HOW TO CHANGE THE COLOUR OF REPORT TEXT BASED ON THE TEXT'S VALUE

LESSON 6

A step by step guide on how change text colour based on the text's value in a TOAD® Reports Manager Report

By
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Introduction

In this lesson we will demonstrate how to change the colour of report text based on the text's value

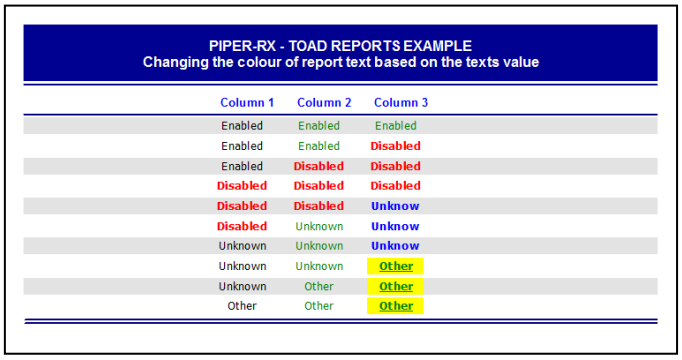
We have provided a simple a three (3) column status report (***How to colour report text – Start***) where each column has the values Enabled, Disabled, Unknown or Other. With this report we will demonstrate three (3) methods for changing the text's colour based value of the text:

- For column one (1) of the report we will use the single colour highlight method
- For column two (2) of the report we will change the default text colour and use the single colour highlight method
- For column three (3) of the report we will use report code to set the text colour

and then, just for fun, we will demonstrate how to highlight the background of alternate rows in the report.

What we are aiming for is a report that looks like the following example report:

Example Report - How to colour report text – Final

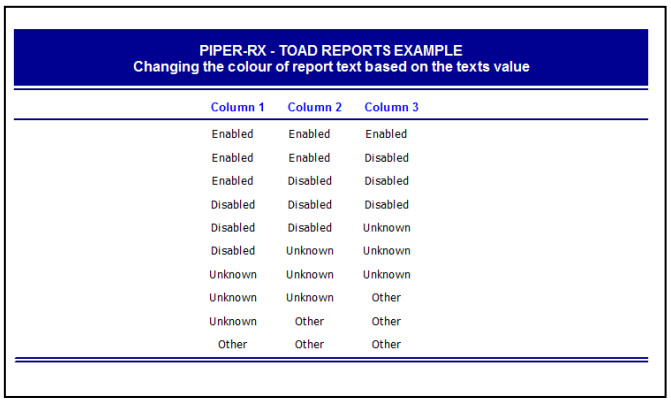


PIPER-RX - TOAD REPORTS EXAMPLE
Changing the colour of report text based on the texts value

Column 1	Column 2	Column 3
Enabled	Enabled	Enabled
Enabled	Enabled	Disabled
Enabled	Disabled	Disabled
Disabled	Disabled	Disabled
Disabled	Disabled	Unknow
Disabled	Unknown	Unknow
Unknown	Unknown	Unknow
Unknown	Unknown	Other
Unknown	Other	Other
Other	Other	Other

Our starting point in this lesson is the report ***How to colour report text – Start*** which looks like the following:

Example Report - How to colour report text – Start



PIPER-RX - TOAD REPORTS EXAMPLE
Changing the colour of report text based on the texts value

Column 1	Column 2	Column 3
Enabled	Enabled	Enabled
Enabled	Enabled	Disabled
Enabled	Disabled	Disabled
Disabled	Disabled	Disabled
Disabled	Disabled	Unknown
Disabled	Unknown	Unknown
Unknown	Unknown	Unknown
Unknown	Unknown	Other
Unknown	Other	Other
Other	Other	Other

Example Reports

With this lesson we have provided two (2) TOAD Report Manager reports in the TRD format. Both these reports can be down loaded from the www.**PIPER-Rx**.com web page:

www.piper-rx.com/pages/reports_lessons/lesson_6.zip

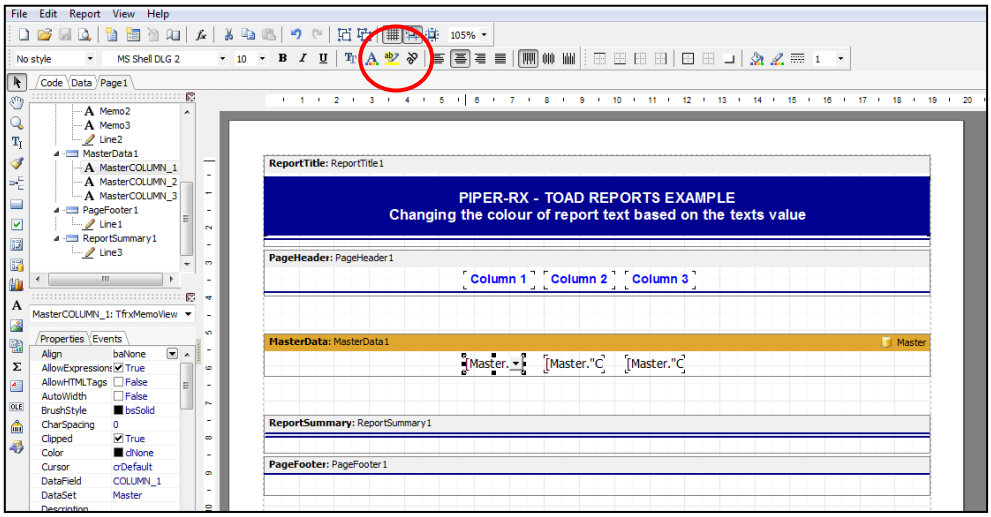
The first report ***How to colour report text – Start*** is the start report for this lesson; it contains the base SQL and layout only. You can use this report to add components as we proceed through the lesson. The second report ***How to colour report text – Final*** is the finished report just in case you want to skip to the end of the story....

Column one - Single Colour Highlight method

Using the report editors highlight option it is possible to change the colour of an attribute's text based on its value. In this example we will set the highlight colour to **Bold Red** for the text value "Disabled".

Step 1

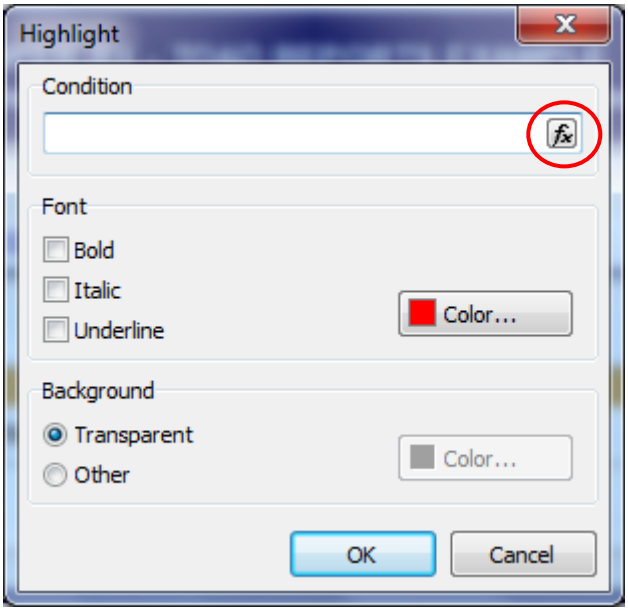
Single click the master data column ***column_1*** to focus the object
Select the highlight option shown in the red circle



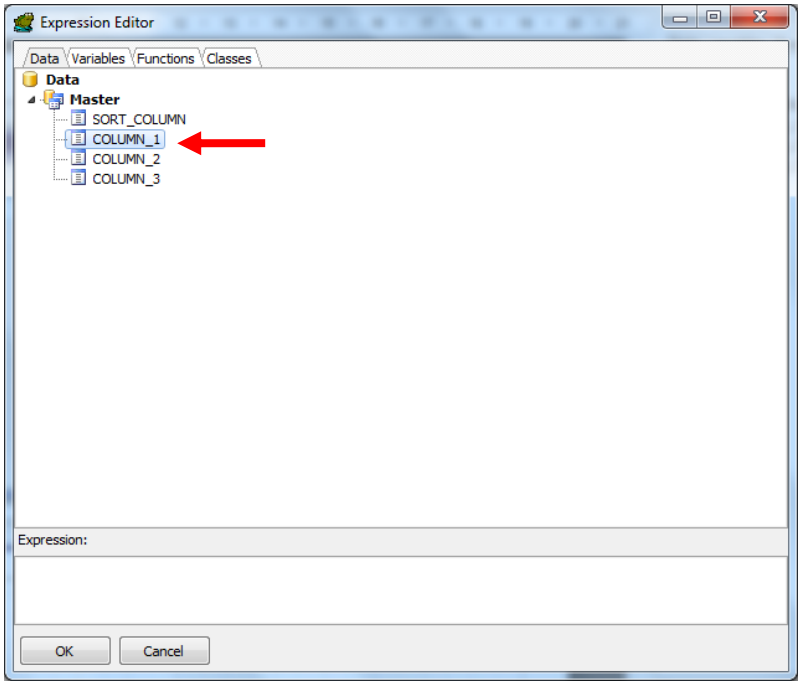
You will be presented with the Highlight dialogue box

