

TRAINING GUIDE

Intermediate Crystal 2

Using Crystal Reports with Lucity

Intermediate Examples - 2

The fourth of a seven-part series, this workbook is designed for Crystal Reports® users with some experience. Here, you'll learn how to add subreports and hide (drill-down) group data. Specifically, we'll look at the Work Order Locations subreport and the module's Comment section. Both the general Comment sections and the Work Order/Request Comment sections will be addressed.

Table of Contents

Subreports	
Accessing Subreports	
Inserting a Work Order Locations Subreport	
Finding Tables and Fields	
Inserting the Subreport	
Formatting the Subreport	6
Subreport Links	
Organizing your Subreport	Error! Bookmark not defined
Adding Fields to the Subreport	
Finalizing the Subreport	Error! Bookmark not defined
Copying a Subreport	10
Date Parameters to a Subreport	
Adding a General Comments Section	14
Option 1	14
Option 2	
Adding a Comments Section to Work Orders and Requests	19
Hide (Drill-Down)	

Subreports

Subreports are simply reports within other reports. They can stand alone or be linked. Lucity typically uses subreports to display information stored in the child records (dialog tables), information from other related modules, and the Comments sections. Subreports can vary in size and can be placed wherever you wish. Typically, subreports are inserted into their own Detail section.

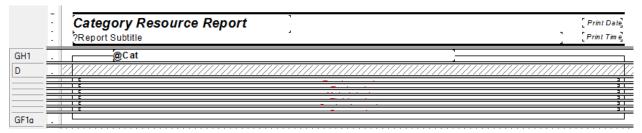
One issue with subreports is the data in a subreport does not receive the filter out in Lucity. If this is required, then try to use grouping as previously discussed.

A second issue with using subreports is it is not possible to place a subreport within another subreport. Thus, it can be challenging to show the child of a child relationship. Usually this is handled with grouping in a subreport.

Accessing Subreports

A few Detail reports have subreports that may be minimized to a point where you cannot read the titles.

- 1. In the Reports Work file open the CatRes.rpt report.
- 2. The minimized sections below the Detail section contain subreports.



- 3. To view the subreport title, place the cursor over a subreport and the name will appear briefly (if the *Tooltips* are turned on). To open the subreport, simply double click on it.
- 4. It is also possible to navigate to a subreport using the *Report Explorer*. Make sure the Show/Hide Grids and Subreports is turned on be opened from this section or from the subreport itself by right clicking on the subreport name and selecting Edit Subreport.

Inserting a Work Order Locations Subreport

The data in many of the grids in the Lucity modules can be connected to the parent report. In the following example, we'll demonstrate how information from the *Work Order Location* grid in the **Work Orders** module can be connected to the **Aging Work Order Report**.

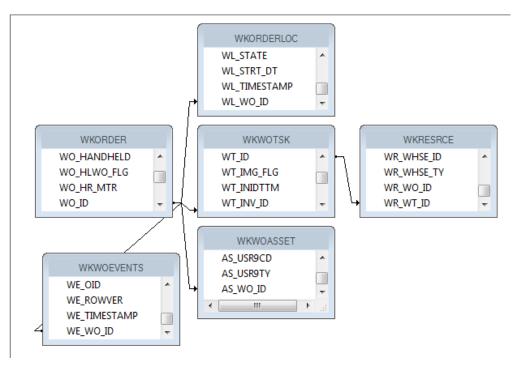
Finding Tables and Fields

- 1. In the **Work Order** module open a record in the *Work Order Location* grid to find field definitions.
 - o Open the Work>>Work Orders>>Standard module and click on the *Location* tab.
 - Open an existing record in the Work Order Location grid (right click View Record) or right click in the grid and select Add Record.

- Find the field definition of the General Location field by pressing Ctrl and right clicking on the field and selecting Field Definition or Field Properties. There, you'll see the following:
 - The table name is WKORDERLOC.
 - The field name is WL_GENLOC.
- o If you do the same thing to the second field of the Address, the field name will show up as WL_ADR_DIR. This is not the correct field name for the information in the box. It is only one of the fields that are joined to create the address in this box. Thus, a formula is needed to address all the fields in a concatenated formula. Not all of the modules use this special address that pulls from the General Address module, some allow you to manually type in the address and store it in a single field.



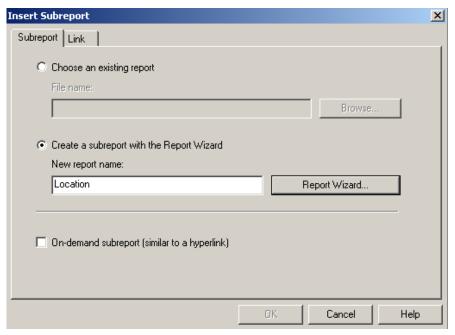
- 2. From the Work module export the **Aging Work Order Report** (**WOsAging.rpt**) and rename it **LC_WOsAgingLoc.rpt**.
- 3. Open the new report and delete the WO_CAT_TY field.
- 4. Delete the WO_PROB_TY field.
- 5. Change the Category column header to Address.
- 6. Change the **Problem** column header to **General Location**.
- 7. Click the *Database Expert* button \Box
- 8. Open the *Links* tab and note where the "tree" of tables begins; most often it is the top table on the far left side (frequently, this is the table the subreport will link to).
 - For example, this tree starts with the WKORDER table.



