

Quick Start

Rapporter i Visu+

Frågor? Kontakta oss!

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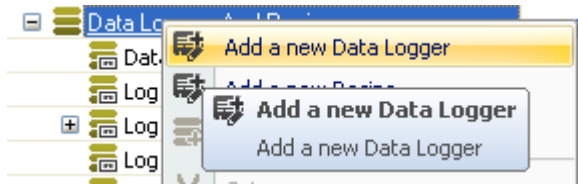
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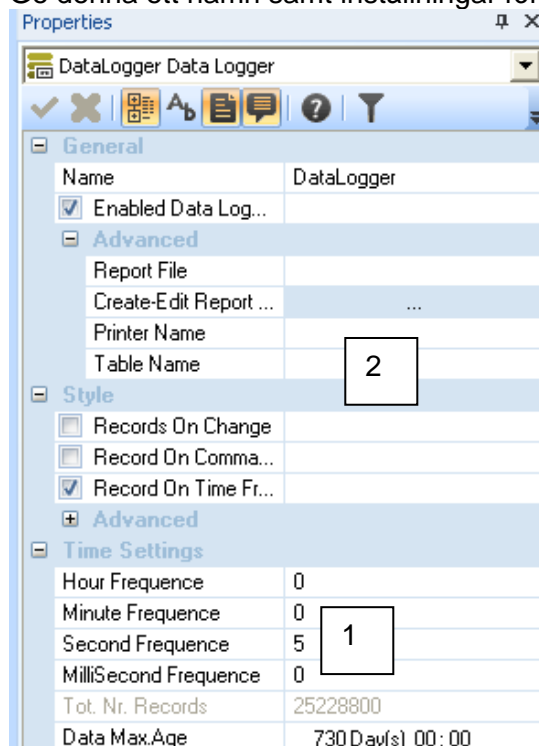
För att generera och skriva ut rapporter i Visu+ så används tilläggsprogrammodulen Report Designer. För att skapa en rapport så behöver vi ha någon historik sparad i projektet. Nedan beskrivs steg för steg hur först historik skapas och därefter rapporter som baseras på denna historik.

Steg 1: Skapa historik

Börja med att skapa en ny DataLogger



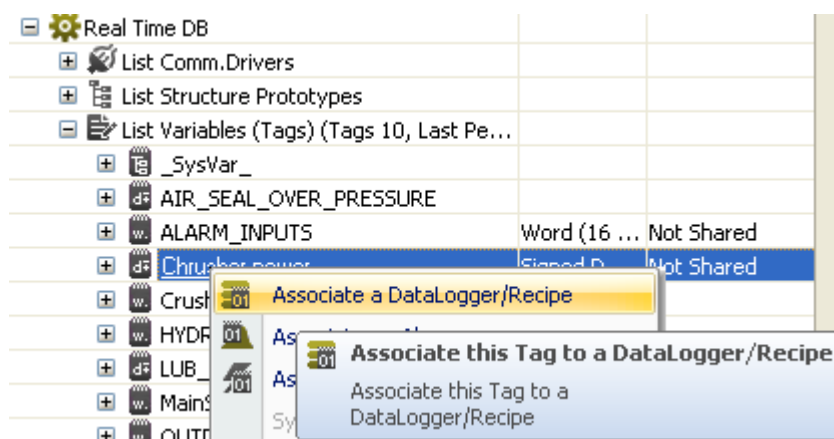
Högerklicka på Data Logger och Recipes och välj Add a new Data Logger. Ge denna ett namn samt inställningar för hur den ska logga.



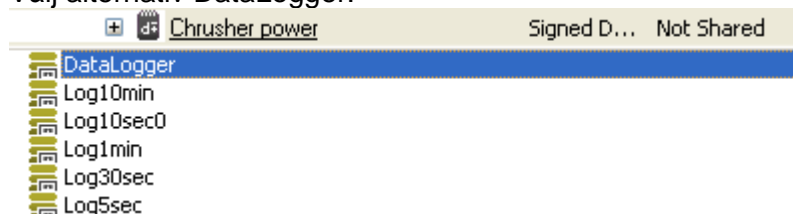
Ange att den ska logga samt i fall man vill att den ska spara värden kontinuerligt enligt ett tidsintervall. I exemplet ovan anges en frekvens på 5 sek (1). Tabellnamnet i ODBC-källan blir automatiskt detsamma som Name (DataLogger) om inget annat anges i Table Name (2)

För att därefter knyta en variabel till denna DataLogger så kan man gå tillväga på två sätt varav alt. 2 är att föredra.

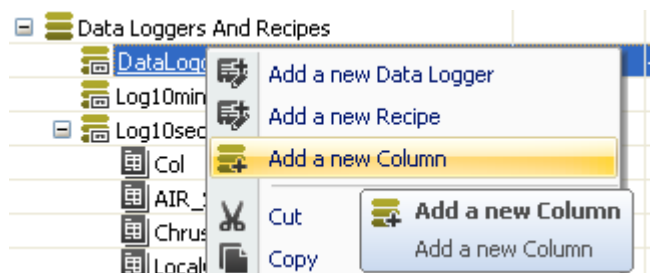
Alt 1: högerklicka på en variabel i Real Time DB och associera denna med DataLogger. Dubbelklicka på den logger som ska användas.



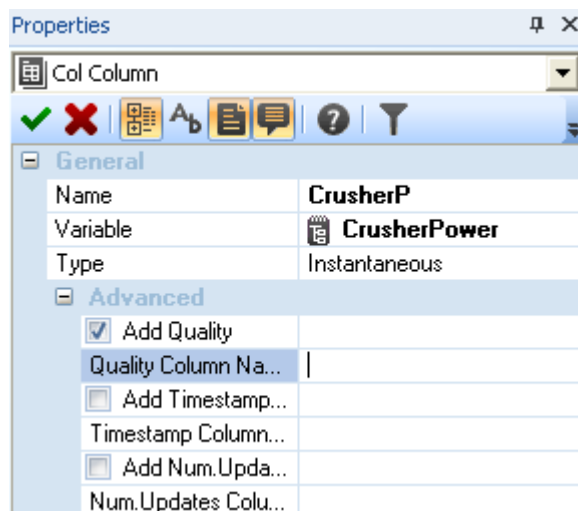
Välj alternativ DataLogger.



Alt 2: Högerklicka på DataLogger och välj *Add a new Column*.



Markera den nya kolumnen som nu heter *Col*. Ge den ett nytt namn och peka ut en variabel som ska användas för lagring i tabellen.



