VI-99: Invoice Customization Tips and Tricks

How to Make Your Invoice Exactly What You Need

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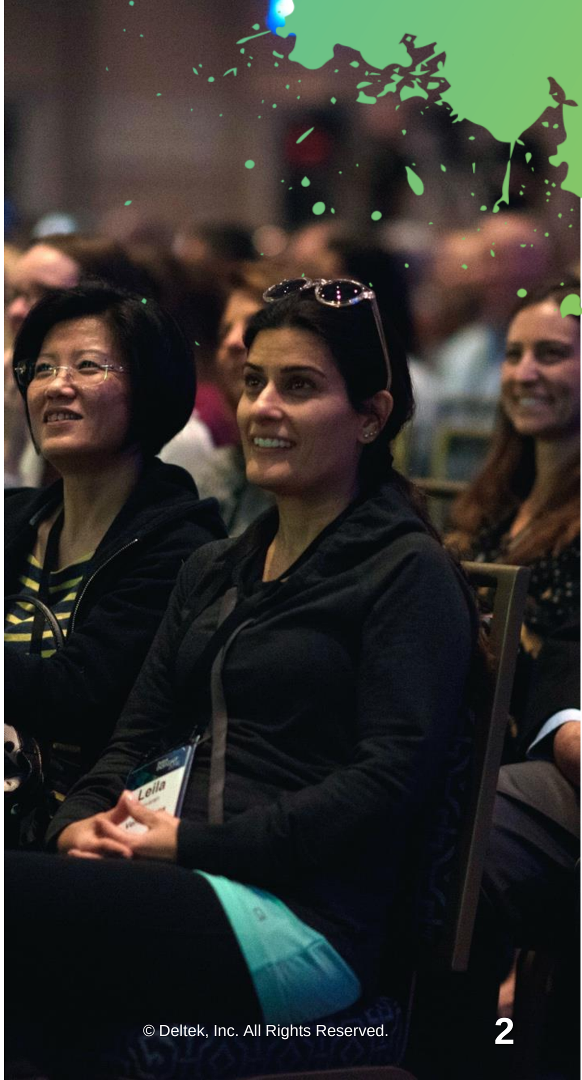
Deltek, Inc.

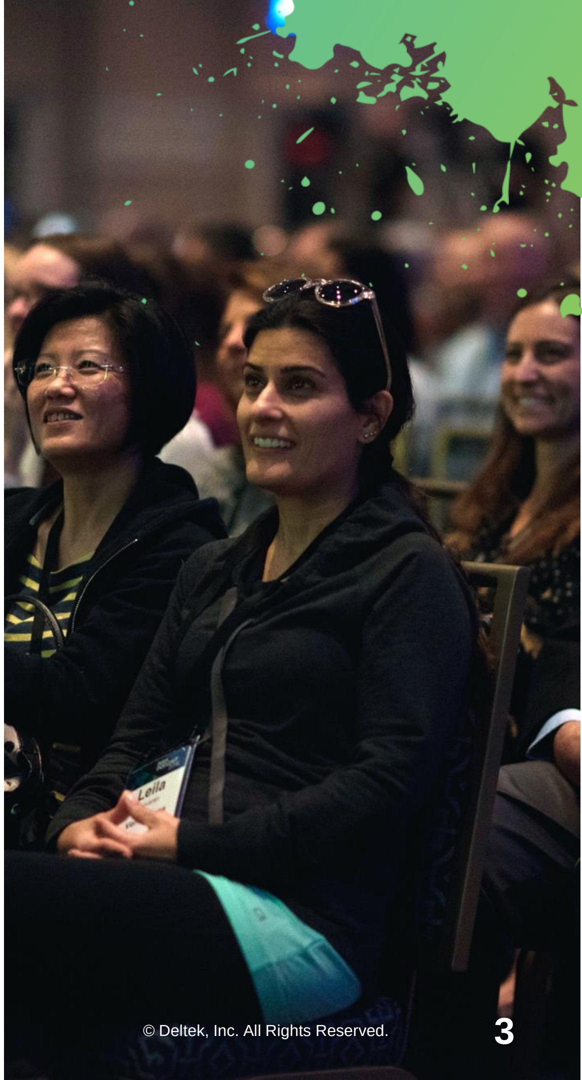
Agenda

1. Software
2. Database
3. Files
4. Invoice Project
5. Main Invoice Structure
6. Invoice Customization Preparation
7. Invoice Customizations 1-4



Agenda (con't)

8. Report Loading
9. More Tips and Tricks
10. Questions & Contact



01

Software

Software

- Visual Studio 2013 (for Vision 7.6, 7.5, 7.4)
- Microsoft SQL Server Data Tools Business Intelligence for Visual Studio 2013
  - aka BIDS for Visual Studio 2013
  - aka Business Intelligence for Visual Studio 2013
- Microsoft SQL Server Management Studio 20XX

02

Database

Database

- Invoice tables: bill*
  - billInvMaster: Main invoice table. Contains a record per WBS (Work Breakdown Structure) with data to display, including parent levels.
  - billFeeDetail: Invoice fee data
  - billLabDetail: Invoice labor data
  - billConDetail: Invoice consultant data
  - billExpDetail: Invoice expense data
  - billUnitDetail: Invoice unit data

Database

- Invoice tables (continued): bill*
  - billAddDetail: Invoice add-on data
  - billLimDetail: Invoice limit data
  - billTaxDetail: Invoice tax data
  - billRetDetail: Invoice retainage data
  - billInvSums: Invoice summary data (watchout for arraytype)
  - billARDetail: Invoice AR detail

Database

- Invoice tables (continued): bill*
  - billBTDDetail: Invoice billed-to-date detail

Database

- Keys:
  - MainWBS1
  - Invoice

Database

Examples:

SELECT * FROM billInvMaster WHERE MainWBS1 = '00000an.00' and Invoice = '<Draft>'

SELECT * FROM billLabDetail WHERE MainWBS1 = '00000an.00' and Invoice = '<Draft>'

SELECT * FROM billInvSums WHERE MainWBS1 = '00000an.00' and Invoice = '<Draft>' and ArrayType = 'I'

03

Files

Files

- Create a folder on your local machine (development machine)
- Make copies of the standard invoice files from your Vision Web/Application into the folder of your development machine:

    C:\Program Files\Deltek\Vision\Reports\Standard\Invoice

Files

- Make a copy of the DefaultDataSource.rds file into the folder of your development machine's same folder as where the standard invoice files are. The DefaultDataSource.rds file is one folder up from where the invoice files are:

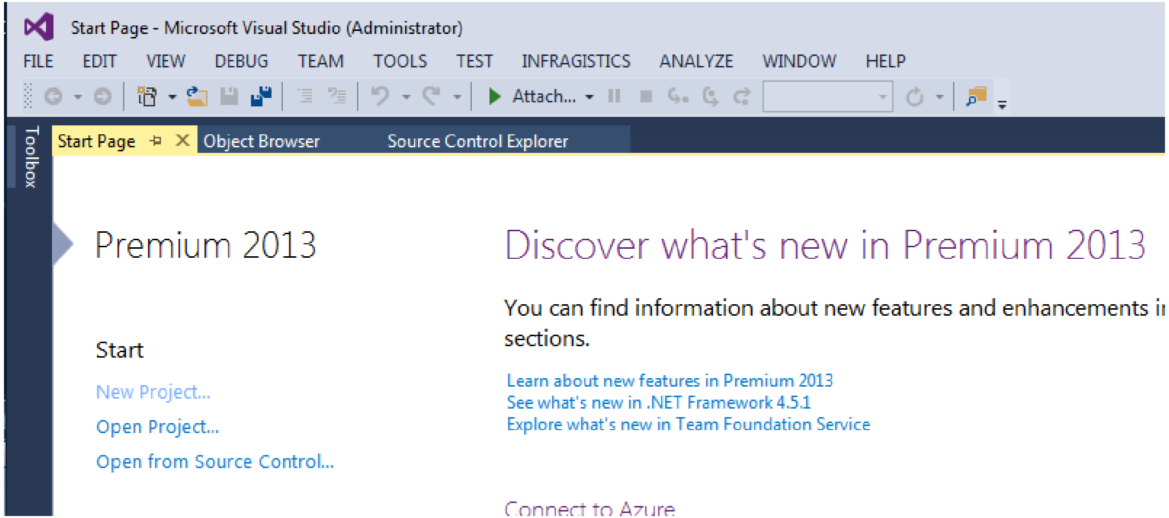
  C:\Program Files\Deltek\Vision\Reports\Standard