9. Close the Database Expert.

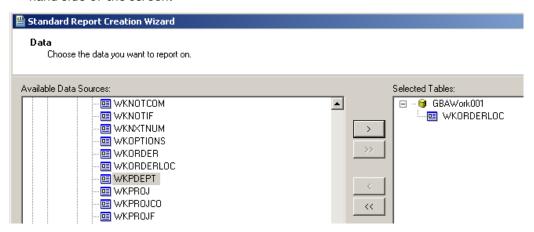
Inserting the Subreport

- 1. Click Insert Subreport .
 - You'll need to type in the New report name. For example, we've called this subreport, Location.



o Then, select the Report Wizard.

- 2. Open Create New Connection > ODBC (RDO) > GBAWork001 (Finish key) > Tables.
 - Select the WKORDERLOC table and move it to the Selected Tables box on the righthand side of the screen.



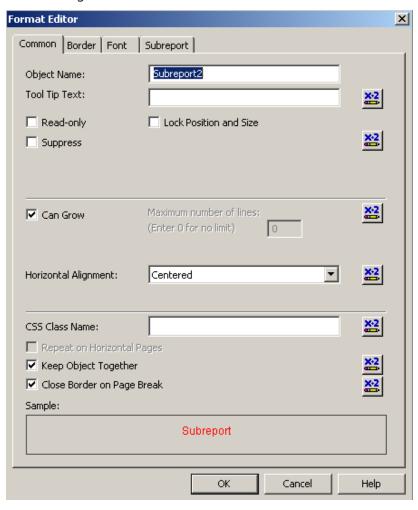
- Click Finish.
- o Click OK.
- 5. Place the subreport "box" in the Detail section with the left edge aligned with the left edge of the Address column header.
- 6. Resize the box to fit under the Address and General Location area.



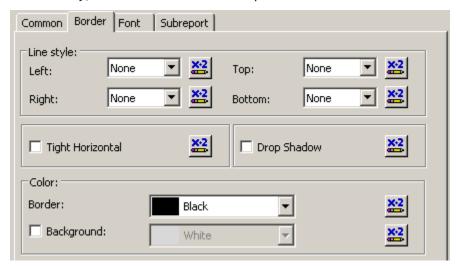
Formatting the Subreport

Right click in the **Location** subreport box and click *Format Subreport*. Choose the formatting options that you prefer.

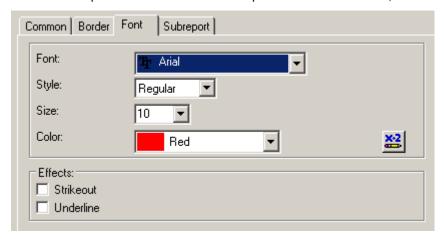
 For example, in the Format Editor dialog below, we've selected to center the report title. You can see a sample of your formatting selections at the bottom of the Format Editor dialog.



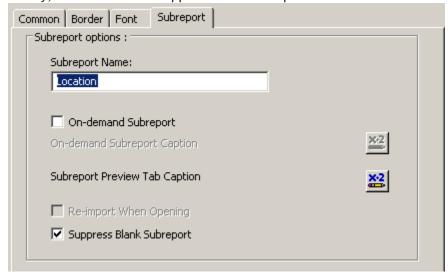
o Additionally, we've chosen to not use a predefined border.



o For the subreport title we've chosen 10 point Arial for our font, and made the text red.



o Finally, we've chosen to Suppress Blank Subreports.



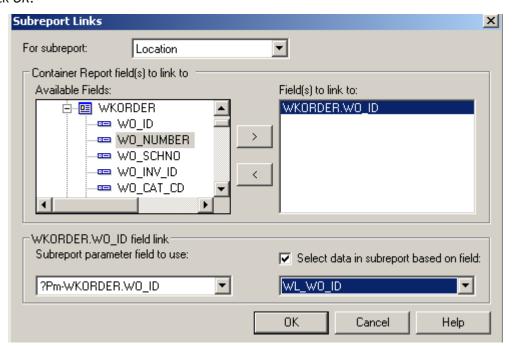
o Once you've finished selecting your formatting options, select OK.

Note: Some of the formatting options are strictly for the creator of the report like having the title centered and red. When working on a report this is a quick visual as to which parts of the report are subreports. Some of the formatting will affect the user end of the report like the border lines, empty space or whether the subreport Can Grow.

