



## **Tech Tip**

### **Creating a Cognos Report with the Maximo where Clause that is dynamically filtered by the Maximo Application**

**Products: Maximo 7.5.0.0, TCR2.1, Cognos 8.4.1**

**Document Number: TRI-MAX-R-001**

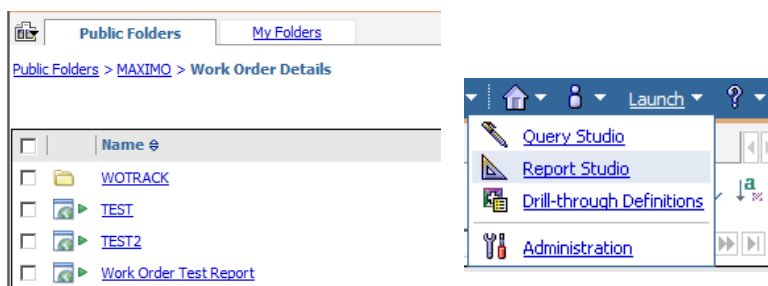
## Prerequisites and Assumptions:

- Ensure you have Maximo installed and running
- Ensure TCR is installed and configured
- Ensure you can access to Cognos Administration page from Maximo.
- Ensure you have published the object structure as a Cognos Package. These instructions use REP\_WORKORDER (Work Order Details).

## Steps:

1. Navigate to Work Order Details package in Cognos Connection. Ensure that you are within the package folder and select 'Launch' and then 'Report Studio'.

**Figure 1 – Launch Menu in Cognos Connection**



2. Select 'Create a new report or template' and select 'List' report and click Ok.
3. Give the report a title like 'Cognos Sample Report'
4. Add some data items to the report from Workorder. Add the following:
  - WONUM
  - DESCRIPTION
  - LOCATION
  - SITEID
  - ASSETNUM
  - STATUS
  - ESTDUR
  - REMDUR

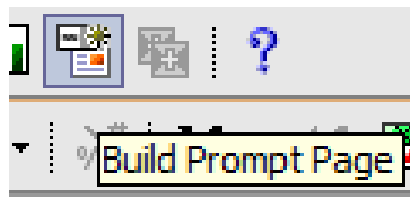
The report should look like this:

**Figure 2 – Report Layout**

<b>Cognos Sample Report</b>							
WONUM	DESCRIPTION	LOCATION	SITEID	ASSETNUM	STATUS	ESTDUR	REMDUR
<WONUM>	<DESCRIPTION>	<LOCATION>	<SITEID>	<ASSETNUM>	<STATUS>	<ESTDUR>	<REMDUR>
<WONUM>	<DESCRIPTION>	<LOCATION>	<SITEID>	<ASSETNUM>	<STATUS>	<ESTDUR>	<REMDUR>
<WONUM>	<DESCRIPTION>	<LOCATION>	<SITEID>	<ASSETNUM>	<STATUS>	<ESTDUR>	<REMDUR>

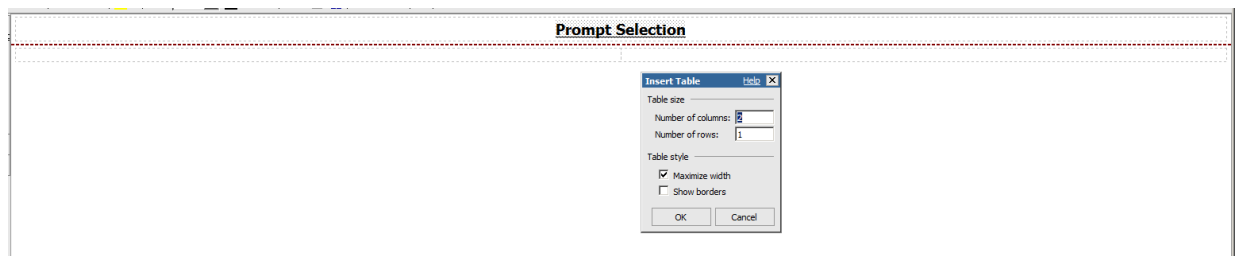
5. Rename the query from Query1 to qry\_sample\_report
6. Navigate back to Page1 and from the toolbar select the 'Build Prompt Page' button.