04

Invoice Project

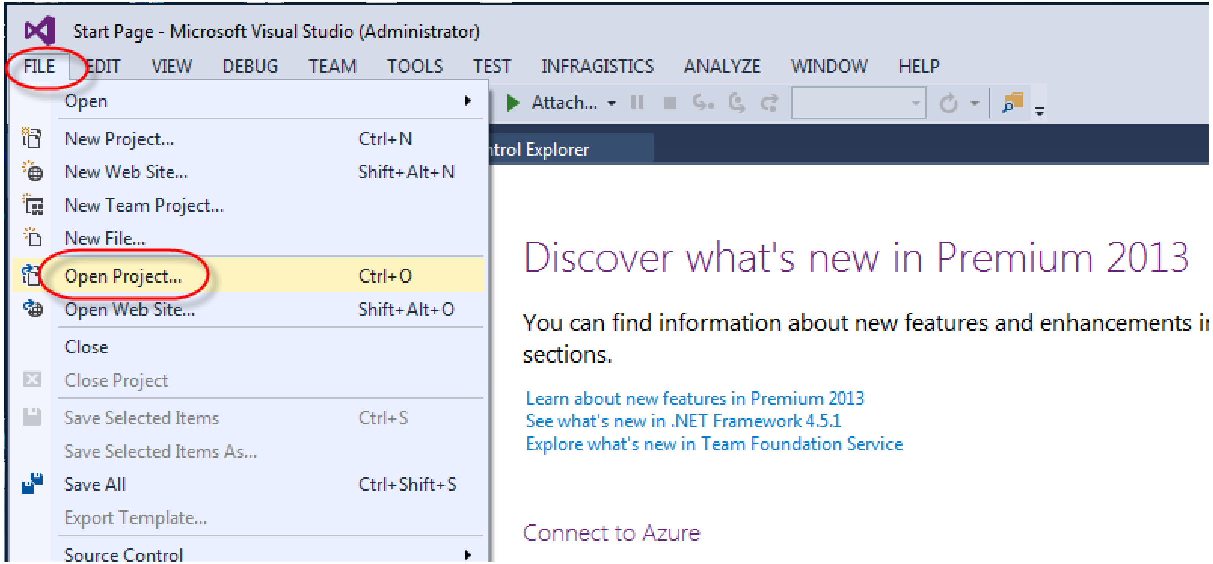
Invoice Project

- In your development machine, open Visual Studio 2013



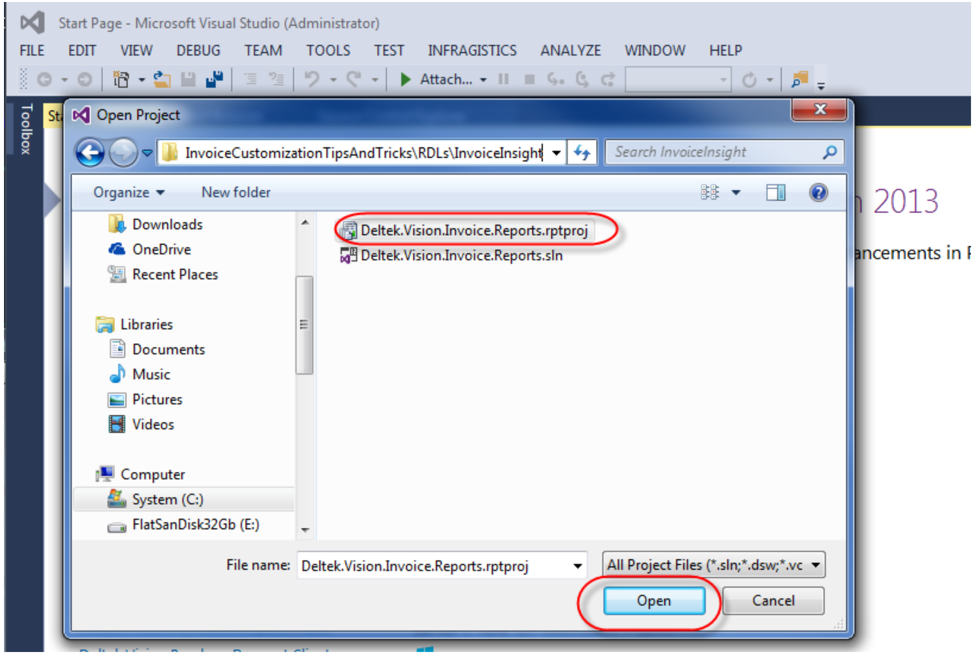
Invoice Project

- Click on File/Open Project…



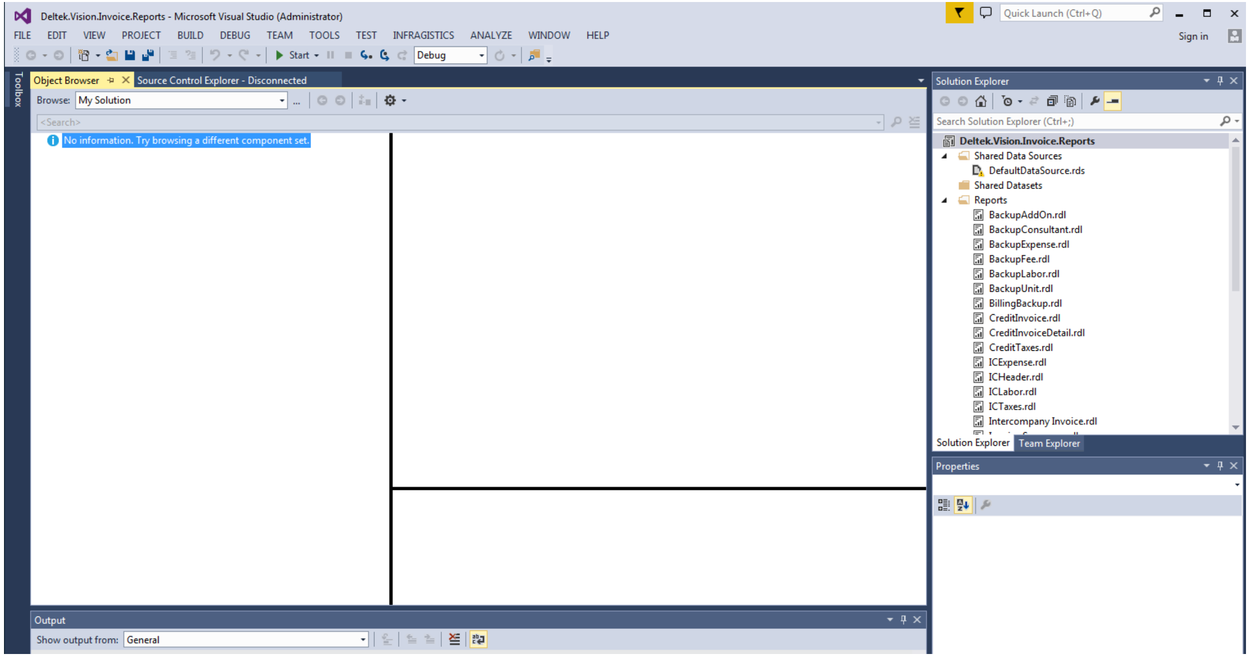
Invoice Project

- Browse to the folder where the invoice files are and click Open



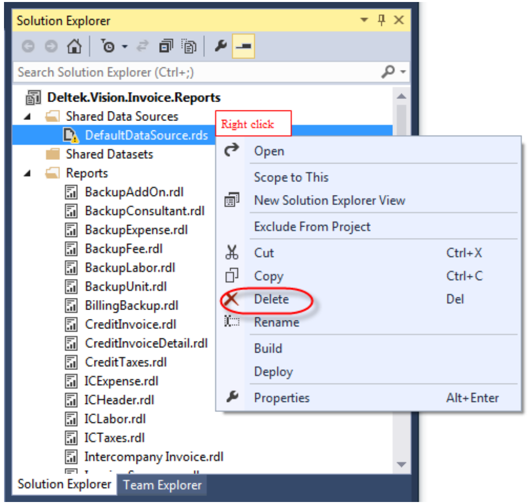
Invoice Project

- Invoice Project



Invoice Project

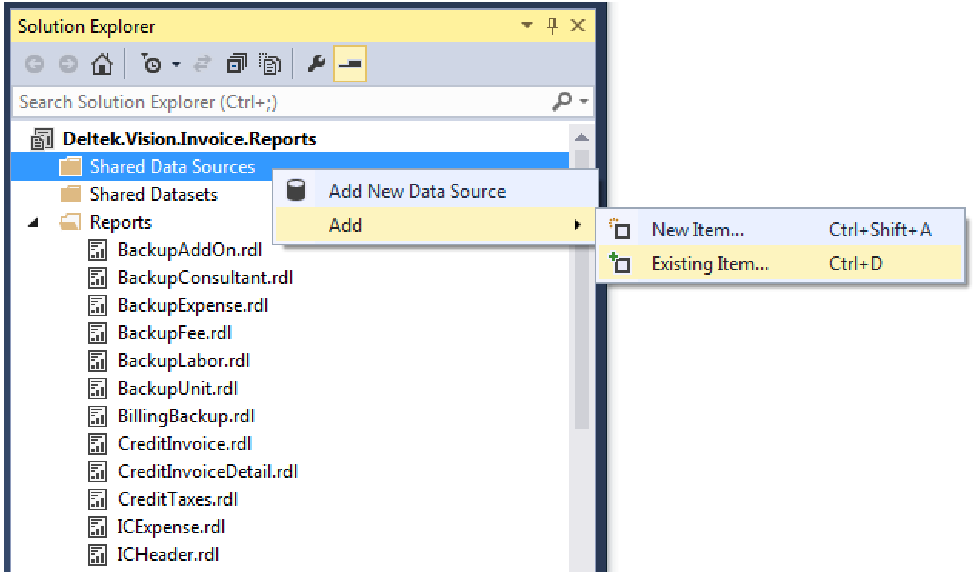
- Relink data source
  - Right click on DefaultDataSource.rds and select “Delete”



  - Confirm DefaultDataSource.rds file deletion.

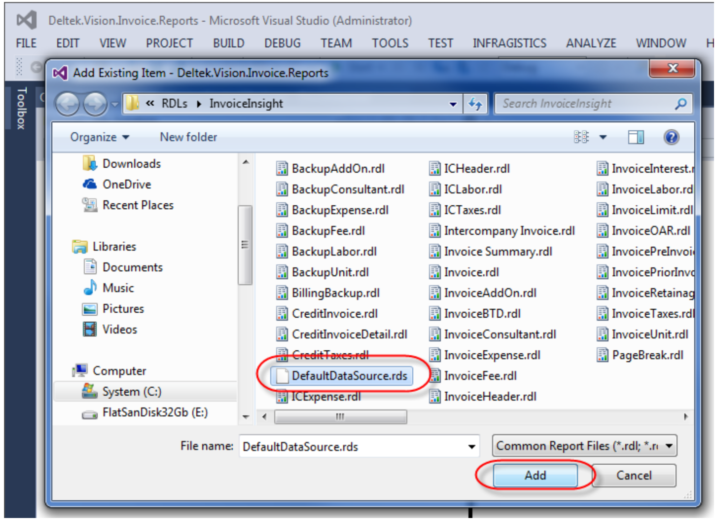
Invoice Project

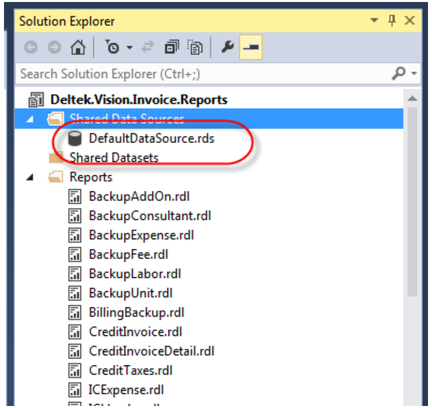
- Relink data source (continued)
  - Right click on “Shared Data Sources” folder and select Add\Existing



Invoice Project

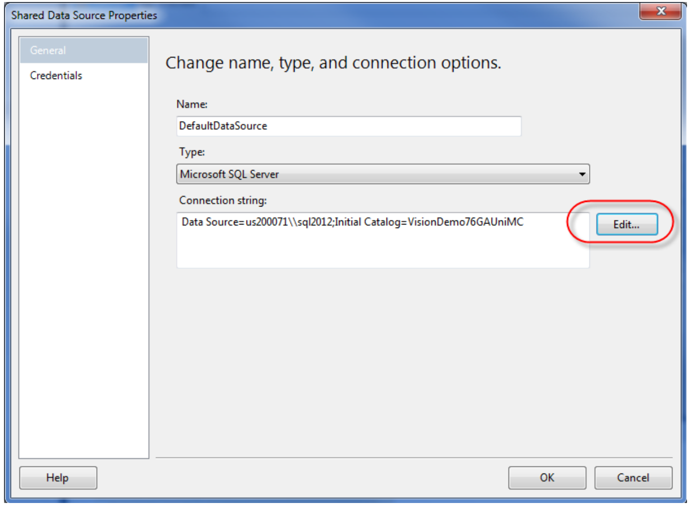
- Relink data source (continued)
  - Browse\Select DefaultDataSource.rds from the folder where the invoice files are and click Add

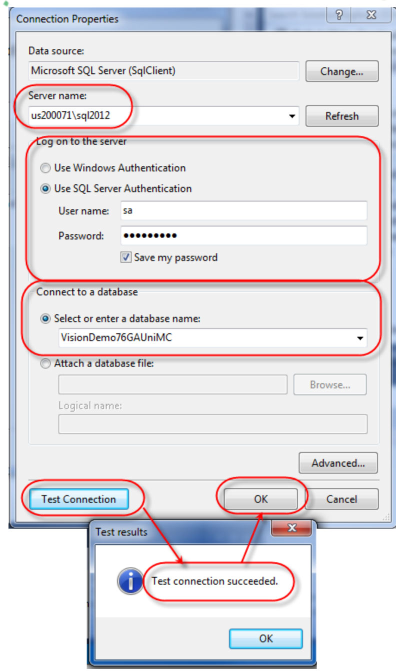




Invoice Project

- Relink data source (continued)
  - Open DefaultDataSource.rds and setup your connection string accordingly



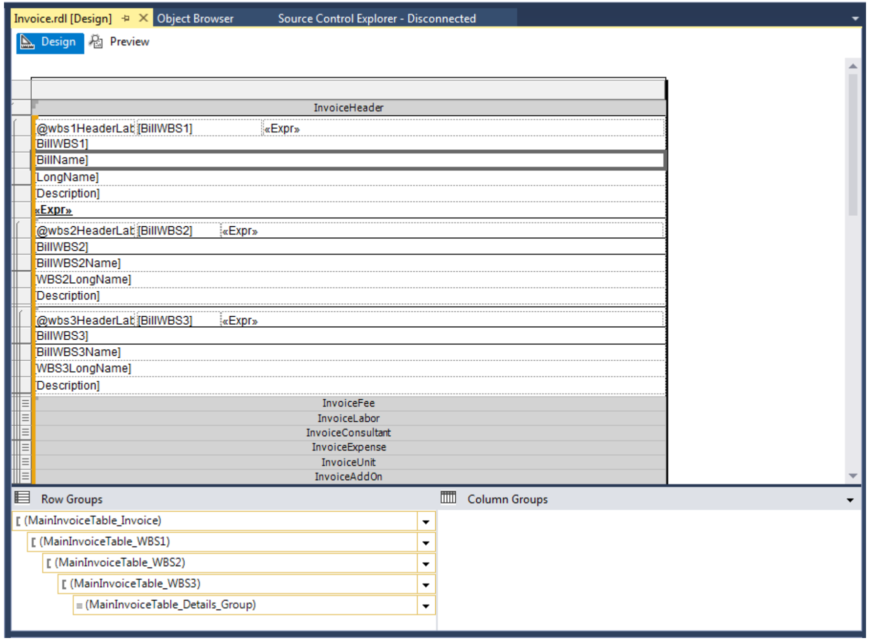


05

Main Invoice Structure

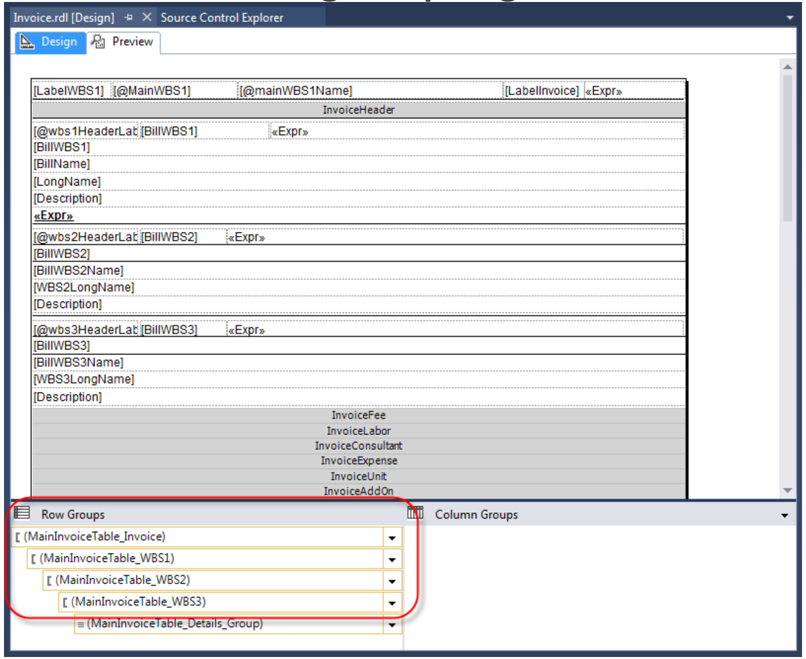
Main Invoice Structure

- Main Invoice = Invoice.rdl, open Invoice.rdl



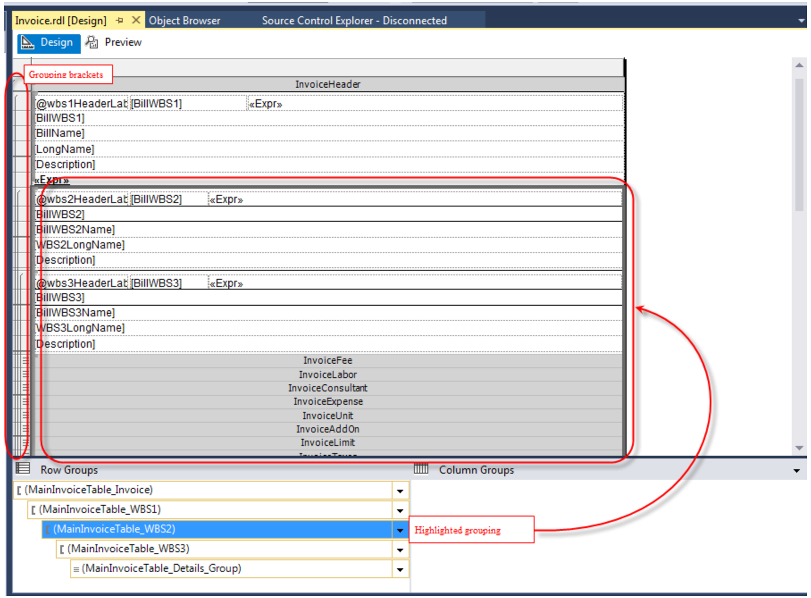
Main Invoice Structure

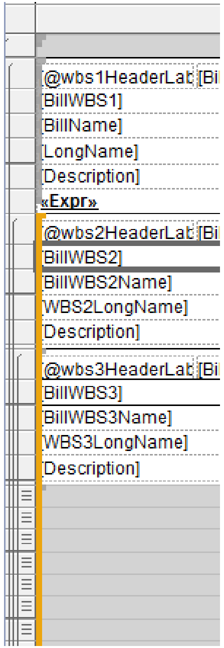
- Invoice main groupings: Invoice, billWBS1, billWBS2, billWBS3