Subreport Links

Subreports can stand alone; however, typically they are linked to the main report. You'll need to find the correct table and field to link your subreport to. This will allow the main report and subreport to communicate effectively.

- 1. Right click in the **Location** subreport box and select *Change Subreport Links*.
 - The linked tables usually have an ID field with a common part; in this case it is WO.
- 2. Open the **WKORDER** table and move the **WO_ID** field over to the *Field(s)* to link to box on the right-hand side of the screen.
- Click the arrow beside the field at the bottom-right of the screen and select the WL_WO_ID field.
- 4. Click OK.



The linking creates a formula in the Subreport in the Select Expert.

{WKORDERLOC.WL_WO_ID} = {?Pm-WKORDER.WO_ID}

Note: The Web reports require any linking formula to have the "?Pm-XXXX" type formatting. This is automatically created through Crystal when using the Subreport Links dialog box. Remember to use this format if creating manually.

Adding Fields to the Subreport

- 1. Open the Location subreport by double clicking or right click and selecting Edit Subreport....
- 2. There will always be at least three sections; the Report Header, Detail and Report Footer. Suppress all sections other than the Detail section.
- 3. As mentioned earlier the address is a concatenated field. This formula will be borrowed from a standard report.
- 4. Open the Work Order Detail report (WODetail.rpt).
- 5. Locate the Locations.rpt subreport and double click on it.
- 6. Find the address formula within the report (@Addy). Right click on it and click *Copy*. Close WODetail.rpt.
- 7. Go back to the LC_WOsAgingLoc.rpt report.
- 8. Make sure you are in the **Location** subreport. Paste the address formula into the *Detail* section. Resize.
 - The address formula is shown below:

```
(If isNull((WKORDERLOC.WL_ADR_BDG)) then "" else Trim(ToText((WKORDERLOC.WL_ADR_BDG),0,"",""))) +" "+

(If isNull((WKORDERLOC.WL_ADR_B2)) then "" else Trim((WKORDERLOC.WL_ADR_B2))) +" "+

(If isNull((WKORDERLOC.WL_ADR_DIR)) then "" else Trim((WKORDERLOC.WL_ADR_DIR))) +" "+

(If isNull((WKORDERLOC.WL_ADR_PT)) then "" else Trim((WKORDERLOC.WL_ADR_PT))) +" "+

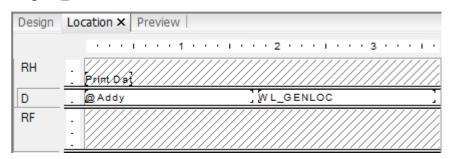
Trim((WKORDERLOC.WL_ADR_STR)) +" "+

(If isNull((WKORDERLOC.WL_ADR_TY)) then "" else Trim((WKORDERLOC.WL_ADR_TY))) +" "+

(If isNull((WKORDERLOC.WL_ADR_STX)) then "" else Trim((WKORDERLOC.WL_ADR_STX))) +" "+

(If isNull((WKORDERLOC.WL_ADR_APT)) then "" else Trim((WKORDERLOC.WL_ADR_APT)))
```

- 9. Open Field Explorer > Database Fields > WKORDERLOC.
- 10. Drag WL_GENLOC field into the Detail section.





Preview

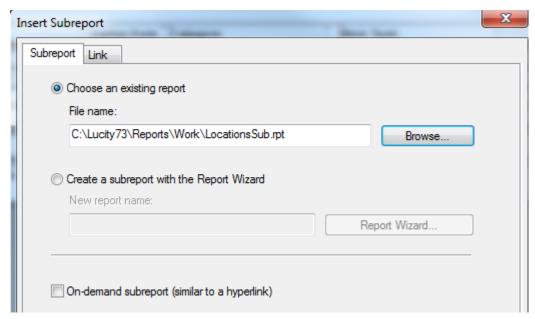
Aging W	Aging Work Order Report							
WO#	Status	Age	Create Date	Address	General Location	Action	Supervisor	
2006-01129	New Work Order	2,909	3/16/2006			Residential Collections	KURT VONHOSSEN	
2006-01608	New Work Order	2,797	7/8/2008			Sewer Line Cleaning	SHIELA KAMDON	
2006-01610	New Work Order	2,797	7/8/2008	E CIVIC CENTER DR	by chipotle	SEWER OVERLFOW	SHIELA KAMDON	
2006-01611	New Work Order	2,797	7/6/2006	1584 E VALENCIA ST			SHIELA KAMDON	

11. Save and close the report.

Copying a Subreport

You can use an existing subreport or report in the same family (i.e. Work, Sewer, Storm, etc.) as long as you are careful with the linking. In our example below, we'll show you how to copy the more detailed Location subreport from the **Work Order Detail Report** and place it in the **Summary Report**.

