Unanet University

UNANET GOVCON:

USING ANALYTICS STUDIO FOR PROJECT MANAGEMENT REPORTING

PARTICIPANT GUIDE

Last Revised April 4, 2023

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ABOUT THIS PARTICIPANT GUIDE

This document serves as a supplement to the training courses offered through Unanet University. Participants should use this workbook to complete exercises in the student Unanet system while attending the course. Additionally, participants should record notes and actions for reference when working within their own Unanet system.

Symbols used in this guide

Activity

Important Note

Demo

Question

Tour

Unanet Contact Information

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Send questions here for information about courses, course schedule, enrollments, certifications, and unanetuniversity.com. This mailbox is monitored daily.

Support Portal

To improve your experience in accessing our support resources, all Knowledge Center articles, and FAQs have been relocated to the Unanet Support Portal, located at support.unanet.com. You will need a Support ID to access the portal, which you can acquire using the steps below:

> To obtain a login to the Unanet support portal or to create a new ticket, send an email to support@unanet.com with "Support Portal ID request" in the Subject line.
>
> The following conditions must be met to be granted a support account:
> - The "from" address must match the domain of your company.
> - It must NOT be a generic email account (e.g., it cannot be from gmail.com, aol.com, or msn.com).

The company must have an active support agreement with Unanet.

COURSE INTRODUCTION

In this course, you will review options for developing project management reports using Analytics. You will use the periodic JSR data object to create tabular, graphical, and pivoted data outputs, use conditional formatting and basic functions in Analytics Studio, and review the parameters involved. Upon completion of this course, you will have created an Analytics version of the periodic line and bar chart that can be exported and uploaded into your own Unanet instance.

Learning Objectives

After this session of **Unanet GovCon: Using Analytics Studio for Project Management Reporting**, participants will be able to:

- Provide an overview of the report types available via Analytics Studio.
- Explain how to create a CrossTab Report.
- Explain how to create an Advanced Report.

Student Training Site

A Unanet training system has been specifically created to support this course. The system is configured around a fictional GovCon company named MyCo. The activities, and accompanying simulations, reference MyCo, its related internal and external organizations, and business processes.

Roles & Access

Unanet is a role-based system which provides security and access based on the roles assigned to the user by the System Administrator. It is helpful to be familiar with Unanet's roles and the access that comes with each unique role. Users may find the need to be assigned a combination of roles in order to perform various job functions.

During this course, students will be instructed to log-in to Unanet utilizing specific user personas which contain the appropriate roles in order to access and complete the required activities.

Please note, the password is case sensitive; username is not.

	Unanet Role	Name	Username	Password
x	x	x	admin	welcome

LESSON 1: INTRODUCTION TO ANALYTICS

Learning Objectives

Provide an overview of the report types available via Analytics Studio.

- Summarize the different report types available via Analytics Studio.
- Explain how to create an ExpressView Report.
- Explain how to create a Chained Report.

Overview

Analytics is a custom reporting capability that is embedded in the Unanet software. It is accessible by selecting the Analytics option on the Reports Dashboard. Analytics provides its users with an additional, embedded option for developing and viewing custom reports. All Unanet Cloud customers are provided with our Analytics Plus offering as part of regular license fees.

Analytics Studio is an add-on capability, allowing those that require advanced analytics and custom reporting to further mine their data for real-time insight. Analytics Studio offers you a deeper level of analysis and drill-down capabilities so you can interact dynamically with your data. Feature-rich, expert-level dashboards, including C-Suite dashboards, are embedded in Analytics Studio, and you can further customize them for your unique business needs.

Report Types

Analytics Studio allows you to build all available report types. The following table provides an overview of the reporting options.

Report Types	Plus	Studio	Uses
ExpressView Provides drag and drop tabular reporting capability while giving users access to many data areas, functions to manipulate data, and create basic charts and graphs.	✓	✓	• Basic tabular reporting solution • Quickly review your data
Advanced Report Provides the ability to create unique reports with limitless formatting options, including conditional formatting, advanced charts and graphs, drill-down capability, and advanced functions.	✗	✓	• All reports
Dashboard Allows users to drag and drop existing reports onto a grid, arrange them in a specific order, and tie them together with similar filters and parameter.	✗	✓	• Financial Dashboards • Project Performance Dashboards
CrossTab Report Allows users to quickly summarize data at the cross-section of user-defined rows and columns.	✗	✓	• Number of column headers are expected to change dynamically based on the filters applied
Chained Report Allows users to tie together multiple reports in a sequential order and into one output file, such as a PDF.	✓	✓	• Reports that cannot be created using one reporting capability

ExpressView

ExpressView is a tool to quickly get insight into vertically expanding data records and groups. An ExpressView report can optionally include a visualization.

Built with an intuitive drag-and-drop interface, ExpressView is intended to be a way to get started quickly viewing data. ExpressView reports can be converted to Advanced Reports to gain the additional capabilities of that format.

ExpressView reports can be scheduled, added to Chained Reports and Dashboards, and exported to multiple formats.

Data Object Design

ExpressView reports can be developed utilizing any of the data objects available in Analytics, with the exception of the Project Periodic JSR and Project Periodic Performance data sets. These objects require the use of Parameters, a feature specific to Analytics Studio reporting.

Activity 1.1 – Create an ExpressView Report

In this activity, you will create an ExpressView Report to show time entered by fiscal period.

Note: To avoid errors with formulas, be sure to type the formulas rather than using copy and paste.

Activity Steps

Part 1: Create a New ExpressView

1. Navigate to **Reports > Analytics**.
2. Select the **Create New Report +** button.
3. Select **ExpressView**. The welcome to the **ExpressView Designer** window opens.
4. Select **skip tutorial** to go straight to the designer.
5. Select the **Disable Tutorial** check box.
6. Select the **Skip Tutorial** button.
7. Select the **Dismiss** button.
8. Select the **right-facing arrow** for **People Labor and Expense** to expand.
9. Select the **right-facing arrow** for **PPL: Labor and Expense Details**.
10. Drag the following fields to the **Design** pane:
    - **Person First Name**
    - **Person Last Name**
    - **Fiscal Period**
    - **Quantity**
    - **Project Code**
11. Select the **down-facing arrow** for **PPL: Label and Expense Details** to collapse.
12. Select the **right-facing arrow** for **PRJ: Project List** to view joint objects.
13. Type *payment terms* in the **Search** field.
14. Press **Enter**. All the objects that have payment terms display.
15. Select the **X** button to clear the search.

Part 2: Create a Formula Field

1. Select the **+ Add Formula** link.
2. Type *last* in the **Formula** field.

3. Select **PPL: Labor and Expense Details.Person Last Name**.
4. Type *&", "&First* in the **Formula** field.
5. Select **PPL: Labor and Expense Details.Person First Name**.
6. Press **Enter**.
7. Select the **Apply changes checkmark** button.
8. Select the **header** for the last column.
9. Select the **pencil** button in the header.
10. Type *Person Name* in the header.
11. Press **Enter**.

Part 3: Apply a Filter

1. Select the **Radial circle** for **Fiscal Period**. The **Radial Menu** opens. You can Group, Delete, Sort, or Filter the column.
2. Select the **Filter** button.
3. Select **Equal To** in the first dropdown menu in the **Filters** section.
4. Select **FY19-11** in the second dropdown menu.
5. Select the **Run** button to view the data.
6. Select the **Stop** button to return to **Design** view.
7. Select the **Filter** button.
8. Select **Is Between** in the first dropdown menu in the **Filters** section.
9. Select **FY19-01** in the second dropdown menu.
10. Select **FY19-07** in the third dropdown menu.
11. Select the **Run** button to view the data.
12. Select the **Stop** button to return to **Design** view.

Part 4: Group by Fiscal Period

1. Select the **Radical circle** for **Fiscal Period**.
2. Select the **Group** button. The data is grouped by fiscal period.
3. Select the **Run** button to view the data.
4. Select the **Stop** button to return to **Design** view.
5. Close the **New ExpressView** tab.
6. Select the **Don't Save** button.

Chained Report

Chained Reports combine multiple reports into a single, multi-page document. This can simplify running and distributing a group of related reports at once. They also support collating reports along a common sort field, to create a super-grouping of common report data. In addition, you can chain entirely disparate reports together without an issue.