Main Invoice Structure

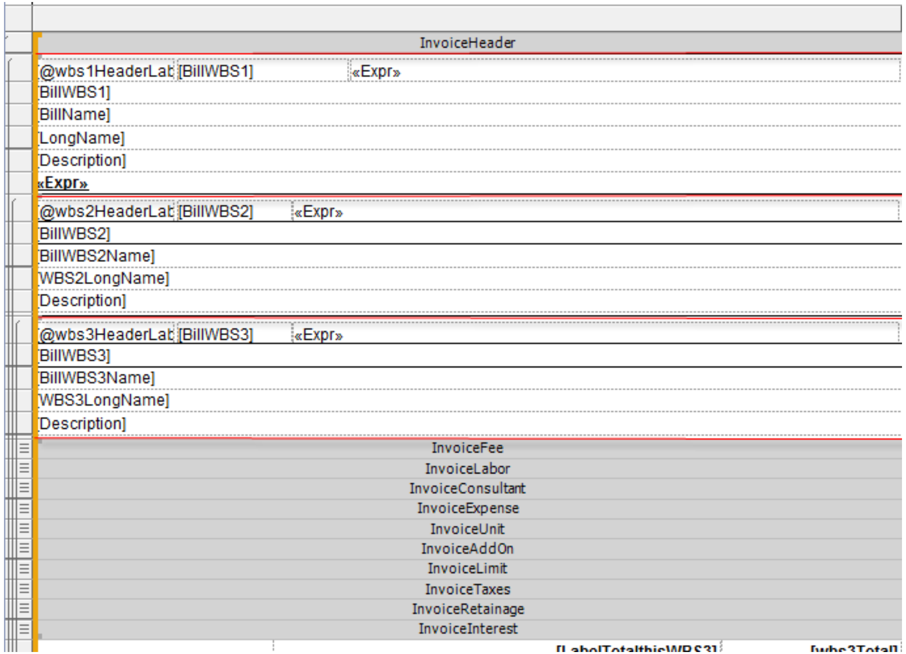
- Highlight grouping or follow grouping brackets to identify groupings within the design





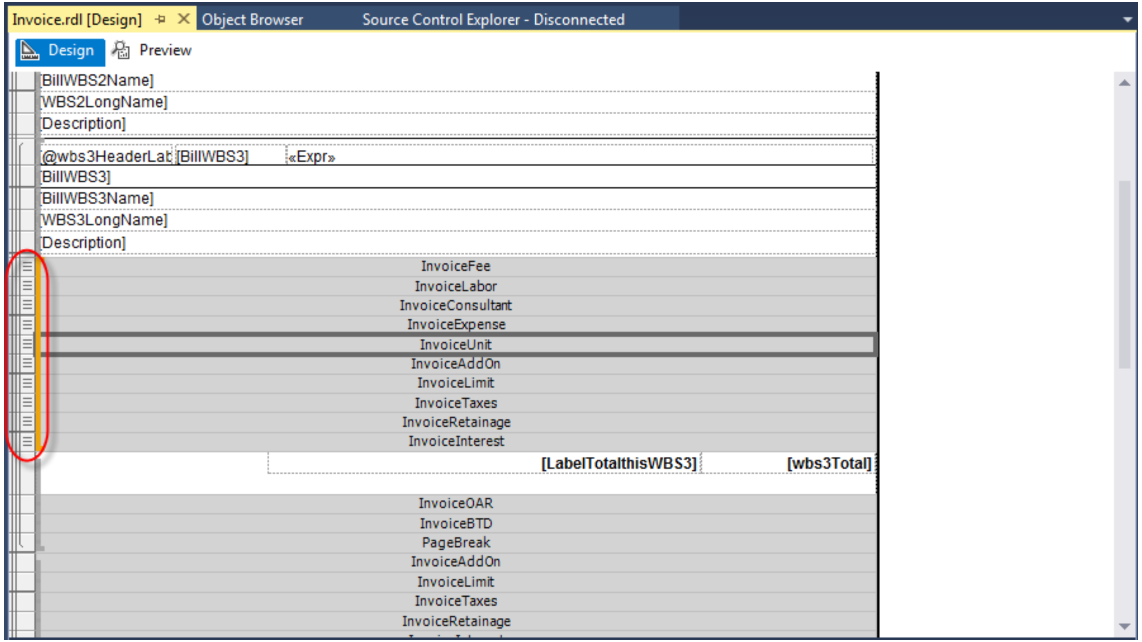
Main Invoice Structure

- Invoice headers



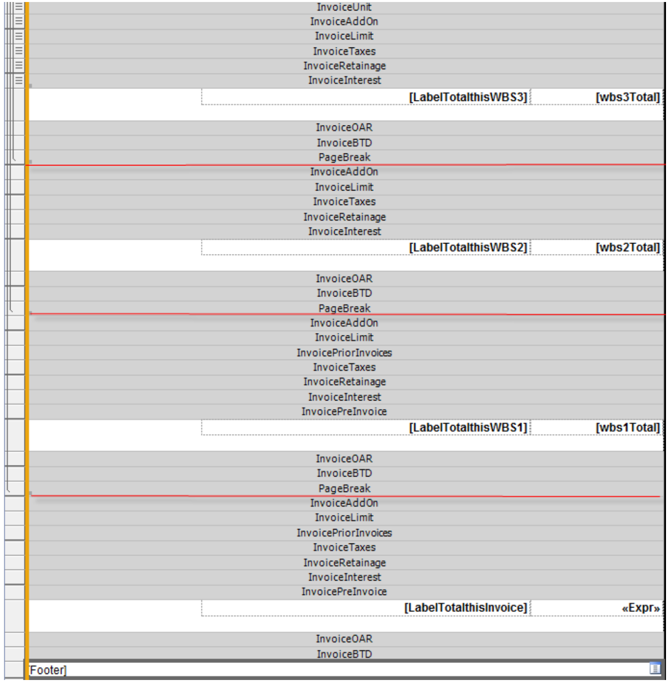
Main Invoice Structure

- Special detail icon for detail section



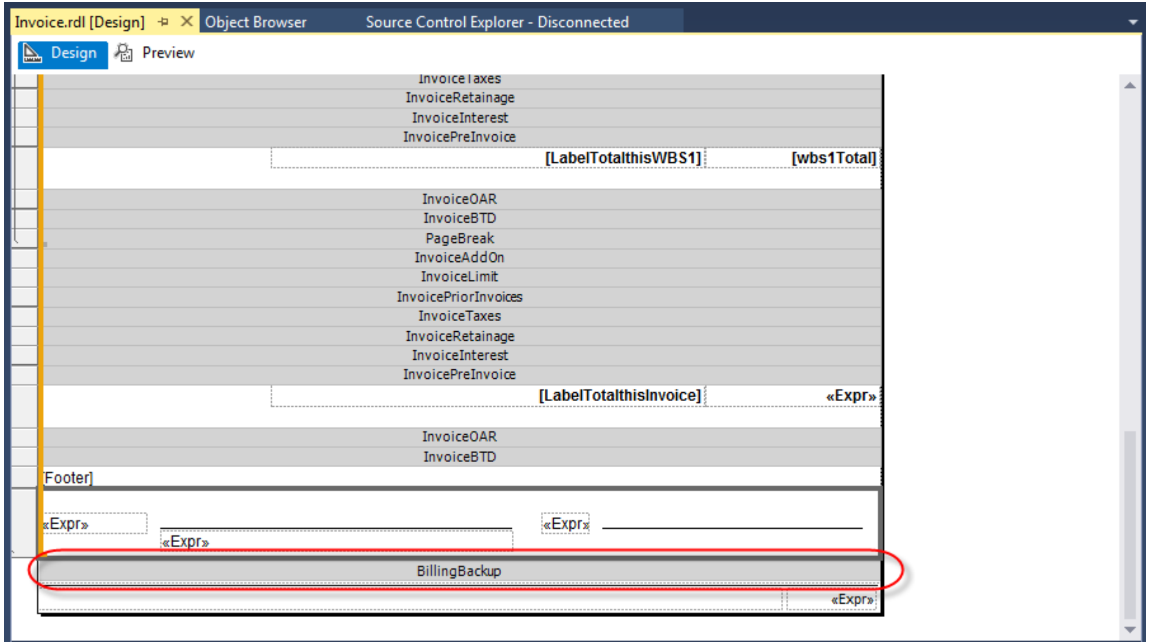
Main Invoice Structure

- Invoice footers



Main Invoice Structure

- Billing Backup sub-report location



06

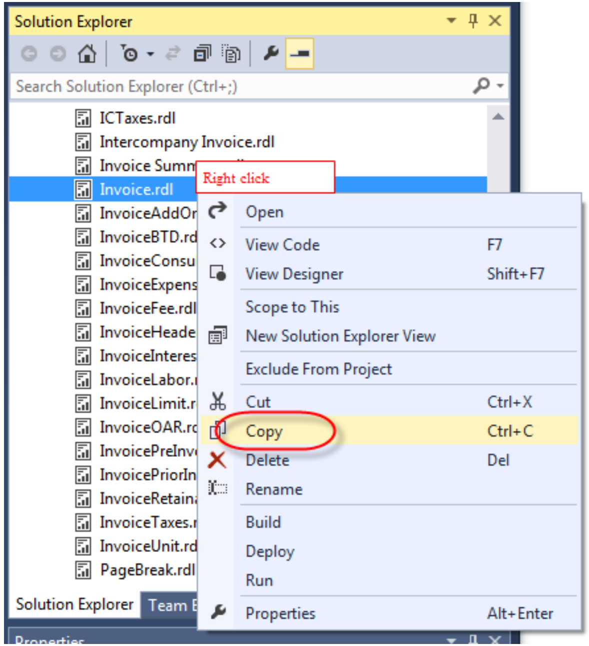
Invoice Customization Preparation

Invoice Customization Preparation

- Make a copy of Invoice.rdl
- Rename copy of Invoice.rdl to InvoiceInsight.rdl

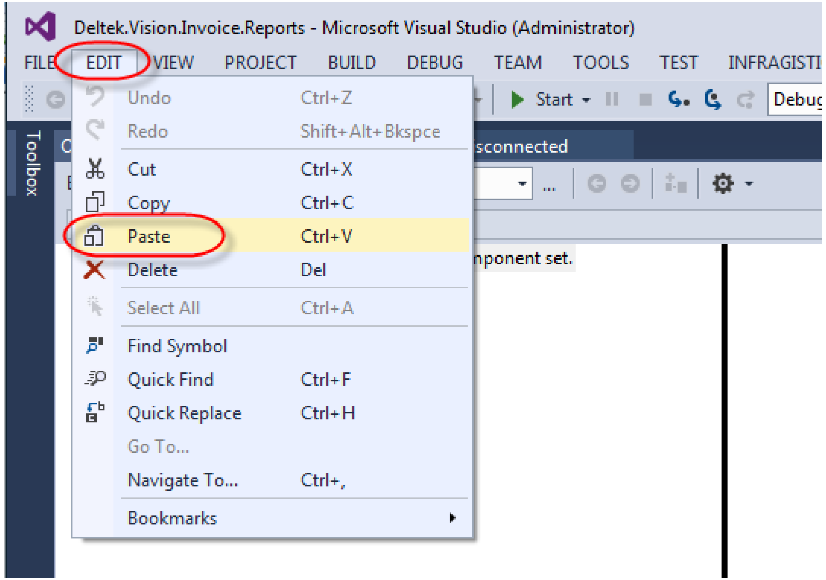
Invoice Customization Preparation

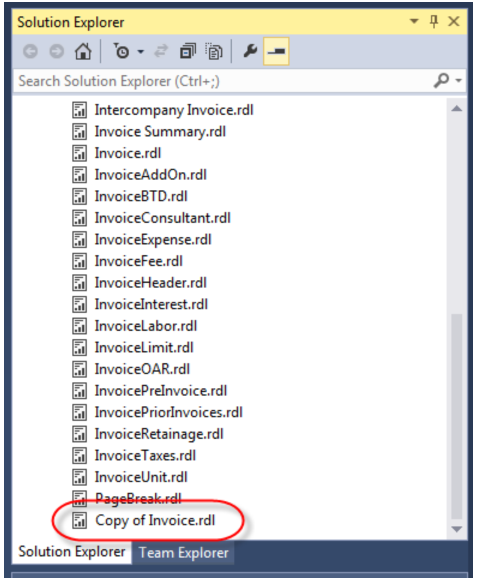
- Right click Invoice.rdl and select Copy



