Reporting Guide

Axiom Enterprise Decision Support
Version 2021.3

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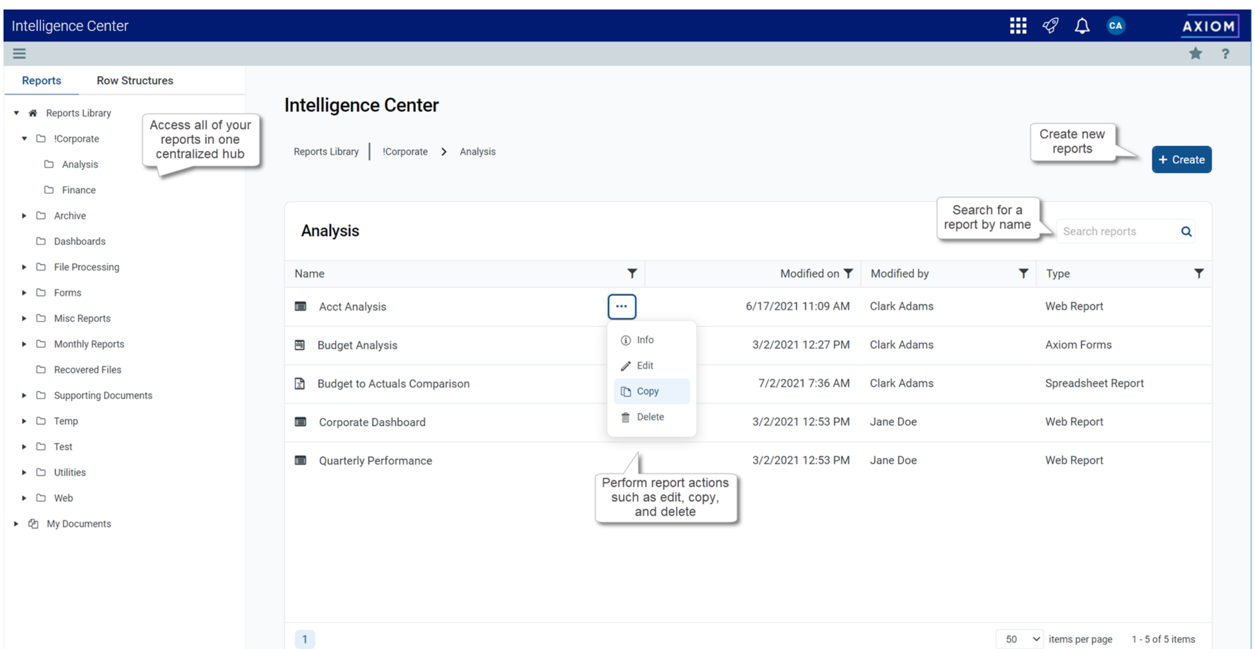
Intelligence Center

The Intelligence Center is a centralized hub where you can view any report that you have access to in the Axiom Reports Library—including web reports, Axiom forms, visualization reports, and spreadsheet reports.

Using the Intelligence Center, you can:

- View any report you have access to, regardless of the report type
- Create new web reports (all clients) and visualization reports (clients with certain product licenses)
- Open reports for editing, in the appropriate editor for the report type
- Perform other report management activities, such as creating and deleting folders, copying and deleting reports, and editing report names and descriptions