Chained Reports can be scheduled and exported to multiple formats.

Activity 1.2 – Create a Chained Report

In this activity, you will create a Chained Report using existing reports.

Activity Steps

Part 1: Create a Chained Report

1. Select the **Create New Report +** button.
2. Select **Chained Report**.
3. Type *Sample Chained Report* in the **Enter the report name** field.
4. Select the **My Reports** folder.
5. Select the **Next** button.
6. Select the **right-facing arrow** for the **Analytics Studio Reports** folder.
7. Select the **right-facing arrow** for **the CXO Tiles** folder.
8. Drag the following reports to the **Report Name** pane:
    - **CXO-Cash**
    - **CXO-Rev**
    - **CXO-NI**
9. Select the **Next** button.
10. Select **PDF** from the **Default Export Type** dropdown list.
11. Select the **Save and Close** button.

Part 2: View the Chained Report

1. Select the **right-facing arrow** for **My Reports**.
2. Select the **PDF** button for **Sample Chained Reports**. The **Parameters** window opens.
3. Use the information in the table to update the following parameters:

Parameter Name	Value
Legal Entity	MYCO
Fiscal Year	FY22
Fiscal Month End Date	1/31/2022
Budget Name	Baseline

4. Select the **Okay** button.
5. Close the **Sample Chained Report** tab.

Check Your Understanding

Which one of the following report options can you convert to an Advanced Report ?

a) ExpressView Report
b) CrossTab Report
c) Chained Report

Which one of the following report options would you use for combining multiple reports into a single document?

a) ExpressView Report
b) CrossTab Report
c) Chained Report

Refer to Appendix A for answers to the Check Your Understanding questions.

LESSON 2: CROSSTAB REPORTING

Learning Objectives

Explain how to create a CrossTab Report.

- Recall how to create a CrossTab Report.

Introduction

A CrossTab, or cross tabulation, is a widget for grouping and summarizing data fields that automatically expands vertically and horizontally depending on the number of data groupings. CrossTabs are also known as two-way tables, contingency tables, and pivot tables.

Periodic JSR CrossTab Report

The following exercise will walk you through the process of creating a CrossTab report based on the Periodic JSR data object. This report is designed to display project metrics across a user-defined period-of-time.

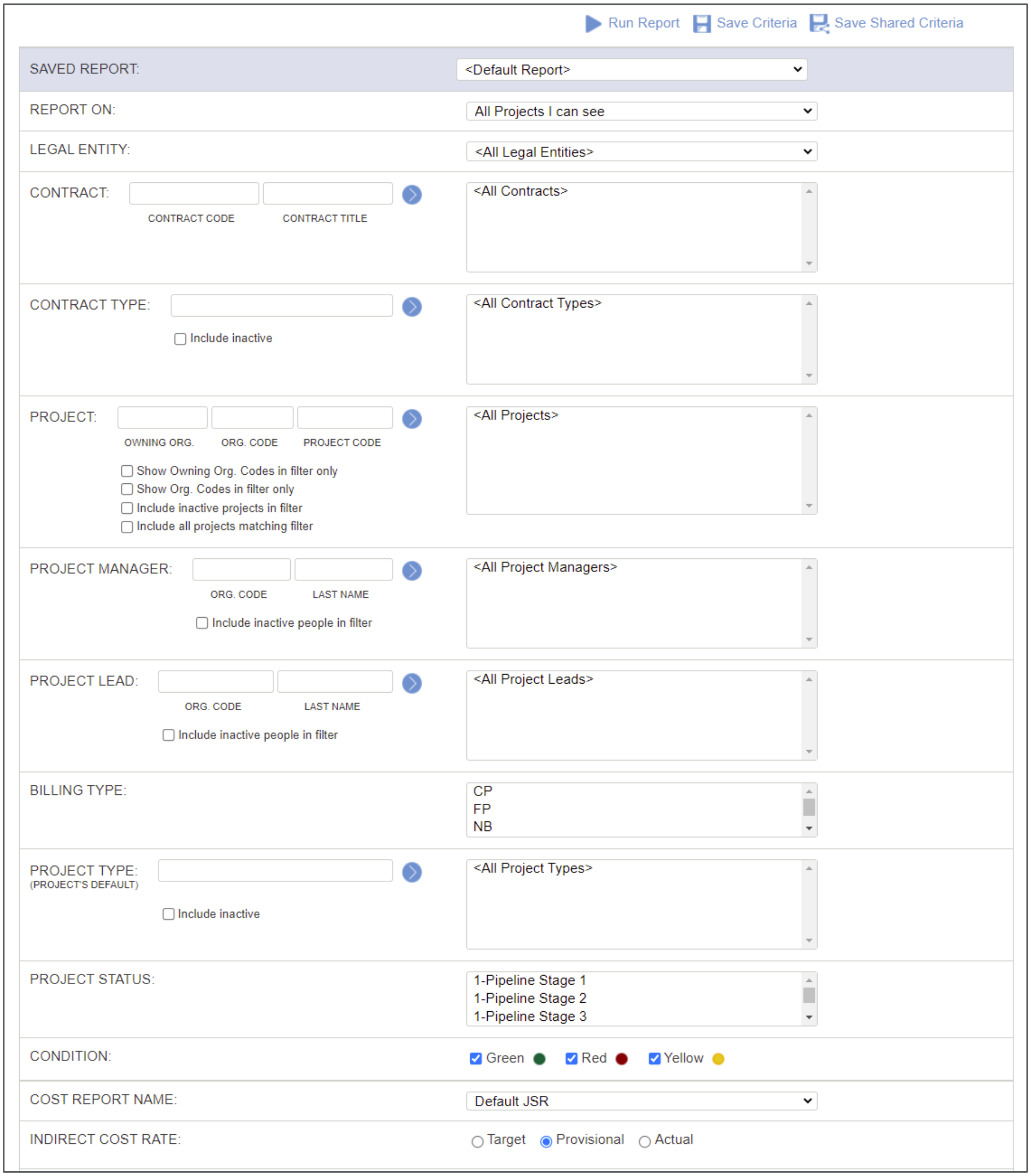
Default JSR *Y	12 01/01/2021	N	*Provisional	*Y						
Project Code	**Cost Report Item Label**	**Row Metrics**	**Period Begin Date**	**01/01/2021**	**02/01/2021**	**03/01/2021**	**04/01/2021**	**05/01/2021**	**06/01/2021**	**07/01/2021**
20.BUG-FIXES	Direct Labor	Actuals		7639.16	7196.51	8824.92	6222.88	1199.26	855.19	0.00
		Budgets		9499.52	9047.16	10404.24	9951.88	9499.52	9951.88	9951.88
	Subcontractor Labor	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Labor Total		**Actuals**	**7639.16**	**7196.51**	**8824.92**	**6222.88**	**1199.26**	**855.19**	**0.00**
			Budgets	**9499.52**	**9047.16**	**10404.24**	**9951.88**	**9499.52**	**9951.88**	**9951.88**
	Total Hours Worked		**Actuals**	**188.00**	**164.00**	**218.00**	**204.00**	**46.00**	**19.00**	**0.00**
			Budgets	**231.08**	**220.08**	**253.09**	**242.08**	**231.08**	**242.08**	**242.08**
	Average Labor Rate		**Actuals**	**40.63**	**43.88**	**40.48**	**30.50**	**26.07**	**45.01**	**0.00**
			Budgets	**41.11**	**41.11**	**41.11**	**41.11**	**41.11**	**41.11**	**41.11**
	Materials	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Inventory	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Travel	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Subcontractor	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total ODC		**Actuals**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
			Budgets	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Fringe	Actuals		2291.75	2158.95	2647.48	1866.86	359.78	256.56	0.00
		Budgets		2849.86	2714.15	3121.27	2985.56	2849.86	2985.56	2985.56
	Overhead	Actuals		115.49	69.16	124.67	101.92	0.00	0.00	0.00
		Budgets		125.94	119.94	137.93	131.93	125.94	131.93	131.93
	G&A	Actuals		1205.57	1130.95	1391.65	983.00	187.08	133.41	0.00
		Budgets		1497.04	1425.75	1639.61	1568.33	1497.04	1568.33	1568.33
	Total Indirect		**Actuals**	**3612.80**	**3359.07**	**4163.79**	**2951.78**	**546.86**	**389.97**	**0.00**
			Budgets	**4472.83**	**4259.84**	**4898.81**	**4685.82**	**4472.83**	**4685.82**	**4685.82**
	Total Project Cost		**Actuals**	**11251.96**	**10555.58**	**12988.71**	**9174.66**	**1746.12**	**1245.16**	**0.00**
			Budgets	**13972.35**	**13307.00**	**15303.05**	**14637.70**	**13972.35**	**14637.70**	**14637.70**
	Total Revenue		**Actuals**	**11440.87**	**10734.46**	**13207.32**	**9329.74**	**1776.90**	**1266.69**	**0.00**
			Budgets	**14207.84**	**13531.28**	**15560.97**	**14884.41**	**14207.84**	**14884.41**	**14884.41**
	Net Margin (Fee)	Actuals		188.91	178.88	218.61	155.08	30.77	21.53	0.00
		Budgets		235.49	224.27	257.92	246.70	235.49	246.70	246.70
	Profit %	Actuals		0.02	0.02	0.02	0.02	0.02	0.02	0.00
		Budgets		0.02	0.02	0.02	0.02	0.02	0.02	0.02
	Unmapped Costs	Actuals		0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Budgets		0.00	0.00	0.00	0.00	0.00	0.00	0.00