**Figure 3 – Build Prompt Page Icon**



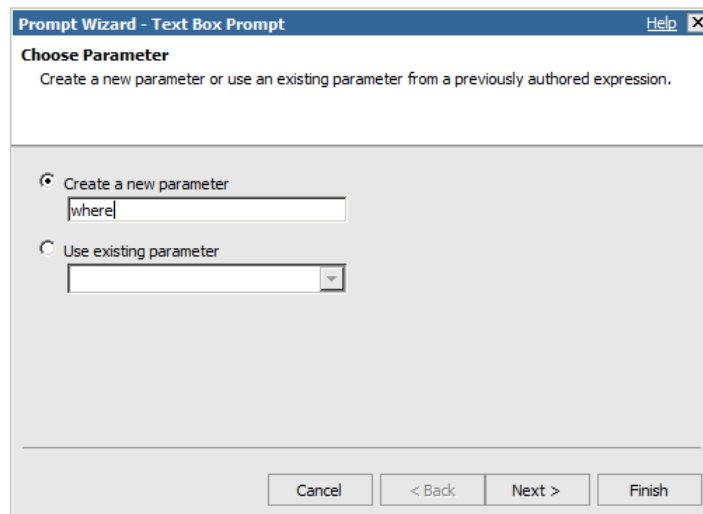
7. Add a title called 'Prompt Selection' to the prompt page.
8. Add a table to the prompt page that has two columns and two rows:

**Figure 3 – Add Table**



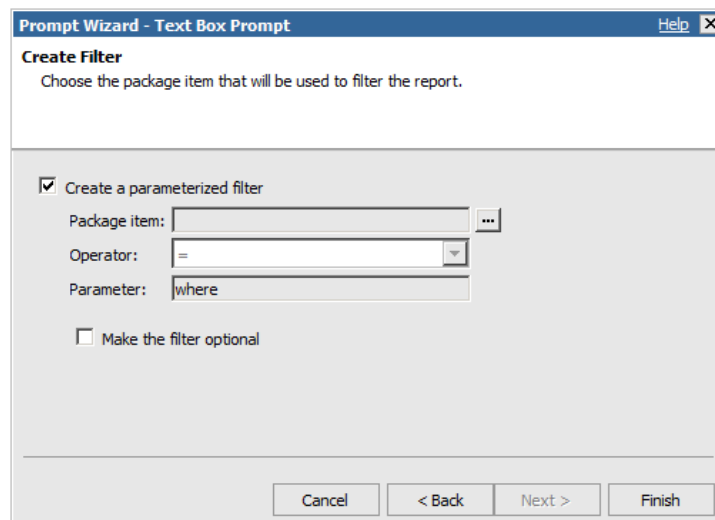
9. Add a text item to the first column with the text 'Where' specified.
10. Drag a Text Box Prompt to the second column of the table. This will generate a prompt wizard. Ensure Create a new parameter radio button is selected and replace 'Parameter1' with 'where'

**Figure 4 – Create where Parameter**



11. Click Next and then click Finish.

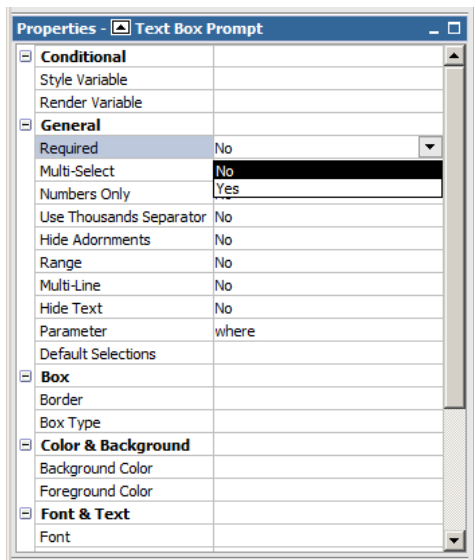
**Figure 5 – Create Parameter Wizard**



12. Click on the Text Box Prompt and change the required parameter from Yes to No.

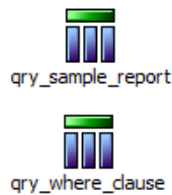
**Figure 6 – Text Box Prompt – Required**





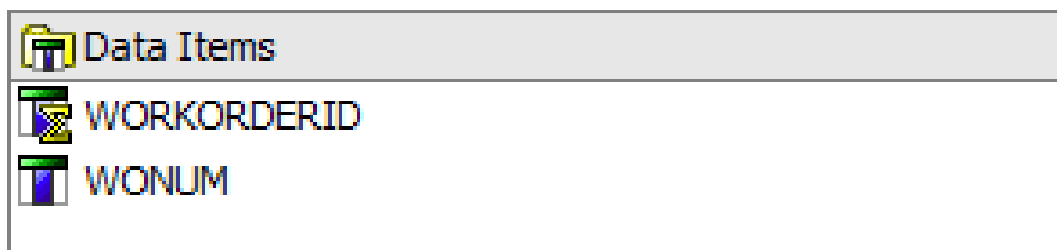
13. The next step is to create the Maximo 'Where' Clause. Navigate to queries and add a new Query. Rename the query from 'Query1' to 'qry\_where\_clause'