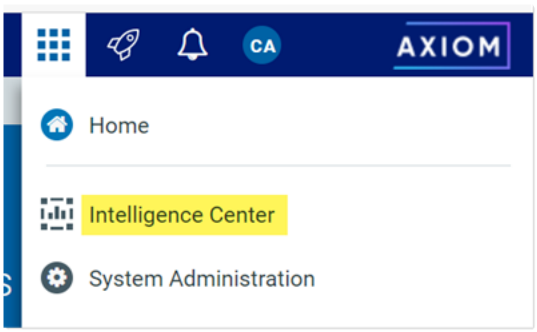


Example Intelligence Center

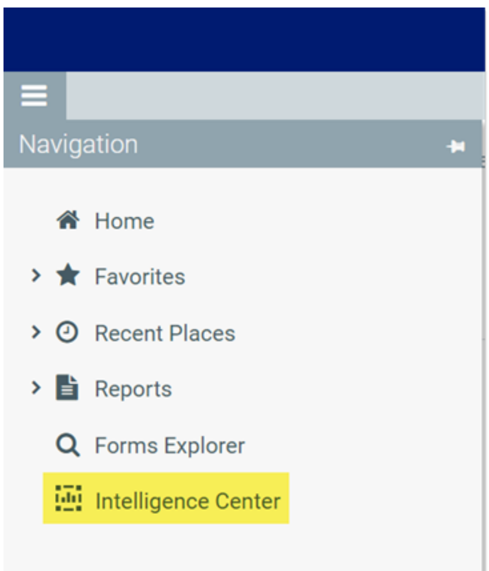
▶ Accessing the Intelligence Center

All users can access the Intelligence Center in the Web Client browser:

- Click the menu icon in the Global Navigation Bar. From the Area menu, select **Intelligence Center**.

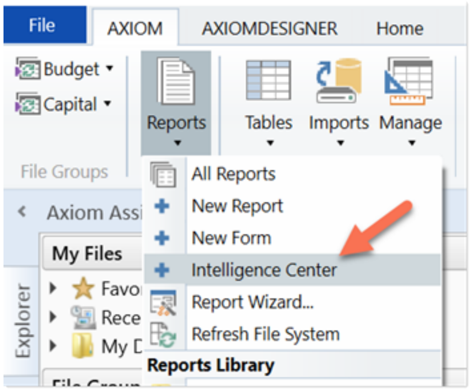


The Intelligence Center may also be accessible from other areas of the Web Client, such as in the left-hand Navigation panel, or from links in product-specific pages.



Intelligence Center in the default Navigation panel

In the Desktop Client, you can open the Intelligence Center from the **Reports** menu. By default this menu is present on the **Axiom** tab. If your system has installed products, it may be available to you on the **Main** tab.



Intelligence Center on the default Reports menu

▶ Opening reports

You can open any report that displays in the Intelligence Center. The Intelligence Center is automatically filtered to only show the reports that you have access to.

To open a report from the Intelligence Center:

1. In the left-hand panel, select the **Reports** tab if it is not already selected.
2. Do one of the following to locate the report that you want to open:
    - Use the folder tree in the left-hand panel to navigate to the folder where the report is located.

      OR
    - Use the Search box to search for the report by name.

   For more information on how to search, filter, and sort the Intelligence Center, see Intelligence Center overview.
3. Once the report displays in the Intelligence Center grid, click on the report name to open it.
    - Web reports open in the same browser tab.
    - Other web-enabled reports open in a new browser tab. This applies to Axiom forms, visualization reports, and deprecated web reports.
    - If the report is a spreadsheet report, Axiom Enterprise Decision Support attempts to launch the Axiom Desktop Client and open the report. This works as follows:
        - The launch routine uses the Axiom Windows Client by default.
        - If an Axiom Enterprise Decision Support client is already open, the launch routine is skipped and the report is opened in that client—regardless of whether the open client is the Excel Client or the Windows Client. Therefore, if you want to open reports in the Excel Client, you must launch the Excel Client first using the Quick Launch menu, then you can open spreadsheet reports from the Intelligence Center.

NOTE: You must have the appropriate security permissions to use the Axiom Enterprise Decision Support Desktop Client in order to open a spreadsheet report. If you do not have either the **Windows Client Access** permission or the **Excel Client Access** permission, then spreadsheet reports are hidden in the Intelligence Center because you cannot launch the client to view them.

