

TECH TIP

CREATING AND PUBLISHING A CUSTOM REPORT PRIMAVERA UNIFIER

A custom report provides the flexibility to create high quality reporting within Unifier. The following steps outline how to publish a custom report. The custom report requires a Data View to extract the data and a design layout for the presentation layer. In this example we are looking at a simple custom report which lists the RFIs for a project.

1. SELECT THE DATA VIEW

Data Views allow the user to create data sources which can be used in UDRs, custom reports and shell dashboards.

This example has a Data View already created called 'RFI_Status'. Data Views are found by going to the Company Workspace > Data Structure Setup > Data Views node. For more information on how to create a Data View please refer to December's Tech Tip: How to Use A Data View in a UDR.

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Data Definitions Data Elements Data Indexes	User-Defined Data Vi 1 Item(s)	ews - Current View: <filtere< th=""></filtere<>
Data Views	Name ARFI_Status	Label Des RFI Status

These tech tips are offered free of charge in the spirit of sharing knowledge with others. They do not include technical support, should you have a problem with them. We are always interested in how they can be improved, please do not hesitate to email us your comments. These tips have been thoroughly tested by our consultants in a variety of environments. Please read these tech tips thoroughly and be sure that you understand them before trying to use them. We can not be responsible for issues that develop because of the configuration of your hardware, technical environment or application of the tech memos. If you are not sure, then we urge you to constact Oracle technical support or your local support consultant for assistance

Opening the Data View will show the SQL query that retrieves RFI data.

Create a Data View	
Prefix:	unifier
Name:	RFI_Status
Label:	RFI Status
Description:	
SQL Definition:	SELECT project id.
	record_no, title,
	status FROM unifier_urfi_view

Ensure the Data View is published.

Name 🔺	Label	Description	Publish Date
RFI_Status	RFI Status	(04/01/2016 01:30 AM

To test that the Data View is retrieving information correctly, select the Data View record and click the 'Data' button from the Data Views menu. A window will display with the result set. If all looks good, then close the window. If the output is incorrect, you'll need to return to the Data View setup to modify.





2. INITIATE REPORT AND GENERATE XML

The next step will be to create the custom report which can generate a sample XML data file. This XML file will be used in BI Publisher Desktop for Word to create the layout.

Go to Company Workspace > Configuration > Custom Prints and Reports node.

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Data Structure Setup Access Control	14 Item(s)	Description	-	Page 1
■ User Administration ■ Gateway ■ Configuration	All Projects Contract Sumn All Projects Contract Sumn All Projects Cost Report	Description	I ype Internal Report Internal Report Internal Report	Internal Internal Internal
- Legi Business Process - Legi Document Manager - Legi Portfolio Manager	All Projects Daily Reports Contract Summary		Internal Report Internal Report	Internal Internal
Resource Manager	Contract Summary with Ac Cost Report Daily Reports		Internal Report Internal Report Internal Report	Internal Internal Internal
Custom Prints and Reports	Design Reviews Items Overdue		Internal Report Internal Report	Internal Internal



Click 'New' and select "Report with Internal Data Model" option.

Note: This example will create a 'Report with Internal Data Model'. The selected option will allow Unifier to handle the Data Model internally for any changes. If 'Report with External Data Model' was selected then the Data Model is managed externally through an XDM file (modified within BI Publisher). "Custom Print..." options are used to generate a single "document" type form, not a summary report.

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 DRMcNatty License Manager Partner Companies uDesigner Data Structure Setup Access Control User Administration Gateway Configuration Business Process Document Manager Portfolio Manager Resource Manager Schedule Manager Schell Manager Shell Manager 	File View Help Image: Second Seco



The report window is displayed. Enter Name of the report and select Report Level and Main View values from the drop down.

The Report Level is either 'Program' or 'Project' determined by which level the report will be run. This example is run at the project-level.

The Main View will display a list of all published Data Views available. This example, RFI_Status is selected.

General Views	Query	Parameters		
	Name:RFI Report		*	
	Description:			
			\sim	
Dat	ta Model Tupe: Internal			
Da	Report Level: Project		*	
	Main View RFL Status		*	
	main view.ptt 1_otatus		-	
		Apply OK	Cancel	

In the View tab click the 'Add' button for the 'Views used as data sets' section. In the View Name column select the same Data View. View Type should remain as the 'Main View' and enter an appropriate Data Set Name which will also populate the Data Set Tag column.