Step 2

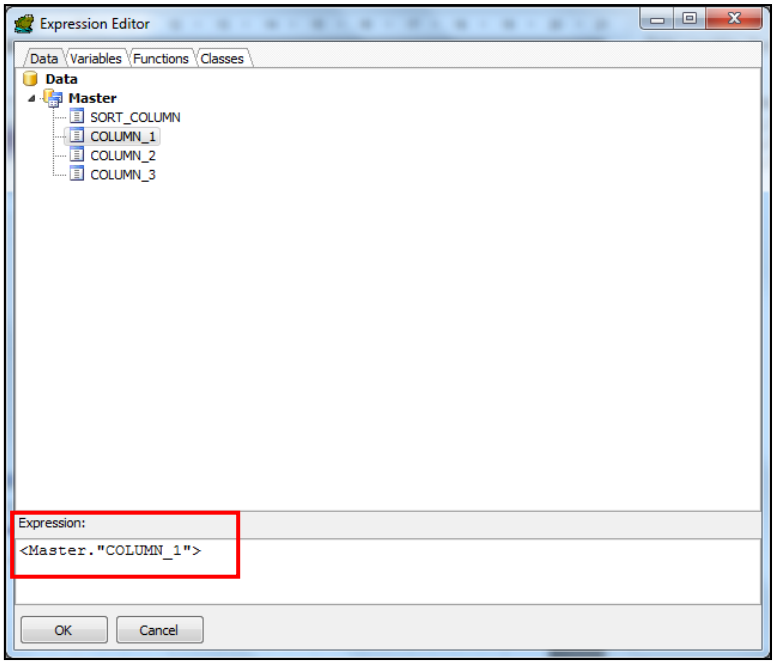
In the Highlight dialogue box, click on the function option shown in the red circle



You will then be presented with the expression editor

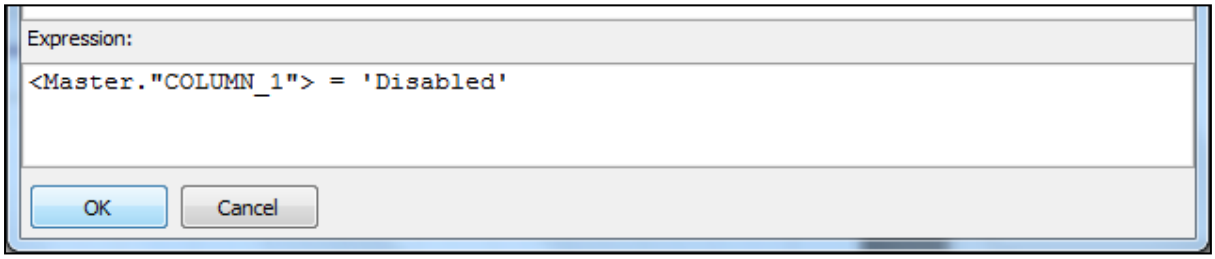


Double click the ***column_1*** entry which will populate the bottom section "Expression:" of the Expression Editor with the report data column selected

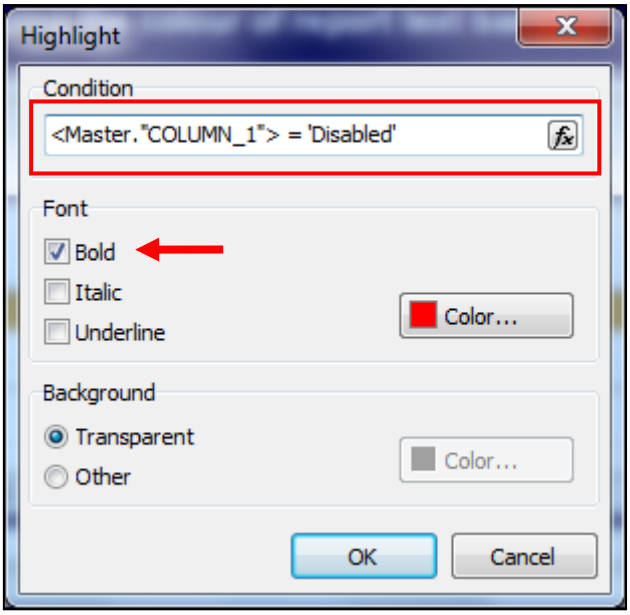


You then need to add the reminder of the expression: **= 'Disabled'**

Note: The text value is case sensitive



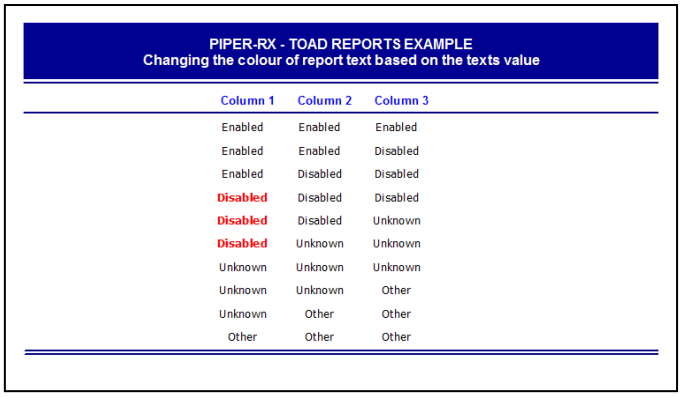
On clicking the [OK] button you will be returned to the Highlight dialogue box with the required expression filled in



