

HOW TO CREATE TOAD® REPORT MANAGER REPORTS

A step by step tutorial guide

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July 2009

TABLE OF CONTENTS

1	Introduction.....	3
2	SQL for template creation.....	4
3	Creating your custom templates.....	5
3.1	Create a new TOAD® Reports Manager template category.....	5
3.2	Formatting your first template.....	10
3.3	Adding colour to your report.....	12
4	Creating a Landscape Template.....	14
4.1	Copying an existing report.....	14
5	Creating your own custom report category.....	17
6	Creating a new report using your template.....	17
6.1	First write and test your SQL for the report.....	17
6.2	Copy and rename the Standard – Portrait report to your custom category.....	18
6.3	Editing the new report.....	20
6.4	Formatting numeric values.....	21
7	How to add a variable to your report.....	23
8	Disclaimer.....	25

1 Introduction

This tutorial will take you through the steps required to create a set of custom report templates that you can then use to create your own reports.

Once you have your set of report templates the longest part of creating a report is writing the SQL.

In this tutorial, we will create both a portrait and landscape template and use the portrait template to create a simple report listing the number of self service page requests for a given day by user.

At the end of this tutorial you should be familiar with:

- ❖ Creating report categories
- ❖ Adding reports
- ❖ Copying existing reports
- ❖ Basic report formatting
- ❖ Adding variables to your report

All templates and reports created in this tutorial will be provided in a TRD format.

2 SQL for template creation

Use the following SQL as the template base.

It is designed to produce two rows so you can see the inter row spacing

It provides a page header date and the database SID name

```
SELECT to_char(sysdate, 'DD-Mon-YY fm(Day)') page_heading_date,
       database_name.sid_name page_heading_sid_name,
       to_char(sysdate, 'DD-Mon-YY HH24:MI:SS') date_column,
       1.234 numeric_column,
       'Text values line 1' text_column
FROM dual,
     (SELECT name sid_name
      FROM gv$database
      WHERE inst_id = 1) database_name
UNION
SELECT to_char(sysdate, 'DD-Mon-YY fm(Day)'),
       database_name.sid_name,
       to_char(sysdate - 1, 'DD-Mon-YY HH24:MI') ,
       2.345,
       'Text values line 2'
FROM dual,
     (SELECT name sid_name
      FROM gv$database
      WHERE inst_id = 1) database_name;
```

Note 1: Any values that are to appear in the title of the report must be the same value for every row returned as is the case with the columns ***page_heading_date*** and ***page_heading_sid_name*** in the above SQL.

TIP: The column aliases used in your SQL code will be the names that appear in the report data set.

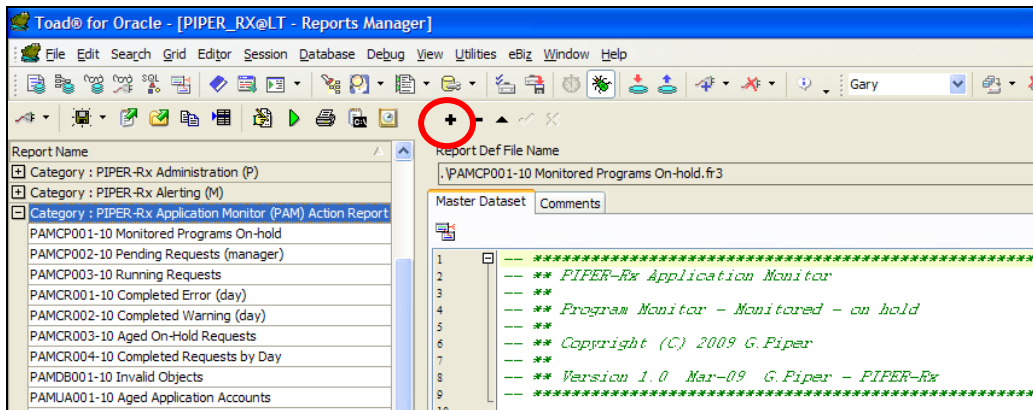
3 Creating your custom templates

In this section we will create a TOAD® Reports Manager category and two templates.

3.1 Create a new TOAD® Reports Manager template category

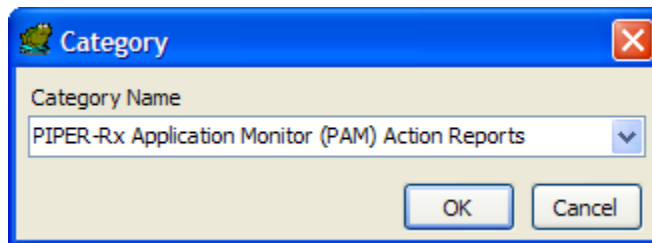
STEP 1: Launch the TOAD® Reports Manager

STEP 2: Highlight an existing reports category and select the + icon



Note: If you highlight a report within a category and select the + button you will create new report under that category.

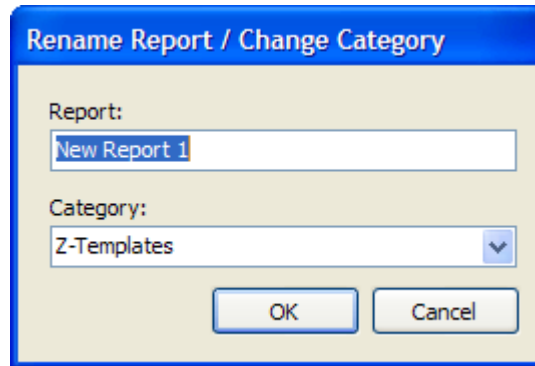
STEP 3: You will then be asked to create a new category name



Over write the category name with the new category name. I tend to use the name **Z-Templates** as the categories are sorted alphabetically, this will place your templates category at the bottom of the report categories.

For this tutorial I have used a category “A – Templates” so as to sort the category to the top of my reports screen purely for screen capture purposes.

When you create a new category you will be asked for the report name you wish to create – a category must have at least one report in it.



Tip: When deciding on report names – be aware that reports within a category are sorted alphabetically

Template naming standards I have used are:

- ❖ Standard – Portrait
- ❖ Standard - Landscape
- ❖ Chart and Page - Portrait
- ❖ Chart and Page - Landscape
- ❖ Chart - Portrait
- ❖ Chart - Landscape

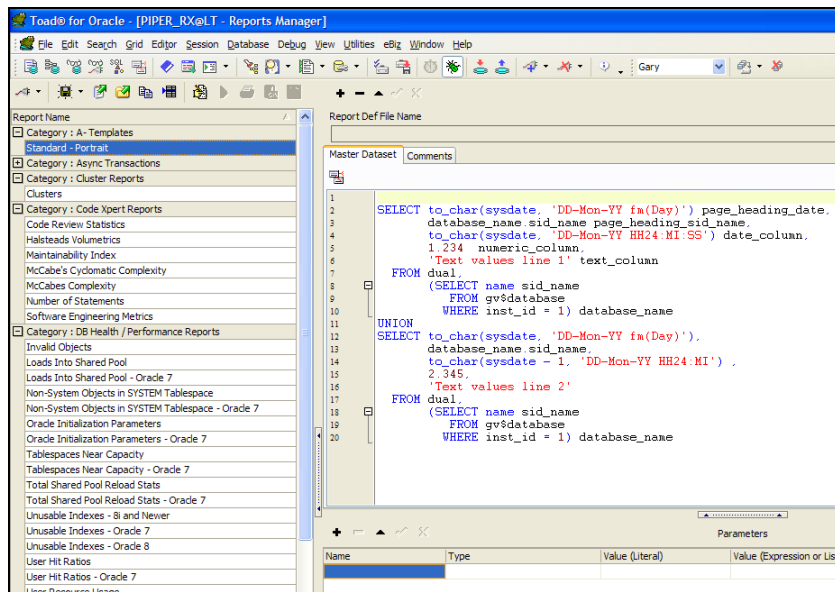
Tip: It is best to start with portrait template as upsizing a report to landscape is easier then downsizing a landscape to portrait format

Warning: If you make a mistake with the name you should note that deleting the last report from a category also deletes the category.