If your report uses multiple data sets, you would use the bottom section "Data Links" to create the linking or association between the data sets, but as this report has only one data set, leave this section blank.

Similarly, this example has no query conditions or parameters to include. Their tabs do not need to be modified.

Click the 'Apply' button.



General	Views	Query	Parameters				
Views used as data	sets:						
Row	View Name		View Type	Data Set Name	•	Data Set Tag	
0	RFI_Status		Main View	D\$1		D S1	
Add	Remove						>
Data links: Source Data Set	▲ Source Ele	ement	Target [Data Set	Target Element		
					1		^
							~
Add	Remove						>
		6	Apply	OK Cancel			

Clicking 'Apply' will result in two new tabs being displayed, the Template File tab and Sample Data tab. Select the Sample Data tab to download the XML data that will be used to create the report design layout.

Select a project from the Sample Project pulldown list and select the number of sample records to bring back (this example is selected for 5 but the other options are 10, 50 or 100) and click the 'Generate' button.

Once data (in XML format) is displayed click the 'Download' button to save the XML data file to an appropriate location.



General	Views	Query	Parameters	Template File	Sample Data	
	Sample Project:	Cren	shaw LAX Transit Co	orrid 🗸		
	Number of rows to return:	5	~			
xml version="1.0"</td <td>encoding="UTF-8"?></td> <td></td> <td></td> <td></td> <td></td> <td></td>	encoding="UTF-8"?>					
<data_ds></data_ds>						
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<ds1></ds1>						
<project_id>10</project_id>)18					
<record_no>R</record_no>	H-UU1					
<status>Pendin</status>	n, Renove damp, Replace P 	avenies/TITLEs				
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<ds1></ds1>						
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<record_no>R</record_no>	FI-002					
<title>Remove E</title>	Banner at Rodeo and Crensha	aw				Ť
Generate	Download					
				Cancel		
				Cancer		

TE REPORT LAYOUT IN BI PUBLISHER DESKTOP

Next you will be working in Oracle Business Intelligence to create the report layout. This runs inside MS Word. If the BI Publisher Desktop for Word Plug-In has not been installed in MS Word, go to http://www.oracle.com/technetwork/middleware/bi-publisher/downloads/index.html to download and install.

Once installed, the plug-in creates a new Bi Publisher tab in MS Word.

File	Home	Insert Page Layout	References	Review	View	Develo	per 🤇	BI Publisher					۵ (?
Log	Den Cog Off	🖏 Upload Template 😭 Upload Template As rt 碅 Save XML Data	Sample	〈ML Schema	Table	Pivot	Chart	123 Field Table/Form Repeating Group	Conditional Format Conditional Region	Preview	Tools	Options		
UII	0	nline	Load	Data	Wizaru	Table		Insert						

Click the 'Sample XML' folder icon to load the XML file downloaded from Unifier.

This example will use the Table Wizard (found in the BI Publisher toolbar) to create the report design layout.

Note: Once you are comfortable, you can also use the other BI Publisher commands to create more complex custom reports.

Select Table and click 'Next'.



-	Table Wizard	
		Please select your report format Table Form Free Form
		Cancel Next Finish

Keep the Data Set selection the same (this is automatically read from the uploaded XML file) and click 'Next'.

Table Wizard	
	Which grouping field do you want to report on?
101010010 101 101 101010010 1010101101 101010011	Data Set /DATA_DS/DS1
	Cancel Back Next Finish

Select all fields from the left hand pane and click '>>'. This will display all those fields in the report as columns.



Table Wizard							
	Which fields do you want to show in your report?						
101010010 101 101010010 101010010 10101011101 10100011	PROJECT_ID RECORD_NO TITLE STATUS	> >> <	PROJECT_ID RECORD_NO TITLE STATUS	^ V			
			Running Total				
	Cancel	Back	Next	Finish			

Click 'Next' in this window since there is no grouping requirement for this report.

Table Wizard						
		How would	you like to group y	our report?		
10101:0010	Group By	•	Group above	📃 Data alread	y sorted	
101			Group left	Break:	No Break	•
	Then By		Group above	🗌 Data alread	y sorted	
			Group left	Break:	No Break	~
10101:0010	Then By		Group above	Data alread	y sorted	
10106111011			Group left	Break:	No Break	-
10011:0011	Then By		Group above	Data alread	y sorted	
			Group left	Break:	No Break	-
		Cancel	Back	Next	Finish	

Sort data by Record_No and in Ascending order, then click 'Next'.