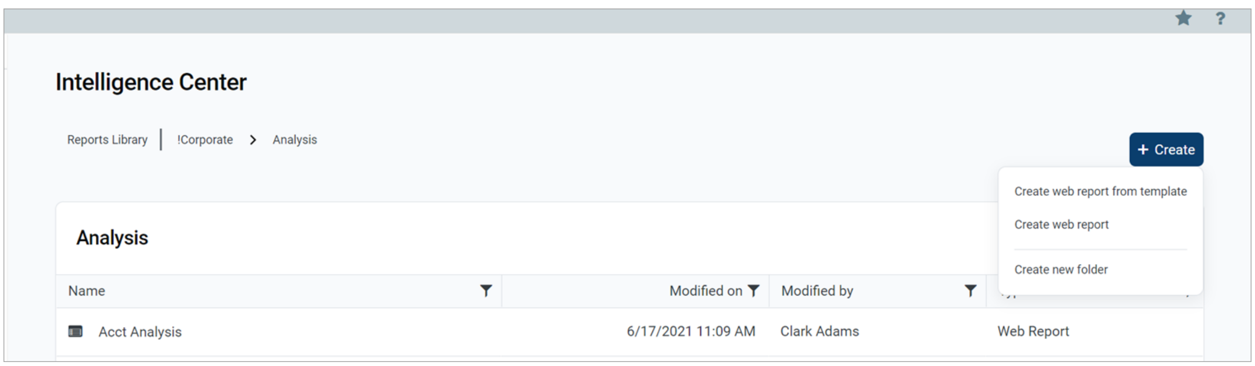
If other types of files are present in the Reports Library—such as PDF, Word, or PowerPoint—these files can also be opened from the Intelligence Center if you have a program capable of reading the file type. Axiom Enterprise Decision Support attempts to open the file using the same routine that opens the Axiom Desktop Client.

▶ Creating new reports

Using the **Create** button at the top right of the Intelligence Center, you can create new reports and new fixed row structures for use in web reports. This button is context-sensitive, depending on what area you have selected from the left-hand panel.

To create a new report, select the **Reports** area from the left-hand panel, then click the **Create** button. Select one of the following:

- **Create web report**: This option opens the web Report Builder so that you can create a new web report from scratch. For more information, see Creating new web reports.
- **Create web report from template**: This option creates a new web report using a template provided by an installed product. See Creating new web reports from template.
- **Create new visualization**: This option creates a new visualization report. This option is only available in systems where visualization reporting is licensed and enabled.

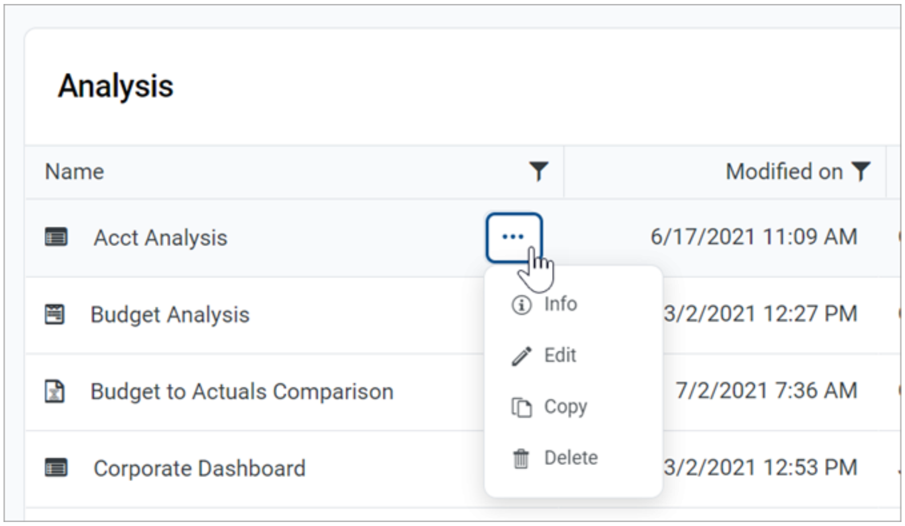


Example Create button to create a new report

To create a new fixed row structure, select the **Row Structures** area from the left-hand panel and then click **Create**. For more information, see Creating fixed row structures.

Other Intelligence Center actions

In the Intelligence Center, you can use the Actions menu to perform other report and folder management activities. To view the available actions, navigate to the item that you want to work with, then hover your cursor over the three dots icon in the right-hand side of the **Name** column. Actions are available for report files, report folders, and fixed row structures.