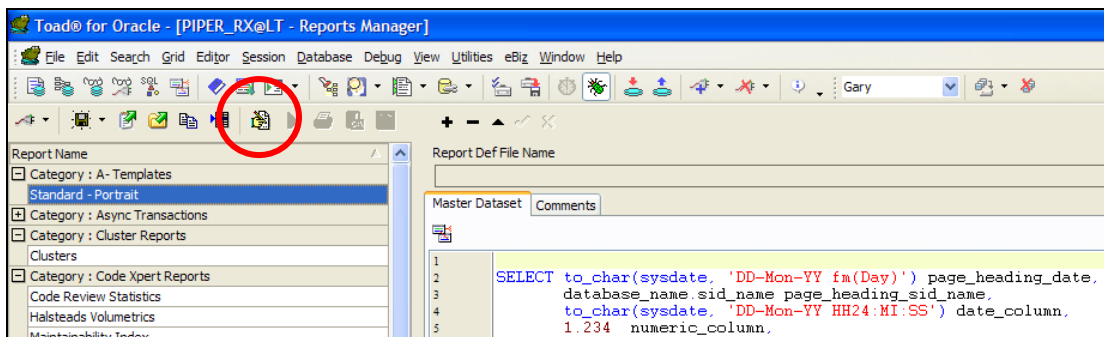
Trick: Up to and including TOAD® 9.6 - The category and any changes you have made to report names and any SQL will only be saved when you exit the TOAD® Reports Manager. (This may have been changed in subsequent TOAD® releases.)

STEP 5: Now add the SQL from above.

Note: Make sure you remove the SQL run semi colon as this is not used by the TOAD Reports Manager.

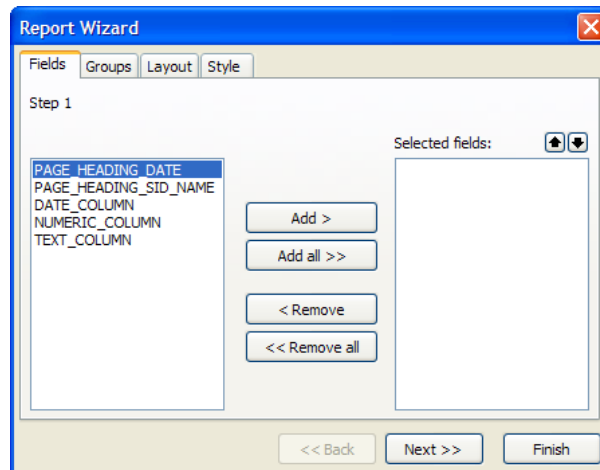


STEP 6: Now select the report editor



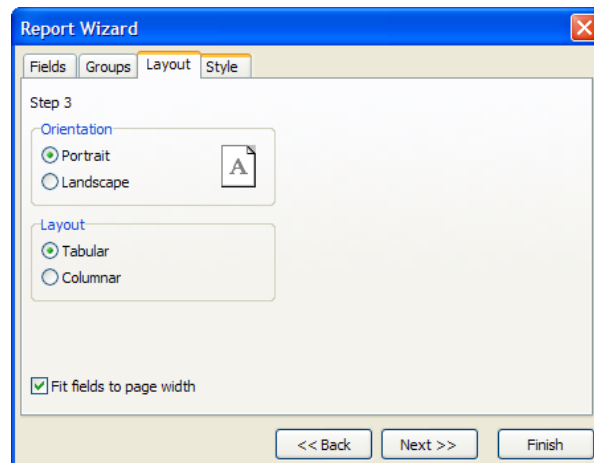
You will now be presented with the report Wizard options. This occurs whenever a new report is created.

Select the option “Add all >>”



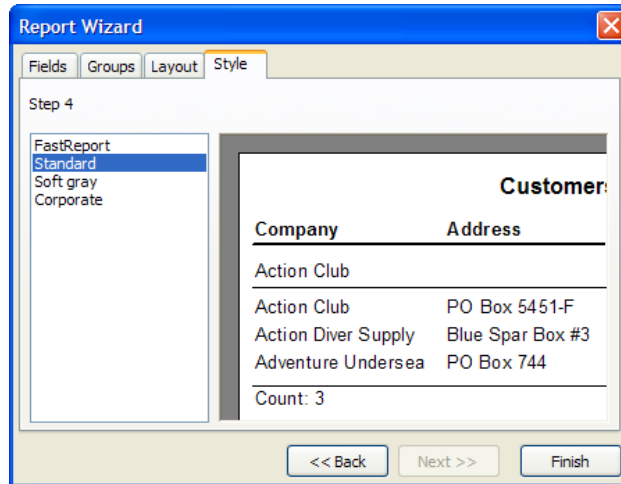
Note: The field names for the reports are the column aliases from the SQL statement

Skip the groups option as we will not need these for the templates; select portrait orientation (default) from the “Layout” tab.

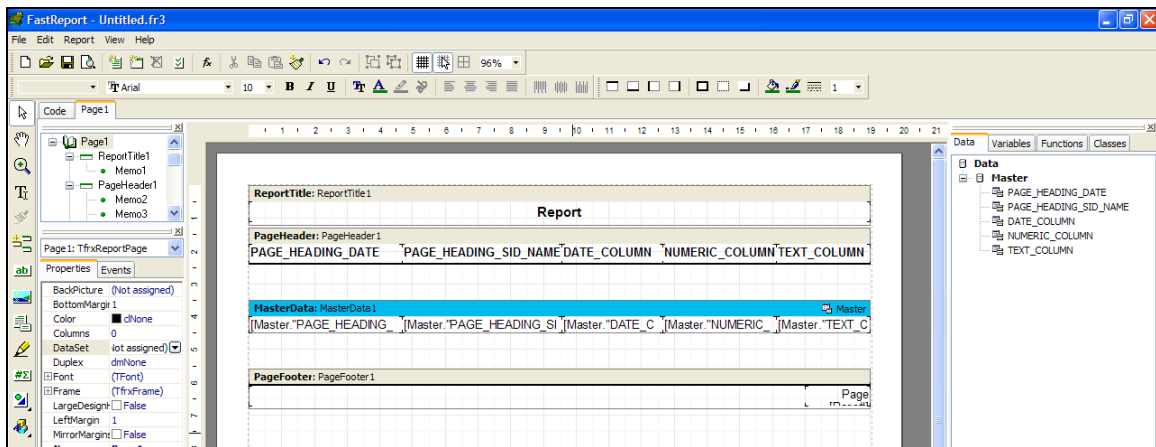


Use either the standard or fast reports style. Standard will be used for this tutorial as we will be adding colour as a later part of the tutorial.