Table Wizard		FI REPORT					
	Which field	Which fields would you like to use to sort the data?					
10101-0010	Sort By		Date/Text				
101		 Descending 	Number				
	Then By						
	•	Ascending	Oate/Text				
		Descending	Number				
	Then By	Ascending	Date/Text				
101001110011		O Descending	Number				
10011/0011	Then By						
		Ascending	Date/Text				
		Descending	Number				
	Cancel	Back	Finish				

The Table Wizard automatically creates a table with the selected fields and column headings.

The design layout should now be saved in RTF format. This can be done through the File > 'Save As' option of Word, however, another option is to preview the report first (using the uploaded XML data).

The best option is to click the 'Preview' button and select the PDF option. This will automatically prompt you to save in RTF format. If you select File > Save As option, make sure you select the Rich Text (RTF) document type and NOT a standard Word (DOC, DOCX) format.

W 🔛	ງ • ປ ຸ	RFI_	_Report_Template0_1	- Microsoft Word			
File	Home Insert Page Layout	References Review	View Developer	BI Publisher			۵ (?)
Log On	Cope off Open Open off Open off Image: Some off Open off Open off Open off Image: Some off Image: Some off Open off Open off Image: Some off Image: Some off Image: Some off Open off	Sample XML	Table Pivot Chart Wizard Table	123 Field Table/Form Repeating Group	Conditional Format Conditional Region	Preview Tools	Options
L	Online	Load Data		Insert	5	🔁 PDF 📳	Excel2000
	RFI REPORT						
- - - -	PROJECT_ F PROJECT_	ID RECORI	D_NO T	ITLE	STATUS STATUS E	BI Publish Word 64b Press F1 fo	er Template Builder for it ır add-in help.

After saving the design layout in RTF format, the preview PDF window will display.



RFI REPORT

PROJECT_ID	RECORD_NO	TITLE	STATUS
1018	RFI-001	MH at 60th, Remove &	Pending
		Replace Paveme	
1018	RFI-002	Remove Banner at Rodeo	Pending
		and Crenshaw	
1018	RFI-003	Grade Crossing Gate	Pending
		Equip Offset	
1018	RFI-004	OCS Clearance to SCE	Pending
		220kV Line at	
1018	RFI-005	Sec 018961 3.5	Pending
		Performance Req	

4. UPLOAD RTF LAYOUT TO UNIFIER

The RTF file can now be uploaded into the custom report in Unifier.

Go back to the report in Company Workspace > Configuration > Custom Prints and Reports node.

Open the report and select the Template File tab and click 'Add' button.





In the Add Template and Files window, enter a Template Name. Note: This is the description the user sees.

Select RTF Template Type and locate the RTF file using the 'Browse' button. Click 'OK' on this window and the previous one.

-	Add Template and Files - Internet Explore	er					
	https://unifierdemo15.mlmprojectservices.com/bp/sys/bip/report/template?report_id=15&mode=new&g A						
	Template						
	Template Name:	RFI Report *					
	Template Type:	RTF 🔽 *					
	Layout File:	RFI_Report_Template.rtf *	Browse				
	Chipose (Simplified):		Browso				
	Chinese (Simplified).		Browse				
	Chinese (Traditional).		Browse				
	Duich.		Browse				
	English:		Browse				
	French:		Browse				
	German:		Browse				
	Italian:		Browse				
	Japanese:		Browse				
	Korean:		Browse				
	Portuguese:		Browse				
	Russian:		Browse				
	Spanish:		Browse				
		OK Cancel					
_							

5. PUBLISH THE REPORT

Selecting the report record, publish the report using the 'Status' button.

🗊 New 🔹 🛱 Open 🗈 Copy 🗙 Delete 😰 Status 🔹 Find						
Custom Prints and Reports - Current View: <filtered attributes="" by="" find=""> [Cancel Filter]</filtered>						
1 Item(s) Page 1 of 1						
Name Description Type Data Model Type Key Report Level Publish Date						
RFI Report		Internal Report	Internal	uuu_15	Project	04/01/2016 05:01 AM

6. MAKE REPORT AVAILABLE IN USER MODE

Once the report is published, it has to be made available in Unifier User Mode.

Go to Company Workspace > Configuration > User Mode Navigator node and open the Project/Shell record (this is the Project/shell navigator).



The report is seen in the available list of Available Modules and Business Processes.

Use the left arrow icon to move the report into an appropriate User Mode node. This example will move the report into the default Reports node.