Example Actions menu

The following actions are available:

Action	Description	More Information
Info	Opens the Settings panel for the current item, displaying the item name and description.	• Changing folder names and descriptions • Changing report names and descriptions • Changing fixed row structure names and descriptions
Edit	Opens the current item in the appropriate editor.	• Editing reports • Editing fixed row structures
Copy	Generates a copy of the current item. Only available for fixed row structures and web reports.	• Copying web reports • Copying fixed row structures
Delete	Deletes the current item.	• Deleting reports • Deleting folders • Deleting fixed row structures

You can also create new folders by clicking **Create > Create new folder** while you are in the Reports area.

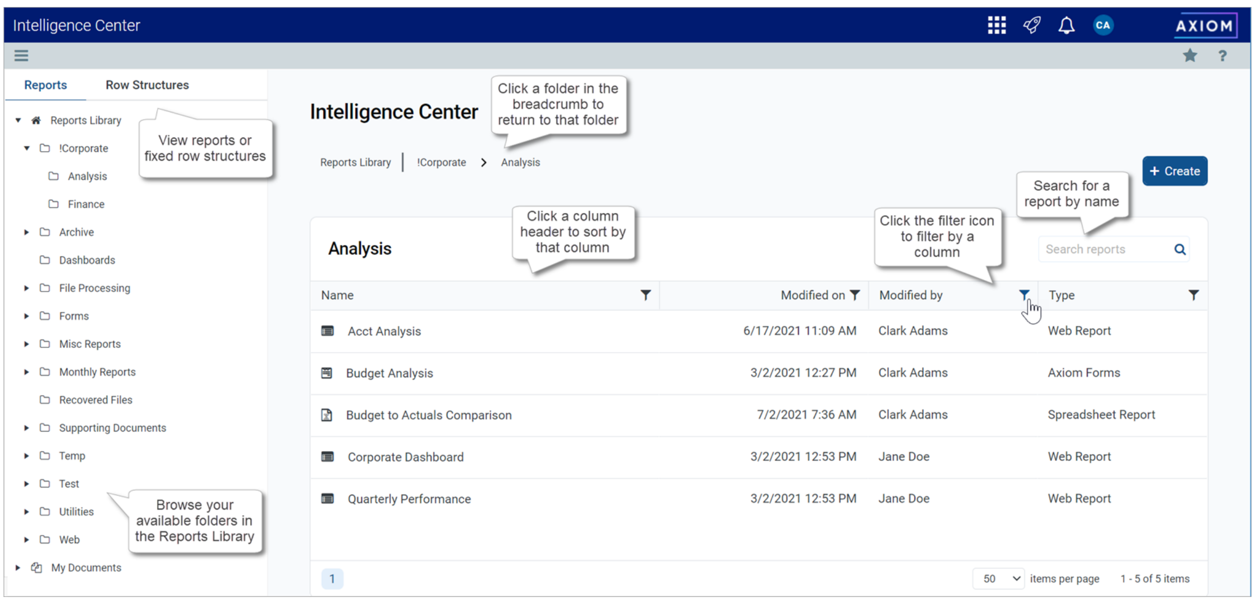
Intelligence Center overview

The Intelligence Center is organized into two main areas. To view an area, select the area name from the left-hand panel:

- The **Reports** area, which contains the **Reports Library** folder tree and your **My Documents** folder (if you have access to it). You can click on folders in this section to navigate through the folder tree. Once a folder is selected, the contents of that folder display in the report grid. You can click on a subfolder name to open that subfolder, or you can click on a report name to open that report.

- The **Row Structures** section, which contains fixed row structures for use in web reports. This section does not have subfolders. You can click on the parent **Fixed Row Structures** folder to view the available fixed row structures, and click on a name to open that structure.

As you navigate, a breadcrumb displays at the top of the report grid. You can click on a folder name in the breadcrumb to move to that folder location.



Navigating the Intelligence Center

▶ Searching the Intelligence Center

You can use the Search box at the top right of the Intelligence Center to find a report or a fixed row structure. The search matches on name only. The search box is context-sensitive as follows:

- If the currently selected area is Reports, then the search can be used to find reports in the Reports Library and your My Documents folder.

- If the currently selected area is Row Structures, then the search can be used to find fixed row structures.

