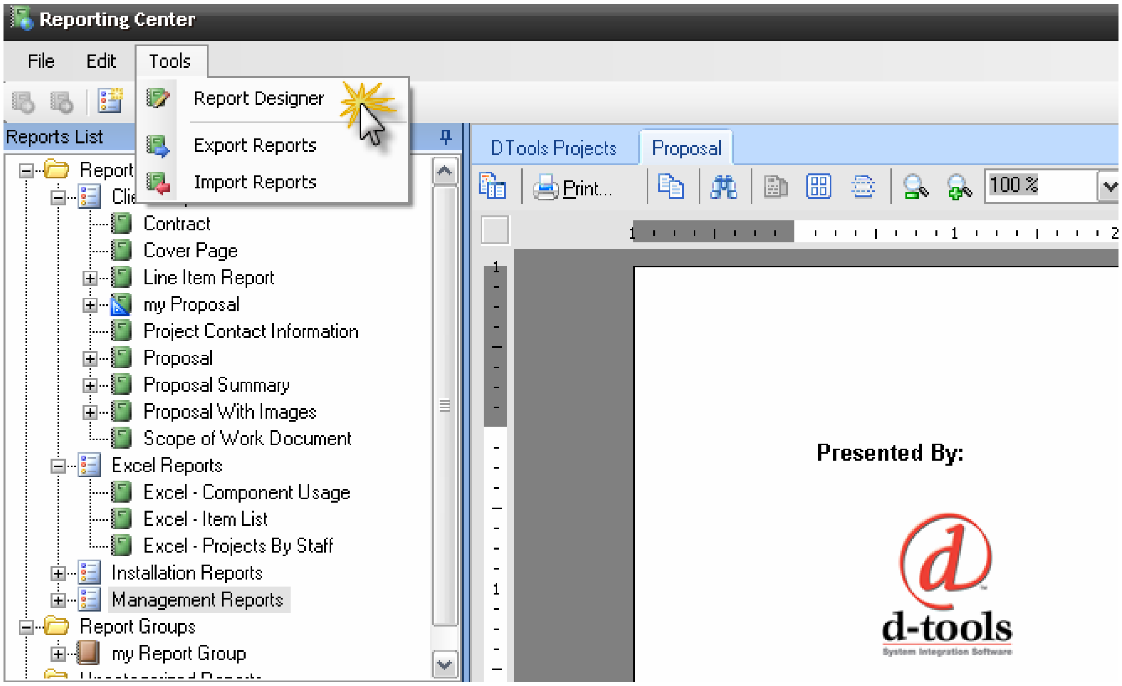
Report Designer

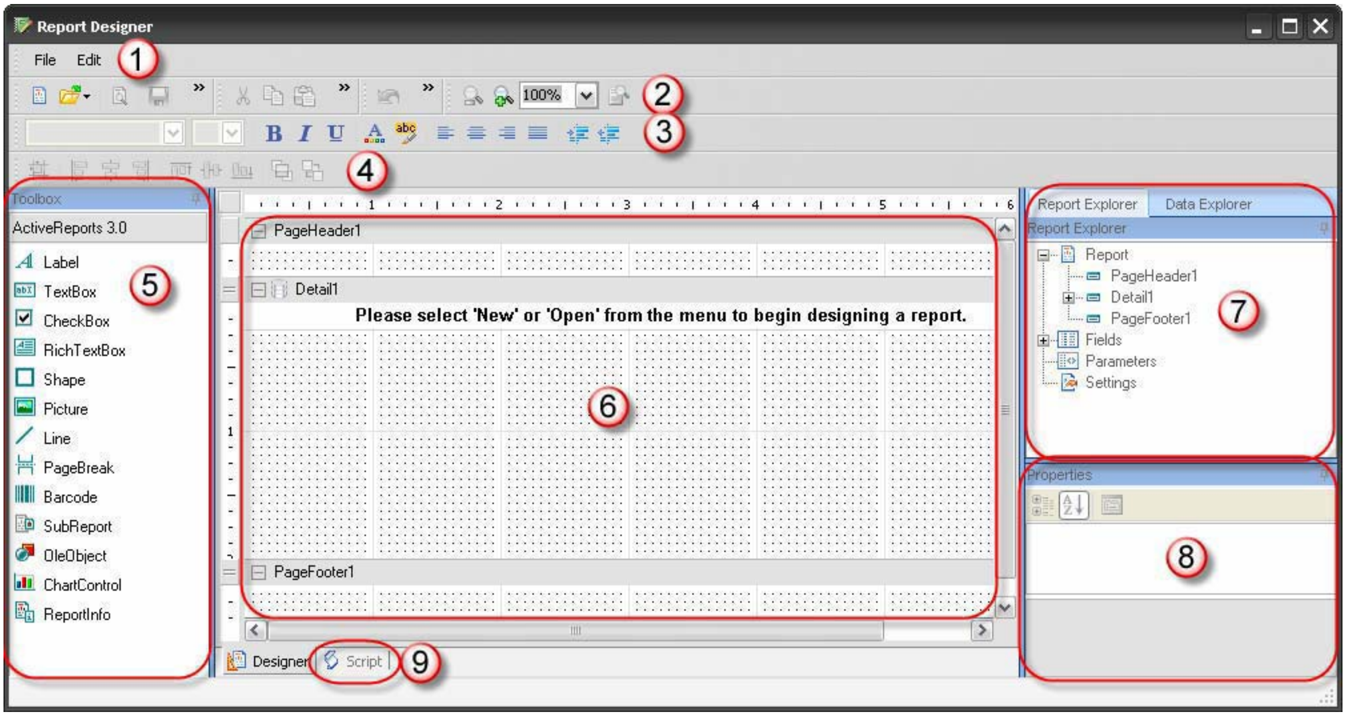
Pro users have the ability to create custom reports using the Report Designer. To open the report designer interface, go to **Tools > Report Designer** in the menu bar of the Reporting Center.



Creating custom reports is for advanced users only. It is the sole responsibility of the user to debug any custom reports.

*The D-Tools Report Designer is based on ActiveReports for .Net 3.0 by Data Dynamics. For a complete user guide on this interface, see the **ActiveReports User Guide** located at **http://www.datadynamics.com/forums/72/ShowForum.aspx.***

The Report Designer interface will open:

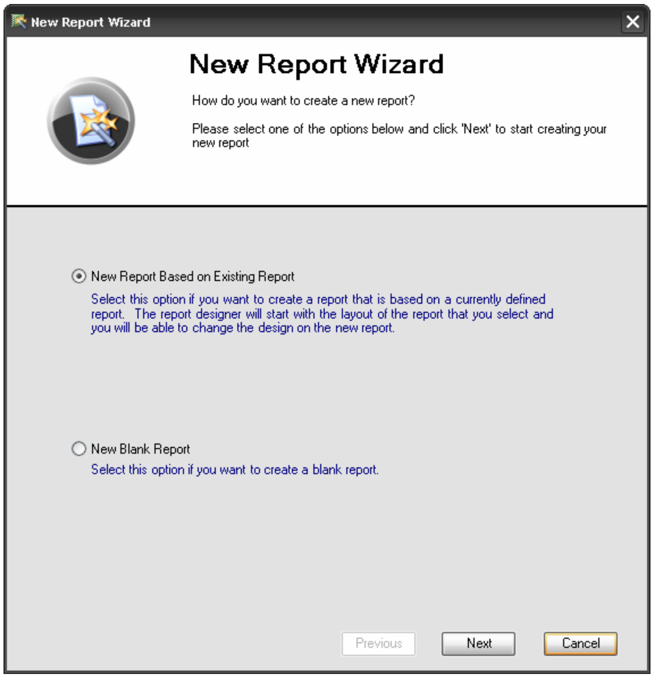


This interface consists of these parts: 1) menu bar, 2) shortcut toolbar, 3-4) formatting toolbars, 5) toolbox, 6) design pane, 7) data and report explorer, 8) properties, and 9) script tab.

Menu bar

File > New (New Report Wizard)

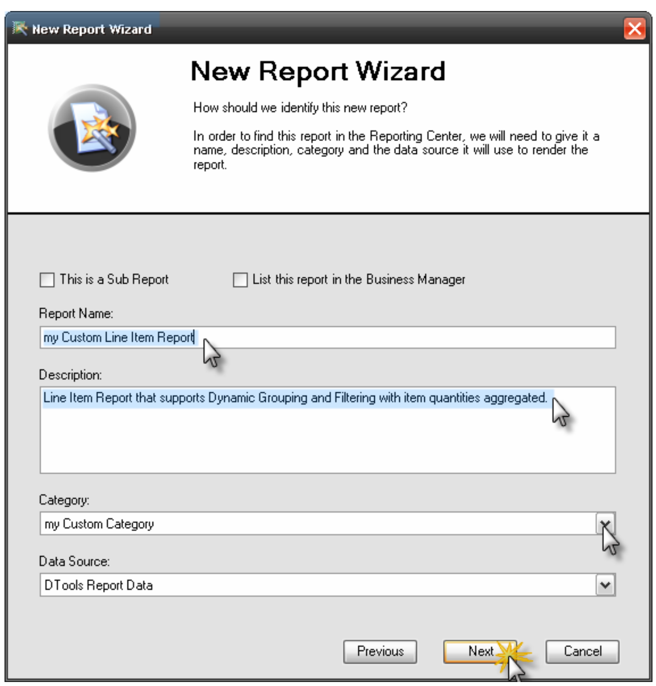
To create a new custom report, go to File… New. The New Report Wizard will open



Select **New Report Based on Existing Report** to create a custom version of an existing report, or **New Blank Report** to create a report from scratch.

If you chose New Report Based on Existing Report, you should then select which report you wish to modify.

The next screen allows you to set the report name, enter a description, and determine which report category the report will appear in. It also allows you to mark this report as a Sub-Report or a Business Manager report.



