Volume

1

INTERACTIVE REPORTING

Sales Analysis and Reporting Products

Administrator's Guide

INTERACTIVE REPORTING

Interactive Reporting Administrator's Guide

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Chapter

1

System Requirements

What you must already have...

You must be using one of the following operating systems:

- Windows 98/Me
- Windows NT 4.0 Workstation
- Windows NT 4.0 Server
- Windows 2000 Pro
- Windows 2000 Server
- Windows 2000 Advanced Server
- Windows XP Pro & XP Home
- Windows 2003

Chapter

2

Installation

Getting Interactive Reporting on to the system...

Download the installable execute, click on it and follow the instructions.

Default Username and Password

The default user name is **demo** and the default password is **demo**

Chapter

3

Configuration

Getting Interactive Reporting ready for use...

Administration of Interactive Reporting is performed via the administration console. To access the Admin section, click on the *Admin* link on the main IR login page as seen below.

Link to Administrator Section

Figure 1

Login with the default administrator password of **demo.**

Figure 2

Once logged in the Administration options are available on the first page as seen in Figure 3 and Figure 4. There are a number of options available to the user at this stage.

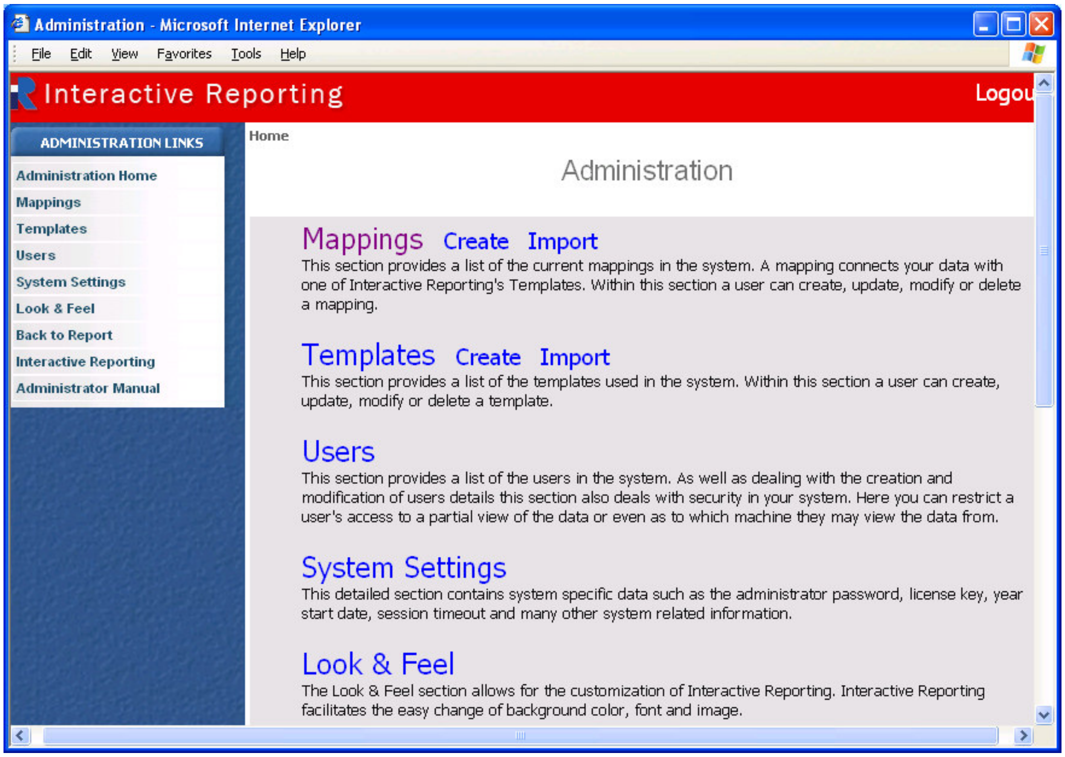


Figure 3

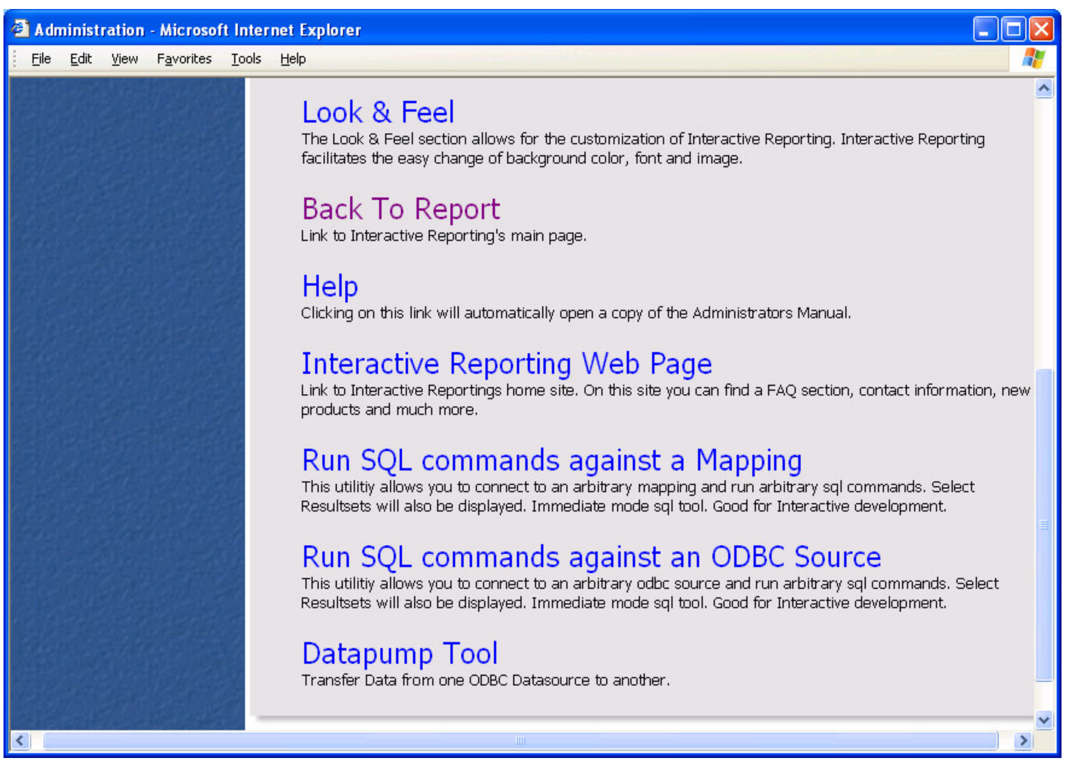


Figure 4

Mapping data-sources

Mappings can be created, deleted, cloned, edited or just viewed. To access the mappings click on the mapping link on the left task bar or the heading *Mappings* on the main *Administration* page (see Figure 3). Once mappings has been selected the user is directed to the *Mappings Maintenance* page, Figure 5.

For each database to be made available to the users, a mapping must be created. In the example below, a mapping (entitled 'Northwind') has already been created:

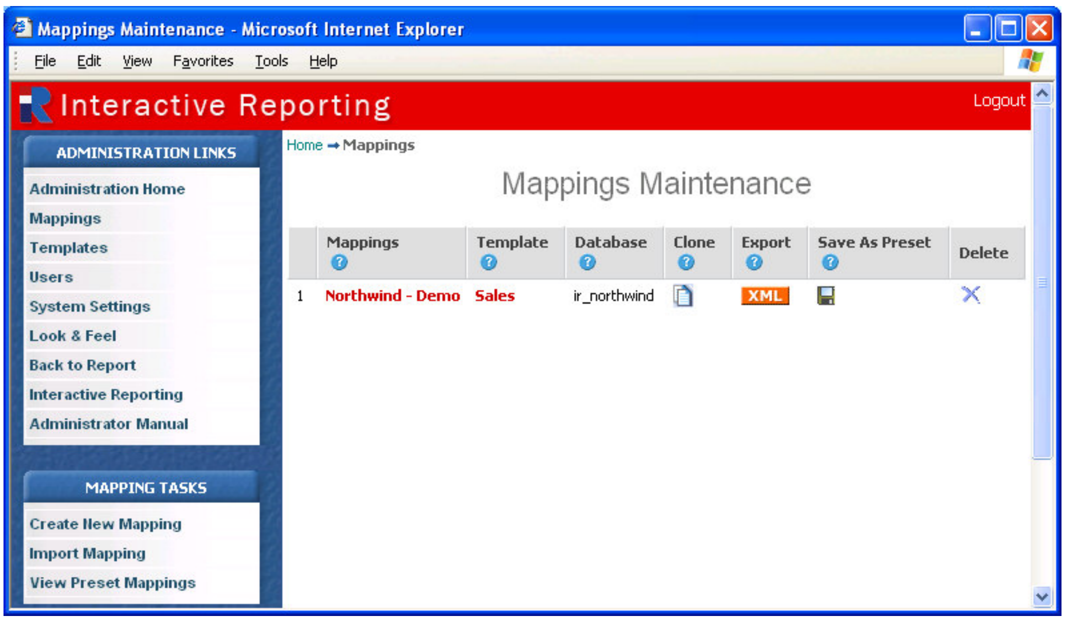


Figure 5

Each mapping is characterised by a user-friendly name and a database connection-string.

- Clicking on the *Mappings* Link will allow the set up of the existing mapping to be viewed. This will also allow editing of the existing mapping if necessary.

- The *Template* Link will redirect the user to the associated template of the mapping in the Template section of Admin. Here alterations to the existing template can be made is so desired.

- The *Database* heading allows the user to see what database is associated with the mapping.

- Clicking on the *Clone* link creates a complete copy of the mapping. This is useful if the user has two very similar databases. Simply clone the first one and make the alterations to the second one.

- To export a mapping click on the *Export* link. This will cause a box to pop up on screen advising the user to save the associated template. This is important, as a mapping must have a template. If the associated template does not exists and an import of the mapping is applied, then the import will fail. After this pop up appears a second popup box appears allowing the user to save the mapping to their desired location.

- The *Save as Preset* link creates a preset of the associated mapping. This preset is stored in the *Database Type Field* of *Create New Mappings.*

- When the *Help Icon* is clicked a popup window appears with text relating to the queried item.

Importing a Mapping

To import a mapping the user should click *Import Mapping* located in the *Mapping Tasks* section of the Frame on the left side of the browser. The user will then be redirected to the *Import Mappings* page as can be seen in Figure 6. 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.

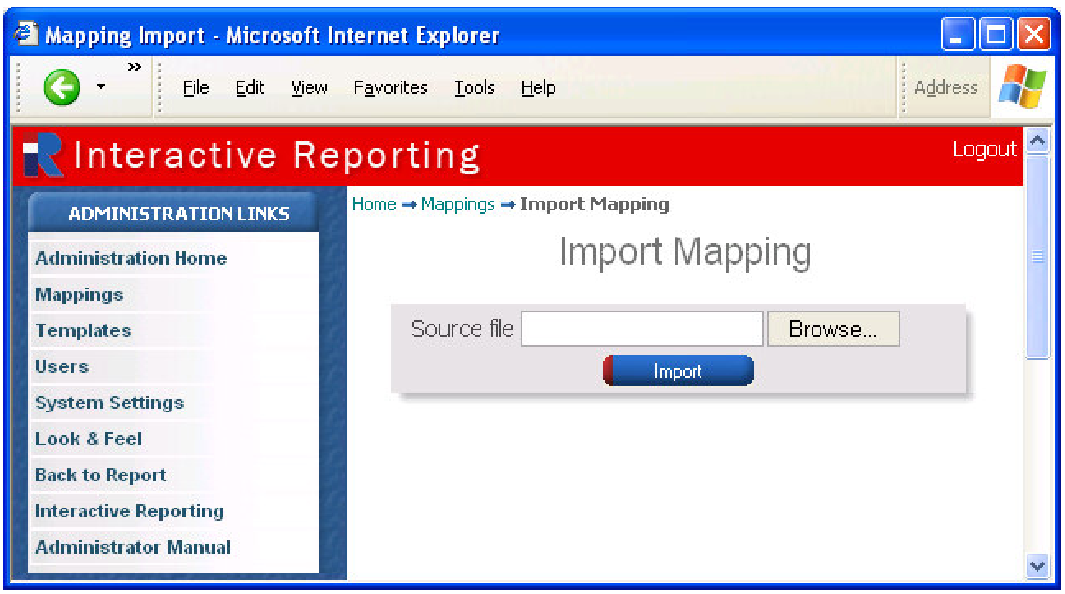


Figure 6

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.

Delete a mapping

Simply click on the X icon next to the *Save as Preset* of the appropriate mapping on the *Mappings Maintenance* screen.

Create a new mapping

For the user to specify another mapping they must click on *Create New Mapping* on the *Mapping Task* frame. This will redirect the user to the *Create New Mapping* page as seen in Figure 7.

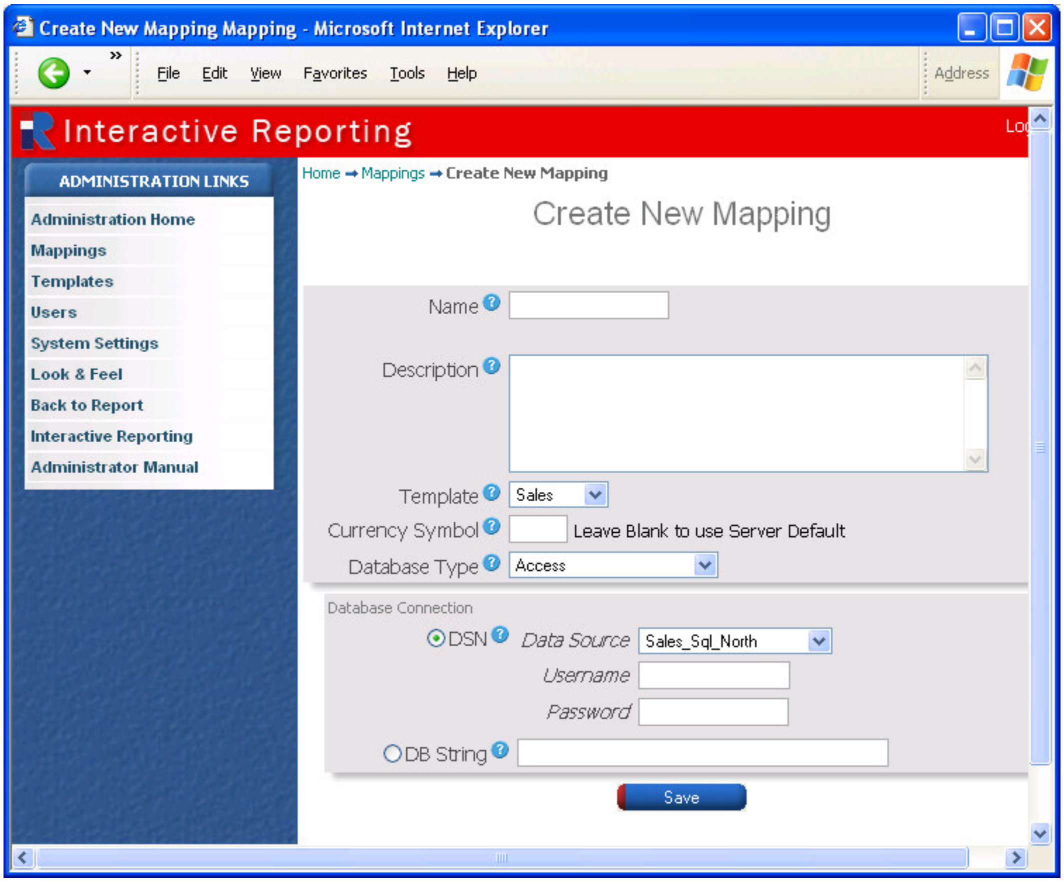


Figure 7

Enter the name to be used for the mapping and a description of the mapping. Next choose the associated Template for the new mapping. If left blank the *Currency Symbol* will use the value on the machine or server where IR resides. To force a specific currency symbol enter the symbol here. The database type can be chosen from a dropdown list. This list includes Oracle, Access, MySQL and SQL Server etc.

There are two options available to the user for the Database Connection. The DSN gives a drop down list of the system (ODBC) data sources. The user must select one, and enter the username and password.

If the DB String, or an ODBC data source, is used, then the user can set it up through the Data Sources or ODBC control panel. Here for the Database Connection String, if there is no password, just type in the name of the data source or ODBC connection. If there is a password then the user will have to enter the following.

```
DSN=NameFromControlPanel;UID=your_username;Password=your_pas
sword
```

NB: We advise the user to use the DSN set-up.

Alternatively, the setting up of the data source in the control panel can be skipped and one of the following used

- Access: `PROVIDER=Microsoft.Jet.OLEDB.4.0; DATASOURCE=c:\mydatastore\mydatabase.mdb.` This has been tested against Access 97,200,XP 2003.

- SQL Server: `PROVIDER=SQLOLEDB;DATA SOURCE=myServerName; INITIAL CATALOG=myDatabaseName; USER ID = myUsername;PASSWORD=myPassword.` This has been tested against SQL Server 7,2000.

- Oracle: `PROVIDER= OraOLEDB.Oracle; DATASOURCE = YourTNSName; USER =johns; PASSWORD = johns;`

Database Notes

The following notes are to aid the user when installing the database with Interactive Reporting.

- Access: This has been tested against Access 97,200,XP 2003.

- SQL Server: This has been tested against SQL Server 7,2000.

- Oracle: This only works with the ORACLE ODBC Driver. Always use oracle drivers, not Microsoft. This has been tested against Oracle8i,9i and 10j.

- Informix:: The Informix CDSK must be installed to have access to the Informix Drivers. This has been tested against Informix 7.2.x

- `MySQL:` For *MySQL i*nstall MyODBC. Set-up an odbc Datasource in the control panel to the mysql database. This has been tested against MySQL 4,3.23

Creating and Editing a Mapping

To allow the data in the mapped data-source to work with Interactive Reporting, the user must map the appropriate tables and fields within the database to the template expected by Interactive Reporting. Interactive Reporting's Mapping Editor makes this a quick and painless task.

First make a clone of Northwind Demo. This will be the backup copy in case of error. Delete the original Northwind Demo.

Next click the *Create Mapping* link in the mapping section. The *Edit Mapping* screen will appear. Fill out the fields as shown below in Figure 8.