**Figure 7 – Report Queries**



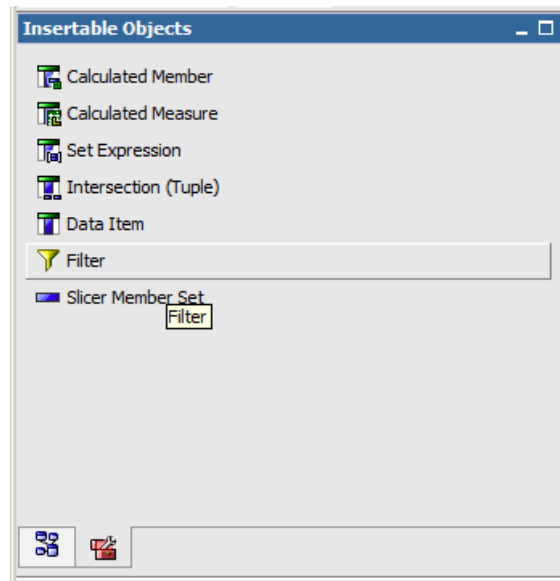
14. We are going to create a where clause that is filtered by Work Order Number from Maximo. Double click on qry\_where\_clause. Add WORKORDERID and WONUM to the query:

**Figure 8 – qry\_where\_clause**



15. Add a Filter from the toolbox to the detail Filters area.

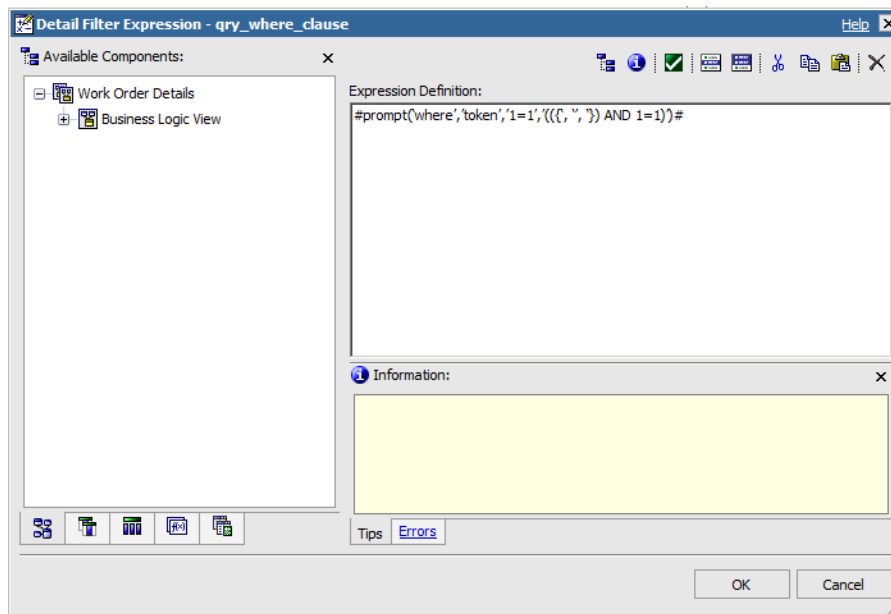
**Figure 9 – Filter Object**



16. This brings up the Expression Definition box. Enter the following code:

```
#prompt('where', 'token', '1=1', '({, ", }) AND 1=1')#
```