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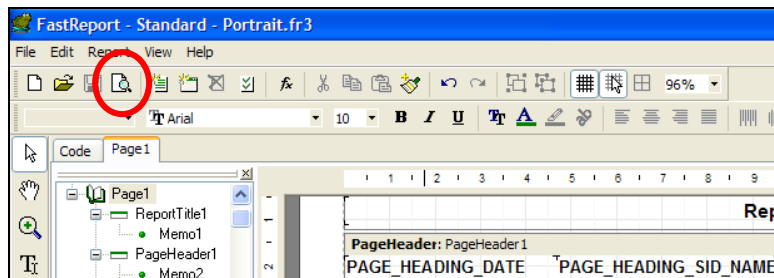
You will now be presented with the report writer editor page



STEP 7: At this stage I suggest you save the report.

TIP: Give the report file name the same name as report name used in the TOAD® Reports Manager, that way it is easy to track reports.

STEP 8: Preview the report by selecting the preview icon.



You should now have a report that looks like the following example:

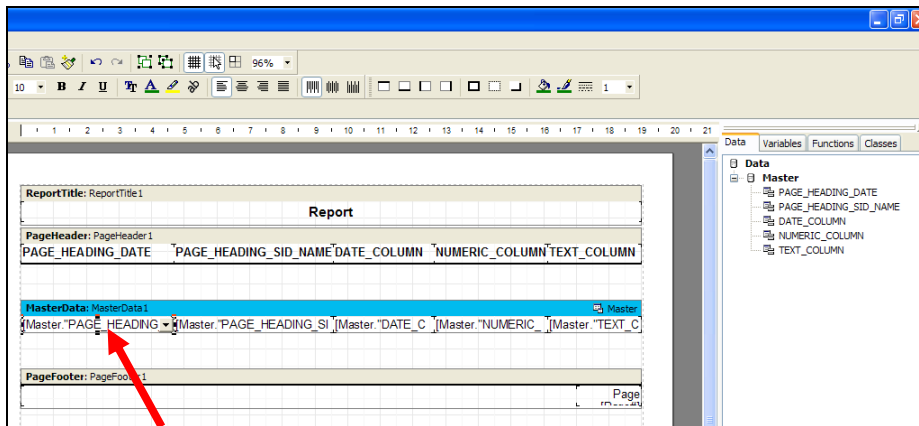
Example Report

Report				
PAGE_HEADING_DATE	PAGE_HEADING_SID_NAME	DATE_COLUMN	NUMERIC_COLUMN	TEXT_COLUMN
28-Jun-09 (Sunday)	LTVIS	27-Jun-09 09:49	2.345	Text values line 2
28-Jun-09 (Sunday)	LTVIS	28-Jun-09	1.234	Text values line 1

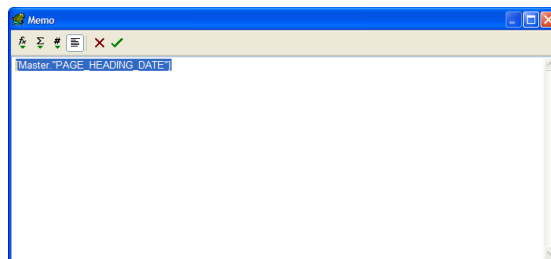
3.2 Formatting your first template

Start by adding the report headings to the report title as follows:

Double click on the **page_heading_date** item in the master data section



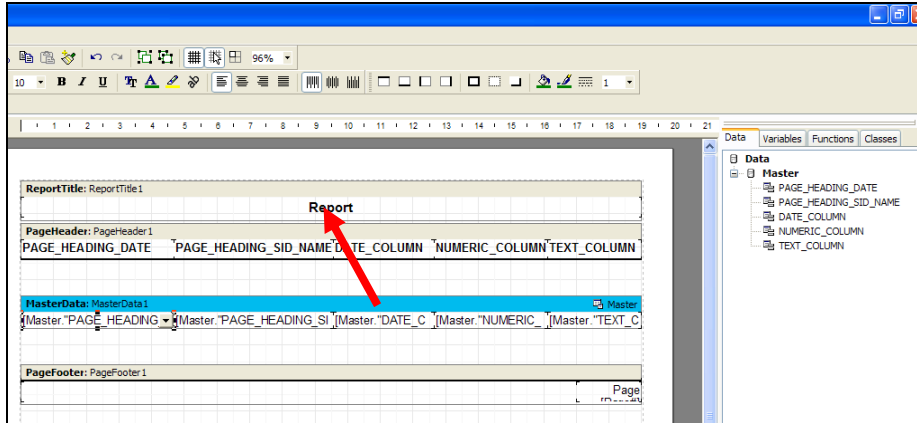
This will open the memo object



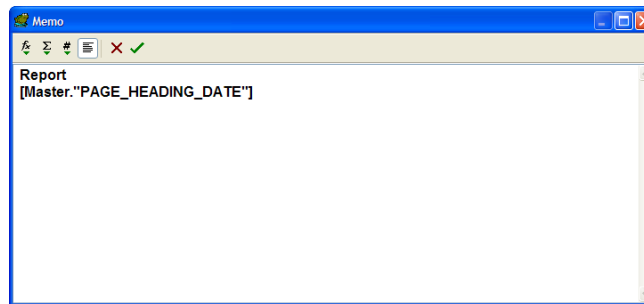
Copy the content either by right click and selection copy or [CTL][C].

Close the memo window.

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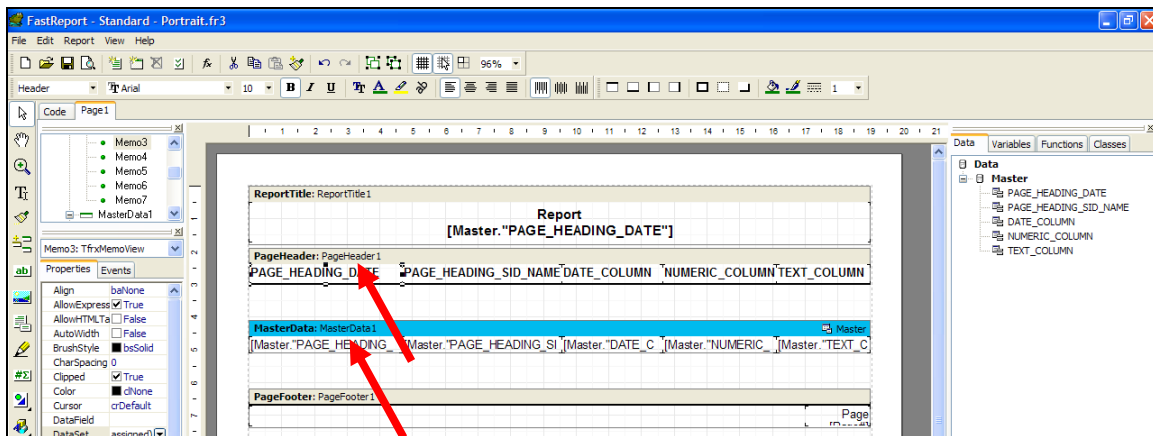


Now double click on the reports field and paste the copied value into the memo window.