Invoice Customization Preparation

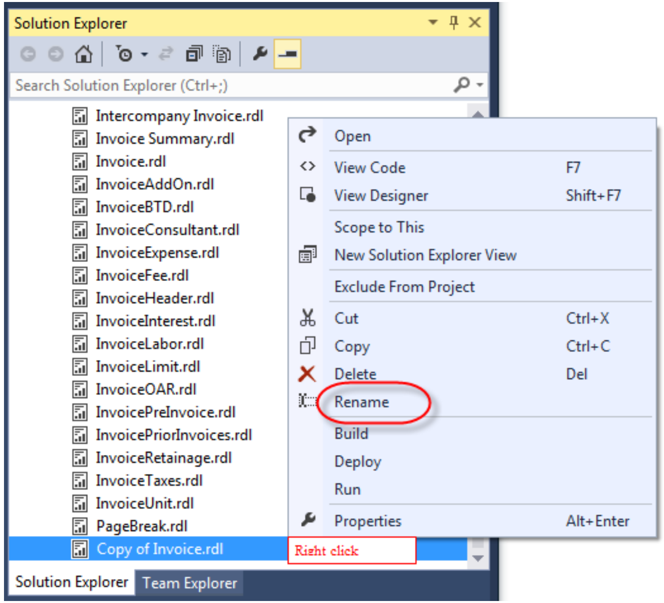
- Click on EDIT/Paste

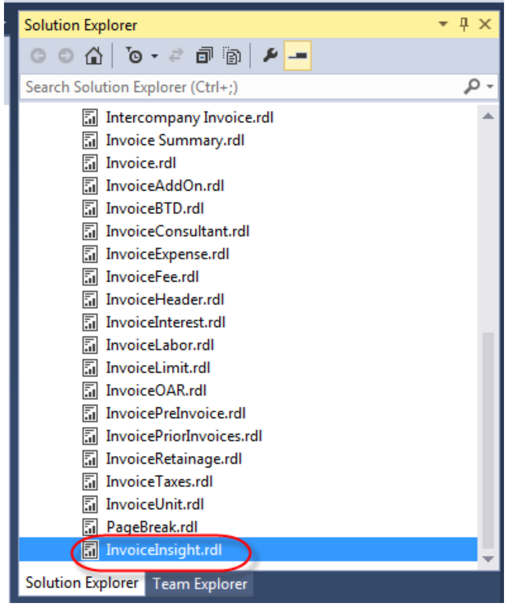




Invoice Customization Preparation

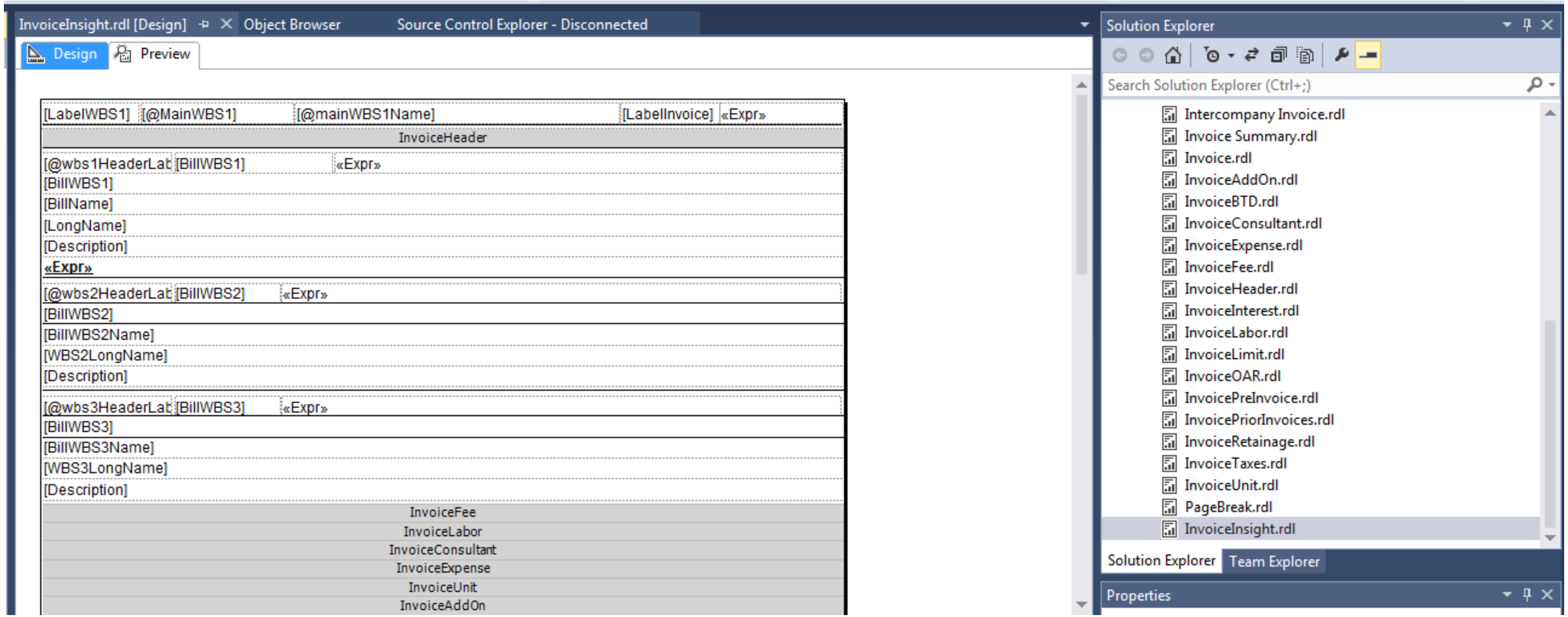
- Right click/Rename





Invoice Customization Preparation

- InvoiceInsight.rdl



07a

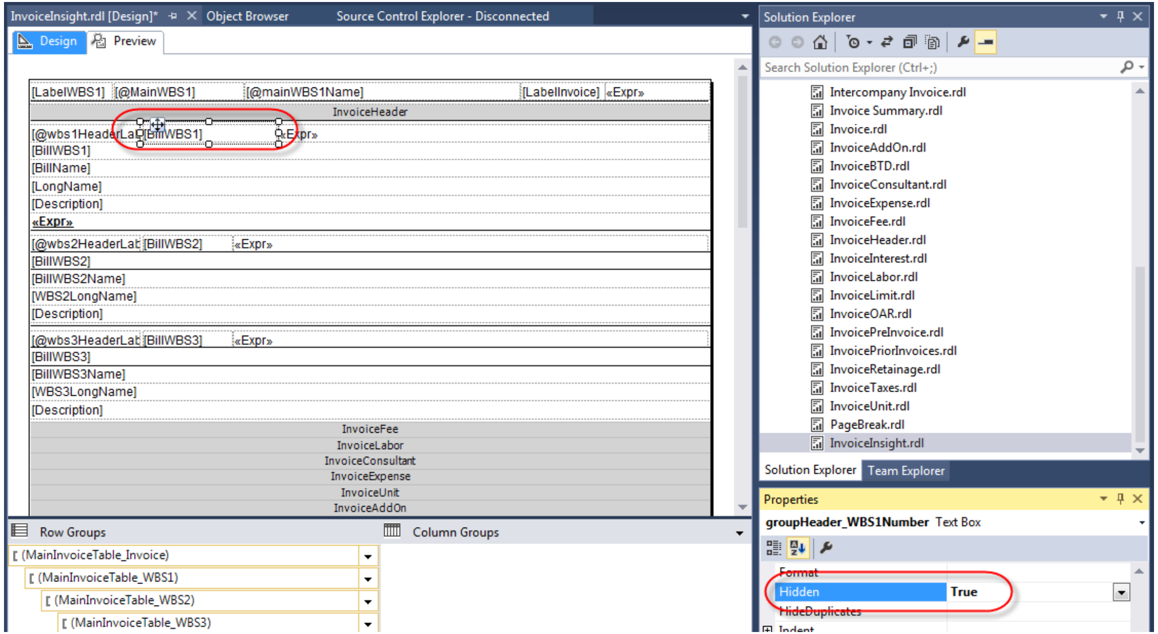
Invoice Customization 1

Invoice Customization 1

- Project No./Name modification
  - Hide Project No. (WBS1)
  - Show Project Name in navy blue font color

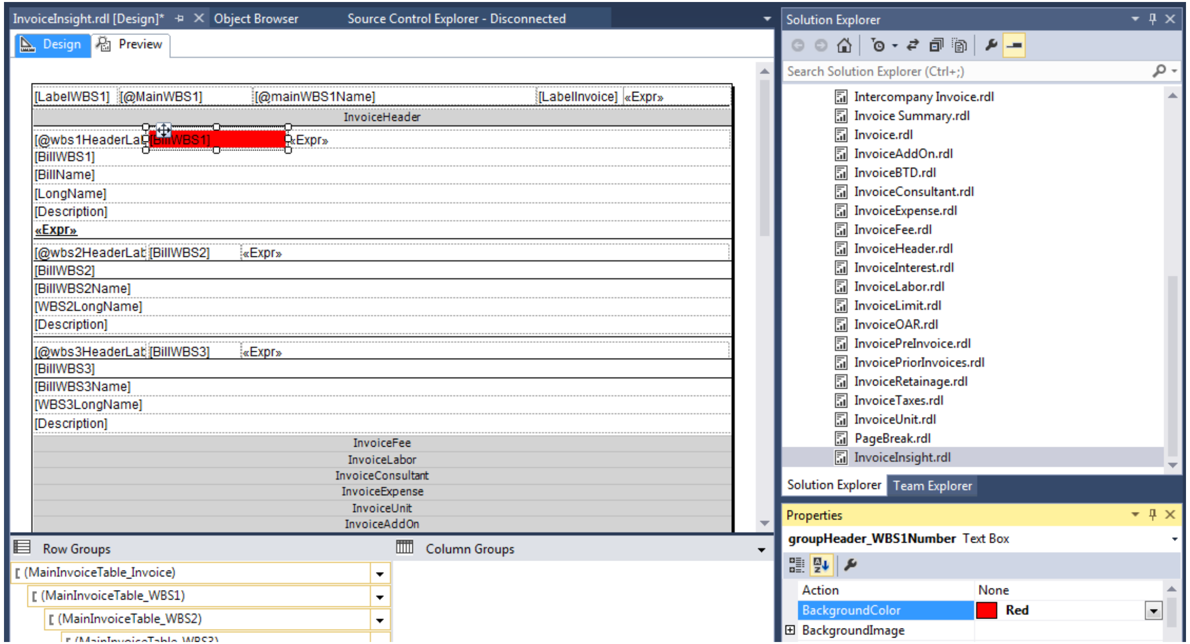
Invoice Customization 1

- Locate WBS1 grouping, select BillWBS1 textbox and hide it



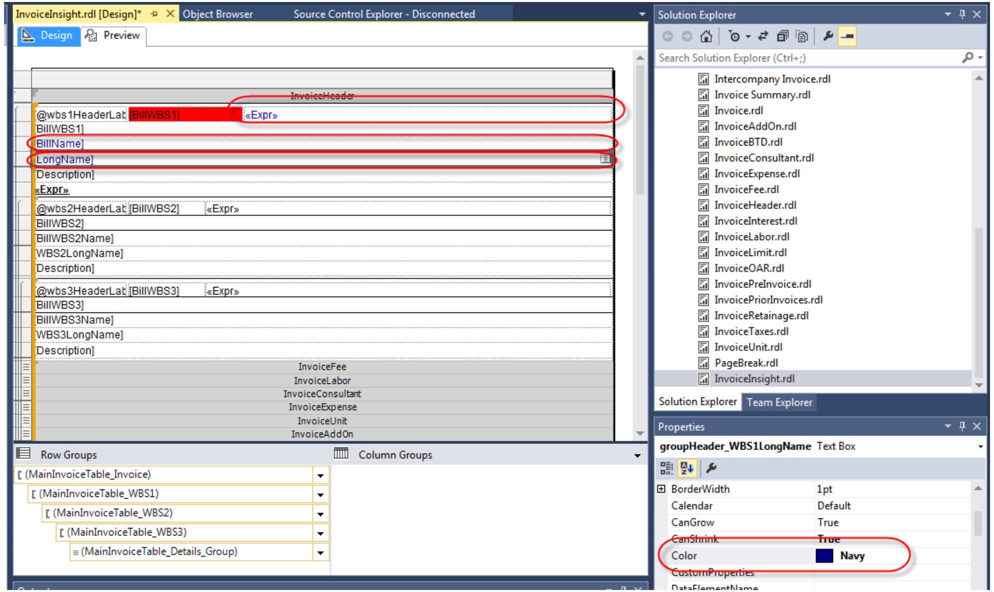
Invoice Customization 1

- Tip: change background color to Red (or any color of your preference)



Invoice Customization 1

- Select and change each possible field that displays the Project Name and change font color to Navy



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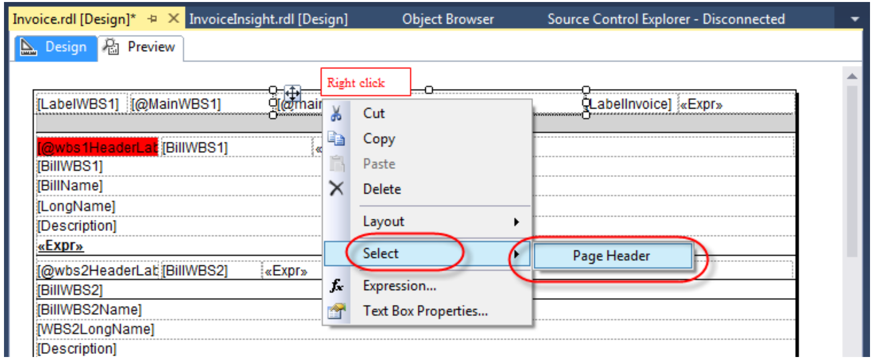
Invoice Customization 2

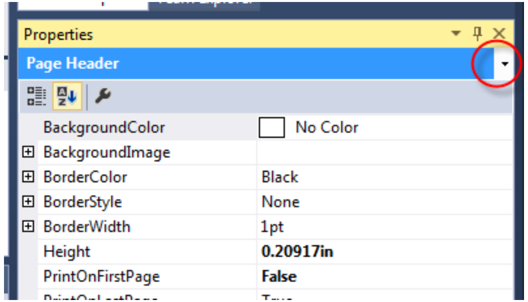
Invoice Customization 2

- Page header modification
  - Move Invoice Number below Project Number
  - Add Invoice Date below the moved Invoice Number

Invoice Customization 2

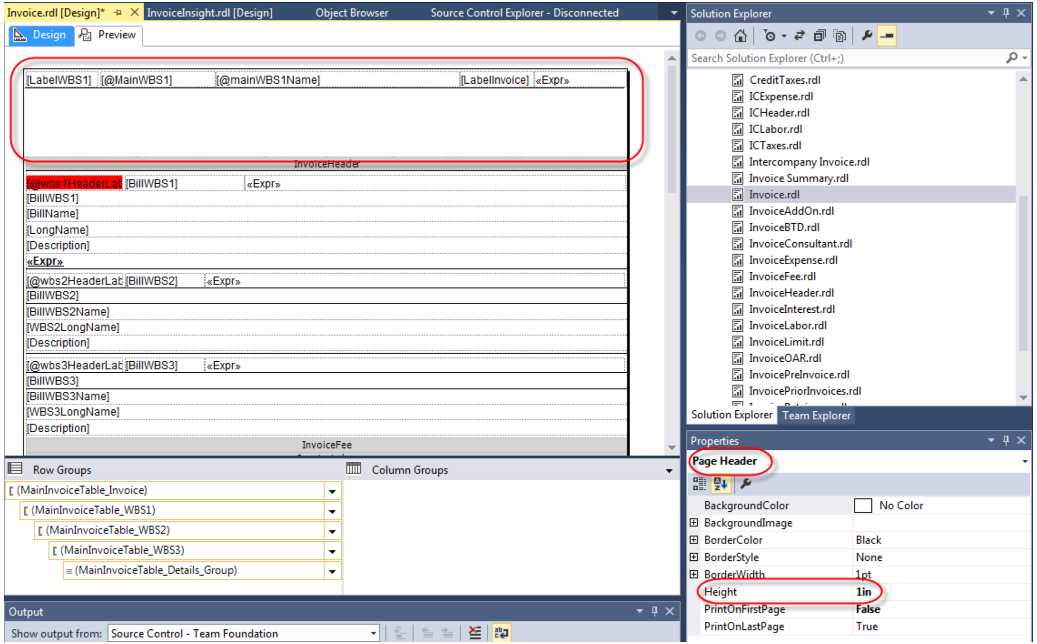
- Select Page Header via Right Click/Select/Page Header or Properties