- 1. Open WODetail.rpt.
- 2. Right click on the **Location** subreport and select *Save Subreport As*.
 - Make sure you are in the correct report file (Work).
 - Enter a File Name (LocationsSub.rpt).
 - Save the subreport and close the Detail report.
- From the Work Order module export the Work Order Summary Report (WOSum.rpt) and name the new report LC_WOSumDetLoc.rpt.
- 4. Delete the Address column title.
- 5. Delete the Locations subreport.
- 6. Add a **new** section under *Group Footer 1a* and increase the size slightly to accommodate the new subreport.
- 7. Select Insert Subreport.
 - Click Choose an existing report.
 - Click Browse.
 - Locate the Reports\Work folder and double click on LocationsSub.rpt. You'll see the Insert Subreport dialog box.
 - Click OK.



- 8. Place the subreport "box" in the newly created *Group Footer 1b* section.
- 9. Choose the desired subreport formatting options discussed earlier.

- 10. Resize to fit the report.
- 11. Right click on the subreport and choose Change Subreport Links.

```
{WKORDERLOC.WL_WO_ID} = {?Pm-WKORDER.WO_ID}
```

- 12. Open the subreport and delete any empty sections.
- 13. Open the Select Expert and delete one of the parameter formulas. Even though the correct formula existed in the subreport's Select Expert, the main report doesn't recognize it, so it needed to be linked correctly again.
 - {WKORDERLOC.WL_WO_ID} = {?Pm-WKORDER.WO_ID} and {WKORDERLOC.WL_WO_ID} = {?Pm-WKORDER.WO_ID}
 - You'll see a duplicate formula because the subreport was taken from a report with the same parent table. If the subreport being used was copied from a report with a different parent table, you would keep the formula that reflects the correct linking.
- 14. Select Save and Close.
- 15. OK

wo #	Status	Status Date	Category	Main Task
05-03-0008	Complete	3/9/2005	Meter Repair Calls	Adjust Meter Box/Vault To Grade
Address	der Locations	Add	dress 2	
X Coord 803 RICHARD	<u>Y Coord</u> S⊺	General Location	<u></u>	

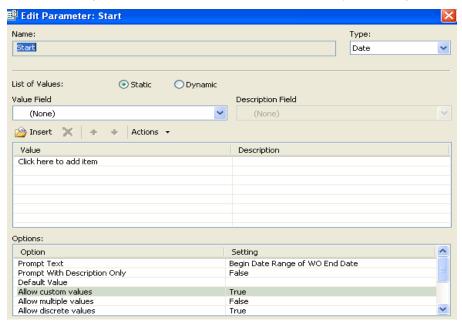
Note: Do not try to use a subreport from one family of reports in another family, such as a Work subreport in a Sewer report.

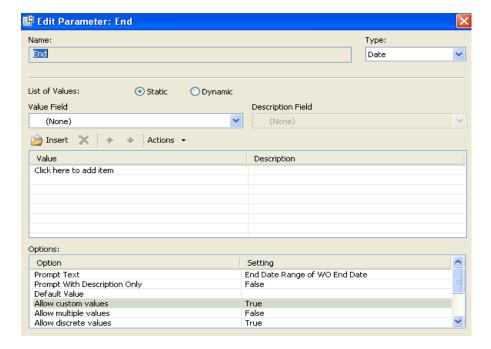
Date Parameters to a Subreport

Frequently subreport records need to be selected for a date range. If the main report is using the date range as well then the date parameter should be created in the main body of the report and linked to the subreport. If only the subreport requires the date selection then the parameters can be created within the subreport.

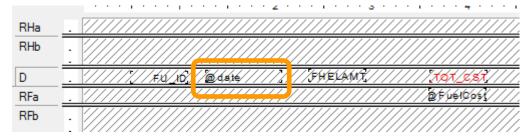
The FleetCost.rpt report passes the parameters from the main body to the Fuel subreport.

First the date parameters were created in the main body of the report.

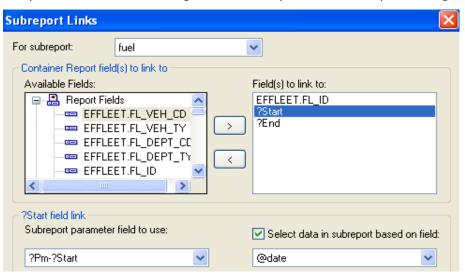


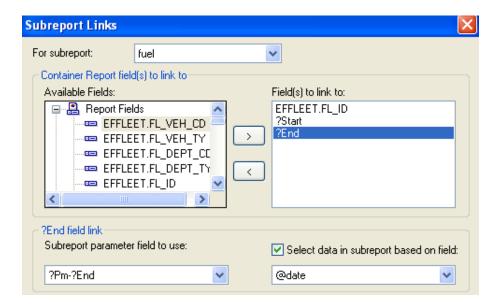


Within the subreport the date formula that will be used with the parameter dates was placed in the body of the report.



The parameter fields are brought to the subreport in the subreport linking.