Resize the page header and the memo field within the page header.

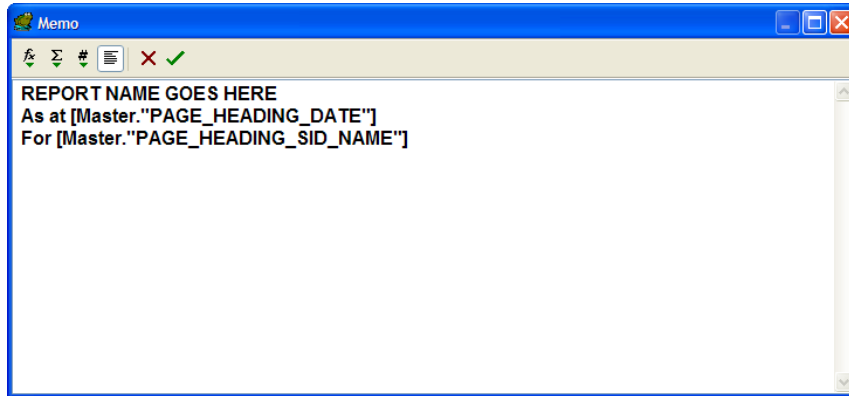
Now delete the **page_heading_date** item from the master data section as we no longer need it– The [del] key works...



Delete the column heading in the same way.

Next, using the same process, add the **page_heading_sid_name** to the title and delete it from the master data section and delete the column header from the page header section.

At the same time modify the report header to make it more readable.



You should now have a report (preview) that looks something like:

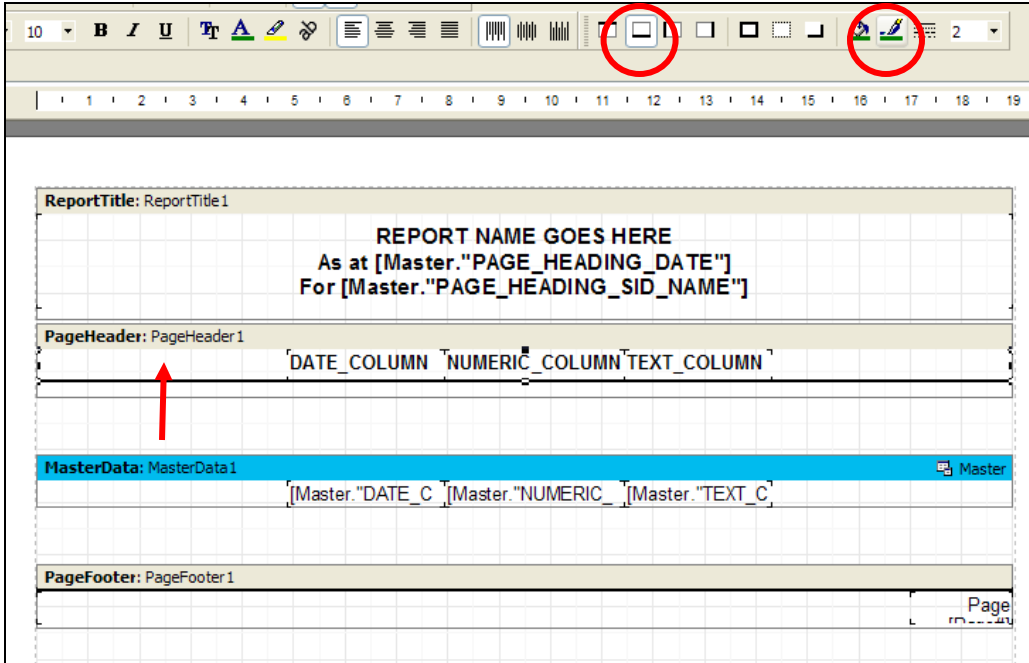
REPORT NAME GOES HERE			
As at 29-Jun-09 (Monday)			
For LTVIS			
	DATE_COLUMN	NUMERIC_COLUMN	TEXT_COLUMN
	28-Jun-09 09:45	2.345	Text values line 2
	29-Jun-09	1.234	Text values line 1

Next, in the report editor drag and drop the columns in the master data section of the report and column headings in the page header section to a more central position.

3.3 Adding colour to your report

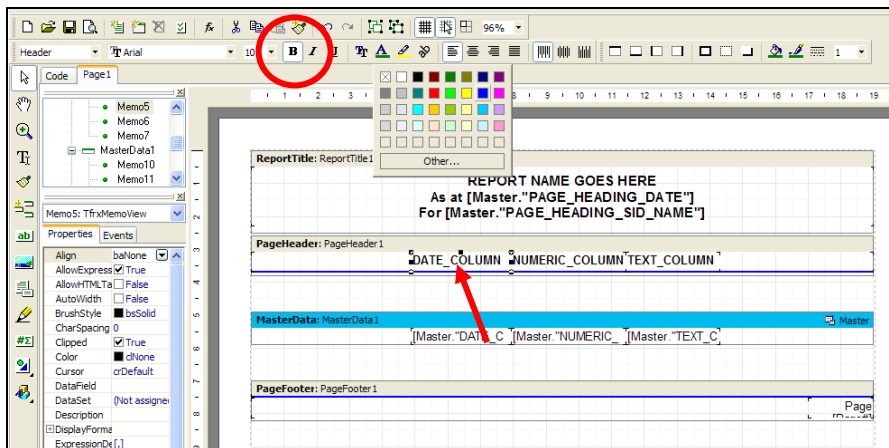
In this section of the tutorial we will make the column headings and underlines a dark blue.

Select the memo box in the page header section and you will notice that there is a box underline in place. Use the frame colour option to change the colour of the underline.



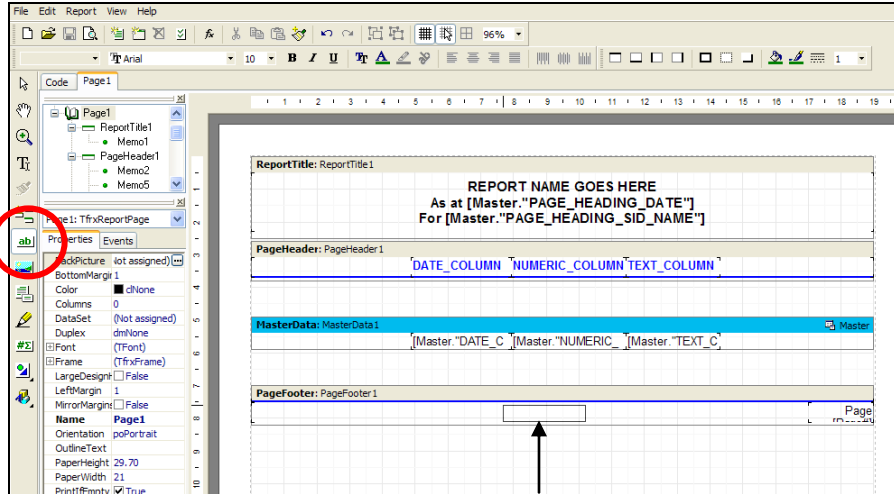
Repeat this process for the Page footer line

Now, change the column headings to a bold blue colour by selecting each column header and using the toolbar Font Colour option to change the colour of the heading.