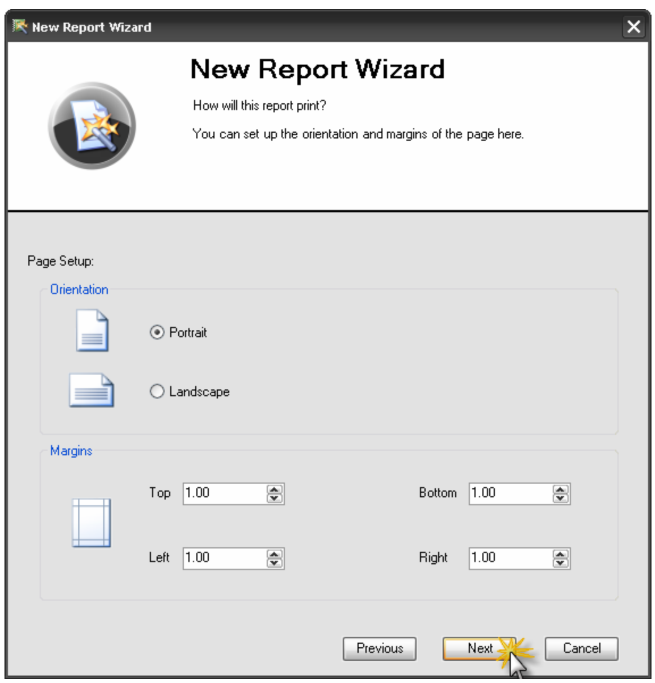
*From here on, just hit **"Next"** at every screen to duplicate the report you are modifying.*

*Note 1: **Sub-reports** do not appear in your reports list. They are generally smaller reports which are included in other reports. An example is the Miscellaneous Costs sub-report.*

Note 2: The Report Name is the name that will appear in the Reports List

Note 3: The "Data Source" field should always say "D-Tools Report Data". For future compatibility.

In the next screen, set the page orientation and margins.



Next, choose whether the report will support sorting, filtering, and dynamic grouping. Also, choose which fields are available to be grouped and/or sorted by.

Only some of the standard reports are set up to support Dynamic Grouping, regardless of whether this checkbox is checked. See the "

***Report Options" on page 559** to see which reports are.*

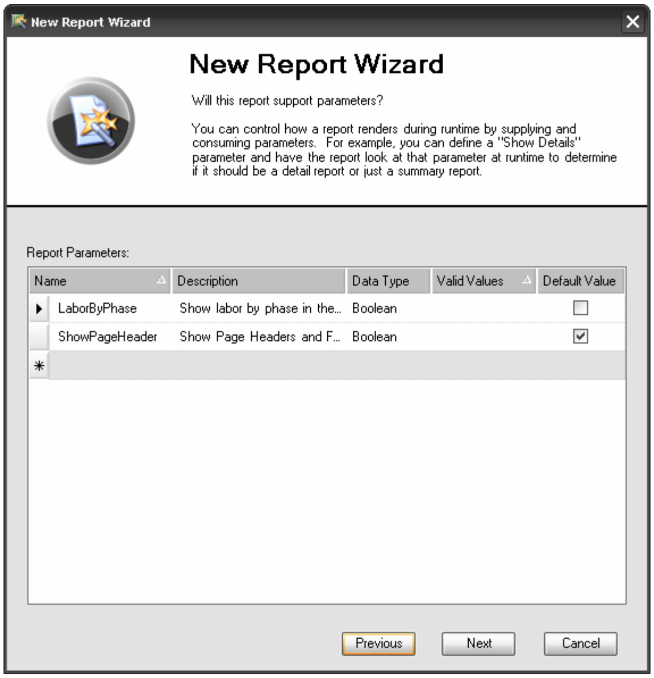
It does not always make sense to group or sort by all fields, depending on the report. Experiment and see which fields work with which reports.

The next step is to define the required groupings. In Line Item reports this determines how data is aggregated. Just click 'Next' if you are uncertain. The example below would be good for creating a BOM where you want a quantity followed by the Manufacturer and Model. This process would group all like Products together. Other useful groups could include, Category, Location, Phase and Zone.

Next choose a required sorting option, if desired

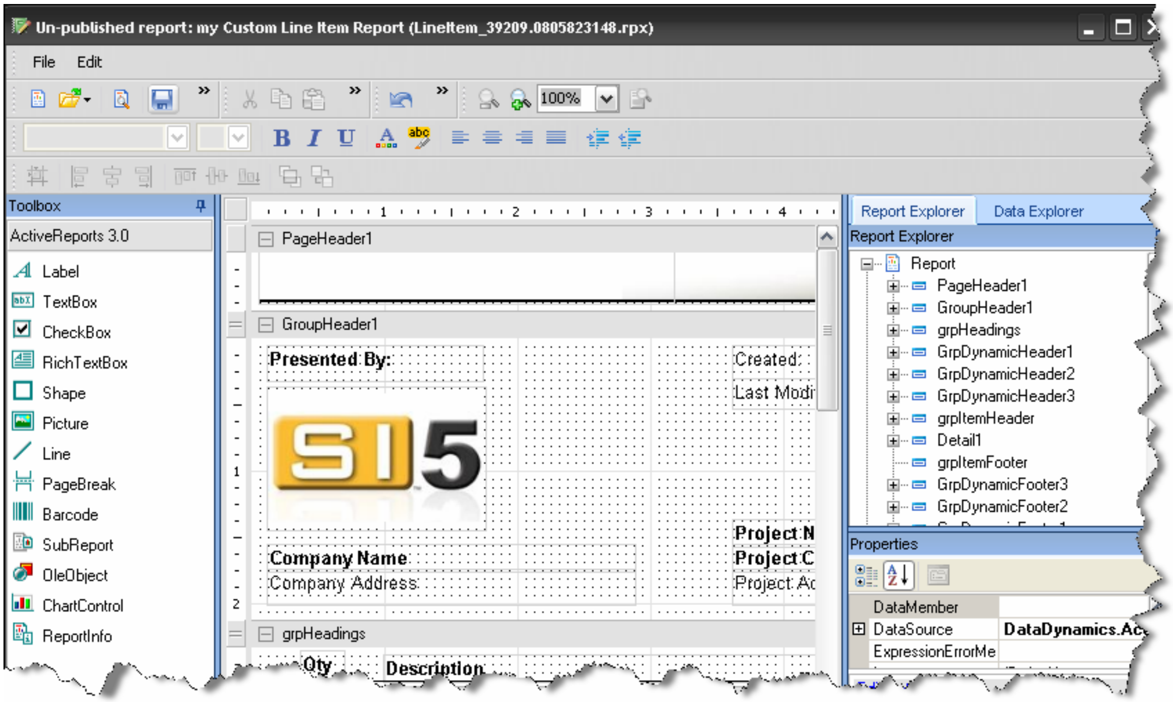
Now, set any required filters, if desired.

The next screen allows you to save report parameters.



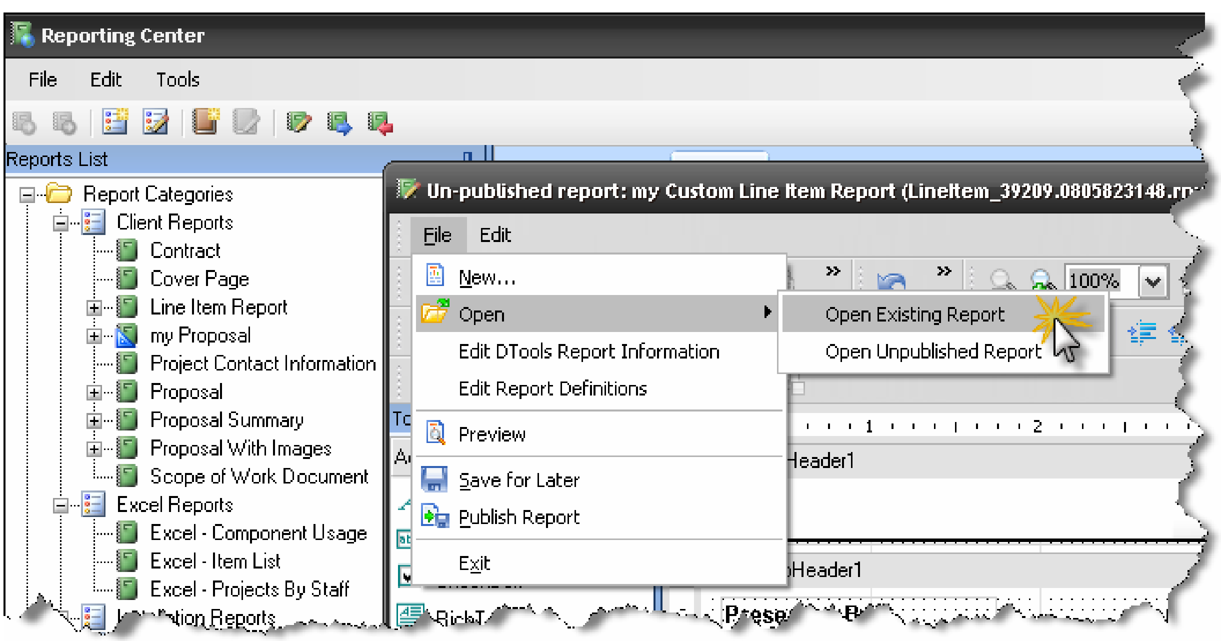
The final screen is a review of your report definition. Click Finish to save and start editing the report.

The report opens and is now an **Unpublished Report** that can be edited.



File > Open

File… Open allows you to open a custom report that you have already created.



Existing reports are published custom reports that appear in your Reports List

Unpublished reports are custom reports that you are still working on. They do not appear in the reports list until you publish them

File > Publish

File > Publish will publish the report you have open so that it will appear in your Reports List. Choose this when you are satisfied and want to start using your custom report. Note that this will close the report for editing.