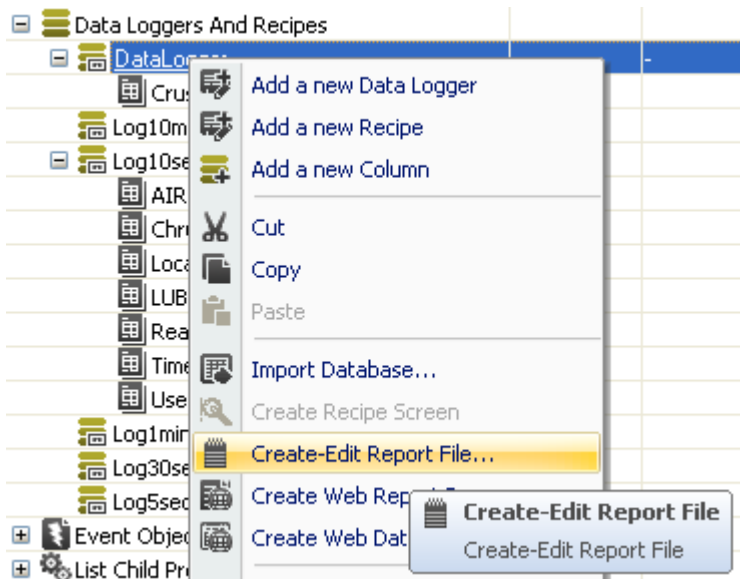
I exemplet ovan har vi nu skapat ett kolumnnamn som heter CrusherP och som knyts med variabeln CrusherPower. Vi kan också välja att lägga till ytterligare kolumner för *Quality*, *TimeStamp* samt *Numeric Updates*. Detta för att knyta ytterligare information till historiken.

- Quality sparar kvaliteten på OPC-variabeln, Oftast Bad eller Good. Notera att det på Properties för DataLogger finns en egenskap för att bara logga då just Quality = Good.
- TimeStamp lägger till tid och datum för när loggningen skedde.
- Num. Update är en räknare för att åskådligöra hur många loggningar som har skett.

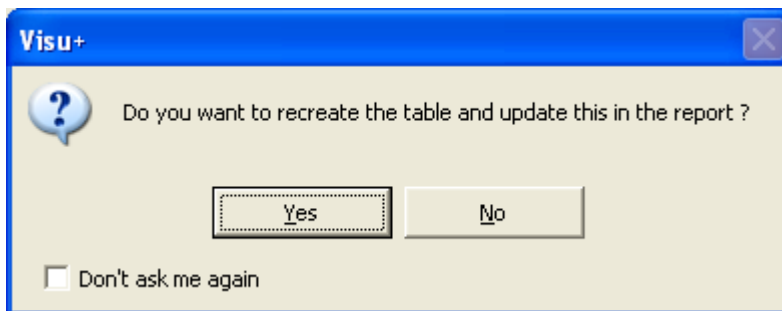
När detta är klart så kommer första gången Visu+ runtime startas en databas att skapas samt tabell för denna historik att initieras. **Notera att ändringar i struktur och historik kan ändras efter start för en tabell men att historiken och eventuella rapporter kan skadas. Försiktighet krävs!**

Steg 2: Skapa en rapport.

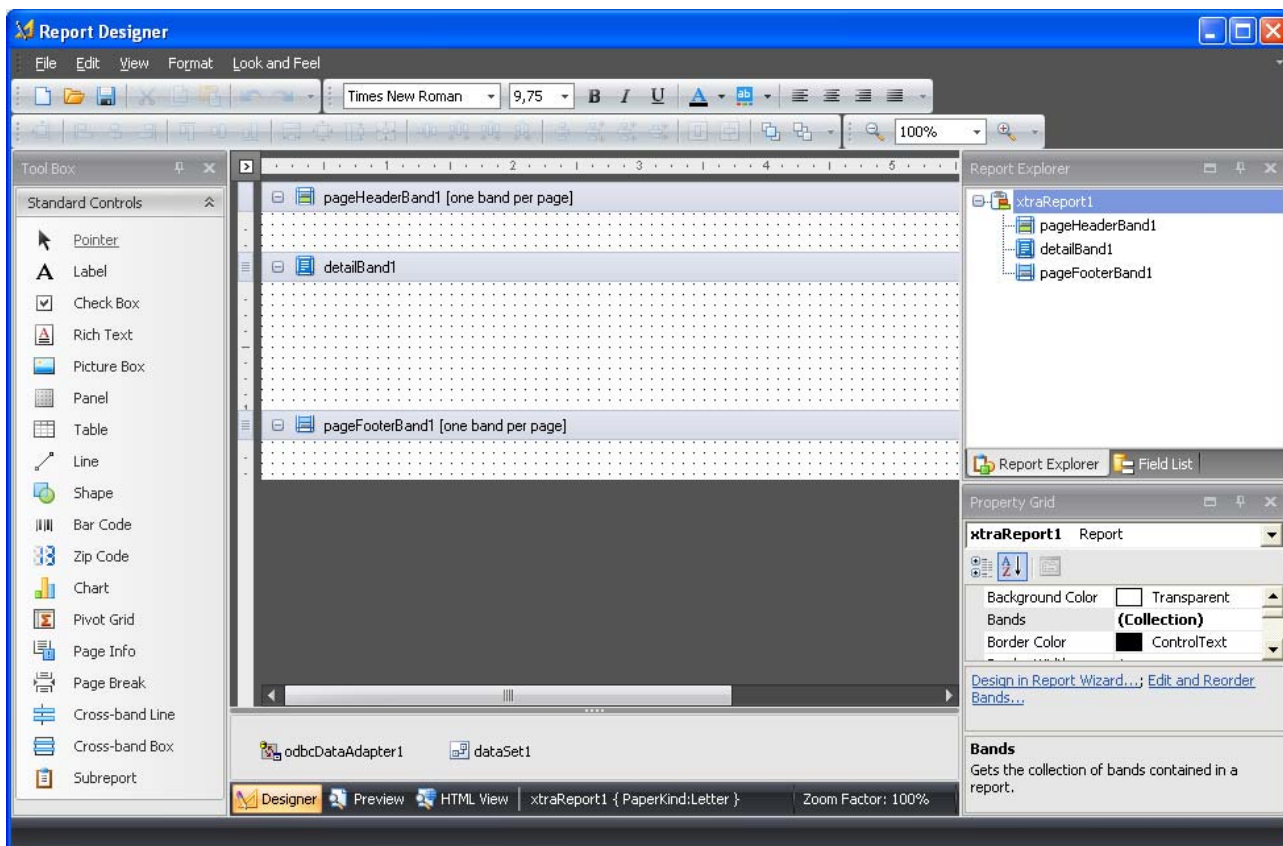
För att skapa en rapport så behöver den vara knuten till en tabell eller källa. Lättast görs detta genom att högerklicka på en DataLogger och välj Create Edit Report File.



Ett nytt program kommer att öppnas.



Om ovanstående fråga ställs så välj Yes och gå vidare. Notera att det kan ta lite tid att skapa tabeller, ODBC-källor samt rapportstruktur.



Report Designer är ett Phoenix-specifikt rapportprogram. I detta program skapas en rapportstruktur efter önskemål. Hjälpfilen till denna är att rekommendera men i denna guide beskrivs hur vi presenterar en tabell med värden.