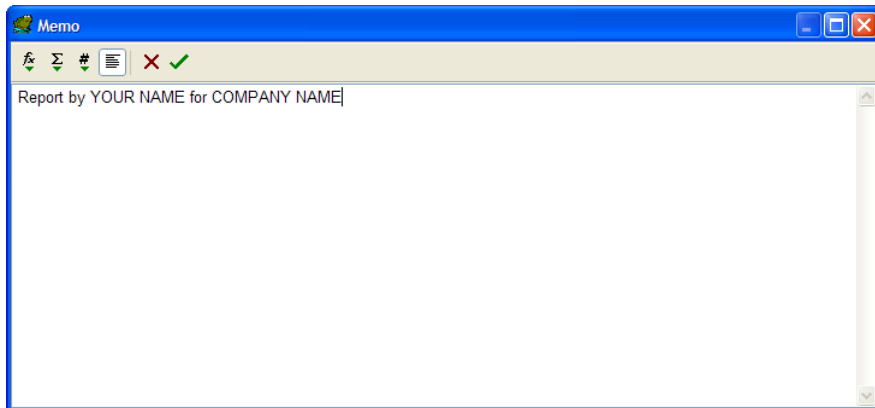


Finally, add a by line to the report so the report recipient knows who wrote the report 😊

Select the Text Object item from the LHS menu bar and place the new object in the page footer.



Double click on the new memo object and add the by line words.



Resize the memo field and center in the page footer section.

After some more editing to suit you now have your first template

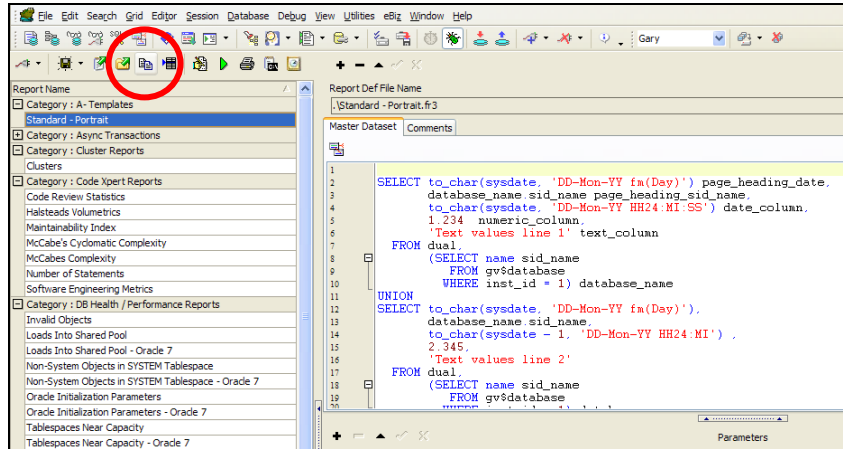
4 Creating a Landscape Template

All the real hard work has been done in the earlier steps.

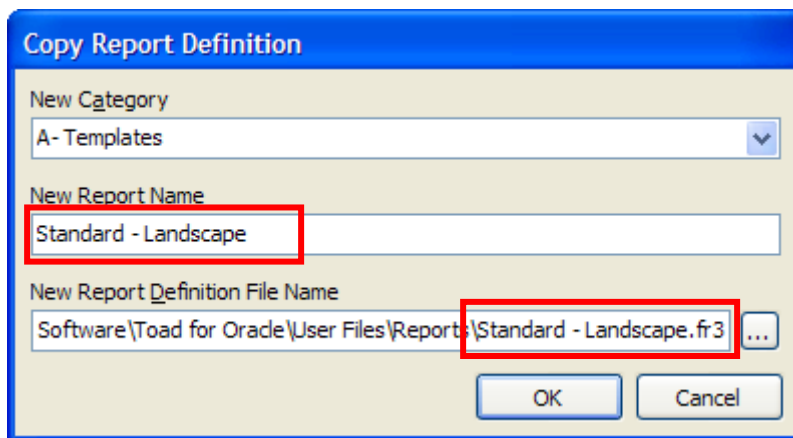
To create a landscape template all you need to do is copy the portrait template and give it a new name "Standard – Landscape"

4.1 Copying an existing report

Highlight the report you wish to copy, in this case the “Standard – Portrait” report and use the report copy feature



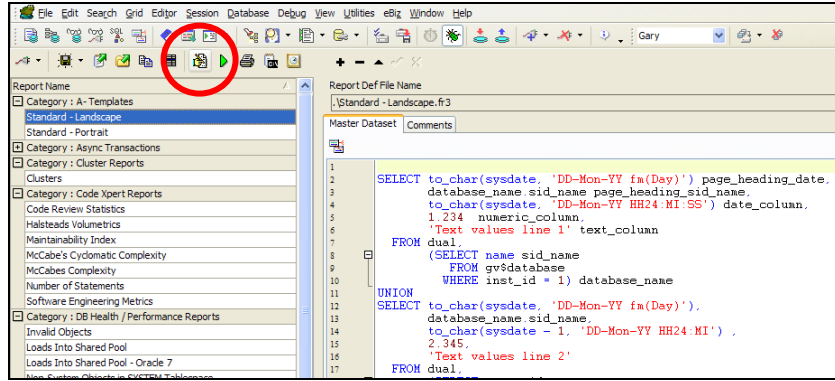
Enter the new report name and file name. Remember, try and keep the report name and file name the same as it does make it easier in the long run.



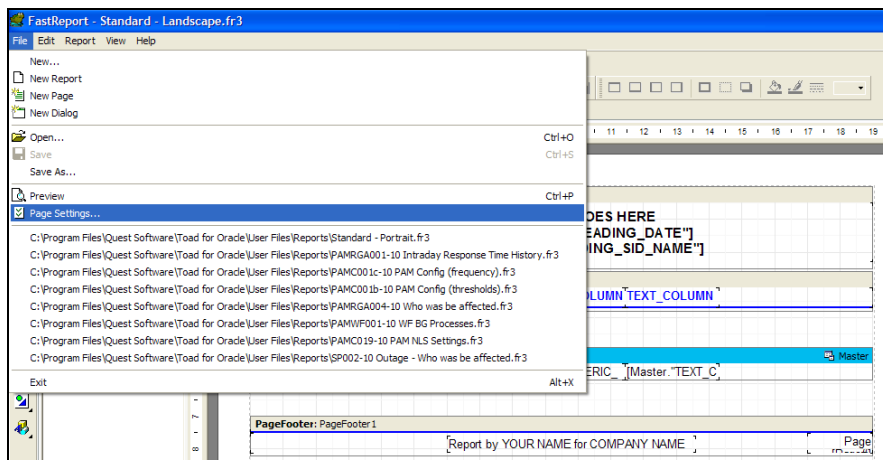
You now have a copy of the portrait report...