File > Edit D-Tools Report Information

To change the report information you entered during the New Report Wizard, use **File > Edit D-Tools Report Information**. This will re-open the wizard and allow you to change the settings, including report name, grouping/sorting/filtering settings, and other options.

File > Edit Report Definitions

If you want to create some custom report definitions for your report, go to **File > Edit Report Definitions**. Report definitions created here will appear in the Reports List beneath the report name.

File > Preview

File > Preview will allow you to preview your report vs. a sample project without having to publish the report or exit the report designer.

File > Save

Use File > Save to save an **unpublished** copy of your report for future editing. You will need to publish your report later if you wish to see it in your Reports List.

Edit

The Edit menu has an assortment of commands which are helpful when editing your custom report: **Undo**, **Redo**, **Cut**, **Copy**, **Paste**, **Delete**, and **Select All**.

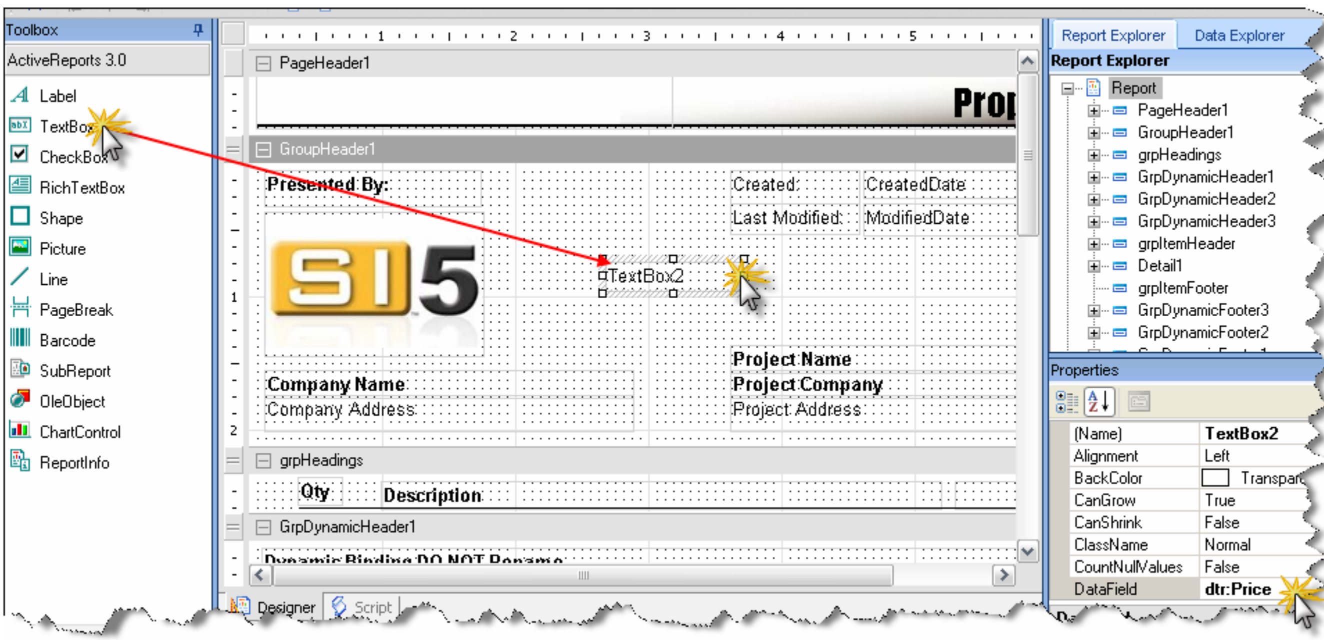
Toolbars

There are two sets of toolbars. The first has one-click shortcuts for most of the items in the Menu Bar: New/Open/Save/Preview Report, Cut/Copy/Delete, Undo/Redo, and Zoom In/Out.

The second set of toolbars is used for editing textboxes and other objects within your report: Font settings, Colors, Alignment, Indentation, and Grouping. Use these to set the properties of report objects when you have one or more objects selected in the Design Pane.

Toolbox

The Toolbox contains a selection of objects that you can drag onto the Design Pane: Labels, Text Boxes, Lines, and Pictures are the most common. Text Boxes in particular can be bound to a data field for display in your report.



To bind the text in a TextBox to a data field, select the TextBox, then go to the Properties area and select DataField. Type in the name of the data field (e.g. dtr:Price) you wish to bind to the Text Box. D-Tools Report data field names are found in the Data Explorer.

Design Pane

The Design Pane, located in the center of the Report Designer, is where you go to modify the layout of your report. You can drag and drop objects from the Toolbox or Data Explorer onto the design pane for display on your reports.

Page Headers and Footers

Objects in the Page Header or Page Footer sections will appear at the top or bottom of each page, respectively.

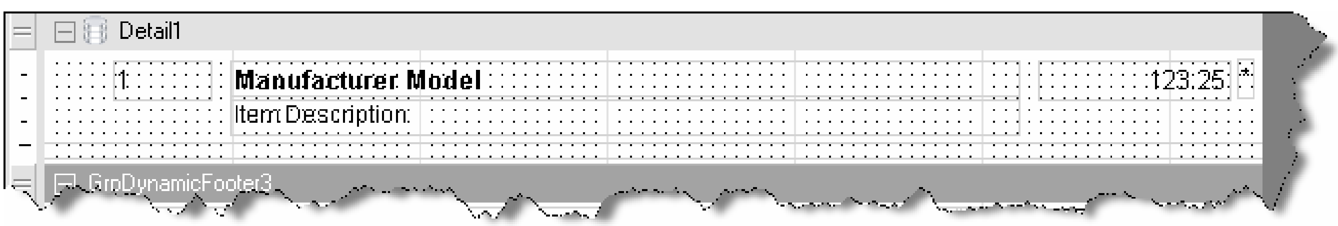
Group Headers and Footers

Group headers affect the way the data is iterated over. Most often, groups are linked to a data field, such as dtr:Location or dtr:Category. This causes this section of the report to repeat itself once for every member of the group.

*Some reports come with special groups named **GrpDynamicHeader1, 2 or 3.** DO NOT RENAME THESE as they are used to implement dynamic (run-time) grouping. Similarly, the group name is in a textbox with name **txtDynamicHeader1, 2 or 3,** which should also not be renamed.*

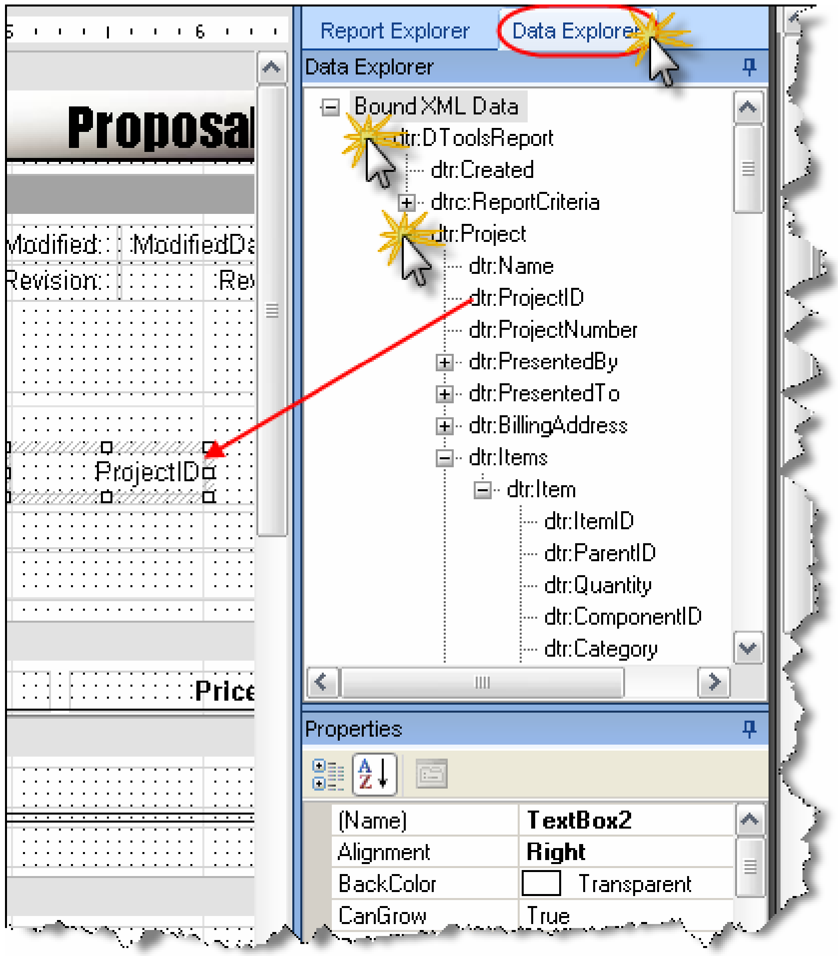
Detail

The Detail section shows what happens for each member of the data set. Use this section to add or remove data fields for each item in your report.



Data Explorer

The Data Explorer is where you go to find data fields for your report. It is initially located on the right, as a tab behind the Report Explorer. Use the Data Explorer to browse through the XML structure, then drag-and-drop data fields onto the Design Pane.



The Data Explorer is where you go to find data fields for your report. It is initially located on the right, as a tab behind the Report Explorer. Use the Data Explorer to browse through the XML structure, then drag-and-drop data fields onto the Design Pane.