The linking process sets the fields up in an "=" formula. This was changed in the Select Expert in the subreport.

• Formula Crystal creates:

```
{@date} = {?Pm-?Start} and
{@date} = {?Pm-?End}
```

Changed to:

```
{@date} >= {?Pm-?Start} and {@date} <= {?Pm-?End}
```

It is a good practice to make sure formulas and parameters have unique names within the report. There should not be duplication of names from the main report to the subreports. The web reports will not support duplicate parameter names.

Our Web code looks for parameters that start with "Pm-", it assumes these are subreport linking parameters and does not ask the user to provide this data. If you do not follow this convention our software will prompt you for the parameter values instead of letting Crystal automatically set those values.

Adding a General Comments Section

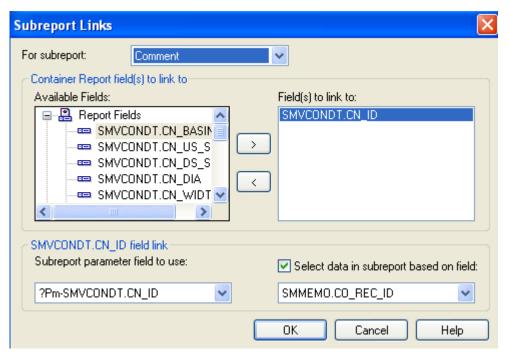
(Not Valid for Work Orders or Requests)

The system handles Comment grids differently than other types of grids in Lucity. For these grids, the information is stored in a MEMO table. The parent table communicates with this MEMO table to retrieve the Comment information. In the example below, we'll show you how to add the Comment field for the Storm Conduit Inventory module to the Conduit Physical Data Check Report (SMcnphck.rpt). You'll use these same steps to add Comment sections to all modules other than Work Orders and Requests comment section. It will work for the Memo type fields in Work Order like Comment From Request or in Request like the Information for Work Order memo field.

Option 1 - Creating a Subreport From Scratch

- 1. First we'll locate the field definition information for the Comment section.
 - o From Storm open the **Conduit Inventory** module and click on the *Comment* tab.
 - Use the Ctrl + right click function to view the field definition. Make a note of the table name (SMVCONDT) and field name (CN_MEMO1).
- 2. Open the Conduit Inventory module's reports and Export the SMcnphck.rpt report.
- 3. Rename the new report as LC_SMConChkCom.rpt and then open it.
- 4. Right click in the margin to the left of the *Details* section and select *Insert Section Below*.
- 5. Increase the size of the new section slightly. This is where the **Comment** subreport will be inserted.
- 6. Click the Database Expert button \Box .
 - Click Links and note where the "tree" of tables begins. This one starts with SMVCONDT.
 - Close the Database Expert.

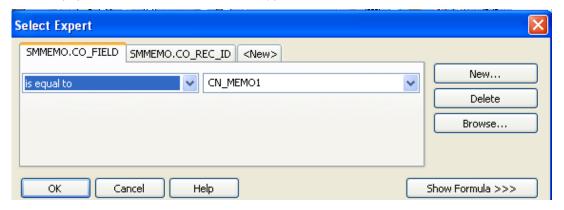
- 7. Click Insert Subreport
 - Type in the *New report name* (Comment).
 - Select Report Wizard.
- 8. Open Create New Connection > ODBC (RDO) > GBAStorm001 (Finish key) > Tables.
 - Select SMMEMO and move it to the right-hand box, Selected Tables.
 - Click Finish.
 - o Click OK.
- 9. Place the "box" in the *Details b* section.
- 10. Right click in the **Comment** subreport box and click *Format Subreport*. Choose the formatting options that you prefer.
- 11. Select OK.
- 12. Resize the subreport box.
- 13. Right click in the Comment box and select Change Subreport Links.
 - Open SMCONDT and move the CN_ID field over to the Field(s) to link to box on the right-hand side of the screen.
 - Click on the arrow beside the box at the bottom-right of the dialog and select the CO_REC_ID field.
 - o Click OK.



14. Double click on the Comment subreport box. You are now within the subreport.

15. Click on the Select Expert .

- Click on the New tab.
- Click on the CO_FIELD and then OK.
- o Click on the down arrow within Select Expert and select "is equal to".
- Click on the down arrow for the right hand drop down box. Select "CN_Memo1". (The comment field name, CN_Memo1, was previously found using the field definition.) The field is only available in the drop down box if there is a record that has the Comment field populated with data. Otherwise, type in the field name.

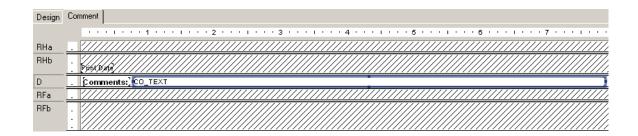


- o Click OK.
- To view the formulas created within the Select Expert, click on Select Expert and then Show Formula>>>.