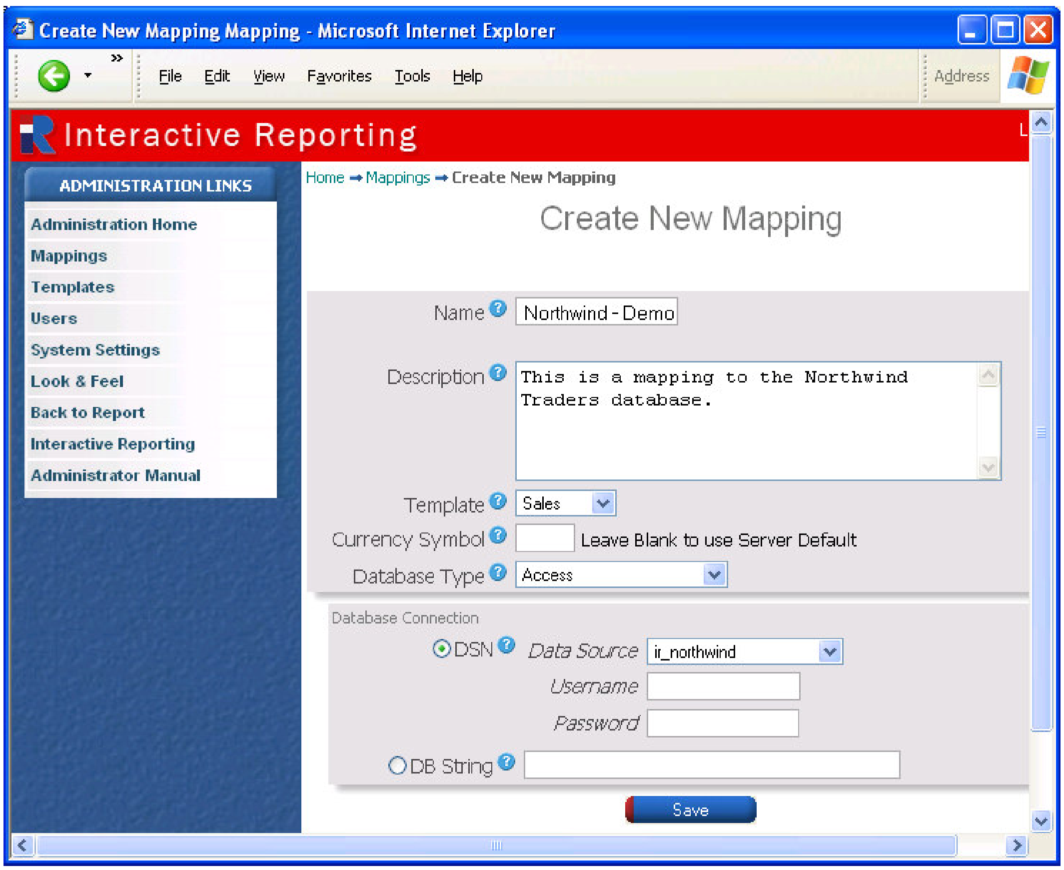
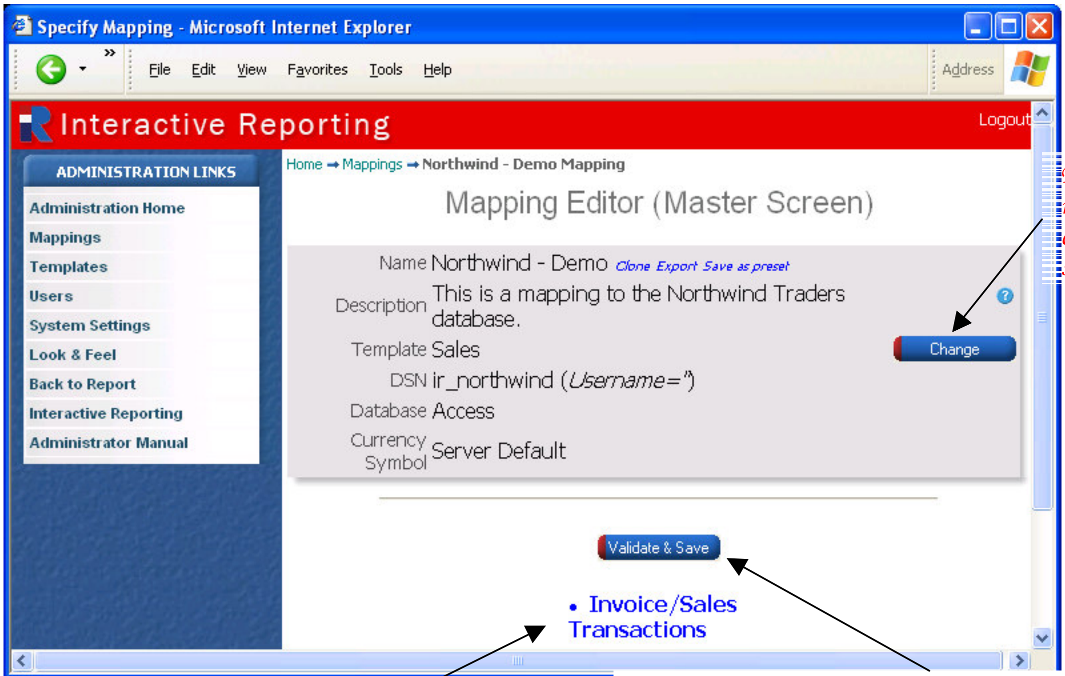


Figure 8

Click on the *Save* button when finished. The following page will then appear.



Edit mapping name and connection string

Map the individual data of the invoice

The 'validate and save' button at the end of the page is clicked when the mapping is completed.

Figure 9

Assuming that the DB String is exactly what is required (otherwise click on 'Change' to update it), the user can map the appropriate elements on an invoice by clicking on the *Invoice/Sales Transaction* link.

Choosing the invoice table

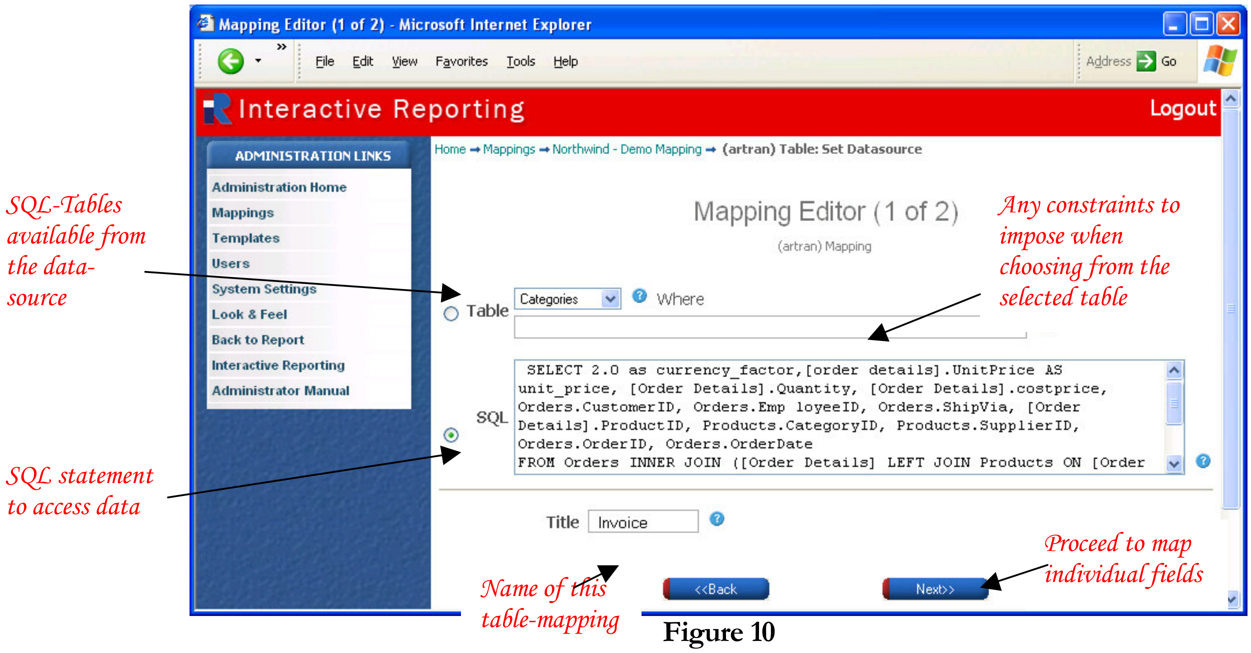


Figure 10

The fields in the invoice transaction may be made visible by specifying either the SQL-table in which they are found or by specifying an SQL statement (make the choice using the radio buttons). In figure 10 the SQL option has been chosen.

Table

The drop-down list will contain the tables that are available in the data-source that the user previously mapped – select the one that corresponds to the main table for invoices/sales 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.

SQL (Advanced users only)

If the information to encapsulate an invoice the user needed is not directly available within a single table (i.e. it either needs to be calculated or is split across several tables), an SQL statement may be entered, which directly extracts the 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 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's reports.

When finished, click on 'Next>>' to proceed.

Mapping the Invoice transaction fields

Now that the group of fields relevant to invoice transactions (often entitled Accounts Receivable) has been made available, the individual elements of an invoice must be mapped to Interactive Reporting's template.

Interactive Reporting makes provision for the following when the sales template is selected when creating a mapping:

- *Category* – the code for the item category
- *currency factor* – If the data has multiple currencies, it will multiply the price and cost by this factor, to arrive at the final value to display. It helps aggregate financial data from different countries.
- *Cost* – the unit cost of the item.
- *Customer* – the code for each customer
- *Invoice_date* – the date of the transaction
- *Invoice_number* – the number/code of the invoice
- *Item* – the code for the individual item
- *Price* – the unit price for each item on an invoice
- *Qty* – the number of a particular kind of item sold
- *Salesgroup* – the sales group that this order relates to. This field ties into the sales group level security field under the individual user.
- *Salesrep* – the id-code of an individual salesperson. This field ties into the sales initials security field under the individual user.
- *Custom1, custom2, custom3, custom4, custom5, custom6* – These custom fields allow the user to analyse by other custom fields they might have in the data.

Additional fields may be added in the *Template* section of interactive reporting. This section also details how to apply mathematical equations and formulas to certain fields, e.g. Average_Inventory_Price$=Sum (quantity * price/quantity)

N.B. *price* and *item* **must** be mapped into the Interactive Reporting template. All other fields are optional, but it is highly advisable to also provide a mapping for *cost* (to allow reports involving profit margin to be generated).

Below is the mapping-editor screen for field-mappings, where the *price* and the *item* have already been mapped (right side of the ->).

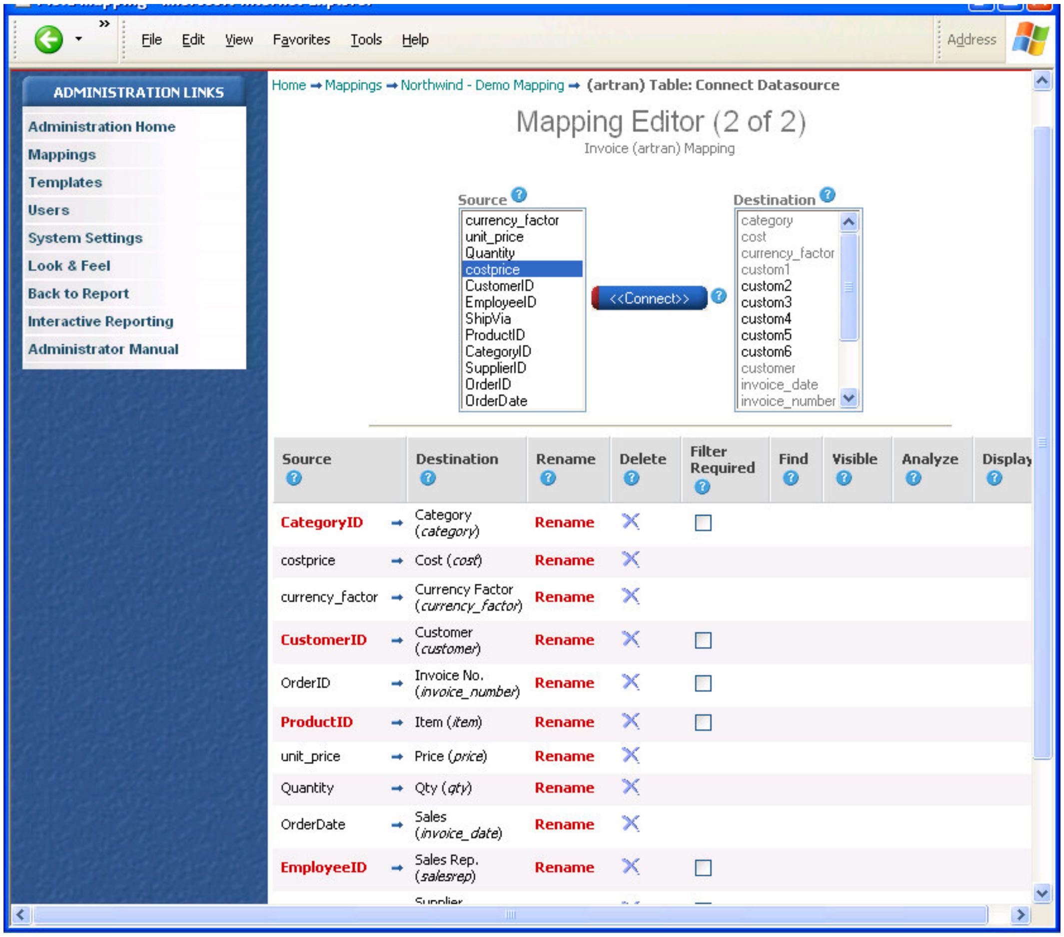


Figure 11

Certain linked values are highlighted, for example **EmployeeID**. This indicates that these values have child attributes which must also be mapped. To start to map these child values click on the highlighted link. The following is the mapping of **EmployeeID**.

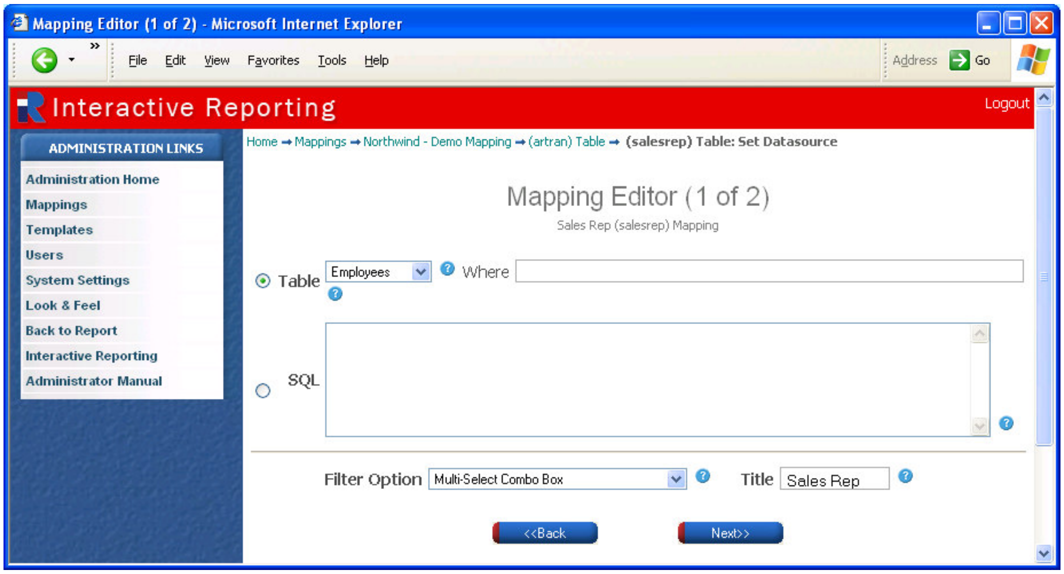


Figure 12

Choose the Employees table from the drop down Table list. When next is clicked the following page appears. Map as is shown in Figure 13.

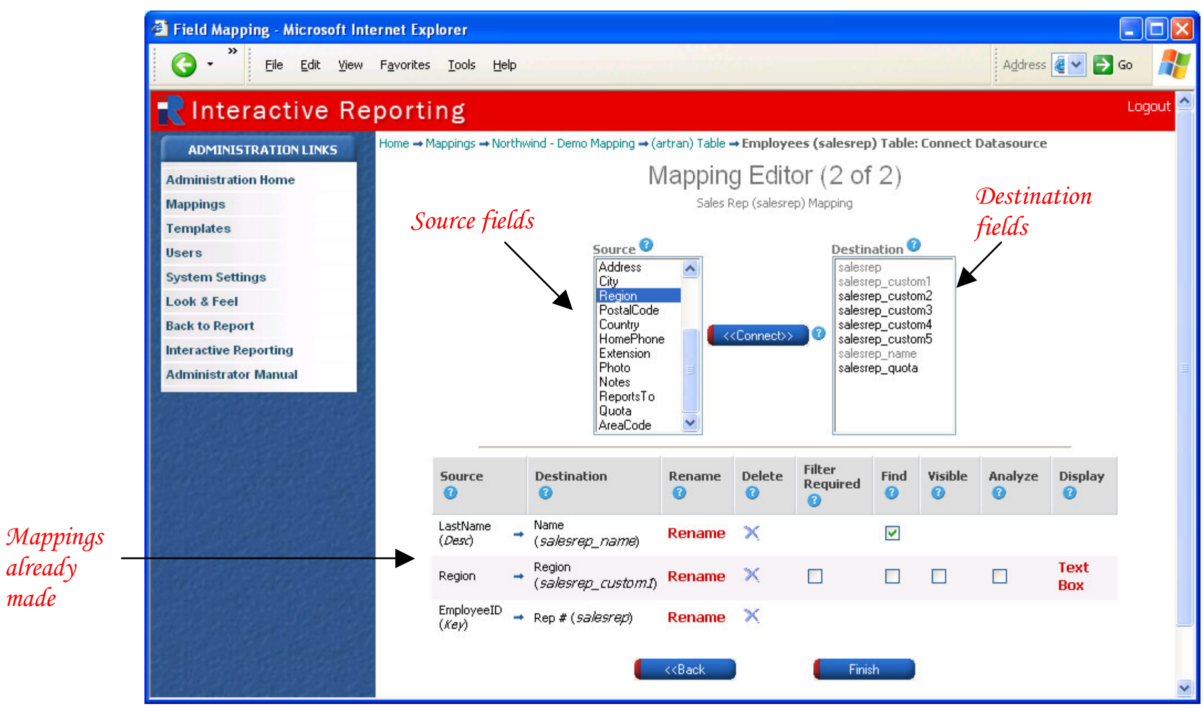


Figure 13

The **source** (e.g. the Northwind data-source's invoice_transactions table) fields are mapped to the **destination** (i.e. the Interactive Reporting template) fields by making the appropriate selections in the combo-boxes and clicking on the '<<Connect>>'.

In the example shown, the data-source's *CustomerID* field is about to be mapped to the Interactive Reporting *customer* field.

Invoice transaction fields that have been mapped are shown in the bottom portion of the screen, where a field mapping may be delete by clicking on the delete icon

If there are fields that are considered essential, but which are not included in the Interactive Reporting template, they can be mapped to one of the custom fields.

The *Rename* link allows the user to change the name. This is the name that will be seen in IR.

The *Find* or *search* box, if ticked, places a find icon next to the display box.

The *Visible* box, if ticked, results in this field being included in the generated reports. In this case, if an analysis were performed on customer, then one of the fields displayed in the generated report would be *Region*.

The *Analysis* box, if ticked, allows the user to analyse by this field. In the above example, *Regions* would be included in the drop down menu in the *Analyze by* section of the main reporting page.

Display Type is associated with the filter section of the main reporting page. Choose from eight display types. Please note that if the display type *None* is chosen then *Filter Required* and the *Find* option are not applicable.

If the *Filter Required* box is ticked then a red asterisk, *, will appear on the main reporting form next to this value. This is to indicate that a value *MUST* be included in this field on the main IR page, for a report to be generated. If there is no value in this field then an error will appear.

Once the mapping has been completed, clicking on 'Finish' will save the changes in the system.

Providing descriptive fields

Below is the result of having provided mappings for *price*, *item*, *customer*, *currency_factor*, *invoice_date*, *invoice_number*, *salesrep*, *qty*, *cost* and *category*.

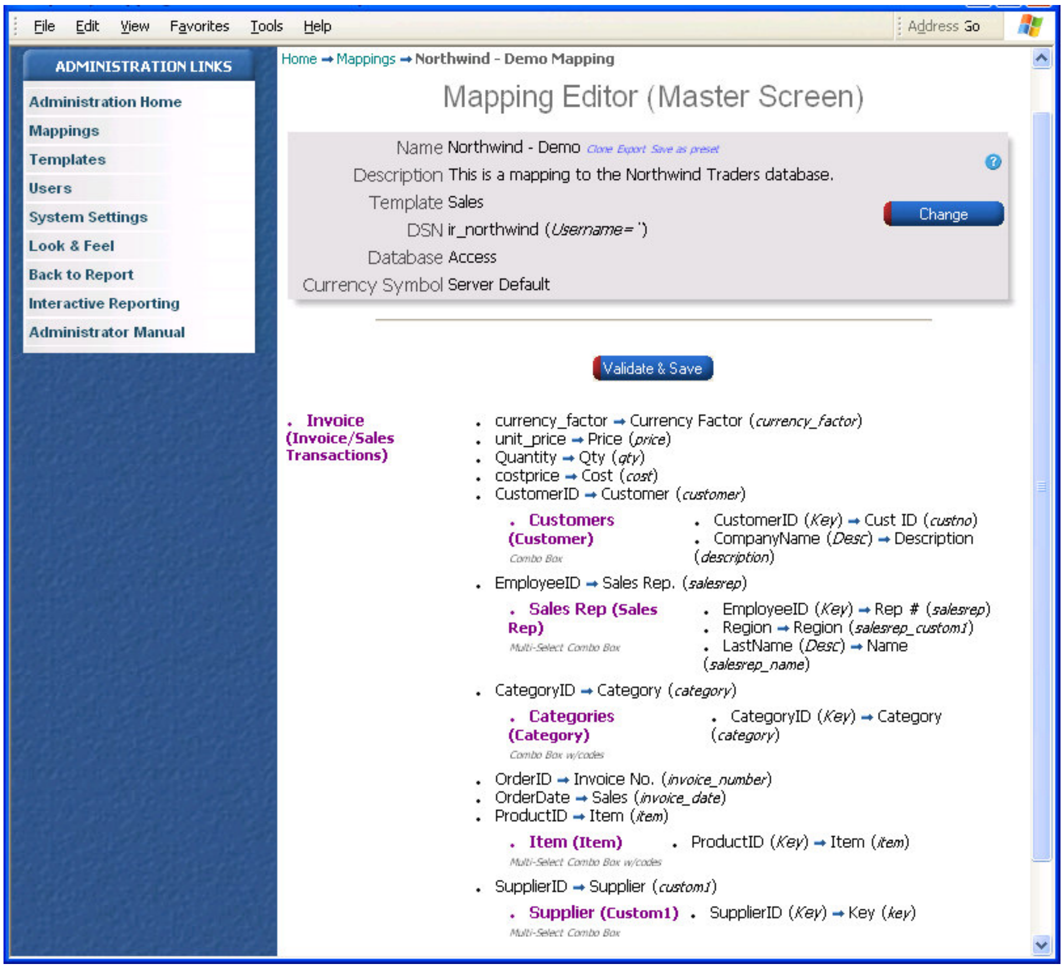


Figure 14

However, *Item*, *Supplier* and *category* have mapped only id/code-numbers and so are quite user-unfriendly. They will just display numbers in the user report and will not enable a user to easily identify what they are. Many databases will also provide tables to lookup descriptive names corresponding to id/code-numbers. One may provide the corresponding descriptions by clicking on the link appropriate to the field for which a description must be provided and then a mapping is made to the appropriate descriptive field (as above for the invoices).