*Most of the information you will be looking for can be found under **dtr:Project**. Data fields for specific items are found under **dtr:Items/dtr:Item**.*

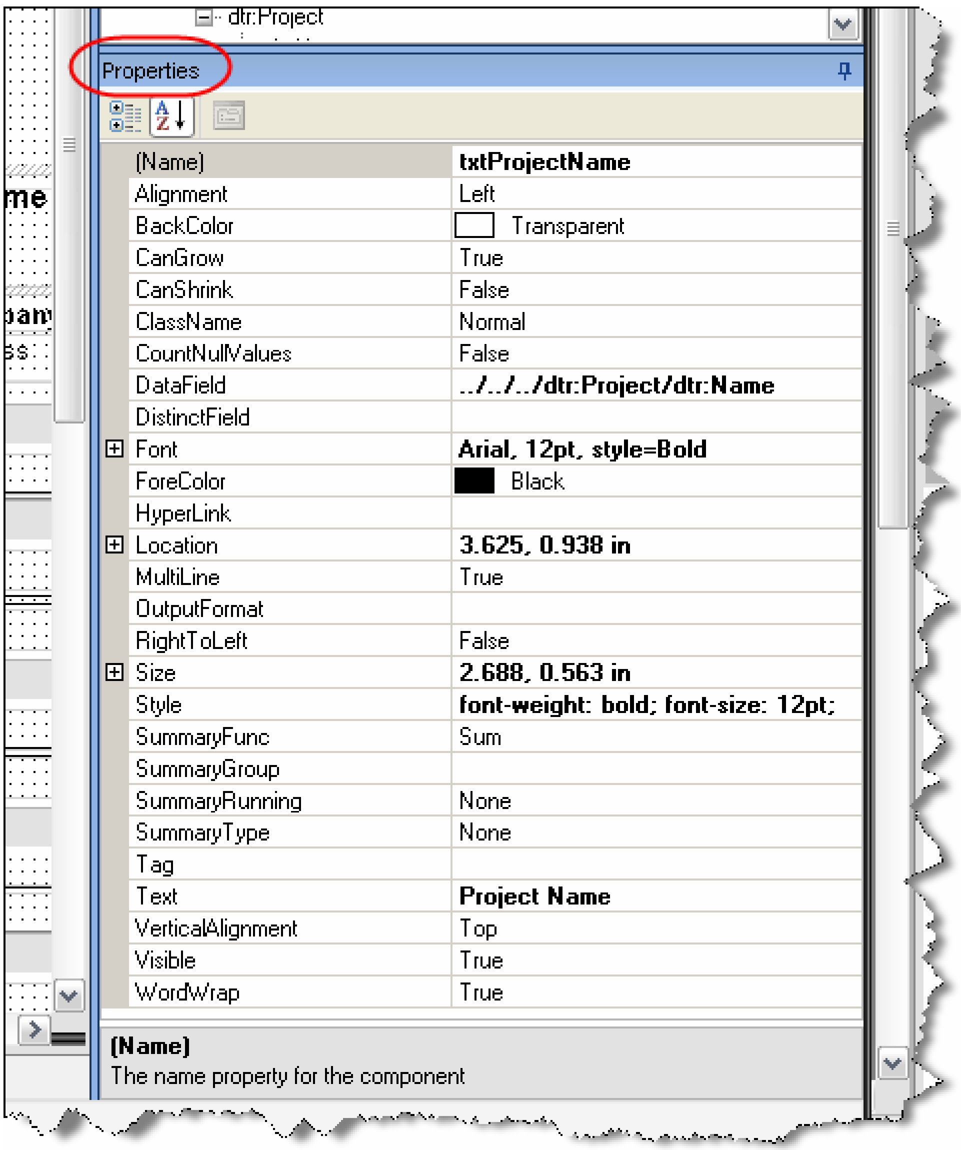
D-Tools XML Structure

D-Tools report data is based on an XML schema that is defined here:

http://www.d-tools.com/schemas/si5/reports/dtoolsreport.xsd

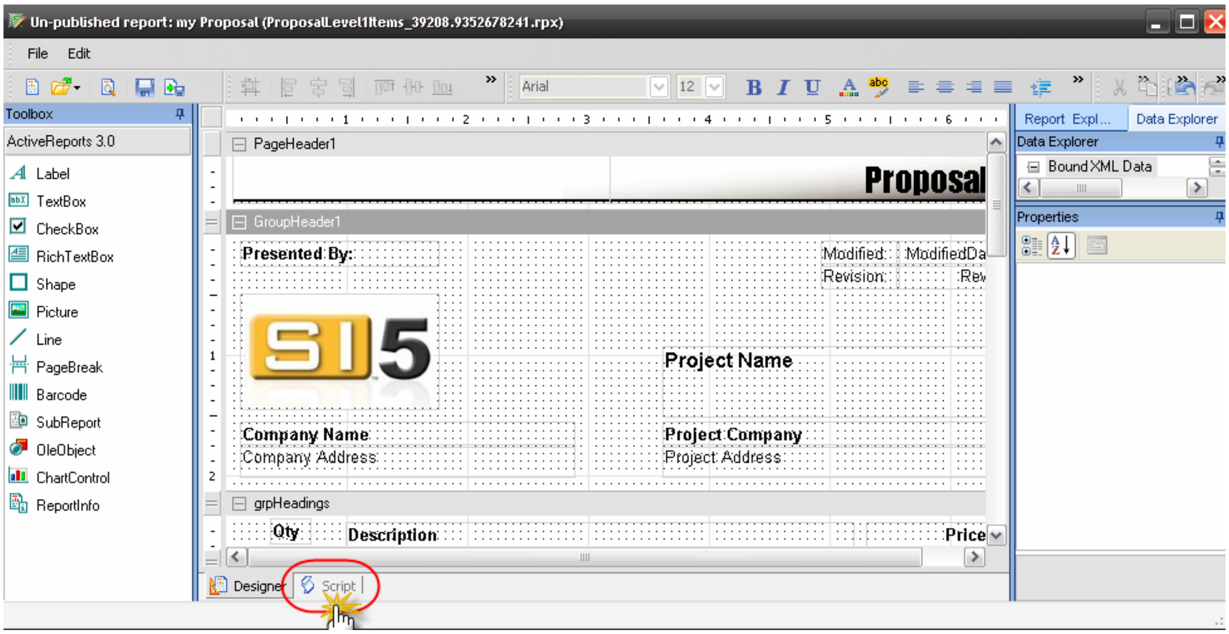
Properties

The properties window is where you go to change fonts, alignments, and any other properties of objects in your Design Pane. Select an object in the design pane first, then go to properties to modify the behavior of the object.



Script

The Script tab, located behind the Design Pane, is where you go to enter in .Net code. This allows you to take programmatic control of your reports. Either C# or VB.NET can be used. Note that all D-Tools reports have some amount of script code in them already.



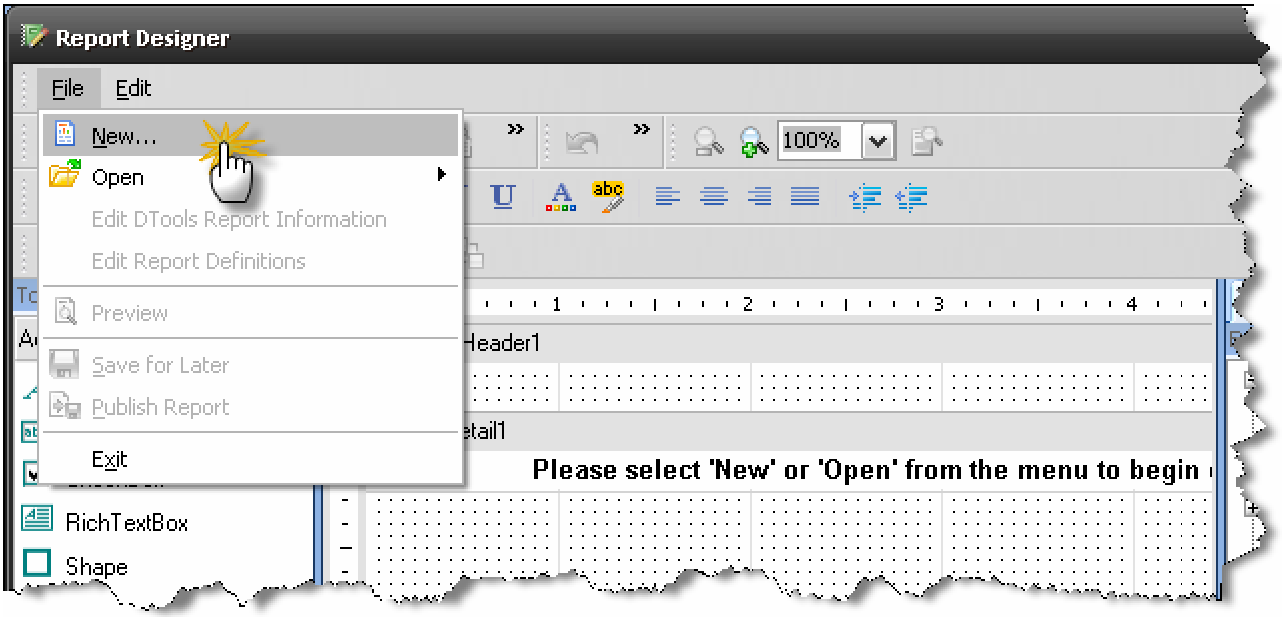
Custom Report Example

To give a simple example of how to customize a report, let's change the page header on a proposal. Here's how:

Step 1: Create a custom report based on an existing report

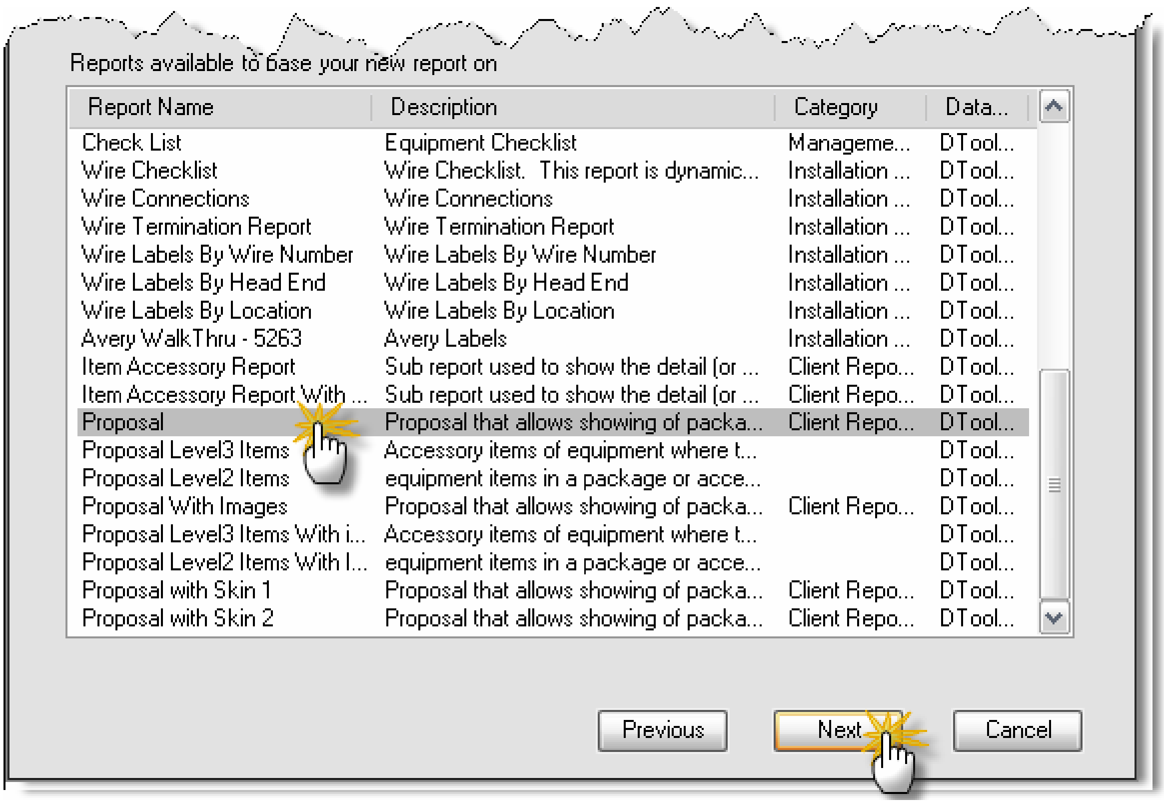
1) In the Reporting Center, go to Tools > Report Designer.

2) In the Report Designer, go to File > New…

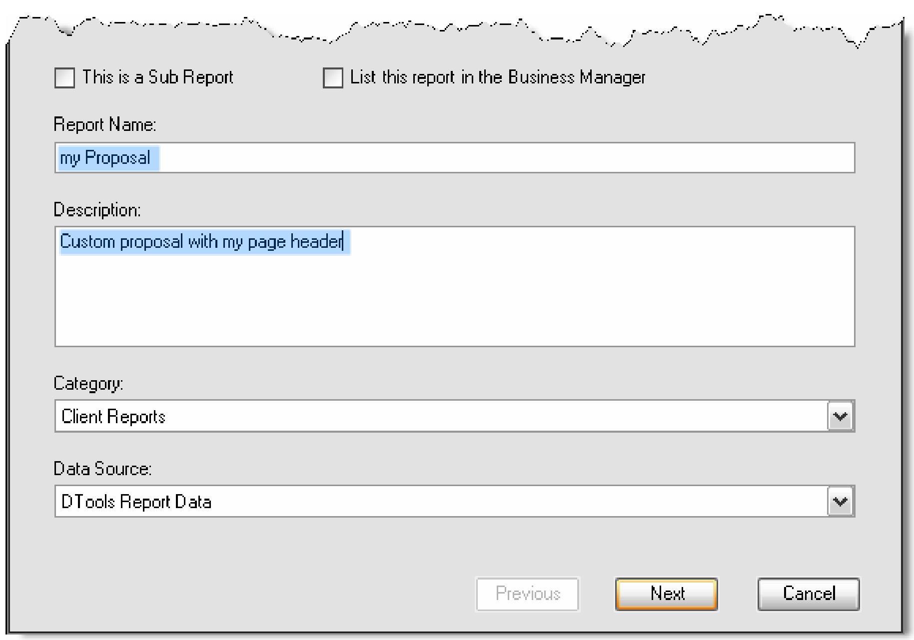


3) Choose “New Report Based on Existing Report” and click Next

4) Select “Proposal” from the list and click Next

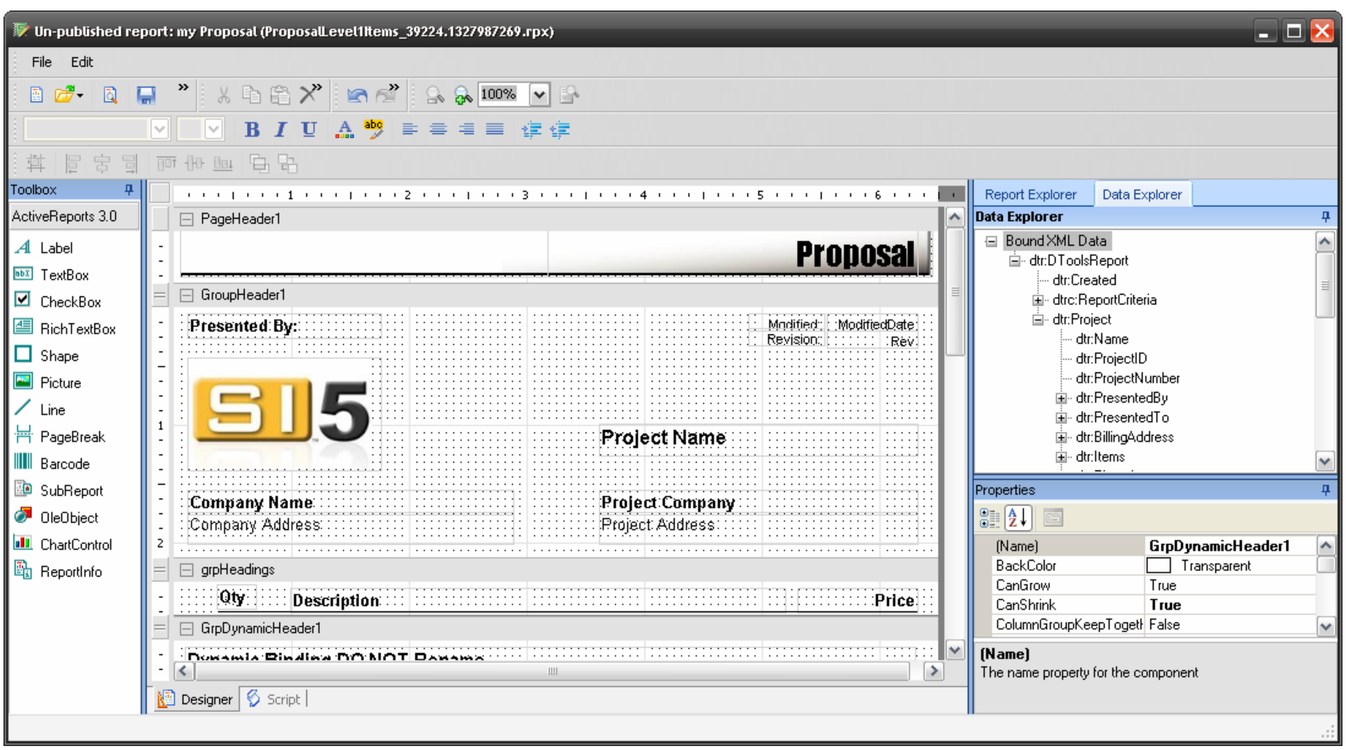


5) Name the report "my Proposal" and enter a description



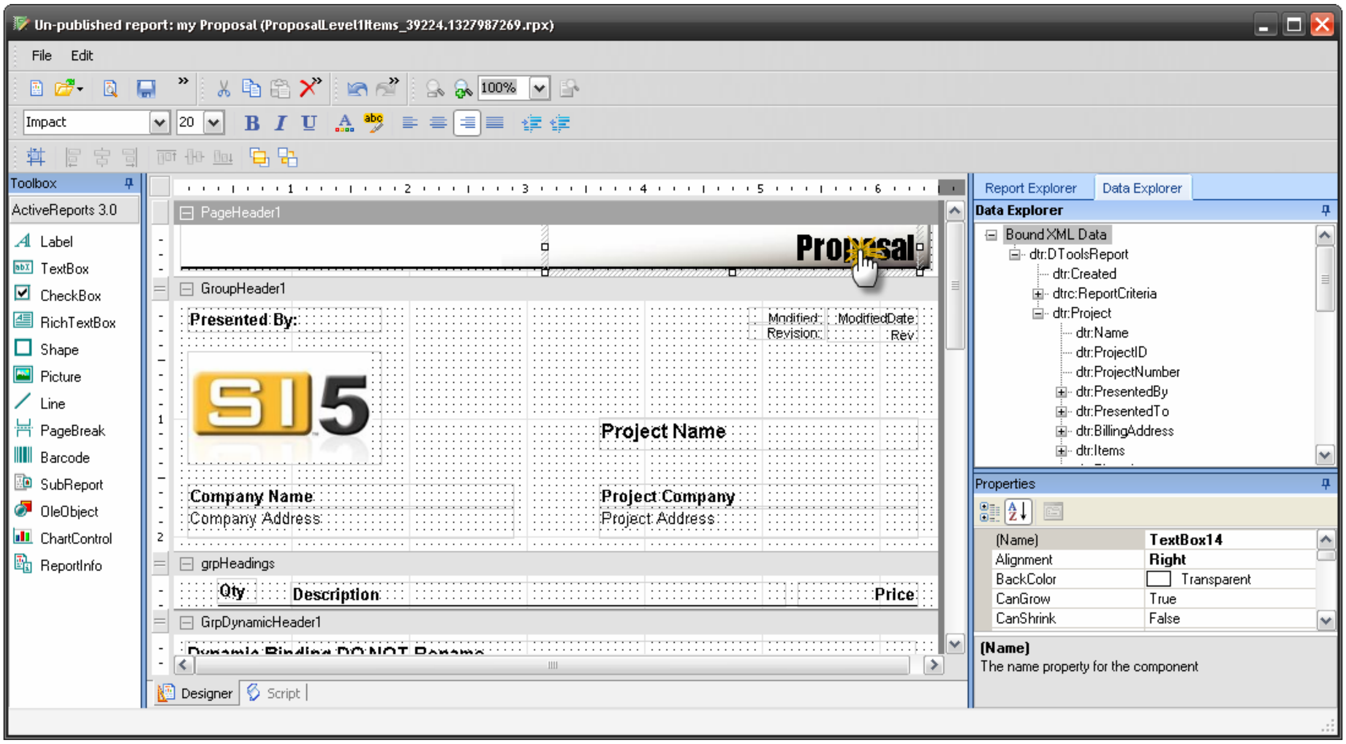
6) Click 'Next' at all further screens until you get to 'Finish', then click that as well.