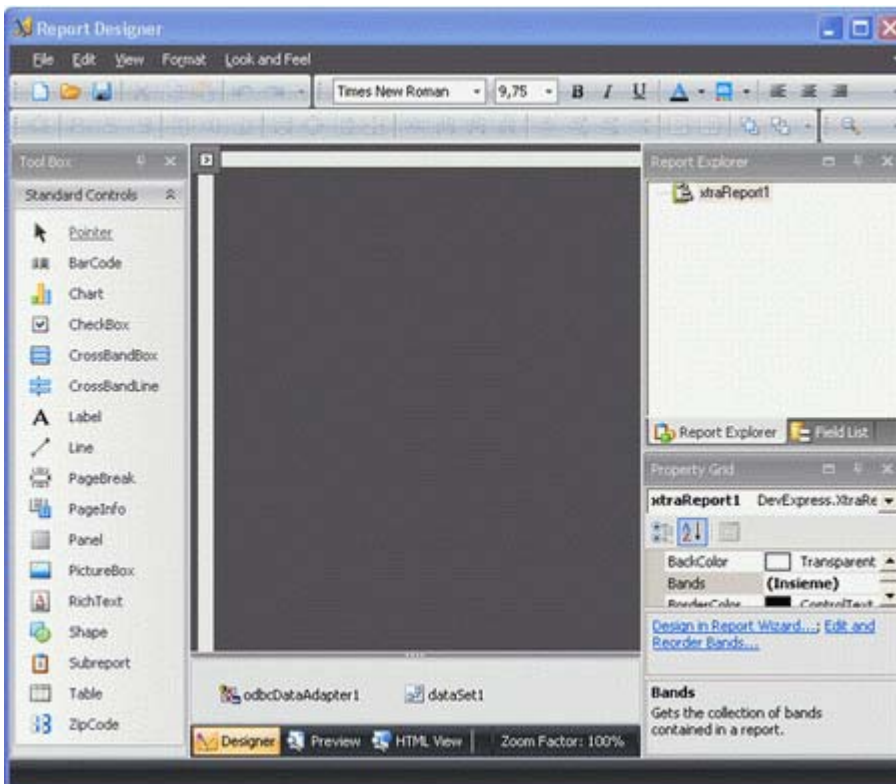
Nedan följer nu ett exempel som är mycket bra och kommer från hjälpen. Det är förvisso på engelska men vi får avsluta det så här:

Help on Line - Visu+ Rel. 2.0x

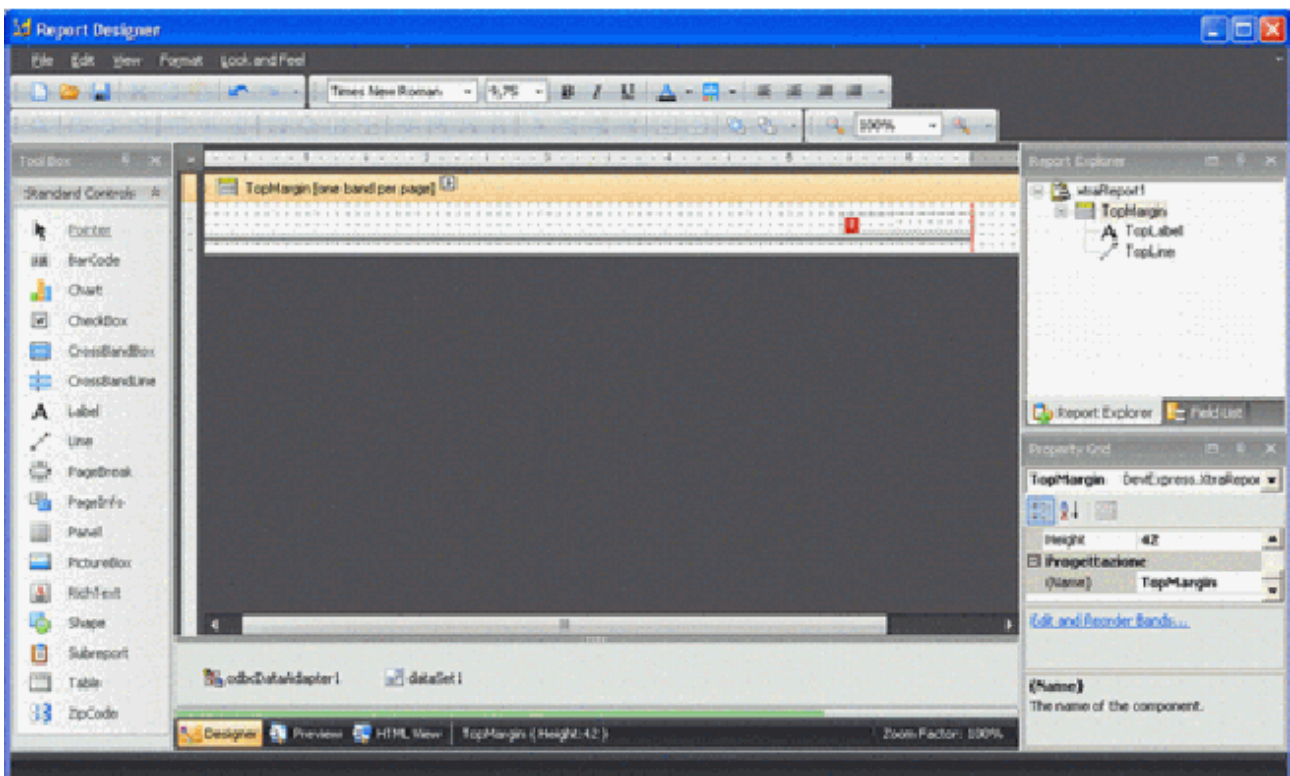
How to create a Report

This is an example to show you how to create a report using the Report Designer for displaying data recorded by a Data Logger:

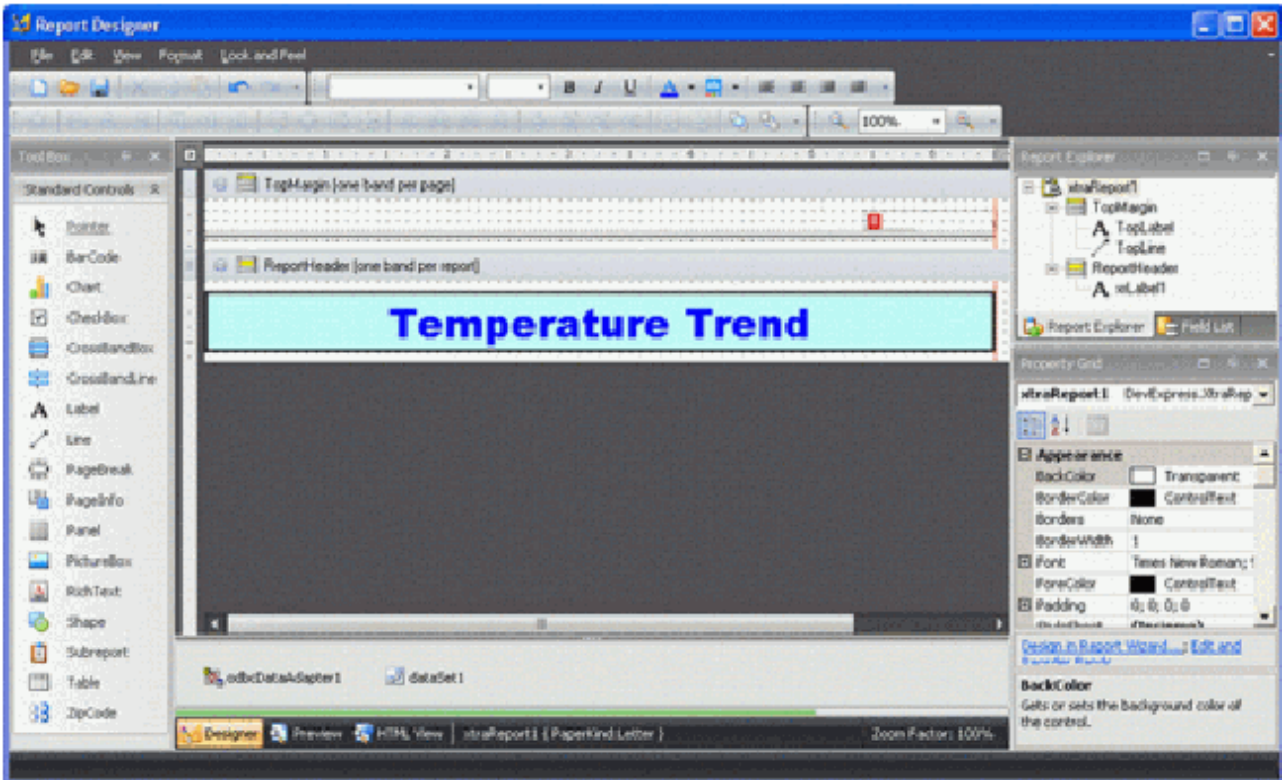
1. First create a new project and insert a Data Logger for recording three temperatures. Set three Float variables and call them "Temp_A", "Temp_B" and "Temp_C". Then add three columns to the Data Logger, set a 1 minute recording time and generate the table using the "Create Table" command from the Data Logger's "Database Options".
2. Now proceed with creating the Report. Click on the "Edit Report File" command from the Data Logger's General properties to open the Report Designer window. The ODBC link to be used will automatically be passed to the Report Designer and therefore the Data Logger table structure with relating fields should be ready and available in the "Field List" window.
3. The window's center pain is the workspace and will appear completely empty. Here you will need to add the different report sections one at a time.



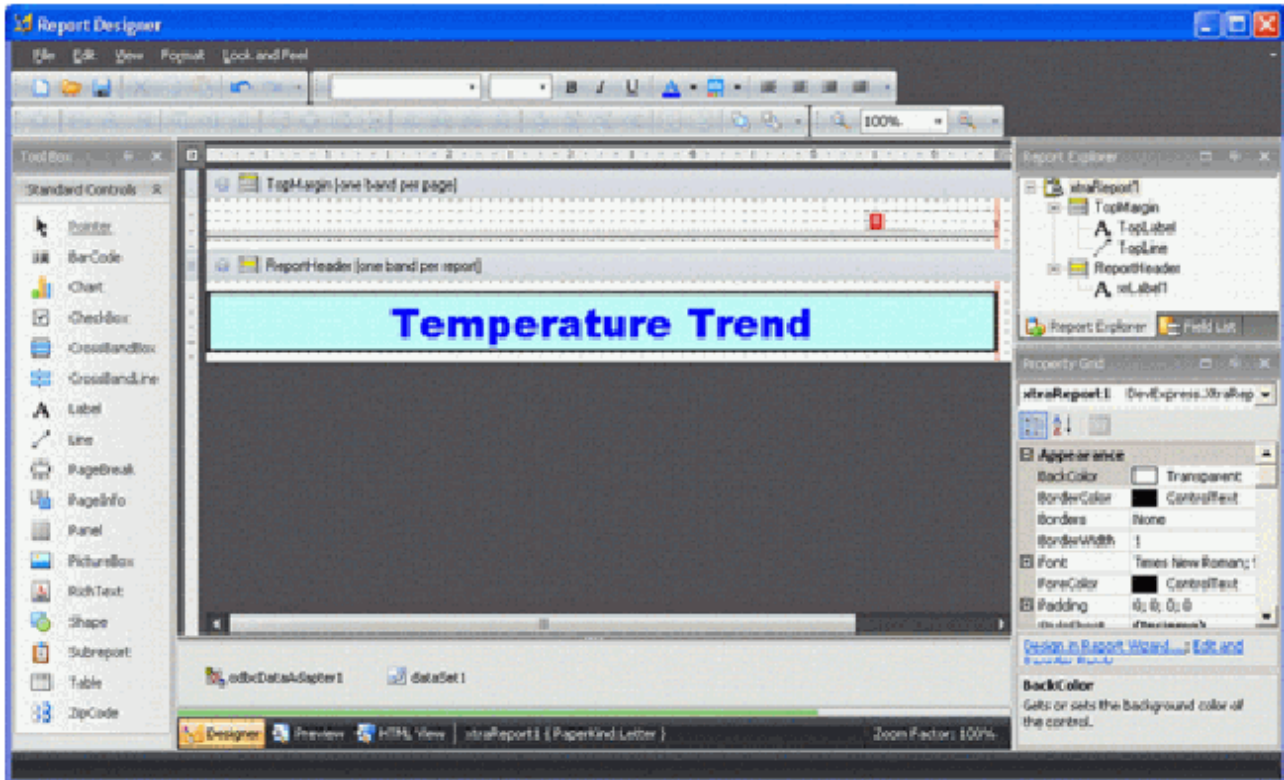
4. First start with inserting the sections, or Bands, to be displayed in the report. Normally the "detail" band is the most important one because this is where the data to be displayed is inserted. To insert a Band right click on the report workspace and select the "Insert Band" item and add the "TopMargin" Band. Only one Band per page can be inserted and represents the pages top limit. Now add a horizontal line and a label, with Visu+ written inside, within the Band by selecting and inserting the "Line" object from the "Standards Controls" window located to the right of the editor window and drag it horizontally across Band. Then select and insert the "Label" object in the Band, right click it to open its "Property Grid" window, or click on the arrow which appears on the top right of the control to access its main properties, and insert "Visu+" in its "Text" property.