For example, to associate a supplier's company name with the *supplier* field that has already been mapped, click on the 'Supplier' link and map the appropriate table:

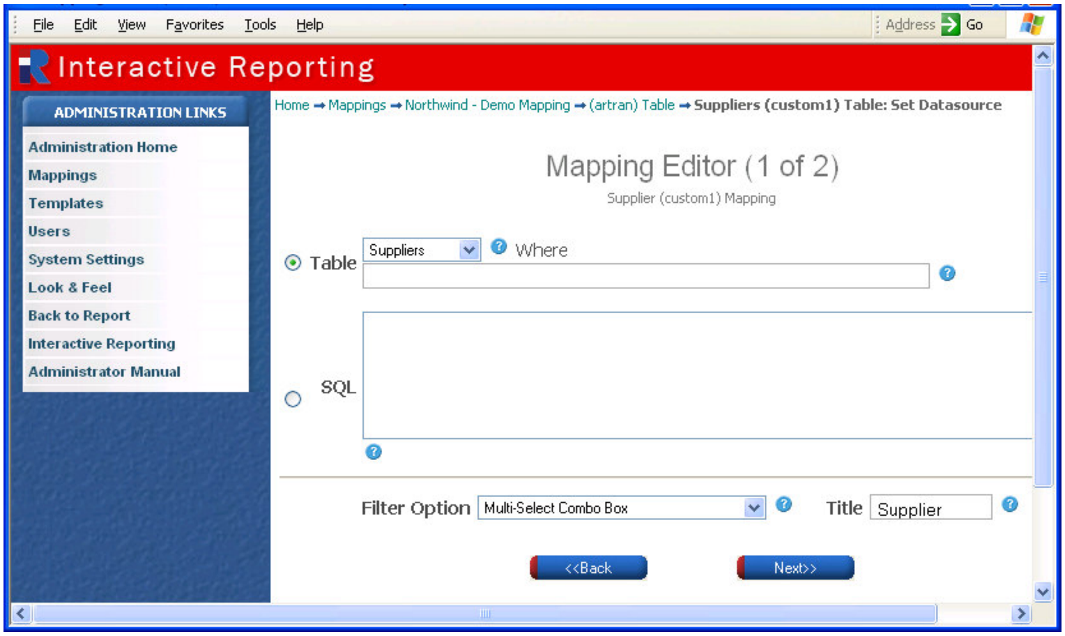


Figure 15

Here, the suppliers names are stored in the Sales data-source's 'Suppliers' table, so this must be selected.

The filter option drop-down allows specification of how this field will be exposed to users:

- *Combo Box* – select one item from a scroll bar list
- *Combo Box* w/codes– select one item from a drop-down list, but shows the underlying code in the dropdown.
- *Multi-Select Combo boxes* – select more then one item from a scroll bar list.
- *Multi-Select Combo Boxes w/codes* – select more then one item from a drop down list and give the underlying code in the dropdown.
- *Multi-Select Combo boxes (w/o All)* – select more then one item from a scroll bar list but does not have the *ALL* option in the list.
- *Multi-Select Combo Boxes w/codes (w/o All)* – select more then one item from a drop down list and give the underlying code in the dropdown but does not have the *ALL* option in the list.
- *Text Box* – type the appropriate customer id
- *None* – not visible

Optionally, the user may edit the title of the mapping – this is appropriate generally only in the case of a mapping to one of the custom fields.

One may enter an optional *Where* condition for the table or even select the information using an SQL statement.

Clicking 'Next>>' to map the descriptive field, we get:

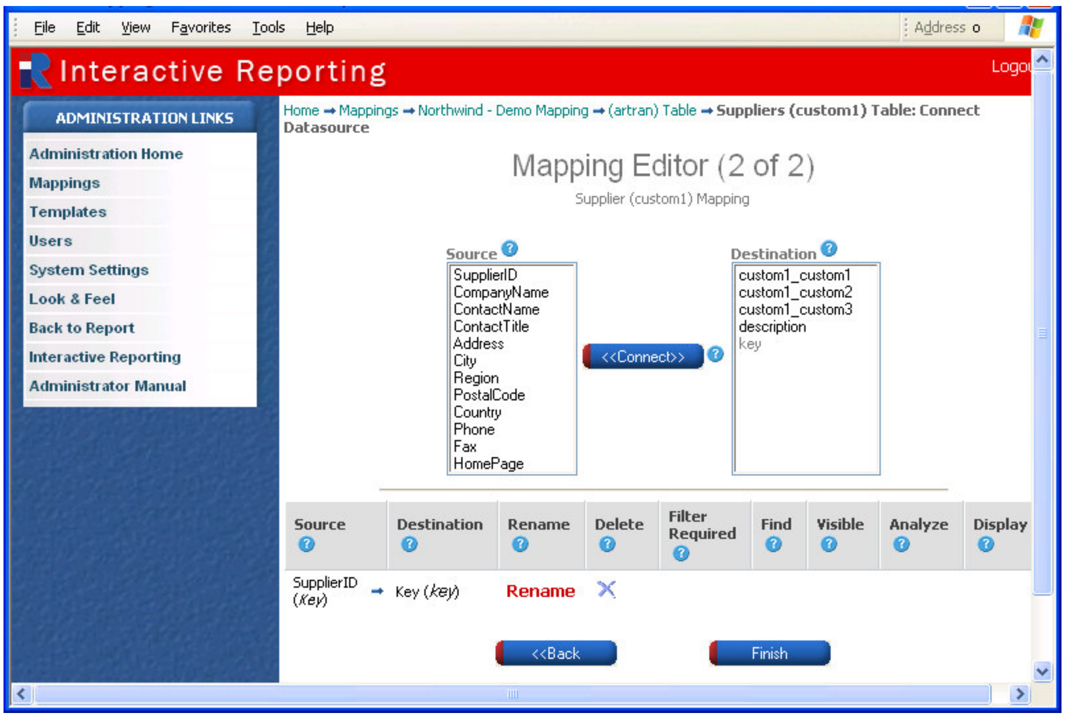


Figure 16

The *Source* Field contains a list of all the field names in the table selected on the previous screen. If an SQL option was used instead of the table option then the list contains the entire field names used in the *Select* part of the SQL statement.

The *Destination* Field contains a list of all the Interactive Reporting field names associated with the table selected on the previous screen. For the more common field names such as Name and ID, Interactive Reporting provides set names to connect to. There are also a number of custom fields that may be used for the less commonly used fields.

Here, we must simply associate the relevant id/code-numbers with each other, along with the relevant descriptive field (which will always have a destination name of *description*). Both the id/code-number field and the description field must be mapped.

To connect a field from the source box to the destination box simple click on the value to be connected in each box and then press the connect button.

Note: A Destination value may be connected to only *ONE* Source value but a Source value may have multiple Destination values connected to it.

For the supplier mapping in our Sales example, we connect *SupplierID* with *key* and Co*mpanyName* with *description*.

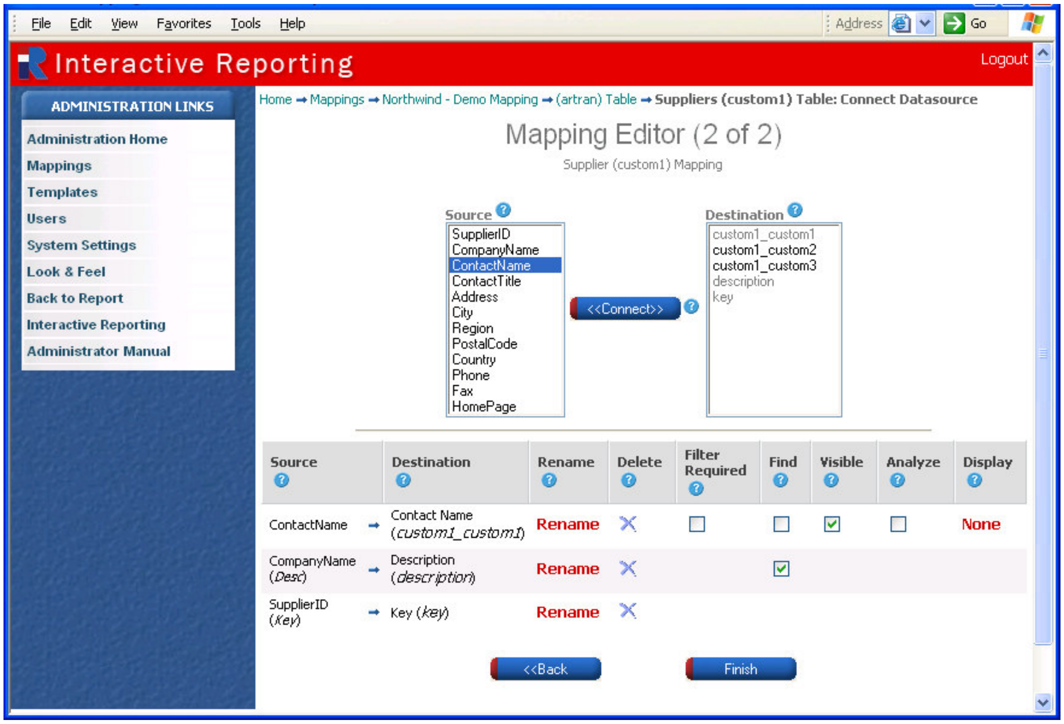


Figure 17

Once a source item and a destination item have been linked the result appears at the bottom of the screen. Associated with the new connection is a list of data that deals with the appearance of the data on the main screen. The data is as follows

1. The Rename feature allows the user to customise the Destination name to make it more intuitive when it appears on the main screen.
2. The X icon deletes the connection.
3. The Visible Box feature allows this value to appear in the generated report when the box is clicked. This is implicitly selected for key and descriptive fields and so a box will not be displayed.
4. The Find Box feature places a *find icon* next to the value. This allows the user to search for the value. This is implicitly selected for key field and so a box will not be displayed.
5. When the Analyze Box is clicked this value is then placed in the *Analyze* drop down menu. This is implicitly selected for the key field and so a box will not be displayed. To avail of this option for the descriptive field the user must map the descriptive field to a custom value and not the description value in the source box.
6. The Text Box has eight options - The options are:
   - Text Box - Field has a text box to enter value.

- Combo Box - Field has a drop down menu with values.
- Combo Box w/codes - Field has a drop down menu with values and codes in parenthesis.
- Multi-Select Combo Box - Field has a drop down menu with values. More then one value may be selected.
- Multi-Select Combo Box w/codes - Field has a drop down menu with values and codes in parenthesis. More then one value may be selected.
- None - Field does not appear in the Main Screen.
- Multi-Select Combo Box (w/o ALL) - Field has a drop down menu with values. More then one value may be selected. *ALL* is not included at the top of the list.
- Multi-Select Combo Box w/codes (w/o ALL)- Field has a drop down menu with values and codes in parenthesis. More then one value may be selected. *ALL* is not included at the top of the list.

Clicking on 'Finish' returns us to the Mapping Editor's master screen, where the association we have just made is now visible:

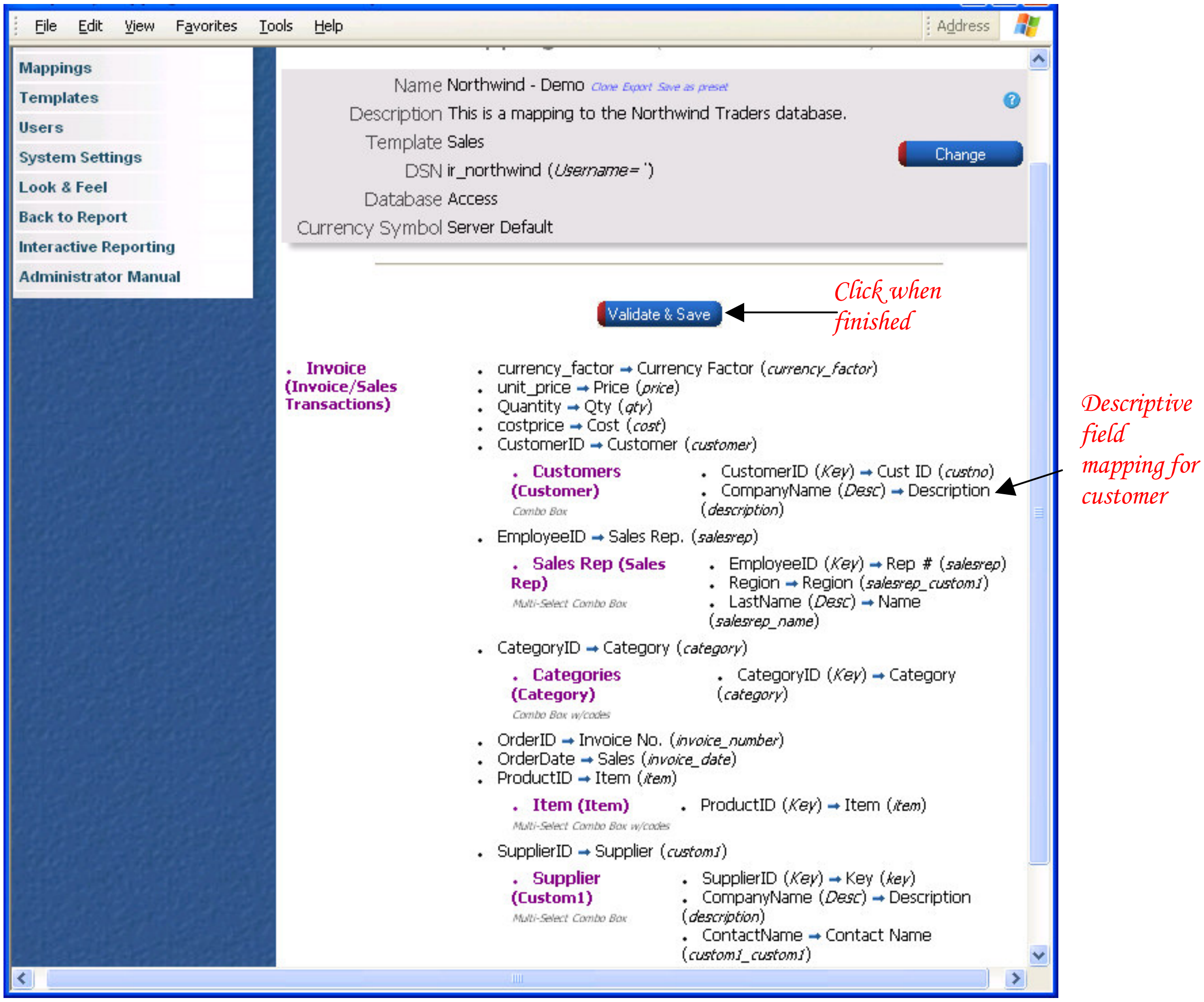


Figure 18

When the mapping process is completed it is essential to click on the *Validate & Save* button to verify the integrity of the mapping and store it. If this is not done a blue exclamation mark, ! , will appear next to the mapping in the mapping list. Also, when the use attempts to access the report on the client side a warning will appear notifying them that the mapping needs to be validated.

N.B. To verify that the user have accurately mapped the invoice transaction fields, they should validate some of Interactive Reporting's reports against existing reports.

The final report, with descriptive fields mapped can be seen below in figure 19.

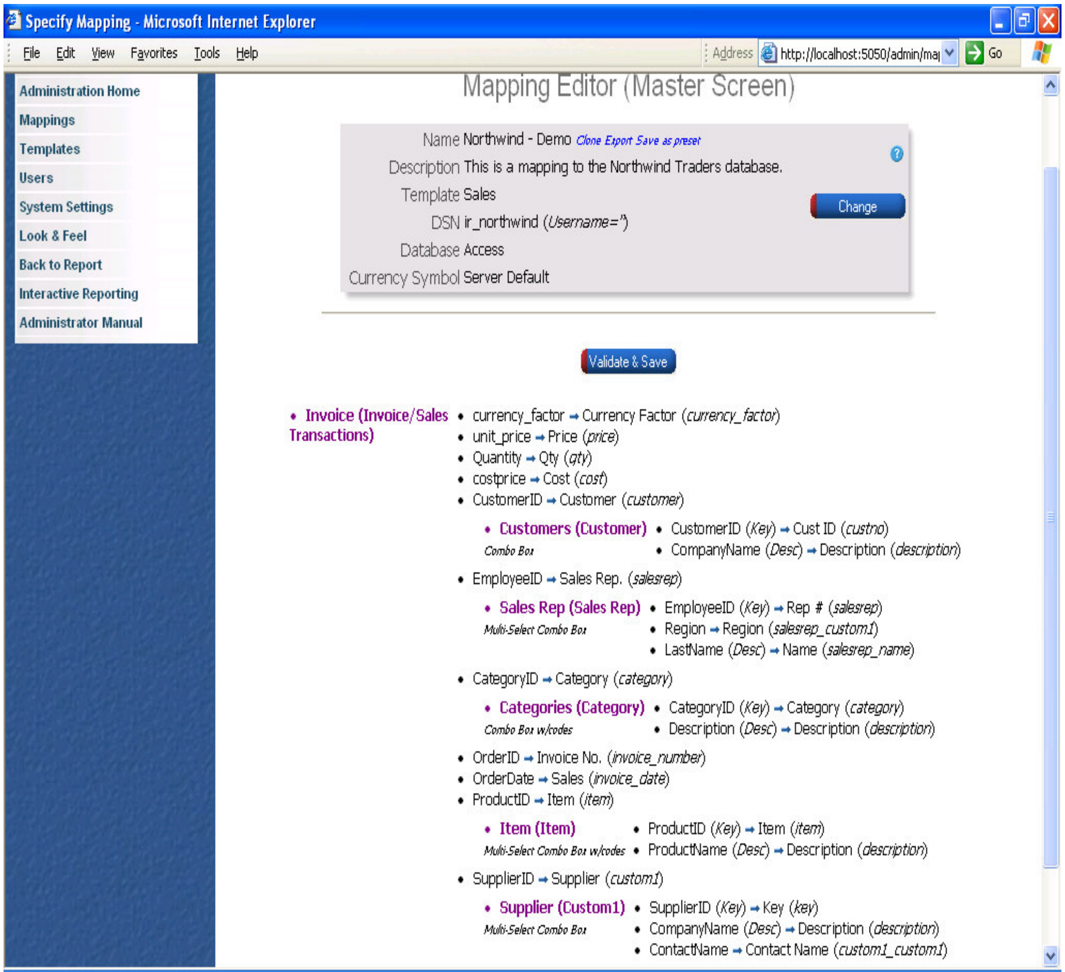

Specify Mapping - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address http://localhost:5050/admin/ma
Go
Administration Home
Mappings
Templates
Users
System Settings
Look & Feel
Back to Report
Interactive Reporting
Administrator Manual
Mapping Editor (Master Screen)
Name Northwind - Demo Clone Export Save as preset
Description This is a mapping to the Northwind Traders database.
Template Sales
DSN ir_northwind (Username='')
Database Access
Currency Symbol Server Default
Change
Validate & Save
Invoice (Invoice/Sales Transactions)
currency_factor → Currency Factor (currency_factor)
unit_price → Price (price)
Quantity → Qty (qty)
costprice → Cost (cost)
CustomerID → Customer (customer)
Customers (Customer)
Combo Box
CustomerID (Key) → Cust ID (custno)
CompanyName (Desc) → Description (description)
EmployeeID → Sales Rep. (salesrep)
Sales Rep (Sales Rep)
Multi-Select Combo Box
EmployeeID (Key) → Rep # (salesrep)
Region → Region (salesrep_custom1)
LastName (Desc) → Name (salesrep_name)
CategoryID → Category (category)
Categories (Category)
Combo Box w/codes
CategoryID (Key) → Category (category)
Description (Desc) → Description (description)
OrderID → Invoice No. (invoice_number)
OrderDate → Sales (invoice_date)
ProductID → Item (item)
Item (Item)
Multi-Select Combo Box w/codes
ProductID (Key) → Item (item)
ProductName (Desc) → Description (description)
SupplierID → Supplier (custom1)
Supplier (Custom1)
Multi-Select Combo Box
SupplierID (Key) → Key (key)
CompanyName (Desc) → Description (description)
ContactName → Contact Name (custom1_custom1)

Figure 19

Chapter 4

User Management

Controlling user access...