Parameters

The Periodic JSR data object requires the use of parameters. These parameters are similar to filters and allow the user to specify key criteria for a report. The parameters that can be utilized in in the Periodic JSR data object very closely match the filter options in Unanet's standard Project Periodic Cost Summary & Status Report. They include the following options:

- @JSRactualsThroughDate@
- @JSRadjustments@
- @JSRcostReport@
- @JSRincludeExpenseReports@
- @JSRincludeNonCompExpRpts@
- @JSRincludePendingAdjustments@
- @JSRindirectCostRate@
- @JSRnumPeriods@
- @JSRpostedDateOnly@
- @JSRreportingPeriod@
- @JSRreportingPeriodStartDate@
- @JSRrowOptionShowPlans@
- @JSRrowOptionShowBudgets@
- @JSRrowOptionShowActuals@
- @JSRrowOptionShowActualsBudgets@
- @JSRrowOptionShowActualsPlan@
- @JSRshowTasks@

An example of the Project Periodic Cost Summary & Status Criteria is shown below.



After adding a parameter to a report, the user will be prompted to select a parameter option during the report's execution.

Activity 2.1 – Create a JSR CrossTab Report

In this activity, you will create a JSR CrossTab Report.

Activity Steps

Part 1: Name the Report

1. Select the **Create New Report +** button.
2. Select **CrossTab Report**.
3. Type *Crosstab – JSR* in the **Enter the report name** field.
4. Select the **My Reports** folder.
5. Select the **Next** button.

Part 2: Select Categories

1. Select the **right-facing arrow** for **Project Periodic JSR (Studio Report Only)**.
2. Drag the following categories to the **Category Name** pane:
   - **PRJ: Periodic JSR**
   - **PRJ: Project List**
3. Select the **Next** button.

Part 3: Select Layout

1. Select the **Layout** tab.
2. Drag **Period Begin Date** to the **Column Header Source** pane.
3. Drag the following sources to the **Row Header Source** pane:
   - **Project Code**
   - **Cost Report Item Label**
   - **Row Metrics**
4. Drag the following **sources** to the **Tabulation Data Source** pane:
   - **Current Period Hours or Amount**
   - **ITD Amount**
5. Select the **Finish** button.

Part 4: Format the Report

1. Select **Report Options gear** button **> Options > Report Viewer**. The **Report View Options** window opens.
2. Deselect the **Simulate PDF** check box.
3. Select the **Okay** button.
4. Select the following cells:
   - **PRJ: Periodic JSR.Current Period Hours or Amount**
   - **PRJ: Periodic JSR.ITD Amount**
5. Select the **Format Cells** button. The **Format Cells** window opens.
6. Select **Number** from the **Category** list.

7. Select the **Okay** button.
8. Select the following cells:
   - **PRJ: Periodic JSR.Project Code**
   - **PRJ: Periodic JSR.Cost Report Item Label**
   - **PRJ: Periodic JSR.Row Metrics**
9. Select the **Format Cells** button. The **Format Cells** window opens.
10. Select the **Border** tab.
11. Select the **Make Borders Uniform** check box.
12. Select the **color picker** box.
13. Select the **black** option.
14. Select the **Okay** button.

Part 5: Add Parameters

1. Select cell **A2**.
2. Type *@JSR* in the **fx** field.
3. Select the **@JSRcostReport@** parameter from the list.
4. Type *&* in the **fx** field after the **@JSRcostReport@** parameter.
5. Repeat steps 2-4 to add the following parameters:
   - **@JSRnumPeriods@**
   - **@JSRrowOptionsShowActuals@**
   - **@JSRreportingPeriodStartDate@**
   - **@JSRshowTasks@**
   - **@JSRindirectCostRate@**
6. Press **Enter**.
7. Select cell **B2**.
8. Type *@project* in the **fx** field.
9. Select the **@projectCode@** parameter from the list.
10. Press **Enter**.

Part 6: Run the Report

1. Select the **Run** button. The **Parameters** window opens.
2. Use the information in the table to update the following parameters:

Parameter Name	Value
Reporting Period Start Date	01/01/2021
Project Code	20.CONTENT-PRODUCTION

3. Select the **Okay** button.
4. Review the information in the report.
5. Close the **Crosstab – JSR** report tab.

Part 7: Add a Column

1. Select cell **A6**.
2. Select the **Menu** button **> Modify**. The **CrossTab Data Designer** window opens.
3. Select the **Options** button. The **Options** window opens.
4. Select **Right** from the **Placement** dropdown list in the **GRAND TOTAL COLUMN** section.
5. Select the **Okay** button.

Part 8: Add Labels

1. Select the **Edit Tabulation pencil** button for **PRJ: Periodic JSR.Current Period Hours or Amount** in the **Tabulation Data Source** pane. The **Tabulation Options** window opens.
2. Type *Current Period* in the **Label** field.
3. Select the **Okay** button.
4. Select the **Edit Tabulation pencil** button for **PRJ: Periodic JSR.ITD Amount** in the **Tabulation Data Source** pane. The **Tabulation Options** window opens.
5. Type *ITD Amount* in the **Label** field.
6. Select the **Okay** button.
7. Select the **Okay** button on the **CrossTab Data Designer** window.

Part 9: Review Parameters

1. Select **Report Options gear** button **> Advanced > Parameters**. The **Parameters** window opens.
2. Review the **Parameters** information.
3. Select the **Cancel** button.

Part 10: Format the Report

1. Select the following cells in column **F**:
   - **PRJ: Periodic JSR.Current Period Hours or Amount**
   - **PRJ: Periodic JSR.ITD Amount**
1. Select the **Bold** button.
2. Select **Align Right** from the **Alignment** dropdown list.
3. Select the **Format Cells** button. The **Format Cells** window opens.
4. Select the **Border** tab.
5. Select the **Make Borders Uniform** check box.
6. Select the **color picker** box.
7. Select the **black** option.
8. Select the **Okay** button.
9. Select the following cells in columns **D** and **E**:
   - **Current Period**
   - **ITD Amount**
   - **PRJ: Periodic JSR.Current Period Hours or Amount**
   - **PRJ: Periodic JSR.ITD Amount**

10. Select the **Format Cells** button. The **Format Cells** window opens.
11. Select the **Border** tab.
12. Select the **Make Borders Uniform** check box.
13. Select the **color picker** box.
14. Select the **black** option.
15. Select the **Okay** button.

Part 11: Run the Report

1. Select the **Run** button. The **Parameters** window opens.
2. Use the information in the table to update the following parameters:

Parameter Name	Value
Reporting Period Start Date	01/01/2021
Project Code	20.CONTENT-PRODUCTION

3. Select the **Okay** button.
4. Review the information in the report.
5. Close the **Crosstab – JSR** report tab.

Part 12: Add Additional Column

1. Select cell **A6**.
2. Select the **Menu** button **> Modify**. The **CrossTab Data Designer** window opens.
3. Select **PRJ: Project List** from the dropdown list.
4. Drag **Funded Value – Original** to the **Row Header Source** pane.
5. Select the **up-facing arrow** for the **PRJ: Project List.Funded Value – Original** to move it up under **PRJ: Periodic JSR.Project Code**.
6. Select the **Okay** button.