At this point the report has been created and can be edited.

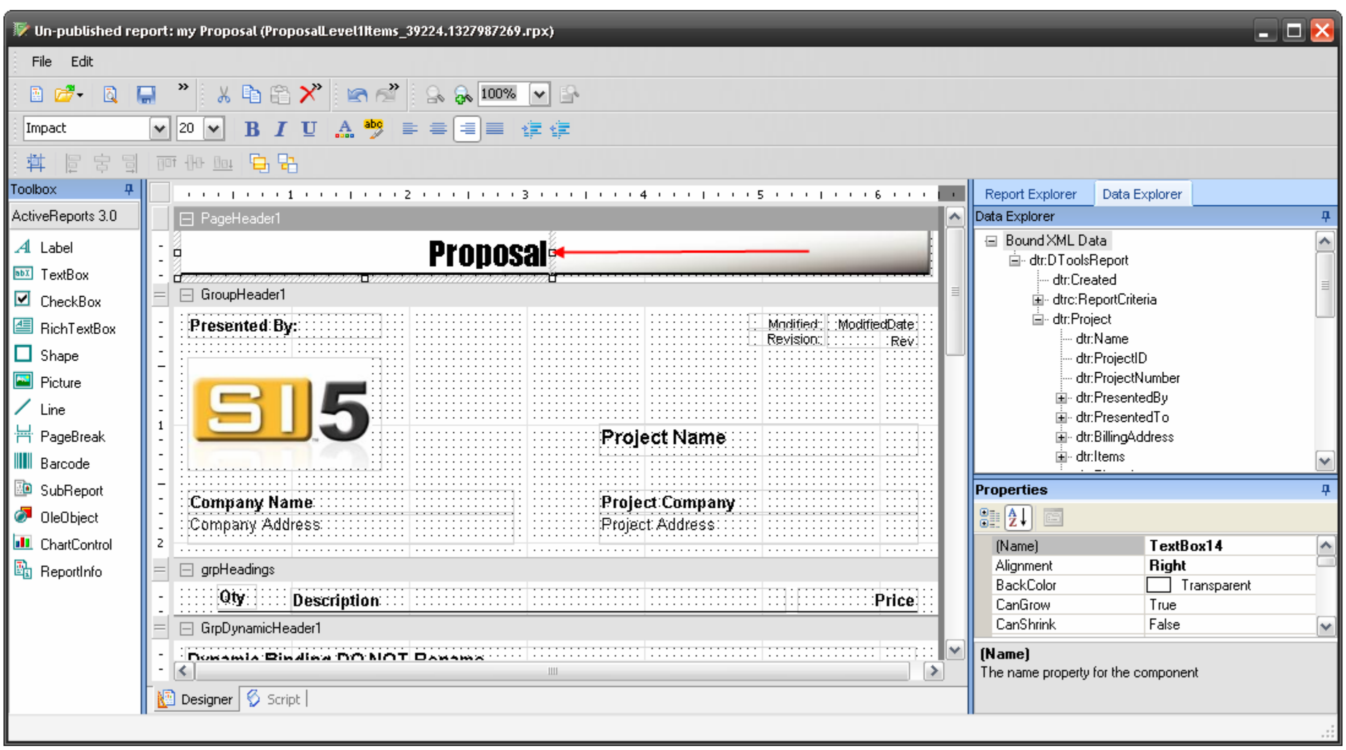


Step 2: Modify the Page Header

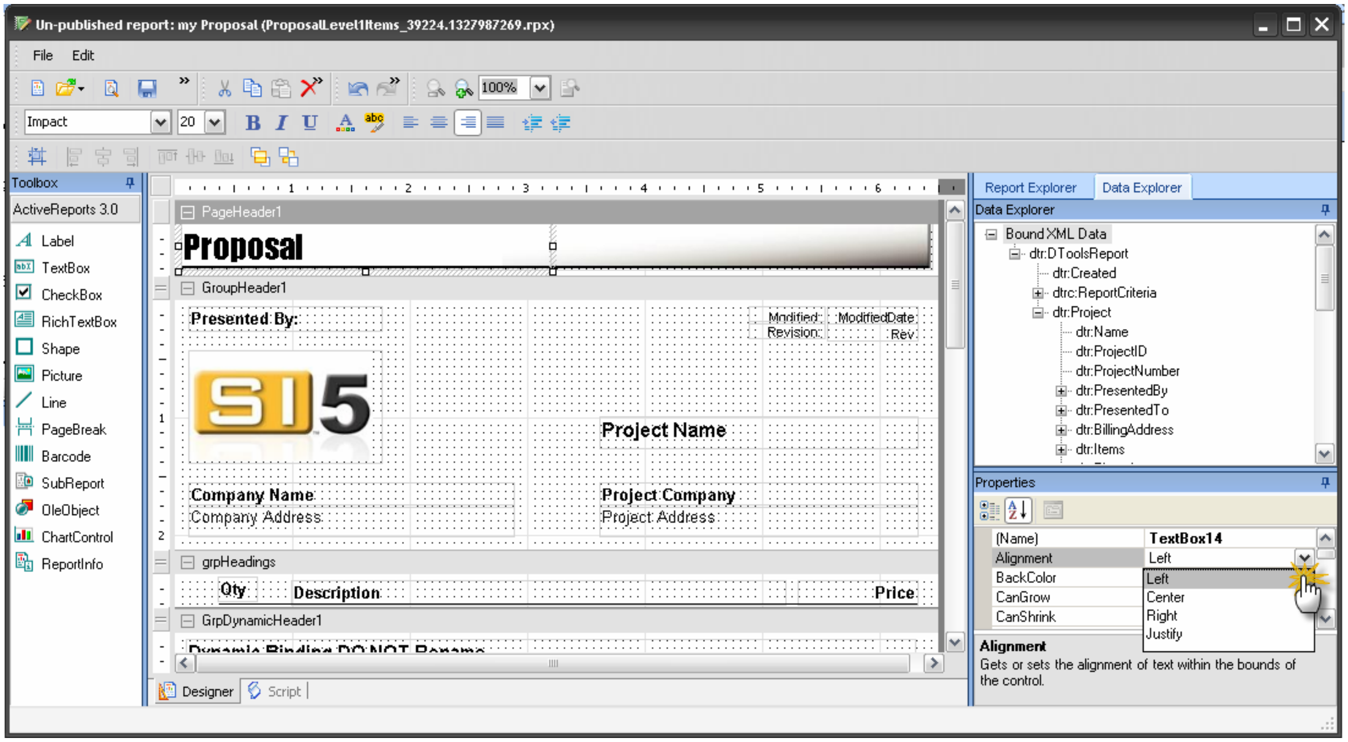
1) In the design pane, in the PageHeader1 section, click on the text that says “Proposal”.