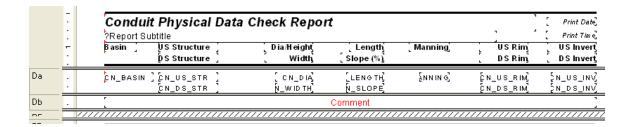
{SMMEMO.CO_REC_ID} = {?Pm-SMVCONDT.CN_ID} and {SMMEMO.CO_FIELD} = "CN_MEMO1"

Note: The CO_REC_ID and CO_FIELD are the same for all general Comment subreports; however, the linking table and the field name in quotations changes for each module. The MEMO table name also changes depending on which suite of modules you are working in. For example, Street is STMEMO, Water is WTMEMO etc.

- 16. Suppress Report Header a and b and Report Footer a and b.
- 17. Create a "Comments" text object field in the Detail section.
- 18. Drag in the CO_TEXT field from Field Explorer and resize the field.
 - It is important that the CO_TEXT field be able to grow, so remember to check the Can Grow option within Format Field. Right click on the field and select Format Field>>Common (tab)>>Can Grow (checked)>>OK.



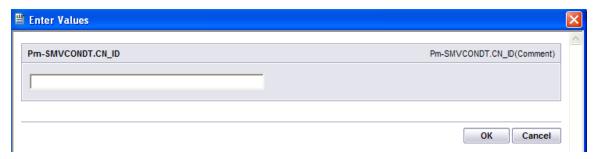
19. Click on the *Design* tab and then the *Print Preview* button



Preview

Condu	uit Physical Data	a Check Repor	t			8/31/2010
	•	•				8:52:57AM
Basin	US Structure	D ia /H ei ght	Length	Manning	US Rim	US Invert
	DS Structure	Width	Slope (%)		DS Rim	DS Invert
250	1120	15	97.30	2.00	22.00	21.00
	1119	6	0.01		11.00	11.00
Commen	ts: comment for conduit 1	120 1119				
1645	1121	15	50.60	2.00	24.00	24.00
	1122	6	0.00		15.00	15.00
Commen	ts: Comment for 1121 to	1122				
5615	1124	15	127.00	2.00	40.00	43.00
	1123	8	0.00		33.00	34.00
654135	1126	18	553.00	1.00	45.00	44.00
	1125	8	0.00		33.00	33.00

20. If you had tried to Preview the report while still in the subreport, something similar to the following would appear:



- 21. Press Cancel and then go to the report Design tab to run the report.
- 22. After reviewing the report, further modifications may seem necessary to make it easier to read.
 - In our example, a line should be added below the **Comments** line.
- 23. Add a Detail section below Detail b.
- 24. Add a line to Detail c.
- 25. Format the line to silver.
- 26. Even when a record has no comments, the space for the **Comments** subreport will still appear. This space can be removed as follows:
 - Click Section Expert <a>В.
 - o Click **Detail b** and select the **Suppress Blank Section** option.
 - o OK.

Preview

Condu	iit Physical Data	Check Repor	t			8/31/2010
	,	•				8:50:23AM
B asin	US Structure DS Structure	D ia/H eight Width	Length Slope (%)	Manning	USRim DSRim	US Invert DS Invert
250	1120	15	97.30	2.00	22.00	21.00
	1119	6	0.01		11.00	11.00
Comment	ts: comment for conduit 1	120 1119				
1645	1121	15	50.60	2.00	24.00	24.00
	1122	6	0.00		15.00	15.00
Comment	ts: Comment for 1121 to	1122				
5615	1124	15	127.00	2.00	40.00	43.00
	1123	8	0.00		33.00	34.00
654135	1126	18	553.00	1.00	45.00	44.00
	1125	8	0.00		33.00	33.00

Option 2 - Creating a Subreport with the Report Wizard

- 1. Open the Conduit Inventory module's reports and Export the SMcnphck.rpt report.
- 2. Rename the new report as LC_SMConChkCom2.rpt.
- 3. Open the new report and add a *Detail* section.
- 4. Click Insert Subreport.
 - o Name it Comment, and click Report Wizard.
- 5. Open Create New Connection > ODBC > GBAStorm001 > Next > Finish > Tables.
- 6. Move **SMMEMO** to Selected Tables. Then, click Next.
- 7. Move CO_TEXT to Fields to Display. Then, click Next.
- 8. There will be no grouping, so select Next in the Grouping dialog box.
- 9. In Record Selection, move the CO_FIELD to the Filter Fields.
 - Using the drop down box, select is equal to.
 - Using the next drop down box, select CN_MEMO1. Then, click Next.
- 10. Select No Template and Finish.
- 11. Select the Link tab.
 - Set this up as described in Option 1.
- 12. Select OK and drop the new subreport box in the new Detail section.
- 13. Set up and format the subreport as described in Option 1.