Select the new Standard – Landscape report and then select the “Design Selected Report” option.

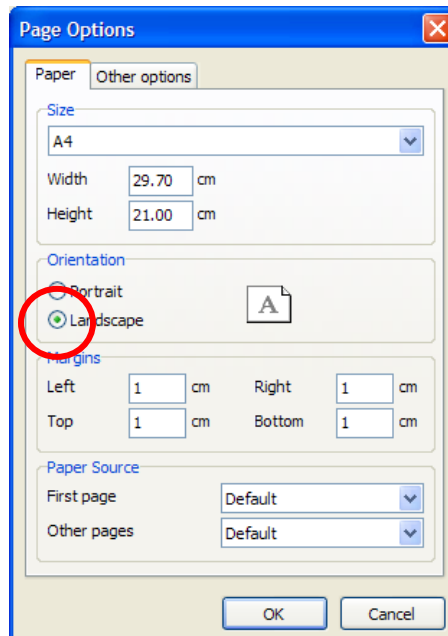
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Select the page settings option for the report



Select the landscape option.



You can now resize heading items etc.. to fit the new page size. You will now see why we created a portrait template first...

Note: You don't have to move the column and column values around to fit as these will be moved or deleted as part of the normal report build process.

Save and exit.

You now have your two basic templates

5 Creating your own custom report category

This is a one off process unless you create large numbers of reports and want to place them in separate categories

Use the same procedure in the section **Create a new report template category**

Note: When a category is first created you will be required to add the first report "New Report 1" to the category. Just do this - you can delete it later.

6 Creating a new report using your template

For this part of the tutorial we will create a simple report showing the self service users by the number of page requests. This report could be used to identify who is hammering your web servers....

6.1 First write and test your SQL for the report

Writing the SQL is the hardest part of writing any report.

For this section of the tutorial we will use the simple SQL below for listing the self service users and the number of page requests "today". (Later in the tutorial we will add a date variable.)

```
SELECT fu.user_name,  
       sum(isess.counter) page_requests
```

```
FROM icx.icx_sessions isess,  
      applsys.fnd_user fu  
WHERE isess.user_id = fu.user_id  
      and isess.first_connect > trunc(sysdate)  
GROUP by fu.user_name  
ORDER by 2 desc;
```

For each report we need to add a couple of columns to provide the report header information. In this tutorial we will add today's date formatted with the day of the week and the database SID name.

```
SELECT to_char(sysdate, 'DD-Mon-YY fm(Day)') page_heading_date,  
       database_name.sid_name page_heading_sid_name,  
       fu.user_name,  
       sum(isess.counter) page_requests  
FROM icx.icx_sessions isess,  
      applsys.fnd_user fu,  
      (SELECT name sid_name  
       FROM gv$databases  
       WHERE inst_id = 1) database_name  
WHERE isess.user_id = fu.user_id  
      and isess.first_connect > trunc(sysdate)  
GROUP by fu.user_name,  
         database_name.sid_name  
ORDER by 4 desc
```

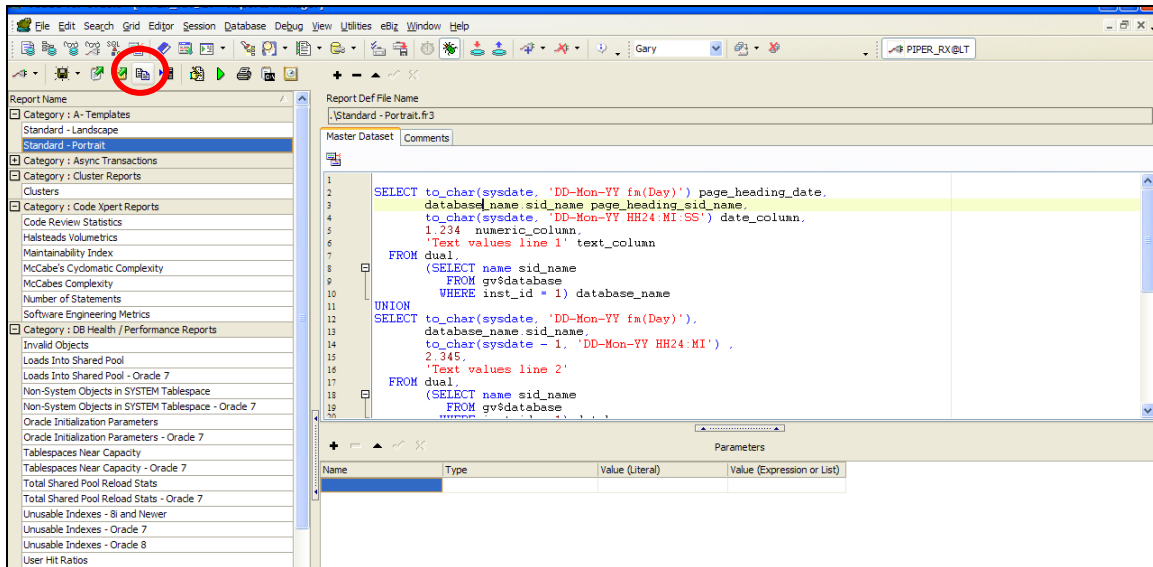
Note 1: You will need to remove the SQL execute semicolon before adding the SQL to the report manager.

Note 2: The column aliases will be used as field names in the report designer so make them meaningful.

6.2 Copy and rename the Standard – Portrait report to your custom category

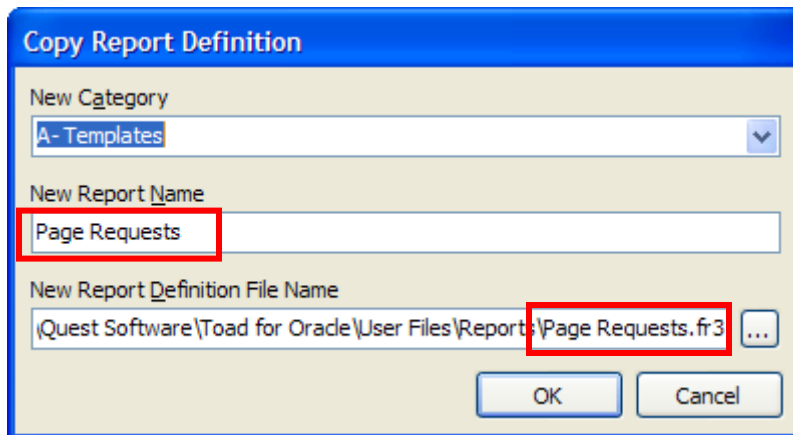
Select the template you wish to use for your report and select the copy report icon.

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Select the category the report is to be copied to – the drop down list will show all the available report categories.