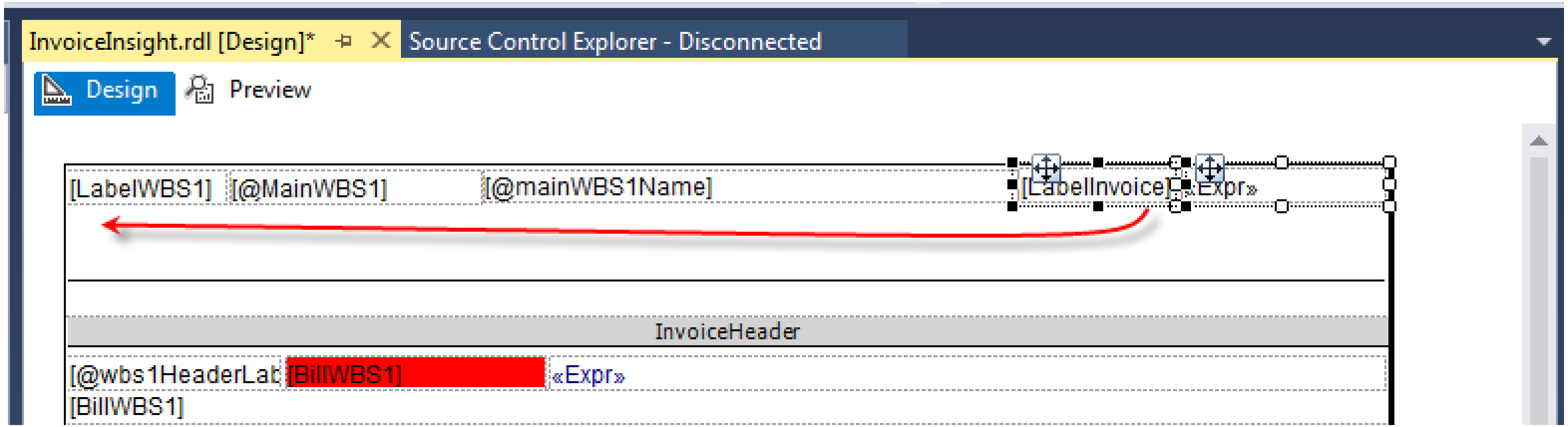
Invoice Customization 2

- Change Height property to 1 inch, to give yourself room to work



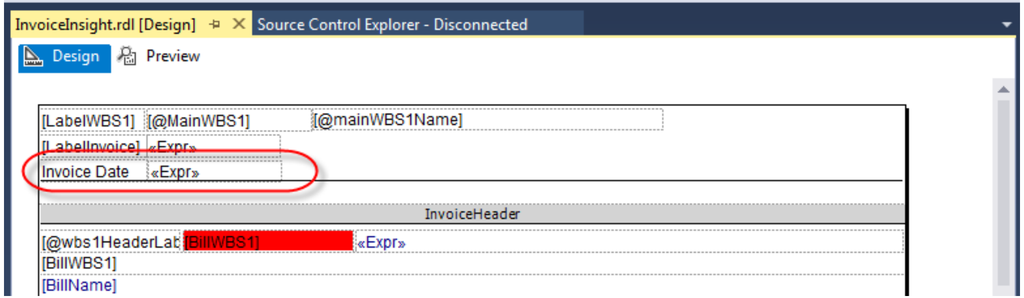
Invoice Customization 2

- Move Page Header Bottom Line down to make room and move both Invoice related textboxes down

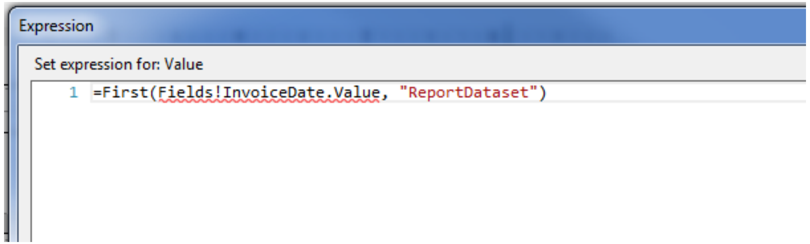


Invoice Customization 2

- Add two new Textboxes below Invoice to display the Invoice Date and re-adjust Page Header Bottom Line

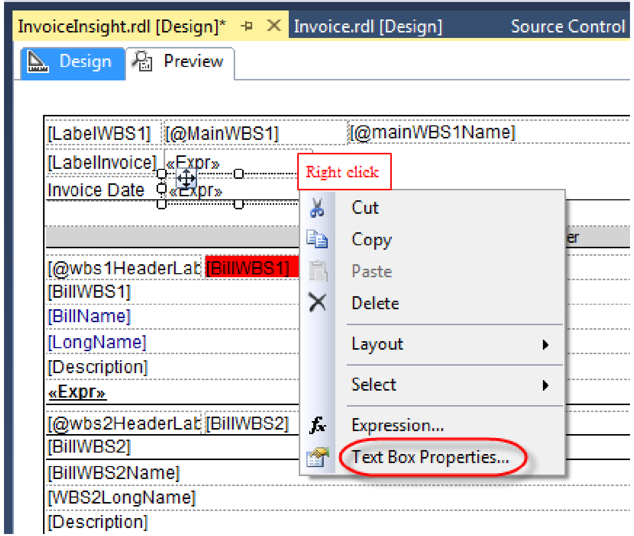


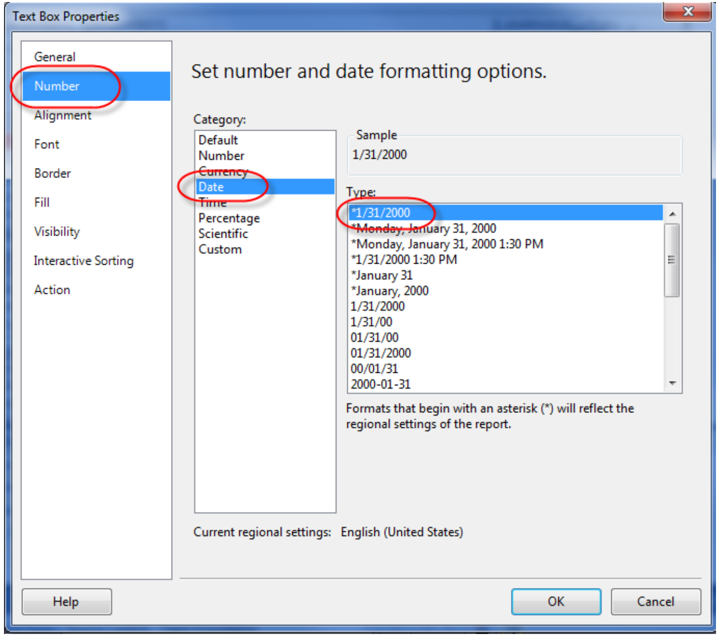
- Invoice Date field expression



Invoice Customization 2

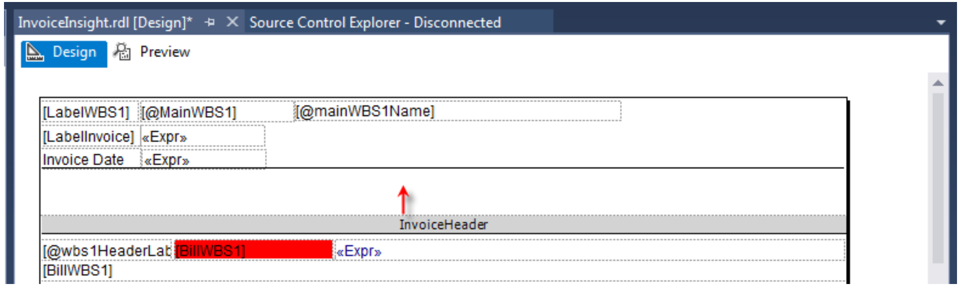
- Invoice Date format setting:

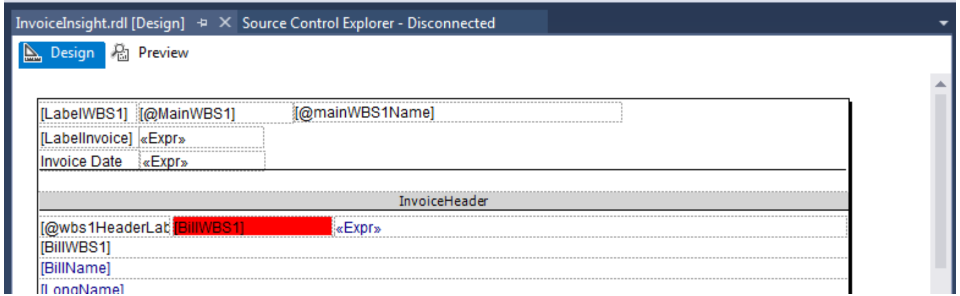




Invoice Customization 2

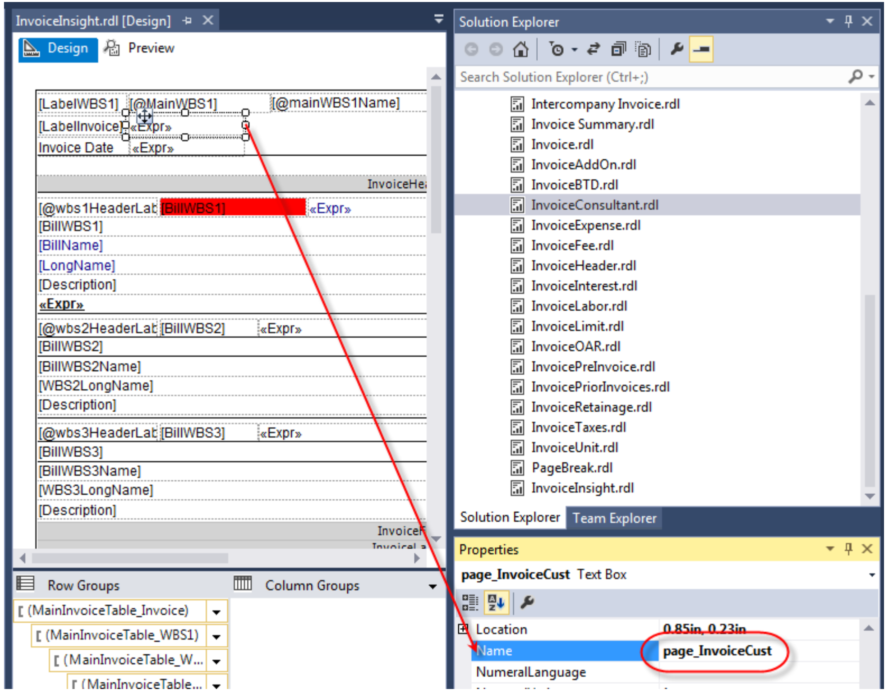
- Resize Page Header back using cursor





Invoice Customization 2

- Trick:
  - Rename page_lblInvoice to page_lblInvoice**Cust** and page_Invoice to page_Invoice**Cust**
  - Why? These fields are moved by Vision Report Architecture on the fly.



07c

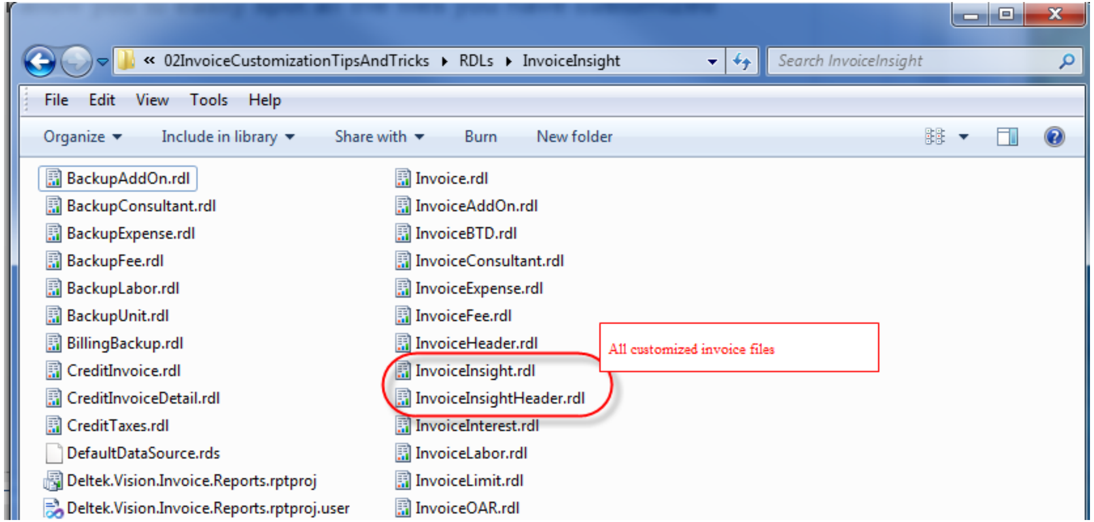
Invoice Customization 3

Invoice Customization 3

- Invoice header modification
  - Add a textbox in the header that shows the Total Compensation amount
  - Change its font size to 12 pts. and bold it