Access to Interactive Reporting is managed through user accounts (much like the accounts that operate at system-level). Clicking on 'Users' - after following the administrator sign-in procedure (as above) - brings the user to the following page:

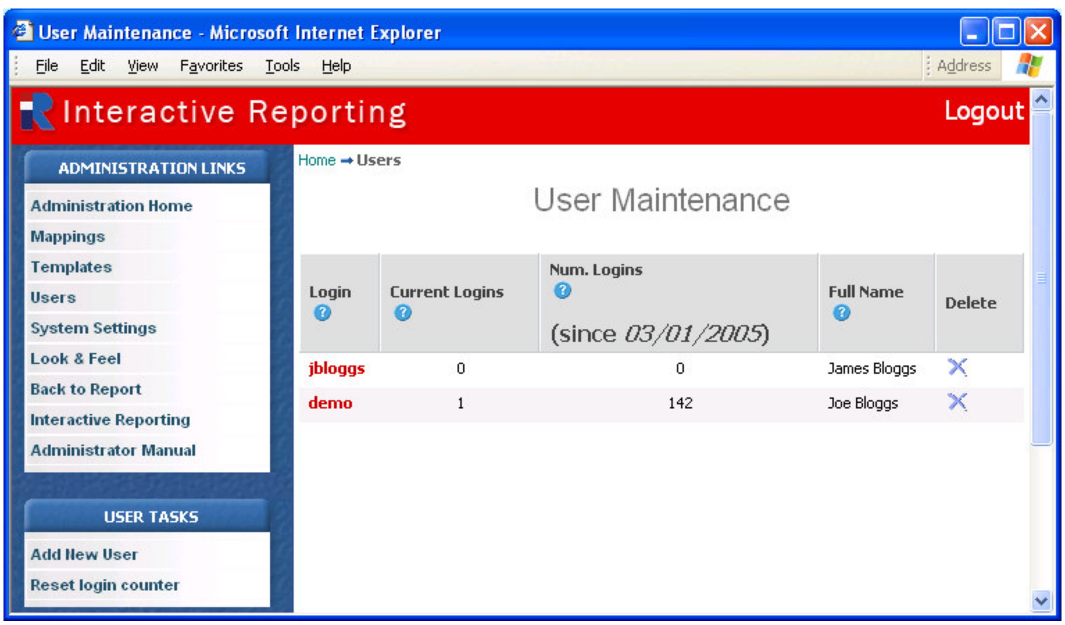


Figure 20

This screen lists those accounts already created (in the example above, two users has been created (e.g. *Joe Bloggs* with login *demo*). A user may be removed from the Interactive Reporting system by clicking on the X icon. Clicking on the users name will allow access to their details for editing purposes..

Current Logins contains an online record of those users currently logged in to the client side of Interactive Reporting. The record also indicates how many users are currently using a specific account.

Num. Logins contains a record of how many times a user has logged into the system on with the user or the administrator side since the date indicated at the top of the field. To reset, simply click on the *Reset Login Counter* link under the *User Tasks* in the task frame on the left side of the screen. This will also update the date at the top of the field.

Adding a New User

A new user may be added by clicking on the *add New User* link (in the example below, we're adding user Robert King):

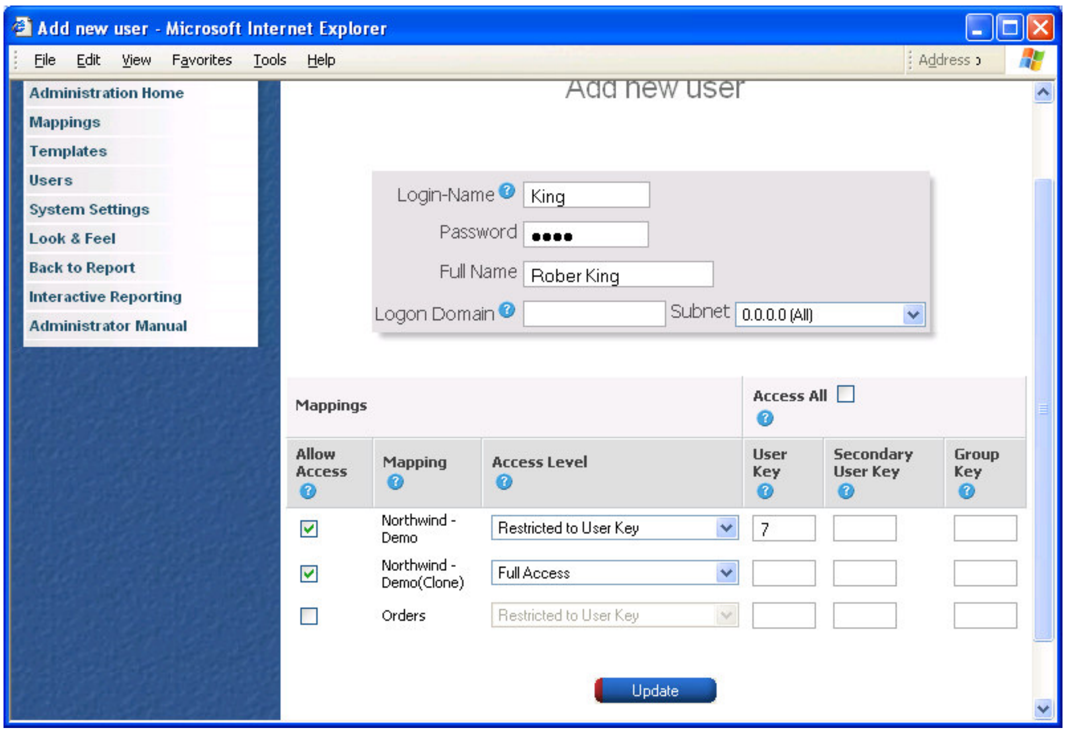


Figure 21

Associated with each user are the following attributes:

- *Login-Name* – the login-id the user is assigned
- *Password* – the password that the user needs to gain access to Interactive Reporting
- *Full name* – the user's full name (or a descriptive name for the account)
- *Login Domain* – this is the IP address that the user is restricted to. Leave blank to allow access from anywhere. This is associated with the subnet field
- *Subnet* – This allows the administrator to control the IP address range from which the user can access the site from. This ranges from login on from a specific IP address, a range of IP addresses or any IP address. The five levels are
    - *No Restriction* – User can log in from anywhere in the subnet.

- *Class A Restriction- (255.0.0.0)*- If the 'Login Domain' is set to 4.5.6.7 and the Subnet is set to 255.0.0.0(ClassA) then this means that the user can log in from machines whose IP address start with 4 The final three digits in the IP address may range from 000-255.

- *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(ClassB) then this means that the user can log in from machines whose IP address start with 4.5 The final two digits in the IP address may range from 000-255.

- *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(ClassC) then this means that the user can only log in from machines whose IP address start with 4.5.6. The final digit in the IP address may be from 000-255.

- *Full Restriction or Exact* – The user may only log in from machine whose IP address is set to 4.5.6.7

• *Access All* – The access all box, if ticked, automatically selects all of *Allow Access* boxes to the mappings visible to the user and sets the *Access Level* to *Full Access*.

• *Mapping* – the data-source mapping with which the user may be granted access to

• *Allow Access* - If the allow access box is ticked then the user has some form of access to this mapping and it will be available for selection in the *Choose Mapping* section when they log into the client side of IR.

• *Access Level* – There are four levels of access for a mapping. *NB:* Please note that the *Restricted to User Key, Restricted to Secondary User Key and Restricted to Group Key* levels are linked to the *User Security, Secondary User Security and Group Security* fields in the template section. Please see Figure 45.

- *Full Access* – A user with full access to the mapping has all data and filters available to them to use in generating reports. It is the least restrictive of the access levels.

- *Restricted to User Key* – this is used for security purposed and is associated with the value placed in the *User Security* field in the template section. If *Restricted to User Key* is selected then a value must be placed in the *User Key* field. This value must be one that is linked to the *User Security* field in the template. For Example, if the *User Security* field in the template section is set to salesrep, which is a numeric value, and the value 7 is placed in to the *User Key* field for the *Northwind Demo* mapping then the user will be restricted to generating reports for salerep number 7, King. No access to any other salesrep will be permitted. When our user logs in and chooses this mapping they will not see the salesrep box in the filter section or in the *Analyze by* section. This enables sales representatives to analyse their own sales information without being privy to other sales reps' information. In the above example, when the user King logs in to IR, he will only see sales data related to him. This is because the User Key is set to 7 and the Access level is set to *Restricted to User Key*.

  - *Secondary User Key* – In some cases the **User Key** alone is not sufficient to chose a specific individual or item. In this case a secondary key may need to be used. Simply place the numeric value related to the *Secondary User Security* in the template section into the **Secondary User Key** field and set the access level to **Restricted to Secondary User Key.** Proceed as in the *User Key* scenario.

  - *Group Key* – The Group Key field is used in conjunction with the Access level field as a security measure. Group Key contains the numeric value of the group with which the user wishes to restrict viewing. In our example it would be the salesrep group to which the user belongs (set in Template Section). When **Restricted to User Key** is selected in the Access Level field the user will be restricted to seeing information for that specific salesrep in that specific group only.

- *User Key* – The user is restricted to the value in the User Key field. This key could be used for sales rep, suppliers, buyers or even customers.

- *Secondary User Key* – The user is restricted to the value in the Secondary User Key field. This key could be used for sales rep, suppliers, buyers or even customers.

- *Group Key* - The user is restricted to only seeing the information related to the Group Key. This would be appropriate for giving a Sales Manager access to analysing the information just in their group.

When finished, click on 'Update' to add the new user to Interactive Reporting.

Chapter 5

System Settings

Changing Interactive Reporting settings...

Associated with Interactive Reporting are a number of settings which facilitate its operation. Clicking on *System Settings* on the left task bar - after following the administrator sign-in procedure – redirects the user to the following page:

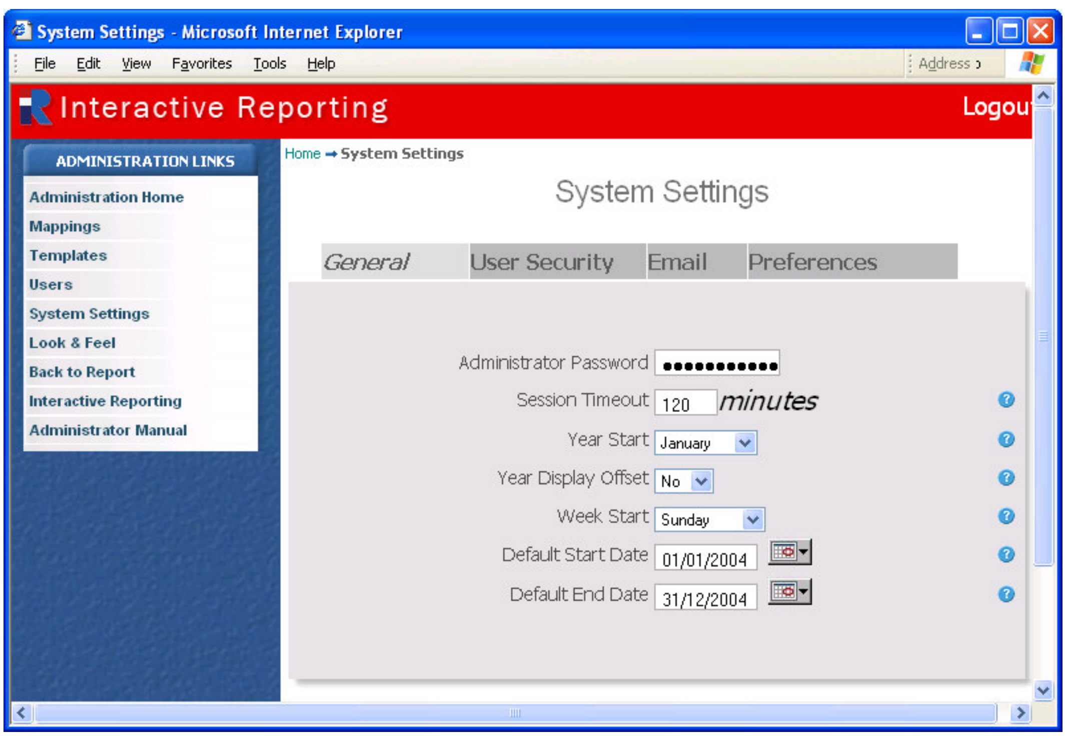


Figure 22

System-setting is divided into four sections, General, User Security, Email and the Preference section. The following are a list of those items that appear in the general section:

General

The General section contains the following information

- *Administrator* password – the password required to access administration functions (the default is *demo*)

- *Session Timeout* – If there has been no activity on the Interactive Reporting site for the duration specified by the administrator then the user is automatically logged out and the screen returns to the log in page.

- *Year Start* - This setting 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 generated report, I.e. 'Analyze by Quarter'. If Year Offset is set, then the year displayed is one greater then the year of the data used to generate the report. This is also tied into the year start value. For example if Year Offset is set to No and a report generated for "Sales by Quarter" for the year 2003, then the following will be displayed.

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

If Year Offset is set to Yes and a report generated for "Sales by Quarter" for the year 2003, the following will be displayed, Even though 2004 is displayed on the generated report, the data is for year 2003

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

- *Week Start* – this sets the day of the week on which the user starts their financial week.

- *Default Start Date* - The start date that will appear by default on the client side of IR upon login.

- *Default End Date* - The end date that will appear by default on the client side of IR upon login.

User Security

The *Password Update Interval* indicates the duration, in days, which the users password is valid for. When the time limit is reached they will be asked to enter a new password at login. If password aging is not desired then this field should be set to 0.

Email

The system-settings available for modification in the Email section are:

- *Email Source* - When sending an email it is customary to have a reply address. When the user requests a report to be emailed to him, the address provided in Email Source field will be the reply-to address of the email.

- *SMTP Server* – This field contains the address of the SMTP server to use.

- *SMTP Port* – This field specifies the port number, usually port 25, to be used by SMTP on the SMTP Server.

- *URL to Interactive Reporting* - This field contains the HTTP path to the Interactive Reporting web server.

- *Email Problem Reports* - When an error occurs when emailing a report, it is important that an Administrator is contacted to rectify the problem. The field Email Problem Reports contains the email address that the system will automatically use if an error of this nature occurs.

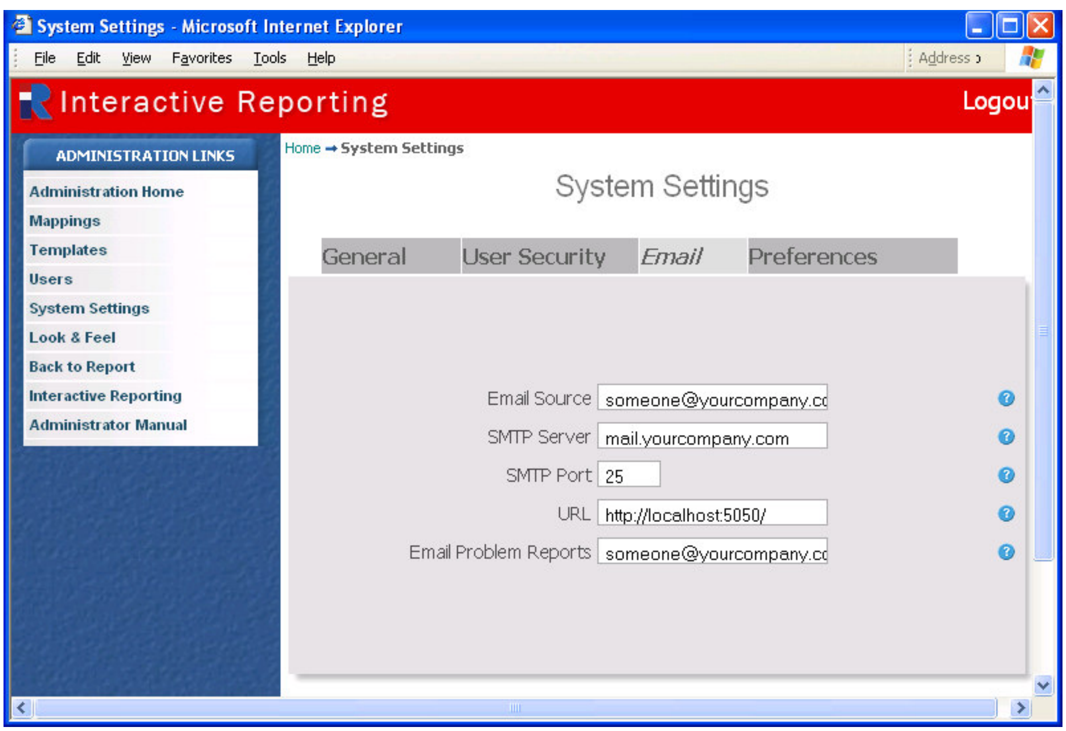


Figure 23

Preferences

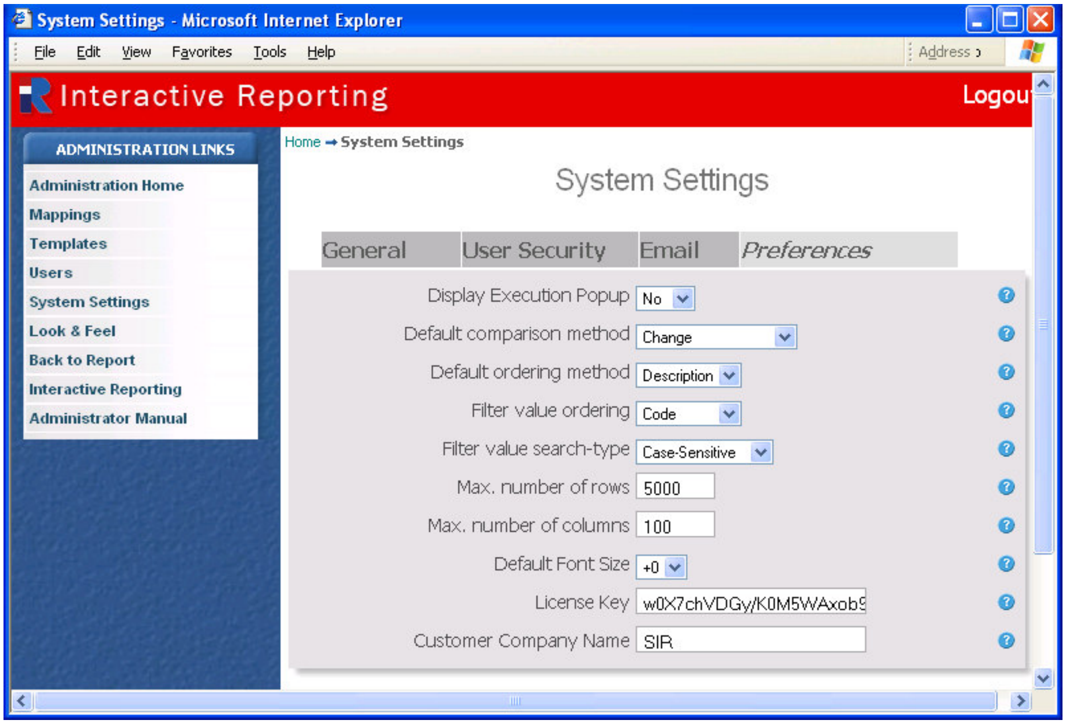


Figure 24

The system-settings available for modification in the Display section are:

- *Display Execution Popup* – This is used to activate or deactivate the execution popup of a 'hopping Kangaroo', which is displayed when generating a report. To activate this image set the value to Yes, to deactivate set the value to No.*Default Comparison Method* – This setting is used for the Volume and Margin values in the Comparison Reports. The method can be set to actual *change* or *percentage change*. *Percentage Change* shows the difference of the volume and the margin as a percentage while *Change* show the actual difference.