Part 13: Update Formatting

1. Select cell **C4**.
2. Select the **Format Paintbrush** button.
3. Select cell **D4**.
4. Select cell **C5**.
5. Select the **Format Paintbrush** button.
6. Select cell **D5**.
7. Select cell **F4**.
8. Select the **Format Paintbrush** button.
9. Select cell **G4**.

Part 14: Add Conditional Formatting

1. Select cells **F6** and **G6**.
2. Select the **Format Cells** button. The **Format Cells** window opens.
3. Select the **Conditional** tab.
4. Select the **+ Add** button.

5. Select **Red** for the **Attribute**.
6. Select the **fx** button. The **Formula Editor** window opens.
7. Select the **+ Cell Value** button.
8. Type >= in the **Formula** field after **CellValue ( )**.
9. Select **PRJ: Project List** from the dropdown list.
10. Drag **Funded Value – Original** to the **Formula** field.
11. Select the **Okay** button.
12. Select the **Okay** button on the **Format Cells** window.

Part 15: Run the Report

1. Select the **Run** button. The **Parameters** window opens.
2. Use the information in the table to update the following parameters:

Parameter Name	Value
Reporting Period Start Date	01/01/2021
Project Code	20.CONTENT-PRODUCTION

3. Select the **Okay** button.
4. Review the information in the report.
5. Close the **Crosstab – JSR** report tab.

Part 16: Add a Parameter

1. Select cell **C2**.
2. Type *@JSR* in the **Formula** field.
3. Select the **@JSRrowOptionShowActualsBudgets@** parameter from the list.
4. Type *&* in the **Formula** field after the **@JSRrowOptionShowActualsBudgets@** parameter.
5. Type *@JSR* in the **Formula** field.
6. Select the **@JSRactualsThroughDate@** parameter from the list.
7. Press **Enter**.

Part 17: Run the Report

1. Select the **Run** button. The **Parameters** window opens.
2. Use the information in the table to update the following **parameters**:

Parameter Name	Value
Reporting Period Start Date	01/01/2021
Project Code	20.CONTENT-PRODUCTION
Actuals Through Date	10/31/2021

3. Select the **Okay** button.
4. Review the information in the report.
5. Close the **Crosstab – JSR** report tab.

Part 18: Add Dynamic Filters

1. Select **Report Options gear** button **> Options > Report Viewer**. The **Report Viewer** window opens.
2. Select the **Filters** tab.
3. Drag **Period Begin Date** to the **Filter** pane.
4. Type *Period Begin Date* in the **Title** field.
5. Select **Range Slider** from the **Type** dropdown list.
6. Select the **Initially Display Filter on Panel** check box.
7. Repeat steps 3-6 to add the **Primary Project Lead – Username** filter:

Field	Value
Filter	Primary Project Lead – Username
Title	Project Lead
Type	Multiple Choice
Initially Display Filter on Panel	Select

8. Select **PRJ: Project List** from the dropdown list.
9. Repeat steps 3-6 to add the **Ultimate Customer/Agency** filter:

Field	Value
Filter	Ultimate Customer/Agency
Title	Ultimate Customer/Agency
Type	Multiple Choice
Initially Display Filter on Panel	Select

10. Select the **General** tab.
11. Select **Show** from the **Show Toolbar in Report Viewer** dropdown list.
12. Select the **Okay** button.

Part 19: Run the Report

1. Select the **Run** button. The **Parameters** window opens.
2. Use the information in the table to update the following parameters:

Parameter Name	Value
Reporting Period Start Date	01/01/2021
Row Option – Show Actuals Combined with Budgets	N
Actuals Through Date	07/01/2021

3. Select the **Okay** button.
4. Select the **HHS** check box in the **Ultimate Customer/Agency** section to filter.
5. Slide the **Period End Date** to **07/01/2021**.
6. Review the information in the report.
7. Close the **Crosstab – JSR** report tab.
8. Select the **Save Report** button.
9. Close the **Crosstab – JSR** tab.

Check Your Understanding

Determine if each statement is true or false.

	True or False
CrossTabs are also known as pivot tables.	
CrossTabs automatically expand vertically and horizontally depending on the number of data groupings.	
Parameters are only used when designing a report.	
The Periodic JSR data object does not require the use of parameters.	

Refer to Appendix A for answers to the Check Your Understanding questions.

LESSON 3: ADVANCED REPORTING

Learning Objectives

Explain how to create an Advanced Report.

- Explain how to create a tabular report using Advanced Reports.
- Explain how to create a bar and line chart using Advanced Reports.
- Summarize how to use the Dashboard to format Advanced Reports.

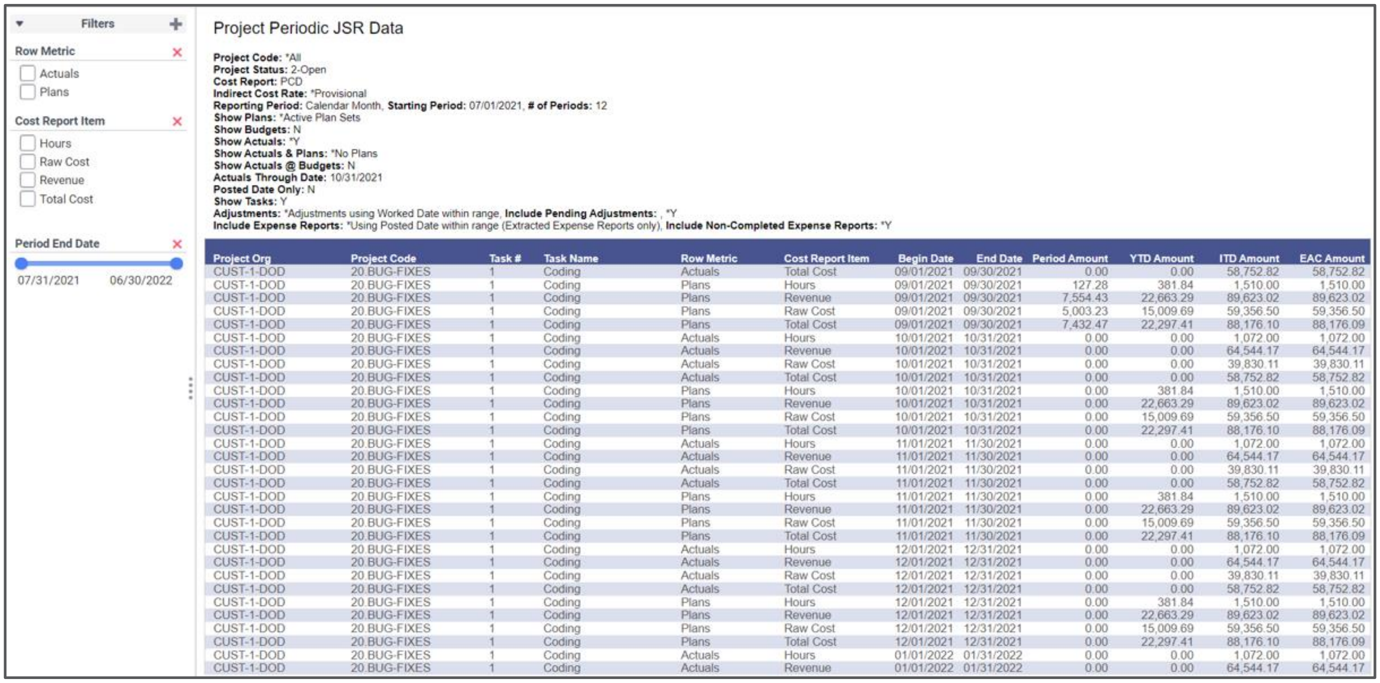
Introduction

The most powerful reporting tools are available with Advanced Reports, including geographic maps; CrossTabs; repeating groups; complex join, filter, and sort logic; drilldowns to linked child reports, and more. Advanced Reports are made using a spreadsheet-like cell-grid interface. The Advanced Report Designer allows users to build reports without requiring knowledge of SQL or the underlying data model. Advanced Reports can be executed to a browser-based Report Viewer interface, which allows for interactivity, additional changes to be made without re-running the report, and for saving user-specific customization.