Adding a Comments Section to Work Orders and Requests and Dated Comments for Inventory Modules

The *Comment* tab within **Work Orders** and **Requests** is formatted differently than the *Comment* sections in other modules. For this example, we'll add a Comment subreport to the **Work Order Summary Report**.

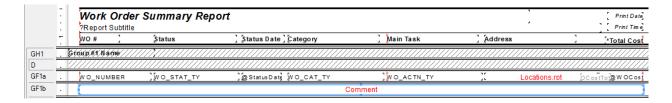
- 1. First, we'll find the field definition for the Work Order Comment section.
 - o Open the Work Orders Standard module. Click on the Comments tab.

Recorded By △	Recorded Date	Recorded Time	Comment
GBA	04/09/2007	08:53 PM	This is also a special type of memo

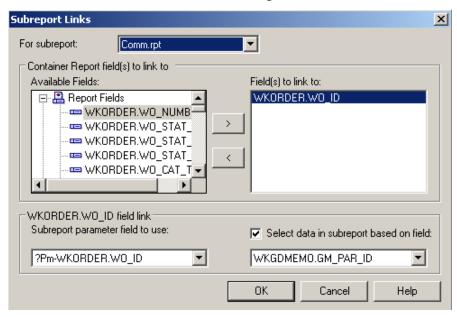
- o Right click in the grid.
- Select Add Comment or View Details for an existing comment.
- Ctrl + right click in the large comments box to view the field definition. Note that the table name is WKGDMEMO and the field name is GM_MEMO.
- Close the comment dialog.

Note: This Comment section does not hit the **WKMEMO** table. Instead, it uses the **WKGDMEMO** table.

- 2. From the Work Order module, export the **Work Order Summary Report** (**WOSum.rpt**) and rename it **LC_WOSumComment.rpt**. Then, open the renamed report.
- 3. Right click in the left margin of the *Group Footer 1a* section and select *Insert Section Below*.
- 4. Click Insert Subreport 😬 .
 - o Type a name for the subreport (Comment) in the New report name section.
 - Click Report Wizard.
- 5. Open Create New Connection > ODBC > GBAWork001 (Finish) > Tables.
 - Move the WKGDMEMO table to Selected Tables.
 - Click Finish.
 - o Click OK.
- 6. Insert the Comment "box" into the Group Footer 1b section.
- 7. Choose subreport formatting options and resize the box.



- 8. Next, right click within the Comment box and select Change Subreport Links.
 - Select fields so it looks like the following:

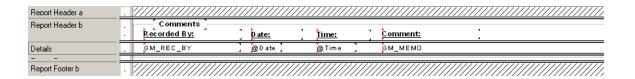


o Click OK.

- 9. Double click on the Comment box. You are now in the Comment subreport.
 - Click Select Expert and click the New tab.
 - Click and highlight GM_PARENT.
 - Click OK.
 - o With the drop down arrow select is equal to.
 - With the right drop down box select WKORDER. (This will only show as a choice if there is at least one record with a comment. Otherwise type WKORDER.)
 - o Click OK.

Note: The formula in Requests would look like this: {WKGDMEMO.GM_PAR_ID} = {?Pm-WKREQ.RQ_ID} and {WKGDMEMO.GM_PARENT} = "WKREQ"

- 10. Add column titles. You'll want to make the titles **bold** and <u>underlined</u> in order to make them distinct.
- 11. Drag in the appropriate fields.
 - You'll need to create formulas before you can add the **Date** and **Time** fields.
- 12. Increase the size of the GM_MEMO field and format it so it Can Grow.
- 13. Place a box around the **Comment** subreport to separate it from the rest of the data. Make sure the bottom of the box is in the Report Footer section so the box will grow to accommodate the Memo field if necessary.
 - Add a title for the box (Comments).
 - Format the Comments text box with a white background.



- 14. Click the Design tab.
- 15. Click the Section Expert button.
 - Select Group Footer1b and the Suppress Blank Section option.
 - Select Group Footer 1 and the Keep Together option. Then, click OK.

Preview

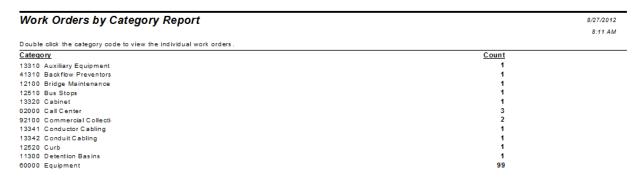
Work Order Summary Report wo # Status Status Date Category Main Task 98-000027 General Office Complete Administrative Comments Recorded By: <u>D ate:</u> <u>Time:</u> Comment: GBA 4/16/2007 2:33:00PM This is a comment for 98-000027 98-000028 Complete Administrative General Office Comments Recorded By: Date: Time: Comment: GBA 4/16/2007 2:34:00PM This is a comment for 98-000028 98-000029 Pavements Asphalt Preparation Complete 98-000005S Completed Pavements Mudjacking 98-000030 Repair Potholes Complete Pavements

The Inventory modules have a second grid in the Comment tab with Dated Comments. The table will be obvious from the field definition and should reflect the suite of modules. For Storm - **SMGDMEMO**, for Sewer - **SWGDMEMO** etc. The setup would be similar to the Work/Request comment setup.