- *Default Ordering Method* - this value indicates the default ordering to use when a report is generated. It has two options by which to order the columns: Code or Description.

- *Filter Value Ordering:* - This value indicates the default for the *Order By* dropdown when the user initially logs-on to Interactive Reporting. It has two options: to order by *Code* or *Description*.

- *Filter Value Search-Type:* The find box (appears on the find screen when the find icon is selected) in the filter section of IR uses this value. If this is set to *Case-Sensitive* then all case sensitive boxes when searching for a value default to Case-Sensitive and a tick appears in the case-sensitive box.

- *Max number of Rows* – This specifies the number of rows, which can be displayed. If there are more rows generated then this number then an error appears advising the user to modify their search criteria.

- *Max number of Columns* - This specifies the number of columns, which can be displayed. If there are more columns then this generated in a report then an error appears advising the user to modify their search criteria.

- *Default Font Size:* - The default font size sets the font for the text in the generated reports. There are five options to choose from ranging from +2 to -2. The default option for this is 0.

- *License Key* - This field is used to update 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.

- *Customer Company Name:* - This field is needed for the licensing of Interactive Reporting. This field value must match that given to Interactive Reporting or to its representative.

When finished, click on 'Update' 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 IR.

Chapter
6

Look and Feel

How to customize the header and footer and to put a custom specified corporate look and feel on it.

By selecting custom Look and Feel from the System Setting, the user can then go to the Look and Feel screen and enter custom HTML for the top and bottom of the Interactive Reporting screen.

Current Templates will contain a number of pre-designed *looks* for Interactive Reporting. Simply choose a template and press Update to implement this new *Look and Feel*. InteractiveReporting2 is the default template used with IR.

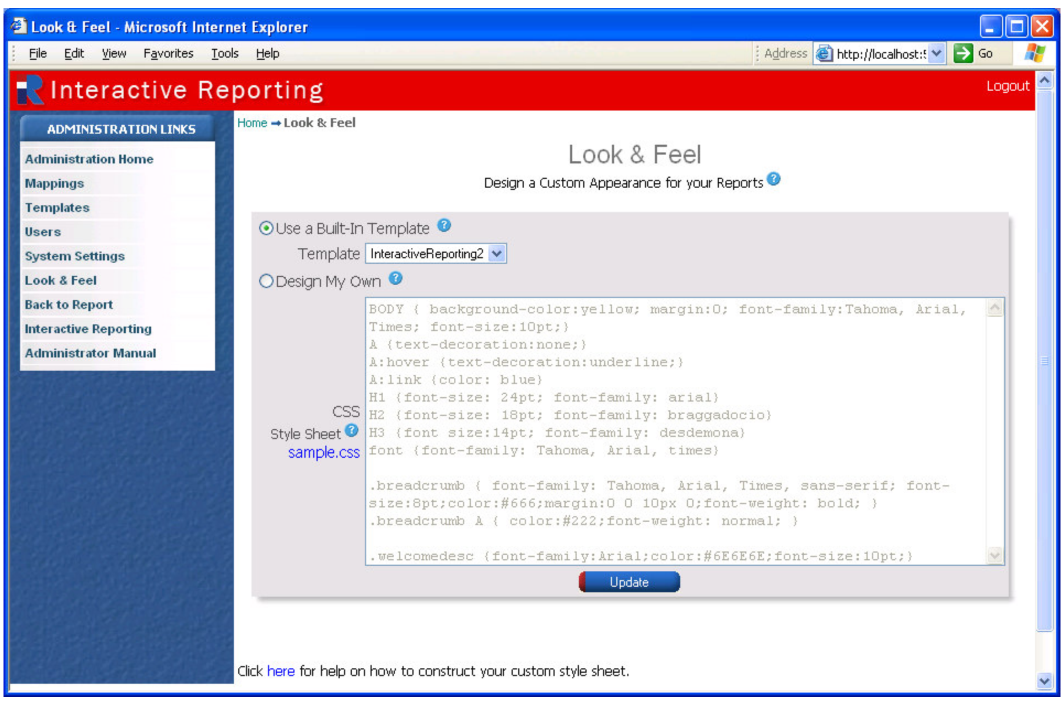


Figure 25

To create a customized design then

1. Click on the *Design My Own* field in the *Current Template* drop-down menu.

2. Enter the customised style sheet in the *CSS*, or the Cascading Style Sheet section.

A sample CSS file is provided to aid the creation of customer specific designs. To view this, simply click on the link. The File SAMPLE.CSS can also be found in Appendix D at the end of this document

Click on the link *here* to view a breakdown of the css.

Chapter

7

Template

How to easily create a new template or copy an existing template.

Interactive Reporting allows the user to easily modify database criteria, without having to deal with database tables or forms, by using the *Template* editor.

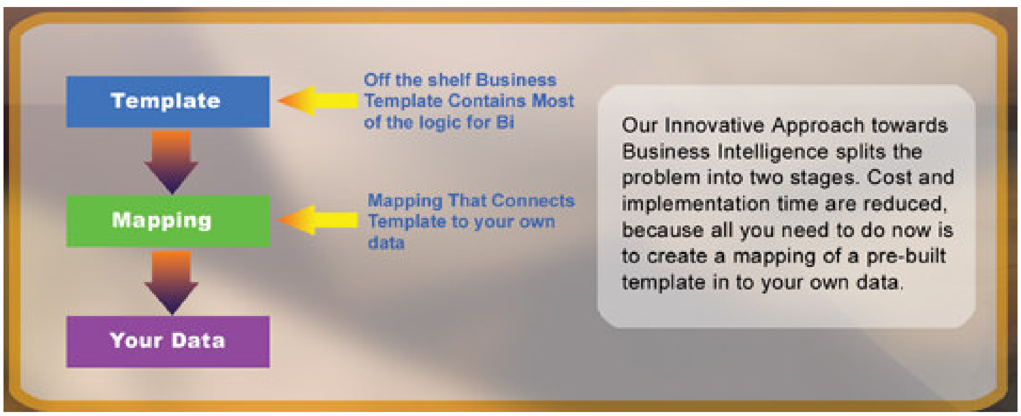


Figure 26

Template contains a list of all available templates in the system (Figure 27). A template must be created for each database that is to be made available to the users. Each template is characterised by a user-friendly name and a description. When a new template is created the Template list is automatically updated.

Under the *Mappings* heading the user will find a list of mappings associated with each template. To go to a specific mapping related to a template select the mapping from the drop down list and press the *Go to Mapping* button.

A template may be created, imported, exported, edited, cloned or deleted.

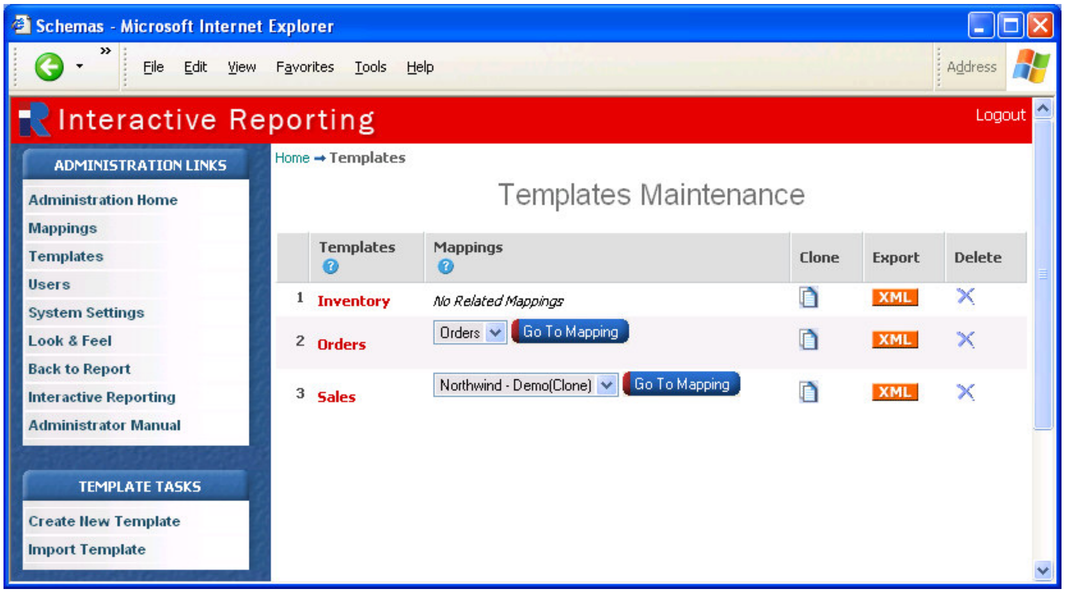


Figure 27

Editing a Template

The template name is also used to show the details of the template. By clicking on the template name the *Template Editor* page appears which allows the user to view or edit this data as seen in Figure 27. Please see the *Creating a Template* section for further details.

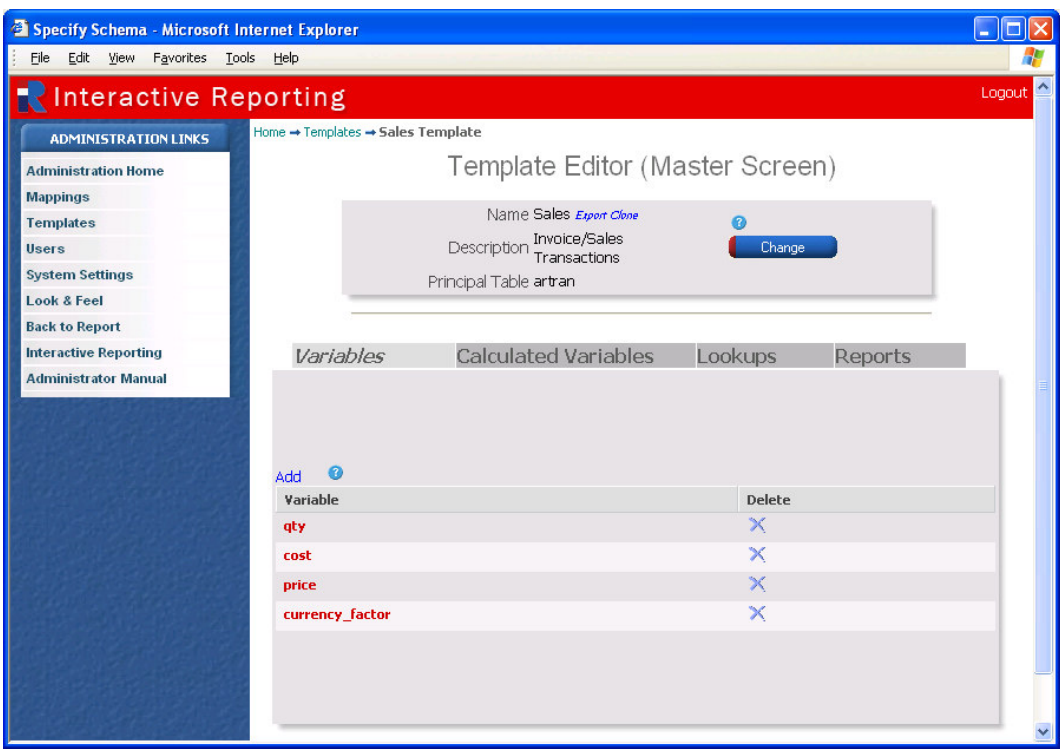


Figure 28

Cloning a Template

The *Clone* feature is one of Interactive Reporting most powerful tools. To create a second template of a mapping clone the first template and make alterations to this clone, this saves time in creating a new template and also reducing the testing time. Once the clone link is clicked a second copy is automatically created with the clone tag at the end of the template name.

Exporting a Template

The *Export* feature allows the user to export a template to another machine. When clicked on, a *file Download* window appears allowing the user either save the template onto the system, or open the template to view it. Remember, if this template is to be reused on the same system, the template name/description within the file must be changed. In this case it would be preferable to use the *Clone* feature as the name/description will be automatically changed.

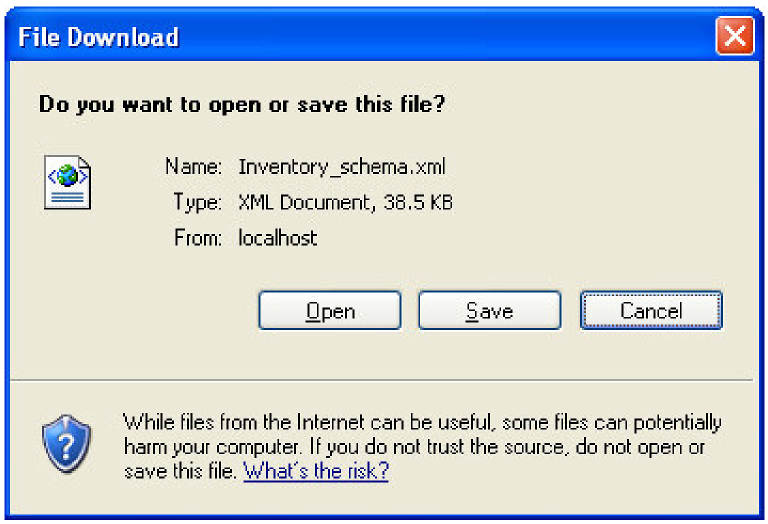


Figure 29

Deleting a Template

The delete icon, X, deletes the template *ONLY* if there are no related mapping. All related mappings must first be deleted before the template can be removed.

Importing a Template

The *Import Template* feature allows an existing template to be imported from outside the database, e.g. from the web, or a different database. Clicking on the link *Import Template* located in the *Template Tasks* section of the task frame on the left side of the screen will redirect the user to the Import Template pages as seen in Figure 28. To locate the template enter the path name or select the Browse button. Once the correct path is in the *Source File* field press the *Import* button. The user will then be automatically returned to the main *Template* page. The new imported template will be present in the template list.

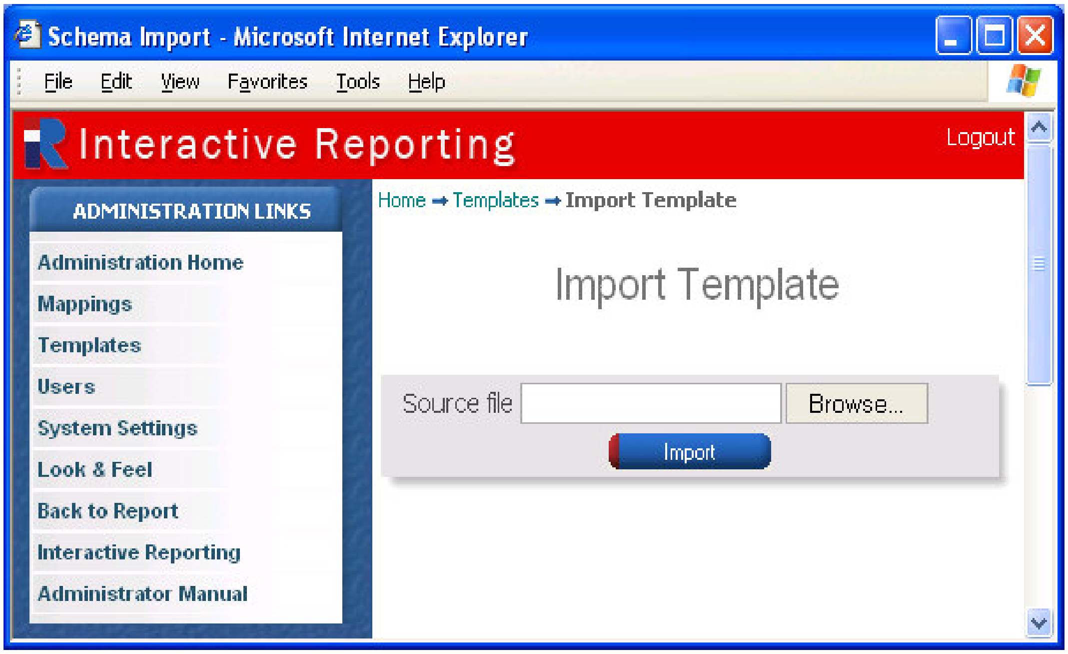


Figure 30

Creating a Template

The *Create Template* feature allows the user to easily create a customer specific template. To do this, click on the link to the *Create New Template* link located in the *Template Tasks* section of the task frame on the left side of the screen. This will result in the following page being displayed.

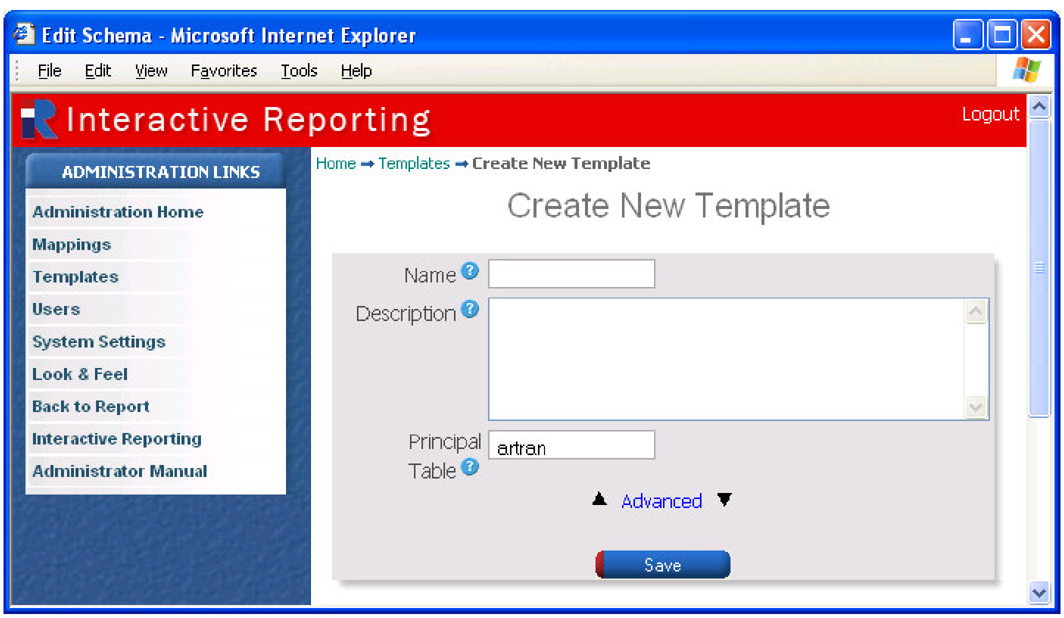


Figure 31

The user should enter a clearly defined and relative name in the *Name* section. The *Description* section allows for a more detailed explanation of the template. The *Principal Table* contains all the information about Variables, Calculated Variables and Lookups. Lookup must be added before the *Advanced* link is selected. Once the data has been entered the user must press the *Save* button to continue to the next step where they can enter the lookups, variables and calculated variables.

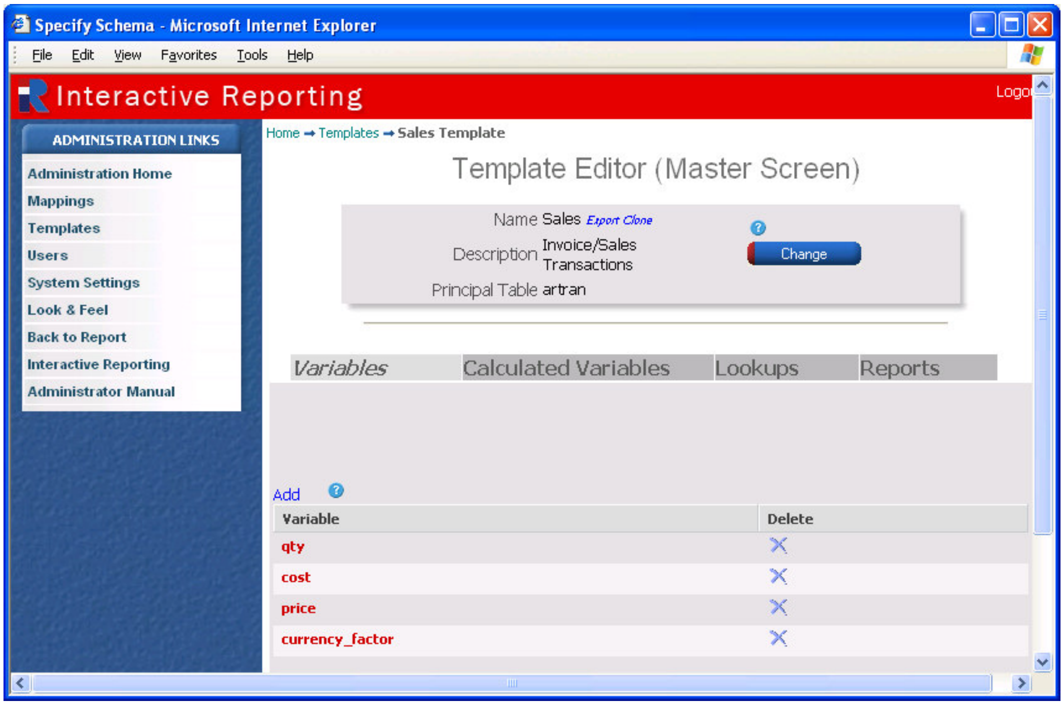


Figure 32

Figure 32 contains information for the *Sales* Template. There are four tabs available:

- *Variables:* This list contains numeric or currency quantities that are used for the evaluation of the Calculated Variables. They constitute the terms required in the numerator and denominator parts of the Sum field of the Edit/Add Calculated Variable page.