Advanced Reports can be scheduled, added to Chained Reports and Dashboards, embedded into web pages, used to populate document templates, and exported to multiple formats.

Tabular Reports

ExpressView reports are the simplest option for creating tabular reporting solutions in Analytics. However, ExpressView reports cannot leverage the use of Parameters, a requirement for reports developed using the Periodic JSR data object, so Advanced Reports can be utilized to look at Periodic JSR data in a tabular view.



Project Periodic JSR Data

Project Code: *All
Project Status: 2-Open
Cost Report: PCD
Indirect Cost Rate: *Provisional
Reporting Period: Calendar Month, **Starting Period:** 07/01/2021, **# of Periods:** 12
Show Plans: *Active Plan Sets
Show Budgets: N
Show Actuals: *Y
Show Actuals & Plans: *No Plans
Show Actuals @ Budgets: N
Actuals Through Date: 10/31/2021
Posted Date Only: N
Show Tasks: Y
Adjustments: *Adjustments using Worked Date within range, **Include Pending Adjustments:** , *Y
Include Expense Reports: *Using Posted Date within range (Extracted Expense Reports only), **Include Non-Completed Expense Reports:** *Y

Project Org	Project Code	Task #	Task Name	Row Metric	Cost Report Item	Begin Date	End Date	Period Amount	YTD Amount	ITD Amount	EAC Amount
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Total Cost	09/01/2021	09/30/2021	0.00	0.00	58,752.82	58,752.82
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Hours	09/01/2021	09/30/2021	127.28	381.84	1,510.00	1,510.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Revenue	09/01/2021	09/30/2021	7,554.43	22,663.29	89,623.02	89,623.02
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Raw Cost	09/01/2021	09/30/2021	5,003.23	15,009.69	59,356.50	59,356.50
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Total Cost	09/01/2021	09/30/2021	7,432.47	22,297.41	88,176.10	88,176.09
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Hours	10/01/2021	10/31/2021	0.00	0.00	1,072.00	1,072.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Revenue	10/01/2021	10/31/2021	0.00	0.00	64,544.17	64,544.17
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Raw Cost	10/01/2021	10/31/2021	0.00	0.00	39,830.11	39,830.11
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Total Cost	10/01/2021	10/31/2021	0.00	0.00	58,752.82	58,752.82
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Hours	10/01/2021	10/31/2021	0.00	381.84	1,510.00	1,510.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Revenue	10/01/2021	10/31/2021	0.00	22,663.29	89,623.02	89,623.02
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Raw Cost	10/01/2021	10/31/2021	0.00	15,009.69	59,356.50	59,356.50
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Total Cost	10/01/2021	10/31/2021	0.00	22,297.41	88,176.10	88,176.09
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Hours	11/01/2021	11/30/2021	0.00	0.00	1,072.00	1,072.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Revenue	11/01/2021	11/30/2021	0.00	0.00	64,544.17	64,544.17
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Raw Cost	11/01/2021	11/30/2021	0.00	0.00	39,830.11	39,830.11
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Total Cost	11/01/2021	11/30/2021	0.00	0.00	58,752.82	58,752.82
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Hours	11/01/2021	11/30/2021	0.00	381.84	1,510.00	1,510.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Revenue	11/01/2021	11/30/2021	0.00	22,663.29	89,623.02	89,623.02
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Raw Cost	11/01/2021	11/30/2021	0.00	15,009.69	59,356.50	59,356.50
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Total Cost	11/01/2021	11/30/2021	0.00	22,297.41	88,176.10	88,176.09
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Hours	12/01/2021	12/31/2021	0.00	0.00	1,072.00	1,072.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Revenue	12/01/2021	12/31/2021	0.00	0.00	64,544.17	64,544.17
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Raw Cost	12/01/2021	12/31/2021	0.00	0.00	39,830.11	39,830.11
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Total Cost	12/01/2021	12/31/2021	0.00	0.00	58,752.82	58,752.82
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Hours	12/01/2021	12/31/2021	0.00	381.84	1,510.00	1,510.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Revenue	12/01/2021	12/31/2021	0.00	22,663.29	89,623.02	89,623.02
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Raw Cost	12/01/2021	12/31/2021	0.00	15,009.69	59,356.50	59,356.50
CUST-1-DOD	20.BUG-FIXES	1	Coding	Plans	Total Cost	12/01/2021	12/31/2021	0.00	22,297.41	88,176.10	88,176.09
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Hours	01/01/2022	01/31/2022	0.00	0.00	1,072.00	1,072.00
CUST-1-DOD	20.BUG-FIXES	1	Coding	Actuals	Revenue	01/01/2022	01/31/2022	0.00	0.00	64,544.17	64,544.17

Sections

An Advanced Report's sections define the appearance and pattern of the report. Specifically, sections determine how frequently their cell contents are repeated.

The appearance of a report is based on data that is not necessarily known at the time it is made. The data, and the relationships it describes, are dynamic and mutable. So tabular reports are usually not fixed designs. Instead, you are describing how the report structures itself around a set of unpredictable data. Knowing which sections are suitable for different types of content is crucial for designing the best possible report.

Section	Description
Page Header	The rows in this section appear at the top of each page.
Report Header	The rows in this section appear at the beginning of the report.
Detail	The rows in this section appear once for each row of data returned during execution.
Report Footer	The rows in this section appear at the end of the report.
Page Footer	The rows in this section appear at the bottom of each page.
Group Header	The rows in this section appear at the start of each new value of a sorted data field. **Note:** Group header sections require that a sort exists.
Group Footer	The rows in this section appear at the end of each value of a sorted data field. **Note:** Group footer sections require that a sort exists.
Repeating Group	Use when you have multiple one-to-many relationships from one data category to other categories and you want each category's data to appear separately.

Activity 3.1 – Create a Periodic JSR Data Report

In this activity, you will create an Advanced Report for Periodic JSR Data. You will get hands-on experience using Advanced Report Sections to create custom report formats.

Note: To avoid errors with formulas, be sure to type the formulas rather than using copy and paste.

Activity Steps

Part 1: Name the Report

1. Select the **Create New Report +** button.
2. Select **Advanced Report**.
3. Type *Periodic JSR Data* in the **Enter the report name** field.
4. Select the **My Reports** folder.
5. Select the **Next** button.

Part 2: Select Categories

1. Select the **right-facing arrow** for **Project Periodic JSR (Studio Report Only)**.
2. Drag **PRJ: Periodic JSR** to the **Category Name** pane.
3. Select the **Next** button.
4. Select the **Finish** button.

Part 3: Add Parameters

1. Select row **3**.
2. Select **Insert Rows After** from the dropdown list.
3. Select cells **A3**, **B3**, **C3**, **D3**, and **E3**.
4. Select the **Merge Cells** button.
5. Select cell **A3**.
6. Type =*Concatenate(Bold("Project Code: "),@projectCode@)* in the **fx** field.
7. Repeat steps 1-6 to add the formulas to the following cells:

Cell	Formula
A4	=Concatenate(Bold("Project Status: "),@projectStatus@)
A5	=Concatenate(Bold("Cost Report: "),@JSRcostReport@)
A6	=Concatenate(Bold("Indirect Cost Rate: "),@JSRindirectCostRate@)
A7	=Concatenate(Bold("Reporting Period: "),@JSRreportingPeriod@,",",Bold("Starting Period: "), @JSRreportingPeriodStartDate@,",",Bold("# of Periods: "),@JSRnumPeriods@)
A8	=Concatenate(Bold("Show Plans: "),@JSRrowOptionShowPlans@)
A9	=Concatenate(Bold("Show Budgets: "),@JSRrowOptionShowBudgets@)
A10	=Concatenate(Bold("Show Actuals: "),@JSRrowOptionShowActuals@)
A11	=Concatenate(Bold("Show Actuals & Plans: "),@JSRrowOptionShowActualsPlans@)

A12	=Concatenate(Bold(“Show Actuals & Budgets: “),@JSRrowOptionShowActualsBudget@)
A13	=Concatenate(Bold(“Actuals Through Date: “),@JSRactualsThroughDate@)
A14	=Concatenate(Bold(“Posted Date Only: “),@JSRpostedDataOnly@)
A15	=Concatenate(Bold(“Show Tasks: “),@JSRshowTasks@)
A16	=Concatenate(Bold(“Adjustments: “),@JSRadjustments@,”,”,Bold(“Include Pending Adjustments: “),@JSRincludePendingAdjustments@)
A17	=Concatenate(Bold(“Include Expense Reports: “),@JSRincludeExpenseReports@,”,”, Bold(“Include Non-Completed Expense Reports: “),@JSRincludeNonCompExpRpts@)