The report is now under the Reports node. Click 'OK'.



After selecting the Project/Shell record click 'Deploy' to make the change available in User Mode.

🗊 New 🔹 🛱 Open 🗸 Error Check 🛯 Deploy 📎 Delete 🔍 Find							
User Mode Navigator - Current View: All							
2 Item(s)							
Name 🔺	Last Saved	Last Deployed					
Company Workspace	11/07/2012 02:05 PM	11/07/2012 02:06 PM					
Project / Shell	04/01/2016 08:32 AM	03/03/2016 09:07 AM					



7. SET PERMISSIONS FOR THE REPORT

The final step is to add the permissions for the report in the appropriate project. This will be completed by using the Shell Template to push the changes to the project.

Go to Company Workspace > Templates > Shells to locate the shell template to use.

Open the shell template.

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🛧 🔇 Navigate To			🖀 🕨 Cor
ACME General Construction License Manager Advance Companies Advance Companies Advance Companies	File Edit View Help File Edit View Help File Copy Projects Templates - Cur	Open Q Find	attributes>
Data Structure Setup Access Control	1 Item(s) Project Name		
Ser Administration Configuration	PT-001	PROJECT TEMPLATE	Active
Elistandards & Libraries Ecompany Workspace			
Implates Projects (Standard) Shells			
Projects PROJECT TEMPLATE			

Select the Access Control node of the shell template and locate the report from the Reports node.

Note: Log out and then log back in if the report cannot be initially seen in the Reports node.

Select the report and a Permissions Settings window will appear.

Check the Group(s) required to access the report and click 'Modify'.





In the new window check the View setting and click 'OK'.

Permissions Setting f	or: RFI Report	
Select Users/Groups		
First Name 🔺	Last Name	Company/Manager
All Project Users	Company Administrator	
Permission Settings:	Add Users/Groups	
✓ View		
	OK Can	cel

Click 'Update Shells' to open up the module permission list. Locate and select the User Mode Access for the 'RFI Report'.

🗊 New 🖆 Open 🔍 Find 📓 Update Shells 🖺 Access Information						
Access Control						
🦉 🦰 Update Projects/Shells - Internet Explorer						
https://unifierdemo15.mlmprojectservices.com/bp/admin/updateproje						
Update Shells 🛛 Close Window						
Module .						
User Mode Access / Project Delivery / All / Lessons Learned						
User Mode Access / Project Delivery / All / Meeting Minutes						
User Mode Access / Project Delivery / All / Monthly Updates						
User Mode Access / Project Delivery / All / Notices to Proceed						
User Mode Access / Project Delivery / All / Project Closeout						
User Mode Access / Project Delivery / All / Punchlist						
User Mode Access / Project Delivery / All / Requests for Information (RFI)						
User Mode Access / Project Delivery / All / Submittal Register						
User Mode Access / Project Delivery / All / Submittals						
User Mode Access / Project Delivery / All / Transmittals						
User Mode Access / Project Delivery / All / Warranties						
User Mode Access / Reports / All Projects Contract Summary						
User Mode Access / Reports / Audit						
User Mode Access / Reports / RFI Report						
User Mode Access / Reports / User-Defined						
User Mode Access / Schedule Manager / Custom Calendars						
User Mode Access / Schedule Manager / Schedule Sheets						
User Mode Access / uMail / Public Items						



Click 'Update Shells' > Shells... from this window.

Update Shells					
Module A Shells					
User Mode Acce: All Shells ivery / All / Lessons Learned	~				
User Mode Acces History ivery / All / Meeting Minutes					
User Mode Accessor reject belivery / All / Monthly Updates					
User Mode Access / Project Delivery / All / Notices to Proceed					
User Mode Access / Project Delivery / All / Project Closeout					
User Mode Access / Project Delivery / All / Punchlist					
User Mode Access / Project Delivery / All / Requests for Information (RFI)					
User Mode Access / Project Delivery / All / Submittal Register					
User Mode Access / Project Delivery / All / Submittals					
User Mode Access / Project Delivery / All / Transmittals					
User Mode Access / Project Delivery / All / Warranties					
User Mode Access / Reports / All Projects Contract Summary					
User Mode Access / Reports / Audit					
User Mode Access / Reports / RFI Report					
User Mode Access / Reports / User-Defined					
User Mode Access / Schedule Manager / Custom Calendars					
User Mode Access / Schedule Manager / Schedule Sheets	<u> </u>				
User Mode Access / uMail / Public Items	•				

Select the project(s) this report will appear in and click 'Update Shell(s)' > Selected Shells from projects list window.

