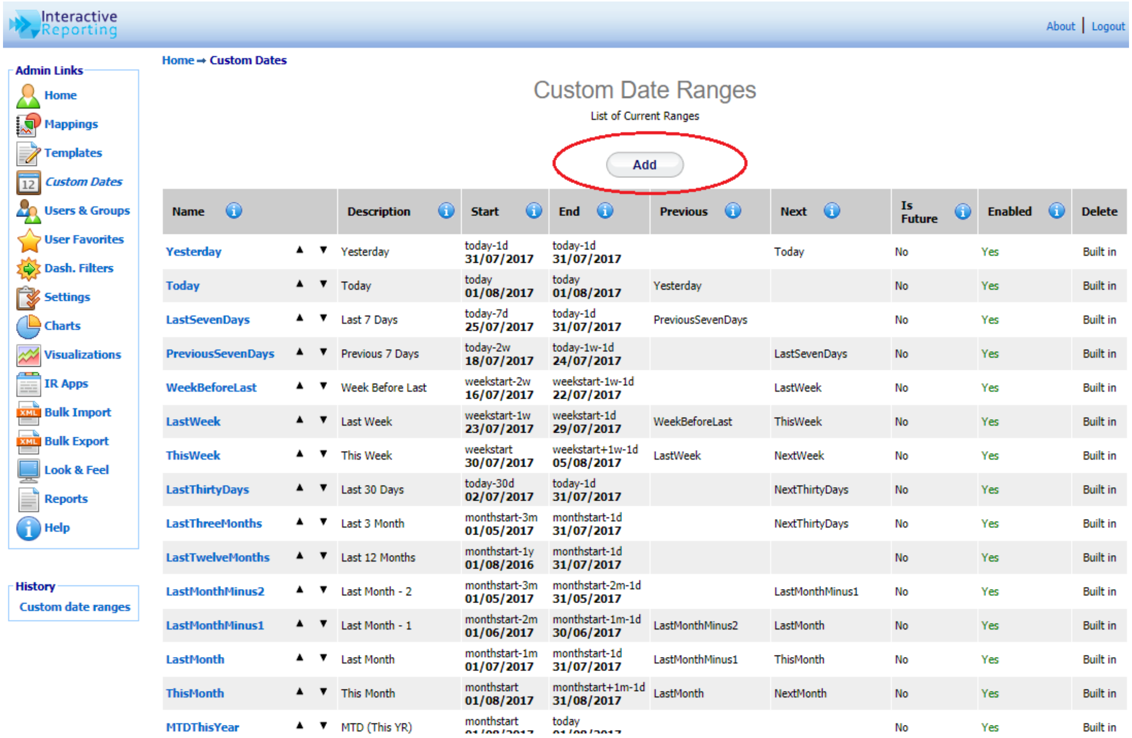
Start date for **'Last Month'** is defined as ***monthstart-1m***.
*ie. "start-date for this month minus 1 month"*

End date for **'Last Month'** is ***monthstart-1d***.
*ie. "start-date for this month minus 1 day" –which equates to "last day of last month"*

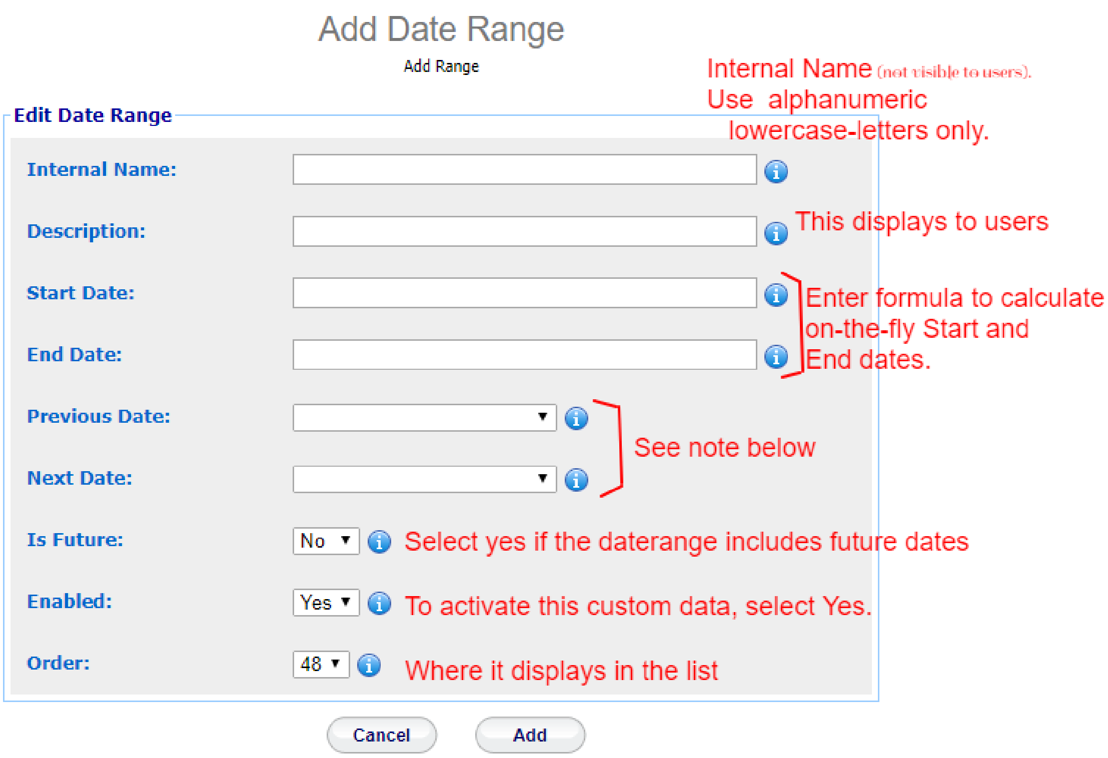
In this manner, with the correct keywords to make up the formula, it is possible to define any date-range necessary in relation to the current date. Full list of Custom Date Keywords available below.

## Add a Custom Date

To add a new Custom Date Range, select Add at the top or bottom of this screen.




| Name | | Description | Start | End | Previous | Next | Is Future | Enabled | Delete |
|---|---|---|---|---|---|---|---|---|---|
| Yesterday | ▲ ▼ | Yesterday | today-1d 31/07/2017 | today-1d 31/07/2017 | | Today | No | Yes | Built in |
| Today | ▲ ▼ | Today | today 01/08/2017 | today 01/08/2017 | Yesterday | | No | Yes | Built in |
| LastSevenDays | ▲ ▼ | Last 7 Days | today-7d 25/07/2017 | today-1d 31/07/2017 | PreviousSevenDays | | No | Yes | Built in |
| PreviousSevenDays | ▲ ▼ | Previous 7 Days | today-2w 18/07/2017 | today-1w-1d 24/07/2017 | | LastSevenDays | No | Yes | Built in |
| WeekBeforeLast | ▲ ▼ | Week Before Last | weekstart-2w 16/07/2017 | weekstart-1w-1d 22/07/2017 | | LastWeek | No | Yes | Built in |
| LastWeek | ▲ ▼ | Last Week | weekstart-1w 23/07/2017 | weekstart-1d 29/07/2017 | WeekBeforeLast | ThisWeek | No | Yes | Built in |
| ThisWeek | ▲ ▼ | This Week | weekstart 30/07/2017 | weekstart+1w-1d 05/08/2017 | LastWeek | NextWeek | No | Yes | Built in |
| LastThirtyDays | ▲ ▼ | Last 30 Days | today-30d 02/07/2017 | today-1d 31/07/2017 | | NextThirtyDays | No | Yes | Built in |
| LastThreeMonths | ▲ ▼ | Last 3 Month | monthstart-3m 01/05/2017 | monthstart-1d 31/07/2017 | | NextThirtyDays | No | Yes | Built in |
| LastTwelveMonths | ▲ ▼ | Last 12 Months | monthstart-1y 01/08/2016 | monthstart-1d 31/07/2017 | | | No | Yes | Built in |
| LastMonthMinus2 | ▲ ▼ | Last Month - 2 | monthstart-3m 01/05/2017 | monthstart-2m-1d 31/05/2017 | | LastMonthMinus1 | No | Yes | Built in |
| LastMonthMinus1 | ▲ ▼ | Last Month - 1 | monthstart-2m 01/06/2017 | monthstart-1m-1d 30/06/2017 | LastMonthMinus2 | LastMonth | No | Yes | Built in |
| LastMonth | ▲ ▼ | Last Month | monthstart-1m 01/07/2017 | monthstart-1d 31/07/2017 | LastMonthMinus1 | ThisMonth | No | Yes | Built in |
| ThisMonth | ▲ ▼ | This Month | monthstart 01/08/2017 | monthstart+1m-1d 31/08/2017 | LastMonth | NextMonth | No | Yes | Built in |
| MTDThisYear | ▲ ▼ | MTD (This YR) | monthstart | today | | | No | Yes | Built in |



## Custom Date Keywords and Formulas

Custom Date Keywords are used to define the Start and End date of a Date-Range. Each Keyword returns a date relative to "Today".

| KEYWORD | RETURNS |
|---|---|
| **today** | Today's date |
| **weekstart** | Date of "first day of the current Week"<br>*(first day of the week defined in **'Settings'**)* |
| **monthstart** | Date of "first day of the current Month" |
| **quarterstart** | Date of "first day of the current Quarter" |
| **yearstart** | Date of "first day of the current Year" |
| **lm_yearstart** | Date of "first day of Last Month's Year"<br>*(useful when running reports from 'year to last month')* |

You can also use an actual date as a Start/ End Date if required.
eg. 01/01/1900

By using these keywords as a base, we can get to the date we require by adding or subtracting any number of days, weeks, months, years or quarters.

eg.

| FORMULA USED | RETURNS |
|---|---|
| **today-1d** | Yesterday |
| **weekstart-1m** | First day of this week, *last month* |
| **monthstart-1d-1y** | End of last month, *last year* |
| **quarterstart+1q-1d** | Last day of this quarter |

Chapter 7

# User Management

## *Controlling User Access…*

Access to INTERACTIVE REPORTING is managed through **Users and Groups** (much like the accounts that operate at system-level). To access the users section click on the '**User & Groups**' link of either the '**Administration Options**' menu or of the '**Admin Links**' sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 38, which contains a list of all available users and groups.

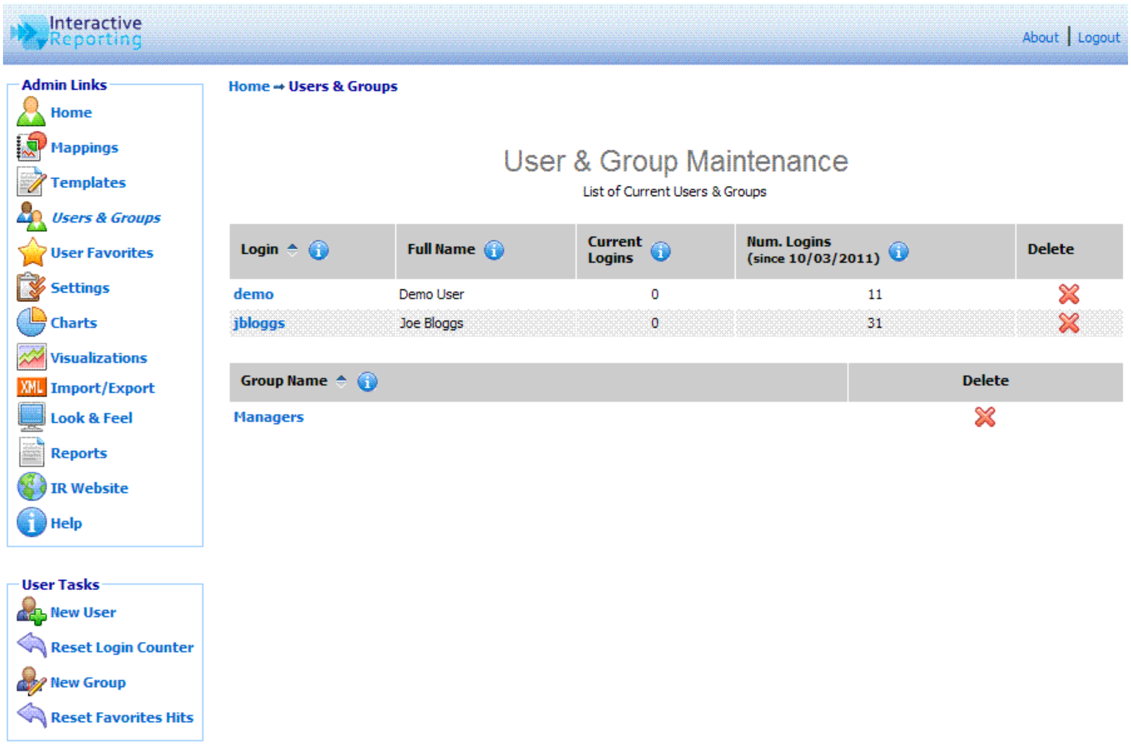



Figure 38

The user and group maintenance page contains two parts: the list of current users and the list of current groups of users. In Figure 38 there are two users, one called *demo* and one called *jbloggs*, and there is one group called *Managers*.

Each user is characterised by a '**Login**' name that they use to get into INTERACTIVE REPORTING. Clicking the user's login name link allows viewing the user's details and/or editing the user's options. The '**Current Logins**' column shows an online record of those users currently logged in to the user side of INTERACTIVE REPORTING. The record also indicates how many users are currently using a specific account. **'Num of Logins'** keeps a record of the number of times a user has logged onto Interactive Reporting over a period of time. Clicking the **'Reset Login Counter'** option at the **'User Tasks'** sidebar menu resets this number to zero and the count recommences on the current date. The user's **'Full Name'** allows the administrator to establish the identity of a user. It may be a person's name or a description of the account. To remove a user just click the delete icon relevant to the user that is no longer required.

Each group is characterised by a **'Group Name'** that can be clicked to allow the administrator to establish the identity of a group of users. Clicking the group's name allows viewing the group's details and/or editing the group's options. To remove a group just click the delete icon relevant to the group that is no longer required.

The **'User Tasks'** offer the ability to create a new user, to create a new group, to reset the login counter, and to reset the number of times users have selected to view favourite reports over a period of time.

## Add New User

To add a new user click the **'New User'** link of the **'User Tasks'** section on the left side of the users maintenance page to be directed to the '**Add New User'** page as can be seen in Figure 39. First complete the **'Login-Name'** that should identify the user. Next provide the password with which the user will be able to login into INTERACTIVE REPORTING. The **'Full Name'** should be completed, which could be either the user's full name or a descriptive name for the account. The **'Logon Domain'** field restricts the user to the IP address specified. If this field is left blank, the user is allowed access from anywhere in the domain. The **'Subnet'** option allows the administrator to control the IP address range from which the user can access the site. This can be done from a specific IP address, a range of specific IP addresses or any IP address. There are five different levels to access a site:

- **No Restriction** – the user can log in from anywhere in the subnet.
- **Class A Restriction** (255.0.0.0) - If the **'Logon Domain'** is set to 4.5.6.7 and the **'Subnet'** is set to 255.0.0.0, the user can log in from machines whose IP address starts with 4. The final three digits in the IP address must be in the range 0-255.
- **Class B Restriction** (255.255.0.0) - If the **'Login Domain'** is set to 4.5.6.7 and the **'Subnet'** is set to 255.255.0.0, the user can log in from machines whose IP address starts with 4.5. The final two digits in the IP address must be in the range 0-255.
- **Class C Restriction** (255.255.255.0) - If the 'Login Domain' is set to 4.5.6.7 and the Subnet is set to 255.255.255.0, the user can only log in from machines whose IP address starts with 4.5.6. The final digit in the IP address must be in the range 0-255.
- **Full Restriction or Exact** - The user may only log in from machine whose IP address is set to 4.5.6.7.

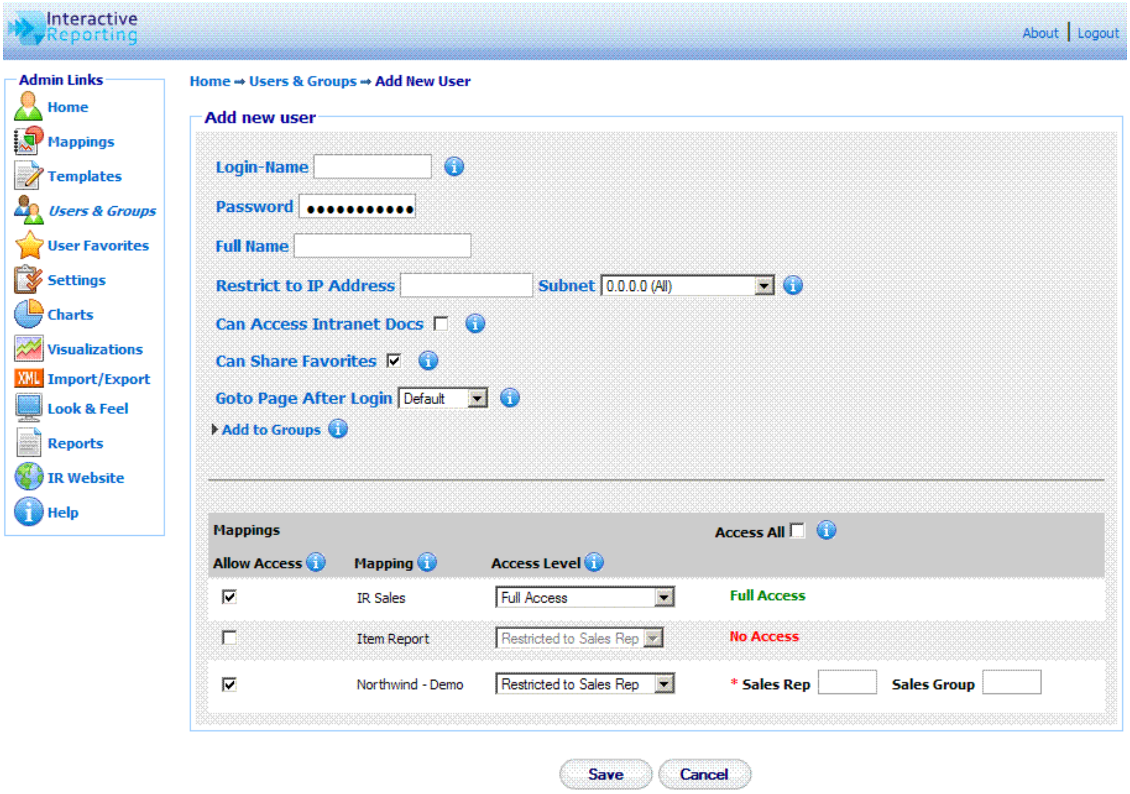



Figure 39

The **'Can Access Intranet Docs'** option, when selected, allows the user to have access to intranet documents. The **'Can Share Favorites'** option, when selected, allows the user to share favorites with other users. The **'Goto Page After Login'** allows the user to select to which page they should get directed upon login in. There are four options for this field: **'Default'**, **'Favorites'**, **'Wizard'**, and **'Advanced'**. **'Default'** directs the user to whichever page is relevant according to the number of mappings they will have access to. **'Favorites'** directs the user to the **'Favorites'** page. If the option **'Wizard'** or **'Advanced'** is selected the user gets directed to the equivalent page upon login. In this case the user must also select the mapping to which this option should apply. Note, the user must select a mapping to which they have allowed access. If the user is to join any groups, the **'Add to Groups'** link should be clicked to reveal the option to choose those groups. To select a group either highlight it and click the appropriate button to move it to the **'User in Groups'** list or double click its name.

The next part of the page sets the access that this new user should have to the mappings that are available at the system. If the **'Access All'** option is checked the user will be granted full access to all mappings. In this case all the **'Allow Access'** boxes of the mappings will be automatically checked for the user. Otherwise, the administrator can manually select which mappings should the user have access to, by checking the appropriate **'Allow Access'** box.