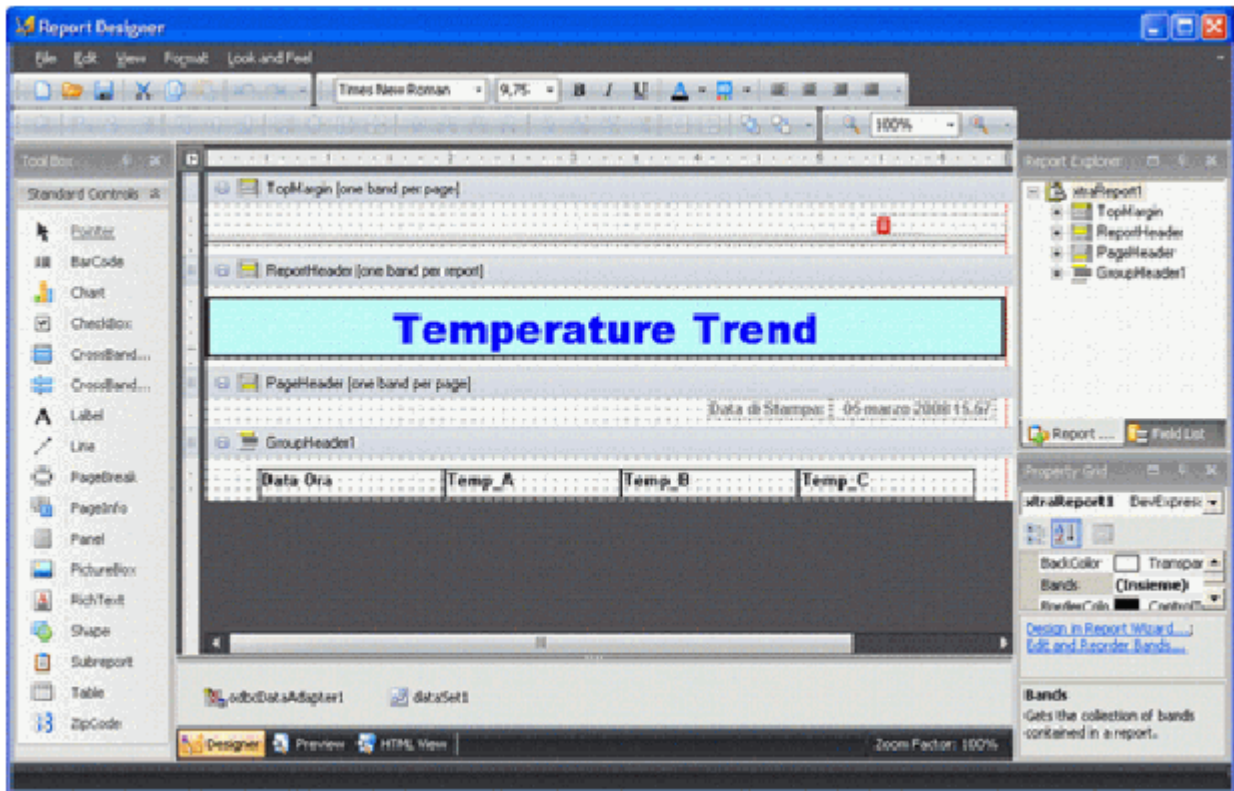
5. Now insert the "ReportHeader" Band. This Band represents the report's heading and will be printed at the beginning of the report on the first page only. To insert the heading select and insert another label into the "ReportHeader" band, size it and through its properties give it a color and insert the "Temperature Trend" heading in the text property. Then apply bold and change the heading font size and center it within the label.



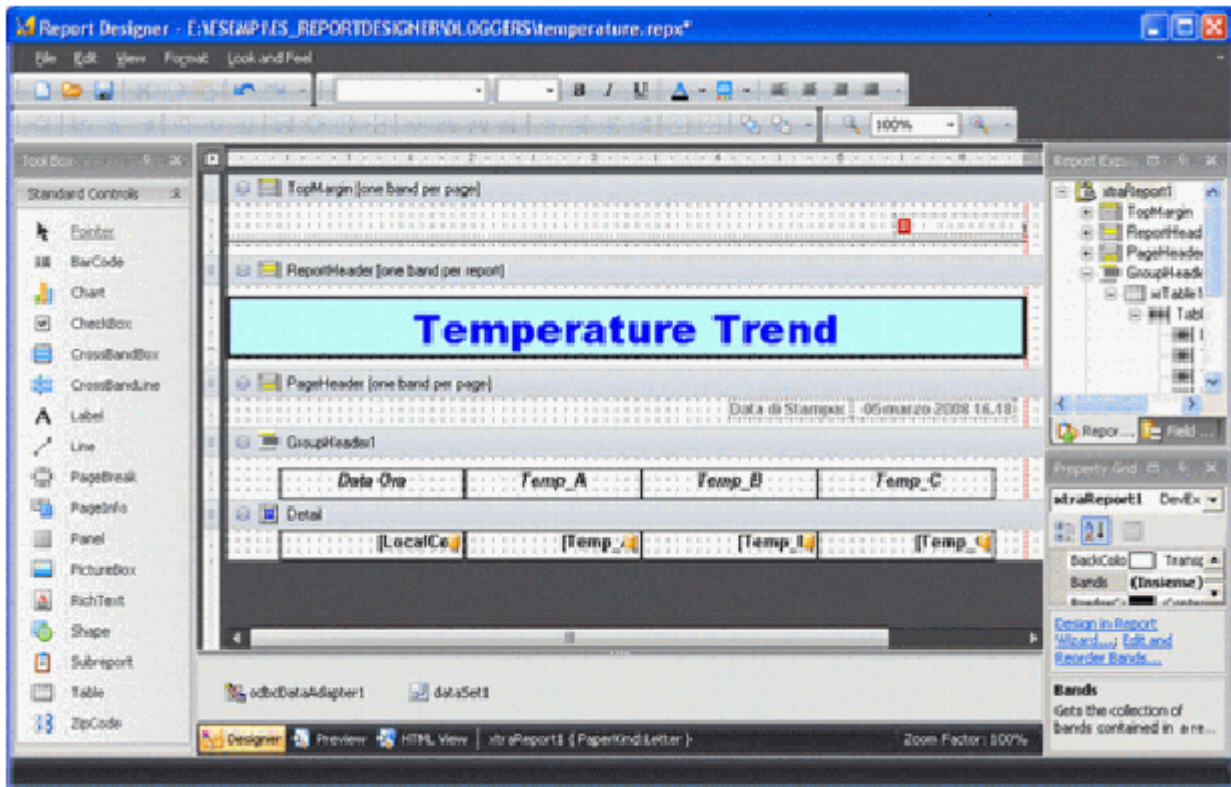
6. Insert the "PageHeader" Band. This Band represents the page heading and is printed at the top of every page. Insert a "Label" in this Pageheader band with text as "Print Date". Then insert an "PageInfo" object with the Label and select the "DateTime" item in its PageInfo property field. After which click on arrow, to the top right, to open the "XRPageInfoTasks" window edit the data and time format through the "Format" field as desired.