Your report should look like this:

	A	B	C	D	E
1	**Periodic JSR Data**				
2					
3	=Concatenate(Bold("Project Code: "),@projectCode@)				
4	=Concatenate(Bold("Project Status: "),@projectStatus@)				
5	=Concatenate(Bold("Cost Report: "),@JSRcostReport@)				
6	=Concatenate(Bold("Indirect Cost Rate: "),@JSRindirectCostRate@)				
7	=Concatenate(Bold("Reporting Period: "),@JSRreportingPeriod@,",",Bold("Starting Period: "),@JSRreportingPeriodStartDate@,",",Bold("# of Periods: "),@JSRnumPeriods@)				
8	=Concatenate(Bold("Show Plans: "),@JSRrowOptionShowPlans@)				
9	=Concatenate(Bold("Show Budgets: "),@JSRrowOptionShowBudgets@)				
10	=Concatenate(Bold("Show Actuals: "),@JSRrowOptionShowActuals@)				
11	=Concatenate(Bold("Show Actuals & Plans: "),@JSRrowOptionShowActualsPlans@)				
12	=Concatenate(Bold("Show Actuals & Budgets: "),@JSRrowOptionShowActualsBudgets@)				
13	=Concatenate(Bold("Actuals Through Date: "),@JSRactualsThroughDate@)				
14	=Concatenate(Bold("Posted Date Only: "),@JSRpostedDataOnly@)				
15	=Concatenate(Bold("Show Tasks: "),@JSRshowTasks@)				
16	=Concatenate(Bold("Adjustments: "),@JSRadjustments@,",",Bold("Include Pending Adjustments: "),@JSRincludePendingAdjustments@)				
17	=Concatenate(Bold("Include Expense Reports: "),@JSRincludeExpenseReports@,",",Bold("Include Non-Completed Expense Reports: "),@JSRincludeNonCompExpRpts@)				
18					

Part 4: Basic Report Formatting

1. Select column **A**.
2. Select **Insert Columns Before** from the dropdown list.
3. Repeat steps 1 and 2 to insert another column.
4. Select column **A**.
5. Select **Set Column Width** from the dropdown list.
6. Type *10* in the **Column Width (px)** field.
7. Select the **Okay** button.
8. Repeat steps 4-7 to set the column with for column **B**.
9. Select the **Detail Section**.
10. Select **Delete Section** from the dropdown list.
11. Select the **Save Report** button.

Part 5: Create a Dashboard

1. Select the **Create New Report +** button.
2. Select **Dashboard**.
3. Select **New Tile** on the **Toolbar** and drag to the **Canvas**.
4. Use the handles to resize the tile to the size of the **Canvas**.

5. Select the **Existing Report** button.
6. Drag **Period JSR Data** to the tile.
7. Select **Parameters** on the **Toolbar**.
8. Select the **dropdown** button for **projectCode**.
9. Select ***All** from the **Value** dropdown list.
10. Verify the **Prompt for value** check box is selected.
11. Repeat steps 9-11 to add the values for the parameters:

Parameter	Value	Prompt for value
ProjectStatus	2-Open	Select
JSRcostReport	PCD	Deselect
JSRindirectCostRate	*Provisional	Select
JSRreportingPeriod	Calendar Month	Select
JSRreportingPeriodStartDate	2021-10-01	Select
JSRnumPeriods	12	Select
JSRrowOptionShowPlans	*Active Plan Sets	Select
JSRrowOptionShowBudgets	N	Deselect
JSRrowOptionShowActuals	*Y	Select
JSRrowOptionShowActualsPlans	*No Plans	Select
JSRrowOptionShowActualBudgets	N	Select
JSRactualsThroughDate	2022-01-15	Select
JSRpostedDataOnly	N	Select
JSRshowTasks	Y	Select
JSRadjustments	*Adjustments using Worked Date within range	Select
JSRincludePendingAdjustments	*Y	Select
JSRincludeExpenseReports	Using Line Item Data within range	Select
JSRincludeNonCompExpRpts	*Y	Select

12. Select the **Save and Close** button.
13. Select **Save** on the **Toolbar**. The **Save Dashboard** window opens.
14. Type *Periodic JSR Dashboard* in the **Name** field.
15. Select the **My Reports** folder.
16. Select the **Save** button.
17. Close the **Periodic JSR Dashboard** tab.

Part 6: Add a Sort

1. Select **Report Options gear** button **> Sorts**. The **Report Sorts** window opens.
2. Drag **Project Code** to the **Sort By** pane.
3. Select the **Okay** button.

Part 7: Add a Group Header

1. Select **Section > Add Section > Group Header**. The **Group Header** window opens.
2. Select **PRJ:Periodic JSR.Project Code** from the **Show this group for each change of the following** dropdown list.
3. Select the **Okay** button.
4. Right-click cell **C19**. **Note:** This cell is in the **Header: PRJ: Periodic JSR.Project Code** row.
5. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
6. Drag **Project Code** to the **Formula** box.
7. Select the **Okay** button.
8. Select the **Save Report** button.

Part 8: Run the Dashboard

1. Select the **Run Report** button for the **Periodic JSR Dashboard** in the **My Reports** section. The **Parameters** window opens.
2. Select the **Okay** button.
3. Select the **Parameters** button on the left side of the **Dashboard**. The **Parameters** pane opens. You can change any of the parameters on the report.
4. Type *1* in the **JSRnumPeriods** field.
5. Press **Enter**. The Dashboard refreshes based on the updated parameters.

Part 9: Add Formulas

1. Select the **Periodic JSR Data** tab.
2. Right-click cell **D19**.
3. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
4. Drag **Project Revised Begin Date** to the **Formula** field.
5. Select the **Okay** button.
6. Right-click cell **E19**.
7. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
8. Drag **Project Revised End Date** to the **Formula** field.
9. Select the **Okay** button.
10. Select the **Save Report** button.

Part 10: Refresh the Dashboard

1. Select the **Periodic JSR Dashboard** tab.
2. Select the **Refresh** button on the left side of the **Dashboard**.

Part 11: Add a Sort

1. Select the **Periodic JSR Data** tab.
2. Select **Report Options gear** button **> Sorts**. The **Report Sorts** window opens.
3. Drag **Task Number** to the **Sort By** pane.
4. Select the **Okay** button.

Part 12: Add a Group Header

1. Select **Header: PRJ:Periodic JSR.Project Code > Add Section > Group Header**. The **Group Header** window opens.
2. Select **PRJ:Periodic JSR.Task Number** from the dropdown list.
3. Select the **Okay** button.
4. Select cell **C20**.
5. Select the **Align** button **> Right Align**.
6. Right-click cell **C20**.
7. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
8. Type *{PRJ: Periodic JSR.Task Number}&" – "&{PRJ: Periodic JSR.Task Name}* the **Formula** field.
9. Select the **Okay** button.
10. Select the **Save Report** button.
11. Select cells **C20** and **D20**.
12. Select the **Merge Cells** button.

Part 13: Add a Category

1. Select **Report Options gear** button **> Categories**. The **Report Categories** window opens.
2. Select the **right-facing arrow** for **Project Periodic JSR (Studio Report Only)**.
3. Drag **PRJ: JSR Task List** to the **Category Name** pane.
4. Select the **Okay** button.
5. Right-click cell **F20**.
6. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
7. Type *AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Revenue", {PRJ: Periodic JSR.Current Period Hours or Amount}, 0))* in the **Formula** field.
8. Select the **Okay** button.
9. Select the **Save Report** button.

Part 14: Add a Section

1. Select **Header PRJ:Periodic JSR.Task Number > Add Section > Group Footer**. The **Group Footers** window opens.
2. Select **PRJ:Periodic JSR.Project Code** from the dropdown list.
3. Select the **Okay** button.
4. Select cells **C21**, **D21**, and **E21**.
5. Select the **Merge Cells** button.
6. Right-click cell **C21**.
7. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
8. Type *"Totals for project: "&{PRJ: Periodic JSR.Project Code}* in the **Formula** field.
9. Select the **Okay** button.
10. Select the **Bold** button.
11. Select the **Save Report** button.