The **'Access Level'** option indicates the scope the user is permitted for a given mapping. There are four levels of permission the user can be granted: full access, restriction to user key, restricted to secondary user key, restricted to group key.

Full access grants the user full access to the mapping.

The restriction to user key option permits the user to access only data that are associated with the selected **'User Key'** value. This value is related to the option selected in the '**User Security'** field in the advanced section of the template editor page, Figure 37. In order to apply such a restriction the relevant field must be mapped, otherwise the option will not appear to the dropdown list. The name of the field as used in the mapping will be displayed in the **'Access Level'** dropdown list. For example, if the user security field is set to *SalesRep* and the name of this field in the mapping is *Sales Rep,* the user will see the option "Restricted to Sales Rep". When this option is selected two text boxes appear next to it which allow the user to select to which values of the relevant field the restriction will apply. The first text box corresponds to the **'User Key'** and the second text box corresponds to the **'Group Key'.** The former is compulsory. As an example, if the user has selected "Restriction To Sales Rep" and the value of the '**Sales Rep'** text box is set to 3, all data displayed for the user will refer ***ONLY*** to the *Sales Rep* whose id is 3. When the user logs into INTERACTIVE REPORTING they will not see any *Sales Rep* dropdown option or data in the filter section.

The restriction to secondary user key option permits the user to access only data that are associated with the selected **'Secondary User Key'** value. This value is related to the option selected in the **'Secondary User Security'** field in the advanced section of the template editor page, Figure 37. In order to apply such a restriction the relevant field must be mapped, otherwise the option will not appear to the dropdown list. The name of the field as used in the mapping will be displayed in the **'Access Level'** dropdown list. For example, if the user security field is set to *category* and the name of this field in the mapping is *Categories,* the user will see the option "Restricted to Categories". When this option is selected a text box appears next to it that allows the user to select to which values of the relevant field the restriction will apply. As an example, if the user has selected "Restriction To Categories" and the value of the '**Categories'** text box is set to 1, all data displayed for the user will refer ***ONLY*** to *Categories* 1. When the user logs into INTERACTIVE REPORTING they will not see any *Categories* dropdown option or data in the filter section.

The restriction to group key option permits the user to access only data that are associated with the selected **'Group Key'** value. This value is related to the option selected in the '**Group Security'** field in the advanced section of the template editor page, Figure 37. In order to apply such a restriction the relevant field must be mapped, otherwise the option will not appear to the dropdown list. The name of the field as used in the mapping will be displayed in the **'Access Level'** dropdown list. For example, if the user security field is set to *salesgroup* and the name of this field in the mapping is *Sales Group,* the user will see the option "Restricted to Sales Group". When this option is selected a text box appears next to it that allows the user to select to which values of the relevant field the restriction will apply. As an example, if the user has selected "Restriction To Sales Group" and the value of the '**Sales Group'** text box is set to 3, all data displayed for the user will refer ***ONLY*** to the *Sales Group* whose id is 3. When the user logs into INTERACTIVE REPORTING only the data related to that *Sales Group* would be shown at the report.

When all the options for the new user have been set, click the **'Save'** Button to return to the user maintenance page, Figure 38.

## Add New Group

To add a new group click the **'New Group'** link of the **'User Tasks'** section on the left side of the users maintenance page to be directed to the **'Add New Page'** page as can be seen in

Figure 40. First provide the 'Group Name' used to identify the new group of users. Next, select which users should be part of this group by selecting their login name and clicking the appropriate button, or by highlighting each login name and double clicking it. When finished with the selection of users click the **'Save'** button to return to the user maintenance page, Figure 38.

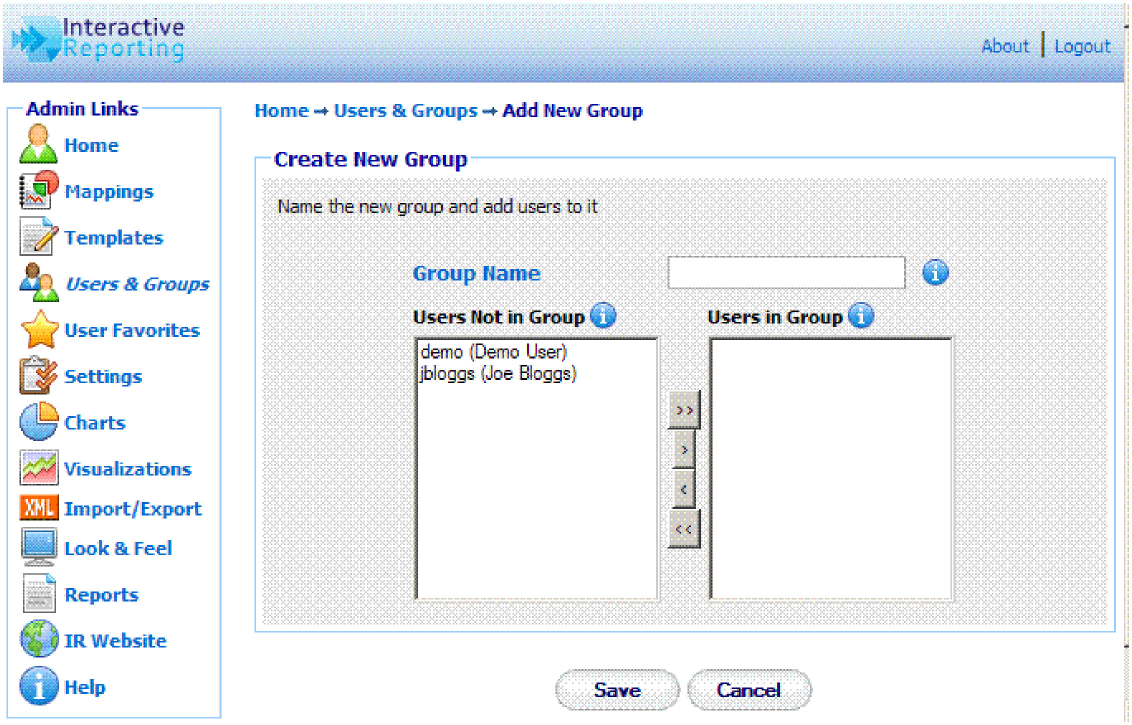



Figure 40

## Edit User/Group

To edit an existing user or group click on the login name of the user or on the name of the group to be directed to a page like the one shown in Figure 39 or 40, respectively, and perform changes as described at the previous section.

Chapter 8

# User Favorites

### *Maintenance of Favorite Reports…*

Favorites are one of the most powerful tools that INTERACTIVE REPORTING has to offer, and they can now be maintained on the administrator side. To access the favorites section click on the '**User Favorites**' link of either the '**Administration Options**' menu or of the '**Admin Links**' sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 41, which contains a list of all available favorites that different users have created.

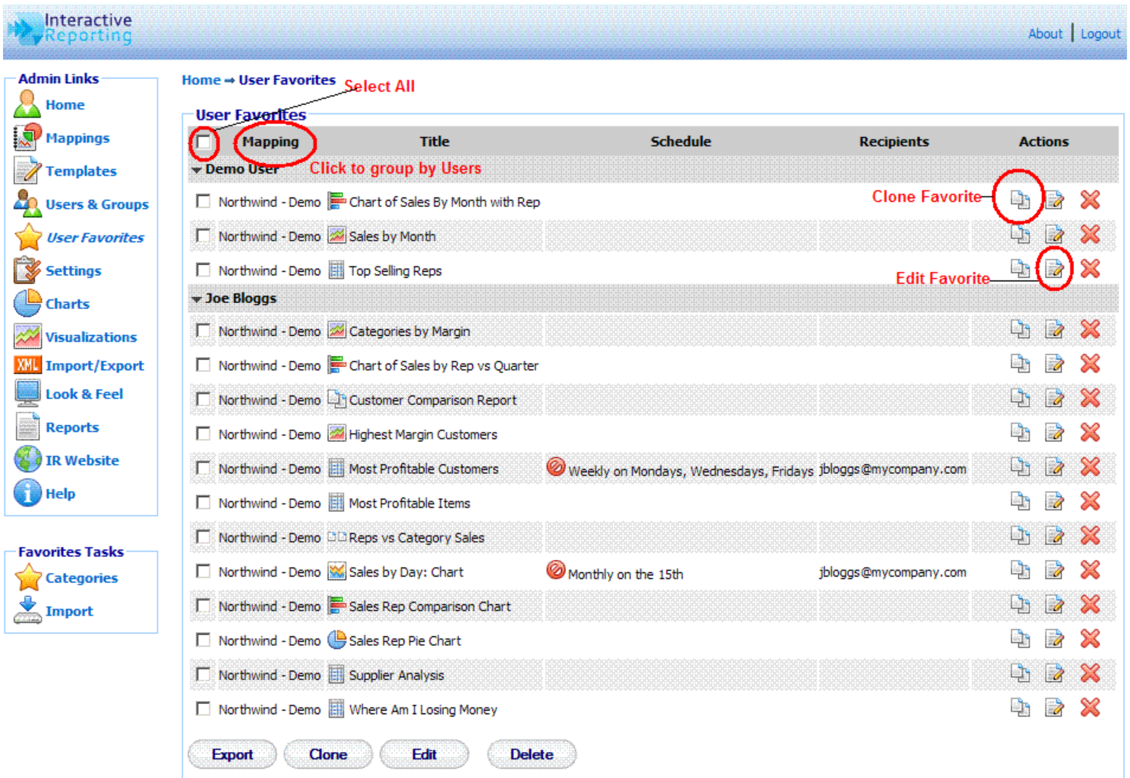



Figure 41

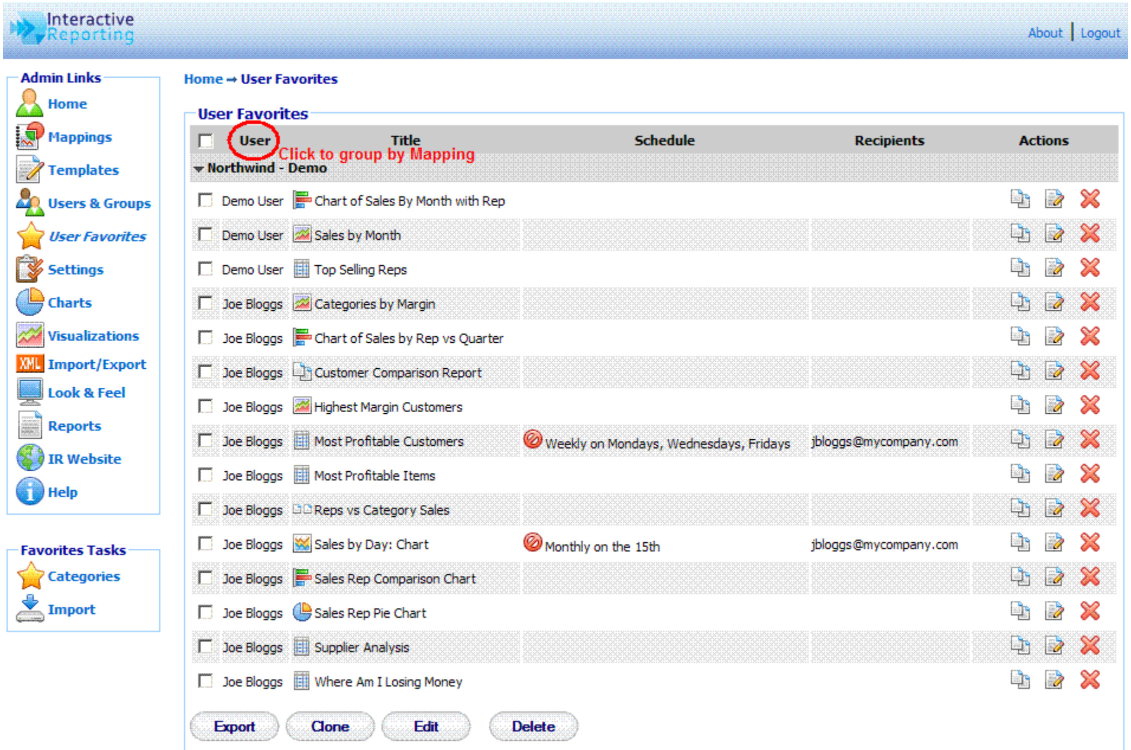


Figure 42

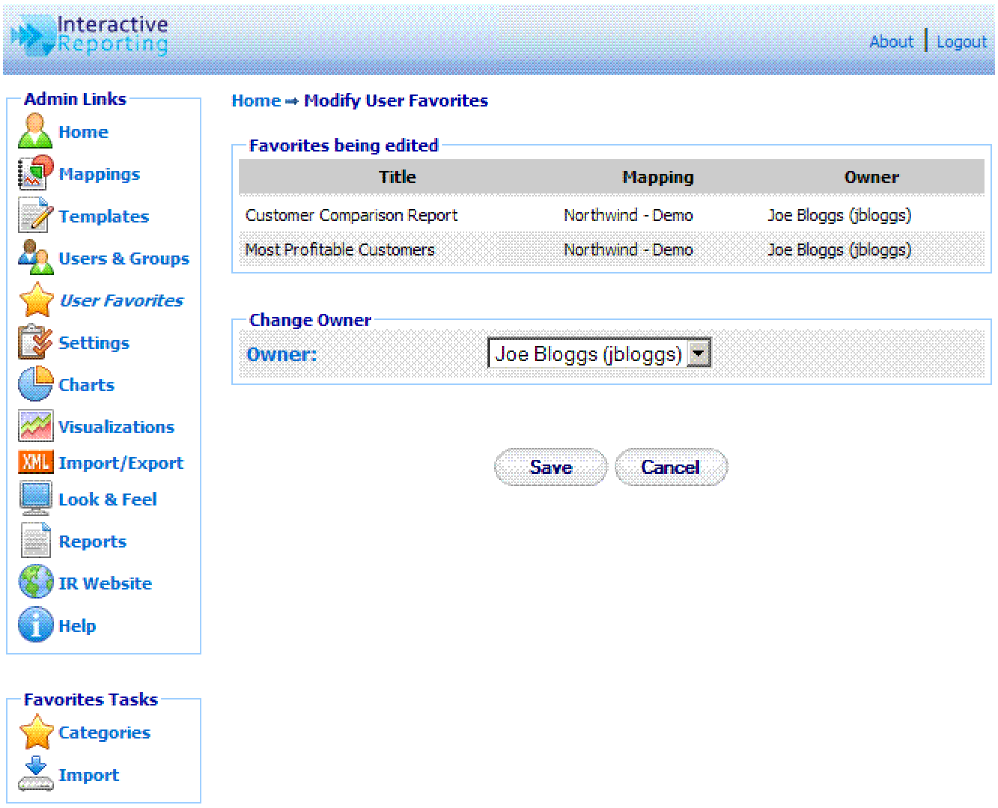


Figure 43

The User Favorites page provides detailed information about each favorite report existing in the system. The favorites are being categorised by **'User'** and each user can perform various actions to a favorite, such as **'Clone'**, **'Edit'**, **'Delete'**, **'Import'**, or **'Export'** a favorite.

- The **'Mapping'** column gives the name of the mapping from which each favorite was created. Clicking the check box preceding it will select all the existing favorites in the list. Clicking the **'Mapping'** title will reorganise the list of favorites to be grouped by the mappings instead, as shown in Figure 42.
- The **'Title'** column gives the name and the type of the favorite. When a user is already logged into IR, the title of the favorite turns to a link that goes directly to the specific favorite report on the client side.
- The **'Schedule'** column provides information about whether an email report has been scheduled for a favorite and provides details about the frequency of such emails. In addition, the user can remove any scheduled emails by clicking the stop icon in front of the scheduled frequency.
- The **'Recipients'** column lists all the email addresses to which the favorite's emails are sent.
- The **'Action'** column provides a list of actions that the user can apply to a favorite. By clicking the **'Clone'** icon, the user can create an exact copy of an existing favorite. By clicking the **'Edit'** icon, the user can edit the details of a favorite. And a favorite can be deleted by clicking the **'Delete'** icon.
- The **'Export'** button allows the user to export one or more favorites. The user must first check the box in front of each favorite that they wish to export and then click the **'Export'** button.
- The **'Clone'** button allows the user to clone one or more favorites. The user must first check the box in front of each favorite that they wish to clone and then click the **'Clone'** button.
- The **'Edit'** button allows the user to edit the owner of one or more favorites. The user must first check the box in front of each favorite that they wish to edit and then click the **'Edit'** button. The user then gets directed to a page like the one shown in Figure 43. This page displays the selected favorites and a list of the existing users to which the selected favorites can be assigned.
- The **'Delete'** button allows the user to remove more than one favorite simultaneously. The user must first check the box in front of each favorite that is no longer required and then click the **'Delete'** button to remove them from the system.

In addition to the **'Admin Links'** and **'Tools'** options, the favorites maintenance page provides the favorites tasks to create different categories for grouping the favorites and import new favorites.

## Categories

Categories contain a list of all categories in which Favorite reports can be grouped. To add or edit favorite categories the user must click the **'Link'** link from the **'Favorites Tasks'** as shown in Figure 41. They then get directed to the Categories page as shown in Figure 44. To add a category the user must click the **'Add'** link and a text box will then appear that will enable the user to provide the new category's name. To add the category the user must click the **'Save'** icon. To abort any changes, the user should click the **'Cancel'** icon. To edit an existing category the user must click on the category's name. A text box will then appear that will enable the user to modify the category's name. Clicking the **'Save'** icon saves the changes to the favorite's category. To abort any changes, click the **'Cancel'** icon.

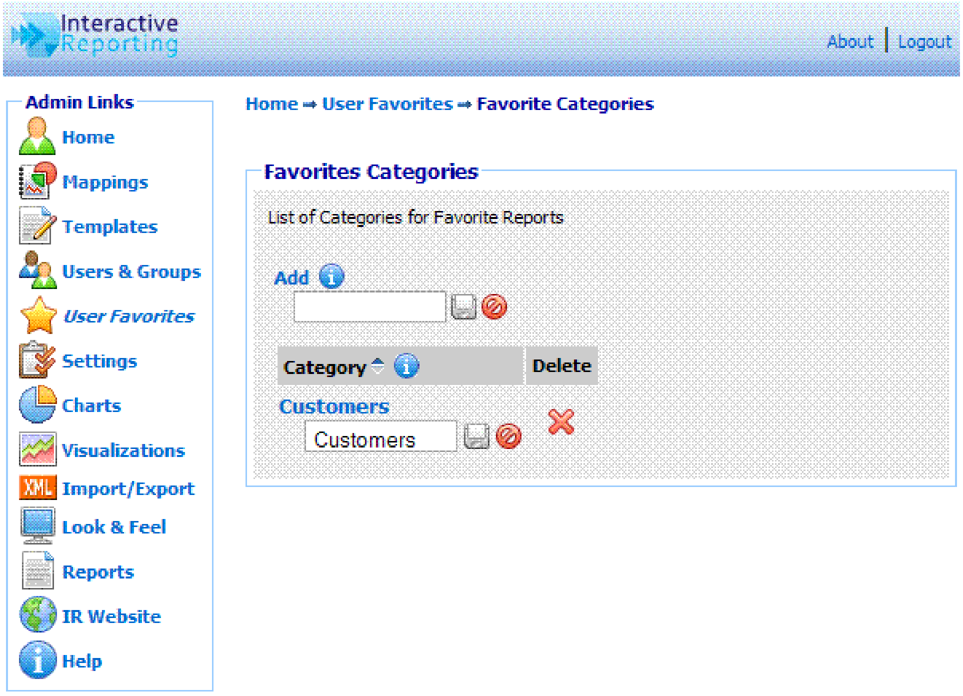



Figure 44

## Import Favorites

To import one or more favorites click the **'Import'** link of the **'Favorites Tasks'** section on the left side of the favorites maintenance page. The user is then directed to the **'Import Favorite'** page as can be seen in Figure 45. The user simply enters the path where the stored favorites file is located or uses the **'Browse'** button to locate the file if unsure of the destination path. When the destination path is provided click the **'Import'** button to return to the favorites page. Once a favorite is imported it will appear within the list of available favorites.