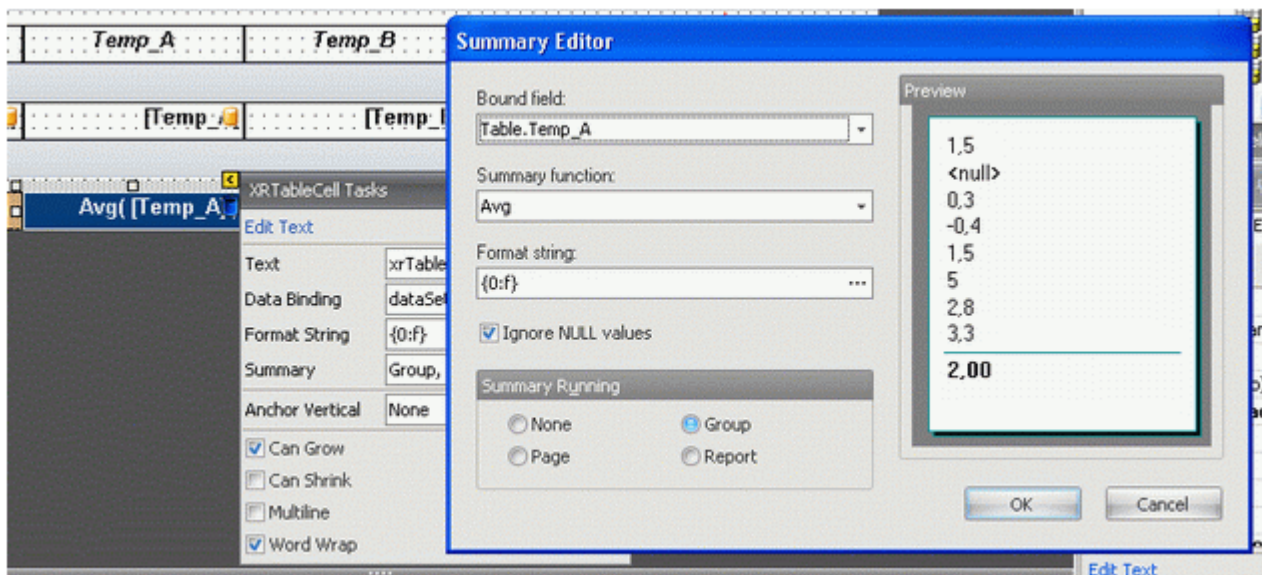
7. The aim of this report is to create and display a table with data retrieved from the database. In order to do this, insert the "GroupHeader" Band. This Band is used for showing a group heading and there can be more than one in a report. This group header will represent the beginning of a data group and you will only need to insert one group to achieve the aim of our project. In this band a line is to be inserted with the headings of the table columns. Therefore add a "Table" object from the "Standard Controls" window. The Table object is inserted with three columns for default but you will need four, so select the object and right click to add another column using the "Insert - Column To Left" command. Now size the columns to fit across the page and insert headings to be displayed in each cell's tasks properties done by clicking top right arrow to open each cell's tasks window. The texts for the four columns are "DateTime", "Temp_A", "Temp_B" and "Temp_C".



8. Insert the "Detail" Band. This Band will contain the data to be displayed for the data group. Here you must create a table with the same sizes inserted for the "GroupHeader" or copy&paste the table to save time. After you have done this, associate each table cell with the database field from which data is be retrieved. First start by selecting the first cell on the left and open its task window. Then select the "LocalCol" table column from the "Data Binding" field.

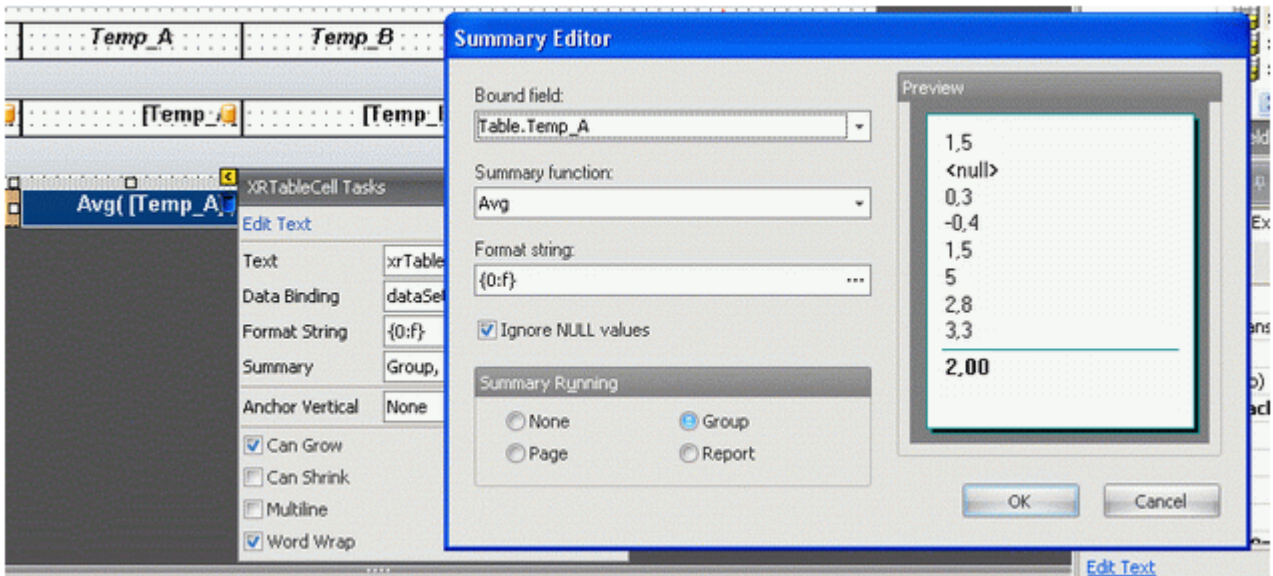


Perform this operation for the other three columns by associating the "Temp_A", "Temp_B" and "Temp_C" field respectively. Also set each cell with a data format where the "LocalCol" column will be in "Date" format and the other remaining three will be "Float" type.