The highlight colour defaults to red, so there is no need to change the highlight colour

Check the bold box and then OK

Save and run the report. Your report should now look like the following example:



PIPER-RX - TOAD REPORTS EXAMPLE
Changing the colour of report text based on the texts value

Column 1	Column 2	Column 3
Enabled	Enabled	Enabled
Enabled	Enabled	Disabled
Enabled	Disabled	Disabled
Disabled	Disabled	Disabled
Disabled	Disabled	Unknown
Disabled	Unknown	Unknown
Unknown	Unknown	Unknown
Unknown	Unknown	Other
Unknown	Other	Other
Other	Other	Other

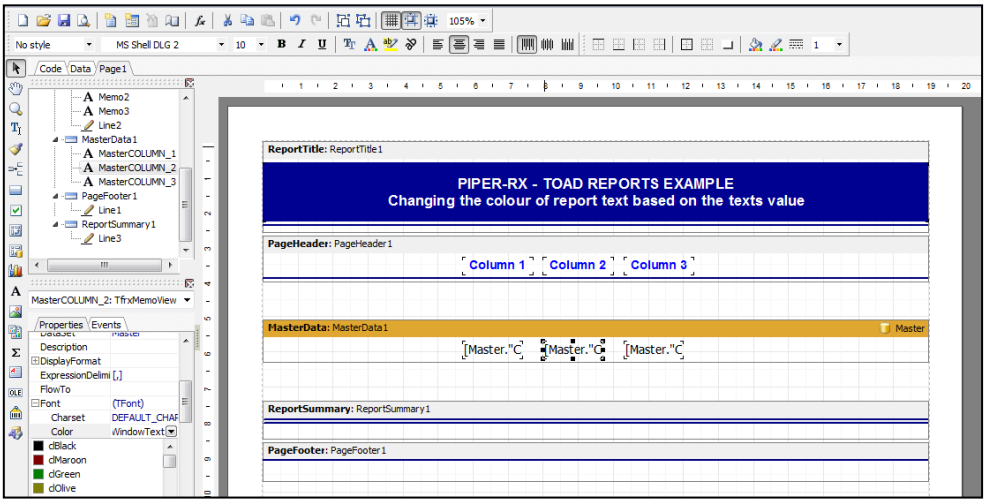
Column Two – Two Colour Highlight method

In this example we will display all text for column 2 in green and display the text "Disabled" in **bold red**.

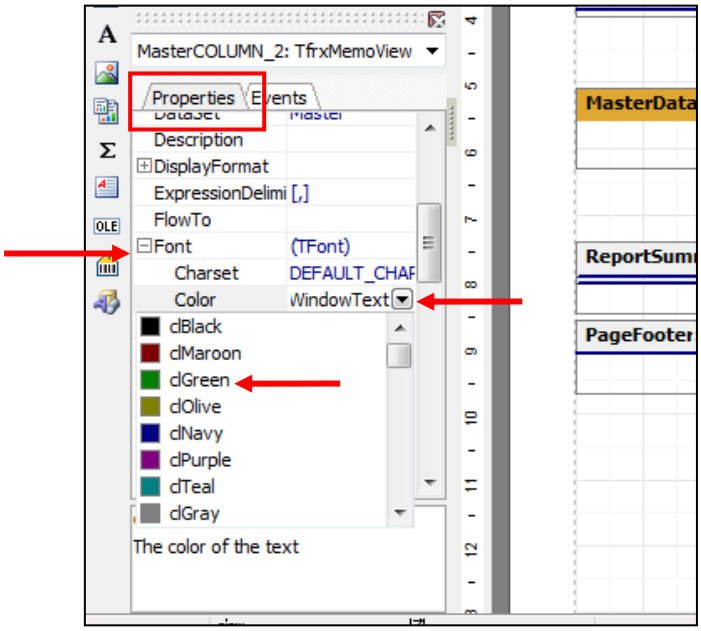
This is a two step process. Firstly, we will set the default colour for Column 2 to Green and then set the highlight colour for Column 2 to Bold Red for the text "Disabled".

Step 1 – Set the default font for column 1 to green

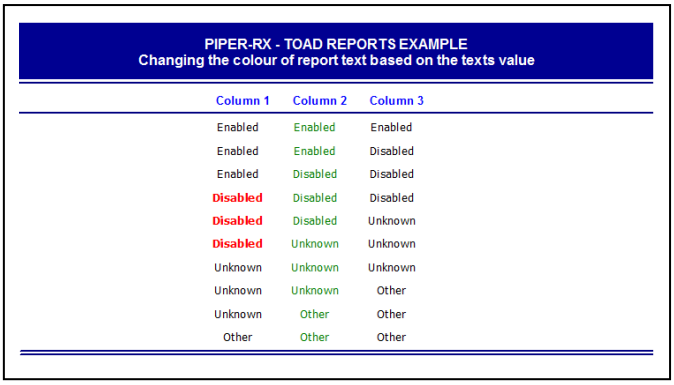
In the report editor select to highlight the master data column ***column_2***



Next select the "Font" option from the properties section of the editor screen
Under properties select the list of values down button for the "Color" option
Then select the "clGreen" option



Save and run the report, all values for column 2 should now be green as shown in the example.