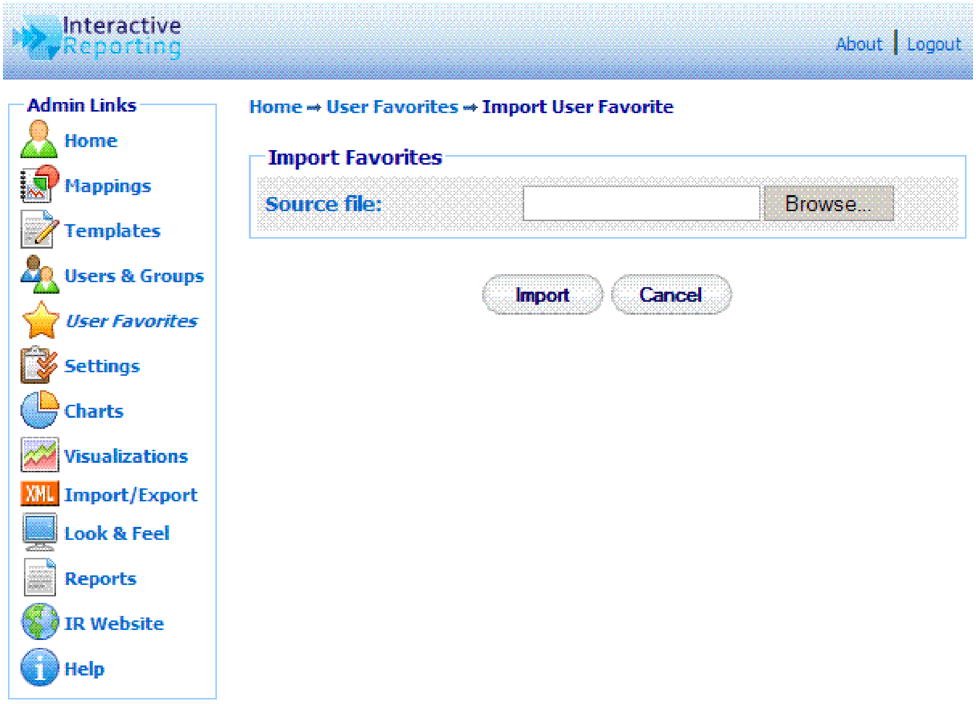



Figure 45

## Edit a Favorite

To edit a Favorite the user must click the **'Edit'** action button as shown in Figure 41. The user will then get directed to the favorite's editing page as can be seen in Figure 46.

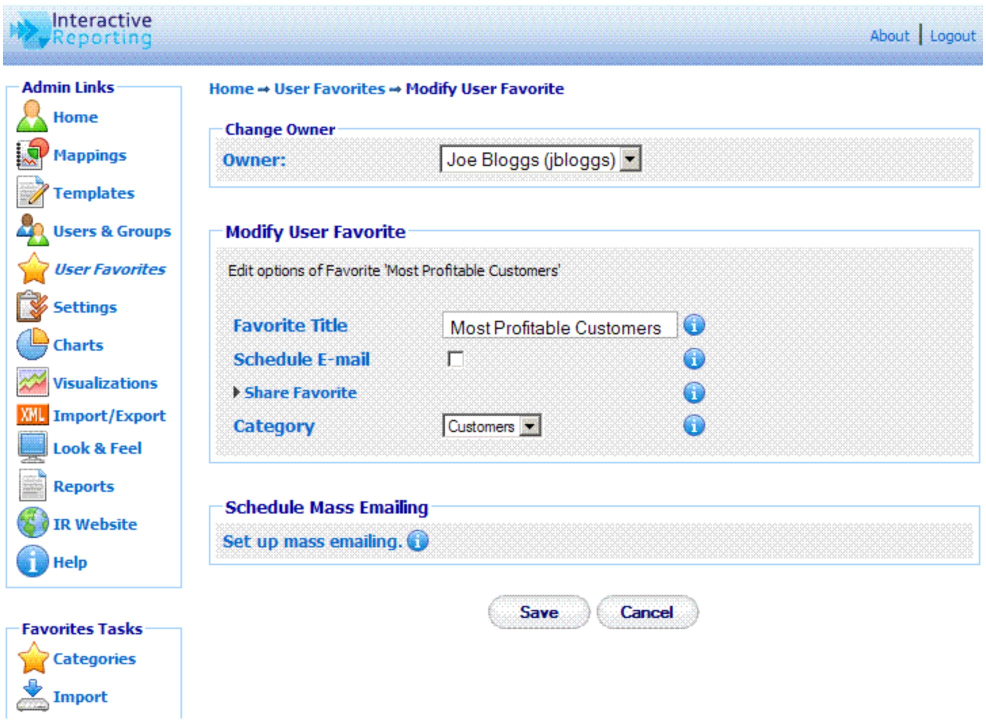



Figure 46

When on this page, the user can change the owner of the specific favorite, by selecting a different user from the **'Owner'** dropdown list. The user can also modify the options of the favorite such as the title of the favourite report and select to which category it should belong. They can choose to schedule it for emails sent to specific email addresses. The **'Schedule Email'** checkbox must first be clicked, and the page changes to the one shown in Figure 47. The user can select how frequently they wish the favourite to be emailed, which can be daily, weekly and which days of the week, monthly and which day of the month. The email address should be typed at the provided text box, with multiple recipients addresses separated by commas. And they can select in which format their emails should be sent, either HTML or Excel format.

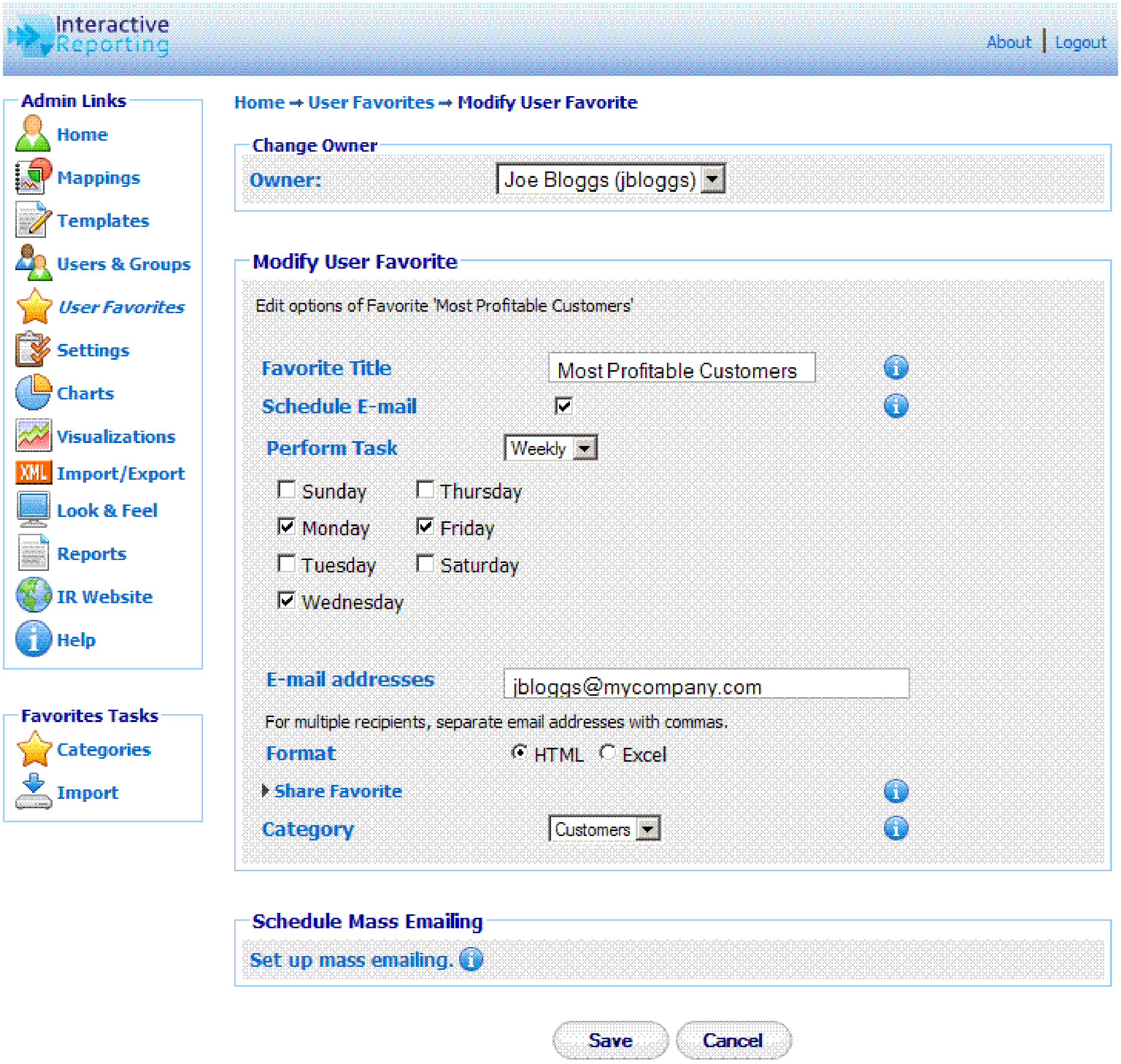



Figure 47

The user can also select to share the favourite with other user(s) and/or groups, by clicking the **'Share Favourite'** link to see a screen like that of Figure 48. To select the users to share the favourite with, highlight the users of choice and use the appropriate buttons to move them to the **'Shared with'** box (multiple and single selections are permitted), or double click on the choices of interest.

The user can also set up a mass-emailing feature for a favorite, by clicking the **'Set up mass emailing'** link of Figure 46, which gives the ability to email a large number of similar reports to a list of users. For example, if a user wanted to send each *Sales Rep* a report showing their sales broken down by customer, they would first create a favorite which would generate such a report for one individual *Sales Rep*. Then by setting the mass emailing feature for this favorite, the user could provide a list of different *Sales Reps* and their email address. A report could then be generated for each S*ales Rep* on the list, and could be emailed to each one of them separately.

By clicking the **'Save'** button the new settings are saved for the favorite and the user is redirected to the **'User Favorites'** page.

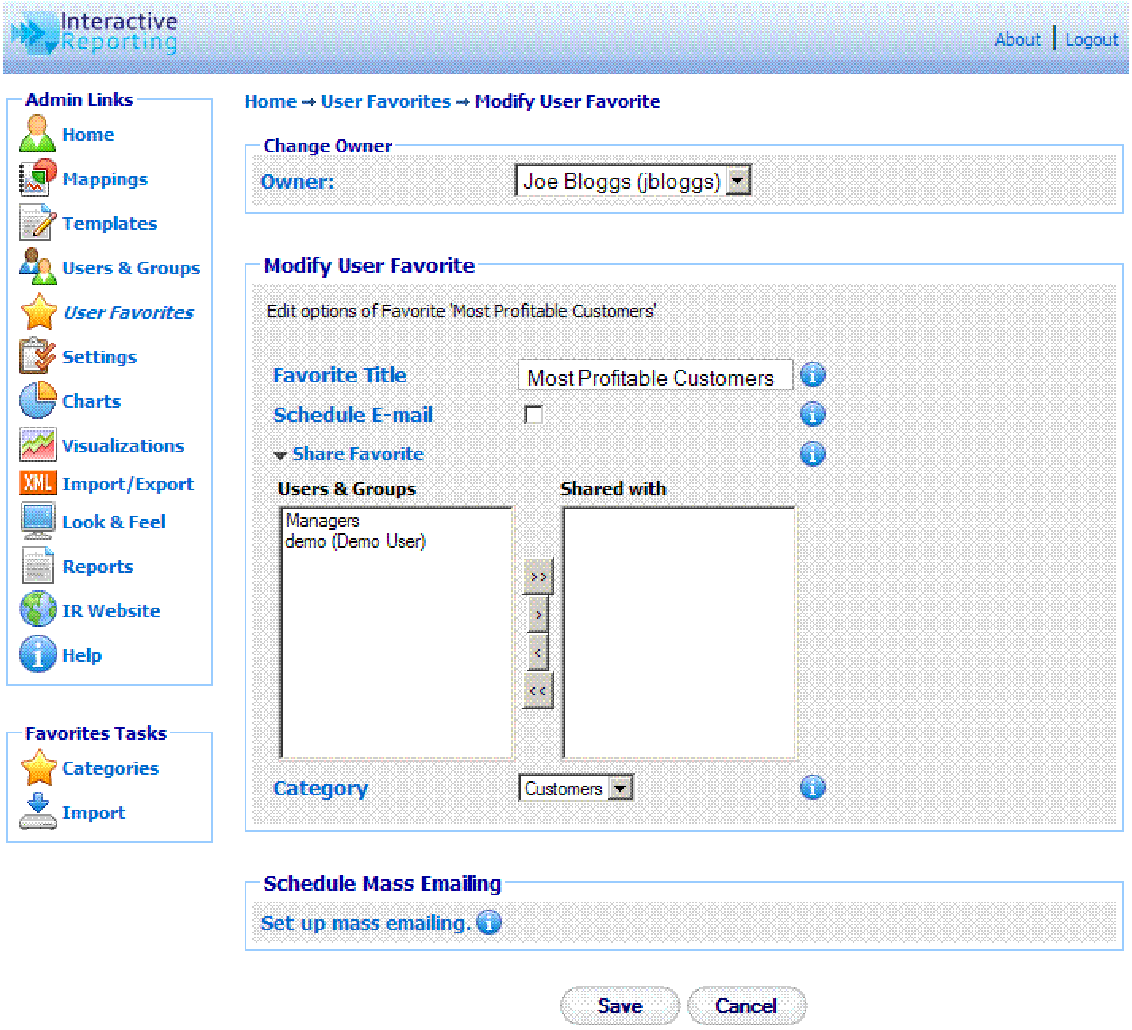



Figure 48

## Mass Emailing

By clicking the **'Set up mass emailing'** link of Figure 46, the user gets directed to the mass-emailing page, shown in Figure 49.

- The **'Value to Replace'** field should contain the value of the filter from the specific favorite that should be replaced by the individual 'id' parameters from the provided SQL statement.

- The **'Connection String'** field should specify the database connection that contains the list of values and email addresses required for the mass emailing of this favorite
- The **'SQL'** field must contain the SQL query that needs to run against the database to provide the list of values and email addresses that will be used in the mass emailing of this favorite. The SQL must return two fields from the database. **'id'** should provide the list of values that will replace the **'Value to Replace'**. The **'email'** field should contain the email address to which the resulting reports should be sent. An example of such an SQL statement is "SELECT EmployeeID AS ID, EmployeeEmail AS EMAIL FROM Employees"
- The **'Header'** field allows the user to add header text on the emails that appears above the generated report. The header text can be plain text or HTML code.
- The **'Footer'** field allows the user to add footer text on the emails that appears below the generated report. The footer text can be plain text or HTML code.

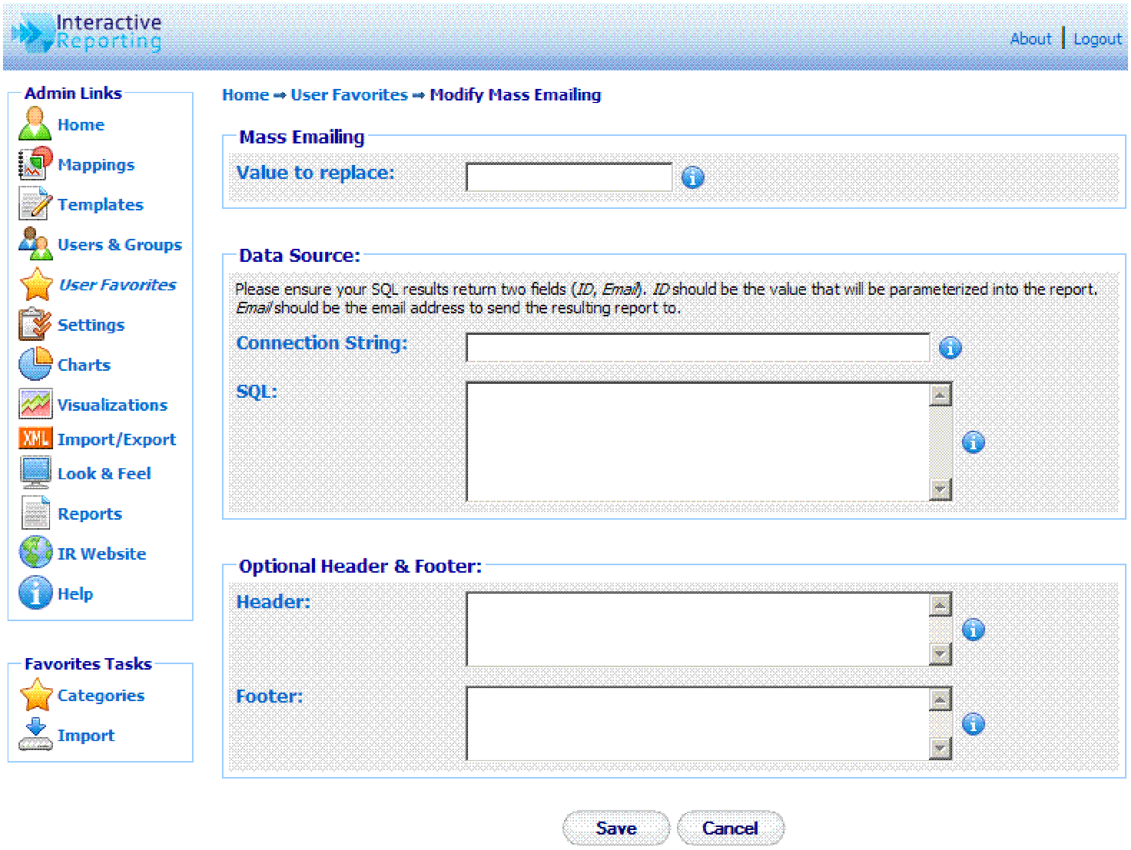



**Figure 49**

By clicking the **'Save'** button the mass emailing settings are saved for the favorite and the user is redirected to the favorite's editing page, as shown in Figure 50.