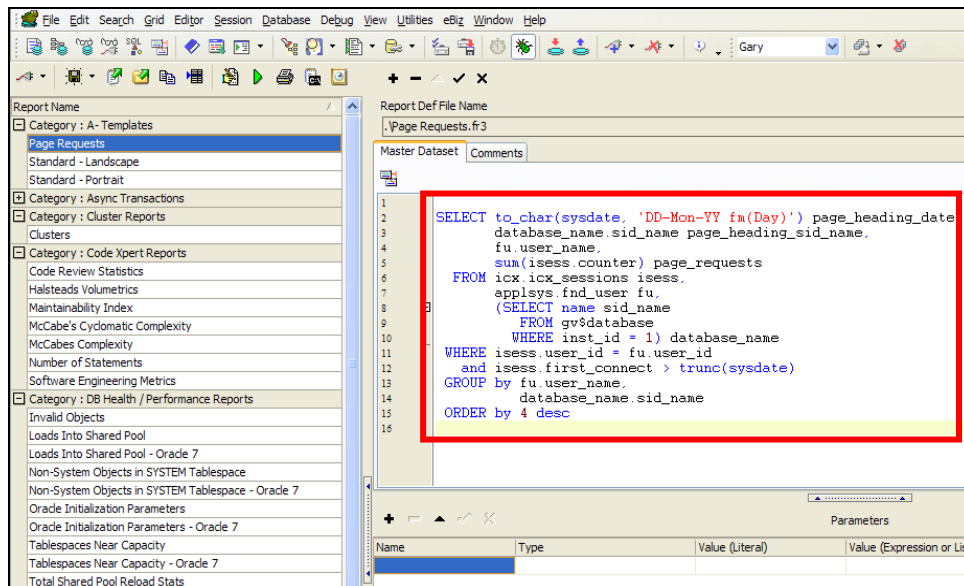
Enter the report name and the report file name and select OK.



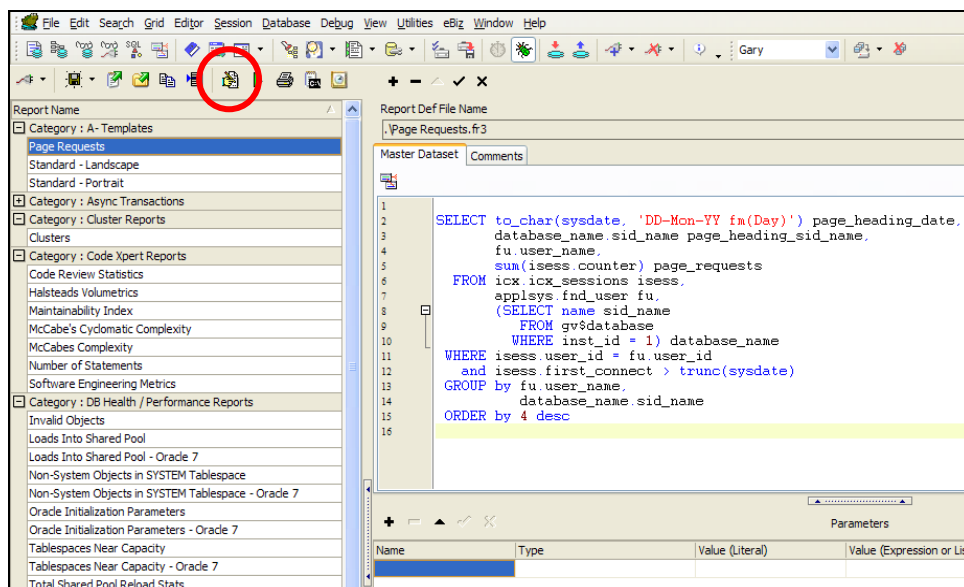
Trick: Up to and including TOAD® 9.6 - The category and any changes you have made to report names and any SQL will only be saved when you exit the TOAD® Reports Manager. (This may have been changed in subsequent TOAD® releases.)

Replace the SQL with your new SQL excluding the SQL run semicolon.

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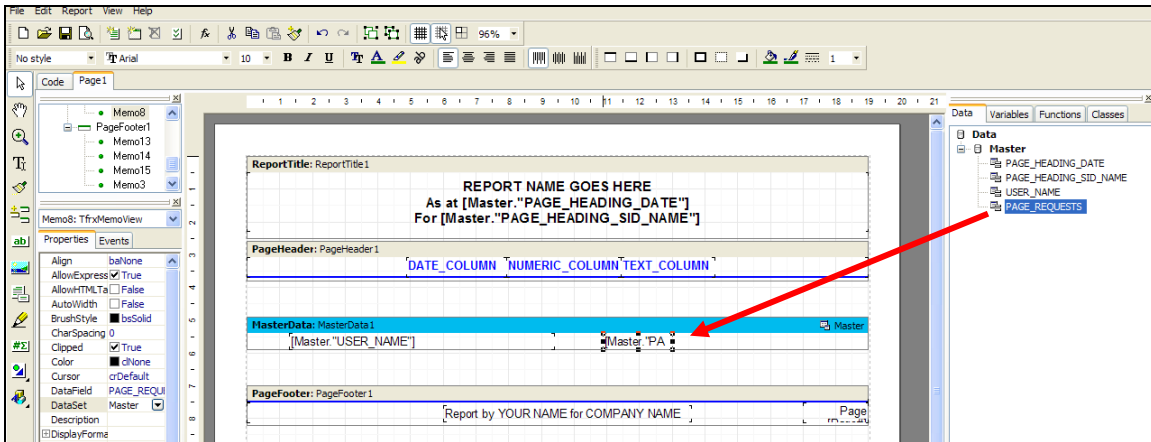
Then edit the report by selecting the Design Selected Report icon.



6.3 Editing the new report

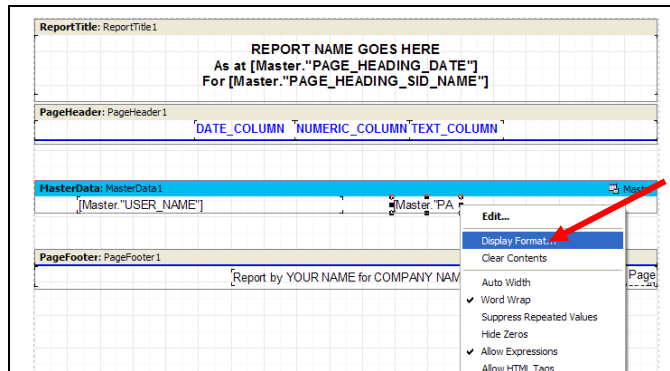
The first thing to do is delete the existing data columns from the Master Data section by selecting each item and deleting it with the [Del] key.

Then drag and drop the two columns **user_name** and **page_requests** from the data section into the Master Data section of the report, position and resize as required.