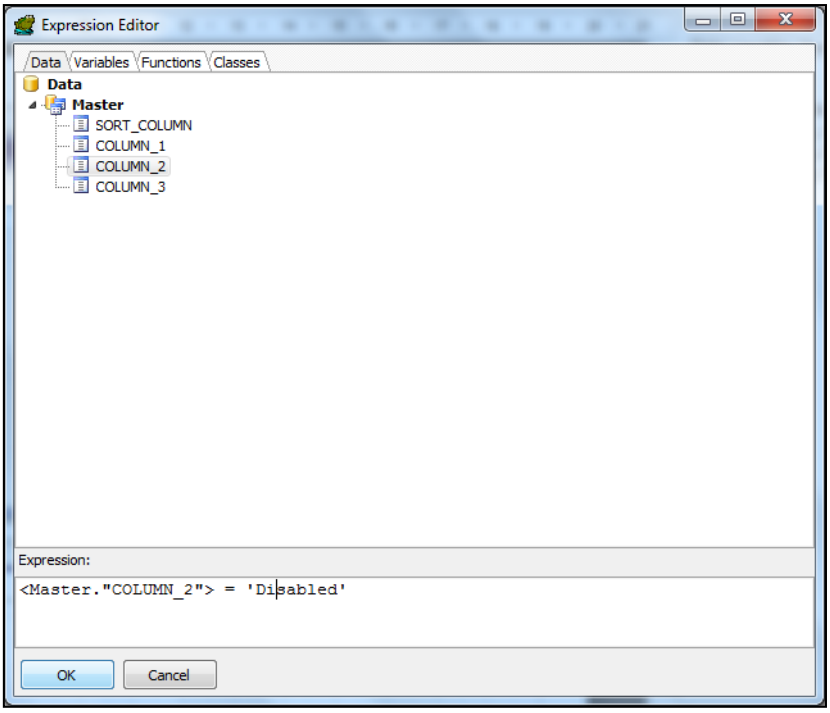


PIPER-RX - TOAD REPORTS EXAMPLE
Changing the colour of report text based on the texts value

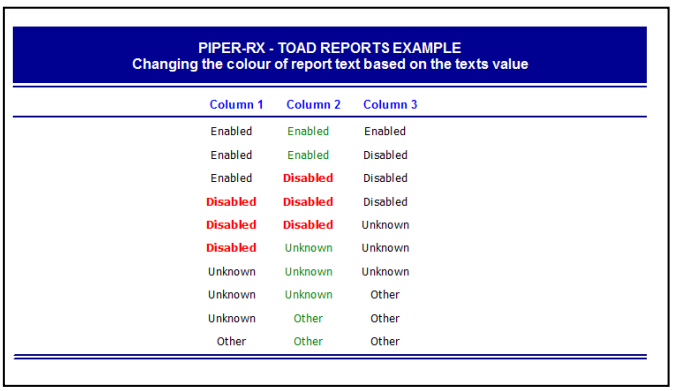
Column 1	Column 2	Column 3
Enabled	Enabled	Enabled
Enabled	Enabled	Disabled
Enabled	Disabled	Disabled
Disabled	Disabled	Disabled
Disabled	Disabled	Unknown
Disabled	Unknown	Unknown
Unknown	Unknown	Unknown
Unknown	Unknown	Other
Unknown	Other	Other
Other	Other	Other

Step 2 – Add Bold Red highlight for column 2

Repeat all the steps from the first example highlighting ***column 2*** in bold red when the value of the text is 'Disabled'



Save and run your report, you should now see the entries for disabled in column 2 displayed in bold and red



PIPER-RX - TOAD REPORTS EXAMPLE
Changing the colour of report text based on the texts value

Column 1	Column 2	Column 3
Enabled	Enabled	Enabled
Enabled	Enabled	Disabled
Enabled	Disabled	Disabled
Disabled	Disabled	Disabled
Disabled	Disabled	Unknown
Disabled	Unknown	Unknown
Unknown	Unknown	Unknown
Unknown	Unknown	Other
Unknown	Other	Other
Other	Other	Other