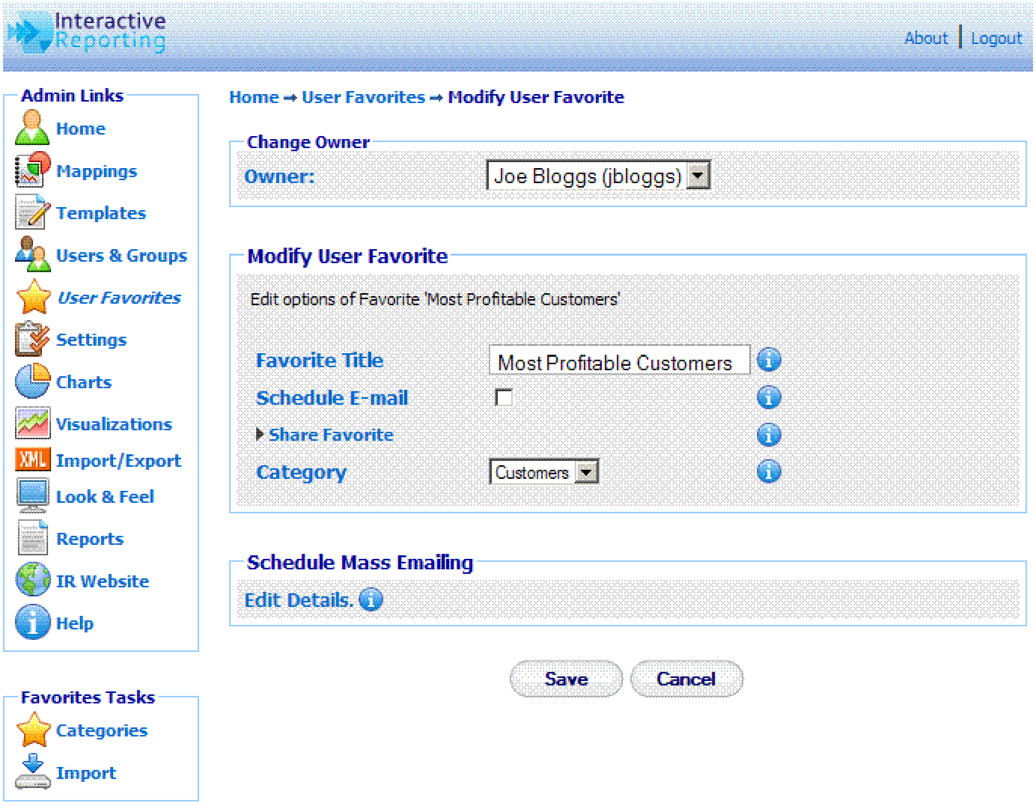
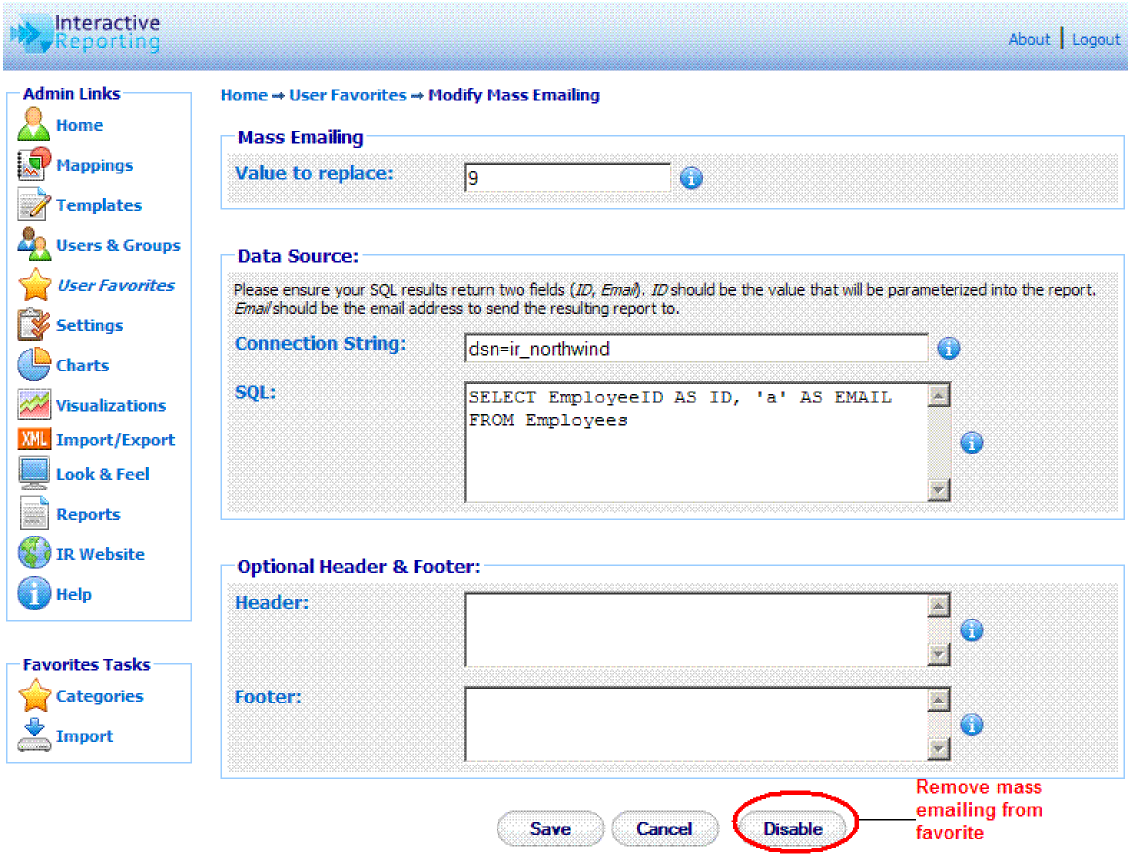



Figure 50

To disable the mass Emailing feature the user must click the **'Edit Details'** link under the **'Schedule Mass Emailing'** part of Figure 50, to go to the editing page of the mass-emailing feature. To remove this option from the favorite the user must then click the **'Disable'** button, as shown in Figure 51.



Interactive Reporting
About | Logout
Admin Links
Home
Mappings
Templates
Users & Groups
User Favorites
Settings
Charts
Visualizations
Import/Export
Look & Feel
Reports
IR Website
Help
Favorites Tasks
Categories
Import
Home ⇒ User Favorites ⇒ Modify Mass Emailing
Mass Emailing
Value to replace:
9
Data Source:
Please ensure your SQL results return two fields (ID, Email). ID should be the value that will be parameterized into the report. Email should be the email address to send the resulting report to.
Connection String:
dsn=ir_northwind
SQL:
SELECT EmployeeID AS ID, 'a' AS EMAIL FROM Employees
Optional Header & Footer:
Header:
Footer:
Save
Cancel
Disable
Remove mass emailing from favorite


Figure 51

Chapter 9

# System Settings

## *Changing Interactive Reporting Settings…*

A number of settings with INTERACTIVE REPORTING facilitate its operation. To access the system settings section click either on the **'System Settings'** link of the **'Administration Options'** menu or on the 'Settings' link of the 'Admin Links' sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 52, which contains all the available INTERACTIVE REPORTING preferences.

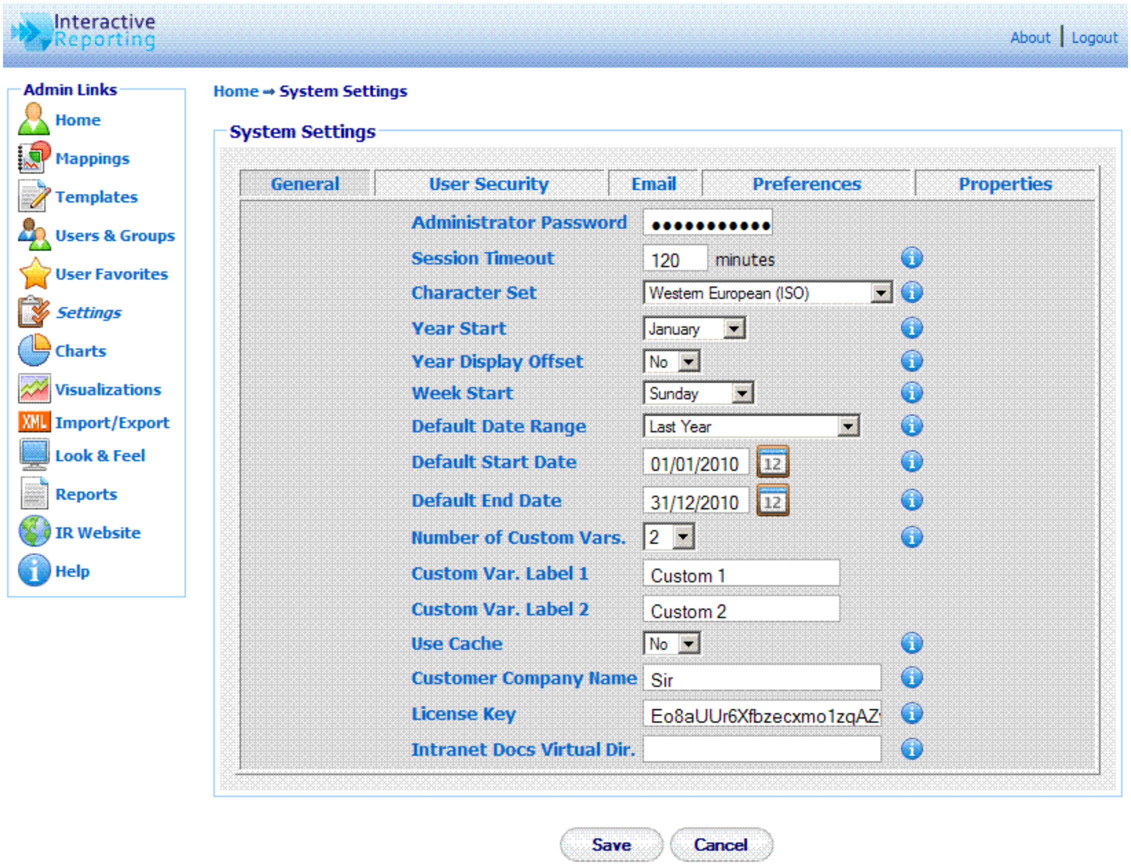



Figure 52

## General

To edit any **'General'** settings the user must click on the **'General'** tab on the **'System Settings'** page. The general section contains the following information:

- **Administrator Password** – the password required to access the administration section of Interactive Reporting (the default password is **demo**).
- **Session Timeout** – indicates the time that a user may be idle before being logged out of Interactive Reporting.
- **Character Set** - determines the character set used in Interactive Reporting.
- **Year Start** - allows the administrator to set the start date of the financial year. For example, if the accounting financial year starts in July, when the user analyses by year, it will use July-June as the period to measure.
- **Year Display Offset** - determines the year to display when a date type is used to generate a report, i.e. **'Analyze by Quarter'**. If the **'Year Display Offset'** is set to **'Yes'**, the year displayed is one greater than the year of the data used to generate the report. This is also tied into the year start value. For example, if **'Year Display Offset'** is set to **'No'**, a report for **'Sales by Quarter'** for the year 2003 would be:

  | *Quarter* | *Qty* | *Avg Cost* |
  |---|---|---|
  | Q1 2003 | €63.03 | €42.19 |
  | Q2 2003 | €57.17 | €38.82 |
  | Q3 2003 | €62.58 | €37.02 |
  | Q4 2003 | €72.17 | €38.64 |

  On the other hand, if **'Year Display Offset'** were set to 'Yes', the above report would be like:

  | *Quarter* | *Qty* | *Avg Cost* |
  |---|---|---|
  | Q1 2004 | €63.03 | €42.19 |
  | Q2 2004 | €57.17 | €38.82 |
  | Q3 2004 | €62.58 | €37.02 |
  | Q4 2004 | €72.17 | €38.64 |

  Even though 2004 is displayed the data is for year 2003.
- **Week Start** – sets the day of the week on which the financial week should begin.
- **Default Date Range** - sets a predefined date range of the wizard and advanced pages
- **Default Start Date** - sets the default start date of the wizard and advanced pages.
- **Default End Date -** sets the default end date of the wizard and advanced pages.
- **Number of Custom Vars. -** controls how many of the custom variables are editable by the users. 0 means that no custom variables are available for editing. The user

can add up to 10 custom variables. When a number greater than 0 is selected, the additional options **'Custom Var Label'** appear, which allow the user to edit the labels for these custom variables. In this case, the **User Edit** page displays additional options for the custom variables, as shown in Figure 53, which the user can edit and add into dynamic SQL statements for mappings.

- **Use Cache** – activates or deactivates the use of caching when generating reports.
- **Customer Company Name** - required for the licensing of INTERACTIVE REPORTING. Its value must match that given to INTERACTIVE REPORTING or to its representative.
- **License Key** - updates the database with the alphanumeric license key. This unique key will be issued to the user by INTERACTIVE REPORTING or by the reseller, either for evaluation purposes or on purchase of the product.
- **Intranet Docs Virtual Dir.** – sets the name of the IIS virtual directory linked to the physical directory of the intranet files.

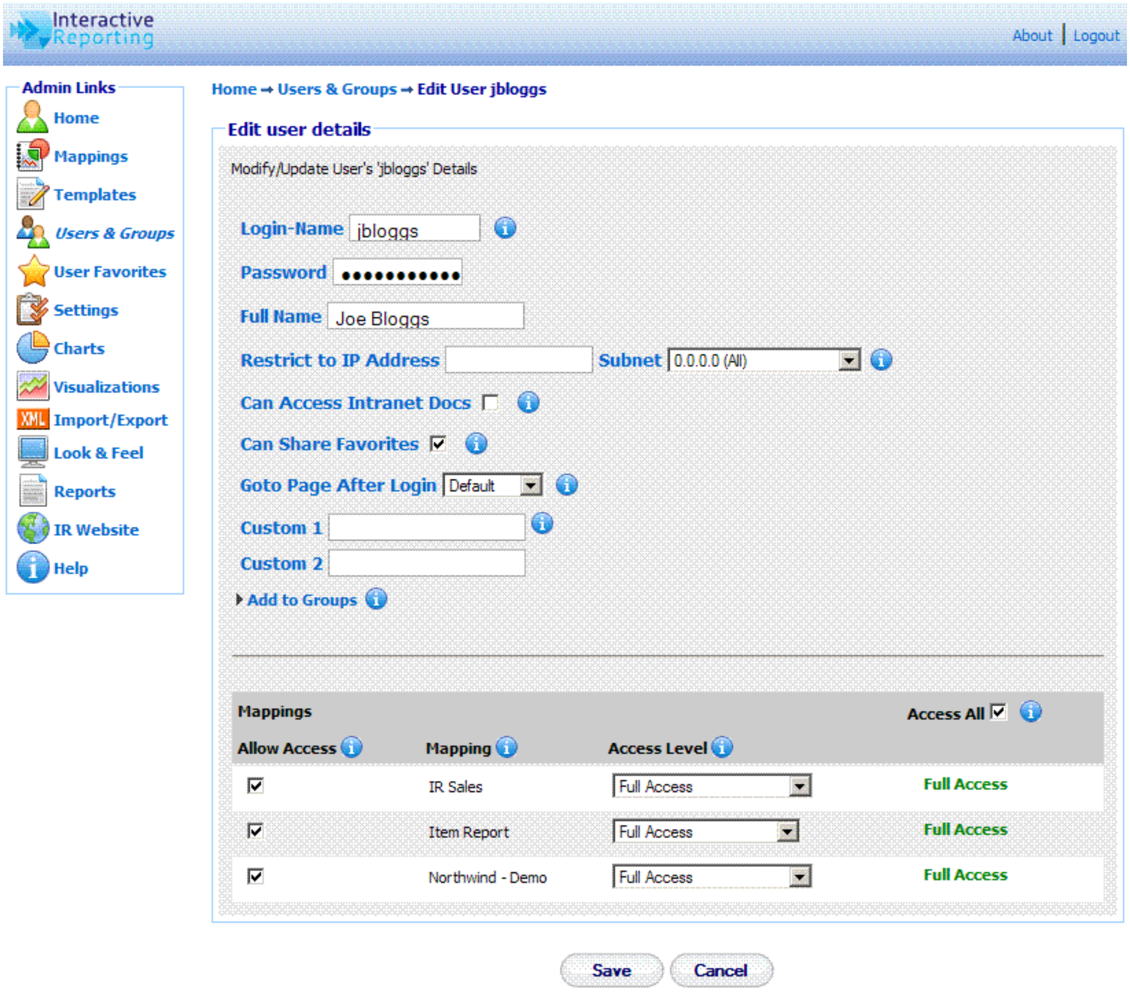



Figure 53

## User Security

To edit any **'User Security'** settings the user must click on the **'User Security'** tab on the **'System Settings'** page, Figure 52. This section contains the following information, Figure 54:

- **User Authentication Method** – sets the type of user authentication.
- **Windows Domain** – sets the domain to use for user passwords.
- **AD Username to list Users** – sets the username required to login to the Active Directory to view the list of users.
- **AD Password to list Users** – sets the password required to login to the Active Directory to view the list of users
- **Password Update Interval** - indicates the number of days that a user may use Interactive Reporting before their password expires. If this value is set to 0, password aging does not apply.

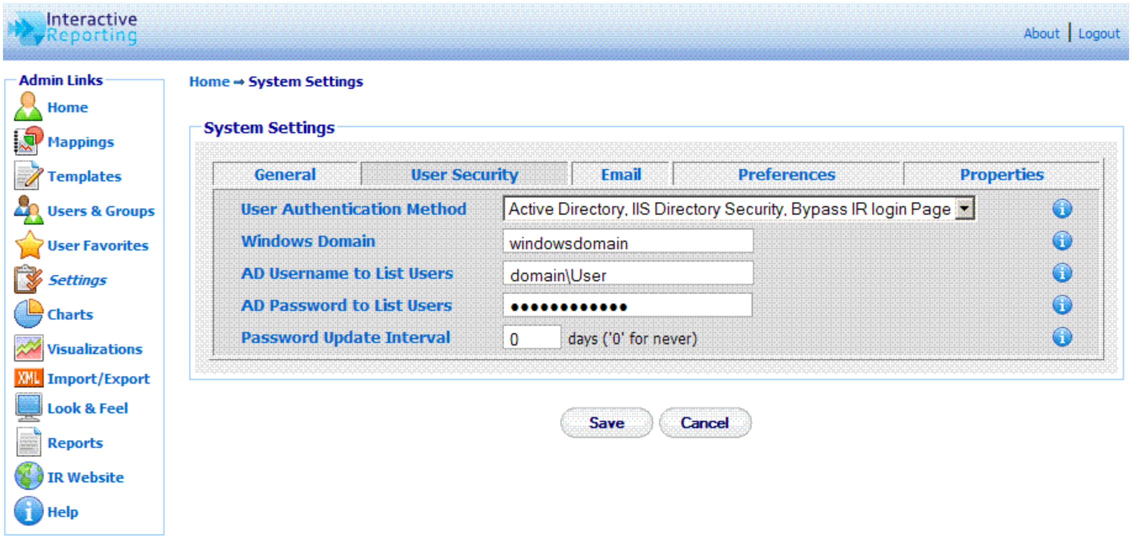



Figure 54

## Email

To edit any **'Email'** settings the user must click on the **'Email'** tab on the **'System Settings'** page, Figure 52. This section contains the following information, Figure 55:

- **Email Source** - the reply-to address of emails when users request reports to be emailed to them.
- **SMTP Server** – the address of the SMTP server to use for email transfer.
- **SMTP Authentication** – sets how the emailer gets connected to the SMTP server.
- **SMTP User** – specifies the username with which the emailer gets connected to the SMTP server if an authentication method is selected.
- **SMTP Password** – specifies the password with which the emailer gets connected to the SMTP server if an authentication method is selected.

- **SMTP Port** – specifies the port number, usually port 25, to be used by SMTP on the SMTP Server.
- **Enable Excel Attachments** – permits the emailing of Excel attachments. Excel must have been installed.
- **URL** - the HTTP path to the INTERACTIVE REPORTING web server.
- **Source Name** – sets the name from which the email will appear to have been sent.
- **SMTP Timeout** – specifies the timeout with which the emailer gets connected to the SMTP server. This field is optional.
- **SSL** - specifies whether or not the emailer should use a SSL (Secure Sockets Layer) connection to connect to the SMTP server. Not all SMTP servers support this.
- **StartTLS** - specifies whether or not the emailer should use a StartTLS (Transport Layer Security) connection to connect to the SMTP server. Not all SMTP servers support this.
- **Skip Unicode Formatting** – specifies whether or not the emailer should format unicode characters present in emailed reports to a HTML compatible format.