Invoice Customization 3

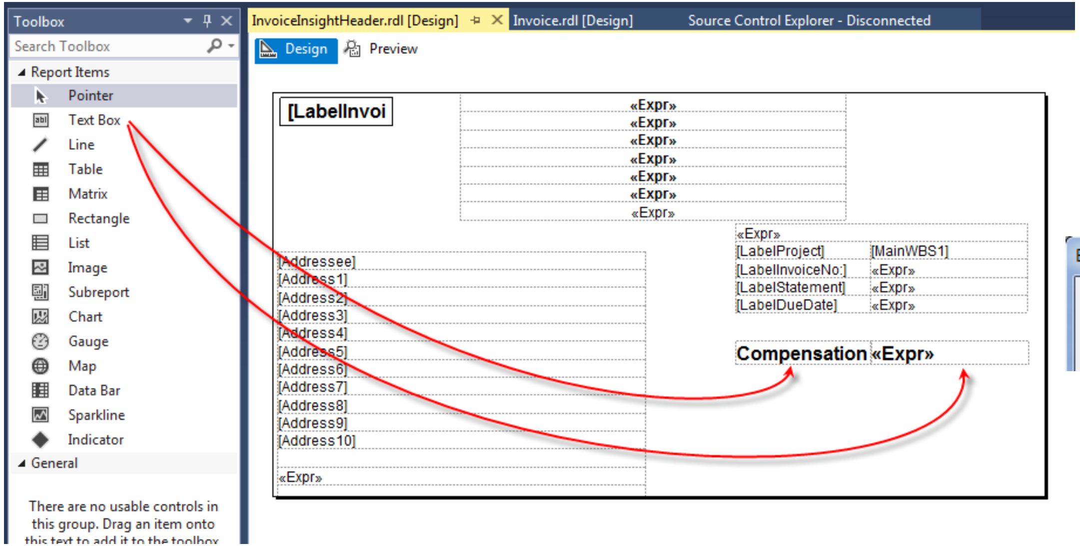
- Copy/rename InvoiceHeader.rdl to InvoiceInsightHeader.rdl

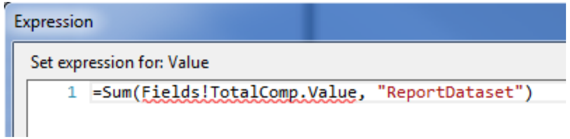


Tip: use naming convention that will allow you to easily spot all the files you have customized

Invoice Customization 3

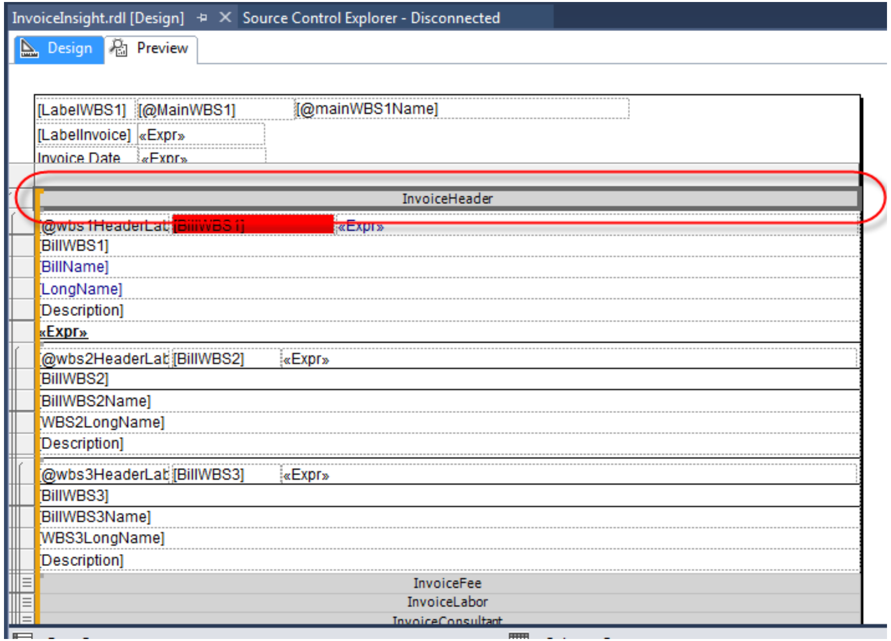
- Open InvoiceInsightHeader.rdl add two textboxes from the Toolbox window to display Total Compensation, adjust font and display format accordingly





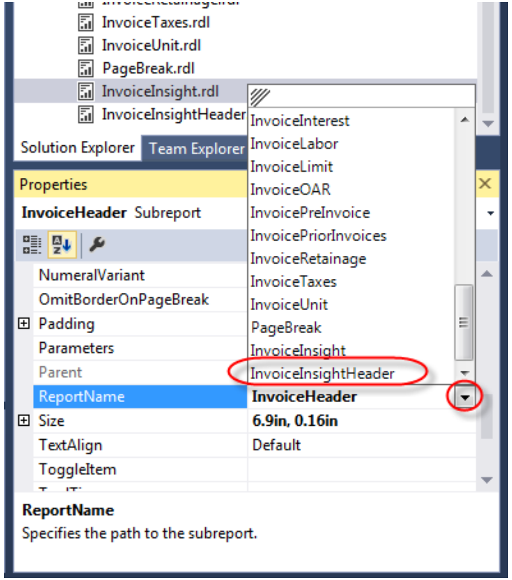
Invoice Customization 3

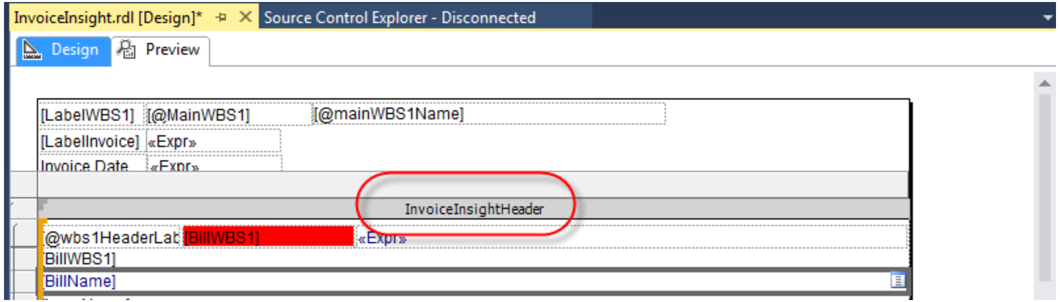
- Open back InvoiceInsight.rdl and highlight the InvoiceHeader subreport



Invoice Customization 3

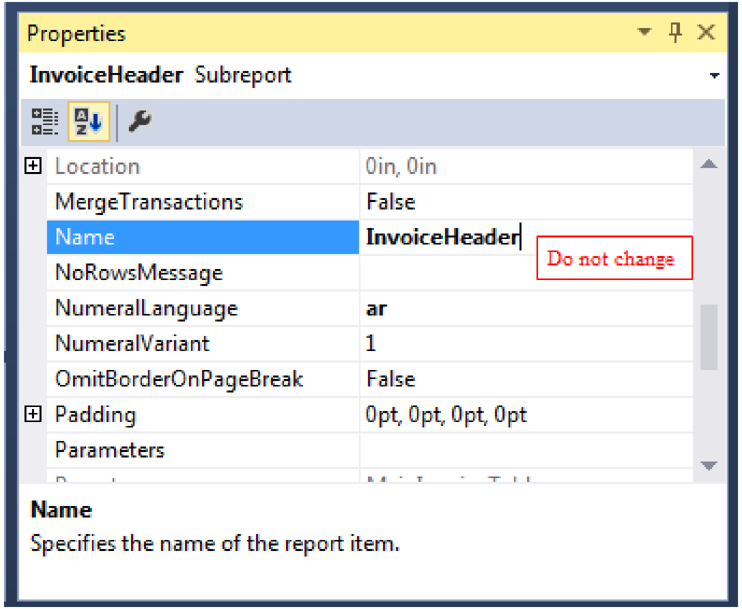
- Under its Properties, change the ReportName to point to your customized InvoiceInsightHeader.rdl





Invoice Customization 3

- Tip: you should not be changing the Name property of any subreport



07d

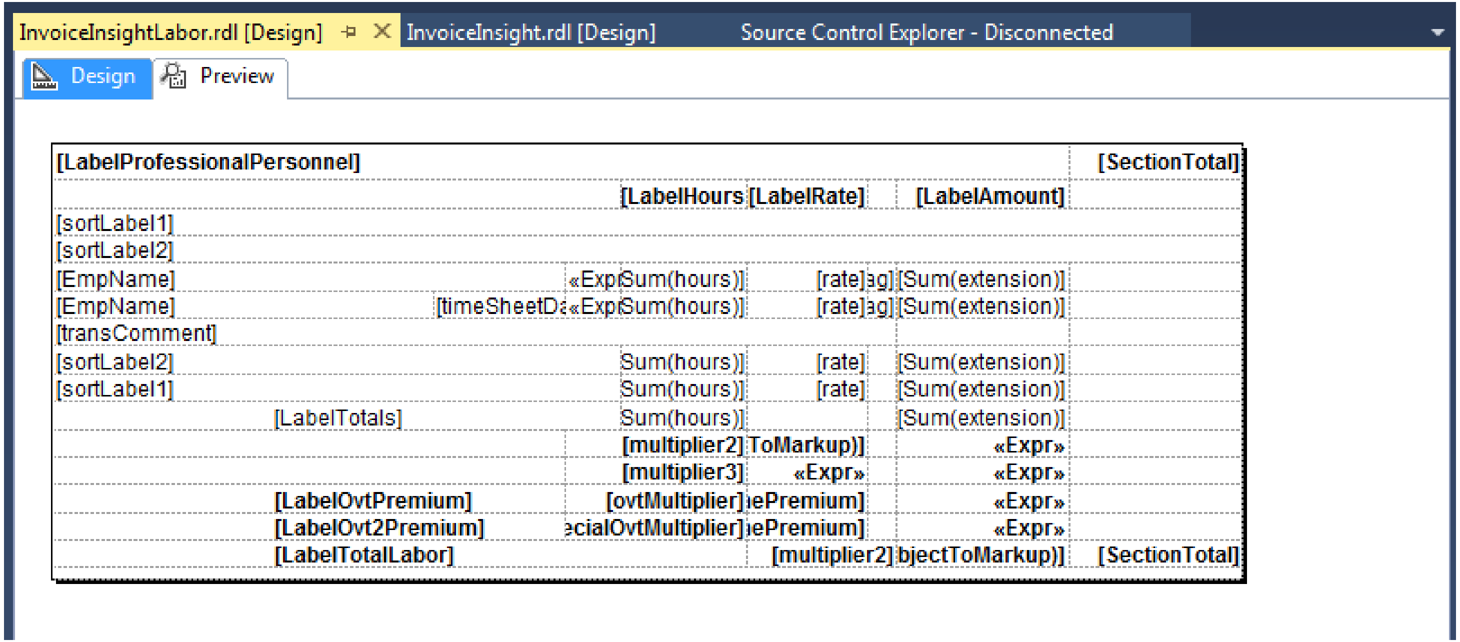
Invoice Customization 4

Invoice Customization 4

- Invoice labor modification
  - Change employee to display as firstname lastname rather than lastname, firstname

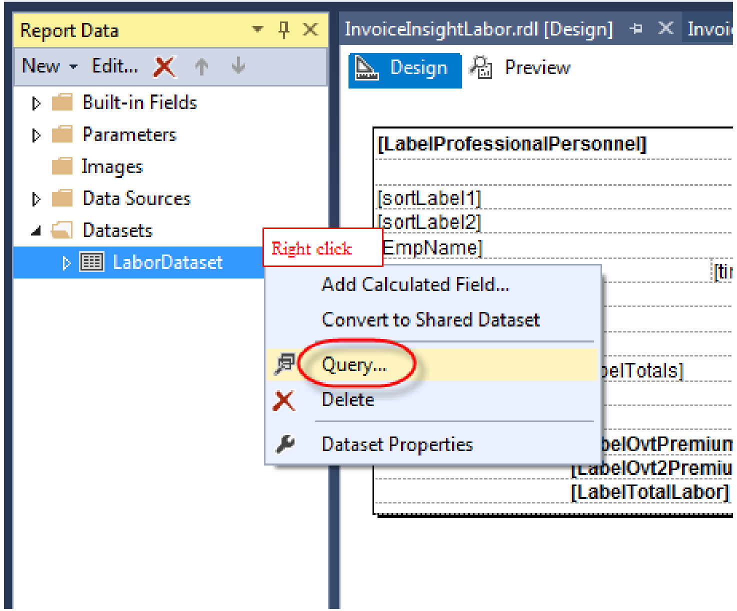
Invoice Customization 4

- Copy/rename InvoiceLabor.rdl to InvoiceInsightLabor.rdl and open it



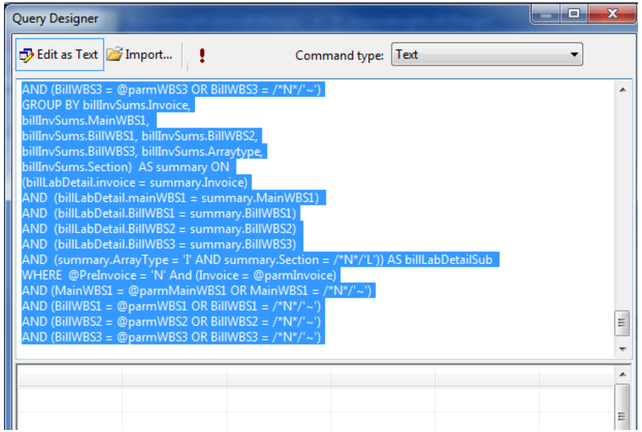
Invoice Customization 4

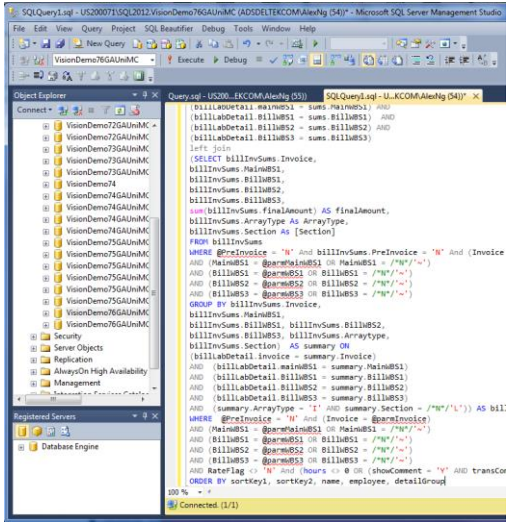
- From the Report Data window, expand Datasets, right click on LaborDataset



Invoice Customization 4

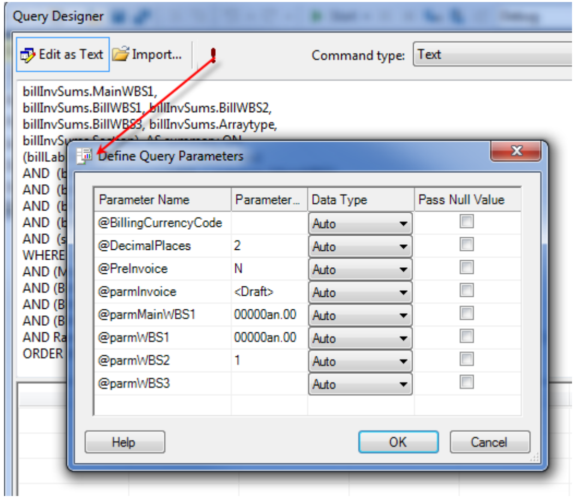
- Tip: use SQL Management Studio to modify the query. Select and copy the whole SQL script from the Query Designer window and paste it into SQL Management Studio