Hide (Drill-Down)

Sometimes, it's useful to view a condensed version of a report, where the details are accessible only when needed. This option is available when grouping data. In the following step-by-step example, we'll show you how to display the number of Work Orders for each category with the option to view the individual Work Orders within the categories.

The main report looks like this:

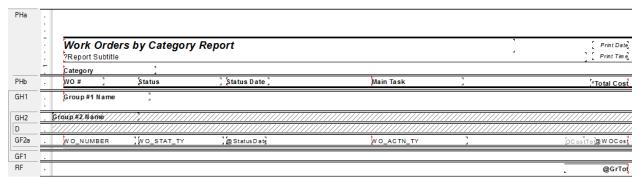


The hidden section of the Equipment category looks like this:

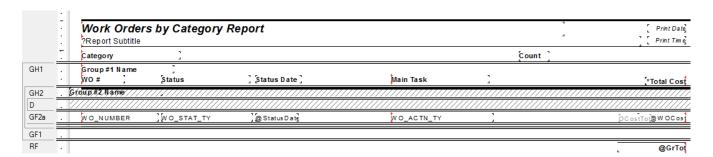
Equipment						
WO #	Status	Status Date	Category	Main Task	*Total Cost	
2006-01662	Complete	7/25/2006	Equipment	Mis cellaneous	\$156.59	
2006-01682	Complete	8/7/2006	Equipment	Dist Maintenance/Equipment	\$155.47	
2006-01684	Complete	8/7/2006	Equipment	Mis cellaneous	\$208.35	
2006-01685	Complete	8/7/2006	Equipment	Mis cellaneous	\$199.74	

 From the Work Order module, export the Work Order Summary Report (WOSum.rpt) and rename it LC_WOHide.rpt.

- 2. Delete the Address column.
- 3. Add the Category grouping and move the Category grouping to be the first grouping.
- 4. Add a second *Page Header* section above the Column titles by placing the cursor on the left ruler section, click and wiggle to create the break.
- 5. Move the Category title above WO # and remove the Category field.
- 6. Increase the Group Header 1 section size.



- 7. Right click in the Page Header b section, click Select All Section Objects,.
- 8. Drag the column titles into the *Group Header 1* section, beneath **Group #1 Name**.
- 9. Right click in the Page Header a section and select Merge Section Below.
- 10. Add a column title called **Count** in the **Page Header** section.



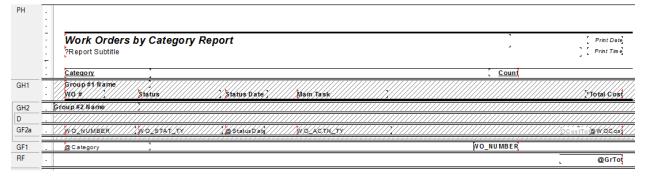
- 11. Create a count formula using the Summary button Σ to count the number of Work Orders.
 - o Have the Count formula placed in the Group Footer 1 section.
 - o Move the formula to the **Count** column.



12. Next, we will create a concatenated formula where fields can be "tacked together" to eliminate awkward spacing. Create a new formula called **Category**.

```
if isnull({WKORDER.WO_CAT_CD}) then "" else {WKORDER.WO_CAT_CD}&" "& if isnull({WKORDER.WO_CAT_TY}) then "" else {WKORDER.WO_CAT_TY}
```

- 13. Drag this formula into the Group Footer 1 section under the Category column title.
- 14. To the left of the report, right click in the *Group Header 1* section and select *Hide(Drill-Down)*.
- 15. Repeat step 14 for the *Group Footer 2a* section.



16. Preview the report to see how it looks.

o To view the Work Orders within each category, double click the category code.

E quipment				
WO #	Status	Status Date	Main Task	*Total Cost
2006-01662	Complete	7/25/2006	Mis cellaneous	\$156.59
2006-01682	Complete	8/7/2006	Dist Maintenance/Equipment	\$155.47
2006-01684	Complete	8/7/2006	Mis cellaneous	\$208.35
2006-01685	Complete	8/7/2006	Mis cellaneous	\$199.74
2006-01705	Complete	11/13/2006	Routine Service	\$0.00
2006-01709	Complete	11/13/2006	Routine Service	\$0.00

17. Next, you should add a text line in the *Page Header* that instructs the report viewer to double click on the category code to view the individual work orders.

Work Orders by Category Report	8/27/2012
, , , ,	8:56 AM
Double click the category code to view the individual work orders.	
Category	<u>Count</u>
13310 Auxiliary Equipment	1
41310 Backflow Preventors	1