**Figure 10 – Detail Filter Expression**

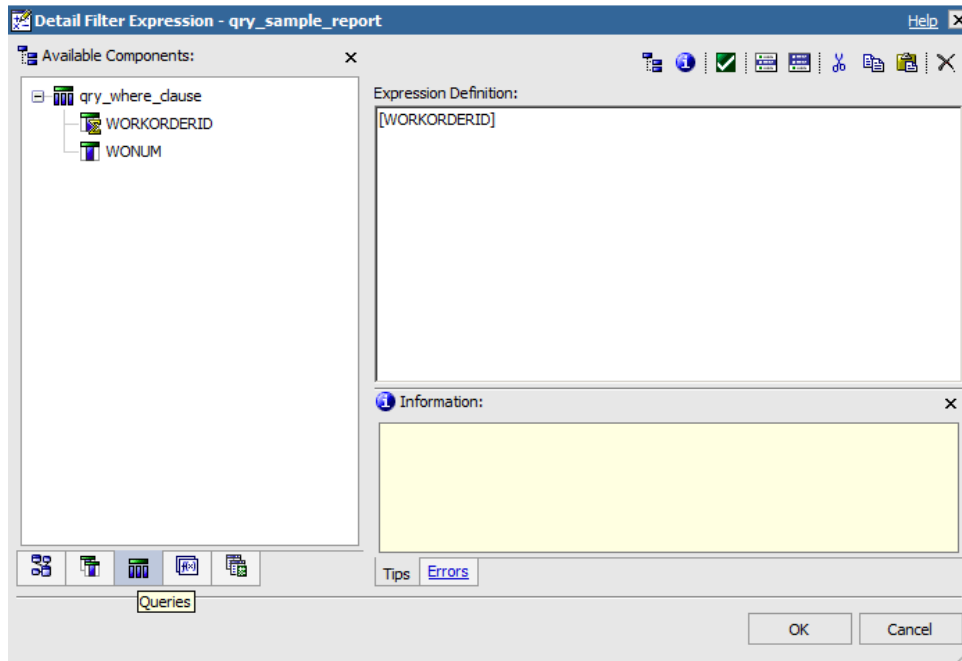


17. Validate the expression to make sure there are no errors and click Ok.
18. Save the report as Cognos Sample Report.
19. Qry\_where\_clause enforces the where clause passed from Maximo. This restriction need to be applied to qry\_sample\_report. Navigate to qry\_sample\_report. Add WORKORDERID to the data items. Please Note this

does not need to be displayed in the report. WORKORDERID is the unique key for REP\_WORKORDER.

20. Drag WORKORDERID from your data items list to the Detail Filters area. In the expression definition navigate to queries:

**Figure 11 – Detail Filter Expression**

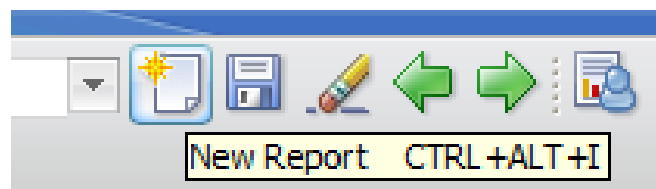


Type in after WORKORDERID and open a bracket. Drag WORKORDERID in from the queries pane and then close the bracket. Your expression Definition should now look like this:

**[WORKORDERID] in ([qry\_where\_clause].[WORKORDERID])**

21. Save the report
22. Close the report.
23. Once the report is completed we need to register the report in Maximo.
24. Navigate to Administration > Reporting > Report Administration
25. Click the New Report Icon:

**Figure 12 – New Report Icon in Maximo**



26. Enter the Report File Name as the name of the report (Cognos Sample Report)
27. Add a Description (CSRNEW) This can be anything.

- 28. Change the Report Type from BIRT to Cognos
- 29. Enter the Package Name (Work Order Details)
- 30. Select the Application (WOTRACK).

**NOTE: Ensure the Report Folder is still blank. If WOTRACK has been inserted then remove it.**

- 31. I am entering a Package Location as my package is within a folder Called MAXIMO. If your package is in the root of Public Folders you can leave this blank.
- 32. Click the Save Button
- 33. Generate the XML by click the Generate Request Page button.

**Figure 13 – New Report Parameters**

- 34. Navigate to Work Order Tracking. Under Work Order type in '100%'

**Figure 14 – Work Order Tracking Screen**

Work Order	Description	Location	Asset	Status
1005	Electric Cart Tune-Up	SHIPPING	12300	APPR
1003	Check for Plumbing Problem	BOILER		APPR
1007	Packaging Mach. Elevator & Drainpan Inspection	BPM3100	13141	APPR
1006	Feedwater Pump Service	BR450	11450	APPR
1002	Rebuild Feedwater Pump	BR450	11450	APPR

This has limited to results to 5 Work Orders. From the Select Action menu select Run Reports. Select CSRNEW and click Submit. The Cognos report runs and is filtered by Maximo:



Figure 15 – Cognos Sample Report

**Cognos Sample Report**

WONUM	DESCRIPTION	LOCATION	SITEID	ASSETNUM	STATUS	ESTDUR	REMDUR
1002	Rebuild Feedwater Pump	BR-450	BEDFORD	11450	APPR	20	
1003	Check for Plumbing Problem	BOILER	BEDFORD		APPR	5	
1005	Electric Cart Tune-Up	SHIPPING	BEDFORD	12300	APPR	1	
1006	Feedwater Pump Service	BR-450	BEDFORD	11450	APPR	20	
1007	Packaging Mach. Elevator & Drainpan Inspection	BPM3100	BEDFORD	13141	APPR	3	

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