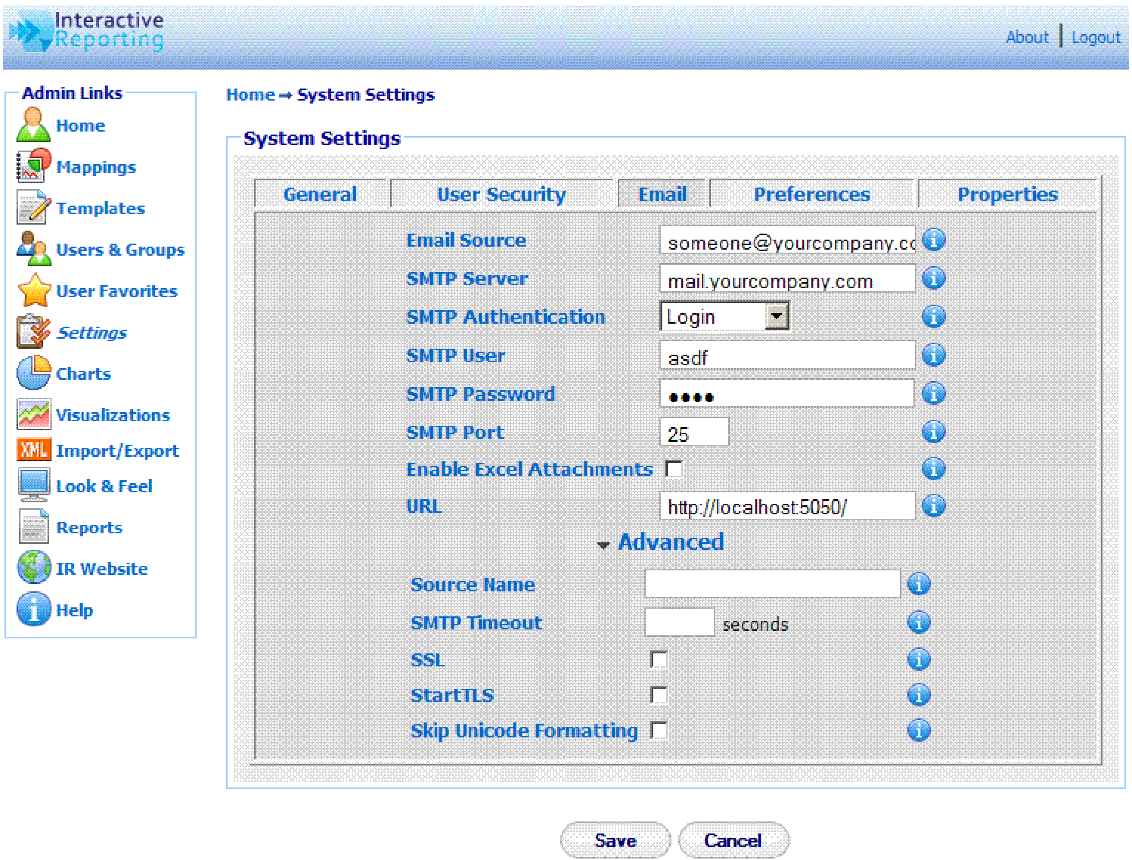



Figure 55

## Preferences

To edit any **'Preferences'** settings the user must click on the **'Preferences'** tab on the **'System Settings'** page, Figure 52. This section contains the following information, Figure 56:

- **Default GUI** – determines the default graphical interface to be used in the report pages.
- **Display Scroll Bars** – activate/deactivate the use of scroll bars in tables when generating reports.
- **Display Execution Popup** – activate/deactivate an execution popup while a report is being generated.
- **Default Comparison Method** – determines the default setting of the output of the variation variables in comparison reports.
- **Default Ordering Method** - indicates the default ordering of reports.
- **Filter Value Ordering** - indicates the default ordering of data in the filter lists.
- **Text Filter Cutoff** - indicates the default length of the filter lists shown in the reports.
- **Max Number of Rows** – determines the maximum number of rows that can be displayed in a report.
- **Max Number of Columns** - determines the maximum number of columns that can be displayed in a report.
- **Table Width** - allows the user to set the width of the report tables. The user can specify a value between 0 and 100 to set the percentage of the available width that the report tables should occupy. For example, a value of 75 will mean that the width of the report tables will be set to 75%.
- **Default Font Family** – sets the default fonts used in the reports.
- **Default Font Size** – sets the default font size used in the reports.
- **Default Font Color** – sets the default font colour used in the reports. A new colour can be selected by clicking the palette icon. The new colour is then shown at the small box next to the palette icon.
- **Negative Number Format** - determines the format by which negative numbers should be displayed at reports.

Some of the options of this section can be overwritten on a mapping–specific basis, on the **'Mapping Preferences'** section. If the user has selected to overwrite the system settings for a mapping, that particular mapping will use the options set by its preferences, whereas all other mappings will use the system settings preferences.

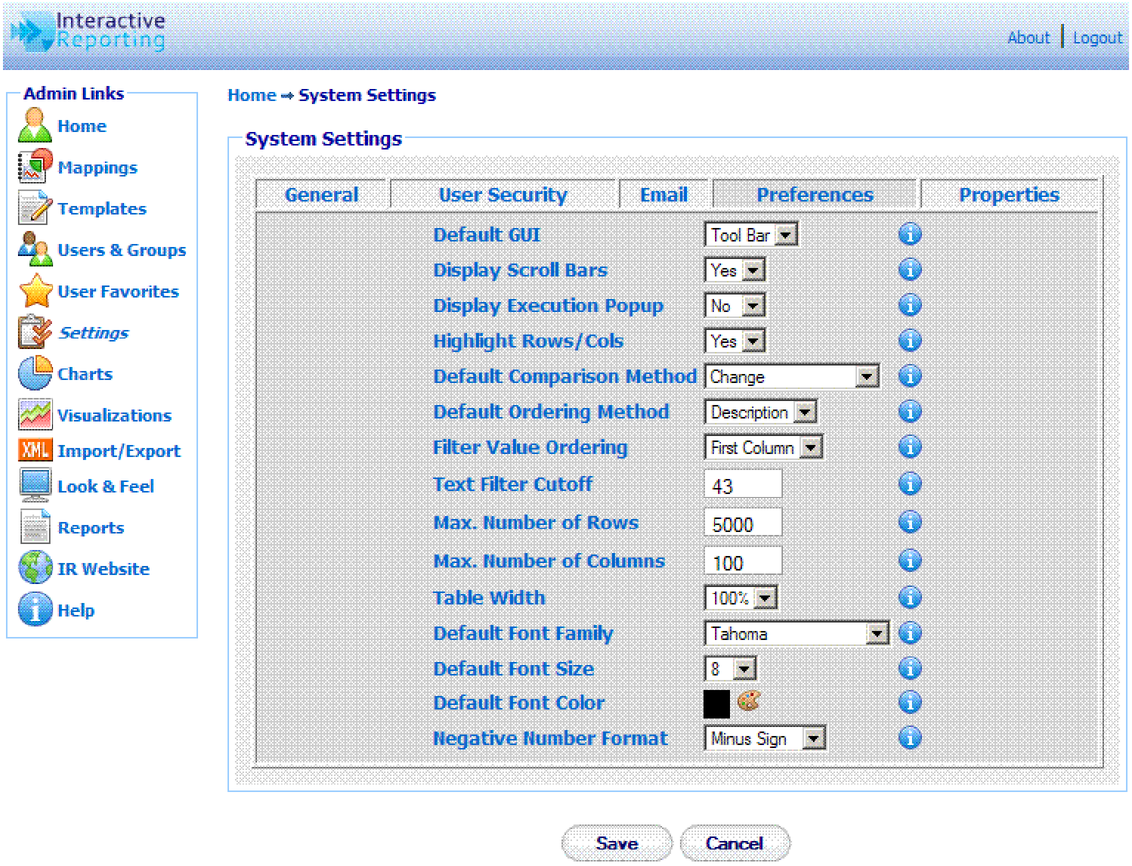



Figure 56

## Properties

To edit any **'Properties'** settings the user must click on the **'Properties'** tab on the **'System Settings'** page, Figure 52. This section contains properties that apply to all tabular reports such as Analysis, Pivot and Comparison reports, Figure 57:

- **Layout** – This option enables the user to select how the data should be displayed in the table. There are two options. In the **Horizontal** layout the labels are shown in rows and the data in columns. In the **Vertical** layout the labels are displayed in columns and the data in rows.
- **Show Pivot Column Total** – This option enables the user to select whether the table in a **Pivot** report should show the **Total Column** data (option checked) or to hide it (option unchecked).
- **Show Grand Total** – This option enables the user to select whether the **Grand Total** row should be shown in the data table (option checked) or not (option unchecked).
- **Show Report Rows** – This option enables the user to select whether the data rows should be shown in the data table (option checked) or not (option unchecked). In the latter case, only rows containing **Total** values will be shown.

- **Show Group Subtotals** – This option enables the user to select whether the **Group Total** rows should be shown in the data table (option checked) or not (option unchecked).
- **Show Other Data** – This option enables the user to select whether the **Other** data row in a **Top/Bottom** report should be shown in the data table (option checked) or not (option unchecked).
- **Hide Zero Rows** – This option enables the user to select whether data rows that contain only zeroes should be hidden from the data table (option checked) or shown (option unchecked). In the former case, only rows containing at least one non-zero value will be shown.
- **Suppress Headers in Print/Excel** – This option enables the user to select whether to suppress the report headers when printing or exporting to Excel.

When finished with the setting preferences, click the **'Save'** button to store the changed settings to the INTERACTIVE REPORTING system. For some of the changes to appear on the main INTERACTIVE REPORTING page it may be necessary to shutdown and restart INTERACTIVE REPORTING.

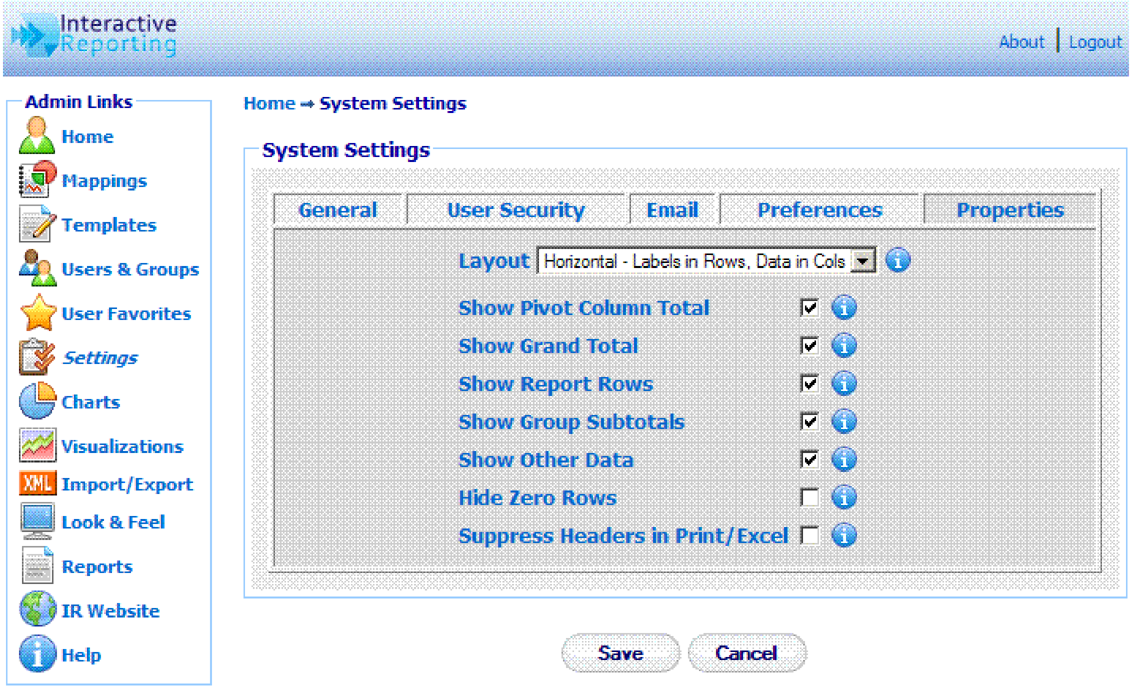



Figure 57

Chapter 10

# Charting Properties

*Customize the Look and Feel of Charts and Visualizations…*

INTERACTIVE REPORTING offers the option of customising the chart and visualization reports according to the user's wishes. To access this option click on either the **'Charts'** or the **'Visualizations'** link of the **'Administration Options'** menu or of the **'Admin Links'** sidebar menu at the left of the page of Figure 3, respectively.

## Chart Properties

The **'Chart'** properties page allows the user to set default values for all the properties that could apply to any Chart report. The list of chart properties is shown in Figure 58.

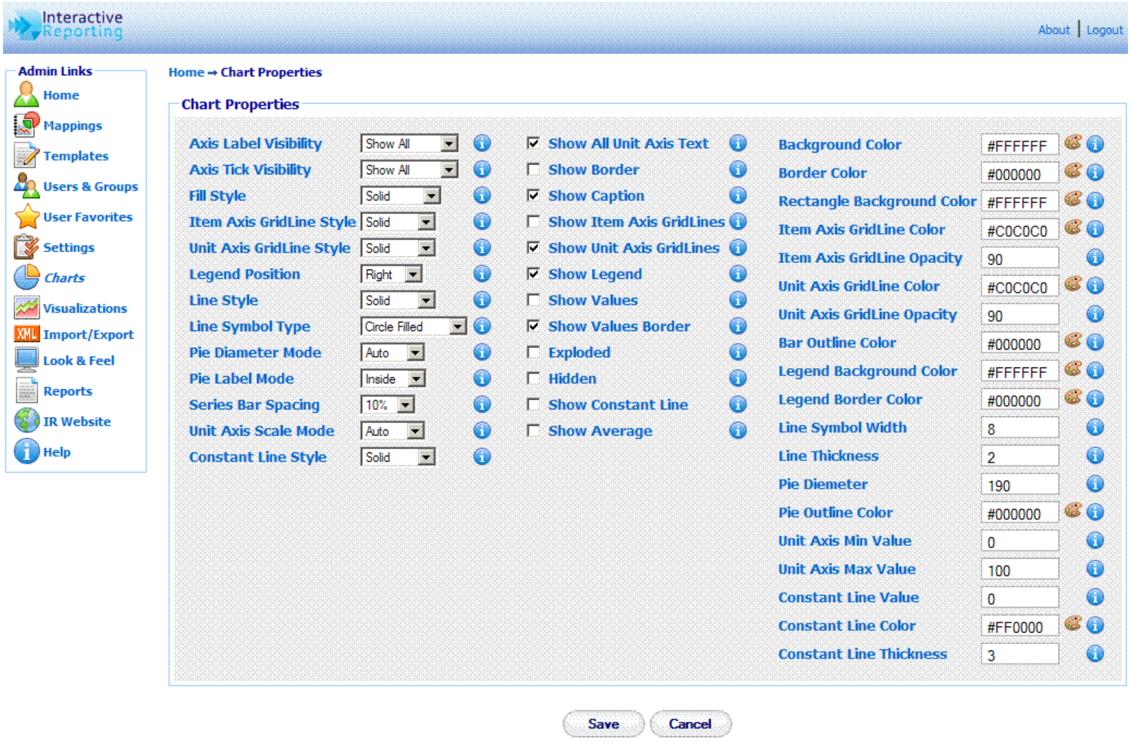



Figure 58

- **Axis Label Visibility** – sets whether or not labels are shown on either the unit or item axis, or both.

- **Axis Tick Visibility** – sets whether or not ticks are shown on either the unit or item axis, or both.
- **Fill Style** – determines how the bar or pie segments are filled.
- **Item Axis Gridline Style** – determines in which style the item axis grid lines are drawn.
- **Unit Axis Gridline Style** – determines in which style the unit axis grid lines are drawn.
- **Legend Position** – sets the position of the chart legend.
- **Line Style** – sets the styles of lines.
- **Line Symbol Type** – sets the symbol type of lines.
- **Pie Diameter Mode** – indicates whether the pie diameter is calculated automatically or is set manually using the **Pie Diameter** property.
- **Pie Label Mode** – sets how the pie segment labels are displayed on the chart, whether inside or outside of the segment.
- **Series Bar Spacing** – sets the spacing between data item groups when drawn as a bar graph.
- **Unit Axis Scale Mode** – sets whether the unit axis is scaled automatically according to the value of all the data items within the chart or whether the unit axis is scaled manually in accordance with user specified **Unit Axis Min** and **Unit Axis Max** values.
- **Constant Line Style** – sets the style of constant lines.
- **Show All Unit Axis Text** – sets whether any extra details of the unit axis label should be shown.
- **Show Border** – sets whether the chart border is visible.
- **Show Caption** – sets whether the chart caption is visible.
- **Show Item Axis Gridlines** – sets whether item axis gridlines are drawn on the chart.
- **Show Unit Axis Gridlines** – sets whether unit axis gridlines are drawn on the chart.
- **Show Legend** – sets whether the chart legend is visible.
- **Show Values** – shows or hides all the data items on the chart.
- **Show Values Border** – sets whether values drawn on the chart have a border around them. The **Show Values Border** property will have no effect if the **Show Values** property is not selected.
- **Exploded** – sets whether selected pie segments are drawn 'exploded'. Which segments should be exploded is set on the properties option of the chart report.
- **Hidden** – sets whether selected bar segments are drawn 'hidden'. Which segments should be hidden is set on the properties option of the chart report.

- **Show Constant Line** – sets the option whether the user could draw constant lines in chart reports.
- **Show Average** – sets the option whether the user could draw average lines in chart reports.
- **Background Color** – sets the color for the chart background.
- **Border Color** – sets the color of the border around the chart.
- **Rectangle Background Color** – sets the color used to fill the background of the chart rectangle. The chart rectangle is defined as the area contained within the unit and item axes.
- **Item Axis Gridline Color** – sets the color used to draw the item axis grid lines. The item axis gridlines will only be visible if the **Show Item Axis Gridlines** property is selected.
- **Item Axis Gridline Opacity** – sets the opacity level used to draw the unit axis grid lines. The **Item Axis Gridline Opacity** value can be a number from 0 to 100 (0 = fully transparent, 100 = fully opaque). The item axis gridlines will only be visible if the **Show Item Axis Gridlines** property is selected.
- **Unit Axis Gridline Color** – sets the color used to draw the unit axis grid lines. The unit axis gridlines will only be visible if the **Show Unit Axis Gridlines** property is selected.
- **Unit Axis Gridline Opacity** – sets the opacity level used to draw the unit axis grid lines. The **Unit Axis Gridline Opacity** value can be a number from 0 to 100 (0 = fully transparent, 100 = fully opaque). The unit axis gridlines will only be visible if the **Show Unit Axis Gridlines** property is selected.
- **Bar Outline Color** – sets the color used to draw the bar outlines.
- **Legend Background Color** – sets the color used to draw the legend background.
- **Legend Border Color** – sets the color used to set the legend border.
- **Line Symbol Width** – sets the width of symbols used for lines.
- **Line Thickness** – sets the thickness of lines.
- **Pie Diameter** – sets the diameter of the pie on a pie chart. The **Pie Diameter** value has no effect unless the **Pie Diameter Mode** property is set to *Manual*. It is possible to set the diameter of a pie that extends off the edges of the chart using this property. Any parts of the pie that extend off the edge of the chart will be clipped.
- **Pie Outline Color** – sets the color used to draw the outline circle around a pie.
- **Unit Axis Min Value** – sets the minimum value shown on the unit scale when the manual scaling option is used. For the **Unit Axis Min Value** to have an effect the **Unit Axis Scale Mode** property must be set to *Manual*.
- **Unit Axis Max Value** – sets the maximum value shown on the unit scale when the manual scaling option is used. For the **Unit Axis Max Value** to have an effect the **Unit Axis Scale Mode** property must be set to *Manual*.
- **Constant Line Value** – sets the value of where constant lines are drawn.

- **Constant Line Color** – sets the color of constant lines.
- **Constant Line Thickness** – sets the thickness of constant lines.