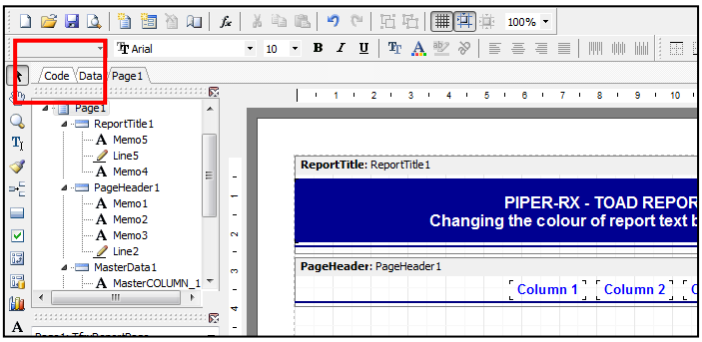
Column Three – Multi Colour Highlight method

In this part of the lesson we will use report code to change the colour of the text for column 3 based on the text's value:

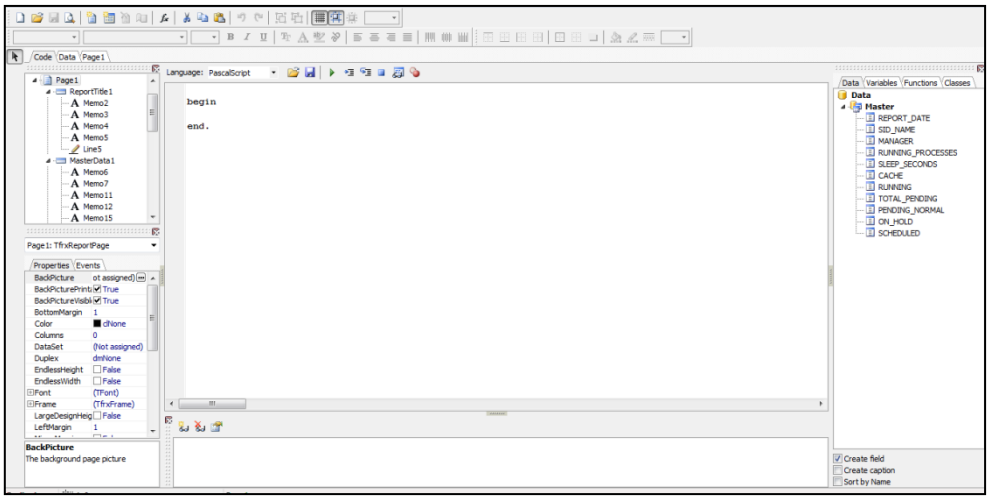
- Enabled to be displayed in green
- Disabled to be displayed in **bold red**
- Unknown to be displayed blue
- Other to be displayed in **underlined green on a yellow background**

Step 1 – Add report code

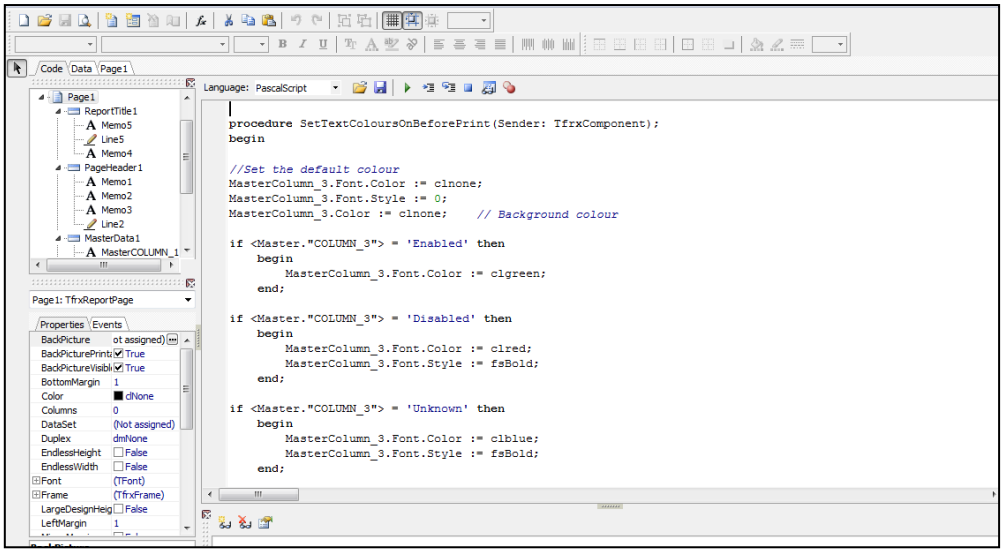
Open the report and select the report [code] tab



You will be presented with the report code page



Replace the default code "begin and end" statements with the code provided in **Appendix 1 - Report Code (Pascal format)**



Note: Don't forget to include the additional Begin, End statements at the end of the code; they are required.