- *Calculated Variables:* The Calculated Variables are the quantities that appear in the report, e.g. in Analyse, in the drop downs next to Pivot or Chart. The right-hand-side shows the formula from which a Calculated Variable is derived.

- *Lookups:* This list contains the Interactive Reporting field names associated with the Destination list of the Mapping Editor page. The parentheses (if they exist) contain the Destination fields (attributes) related with each associated Lookup.

- *Reports:* The reports section contains data on the *Detail Reports, Comparison Reports, Chart Reports* and *Pivot Reports*

Variables

The terms of the *Variables* list correspond to a number or currency variable. They are used for the evaluation of the Calculated Variables.

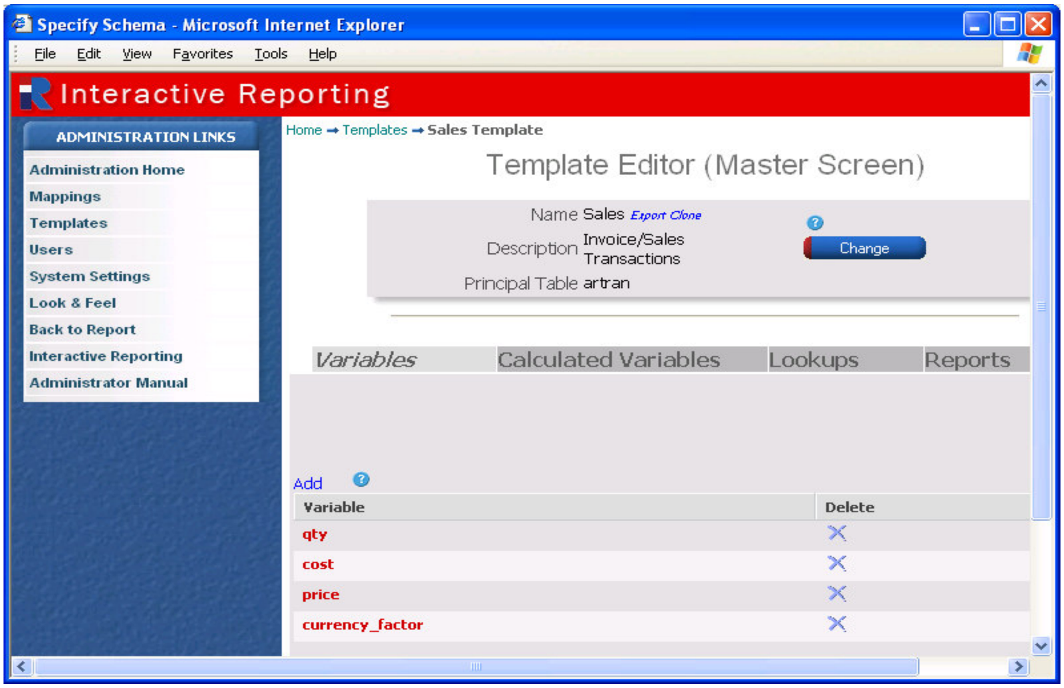


Figure 33

The Name field may *not* be left blank. They Type field contains one of two values, *Number* or *Currency*. These values appear in the 'Destination' section of a mapping. By clicking on the *Advanced* feature more options become available. The *Default Value* should be either blank or numeric. The *Required field* determines whether a mapping is required for the particular Variable. It can accept only two values, either 'Yes' or 'No'. If 'Yes' is chosen the variable will need to be mapped in the principal table.

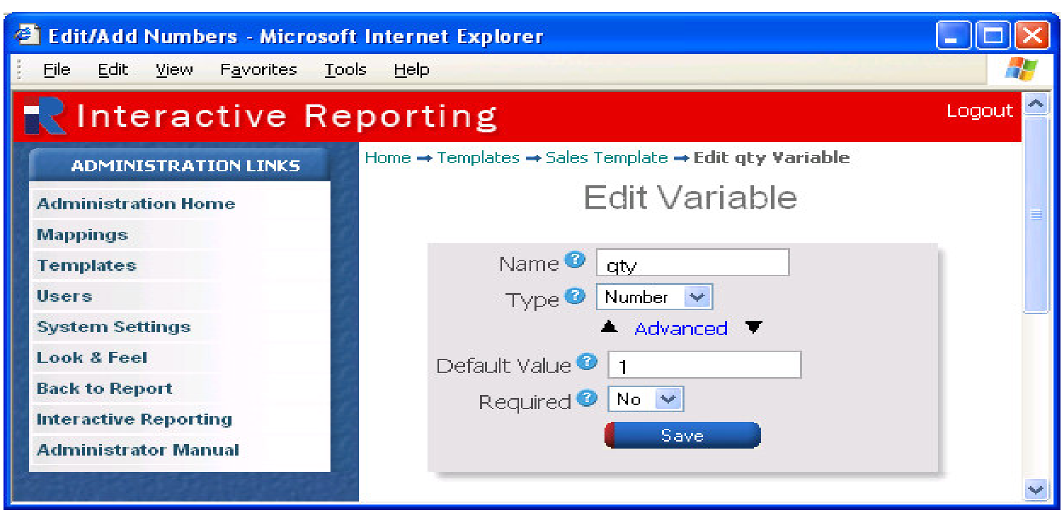


Figure 34

Calculated Variables

The *Calculated Variables* are the quantities that appear in the report, e.g. in Analyze, in the drop downs next to Pivot or Chart. In the right-hand-side the formula that produces the calculated variables is displayed. These values are not seen in the mapping section. Rather, these quantities use the values from the Variables section in calculations. A calculated variable will only be seen in a report if the variables used in its equations have been mapped in the associated mappings.

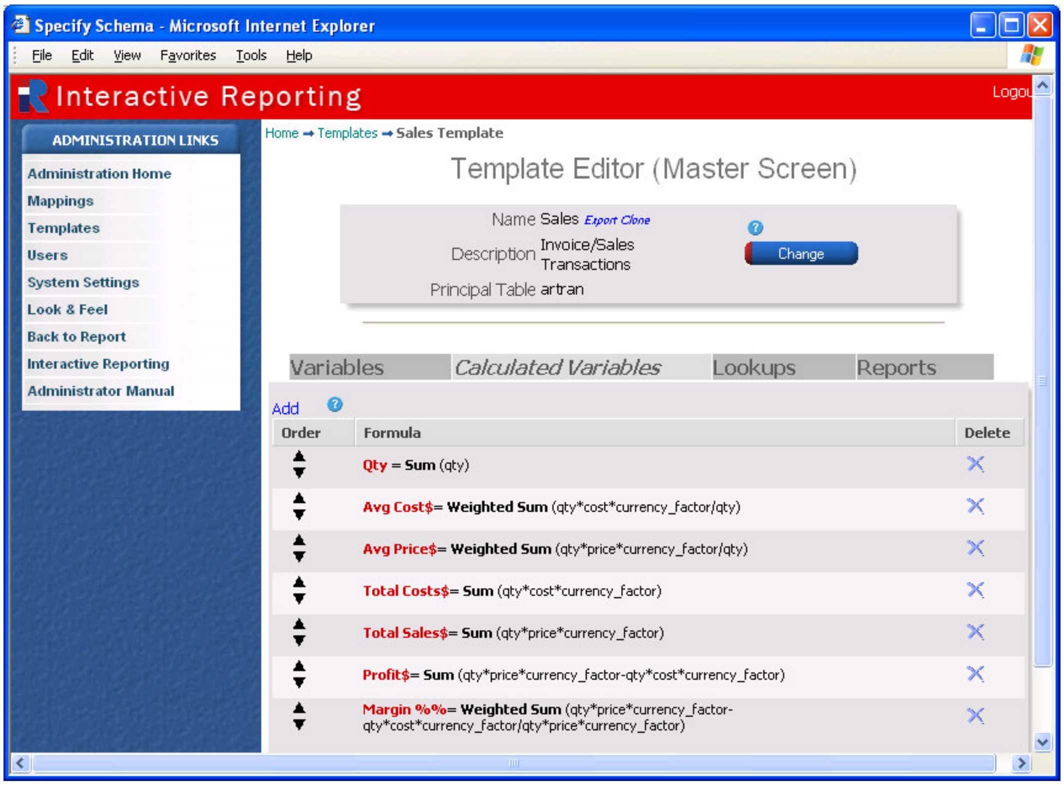


Figure 35

Figure 35 details the list of calculated variables available to the user when using the sales template. These values will be seen in generated reports, if included. See the *Reports* section for more details

Here, in figure 36 and figure 37, we have a Simple and an Advanced option. The simple view contains *Title, Type* and *Sum* fields. All other fields are contained in the Advanced section.

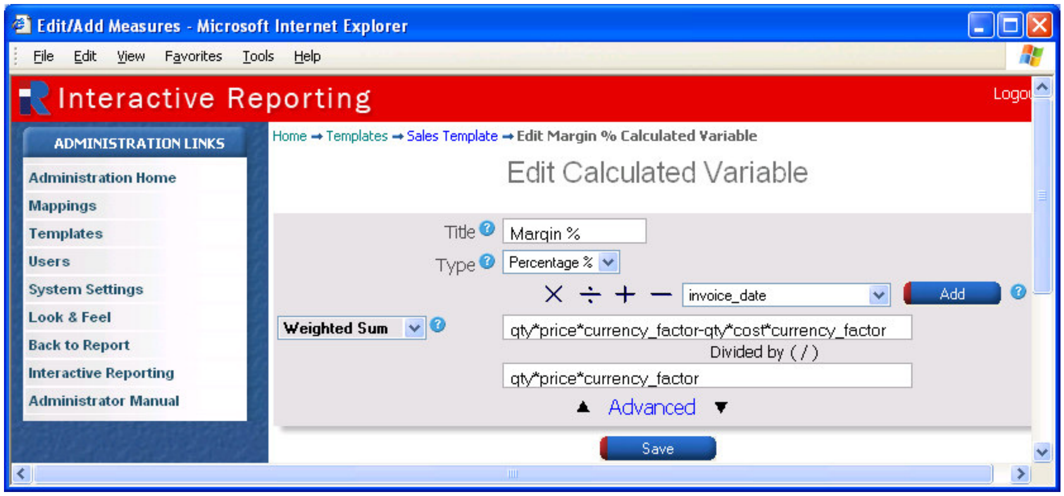


Figure 36

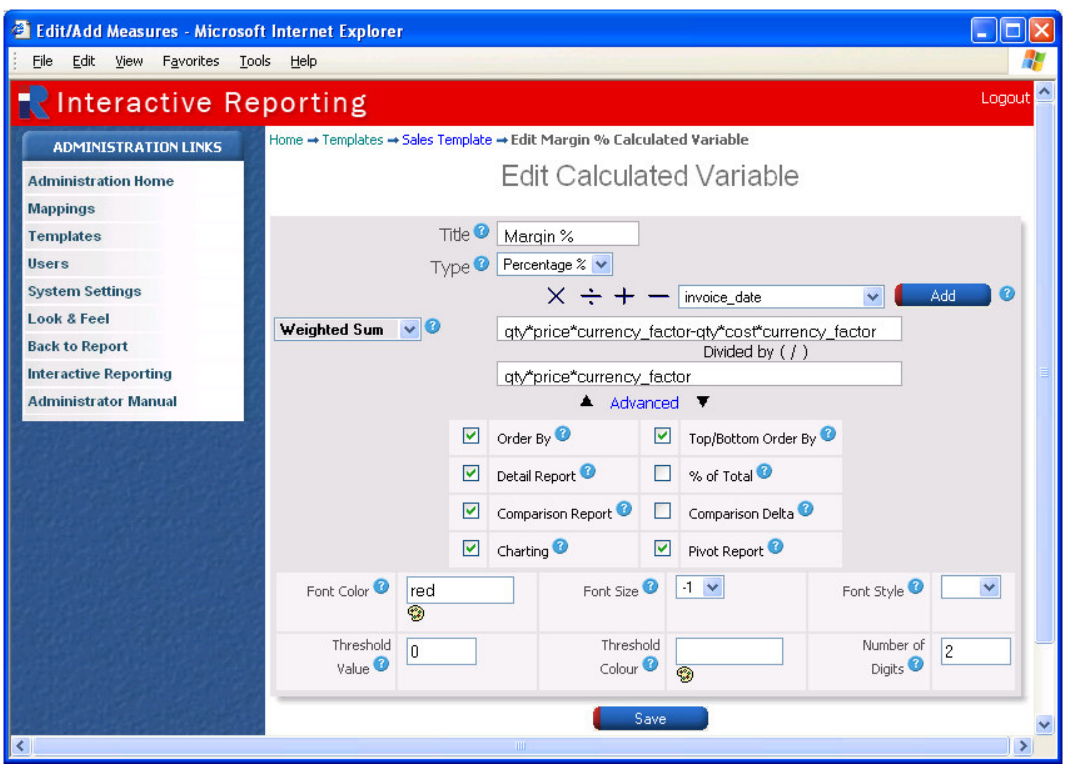


Figure 37

- The *Title* field cannot remain blank. Valid Titles can begin only with **text**, and they can contain only **text**, **numbers** or the **underscore** (_). The Title should be unique.

- In the *Type* field the Calculated Variable may only be Number, Currency or Percentage Type.

- The *mathematical list* and operators are used in the expression text boxes. Click on the expression text box and then select the mathematical operator. To add a variable first select the value from the dropdown list, next select where in the text box the value is to be place and finally press the *Add* button.

- This dropdown list on the left allows the user to choose a function, such as *Count, Max, Min, Sum, Conditional Sum, Weighted Sum*. The subfields of the numerator can be numbers, mathematical expressions, and/or functions of Variables or Dates. If a field does not exist in the Variables list, then the numerator is invalid. The numerator and denominator text fields can be filled either by editing directly the text box or by choosing a field from the adjacent dropdown list and clicking the buttons. The Up button inserts a field in the numerator text box, whereas the Down button inserts the field in the denominator text box. Similarly, a mathematical operator can chosen from the second dropdown list.

- The denominator can contain numbers, mathematical expressions, and/or functions of Variables or Dates, in a similar fashion as the numerator. Care should be taken not to have the denominator equal to 0.

    - When choosing the function *Weighted Sum* you can enter a denominator for the Calculated Variable. When changing from any other function to Weighted Sum, any value of the denominator will be deleted.

    - The function *Conditional Sum* permits the construction of a condition. When choosing the Conditional Sum option, the upper text field will correspond to the condition of interest, and the lower text field will hold the value if true.

- The *Order By* field gives the possibility of ordering by the particular Calculated Variable in the report. If checked, the Calculated Variable will appear in the drop down list of Order By in the Interactive Reporting home page.

- *Detail Report*, if checked, will allow the value to appear in the detailed report (the final generated document after all drilldowns).

- The *Comparison Report* field allows a comparison of the Calculated Variable to be performed. If Comparison Report is checked, the Calculated Variable will appear in the analysed data by the Comparison report. For example, if this box is active for Qty, then there will be a Qty field in both date sections of the comparison report.

- The *Charting* field allows the Calculated Variable to be investigated by the Chart option of the report. If Charting is checked, the Calculated Variable will appear in the drop down list next to Chart button in the Interactive Reporting home page.

- *Top/Bottom Order By* field is the field associated with the 'View' drop down on the main IR page. If this box is clicked then the value will be placed in the 'by' drop down list of the 'View' field. For example, if Avg Cost, Qty, Profit and Margin% all have this box ticked, then in IR if top 20 is selected, one of these four options is the restriction criteria for the top 20. E.G. Top 20 customers by profit would produce a report selecting the 20 customers with the highest profit.

- If the *% of Total* field is checked it will add an extra field in the report with the percentage of the Calculated Variable.

- If the *Comparison Delta* field is checked, then an extra Calculated Variable field will be added in the Comparison Report. This will show the difference between the values in the two date ranges. For example, if this is set for Qty, then a new field 'Qty Var' will appear on the right side of comparison report. This field contains the difference between the qty in date range 1 and the qty in date range 2. This field should only be used if the *Comparison Reporting* box has been ticked.

- The *Pivot Report* field allows the Calculated Variable to be investigated by the Pivot option of the report. If Pivot Report is checked, the Calculated Variable will appear in the drop down list next to Pivot button in the Interactive Reporting home page.

- *Font Colour* – This optional field enables the choice of a colour by which the Calculated Variable will be displayed in the Pivot Report. The colour may be manually typed or chosen from the palette icon.

- *Font Style* - This optional field enables the choice of font size by which the Calculated Variable will be displayed in the Pivot Report.

- *Font Size*- This optional field enables the choice of font style (bold, italic) by which the Calculated Variable will be displayed in the Pivot Report.

- *Threshold Value*- When a value for *Calculated Variable* is below the *Threshold Value* then the corresponding figure will be displayed in the colour chosen from the *Threshold Colour* field.

- *Threshold Colour*- When a value for the *Calculated Variable* is below the *Threshold Value* then the corresponding figure will be displayed in the Threshold Colour. This allows the user to easily spot areas of financial concern in a report.

- *Number of Digits*- Some customers may deal with fractions of items and this field allows you to specify the limit of the digits output to the screen. E.g. if Number of digits is set to 4 then a datum of 6.25 in the Qty field will be displayed as 6.2500. The default values of the Number of Digits is equal to 2 for Type="currency" and for the Weighted Sum option, and 0 otherwise. However, you can put any value of your choice.

Lookups

The *Lookups* are the field names that constitute the Destination fields of the principal table in the Mapping Editor pages. The fields inside the parentheses are the Destination fields of the child tables that are used to construct a mapping.

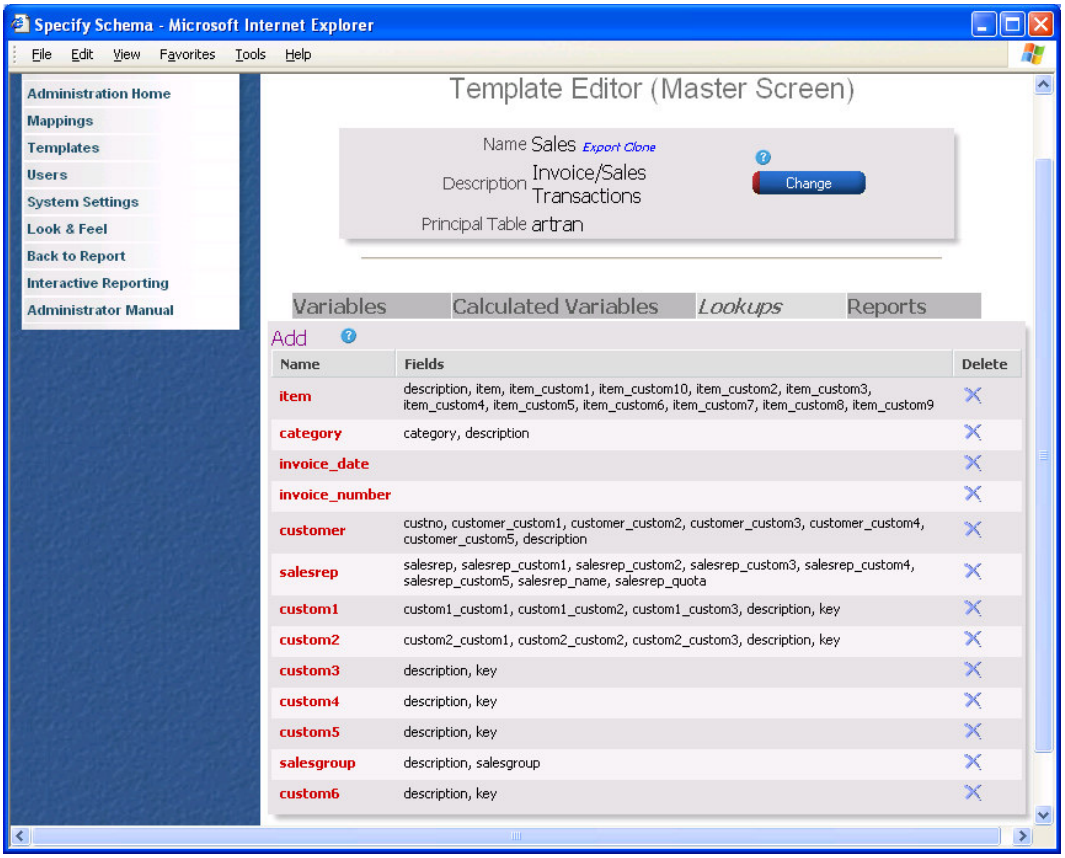


Figure 38

When the *Add* link is clicked the user is redirected to the *Add Lookup* Page. Here they must which of the three datatypes they wish to create. The format for the *date* datatype and the *text* datatype are almost identical, the only difference being that date aligns to the left while text aligns to the right. If the *Text with Lookup* is selected then the page displayed is more complicated as can be seen in Figure 38.