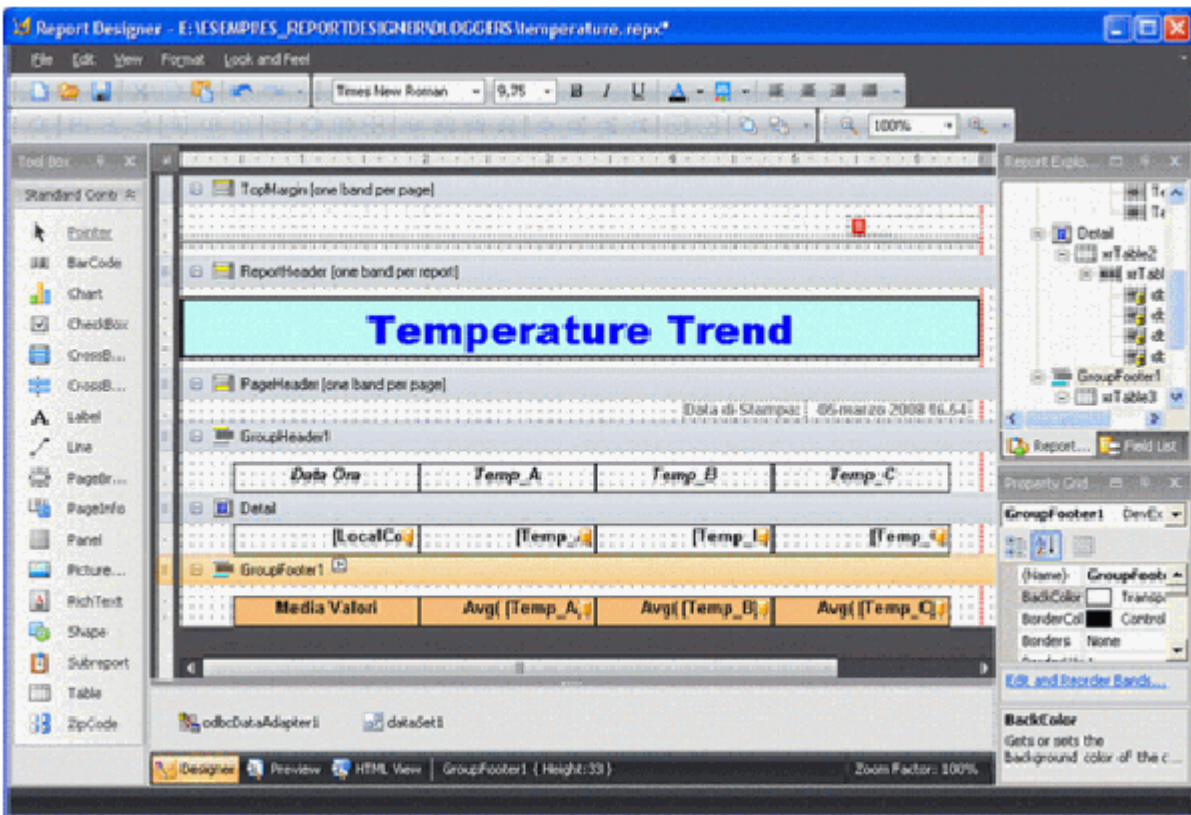


8. Insert the "GroupFooter" Band. This Band closes the group and always corresponds to the "GroupHeader". This Band will show the average values extracted for the three temperature columns. Insert another table with four fields columns as before. The first field just add "Average Values" as text. Select the second field, open its tasks window and click on the "Summary" field to open another window where you can define the formula to apply to the field. The window items must be compiled as follows:

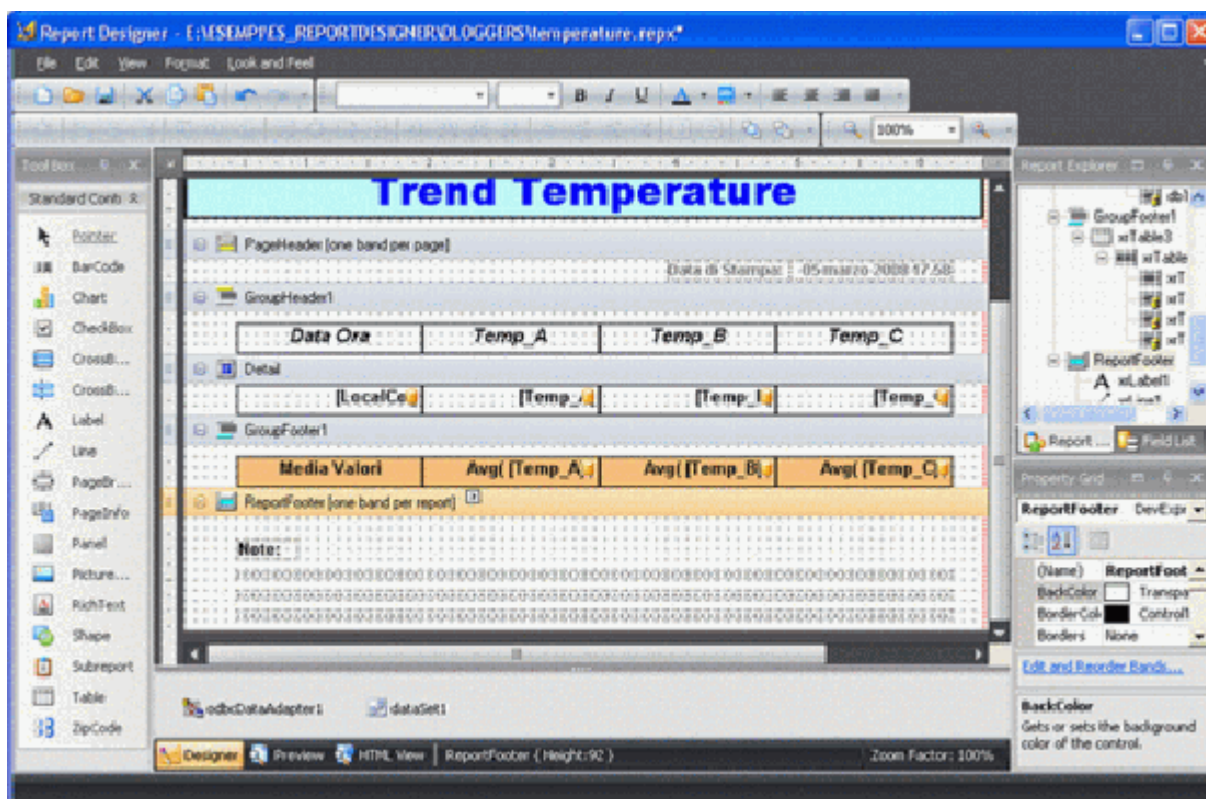
- **Bound field:** select the table field in which to apply the formula, in our case "Temp_A"
- **Summary function:** select the function type to apply, in our case "Avg"
- **Format string:** define the data format type, in our case "Float"
- **Ignore NULL values:** enable this check box when wishing to ignore null values
- **Summary Running:** select which environment to run operation, in our the case "Group"