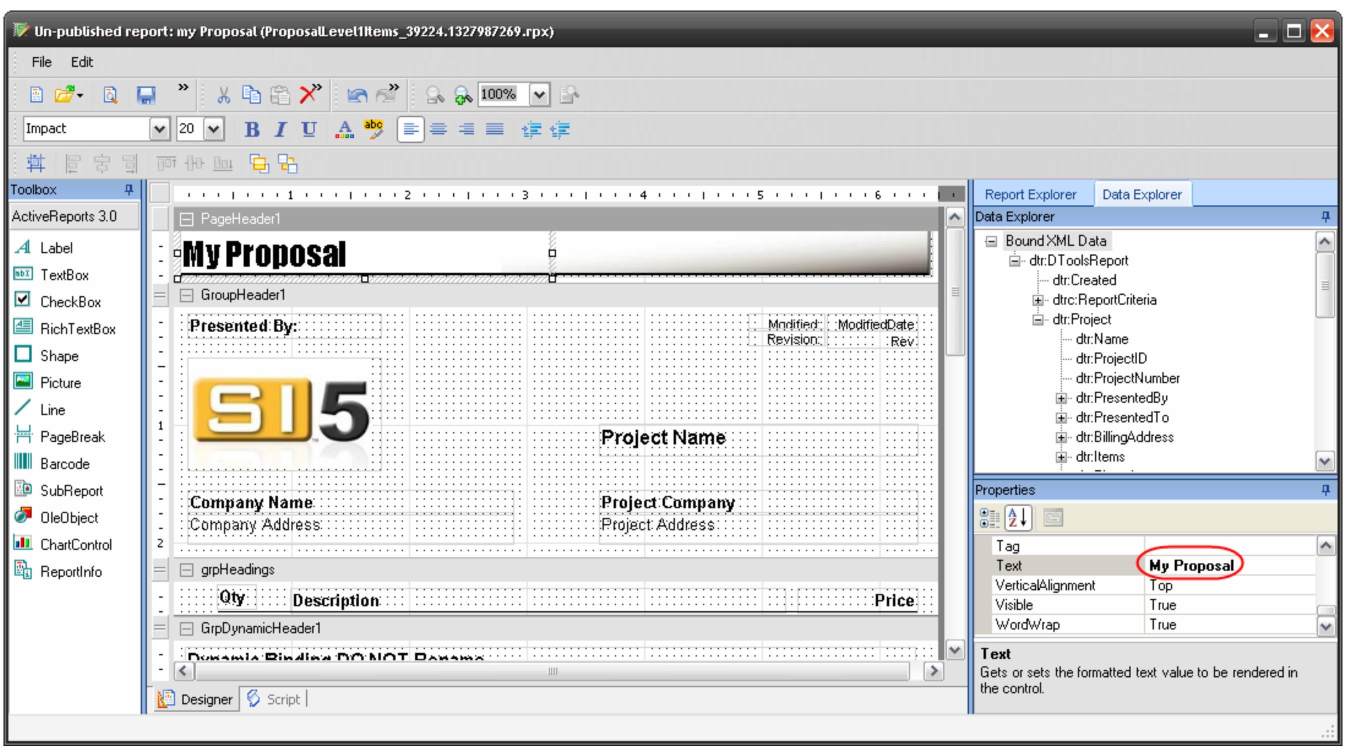
2) With the mouse, move this textbox (TextBox14) until it is aligned with the left side of the page



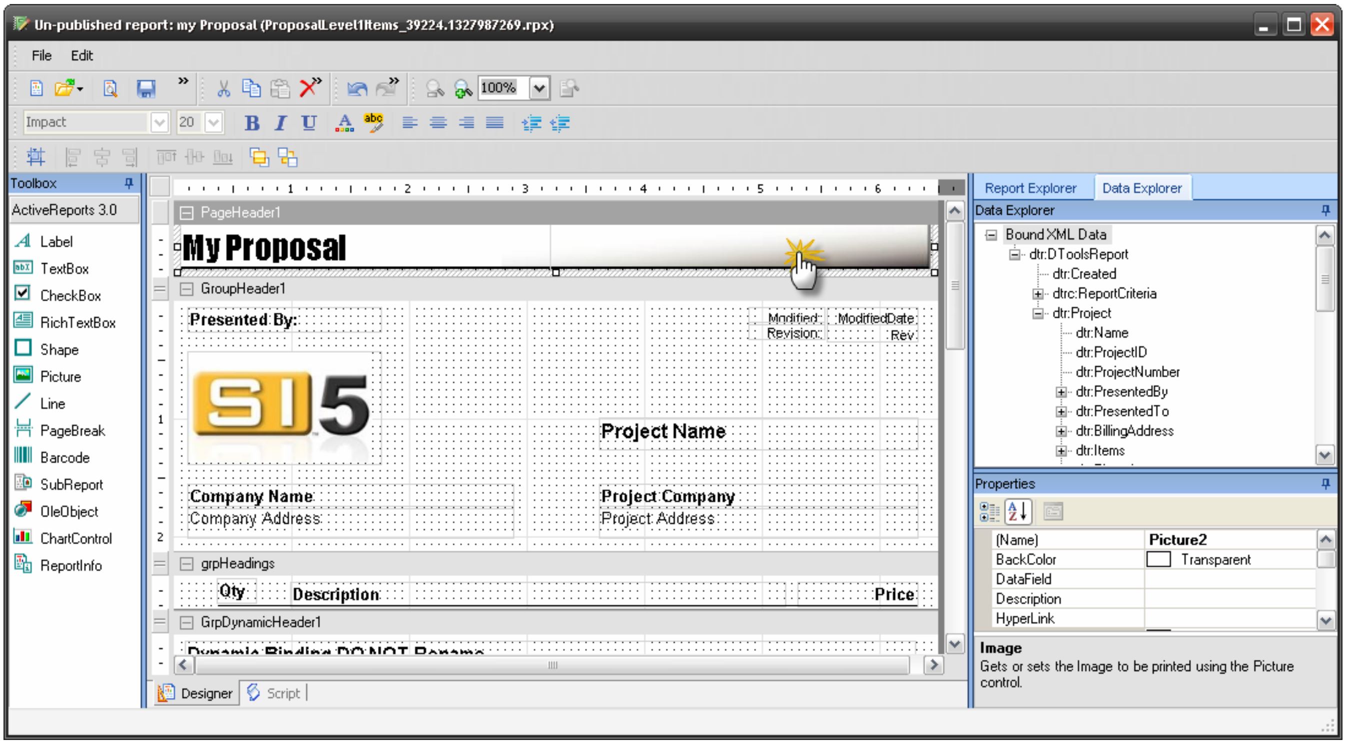
3) With the textbox still selected, go to the Properties window and set Alignment = Left



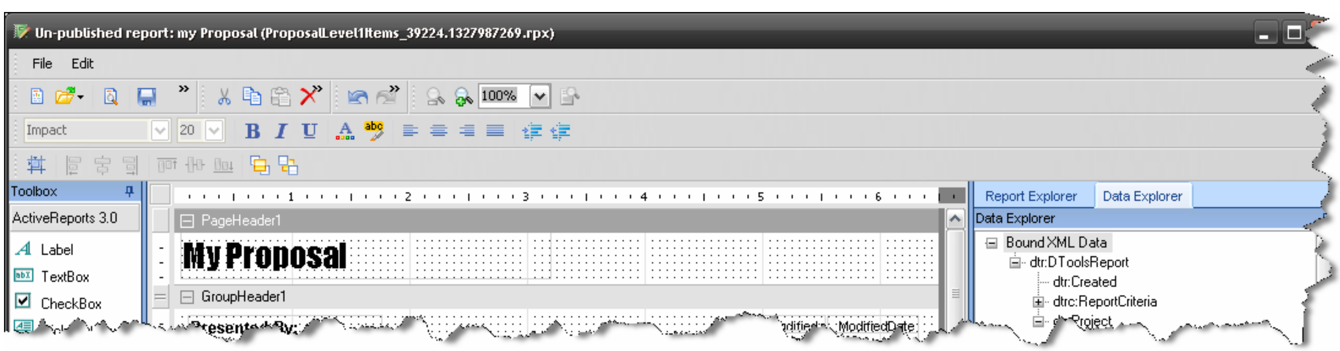
4) With the textbox still selected, go to the Properties window, scroll down to the Text property, and replace “Proposal” with “My Proposal”



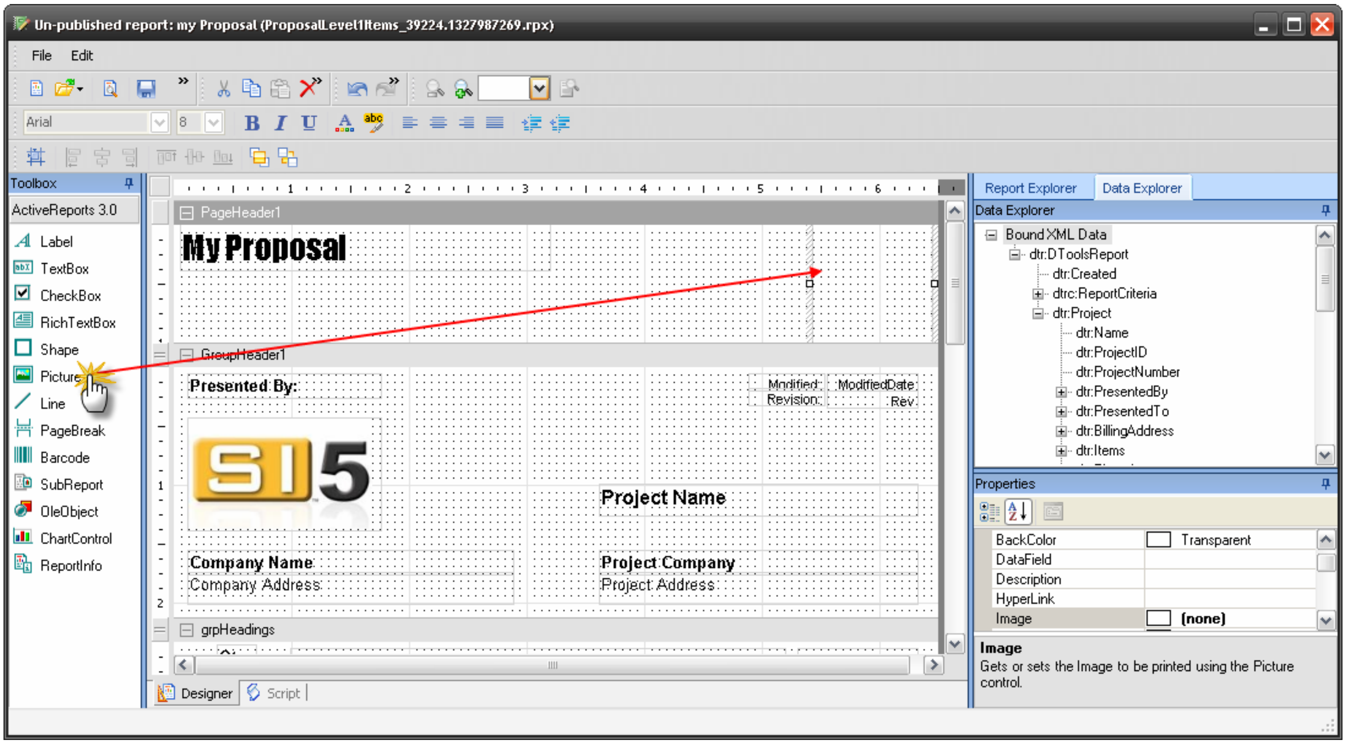
5) To change the image in the header, first select it with the pointer