To edit an existing lookup click on the 'Name' field. Figure 39 is the page displayed when the customer name is selected.

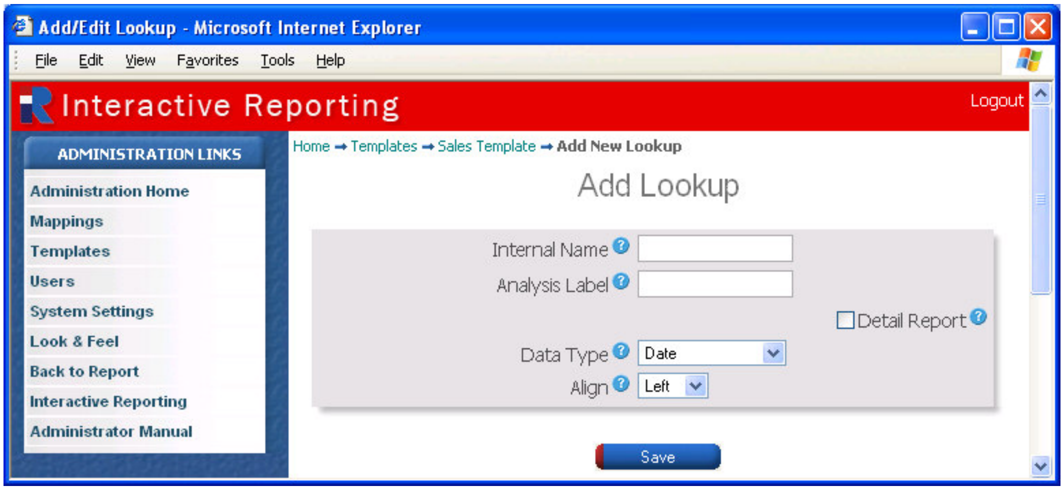


Figure 39

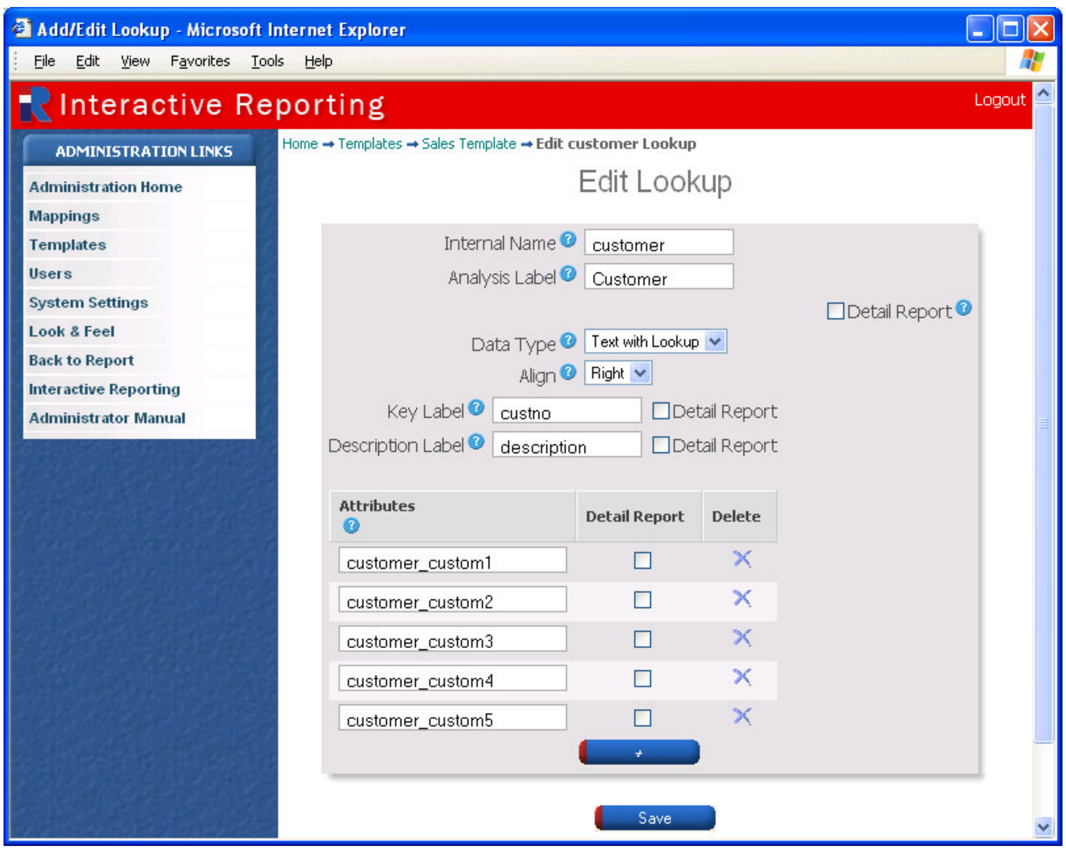


Figure 40

The *Internal Name* field is the name that will appear in the destination section of the mapping. Valid Internal Names can begin only with **text**, and they can contain only **text**, **numbers** or the **underscore** (_). The Name should be unique and it cannot remain blank.

The *Analysis Label* field cannot remain blank. This is an internal name used in the database.

If the *Detail Report* field is checked, the Lookup will appear in the Detail Analysis report. The Data Type field can have one of three values: Date, Text or Text with Lookup.

The *Date Type* contains three values. The difference between *Text* and *Text with Lookup* is that the second provides more details for the determination of the attributes of each lookup that appear inside the parentheses. Dates and Invoice Numbers cannot have attributes. If the data type "Text with Look up" is selected then additional information appears on the screen as can be seen in Figure 39. This causes a mapping value with a child mapping to be created in the destination field in the associated mapping. The number of extra custom fields can be set by selecting a number in the 'Number of Attributes' section. In the following example, the two attributes would appear in the mapping screen as size_custom1 and size_custom2. Both the key and description label may be changed to more suitable names if desired. The value in the 'Number of Attributes' may be increased at any stage but may not decreased.

Align is used to determine which side of the IR screen the filters and dates should appear. The data type 'Date' is automatically set to 'Left' and all other data types are automatically set to 'Right'. This may be manually changed if so desired.

The *Key Label* field 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* field corresponds to the second attribute of the Lookup. Its default value is set to 'description', but it can be changed to any other name.

The *Attributes* section allows you to edit the name of a Lookup Attribute, delete an Attribute, add a new one, and select which ones should appear in the Detail Report.

Reports

The *Detail Report* contains all the Calculated Variables, Lookups and their Attributes that will appear at the Detail Report in its brackets. The *Comparison Report, Chart Report* and *Pivot Report* all contains the Calculated Variables that will appear in the reports within the brackets after the report name. To change the values that will appear click on the report name. This can be seen in Figure 42 for the pivot report. Values may be added or removed from the column on the right side of the screen to the *Choose* column.

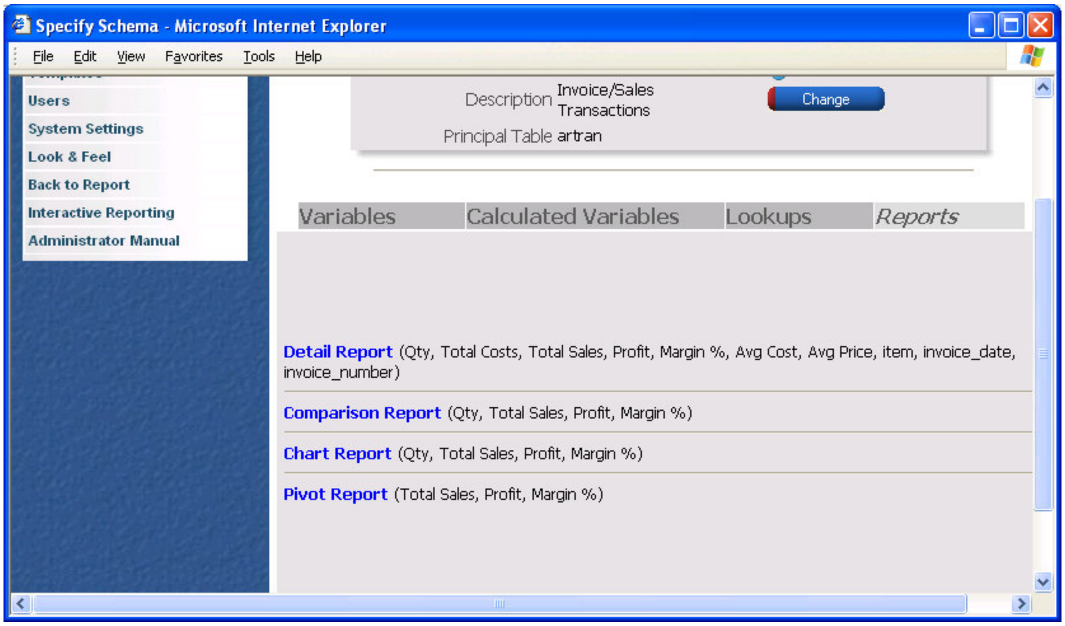


Figure 41

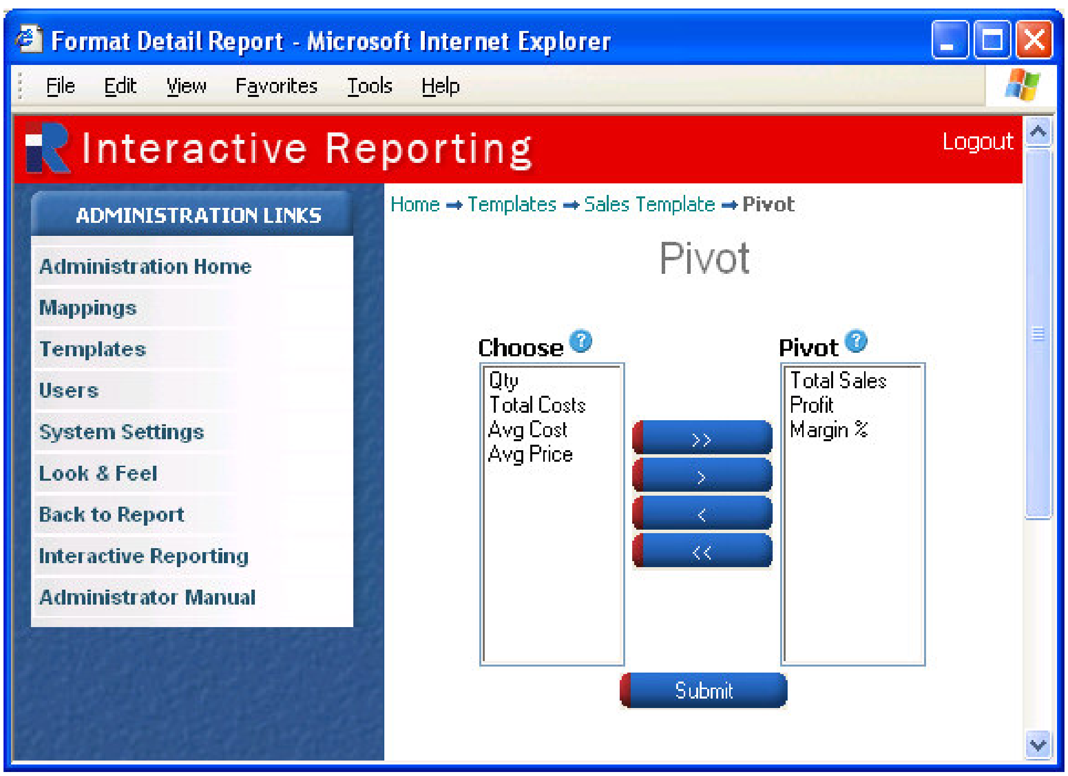


Figure 42

Editing the Template

Earlier it was written that the *Advanced* link should only be pressed once the lookup data has been created. Once that is accomplished, click on the *Change* button, Figure 41, and then the *Advanced* link and the following screen appears (Figure 43 and Figure 44)

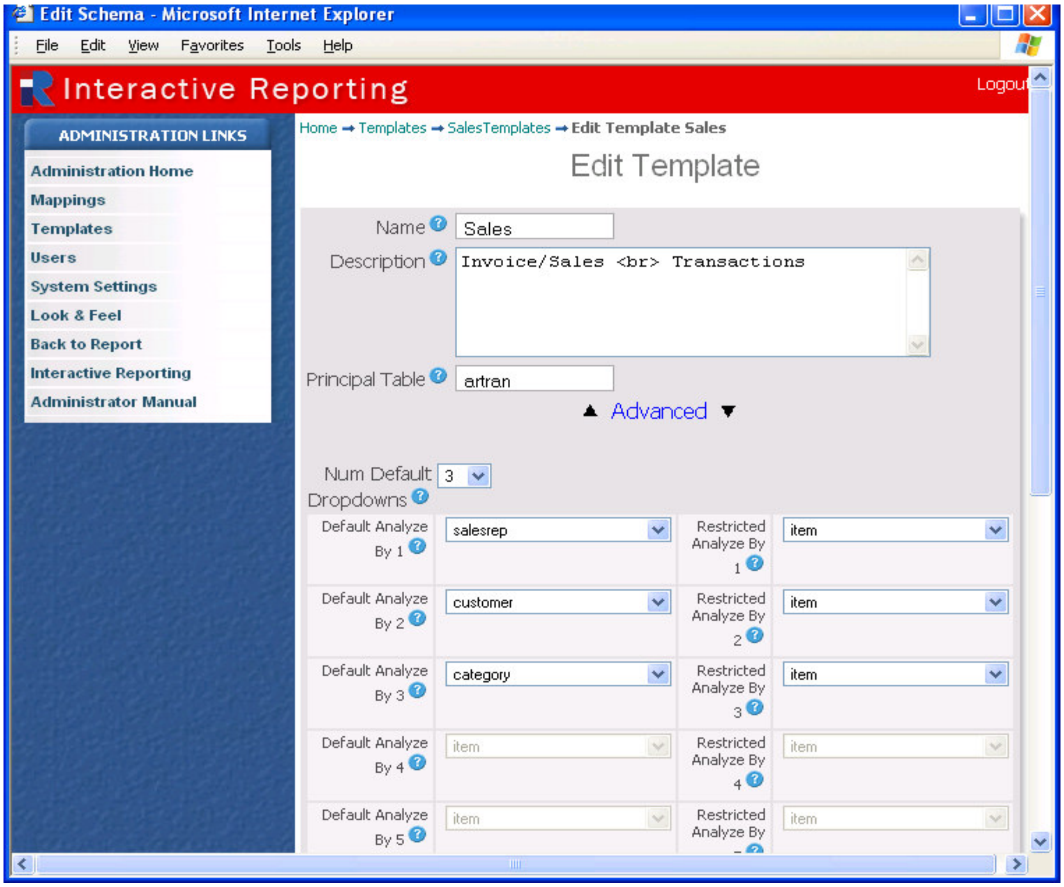


Figure 43

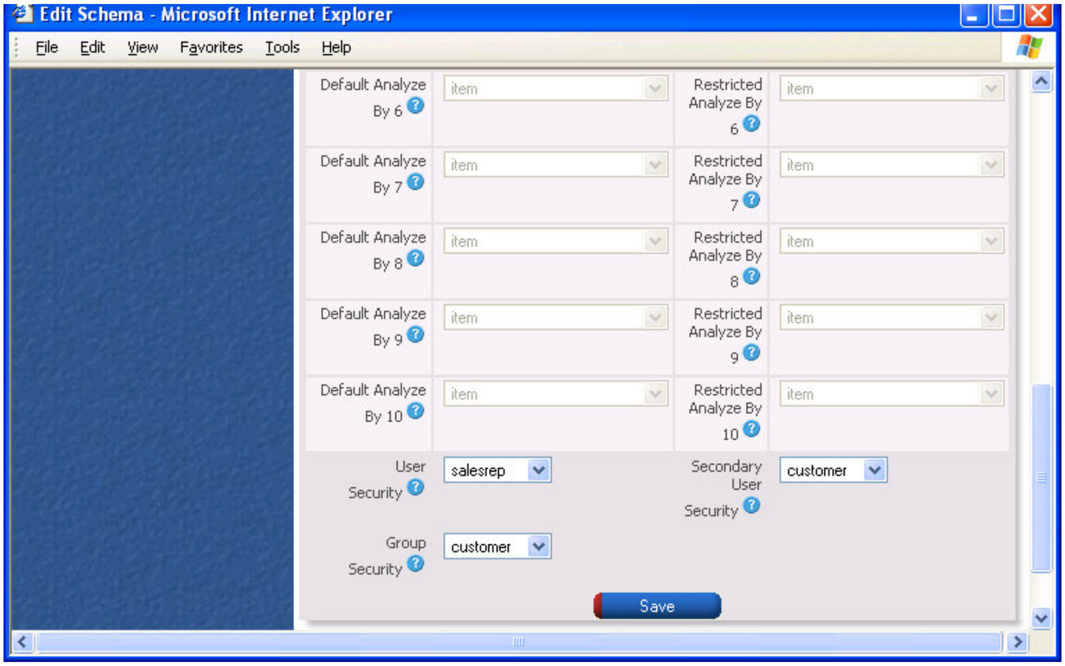


Figure 44

- The *Num Default Dropdowns* field is linked to the *Analyze By, Then By…* of the client report generation page. The number in the field corresponds to the number of *Analyze By, Then By,Then by……* that will be displayed. The number of fields range from the default 3 to a maximum of 10 fields.

- The *Default Analyze by 1* field is the default field of *Analyze by* in the Interactive Reporting home page, when the user has been granted **full access**.

- The *Default Analyze by 2* field is the default field of the first *Then By* drop down list in the Interactive Reporting home page, when the user has been granted **full access**.

- The *Default Analyze by 3* field is the default field of the second *Then By* drop down list in the Interactive Reporting home page, when the user has been granted **full access**.

- The *Restricted Analyze by* field are similar to the *Default Analyze by* fields. These are the values used if one of the fields in the *Default Analyze by* is restricted due to user, secondary or group security field settings of a user. These are used when the user has been granted any other access other then full access.

User, Secondary User and Group Security

- The *User Security* field determines at which level data will be displayed in the report. For example, set this value to salesrep. If a users access level is set to **Restricted to User Key** in the user section and they log into IR then only the data related to a particular sales representative would be shown at the report.

- The *Secondary User Security* field determines at which level data will be displayed in the report. For example, set this value to custom1. If a users access level is set to **Restricted to Secondary User Key** in the user section and they log into IR then only the data related to a particular supplier would be shown at the report.

- The *Group Security* field determines at which level data will be displayed in the report. As an example, if Group Security has been assigned to salesgroup only the data related to a sales group will be shown at the report if the users access level is set to **Restricted to Group Key**. If this field is mapped to a value and the users access level is set to either 'restricted to user key' or 'restricted to secondary user key' then the value in the group key section of the user acts as a second restriction. For example, if Group Security is set to salesgroup, and User Security is set to salesrep in the template, and in the user section, user Buchanan User key field is set to 5 and the Group Key set to c, then when Buchanan logs in his data is restricted to salesrep 5 in salesgroup c. If salesrep 5 belongs to a different group then no data will be shown.

Chapter

8

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 or a service version.