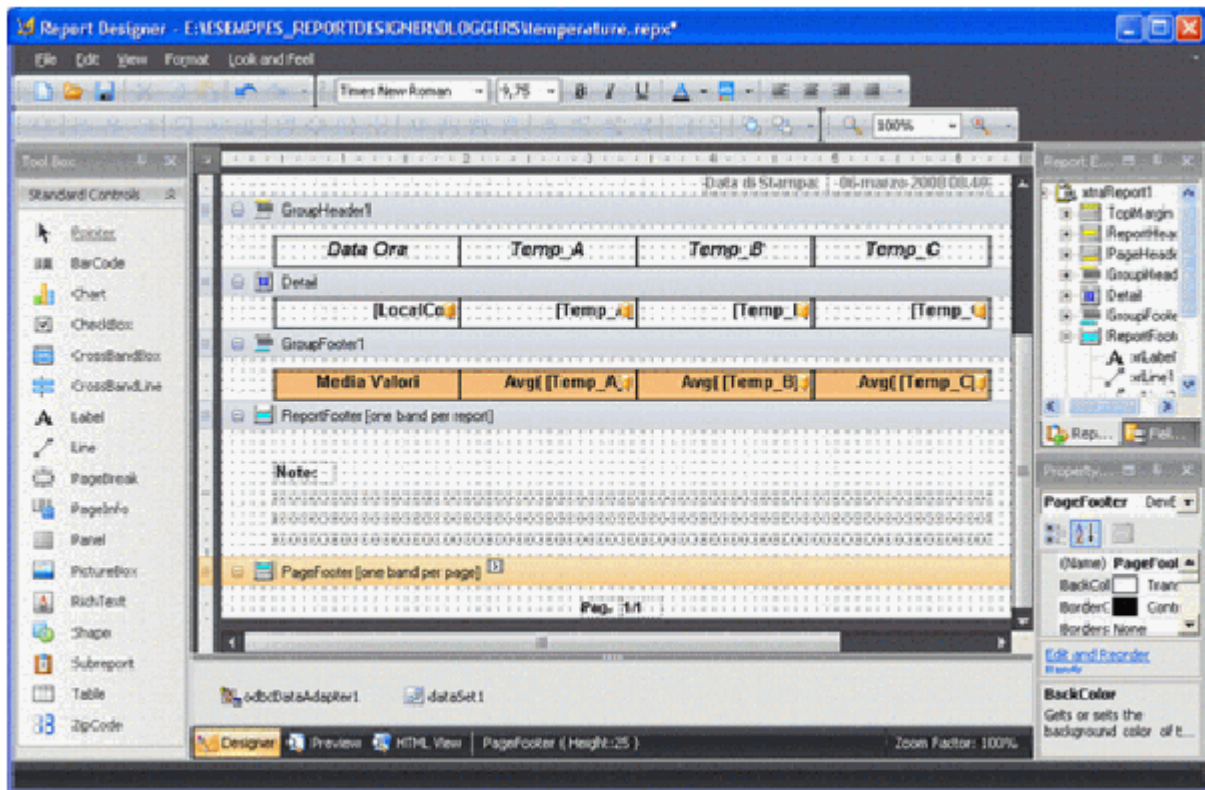
Repeat the same procedure for the other two "Temp_B" and "Temp_C" table fields. Apply a background color to average values table.



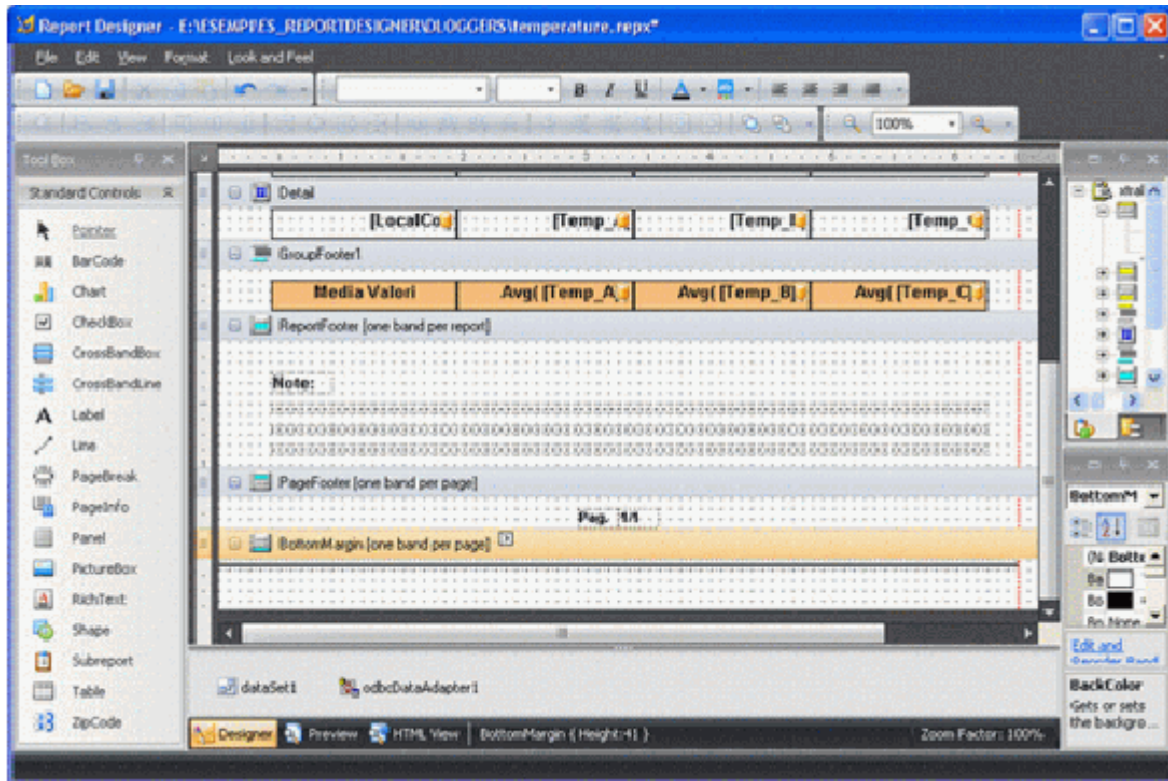
9. Insert the "ReportFooter" Band. This Band will printed at the end of the report at the last page. This Band is will be inserted with a field so that the operator can enter notes. Simply insert a "Label" and three lines and modify them into dotted lines.



10. Insert the "PageFooter" Band. This Band closes each report page. In this Band you are going to insert a field for display the page number. Therefore add a "Label" with the "Pag." text and a "PageInfo" field and select the data type to be displayed, ie. "NumberOfTotal" (displays the current page and the total number of pages).



11. Insert The "BottomMargin" Band. Only one of these a page can be inserted and represents the page's bottom limit. Add a horizontal line in the Band just like the one inserted in the "TopMargin" Band.



12. This ends the report and if you have data already in the database you can see how it will look by clicking on the "Preview" tab on the bottom Report Designer Bar to get a report preview.

Trend Temperature			
Lokasi: Sampur		Unit meter: 2000 ML23	
Dasar Data	Temp_A	Temp_B	Temp_C
06.03.2008 18.1000	0,00	0,00	0,00
06.03.2008 18.1100	26,70	33,33	33,24
06.03.2008 18.1200	-34,76	81,66	28,32
06.03.2008 18.1300	-34,76	81,66	28,32
06.03.2008 18.1400	-4,63	-13,14	36,48
06.03.2008 08.0600	-4,63	-13,14	36,48
06.03.2008 08.1300	31,47	23,41	42,88
Media Nilai	-4,08	21,84	47,33
Note:			

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You can also preview the report at any time while creating it in order to see how the report is coming along and if it needs changing or adding to.

13. Save the report and close the Report Designer to return back to the Visu+ project. At this point insert a new screen in the project and insert the following objects into it:

- a "Data Logger-Recipe" window, to which the previously created Data Logger will be associated, for displaying recorded data. By using the window's "Print" button you can get a direct printout without previewing the report first (the printer preset in the OS will be used)

- three meters or Displays for modifying the three "Temp_A", "Temp_B" and "Temp_C" temperature variables.
- A Button to which the "Report-Recipe" command shall be associated to. Select the previously created Data Logger in this command and in the "Action" field select the "View" item. This button will be used for opening the report in preview mode.

Now you can run the project and after having recorded data, test the report out.

Not all the Bands provided have been used in this example, but as mentioned at the beginning this is just an example and there are no set rules as to which ones to use and therefore it is the programmer's discretion to choose those most suited.