## Visualization Properties

The **'Visualization'** properties page allows the user to set default values for all the properties that could apply to any Visualization report. The list of visualization properties is shown in Figure 59.

- **Background Color** – sets the background color for the main area of the visualization. It does **NOT** apply to: *Annotation Time Lines, Gauges, Motion* and *Table* visualizations.
- **Border Color** – sets the visualization border color. It does **NOT** apply to: *Annotation Time Lines, Gauges, Motion* and *Table* visualizations.
- **Border Width** – sets the visualization border width in pixels. It does **NOT** apply to: *Annotation Time Lines, Gauges, Motion* and *Table* visualizations.
- **Show Caption** – sets whether the visualization caption is visible.
- **Stacked** – if selected, the data values are stacked (accumulated). It applies **ONLY** to: *Area, Horizontal* and *Vertical* visualizations.
- **Slanted Text** – if selected, the horizontal axis text is drawn at an angle, to help fit more text along the axis; if not, horizontal axis text is drawn upright. It applies **ONLY** to: *Area, Horizontal, Line* and *Vertical* visualizations.
- **Slanted Text Angle** – sets the angle of the horizontal axis text, if it's drawn slanted., and takes values in the range of 1-90. It applies **ONLY** to: *Area, Horizontal, Line* and *Vertical* visualizations.
- **Data Axis Min Value** – sets the lowest data axis grid line. The actual grid line will be the lower of two values: the **Min Value** option, or the lowest data value, rounded down to the next lower grid mark.
- **Data Axis Max Value** – sets the highest data axis grid line. The actual grid line will be the greater of two values: the **Max Value** option, or the highest data value, rounded up to the next higher grid mark.
- **Legend Position** – sets the position of the visualization legend. It does **NOT** apply to: *Annotation Time Line, Gauge, Motion* and *Table* visualizations.
- **Curve Type** – controls the curve of the lines. If the option *None* is selected, then the lines are straight without curve. If the option *Function* is selected the angles of the line will be smoothed. It applies **ONLY** to: *Line* and *Scatter* visualizations.
- **Line Thickness** – sets the nine thickness in pixels. Use zero to hide all lines and show only the points. It applies **ONLY** to: *Area, Line* and *Scatter* visualizations.
- **Line Symbol Width** – sets the diameter of data points, in pixels. Use zero to hide all points. It applies **ONLY** to: *Area, Line* and *Scatter* visualizations.
- **Max Alternation** – sets the maximum number of levels of horizontal axis text. If axis text labels become too crowded, the server might shift neighbouring labels up

or down in order to fit labels closer together. This value specifies the most number of levels to use; the server can use fewer levels, if labels can fit without overlapping. It applies **ONLY** to: *Area, Line* and *Vertical* visualizations.

- **Left** – sets how far to draw the visualization from the left border. It does **NOT** apply to: *Gauge, Motion* and *Table* visualizations.
- **Top** – sets how far to draw the visualization from the top border. It does **NOT** apply to: Gauge, Motion and Table visualizations.
- **3D** – if selected, the visualization becomes three-dimensional. It applies **ONLY** to: *Pie* visualizations.

The **General** tab contains a list of properties that would apply to most of the visualizations. However, there are a few that contain a different set of properties, and these are described in detail below.

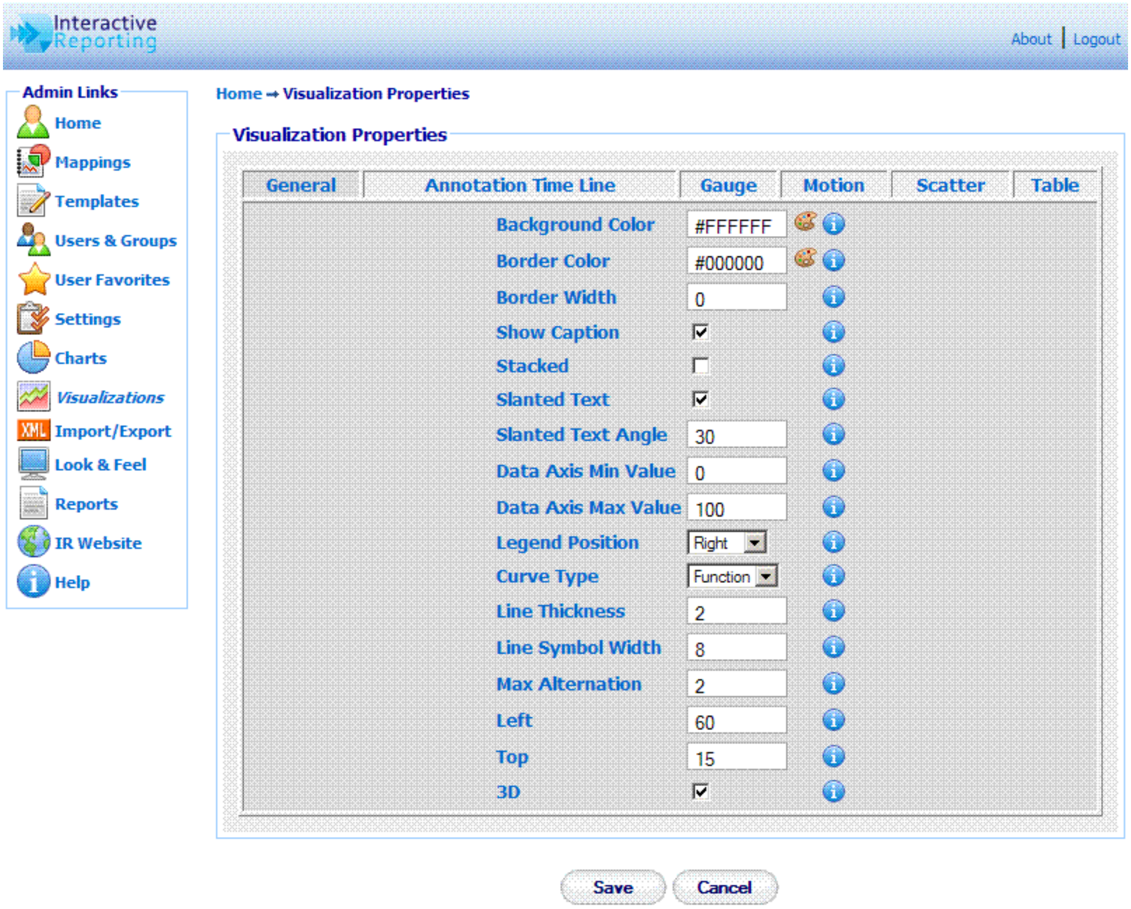



**Figure 59**

The properties applicable to the **Annotation Time Line** visualization are shown when clicking the **Annotation Time Line** tab of Figure 59, and are the following (Figure 60):

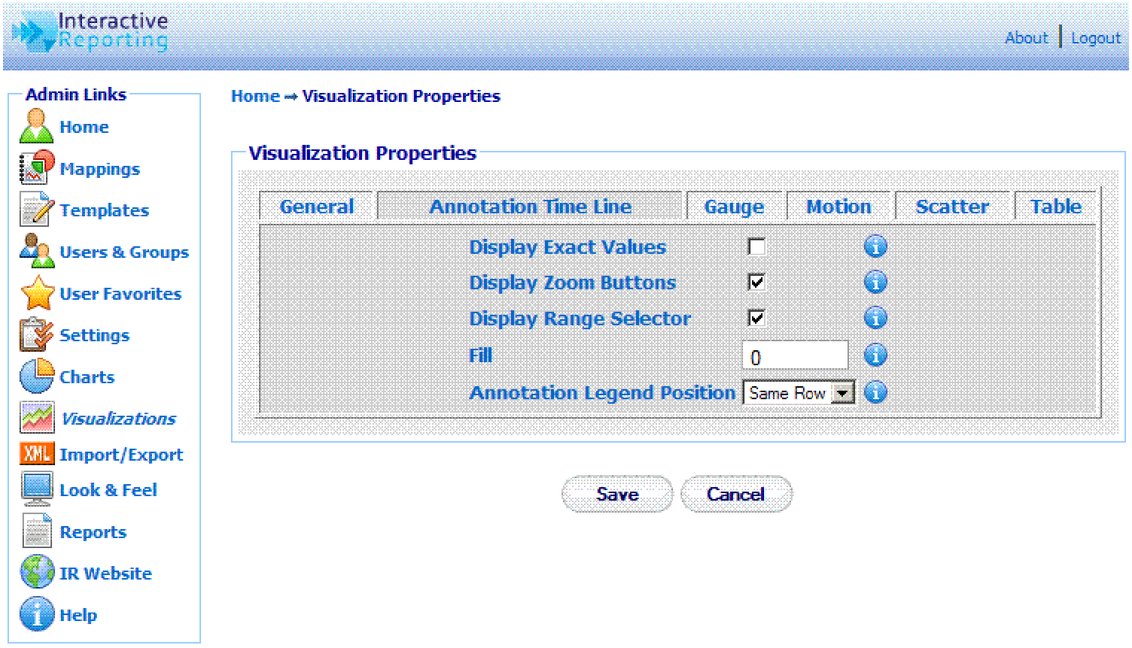



Figure 60

- **Display Exact Values** – if not selected, a shortened, rounded version of the values on the top of the graph will be displayed, to save space. For example, 56123.45 will be displayed as 56.12k
- **Display Zoom Buttons** – sets whether to show the zoom links ("1d 5d 1m" etc.)
- **Display Range Selector**– sets whether to show the zoom range selection area (the area at the bottom of the visualization).
- **Fill** – sets the alpha of the fill below each line in the line visualization. The **Fill** value can be a number in the range 0-100 (inclusive), 0 means no fill at all and 100 means 100% opaque fill, The fill color is the same color as the line above it.
- **Top** – sets whether to put the coloured legend on the same row with the zoom buttons and the date.

The properties applicable to the **Gauge** visualization are shown when clicking the **Gauge** tab of Figure 59, and are the following (Figure 61):

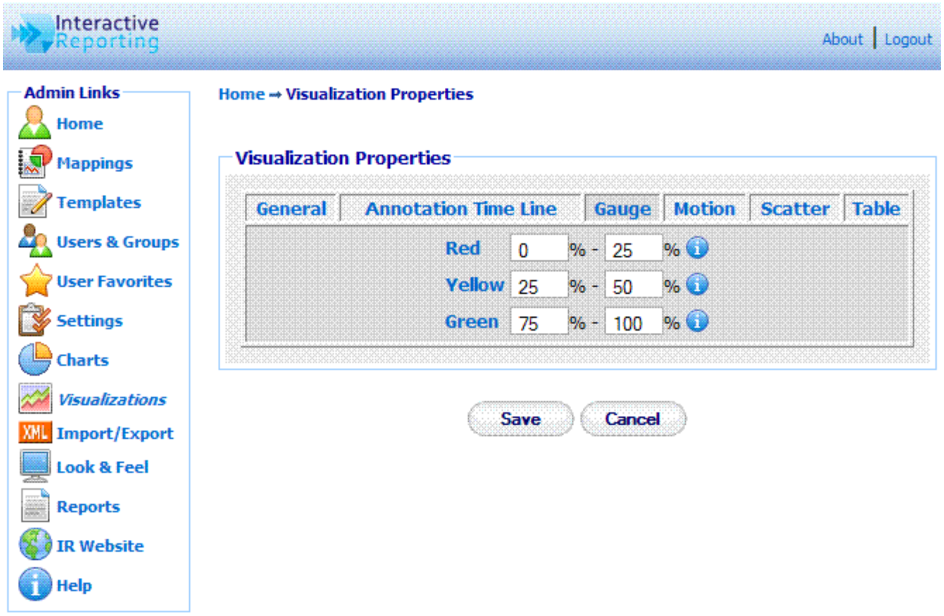



Figure 61

- **Red** – sets the lowest and maximum percentage values for a range marked by a red color.
- **Yellow** – sets the lowest and maximum percentage values for a range marked by a yellow color.
- **Green** – sets the lowest and maximum percentage values for a range marked by a yellow color.

The properties applicable to the **Motion** visualization are shown when clicking the **Motion** tab of Figure 59, and are the following (Figure 62):

- **Show Chart Buttons** – sets whether the buttons that control the graph type (bubbles / lines / columns) at top right corner are displayed.
- **Show Header** – sets whether the title label of the entities (derived from the label of the first column in the data table) is displayed.
- **Show Select List** – sets whether the list of visible entities is displayed.
- **Show Side Panel** – sets whether, the right hand panel is displayed.
- **Show X Metric Picker** – sets whether the metric picker for the x-axis is displayed.
- **Show Y Metric Picker** – sets whether the metric picker for the y-axis is displayed.
- **Show X Scale Picker** – sets whether the scale picker for the x-axis is displayed.
- **Show Y Scale Picker** – sets whether the scale picker for the y-axis is displayed.
- **Show Advanced Panel** – sets whether the options compartment in the settings panel is displayed.

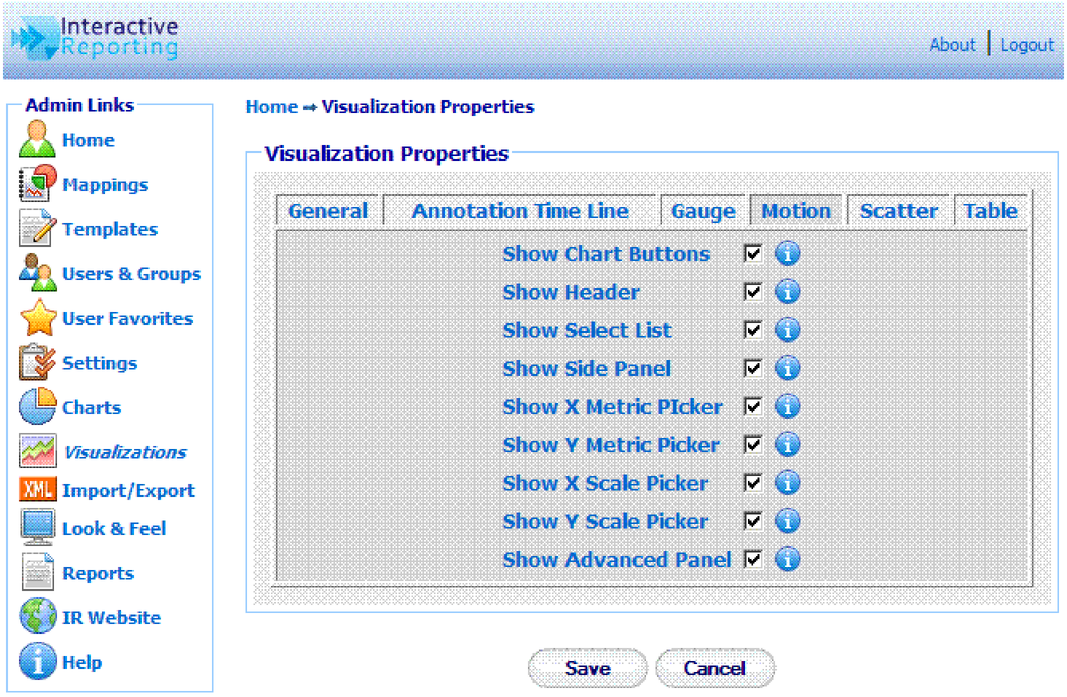



Figure 62

The **Scatter** visualization has some additional properties on top of some of the properties from the **General** properties. These are shown when clicking the **Scatter** tab of Figure 59, and are the following (Figure 63):

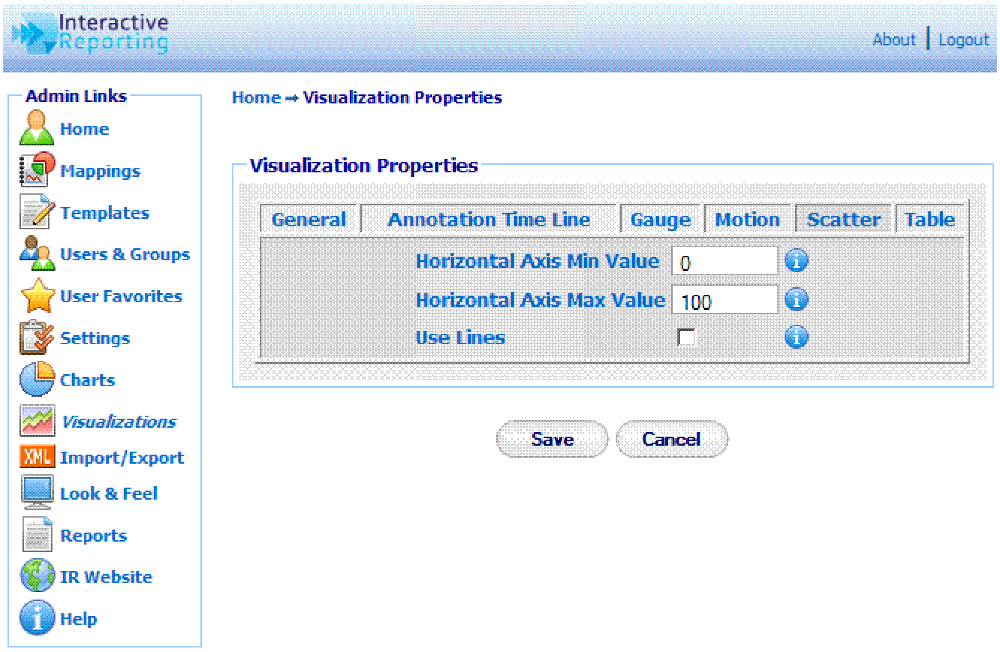



Figure 63

- **Horizontal Axis Min Value** – sets the minimum value shown on the horizontal scale. The actual grid line will be the lower of two values: the **Min Value** option, or the lowest data value, rounded down to the next lower grid mark.

- **Horizontal Axis Max Value** – sets the maximum value shown on the horizontal scale. The actual grid line will be the higher of two values: the **Max Value** option, or the highest data value, rounded down to the next higher grid mark.
- **Use Lines** – sets whether the visualization will show lines connecting the data points.

Chapter

11

# Look and Feel

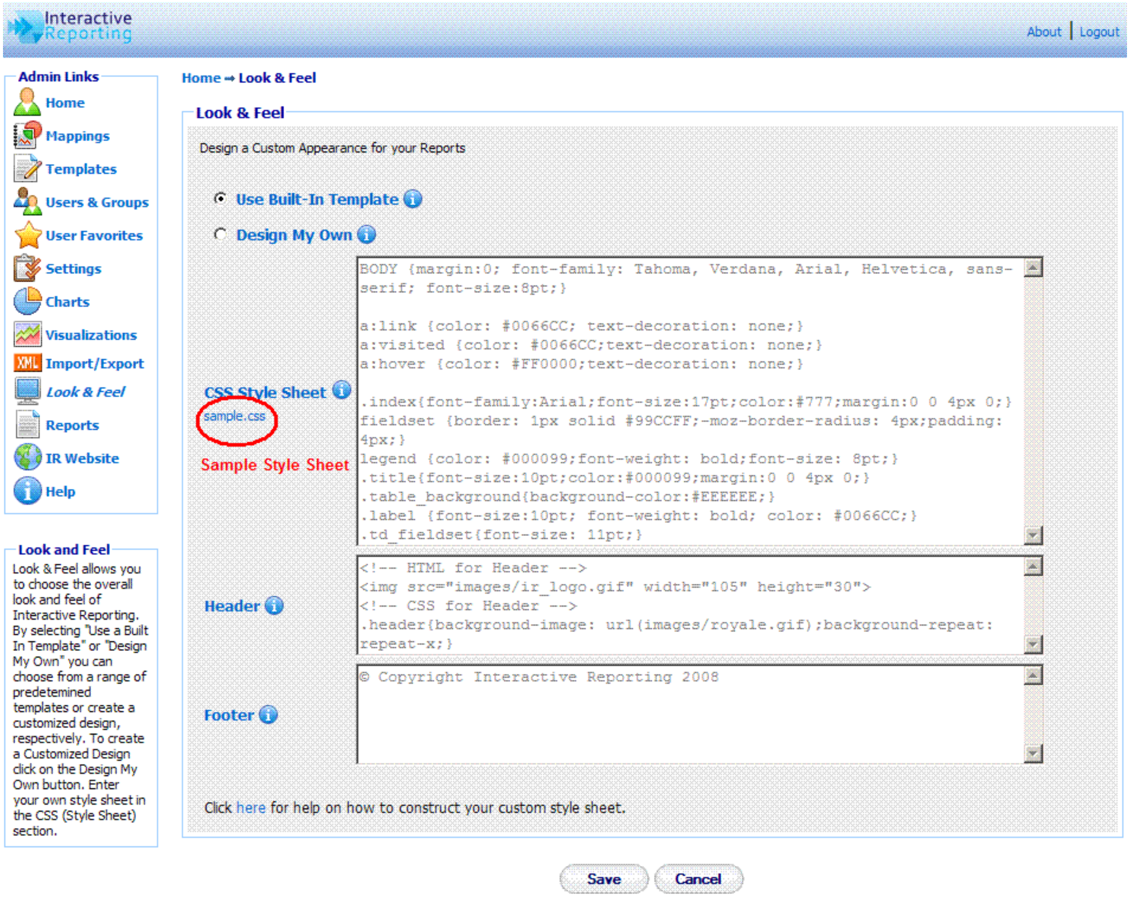
### *Customize the Look and Feel of Interactive Reporting…*

INTERACTIVE REPORTING offers the option of designing a customised according to the user's wishes. To access this option click on either the **'Look & Feel'** link of the **'Administration Options'** menu or of the **'Admin Links'** sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 64.