Standalone Interactive Reporting

This version is easily set up. Simply follow the online instructions. To remove, 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.

```
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 45

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 is 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 v23 is used during installation then ir_service –u –svc v23 must be used during removal.

Appendix

A

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, this may affect the performance of the accounting system. 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, then a database index is probably missing on one of the columns specified for analysis.

Appendix

B

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 keeps a template database. Every night, a fresh copy of the template should be made, and the data imported into the 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 are not 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, then 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, then 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 an analyse is performed by several variables with the same filter, and different results obtained, it may mean that the LEFT JOINs are incorrect.

Appendix

C

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

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 renamed.

4. Sales Orders

If Sales Transactions is not available, then *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*.

Appendix

D

Sample.CSS

Sample Style Sheet for Look and Feel Section and explanation of contents.

The following section includes sample.css, a sample style sheet, and after this file there is a detailed explanation of what each field in this file does.

BODY { background-color:white; margin:0; font-family:Tahoma, Arial, Times; font-size:10pt;}

A {text-decoration:none;}

A:hover {text-decoration:underline;}

A:link {color: blue}

H1 {font-size: 24pt; font-family: arial}

H2 {font-size: 18pt; font-family: braggadocio}

H3 {font size:14pt; font-family: desdemona}

font {font-family: Tahoma, Arial, times}

.breadcrumb { font-family: Tahoma, Arial, Times, sans-serif; font-size:8pt;color:#666;margin:0 0 10px 0;font-weight: bold; }

.breadcrumb A { color:#222;font-weight: normal; }

.welcomedesc {font-family:Arial;color:#6E6E6E;font-size:10pt;}

.welcomedesc A {font-family:Arial; color:#CC0000; font-weight: bold; font-size:13pt;}

.tab {font-family:Tahoma; font-size:12pt; font-weight: bold; color:black;margin:0 0 20px 0; background-color: orange;}

.tab A {color: #5F5F5F; text-decoration:none;}

.tabactive {font-family:Tahoma;font-size:12pt; font-weight: bold; font-style:italic; color:#7F7F7F;margin:0 0 20px 0; background-color: #DDD;}

.tabactive A {color: #5F5F5F; text-decoration:none;}

.tabdisabled {font-family:Tahoma; font-size:12pt; font-weight: bold; color:#9F9F9F;margin:0 0 20px 0; background-color: #BBB;}

.copyright { font-family:Tahoma;font-size:7pt;color:#666;margin:10px 0 20px 0; }

.title { font-family:Arial;font-size:17pt;color:black;margin:0 0 4px 0;}

.description { font-family:Tahoma;font-size:10pt;color: black ;margin:0 0 20px 0; }

.description A { color: red;}

.filter_title {font-size:25; font-weight: bold; color: #444488}

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

.errorMessage {font-size: 12pt; font-weight: bold; font-family: arial; color:red}

.promptMessage {font-family:Tahoma, Arial, times;font-size:8pt;color:#7F7F7F;margin:0 0 20px 0; }

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

.helpPopupTitle { font-size: 16; font-weight: bold}

.helpPopupBody { font-size:14; color: black}

.helpPopupTopicId {font-size:10; color: black; font-style: italic}

.helpPopupTopicNotFoundTitle { font-size: 18; font-weight: bold; color:red;}

.helpPopupTopicNotFoundBody { font-size: 14; color:red;}

.table_class {font-family:Tahoma;font-size:10pt;border-width: 0; border-style: ridge;}

.tableheader { background-color: #DDD;border:1px solid;border-color: #FEFEFE #C3C8CB #C3C8CB #FEFEFE;color:#424242;font-weight: bold; font-size:8pt;height:20px;margin: 0px;padding: 0px;padding: 4px 10px 4px 7px}

.tableheader A{color:#424242;display: block;width:100%; text-decoration: none;}

.tableodd td{background-color: #F0F0F0;font-size:8pt;padding: 2px 3px 6px 7px;}

.tableeven td{font-size:8pt;padding: 2px 3px 6px 7px;}

.tableeven A {color:#CC0000;font-weight:bold;}

.tableodd A {color:#CC0000;font-weight:bold;}

.tablegrouptotal td {color:#000;background-color: #BBB;font-size:8pt;padding: 2px 3px 6px 7px;font-weight: bold;text-align: right}

.tablefooter {background-color:A2A1A1;height:5px;}

.tabletotal td {color:#FFF;background-color: #888;font-size:8pt;padding: 2px 3px 6px 7px;font-weight: bold;}

.leftbar { background-color:#2F578B; background-image: url('gui/images/left-bar.jpg'); background-repeat: repeat-y;height:450px; text-align: center;}

.headerlogo { background-color:#E60101; background-image: url('gui/images/interactive.gif'); background-repeat: no-repeat; width:294px; height:36px; text-align:left}

.maintable { width:750px;}

.outershadow{background-color:#EEEEEE;background-image: url('gui/images/shad2.gif');background-repeat: repeat-y;width:10;}

.outershadowcorner{background-color:#EEEEEE;background-image: url('gui/images/shad3.gif');background-repeat: repeat-y;height:10px;}

.outershadowbottom{background-color:#EEEEEE;background-image: url('gui/images/shad4.gif');background-repeat: repeat-x;}

.personalsettings { float:right;font-family:Tahoma;font-size:20pt;color:#FFF;margin:0 0 10px 0; }

.personalsettings A { color:purple;}

.showhide { float:right;font-family:Tahoma;font-size:8pt;color:#999;margin:0 0 5px 0; }

.showhide A { color:#999;}

.modtop { background-image: url('gui/images/mod1.gif');background-repeat:no-repeat;height:24px;width:100%;text-align: center;color:white;font-weight: bold;text-transform: uppercase;font-size:8pt;padding: 2px 0px 0px 0px;}

.modtop A { color:white;display: block;margin: 0px;}

.modtop A:hover { color:#CCC;text-decoration:none;}

.modclose { background-image: url('gui/images/moddown.gif');background-repeat:no-repeat;height:31px;width:100%;text-align: center;color:white;font-weight: bold;text-transform: uppercase;font-size:8pt;padding: 2px 0px 10px 0px;}

.modclose A { color:white;display: block;margin: 0px;}

.modclose A:hover { color:#CCC;text-decoration:none;}

.modmid { background-image: url('gui/images/mod2.gif');background-repeat:repeat-y;width:195px;text-align: left;color:#21536A;padding: 5px 13px 5px 6px;font-size:8pt; }

.modbot { background-image: url('gui/images/mod3.gif');background-repeat:no-repeat;width:195px;height:20px;}

.modspacing {padding:5px 5px 5px 5px;}

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

.label {color:#494949;font-size:12pt; text-align: right; font-family: Tahoma; font-size: 14}

.checkbox {font-size:8pt;}

.radio {font-size:8pt;}

.largebutton { width:92px;height:20px;border:medium none;background-image: url('gui/images/button.gif'); background-repeat: no-repeat; font-size:10px; color:#FFFFFF; }

.smallbutton { width:77px;height:20px;border:medium none;background-image: url('gui/images/buttonsm.gif'); background-repeat: no-repeat; font-size:10px; color:#FFFFFF; }

.select { font-family: Tahoma, Arial, times; font-size: 12px; border: #000000; border-style: solid; border-top-width: 0px; border-right-width: 0px; border-bottom-width: 0px; border-left-width: 0px}

.buttons a {color: #21536A; border: 1px solid;border-color:#FAFAFA; padding: 3px; font: 11px Arial; font-weight: bold; text-decoration: none; display: block; margin: 0px; text-align: left;}

.buttons a:hover {color: #21536A; background-color: #FFF;border: 1px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; }

.buttonactive {border: 1px solid; padding: 3px; background-color: #D6E4F4; font: 11px Arial; font-weight: bold; font-style:italic; border-color: #C3C8CB #FEFEFE #FEFEFE #C3C8CB;color: #21536A;text-decoration: none;}

.buttonactive a {color: #21536A;}

.buttonselected a {color: #111111; border: 1px solid;border-color:#FAFAFA; padding: 3px; font: 11px Arial; font-weight: bold; text-decoration: none; display: block; margin: 0px; text-align: left; font-style: italic;}

.buttonselected a:hover {color: #21536A; background-color: #FFF;border: 1px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; font-style: italic;}

.buttons_updown a {color: #21536A; border: 0px solid;border-color:#FAFAFA; padding: 3px; font: 11px Arial; text-decoration: none; display: block; margin: 0px; text-align: center;}

.buttons_updown a:hover {color: #21536A; background-color: #FFF;border: 0px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; }

.a_math:hover {color: #21536A; background-color: #FFF;border: 1px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; }

.topmiddle {background-color:#E0E0E0;}

.topright {background-image: url('gui/images/v1.gif');background-repeat: repeat-y; width:8px;}

.bottomleft {background-image: url('gui/images/h1.gif');background-repeat: repeat-x;height:8px;}

.corner { background-image: url('gui/images/c1.gif');background-repeat:no-repeat;height:8px;width:8px;}

The following data is taken from the current default style sheet available with Interactive Reporting. You can download this file by clicking on the file sample.css in the *Look & Feel* section of IR. Altering fields in this file and updating the CSS field with these changes will alter the appearance of Interactive Reporting. This sets the background color to white, the font size to 10pt and the font type to belonging to Tahoma, Arial, Times. Please remember to keep the data within the curly {} brackets.

BODY { background-color:white; margin:0; font-family:Tahoma, Arial, Times;

font-size:10pt;}

The 'A:link' sets the unclicked names on links and drill downs to blue. E.g. the "LogOut" link on the main page of Interactive Reporting. Whilst the A:Hover changes place an underline under the text if the mouse is placed over the text

A:hover {text-decoration:underline;} A:link {color: blue}

These are the defaults for Headers, these are currently not used by Interactive Reporting.

H1 {font-size: 24pt; font-family: arial}

H2 {font-size: 18pt; font-family: braggadocio}

H3 {font size:14pt; font-family: desdemona}

This chooses the *Font* style of most of the text in Interactive reporting, e.g. *Analyze By, Categories* A number of fonts is listed as there may be symbols in the text that are not in Tahoma. If this is the case then the symbol will check in Arial and finally in the Times font

font {font-family: Tahoma, Arial, times}

Section 2

This first part of this section deals with the breadcrumbs. This is the data that is displayed on the top of a report, indicating the path taken to reach the level in the

report. Here, the font type and colour is set for the breadcrumbs.
.breadcrumb { font-family: Tahoma, Arial, Times, sans-serif; font-size:8pt;color:#666;margin:0 0 10px 0;font-weight: bold; }
.breadcrumb A { color:#222;font-weight: normal; }

This piece of code is responsible for the color, text size and text type of the introduction page to the wizard in IR.
.welcomedesc {font-family:Arial;color:#6E6E6E;font-size:10pt;}
.welcomedesc A {font-family:Arial; color:#CC0000; font-weight: bold; font-size:13pt;}
The first line is responsible for the description of each type of report, e.g.
Similar to a regular report but helps you clearly visualize your data.
Whilst the second line gives details of each type of report, e.g.
Chart

Section 3

Here is the details for the 'look and Feel' of the Tabs used in Admin->System Settings and Admin->Template. The active tab is the tab currently being viewed. As the tabs in IR are links the color does not affect it. However, the *background-color* of the tab may be changed.
.tab {font-family:Tahoma; font-size:12pt; font-weight: bold; color:#7F7F7F;margin:0 0 20px 0; background-color: #BBB;}
.tab A {color: #5F5F5F; text-decoration:none;}
.tabactive {font-family:Tahoma;font-size:12pt; font-weight: bold; font-style:italic; color:#7F7F7F;margin:0 0 20px 0; background-color: #DDD;}
.tabactive A {color: #5F5F5F; text-decoration:none;}
.tabdisabled {font-family:Tahoma; font-size:12pt; font-weight: bold; color:#9F9F9F;margin:0 0 20px 0; background-color: #BBB;}

Section 4

The copyright data is displayed on the bottom of the login screen. The look of this may be changed by altering the code for the copyright. Similarly, the titles to each page, and their descriptions, if present, may also be altered by changing the following code. Titles of pages include the 'Please Sign in', 'Choose Mapping', etc.
.copyright { font-family:Tahoma;font-size:7pt;color:#666;margin:10px 0 20px 0; }
.title { font-family:Arial;font-size:17pt;color:#777;margin:0 0 4px 0;}
.description { font-family:Tahoma;font-size:8pt;color:#7F7F7F;margin:0 0 20px 0; }
.description A { color:#7F7F7F;}

The Filter title can be seen on the client side of IR prior to generating a report. In the wizard, it affects the text on the pages'Choose Date Ranges' and 'Filter data', whilst on the advanced side it also affects the date text and the text under the 'Filter By' section. The customer_Company_name appears on each page of IR. **.filter_title {font-size:12;**

font-weight: bold; color: #444488}
.customer_company_name {font-size:12pt; font-style: italic; color: gray}

Section 5

The following commands change the style of the various error messages and help messages.
.errorMessage {font-size: 12pt; font-weight: bold; font-family: arial; color:red}
.promptMessage {font-family:Tahoma, Arial, times;font-size:8pt;color:#7F7F7F;margin:0 0 20px 0; }
.noRecordsFound {font-size: 14pt; font-weight: bold; color:red; text-align: center}
.helpPopupTitle { font-size: 16; font-weight: bold}
.helpPopupBody { font-size:14; color: black}
.helpPopupTopicId {font-size:10; color: black; font-style: italic}
.helpPopupTopicNotFoundTitle { font-size: 18; font-weight: bold; color:red;}
.helpPopupTopicNotFoundBody { font-size: 14; color:red;}

Section 6

The Table Class section deals with the results tables produced from Pivots, Compares and Analysis. The tableodd and tableeven refer to how the data is displayed in the table, the colour for odd and even lines is different for clarity purposes
.tableheader { background-color: #DDD;border:1px solid;border-color: #FEFEFE #C3C8CB #C3C8CB #FEFEFE;color:#424242;font-weight: bold; font-size:8pt;height:20px;margin: 0px;padding: 0px;padding: 4px 10px 4px 7px}
.tableheader A{color:#424242;display: block;width:100%; text-decoration: none;}
.tableodd td{background-color: #F0F0F0;font-size:8pt;padding: 2px 3px 6px 7px;}
.tableeven td{font-size:8pt;padding: 2px 3px 6px 7px;}
.tableeven A {color:#CC0000;font-weight:bold;}
.tableodd A {color:#CC0000;font-weight:bold;}
.tablegrouptotal td {color:#000;background-color: #BBB;font-size:8pt;padding: 2px 3px 6px 7px;font-weight: bold;text-align: right}
.tablefooter {background-color:A2A1A1;height:5px;}
.tabletotal td {color:#FFF;background-color: #888;font-size:8pt;padding: 2px 3px 6px 7px;font-weight: bold;}
.table_class {border-width: 2; border-style: ridge}

Section 7

The first two lines of code refer to the 'Interactive Reporting' banner that can be seen on the top of each page, and the blue panel to the left of each page. The remaining lines add depth and texture to the images, casting shadows on corners etc. Own user images may be placed in this section. For example, a user can replace the Interactive Reporting Logo with their on company logo by changing the path 'gui/images/interactive.gif' to point to the new image.
.leftbar { background-color:#2F578B; background-image: url('gui/images/left-bar.jpg'); background-repeat: repeat-y;height:450px; text-align: center;}
.headerlogo { background-color:#E60101; background-image: url('gui/images/interactive.gif'); background-repeat: no-repeat; width:294px;

height:36px; text-align:left}
.maintable { width:750px;} .outershadow { background-color:#EEEEEE;background-image: url('gui/images/shad2.gif');background-repeat: repeat-y;width:10;}
.outershadowcorner { background-color:#EEEEEE;background-image: url('gui/images/shad3.gif');background-repeat: repeat-y;height:10px;}
.outershadowbottom { background-color:#EEEEEE;background-image: url('gui/images/shad4.gif');background-repeat: repeat-x;}

Section 8

The first two lines of code are used on the login-page of IR to determine the size of the IR banner . Meanwhile, the latter two lines of code are responsible for the look of the 'Show/Hide Frame' switch that can be seen on the top right-hand corner of the generated reports.
.personalsettings { float:right;font-family:Tahoma;font-size:8pt;color:#FFF;margin:0 0 10px 0; }
.personalsettings A { color:#FFF;}
.showhide { float:right;font-family:Tahoma;font-size:8pt;color:#999;margin:0 0 5px 0; }
.showhide A { color:#999;}

Section 9

This section contains information for creating the information boxes displayed on the 'Task Bar' on the left side of the IR screen.
.modtop { background-image: url('gui/images/mod1.gif');background-repeat:no-repeat;height:24px;width:100%;text-align: center;color:white;font-weight: bold;text-transform: uppercase;font-size:8pt;padding: 2px 0px 0px 0px;}
.modtop A { color:white;display: block;margin: 0px;}
.modtop A:hover { color:#CCC;text-decoration:none;}
.modclose { background-image: url('gui/images/moddown.gif');background-repeat:no-repeat;height:31px;width:100%;text-align: center;color:white;font-weight: bold;text-transform: uppercase;font-size:8pt;padding: 2px 0px 10px 0px;}
.modclose A { color:white;display: block;margin: 0px;}
.modclose A:hover { color:#CCC;text-decoration:none;}
.modmid { background-image: url('gui/images/mod2.gif');background-repeat:repeat-y;width:195px;text-align: left;color:#21536A;padding: 5px 13px 5px 6px;font-size:8pt; }
.modbot { background-image: url('gui/images/mod3.gif');background-repeat:no-repeat;width:195px;height:20px;}
.modspacing {padding:5px 5px 5px 5px;}

Section 10

This section maintains the look & feel of the buttons and labels used throughout IR. It is responsible for colour changes when button are pressed, the size of the text on buttons, etc. Also include is display information for the math symbols used in the template 'Calculate Variables' section.
.inputtext { border:1px solid;border-color: #AAA;padding-top:3px;padding-left:

4pt}
.label {color:#494949;font-size:12pt; text-align: right; font-family: Tahoma; font-size: 14}
.checkbox {font-size:8pt;}
.radio {font-size:8pt;}
.largebutton { width:92px;height:20px;border:medium none;background-image: url('gui/images/button.gif'); background-repeat: no-repeat; font-size:10px; color:#FFFFFF; }
.smallbutton { width:77px;height:20px;border:medium none;background-image: url('gui/images/buttonsm.gif'); background-repeat: no-repeat; font-size:10px; color:#FFFFFF; }
.select { font-family: Tahoma, Arial, times; font-size: 12px; border: #000000; border-style: solid; border-top-width: 0px; border-right-width: 0px; border-bottom-width: 0px; border-left-width: 0px}
.buttons a {color: #21536A; border: 1px solid;border-color:#FAFAFA; padding: 3px; font: 11px Arial; font-weight: bold; text-decoration: none; display: block; margin: 0px; text-align: left;}
.buttons a:hover {color: #21536A; background-color: #FFF;border: 1px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; }
.buttonactive {border: 1px solid; padding: 3px; background-color: #D6E4F4; font: 11px Arial; font-weight: bold; font-style:italic; border-color: #C3C8CB #FEFEFE #FEFEFE #C3C8CB;color: #21536A;text-decoration: none;}
.buttonactive a {color: #21536A;}
.buttonselected a {color: #111111; border: 1px solid;border-color:#FAFAFA; padding: 3px; font: 11px Arial; font-weight: bold; text-decoration: none; display: block; margin: 0px; text-align: left; font-style: italic;}
.buttonselected a:hover {color: #21536A; background-color: #FFF;border: 1px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; font-style: italic;}
.buttons_updown a {color: #21536A; border: 0px solid;border-color:#FAFAFA; padding: 3px; font: 11px Arial; text-decoration: none; display: block; margin: 0px; text-align: center;}
.buttons_updown a:hover {color: #21536A; background-color: #FFF;border: 0px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; }
.a_math:hover {color: #21536A; background-color: #FFF;border: 1px solid;border-color:#C3C8CB #FEFEFE #FEFEFE #C3C8CB;text-decoration: none; }

Section 11

This section also deals with depth and shading of images, but specifically to boxes such as the 'Login', 'Choose Mappings', etc.
.topmiddle {background-color:#E0E0E0;}
.topright {background-image: url('gui/images/v1.gif');background-repeat: repeat-y; width:8px;}
.bottomleft {background-image: url('gui/images/h1.gif');background-repeat:

repeat-x;height:8px;}
.corner { background-image: url('gui/images/c1.gif');background-repeat:no-repeat;height:8px;width:8px;}