Whilst the code is quite self-explanatory, it is worth pointing out the font variables:

To set the text colour

MasterColumn_3.Font.Color := clred;

To set the font style

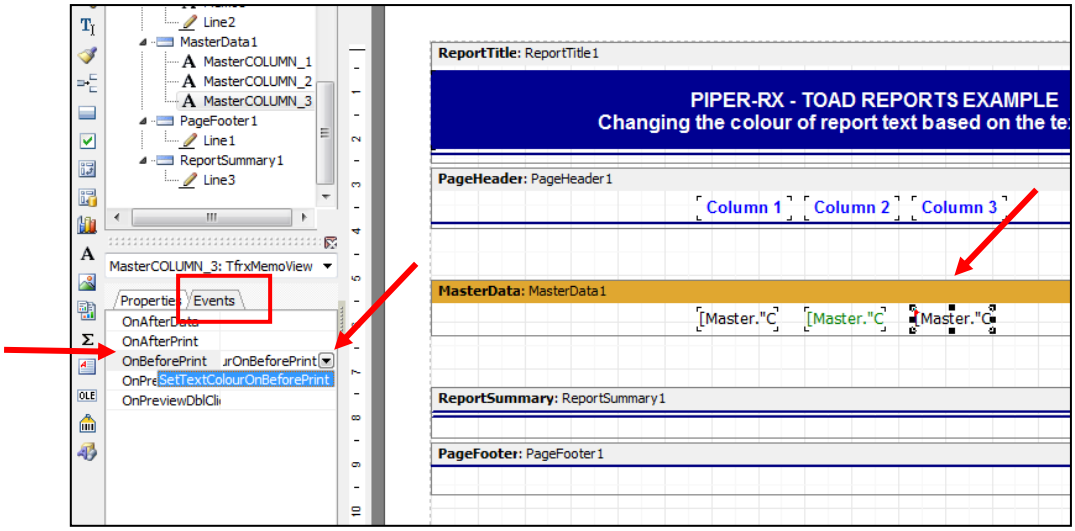
MasterColumn_3.Font.Style := fsBold + fsunderline;

To set the background colour

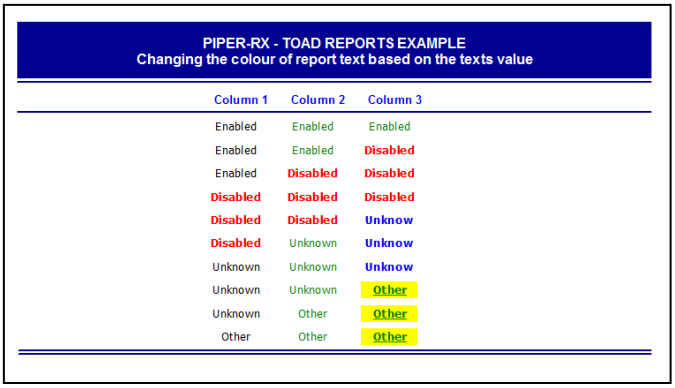
MasterColumn_3.Color := clyellow;

Step 2 - Assign the event code to the report

Select Master data ***column_3*** to highlight
Select the "Events" tab
Select the "OnBeforePrint" option
Use the list of value button to view the available code procedures created on the code page
Select the code procedure SetRowColourOnBeforePrint (should be to only one at this stage)



Save and run the report, it should now look like the finished example below:



Highlighting Alternate Rows

In this example we will add a memo field and size it to the same size as the master data section, we will then add code to change the background colour for alternate rows.

Step 1 – Create a memo field

Add a memo field to the master data section of the report and expand it to the same size as the masterData section itself.

Right click on the new memo filed and select the option "Send to Back"

Step 2 – Add code procedure

Select the reports code page
Add the following code to the code page

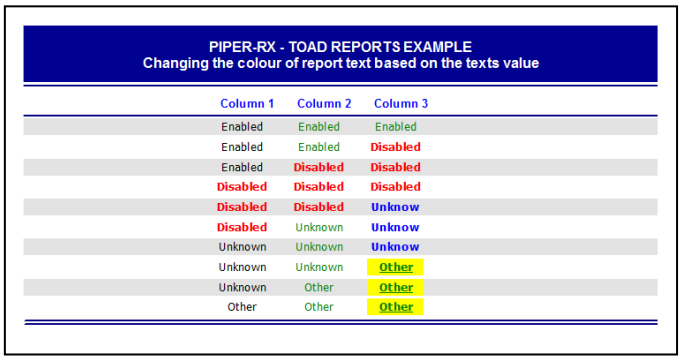

```
procedure SetRowColourOnBeforePrint(Sender: TfrxComponent);
begin

Memo6.Color := clnone;    // Reset default background colour

if  <Line#> mod 2 THEN
   begin
   memo6.Color := cl3dlight;
   end;
end;
```

Step 3 - Assign the event procedure to the memo field

Select the new memo attribute to focus the attribute
Select the "OnBeforePrint" option
Use the list of value button to view the available code procedures created on the code page
Select the code procedure SetRowColourOnBeforePrint (should be to only one at this stage)
Save and run the report.