There are two options available to the Administrator for the look and feel of INTERACTIVE REPORTING. The user can either select the built-in predetermined INTERACTIVE REPORTING template, or they can select to design their own look and feel by entering their own style sheet. When the latter option is selected the text area under the **'Design my Own'** option becomes active and the administrator can edit the custom style sheet to match the user's requirements. A sample style sheet is available for help on how to create a custom design, which can be accessed by clicking the **'sample.css'** link by the **'Design my Own'** text area. An example of the sample.css file can be found in Appendix A.

There is also the option to change the header and footer of the INTERACTIVE REPORTING pages according to the user's needs or preferences, irrespective of the look and feel template they have chosen. To do this, the administrator must enter into the appropriate text box the style that corresponds to the required header or footer.

To finish with the setting of the look and feel click the 'Save' button to store the new options into the INTERACTIVE REPORTING system



Interactive Reporting
About | Logout
Admin Links
Home
Mappings
Templates
Users & Groups
User Favorites
Settings
Charts
Visualizations
Import/Export
Look & Feel
Reports
IR Website
Help
Look and Feel
Look & Feel allows you to choose the overall look and feel of Interactive Reporting. By selecting "Use a Built In Template" or "Design My Own" you can choose from a range of predetemined templates or create a customized design, respectively. To create a Customized Design click on the Design My Own button. Enter your own style sheet in the CSS (Style Sheet) section.
Home → Look & Feel
Look & Feel
Design a Custom Appearance for your Reports
Use Built-In Template
Design My Own
CSS Style Sheet
sample.css
Sample Style Sheet
BODY {margin:0; font-family: Tahoma, Verdana, Arial, Helvetica, sans-serif; font-size:8pt;}
a:link {color: #0066CC; text-decoration: none;}
a:visited {color: #0066CC;text-decoration: none;}
a:hover {color: #FF0000;text-decoration: none;}
.index{font-family:Arial;font-size:17pt;color:#777;margin:0 0 4px 0;}
fieldset {border: 1px solid #99CCFF;-moz-border-radius: 4px;padding: 4px;}
legend {color: #000099;font-weight: bold;font-size: 8pt;}
.title{font-size:10pt;color:#000099;margin:0 0 4px 0;}
.table_background{background-color:#EEEEEE;}
.label {font-size:10pt; font-weight: bold; color: #0066CC;}
.td_fieldset{font-size: 11pt;}
Header
<!-- HTML for Header -->
<img src="images/ir_logo.gif" width="105" height="30">
<!-- CSS for Header -->
.header{background-image: url(images/royale.gif);background-repeat: repeat-x;}
Footer
© Copyright Interactive Reporting 2008
Click here for help on how to construct your custom style sheet.
Save
Cancel


Figure 64

Chapter
12

# Import & Export

***Bulk Import & Export of Templates and/or Mappings…***

Importing and Exporting Templates and Mappings has never been easier in INTERACTIVE REPORTING. To access this option click on either the **'Import/Export'** link of the **'Administration Options'** menu or of the **'Admin Links'** sidebar menu at the left of the page of Figure 3. The user will then get directed to a page like the one shown in Figure 65.

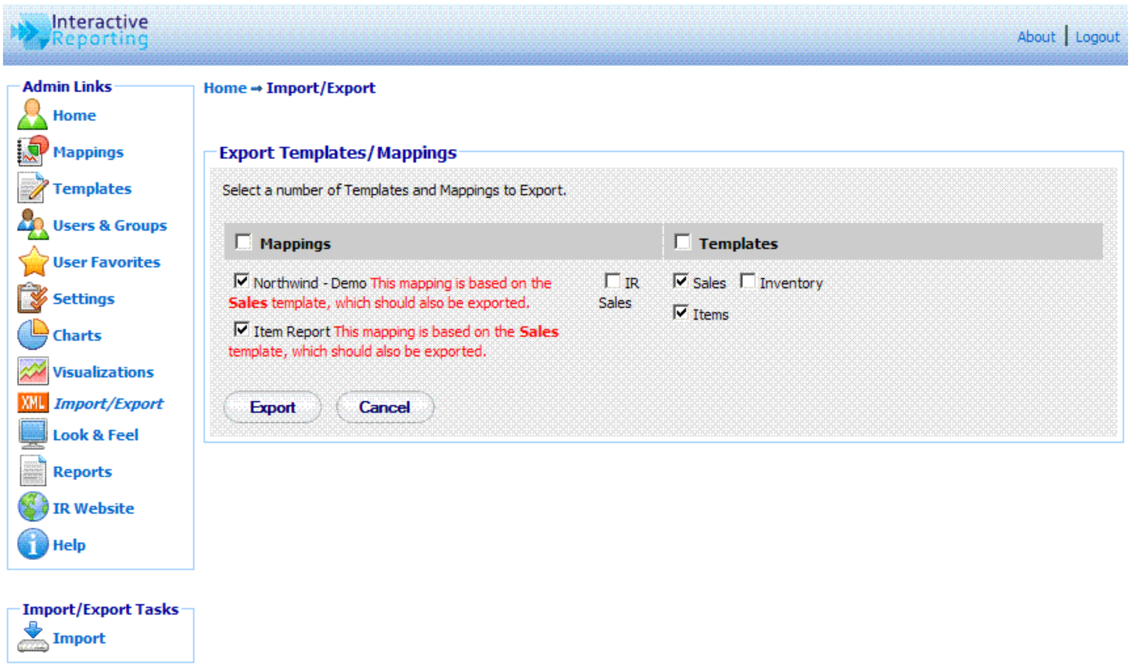



Figure 65

The user must select which templates and/or mappings to export by checking the box that is in front of each template and mapping. To export any selected elements the user must click the **'Export'** button at the bottom of the list. When exporting a mapping the user must make sure that the associated template is also exported, otherwise any possible of that mapping at a future time will fail.

## Import

To import a file that contains a list of templates and or mappings, such as a file created by exporting templates and mappings, as described on the previous section, the user must click the **'Import'** link of the **'Import/Export Tasks'** section on the left side of the import/export page. The user is then directed to the **'Import Templates/Mappings'** page as can be seen in Figure 66. The user simply enters the path where the stored project file is located or uses the **'Browse'** button to locate it if unsure of the destination path. When the destination path is provided click the **'Import'** button to proceed to the second step of the import process as shown in Figure 67.

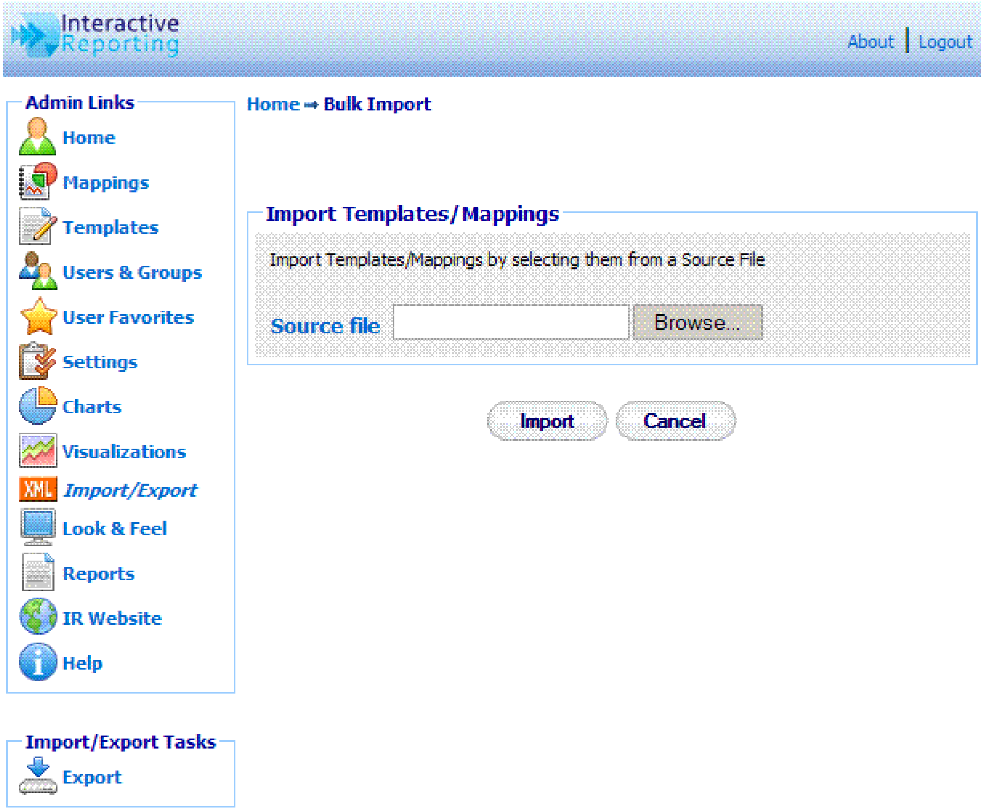



Figure 66

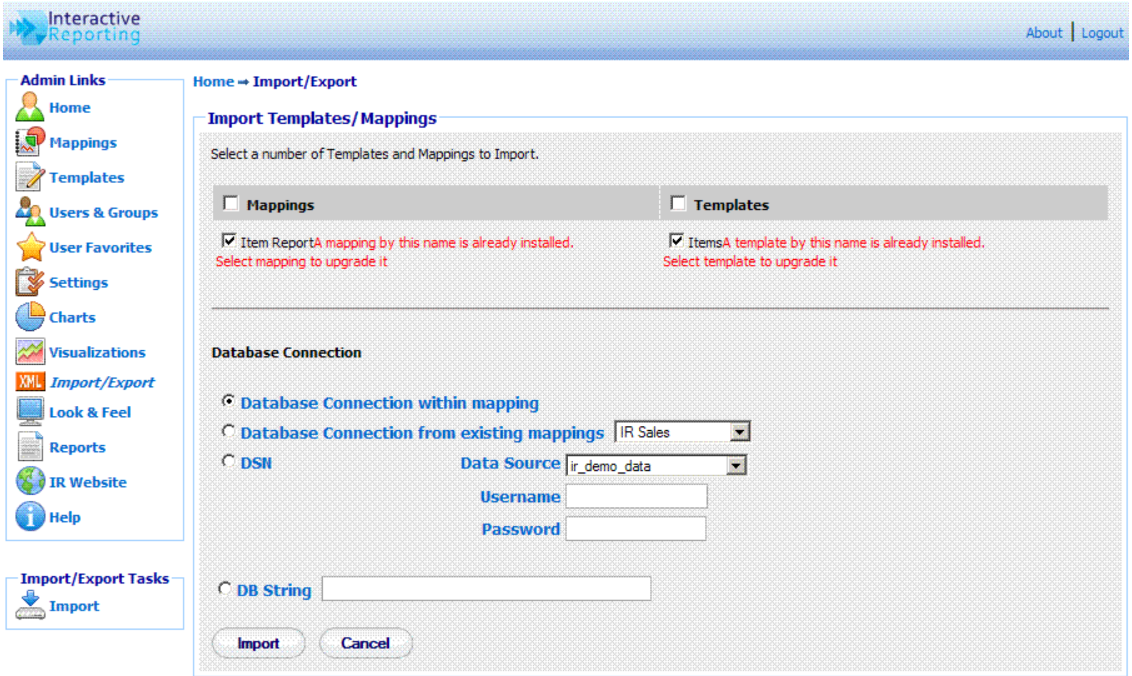



Figure 67

The user can then select which templates and/or mappings they would like to import. If the user selects one or more mappings, then they must select the database connection for the imported mappings, as described in the **Import Mapping** section of Chapter 4. Before importing any mappings the user should ensure that the associated template is either stored in the template section already or it is selected for import. When the user finishes with the import set up, they can click the **'Import'** button to finalise the process.

Chapter

13

# Interactive Reporting Tools

*Tools for Interactive Development…*

INTERACTIVE REPORTING can be adapted to perform more complex operations for more interactive development. This may be appropriate for more advanced users, so make sure to request your System Administrator's help if required.

## SQL *vs* Mapping

This utility allows the user/administrator to connect to any of the existing mappings and run arbitrary SQL commands against this mapping. To access this option click either on the **'Run SQL Commands against a Mapping'** link of the **'Administration Options'** menu or on the **'SQL vs Mapping'** link of the of the **'Tools'** sidebar menu at the left of the page of Figure 3. The user/administrator will then get directed to a page like the one shown in Figure 68. To perform an SQL request, first select the mapping of interest from the **'Report'** list. Next type the desired SQL statement into the **'SQL'** text area, and click the **'Execute'** button. The result set will then be displayed in the page. For example, Figure 69 shows the outcome of running the SQL statement **'select * from products where categoryid=7'** from the *Northwind – Demo* mapping.

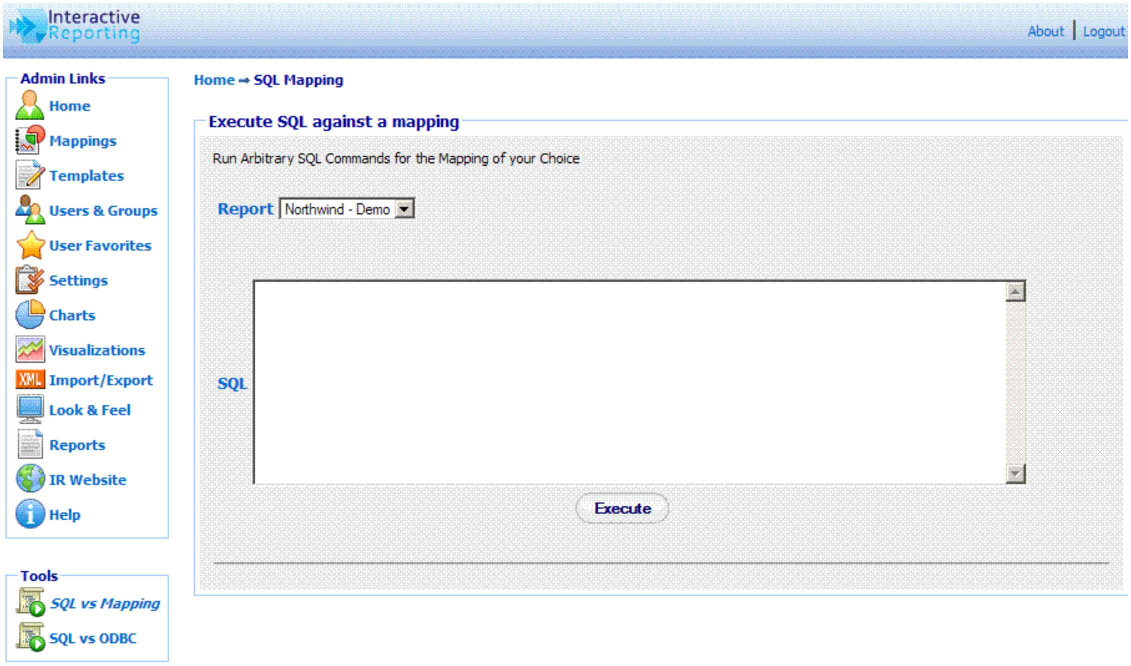



Figure 68

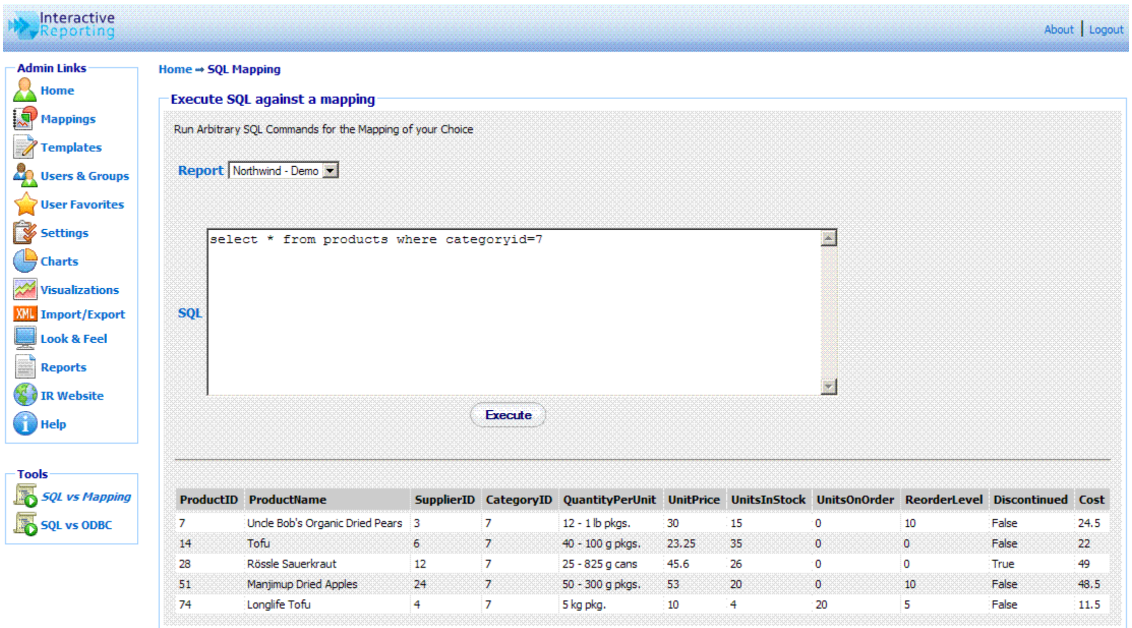



Figure 69

## SQL *vs* ODBC

This utility allows the user/administrator to connect to any of the existing ODBC sources and run arbitrary SQL commands against this connection. To access this option click either on the **'Run SQL Commands against an ODBC Source'** link of the **'Administration Options'** menu or on the **'SQL vs ODBC'** link of the of the **'Tools'** sidebar menu at the left of the page of Figure 3. The user/administrator will then get directed to a page like the one shown in Figure 70. To perform an SQL request choose the database connection either by specifying a DSN connection, with the appropriate username and password if applicable, or my providing the relevant DB string. Type the desired SQL statement into the **'SQL'** text area, and click the **'Execute'** button. The result set will then be displayed in the page, in a similar fashion to running an SQL statement against a mapping.