Part 15: Refresh the Dashboard

1. Select the **Periodic JSR Dashboard** tab.
2. Select the **Refresh** button.

Part 16: Add a Row

1. Select the **Periodic JSR Data** tab.
2. Select row **21 > Insert Rows After**.
3. Select the **Save Report** button.

Part 17: Refresh the Dashboard

1. Select the **Periodic JSR Dashboard** tab.
2. Select the **Refresh** button.

Part 18: Add a Row

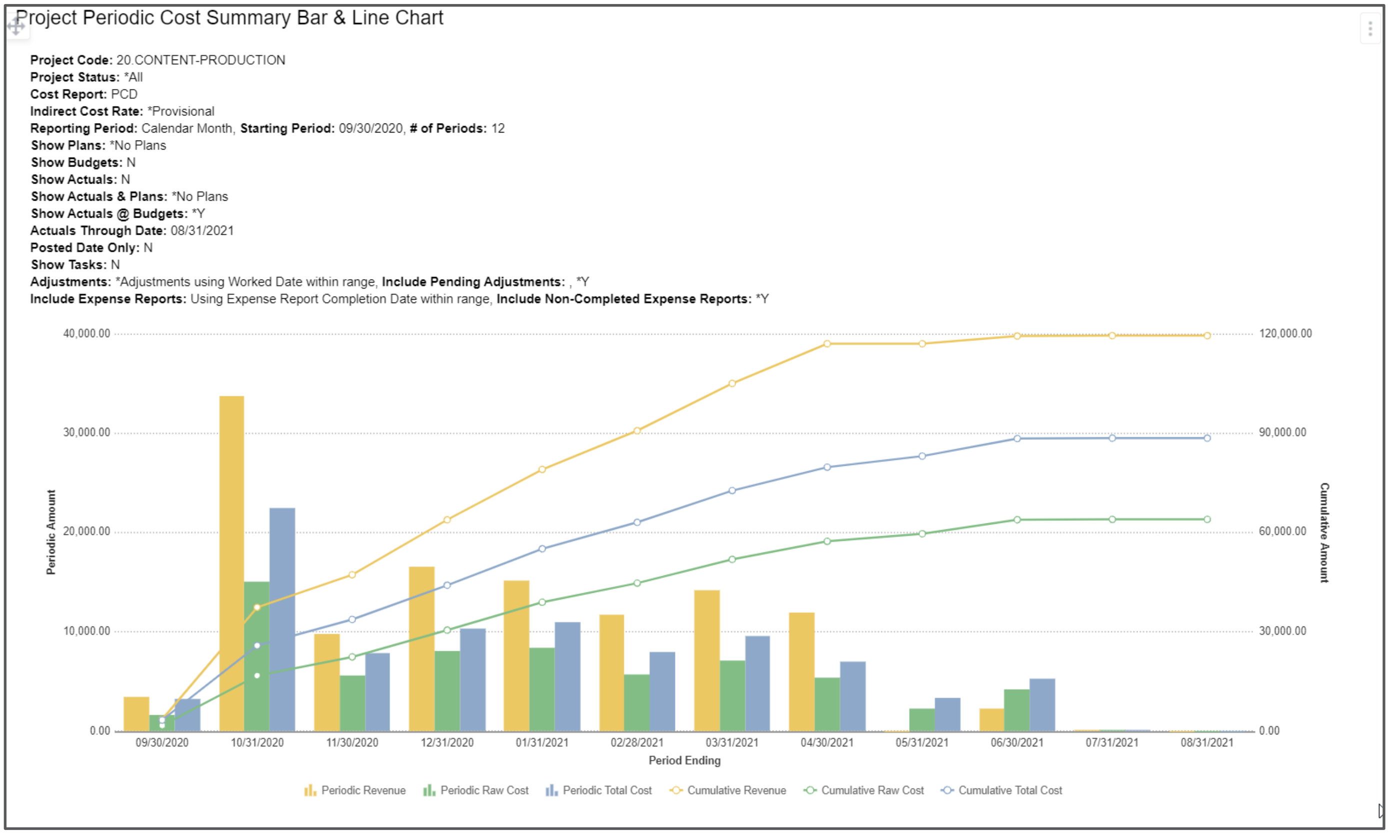
1. Select the **Periodic JSR Data** tab.
2. Right-click cell **F21**.
3. Select **Insert > Formula** from the list. The **Formula Editor** window opens.
4. Type *AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Revenue", {PRJ: Periodic JSR.Current Period Hours or Amount}, 0))*in the **Formula** field.
5. Select the **Okay** button.
6. Select the **Save Report** button.

Part 19: Refresh the Dashboard

1. Select the **Periodic JSR Dashboard** tab.
2. Select the **Refresh** button.
3. Close the **Periodic JSR Dashboard** tab.
4. Close the **Periodic JSR Data** tab.

Charting

Charts allow you to showcase your data in a visual format. They allow you to quickly scan your data for patterns and trends. Charts are easily made and customized.



Activity 3.2 – Create a Periodic JSR Bar and Line Chart

In this activity, you will use the report you created in Activity 3.1 and add a bar and line chart.

Note: To avoid errors with formulas, be sure to type the formulas rather than using copy and paste.

Activity Steps

Part 1: Duplicate a Report

1. Select the **right-facing arrow** for **My Reports**.
2. Select **Periodic JSR Data**.
3. Select the **Menu** button **> Duplicate**. The **Duplicate Report** window opens.
4. Type *Periodic Bar & Line Chart* in the **Enter the report name** field.
5. Select **My Reports**.
6. Select the **Okay** button.
7. Select **Periodic Bar & Line Chart**.
8. Select the **Menu** button **> Edit**.
9. Select **Header: PRJ: Periodic JSR.Project Code > Delete Section**.
10. Select **Header: PRJ: Periodic JSR.Task Number > Delete Section**.
11. Select **Footer: PRJ: Periodic JSR.Product Code > Delete Section**.

Part 2: Update Report Sorts

1. Select **Report Options > Sorts**. **The Report Sorts** window opens.
2. Select the **Delete** button for the **PRJ:Periodic JSR.Project Code** sort.
3. Select the **Delete** button for the **PRJ:Periodic JSR.Task Number** sort.
4. Select **PRJ: Periodic JSR** in the dropdown list.
5. Drag **Period End Date** to the **Sort By** pane.
6. Select the **Okay** button.

Part 2: Add a Report Header Section

1. Select **Page Header > Add Section > Report Header**.
2. Select column **G > Insert Columns After**.
3. Select column **G > Insert Columns After**.
4. Use the information in the table to add labels to the report:

Cell	Value
C19	Period End Date
D19	Periodic Revenue
E19	Periodic Raw Cost
F19	Periodic Total Cost
G19	Cumulative Revenue
H19	Cumulative Raw Cost

I19	Cumulative Total Cost

5. Select the **Save Report** button.

Part 3: Add a Header Section

1. Select **Page Header > Add Section > Group Header**. The **Group Header** window opens.
2. Select **PRJ:Periodic JSR.Period End Date** from the dropdown list.
3. Select the **Okay** button.
4. Select cell **C20**.
5. Type *=DateCustomFormat({PRJ: Periodic JSR.Period End Date},"MM yy")* in the **fx** field.
6. Press **Enter**.
7. Select cell **D20**.
8. Type *=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Revenue",{PRJ: Periodic JSR.Current Period Hours or Amount},0))* in the **fx** field.
9. Copy the formula in cell **D20**.
10. Paste the formula in cell **E20**.
11. Replace *Revenue* with *Raw Cost* in the pasted formula in cell **E20**.
12. Paste the formula in cell **F20**.
13. Replace *Revenue* with *Total Cost* in the pasted formula in cell **F20**.
14. Select the **Save Report** button.
15. Close the **Periodic Bar & Line Chart** tab.