Your report should now look like the finished report example below:

Example Report - How to colour report text – Final



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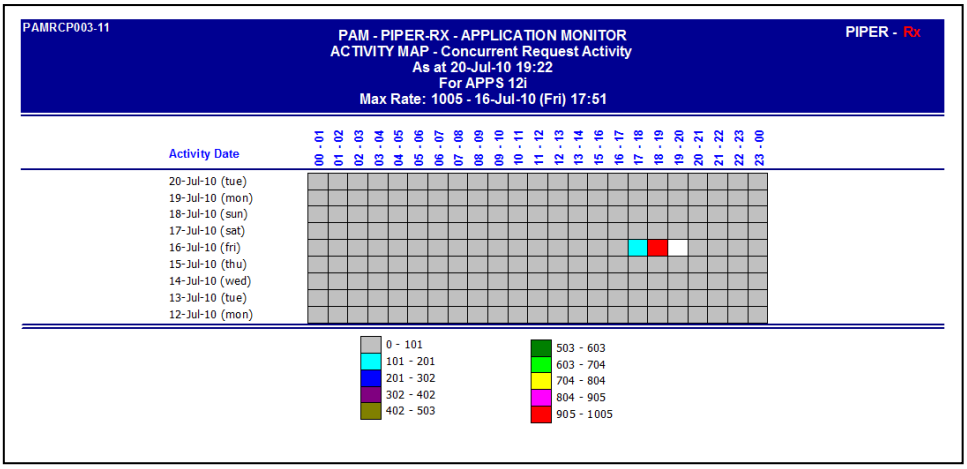
Changing the colour of report text based on the texts value

Column 1	Column 2	Column 3
Enabled	Enabled	Enabled
Enabled	Enabled	Disabled
Enabled	Disabled	Disabled
Disabled	Disabled	Disabled
Disabled	Disabled	Unknow
Disabled	Unknown	Unknow
Unknown	Unknown	Unknow
Unknown	Unknown	Other
Unknown	Other	Other
Other	Other	Other

Anything is possible... As per the example below, with a lot of work and some creative SQL we were able to produce an OEBS (**O**racle **E**-**B**usiness **S**uite) application activity map.



Want to know more?

There is loads more ***FREE*** information on TOAD Reports Manager reports and also on all aspects of OEBS Application Administration at the **PIPER-Rx** website. I have been working with TOAD Reports Manager since its inception and have had over 20+ years working with Oracle (the product, not the Company) and Oracle E-Business Suite (since Release 5). Since the late 1990's I have spent more time sharing these learnings and the most popular papers and case studies I have presented are available at www.**PIPER-Rx**.com as well as over 250 TOAD Reports Manager reports and a whole host of Tips and Reports I have used throughout my career.

All information is at the **PIPER-Rx**.com website ***FREE*** so why not check it out….I hope you find it useful! **– 40,000+ downloaders to date can't be wrong!**

Appendix 1 - Report Code (Pascal format)

```
procedure SetTextColoursOnBeforePrint(Sender: TfrxComponent);

begin

//Set the default colour
MasterColumn_3.Font.Color := clnone; // Set to default
MasterColumn_3.Font.Style := 0;      // Clear style
MasterColumn_3.Color := clnone;      // Background colour

if <Master."COLUMN_3"> = 'Enabled' then
    begin
        MasterColumn_3.Font.Color := clgreen;
    end;

if <Master."COLUMN_3"> = 'Disabled' then
    begin
        MasterColumn_3.Font.Color := clred;
        MasterColumn_3.Font.Style := fsBold;
    end;

if <Master."COLUMN_3"> = 'Unknown' then
    begin
        MasterColumn_3.Font.Color := clblue;
        MasterColumn_3.Font.Style := fsBold;
    end;

if <Master."COLUMN_3"> = 'Other' then
    begin
        MasterColumn_3.Font.Color := clgreen;
        MasterColumn_3.Font.Style := fsBold + fsunderline;
        MasterColumn_3.Color := clyellow;
    end

end;

begin

end.
```

Appendix 2 – Report SQL

```
SELECT 1 sort_column,
       'Enabled' column_1,
       'Enabled' column_2,
       'Enabled' column_3
  FROM dual
UNION
SELECT 2, 'Enabled', 'Enabled', 'Disabled'
  FROM dual
UNION
SELECT 3, 'Enabled', 'Disabled', 'Disabled'
  FROM dual
UNION
SELECT 4, 'Disabled', 'Disabled', 'Disabled'
  FROM dual
UNION
SELECT 5, 'Disabled', 'Disabled', 'Unknown'
  FROM dual
UNION
SELECT 6, 'Disabled', 'Unknown', 'Unknown'
  FROM dual
UNION
SELECT 7, 'Unknown', 'Unknown', 'Unknown'
  FROM dual
UNION
SELECT 8, 'Unknown', 'Unknown', 'Other'
  FROM dual
UNION
SELECT 9, 'Unknown', 'Other', 'Other'
  FROM dual
UNION
SELECT 10, 'Other', 'Other', 'Other'
  FROM dual
ORDER by 1
```

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