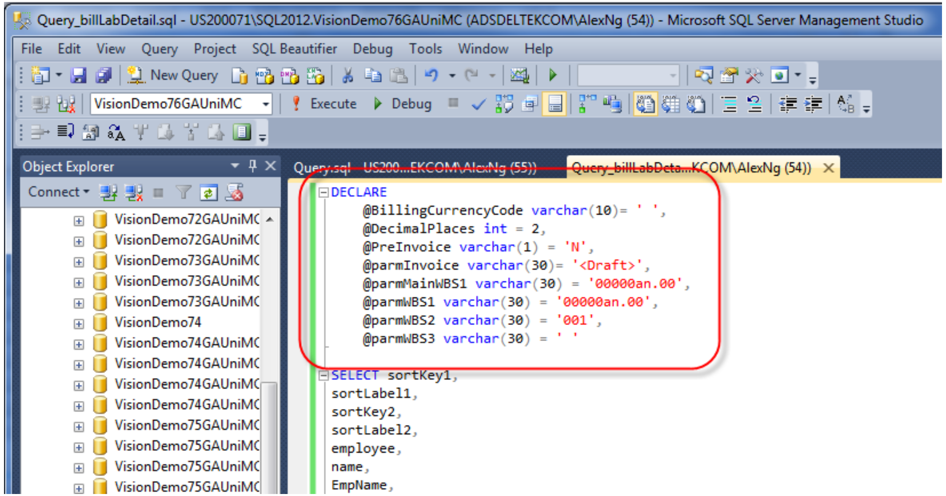




Invoice Customization 4

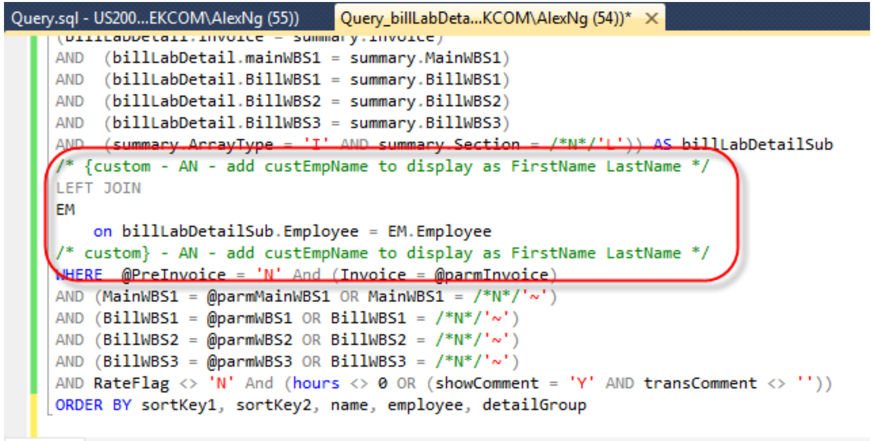
- The query will require parameters before it can run. To figure out which parameters are needed try to run the query from within Query Designer to help you add those to the query you just pasted in SQL Management Studio

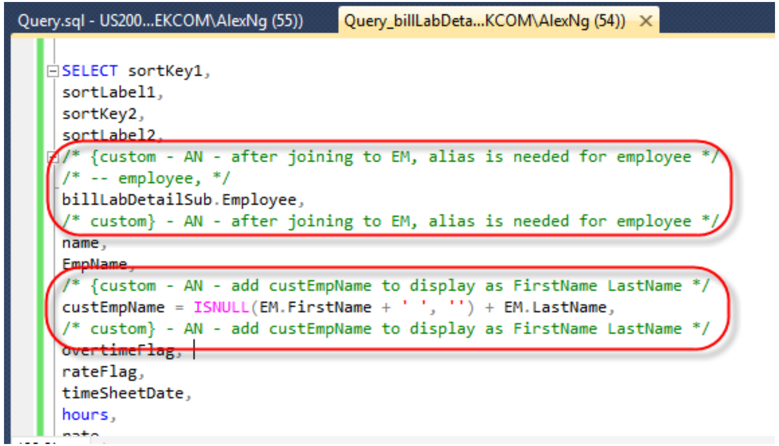




Invoice Customization 4

- Modify the query in SQL Management Studio so that it returns an extra column with the employee name to display as desired

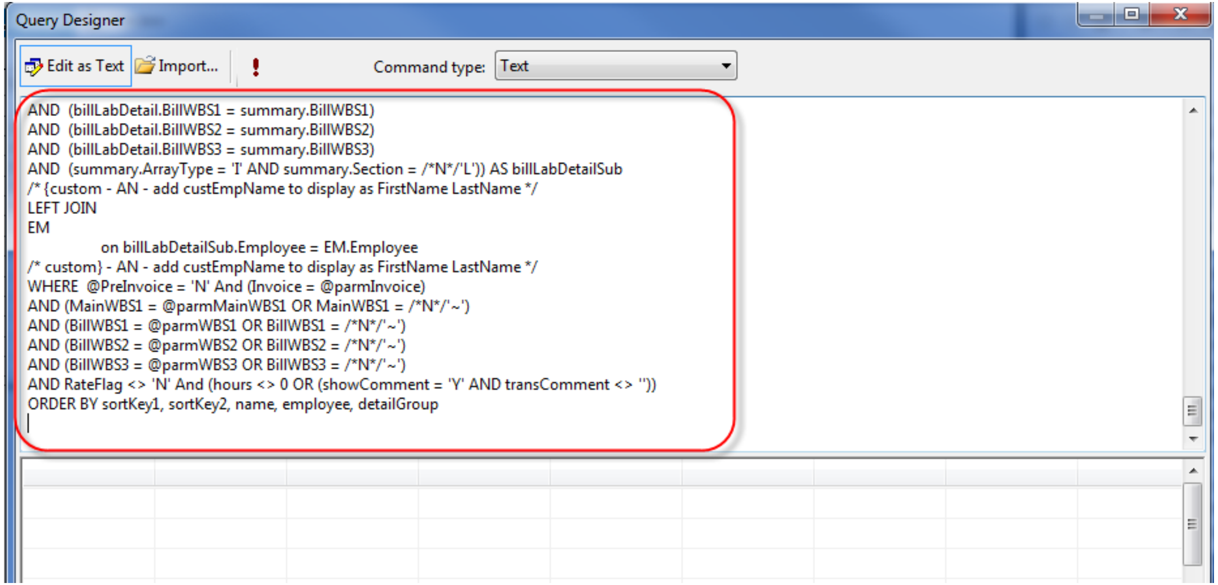




- Tip: tag every custom code you modify or add to your query with beginning and ending comments

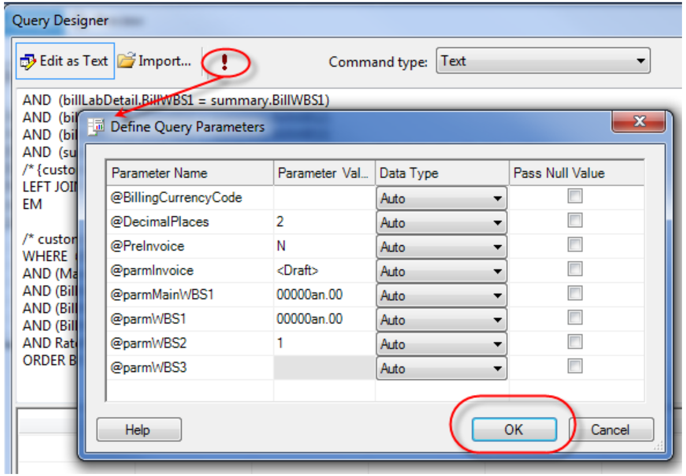
Invoice Customization 4

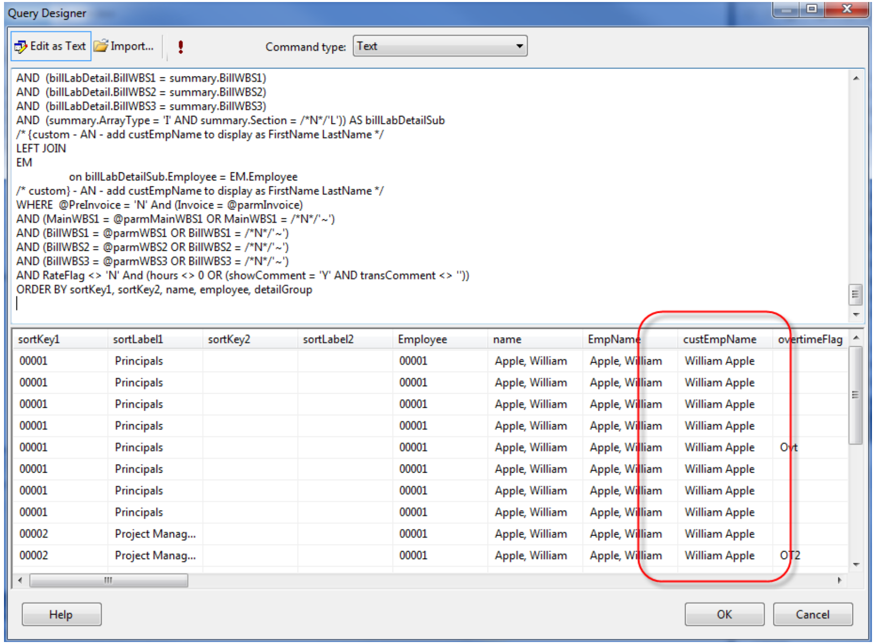
- Copy and paste the query back into the Query Designer window (do not include variables declaration)



Invoice Customization 4

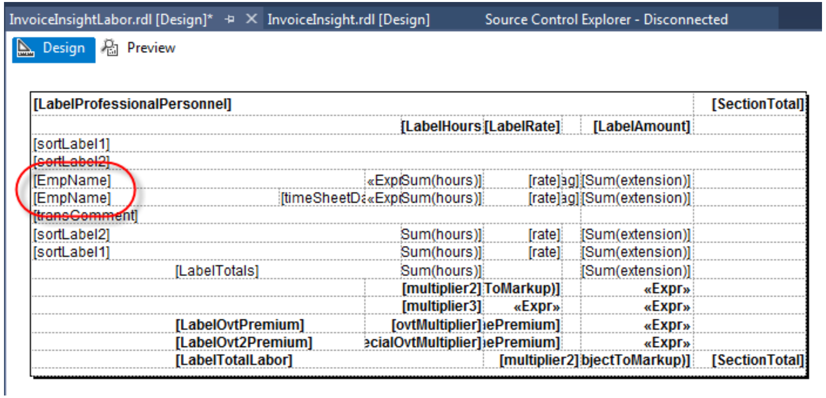
- Run the query and make sure you are getting the desired results

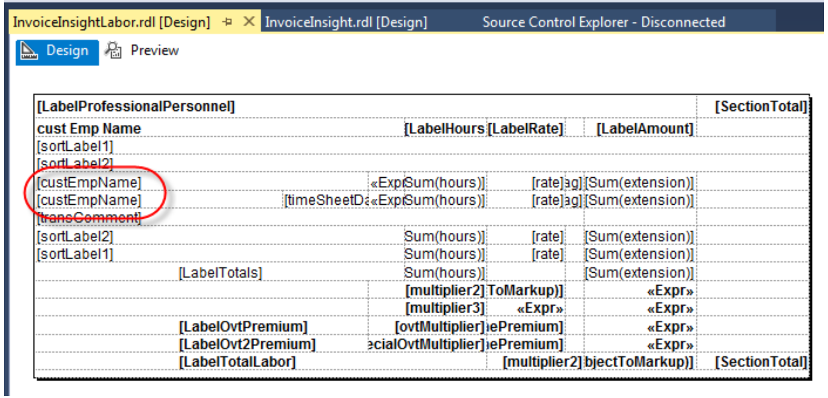




Invoice Customization 4

- Back in the report designer, change the textboxes that display EmpName to custEmpName





- Open back InvoiceInsight.rdl and update InvoiceLabor subreport's ReportName accordingly

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Report Loading

Report Loading

- Method 1: via Utilities\Report Administration\Load Reports tab
- Method 2: via Utilities\Report Administration\Custom Reports tab

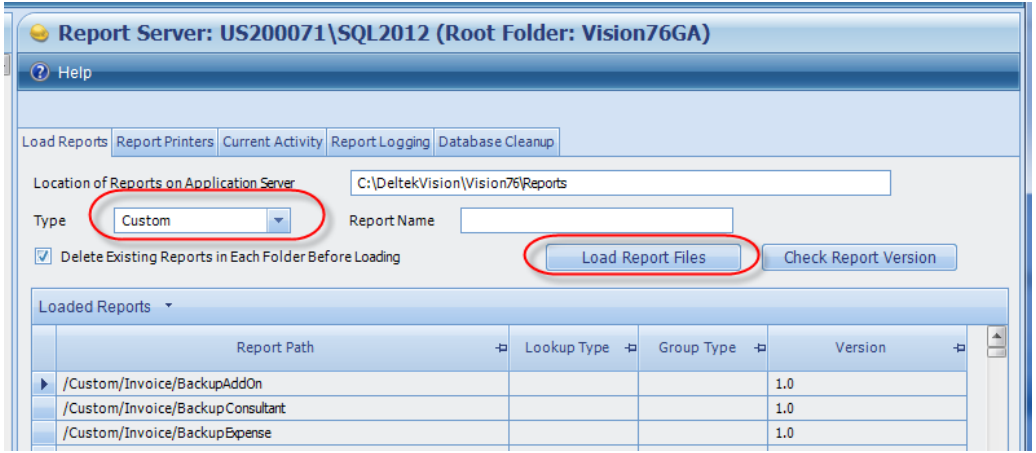
Report Loading – Method 1

- Method 1: via Utilities\Report Administration\Load Reports tab
  - Copy all the *.rdl files from your development machine to the Vision Web/Application server:

    C:\Program Files\Deltek\Vision\Reports**Custom**\Invoice

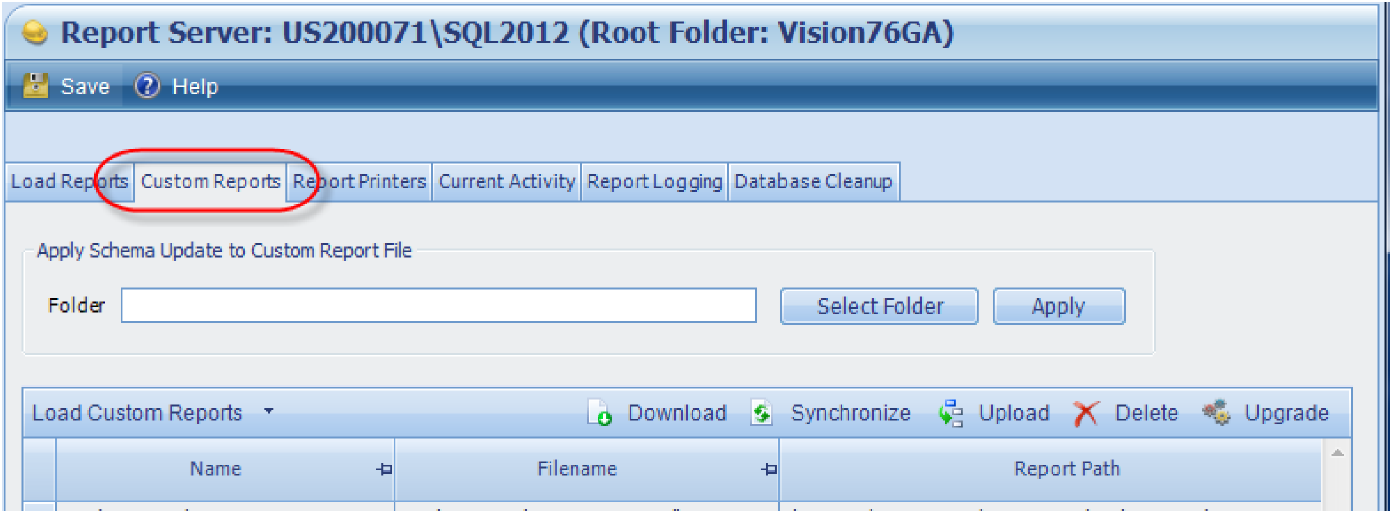
Report Loading – Method 1

- In Vision, go to Utilities/Report Administration/Load Reports tab
- Change Type to “Custom” and click on “Load Report Files”



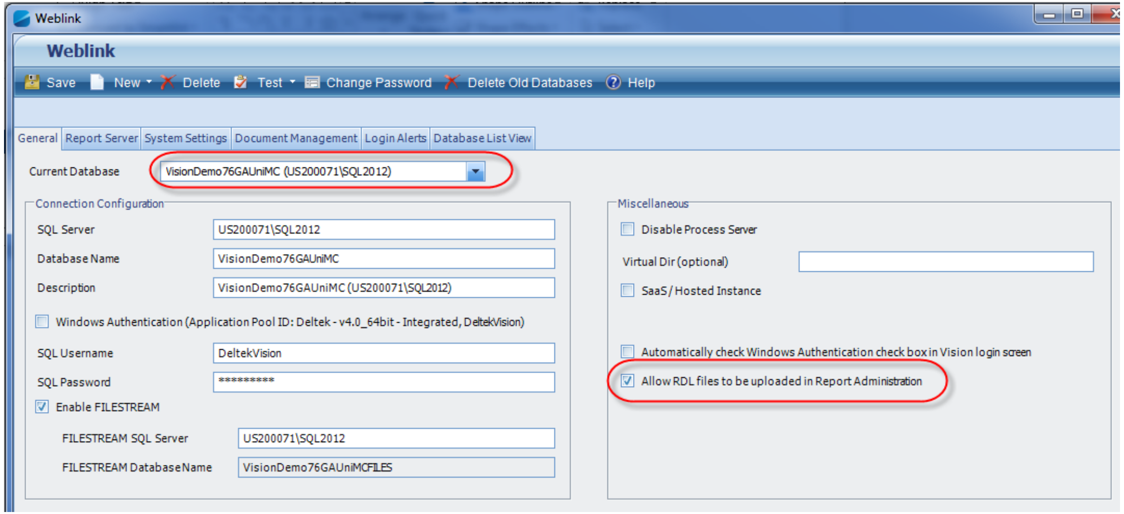
Report Loading – Method 2

- Method 2: via Utilities/Report Administration/Custom Reports tab



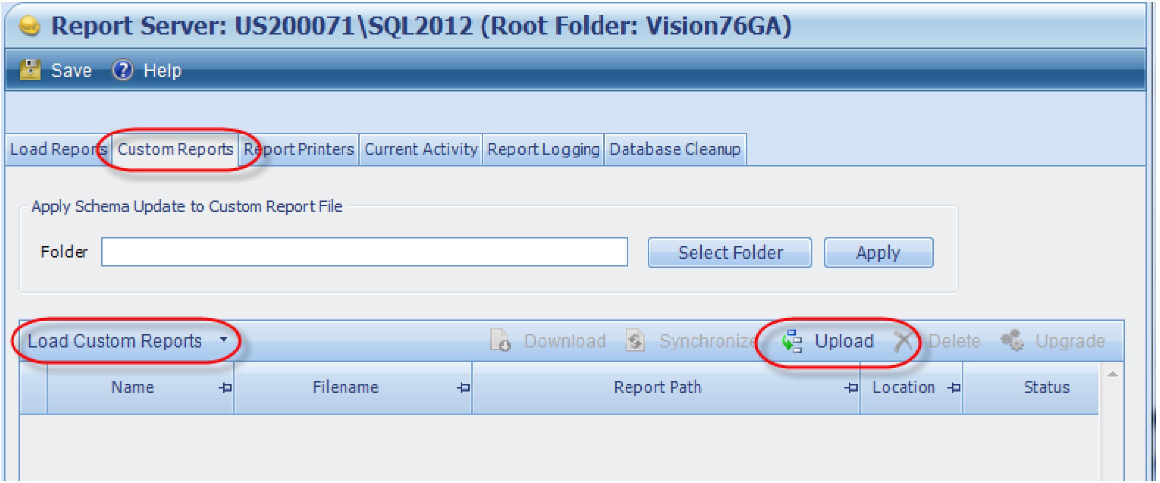
Report Loading – Method 2

- Tip: If you don't see this tab, you will need to enable it from Weblink
  - In Weblink, select the database you want to enable this feature on and check the "Allow RDL files to be uploaded in Report Administration"



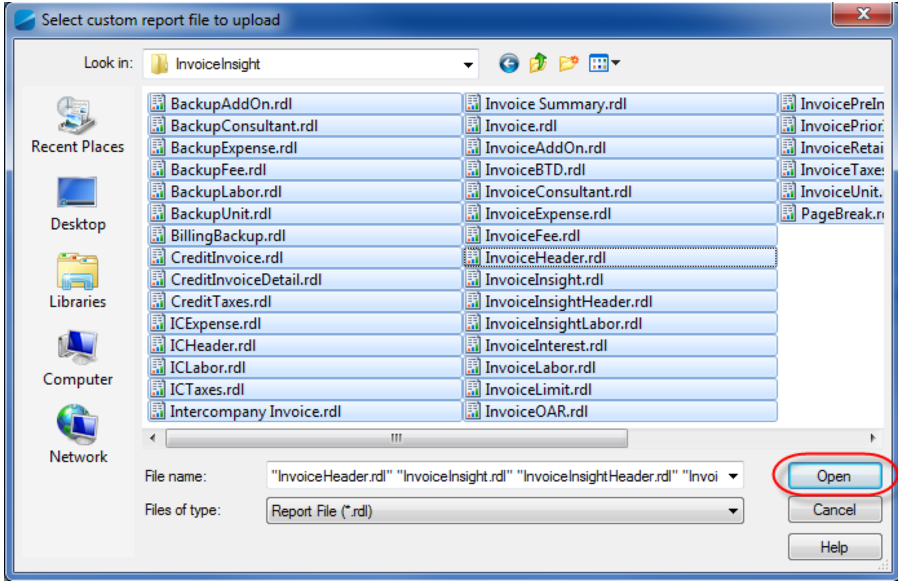
Report Loading – Method 2

- To use method 2, In Vision, go to Utilities\Report Administration\Custom Reports tab.
- Click on Upload in the “Load Custom Reports” grid



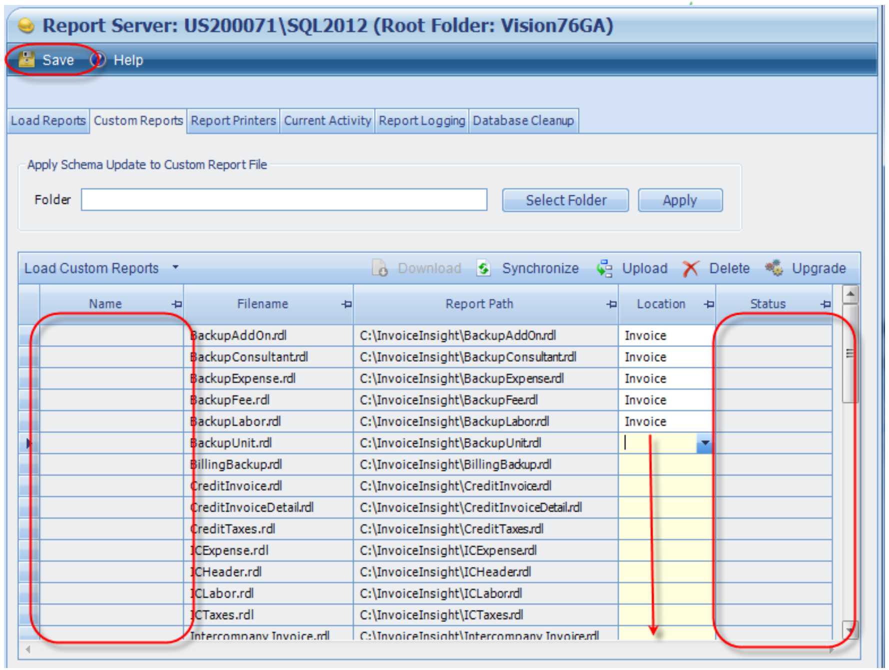
Report Loading – Method 2

- Browse to folder where the invoice rdl files are, select all rdl files and click on Open



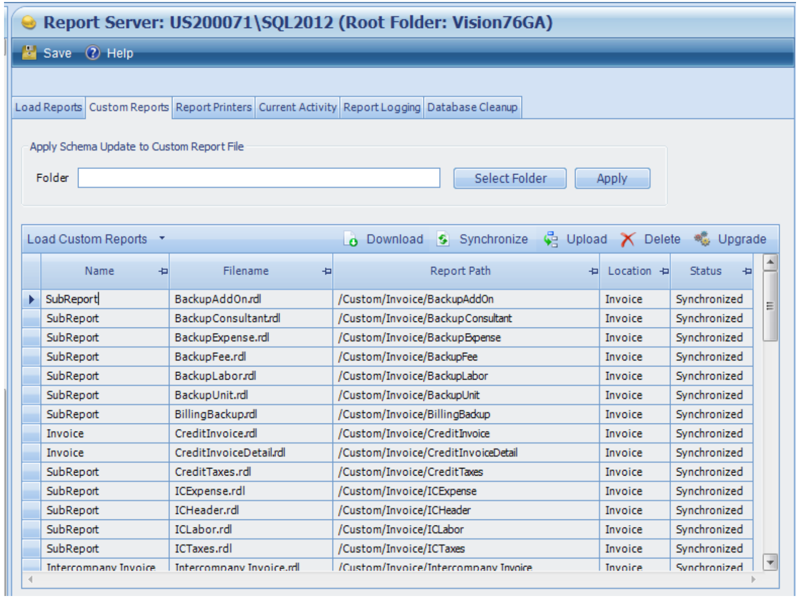
Report Loading – Method 2

- Once they open they will all be listed in the grid with no Name, Location and Status
- Update all Location to “Invoice” and click Save



Report Loading – Method 2

- Once Vision finishes saving, all uploaded reports will be saved to the database and synchronized with the report server



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More Tips and Tricks

More Tips and Tricks

- Do not make a bunch of changes in one shot and then publish the invoice to test. Publish each time a change is made and make sure it is working before tackling the next change
- Invoice Total should not deviate/change from what standard is showing.
- Check Vision Invoice Template Editor and Billing Terms to see if it can handle your requirement before customizing (since Vision 7.4 Invoice Template Editor has been greatly enhanced)

More Tips and Tricks

- May need to re-apply the same customization from version to version (even between CUs). Drop yourself enough breadcrumbs to make sure that you can re-create the same custom invoice if you need to re-apply the same customization to a future Vision version
- clients need to prefix all rdl files with 10 digit client no. (zero prefixed) followed by underscore

    Ex.:

    0000012345_InvoiceInsight.rdl

    0000012345_InvoiceLabor.rdl

    0000012345_InvoiceInsightLabor.rdl

More Tips and Tricks

- Use OriginalTable, OriginalPeriod, OriginalPostSeq and OriginalPKey columns (from billLabDetail, billConDetail, billExpDetail, billUnitDetail, etc.) to link back to original transaction table if further info is needed.

```sql
select * from billexpdetail where mainwbs1 = '00000an.00' and invoice = '<draft>'
```

100 %

Results

Invoice	MainWBS1	OriginalTable	OriginalPeriod	OriginalPostSeq	OriginalPKey	BillWBS1
<Draft>	00000AN.00	LedgerAP	200506	436	ADMIN275516840474	00000AN.00
<Draft>	00000AN.00	LedgerAP	200506	590	407961343601	00000AN.00
<Draft>	00000AN.00	LedgerAP	200506	609	454512017267	00000AN.00
<Draft>	00000AN.00	LedgerAP	200506	612	523978787148	00000AN.00
<Draft>	00000AN.00	LedgerAP	200802	6	539793008109	00000AN.00
<Draft>	00000AN.00	LedgerMisc	200802	9	545824654269	00000AN.00
<Draft>	00000AN.00	LedgerMisc	200802	9	545824654270	00000AN.00

(7 row(s) affected)

Questions & Contact

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Thank you!

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