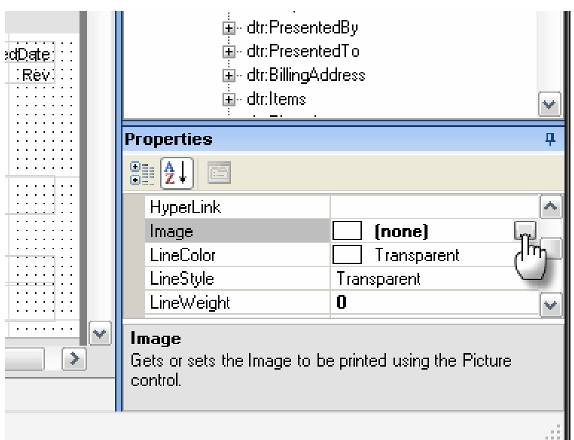
6) Now hit Delete to remove the image



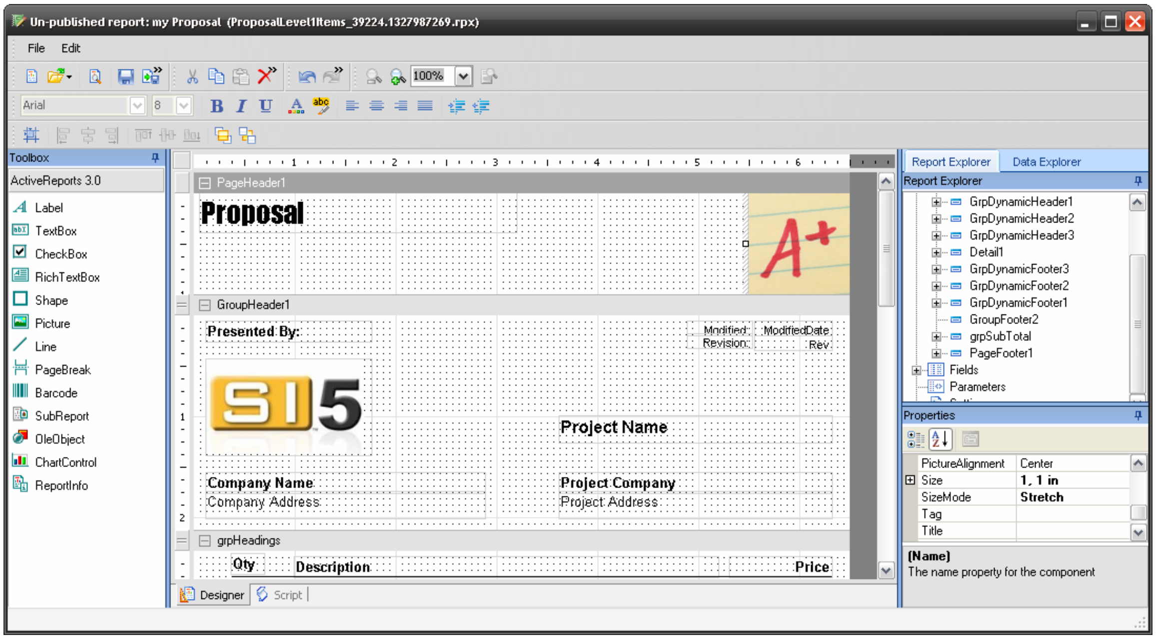
7) To add a new image, drag and drop the Picture icon from the toolbox to the PageHeader1 section



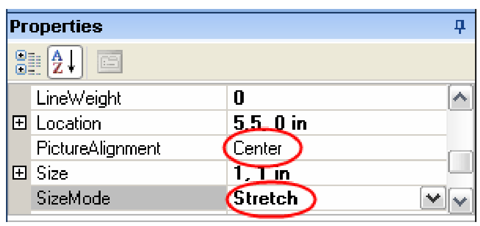
8) In the properties window, click on the image property and browse to the desired image file on your hard drive



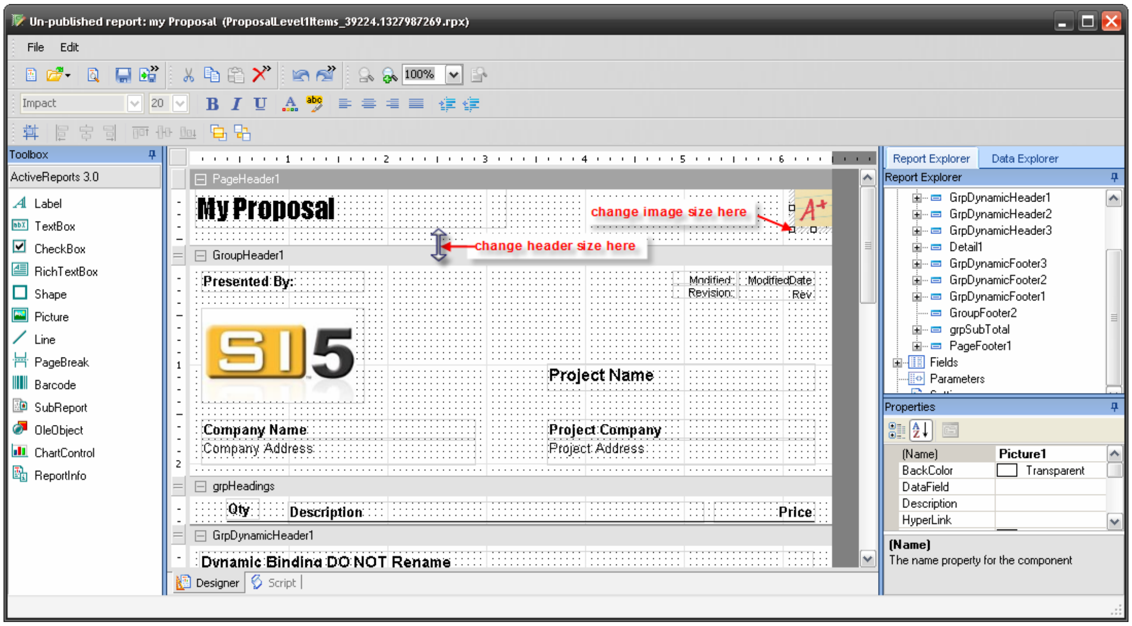
9) At this point you will see the image in the design pane



10) You may also need to set the SizeMode and Picture Alignment properties to see all of the picture

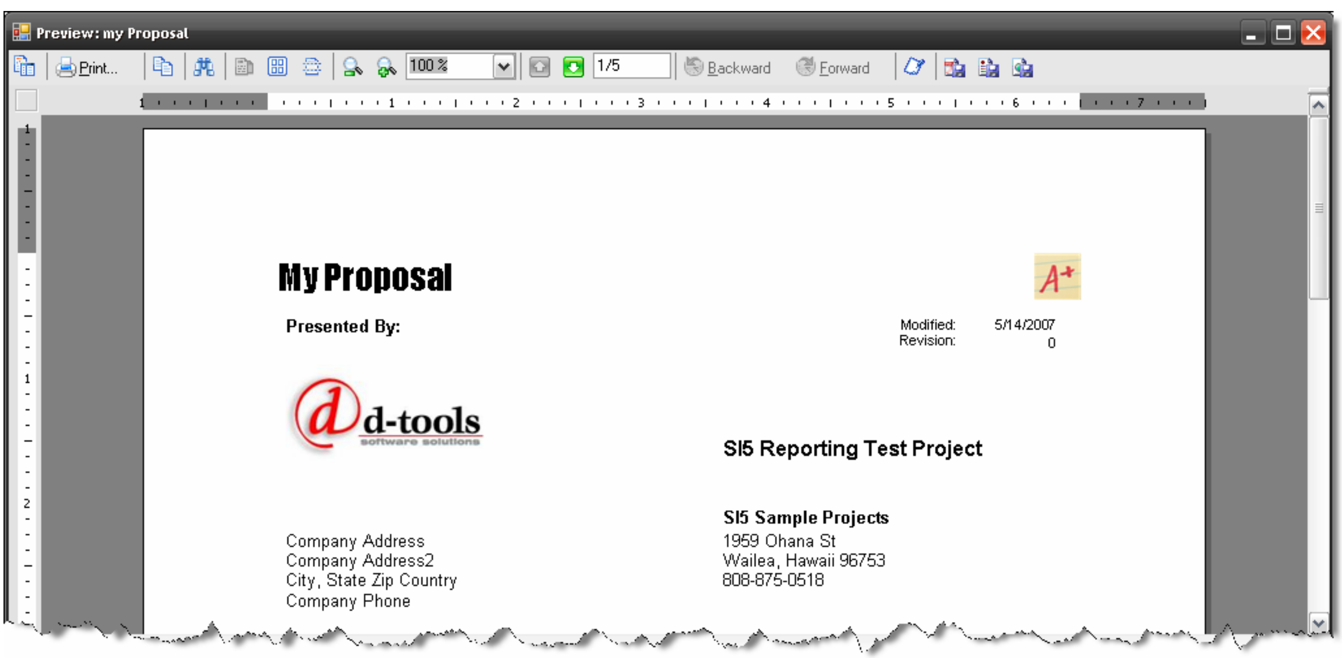


11) Resize the image using the handles on the image. You may need to adjust the size of the Header area before or after you do this.



Step 3: Preview and Publish the Report

1) Go to File > Preview to preview the report vs. a sample project. Close the window when done.



2) When satisfied, go to File > Publish. Click 'Yes' at the prompt. You will be returned to the reporting center and your custom report will appear in your reports list.