Part 4: Create a Dashboard

1. Select the **Create New Report +** button.
2. Select **Dashboard**.
3. Select **New Tile** and drag to the **Canvas**.
4. Use the handles to resize the tile to the size of the **Canvas**.
5. Select the **Existing Report** button.
6. Drag **Period Bar & Line Chart** to the tile.
7. Select **Parameters** on the **Toolbar**.
8. Use the information in the table to add the values for the parameters:

Parameter	Value
projectCode	20.CONTENT-PRODUCTION
projectStatus	*All
JSRcostReport	PCD
JSRindirectCostRate	*Provisional
JSRreportingPeriod	Calendar Month
JSRreportingPeriodStartDate	2020-09-30
JSRnumPeriods	12
JSRrowOptionShowPlans	*No Plans

JSRrowOptionShowBudgets	N
JSRrowOptionShowActuals	N
JSRrowOptionShowActualsPlans	*No Plans
JSRrowOptionShowActualBudgets	*Y
JSRactualsThroughDate	2021-08-31
JSRpostedDataOnly	N
JSRshowTasks	N
JSRadjustments	*Adjustments using Worked Date within range
JSRincludePendingAdjustments	*Y
JSRincludeExpenseReports	Using Line Item Data within range
JSRincludeNonCompExpRpts	N

9. Select the **Save and Close** button.
10. Select the **Style** tab.
11. Select the **Keep Original Report Cell Heights** radio button.
12. Select the **Save** button. The **Save Dashboard** window opens.
13. Type *Periodic Bar & Line Chart Dashboard* in the **Name** field.
14. Select the **My Reports** folder.
15. Select the **Save** button.

Part 5: Edit the Report

1. Select the **right-facing arrow** for **My Reports**.
2. Select **Period Bar & Line Chart**.
3. Select the **Menu** button **> Edit**.
4. Type *=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Revenue",{PRJ: Periodic JSR.ITD Amount}, 0))* in the **fx** field for cell **G20**.
5. Copy the formula in cell **G20**.
6. Paste the formula in cell **H20**.
7. Replace *Revenue* with *Raw Cost* in the pasted formula in cell **H20**.
8. Paste the formula in cell **I20**.
9. Replace *Revenue* with *Total Cost* in the pasted formula in cell **I20**.
10. Select the **Save Report** button.

Part 5: Run the Report

1. Select the **Periodic Bar & Line Chart Dashboard** tab.
2. Select **Refresh** on the **Toolbar**.

Part 6: Create a Chart

1. Select the **Period Bar & Line Chart** tab.
2. Select cell **19 > Insert Row Before**.
3. Select cell **19 > Row Height**. The **Row Height** window opens.
4. Deselect the **Auto Height** check box.

5. Type *400* in the **Row Height (px)** field.
6. Select the **Okay** button.
7. Select cells **C19**, **D19**, **E19**, **F19**, **G19**, **H19**, and **I19**.
8. Select the **Merge Cells** button.
9. Select cell **C19**.
10. Select the **Chart Wizard** button. The **Chart Wizard** window opens.
11. Select the **Combination Chart** button.
12. Select the **Next** button.

Part 7: Add Data to the Chart

1. Select **=DateCustomFormat({PRJ: Periodic JSR.Period End Date},"MM yy")** from the **X-Axis Labels** dropdown list.
2. Use the information in the table to add series to the chart:

Series Value	Render Type	Series Name
=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Revenue", {PRJ: Periodic JSR.Current Period Hours or Amount},0))	Column	Periodic Revenue
=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Raw Cost", {PRJ: Periodic JSR.Current Period Hours or Amount},0))	Column	Periodic Raw Cost
=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Total Cost", {PRJ: Periodic JSR.Current Period Hours or Amount},0))	Column	Periodic Total Cost
=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Revenue", {PRJ: Periodic JSR.ITD Amount},0))	Line	ITD Revenue
=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Raw Cost", {PRJ: Periodic JSR.ITD Amount},0))	Line	ITD Raw Cost
=AggSum(If({PRJ: Periodic JSR.Cost Report Item Label}="Total Cost", {PRJ: Periodic JSR.ITD Amount},0))	Line	ITD Total Cost

3. Select the **Next** button.

Part 8: Format the Appearance of the Chart

1. Select the **Chart Axes** button. The **Chart Axes** window opens.
2. Type *Month Ending* in the **Title** field for **X-AXIS**.
3. Type *Periodic Amount* in the **Axis Title** field for **Y-Axis 1**.
4. Select the **+ Add Y Axis** button.
5. Type *ITD Amount* in the **Axis Title** field for **Y-Axis 2**.

6. Use the information in the table to associate the **Series Name** with the **Y-Axis**.

Series Name	Y-Axis
Periodic Revenue	Y-Axis 1
Periodic Raw Cost	Y-Axis 1
Periodic Total Cost	Y-Axis 1
ITD Revenue	Y-Axis 2
ITD Raw Cost	Y-Axis 2
ITD Total Cost	Y-Axis 2

7. Select the **Okay** button.
8. Select the **Finish** button.
9. Select the **Save Report** button.
10. Select section **20 > Suppress Rows** check box.
11. Select section **21 > Suppress Rows** check box.
12. Select the **Save Report** button.

Part 9: Review the Dashboard

1. Select the **Periodic Bar & Line Chart Dashboard** tab.
2. Select **Refresh** on the **Toolbar**.

Part 10: Update the Appearance of the Chart

1. Select the **Periodic Bar & Line Chart** tab.
2. Right-click the **Bar & Line Chart**.
3. Select **Edit > Legend Location > Bottom** check box.
4. Right-click the **Bar & Line Chart**.
5. Select **Edit > Theme > Unanet Medium**.

Part 11: Add Advanced Features

Note: See **Appendix B** for links to resources for available advanced attributes.

1. Select the **Chart Wizard** button. The **Chart Wizard** window opens.
2. Select the **Appearance** tab.
3. Type *labelStep* in the **ADVANCED FEATURES** field.
4. Select the **+Add Attribute** button.
5. Type *3* in the **labelStep** field.
6. Select the **Finish** button.
7. Select the **Save Report** button.

Part 12: Review the Dashboard

1. Select the **Periodic Bar & Line Chart Dashboard** tab.
2. Select **Refresh** on the **Toolbar**.
3. Close the **Periodic Bar & Line Chart Dashboard** tab.
4. Close the **Periodic Bar & Line Chart** tab.

Check Your Understanding

Which one of the following sections would you use if you had information that you wanted to repeat on the bottom of each page of a report?

a) Report Footer
b) Page Footer
c) Group Footer

Which of the following is NOT a capability of Advanced Reporting?

a) Conditional formatting
b) Advanced charts and graphs
c) Expanding horizontal sections

Refer to Appendix A for answers to the Check Your Understanding questions.

APPENDIX A: CHECK YOUR UNDERSTANDING ANSWER KEY

Lesson 1: Introduction to Analytics

Which one of the following report options can you convert to an Advanced Report ?

a) ExpressView Report
b) CrossTab Report
c) Chained Report

Which one of the following report options would you use for combining multiple reports into a single document?

a) ExpressView Report
b) CrossTab Report
c) Chained Report

Lesson 2: CrossTab Reporting

Determine if each statement is true or false.

	True or False
CrossTabs are also known as pivot tables.	T
CrossTabs automatically expand vertically and horizontally depending on the number of data groupings.	T
Parameters are only used when designing a report.	F
The Periodic JSR data object does not require the use of parameters.	F

Lesson 3: Advanced Reporting

Which one of the following sections would you use if you had information that you wanted to repeat on the bottom of each page of a report?

a) Report Footer
b) Page Footer
c) Group Footer

Which of the following is NOT a capability of Advanced Reporting?

a) Conditional formatting
b) Advanced charts and graphs
c) Expanding horizontal sections

APPENDIX B: SUPPLEMENTAL INFORMATION

Appearance: Advanced Features

Use chart attributes to customize the look and feel of a chart.

Chart Advanced Features: Column 2D:
https://exagobi.com/support/reporting/charts-and-visualizations/advanced-features/column-2d/

Chart Advanced Features: Line:
https://exagobi.com/support/reporting/charts-and-visualizations/advanced-features/line/

COMPLETION CERTIFICATE AND EVALUATION

When the course has finished, Unanet University staff will mark the attendance in the Learning Management System (LMS.) This marking is percentage based and may be prorated if a participant was absent for any period of time during the course.

The LMS will generate a completion certificate (including **CPE credits**, where applicable) which will be available to the participant under their Transcript section of the LMS.

We appreciate your feedback on our courses and encourage you to complete the course evaluation.