Update Shell(s)	Close	Nindow				
Projects - Current Selected Shell(s) Ittributes> [Cancel Filter]						
4 Item(s)	All Filtered Shells	Page 1 o	f 1 Disp			
Project Number	Project Name	Status	✓ Location			
865512	Crenshaw LAX T	ransit Cor Active	/Los Angeles			
405556	Crenshaw Enviro	onmental F Active	/Los Angeles			
865512PE	Crenshaw LAX T	ransit Pre Active	/Los Angeles			
465512	Crenshaw Conce	eptual Eng Active	/Los Angeles			

Click 'Yes'.





8. TEST REPORT PRINTING

The report now should be available and ready to test.

Go to the project in User Mode and select the Reports node. Select the report and click 'Open'.



The report query window now appears. The template uploaded has already been selected. Choose pdf for the format. Click the 'Report' button to run the report.

Note: The Search Parameters and Additional Parameters sections are blank since query conditions and additional parameters were not included.



RFI Report Query	
Search Parameters	
Additional Parameter	
Template:	REI Report
Format:	PDF CExcel ORTF Text
	Report Close

The report will display in PDF format once the data has been retrieved. The report can now be saved or printed.

Note: You may also output reports in other formats (i.e. Excel, RTF, Text) depending upon your needs. Also in this example, we built ONE layout template for the report; however, you also have the option to build multiple layouts for the same base report should the layout needs change for different users/projects.



https://unifierdemo15.	mImprojectservice	es.com/bp/sys/bip/report/runReport?id=6≻	gnt=90ad602986351f9c164	678fd5fb3		
	RFI REPORT					
PROJECT ID	RECORD NO	TITLE	STATUS			
1018	RFI-001	MH at 60th, Remove & Replace Paveme	Pending			
1018	RFI-002	Remove Banner at Rodeo and Crenshaw	Pending			
1018	RFI-003	Grade Crossing Gate Equip Offset	Pending			
1018	RFI-004	OCS Clearance to SCE 220kV Line at	Pending			
1018	RFI-005	Sec 018961 3.5 Performance Reg	Pending			
1018	RFI-006	AMc 0002 TPSS No. 1	Pending			
1018	RFI-007	TPSS 10 Build Out	Pending			
1018	RFI-008	Emergency Power Receptacles	Pending			
1018	RFI-009	Confirmation of Knock-out Panel	Pending			
1018	RFI-010	Crenshaw-MLK Station Confirmation	Pending			
1018	RFI-011	Electromagnetic Interference Rpt	Pending			
1018	RFI-012	Conad Dir to Remove Sig Fdn at Arli	Pending			
1018	RFI-013	Traffic Signal Loop Detect Costs	Pending			
1018	RFI-014	MLK Sta-Unknown SD Conflict with Ex	Approved			
1018	RFI-015	Changed SS Disposition & Conflict	Approved			
1018	RFI-016	MLK Water Vault	Approved			
1018	RFI-017	"Betterments" Requested LADOT	Approved			
1018	RFI-018	UG Struc-Air Entrained Conc Pct and	Pending			
1018	RFI-019	Status of Right of Entry	Pending			
1018	RFI-020	Acceleration vs Speed Curves/Table	Pending			
1018	RFI-021	Expo Temp Sewer Line 820 Align	Approved			
1018	RFI-022	Removal of Remaining UG Struct MLK	Pending			
1018	RFI-023	Excavation Support Monitoring Point	Pending			
1018	RFI-024	Excavation Support Monitoring Point	Approved			
1018	RFI-025	2in Buried Water Hose - Vernon	Approved			
1018	RFI-026	Resp From LABOE for Expo Temp line	Pending			
1018	RFI-027	Pole Mounted OCS Disconnect Switch	Pending			
1018	RFI-028	Brynhurst 21in Storm Drain UID 1364	Approved			
1018	RFI-029	Slauson Ave Widening Existing Pwr	Pending			
1018	RFI-030	La Brea review by LABOE	Approved			
1018	RFI-031	Clarify Gas Membrane Requirement	Approved			
1018	RFI-032	Gas Line at TPSS 4	Approved			
1018	RFI-033	Greenline Ex Plinth Removal Demo	Approved			
1018	REL034	18in SS at Aviation Imperial to 111	Approved			