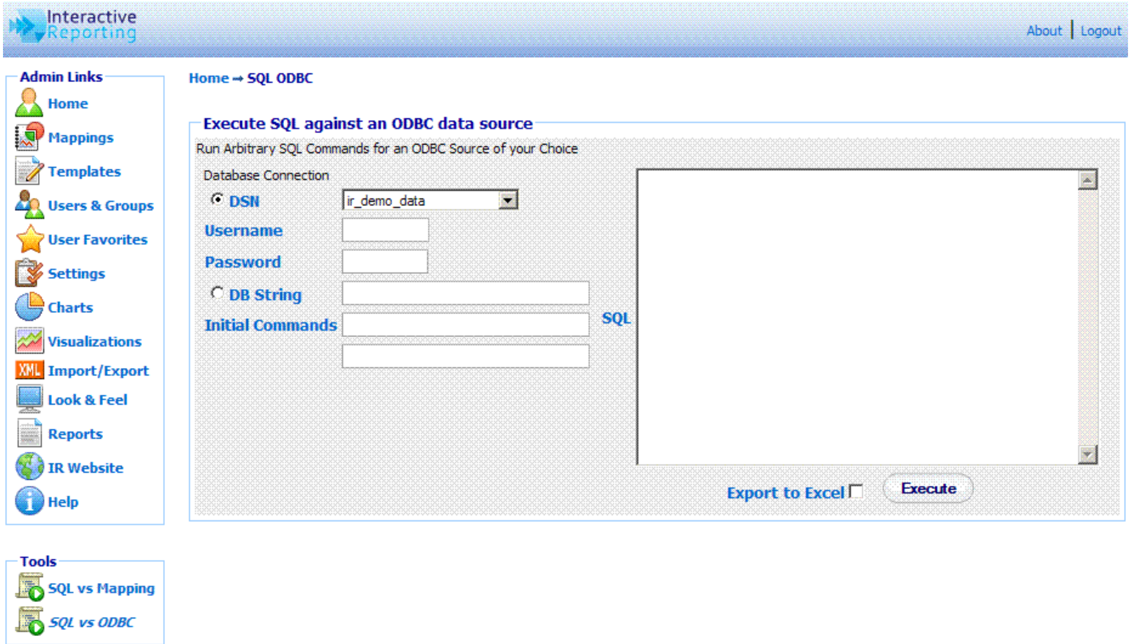



Figure 70

Chapter

14

# Installation & Removal of IR Service

## *Choosing the correct version of Interactive Reporting for you…*

There are currently two versions of INTERACTIVE REPORTING available to a customer: a **Standalone Version** and a **Service Version**.

### Standalone Interactive Reporting

This version is easily set up. Simply follow the online instructions. To remove INTERACTIVE REPORTING, go to the control panel. Click on **'Add or Remove Programs'**. Scroll down until **'Interactive Reporting'** is found and click on this. Once this has been highlighted a **'Change'** and **'Remove'** button appear. Simply click on the **'Remove'** button to remove INTERACTIVE REPORTING from the system.

### Service Interactive Reporting

Services applications can only run on Windows NT, Windows 2000 and Windows XP. To install, save the **ir_service.exe executable** to a directory with full permissions. For the basic installation type **ir_service –i** from the command line, as shown in Figure 71.

**INTERACTIVEREPORTING** should now appear in the **'Services'** section of **'Settings ->Control Panel -> Administrative Tools -> Services'**. Highlight this and click the **'Start'** option in the top left hand corner. INTERACTIVE REPORTING should be now ready for use.

To remove the service version, stop INTERACTIVEREPORTING in **'Settings ->Control Panel -> Administrative Tools -> Services'**. Next simply type **ir_service –u**. *Service INTERACTIVEREPORTING removed* appears as a confirmation.

Please note that if the extra options available are used in the installation, the exact same syntax **MUST** be used during removal. E.g. If **ir_service –i –svc v33** is used during installation, **ir_service –u –svc v33** must be used during removal.

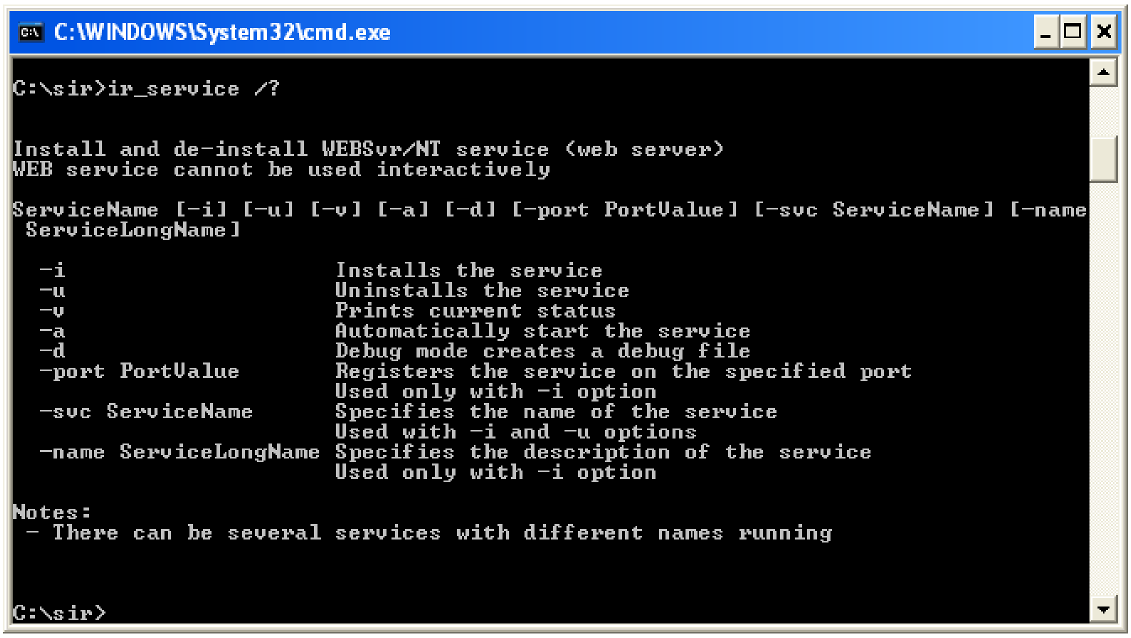

C:\WINDOWS\System32\cmd.exe
C:\sir>ir_service /?
Install and de-install WEBSvr/NT service (web server)
WEB service cannot be used interactively
ServiceName [-i] [-u] [-v] [-a] [-d] [-port PortValue] [-svc ServiceName] [-name ServiceLongName]
-i Installs the service
-u Uninstalls the service
-v Prints current status
-a Automatically start the service
-d Debug mode creates a debug file
-port PortValue Registers the service on the specified port
Used only with -i option
-svc ServiceName Specifies the name of the service
Used with -i and -u options
-name ServiceLongName Specifies the description of the service
Used only with -i option
Notes:
- There can be several services with different names running
C:\sir>

Figure 71

Appendix

A

# Sample.css

## *Sample Style Sheet for Look and Feel Section…*

<PRE>

BODY {margin:0; font-family: Tahoma, Verdana, Arial, Helvetica, sans-serif; font-size:8pt;}

a:link {color: #0066CC; text-decoration: none;}

a:visited {color: #0066CC;text-decoration: none;}

a:hover {color: #FF0000;text-decoration: none;}

.index{font-family:Arial;font-size:17pt;color:#777;margin:0 0 4px 0;}

fieldset {border: 1px solid #99CCFF;-moz-border-radius: 4px;padding: 4px;}

legend {color: #000099;font-weight: bold;font-size: 8pt;}

.title{font-size:10pt;color:#000099;margin:0 0 4px 0;}

.table_background{background-color:#EEEEEE;}

.label {font-size:10pt; font-weight: bold; color: #0066CC;}

.td_fieldset{font-size: 11pt;}

.td_descr{font-size: 9pt;}

.description {font-size:8pt;}

.description A {color:#0066CC; font-weight: bold; font-size:9pt;}

.smallLink{font-size:8pt;color:#0066CC;}

.td_sidebar{font-size: 8pt;font-weight: bold;}

.toolbar{background-color:#EBE9ED;}

.buttonText{color: #0066CC; font-size: 8pt;text-align:center;}

.breadcrumb {font-size:8pt;color:#000099;margin:0 0 10px 0;font-weight: bold;}

.reportInfo{font-size: 8pt;font-weight:bold;}

.displayText{font-size: 8pt;text-align:left;}

.errorMessage {font-size: 11pt; font-weight: bold; font-family: arial; color:red}

.promptMessage {font-size:8pt;color:#7F7F7F;margin:0 0 20px 0; }

.noRecordsFound {font-size: 14pt; font-weight: bold; color:red; text-align: center}

.helpPopupBody {font-size:10pt; color: black}

.inputtext {border:1px solid;border-color: #AAA;padding-top:3px;padding-left: 4pt}

.checkbox {font-size:8pt;}

.radio {font-size:8pt;}

.select {font-size: 9pt;}

.selectToolbar {font-size: 8pt;}

.largebutton{width:76px;height:25px;border:medium none;background-color: #FFFFFF;background-image:url('images/button2.gif');background-repeat: no-repeat; font-size:9pt; color:#000066;font-weight: bold;}

.dropmenudiv{position:absolute;top: 0;border: 1px solid #BBB; /*Theme Change here*/width: 200px;color:#0066CC;

border-bottom-width: 0;font:8pt;line-height:18px;z-index:200;background-color: white;visibility: hidden;}

.dropmenudiv a{width: 100%;display: block;text-indent: 3px;border-bottom: 1px solid #BBB; /*Theme Change here*/

padding: 2px 0;text-decoration: none;font-weight: bold;color:color:#0066CC;

filter: progid:DXImageTransform.Microsoft.Shadow(color=#CACACA,direction=135,strength=4); /*Add Shadow in IE. Remove if desired*/}

.dropmenudiv a:hover{ /*Theme Change here*/background-color: #F0F0F0;text-decoration: none;}

.copyright{font-size:7pt;color:#666;}

.customer_company_name {font-size:12pt; font-style: italic; color: gray}

</PRE>.

A **Style Sheet** is a file that contains style information for elements and is used to enhance the presentation of your web page. The style sheet contains information such as the fonts, colours, borders, and size of elements. To update INTERACTIVE REPORTING with your style changes simply copy the data from an existing .css file into the text area. A style sheet file ends with the extension .css, e.g. MyStyleSheet.css.

The following data is taken from the current default style sheet available with INTERACTIVE REPORTING. Altering fields in this file and updating the CSS field with these changes will alter the appearance of INTERACTIVE REPORTING. Please note that you may have to refresh the browser to view these changes. Please remember to keep the data within the curly {} brackets.

This sets the font options and margin for the background.

**BODY {margin:0; font-family: Tahoma, Verdana, Arial, Helvetica, sans-serif; font-size:8pt;}**

This sets the colour of unclicked names on links and removes the underlying from the links. e.g. the **"Logout"** link on the header of INTERACTIVE REPORTING.

**a:link {color: #0066CC; text-decoration: none;}**

This sets the colour of clicked names on links. e.g. the **"Logout"** link of INTERACTIVE REPORTING turn to #0066CC after being pressed.

**a:visited {color: #0066CC;text-decoration: none;}**

This sets the colour of links when moving the mouse over a link. E.g. the **'Logout'** link of INTERACTIVE REPORTING turn to #FF0000 when hovering over it.

**a:hover {color: #FF0000;text-decoration: none;}**

The following class deals with the fonts and margin of the general title of a page. E.g., format the title **'Favourites'**.

**.index{font-family:Arial;font-size:17pt;color:#777;margin:0 0 4px 0;}**

The next set of classes determines the style of the main report Wizard and Advanced pages. They set the fonts and colours of the page title, the background colour, and the style of the descriptions of the fieldsets.

**fieldset {border: 1px solid #99CCFF;-moz-border-radius: 4px;padding: 4px;}**

**legend {color: #000099;font-weight: bold;font-size: 8pt;}**

**.title{font-size:10pt;color:#000099;margin:0 0 4px 0;}**

**.table_background{background-color:#EEEEEE;}**

**.label {font-size:10pt; font-weight: bold; color: #0066CC;}**

**.description {font-size:8pt;}**

**.description A {color:#0066CC; font-weight: bold; font-size:9pt;}**

**.td_fieldset{font-size: 11pt;}**

**.td_descr{font-size: 9pt;}**

**.smallLink{font-size:8pt;color:#0066CC;}**

The next class sets the font size and style of the links at the sidebar menus of each page. E.g. the sidebar link **'Wizard'** appears bold.

**.td_sidebar{font-size: 8pt;font-weight: bold;}**

The following sections set the style of the buttons in the toolbar option on the report page.

**.toolbar{background-color:#EBE9ED;}**

**.buttonText{color: #0066CC; font-size: 8pt;text-align:center;}**

The next class formats the style of the breadcrumbs on the top of the report pages that redirect to previously visited pages.

**.breadcrumb {font-size:8pt;color:#000099;margin:0 0 10px 0;font-weight: bold;}**

This section generates the style of the filter information shown at the report pages when drilling down at a report link.

**.reportInfo{font-size: 8pt;font-weight:bold;}**

**.displayText{font-size: 8pt;text-align:left;}**

The following commands change the style of the various error messages.

**.errorMessage {font-size: 11pt; font-weight: bold; font-family: arial; color:red}**

**.promptMessage {font-size:8pt;color:#7F7F7F;margin:0 0 20px 0;}**

**.noRecordsFound {font-size: 14pt; font-weight: bold; color:red; text-align: center}**

**.helpPopupBody {font-size:10pt; color: black}**

The next set of classes format the various form elements, such as input boxes, select lists and buttons, that appear at various pages of INTERACTIVE REPORTING.

**.inputtext {border:1px solid;border-color: #AAA;padding-top:3px;padding-left: 4pt}**

**.checkbox {font-size:8pt;}**

**.radio {font-size:8pt;}**

**.select {font-size: 9pt;}**

**.selectToolbar {font-size: 8pt;}**

**.largebutton{width:76px;height:25px;border:medium none;background-color: #FFFFFF;background-image:url('images/button2.gif');background-repeat: no-repeat; font-size:9pt; color:#000066;font-weight: bold;}**

The next class generates the style of the list that appears at the **Tool Bar** option when there are custom menus set up by the user.

**.dropmenudiv{position:absolute;top: 0;border: 1px solid #BBB; /*Theme Change here*/width: 200px;color:#0066CC;border-bottom-width: 0;font:8pt;line-height:18px;z-index:200;background-color: white;visibility: hidden;}**

**.dropmenudiv a{width: 100%;display: block;text-indent: 3px;border-bottom: 1px solid #BBB; /*Theme Change here*/padding: 2px 0;text-decoration: none;font-weight: bold;color:color:#0066CC;filter: progid:DXImageTransform.Microsoft.Shadow(color=#CACACA,direction=135,strength=4); /*Add Shadow in IE. Remove if desired*/}**

**.dropmenudiv a:hover{ /*Theme Change here*/background-color: #F0F0F0;text-decoration: none;}**

The last section provides the style of the copyright message and **Company Name** information that appears at the bottom of INTERACTIVE REPORTING pages.

**.copyright{font-size:7pt;color:#666;}**

**.customer_company_name {font-size:12pt; font-style: italic; color: gray}**

Appendix

B

# Performance Optimisation

## *Supercharging Interactive Reporting…*

If INTERACTIVE REPORTING is working too slowly, the following should be considered:

1. **Using Database Indexes**
   To get reasonable speed it is advisable to create database indexes in the invoice transaction table on the *invoice_date*, *category*, *salesrep*, *invoice_number*, *item* and *customer* fields. Unless this is done, it will be difficult to obtain quick results from the reports.

2. **Minimizing the number of fields to transfer.**

Every field transferred takes up space. Invoice Transaction tables can sometimes have up to 60 fields or more. INTERACTIVE REPORTING only uses a few of these fields (i.e. *item*, *cost*, *price*, *qty*, *category*, *salesrep*, *invoice_date*, *invoice_number*, *customer*). If only the necessary fields are transferred, and hence the amount of data imported is reduced, then the database access will be quicker. This is particularly true if there are millions of records present. Essentially, the database server does not have to read in or cache as much information. Similarly, if the user has remote locations, where branch or other company data is be stored, it would mean that they would have less data to transfer.

3. **Separate Database for Analysis.**

If a large number of analyses are run, the performance of the accounting system may be affected. One approach to rectify this is to transfer the data to a separate database. We suggest a daily import script to import the data. If this approach is adopted, the real-time reporting capabilities will be lost. Advice on setting-up a separate data warehouse is given in the next appendix. If one of the reports is particularly slow, while most others are fast, it is probable that a database index is missing from one of the columns specified for analysis.

Appendix

C

# Setting-up a Data Warehouse

## *Moving Data About…*

If a separate data warehouse is set up, the following tips might be useful:

1. **Microsoft Access**

We recommend that the user keep a template database. Every night, a fresh copy of the template should be made and data should be imported into this new copy. This is a throwaway copy and will be replaced the next night. The reason we recommend this is that file-size grows with every data import and the database will cease functioning once file-size reaches 2GB. The data-warehouse will use the copy.

2. **SQL Server**

We recommend the use of **Microsoft Data Import Tool** (DTS) to set-up a database task to import the relevant tables. This task can be scheduled either nightly (for the current database) or monthly (for any history file that may exist). We also recommend that transaction logs not be kept on the data warehouse (uncheck **'Truncate Log'** on the **'Checkpoint'** option). Otherwise, the database will keep on growing unnecessarily and become unresponsive.

3. **History Files**

The user should only need to import the history file once a month, while the current file should be imported daily. The reason is that the history file shouldn't change once the month's data has been closed. Both History and Current files should be indexed.

If the accounting system does store them separately, they will need to be combined at some stage. The user can combine them by using a View with a union in it. This may be accomplished using the SQL option in the Data-Mapper. The advantage of a union is that it will remove duplicate rows. However, a history signifier should not be included in the union. A combined table can also be generated, though this must be performed carefully to avoid duplicate rows. The current table can contain rows that come from before the start of the period.

## 4. Left Joins

For data consistency, the system is designed to always use a left join whenever data is joined with another table (we do not want the system to lose any rows when trying to calculate a sales figure). If SQL is used, an attempt should be made to try to use LEFT JOINs when combining other tables with the main invoice transaction table from the system. If analyse is performed by several variables with the same filter, and different results obtained, it may mean that the LEFT JOINs are incorrect.

Appendix

# D

# Analysing Other Types of Information

## *Extending Interactive Reporting…*

Although INTERACTIVE REPORTING is principally designed to allow analysis of the Accounts Receivable paradigm, it may be extended to the following:

### 1. Sales Order Transactions

INTERACTIVE REPORTING can be used to analyse sales transactions. The user just needs to connect it to the Sales Transaction database, renaming the column titles.

### 2. Invoices

Even if the user does not have Invoice Transactions available, the invoices can still be analysed. The user should map the invoice line-total to price, and leave quantity unmapped (*qty* will default to 1). There will be no average cost or average price columns. Users will not be able to analyse by item (unless there is an item to invoice correspondence).

### 3. Inventory

By mapping **'inventory cost'** to *price*, **'inventory on hand'** to *qty*, the user can analyse the inventory information. The user should import the main inventory table (or the **'inventory at location'** table if they wish to analyse multiple warehouses). The column titles should also be renamed.

### 4. Sales Orders

Even if Sales Transactions is not available, *Sales Orders* can still be analysed. To do this map the invoice total to *price*, and leave *qty* unmapped. There will be no average cost or average price columns. Users will not be able to analyse by item (unless there is an item to sales order correspondence). The user should also rename the column titles.

### 5. Purchasing Order Transactions and AP Transactions.

Analysis of the PO transactions and AP transactions should be possible by mapping COG to *price*.