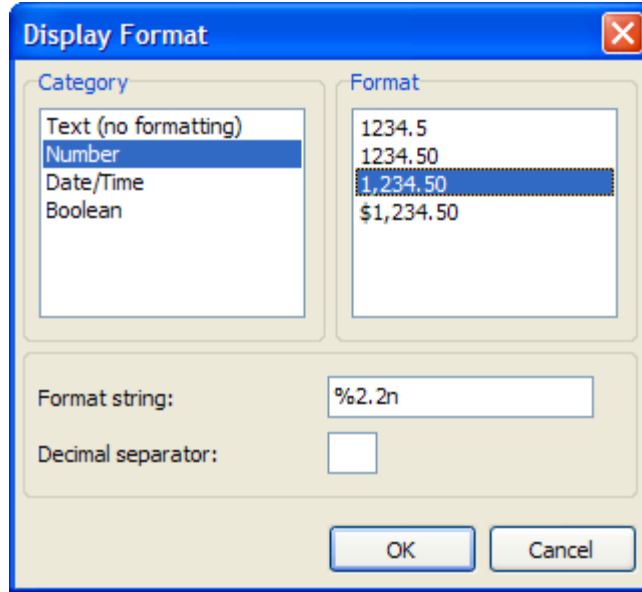


6.4 Formatting numeric values

To format the numeric **page_requests** value, right click on the **page_requests** attribute and select Display Format...

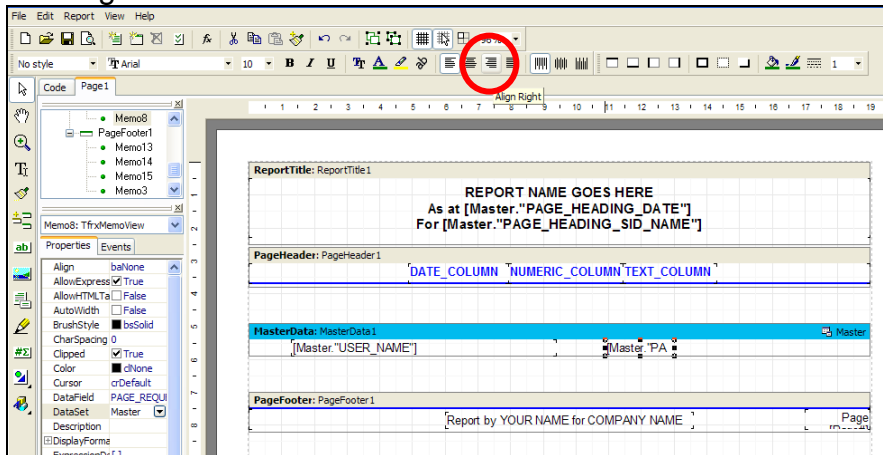


Select the number category and the format you wish to use.



The number of decimal places displayed can be changed by varying the format string. Changing the value %2.2n to %2.1n will change the displayed decimal place from two to one decimal places

To Right align the column value, whilst the item is selected click the right align icon on the design menu bar.



Finally:

- ❖ Rename position the column headings
- ❖ Change the heading to the name of the report
- ❖ Save and exit

It is done...

SELF SERVICE PAGE REQUESTS	
As at 30-Jun-09 (Tuesday)	
For LTVIS	
User Name	Page Requests
SYSADMIN	43
GUEST	18

7 How to add a variable to your report

By adding a date variable to the report you can report on page request activity for any given date (providing you have the data in the [icx_sessions](#) table)

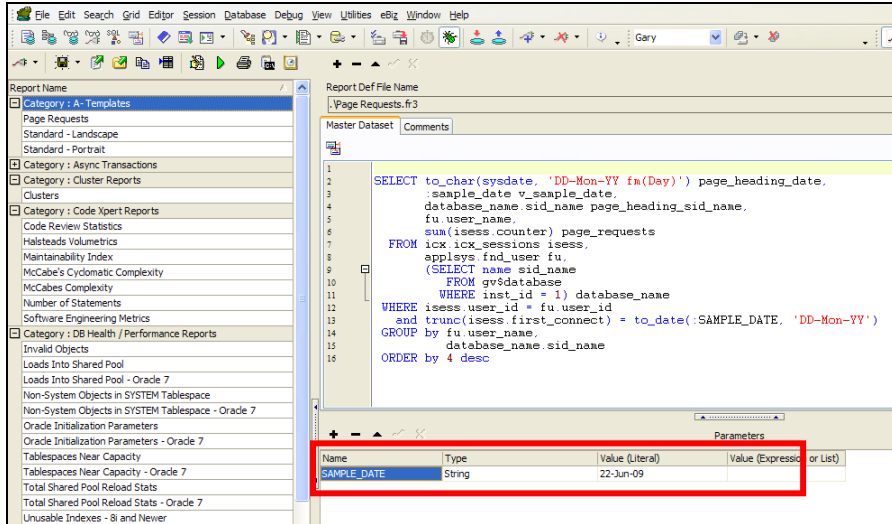
First, change the SQL in the TOAD® Report Manager to include a date variable SAMPLE_DATE

```
SELECT to_char(sysdate, 'DD-Mon-YY fm(Day)') page_heading_date,
       :SAMPLE_DATE v_sample_date,
       database_name.sid_name page_heading_sid_name,
       fu.user_name,
       sum(issess.counter) page_requests
FROM icx.icx_sessions issess,
     applsys.fnd_user fu,
     (SELECT name sid_name
      FROM gv$databases
      WHERE inst_id = 1) database_name
WHERE issess.user_id = fu.user_id
      and trunc(issess.first_connect) =
          to_date(:SAMPLE_DATE, 'DD-Mon-YY')
GROUP by fu.user_name,
         database_name.sid_name
ORDER by 4 desc
```

Note: I have also changed [issess.first_connect](#) to [trunc\(issess.first_connect\)](#). This should not cause a performance issue as there was no index on this field in the first place.

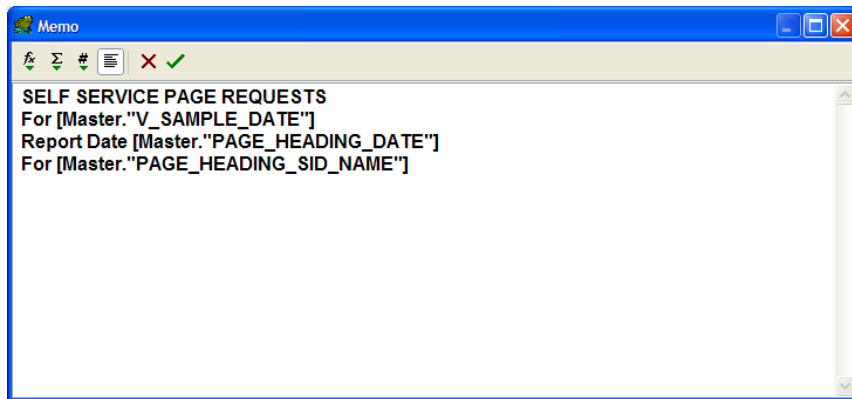
Add the variable SAMPLE_DATE to the parameters section:

Tutorial – Creating TOAD® Reports (July 2009)



The trick here is that the variable defined in the parameter section does not have a leading full colon (:), whereas any reference in the SQL statement must have the leading full colon (:).

Change the report header to include the new value V_SAMPLE_DATE alias for the :SAMPLE_DATE column in the SQL.



Save and exit.

The Final Report.

SELF SERVICE PAGE REQUESTS	
For 22-Jun-09	
Report Date 30-Jun-09 (Tuesday)	
For LTVIS	
User Name	Page Requests
SYSADMIN	17
GUEST	9

Don't forget to save a copy of your templates and reports (TRD format) so you can take them with you or send the report to another user.

8 Disclaimer

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