To search for an item by name:

- Type your search text into the Search box, and then click the magnifying glass or hit the Enter key to search.

The grid updates to show a list of all reports or fixed row structures that match your search text. You can open an item or perform other actions using this list. You can also filter and sort this list as described in the following sections.

To clear a search:

- Click the **X** icon in the right side of the Search box.

Your search text is cleared, and you are returned to the folder location that you were viewing when you started the search.

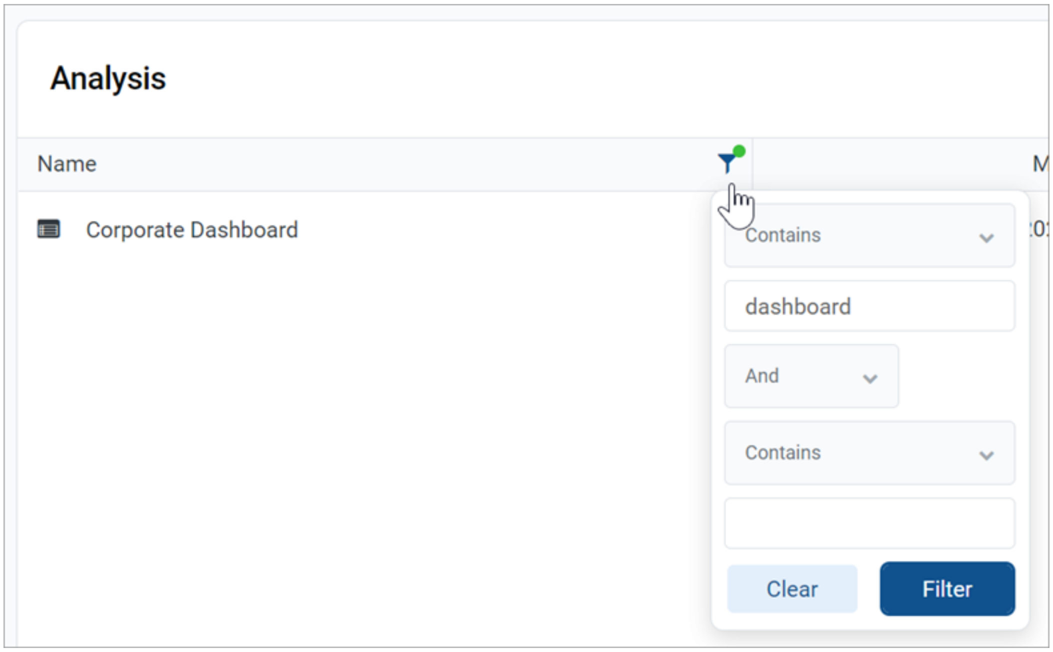
▶ Filtering the grid

When you are viewing a folder in the Intelligence Center (or when viewing search results), you can filter the contents by any column in the grid. For example, you can filter to show all reports of a certain type, or to show all reports created after a certain date.

To filter the grid based on a column:

1. Click the filter icon in the column header to show the filter options.
2. Set the filter options as desired. You can set up to two filter options, combined with either AND or OR.
3. Click **Filter**.

The grid updates to only show items that meet the filter. Additionally, a green dot displays by the filter icon in the column header to indicate that the grid is filtered by this column.



Example Intelligence Center column with a defined filter

If multiple columns are filtered, the filters are combined using AND—meaning the grid only shows items that match all of the filters.

The column filter is retained until you clear it, or until you navigate to a new folder location. If you have filtered the search results, clearing the search results also clears the filter.

To clear a filter:

1. Click the filter icon in the column header to show the filter options.
2. Click **Clear**.

The grid updates to clear the filter.

▶ Sorting the grid

When you are viewing a folder in the Intelligence Center (or when viewing search results), you can sort the list by any column in the grid.

To sort the grid by a column, click on the column header. Each click toggles between ascending sort, descending sort, and no sort. If the grid is currently sorted by a column, the sort direction is indicated by an arrow on the column header (up for ascending, down for descending).

The sort is reset when you move to a new folder location. If you have sorted the search results, clearing the search results also clears the sort.

NOTE: The grid can only be sorted by one column at a time. If you have sorted by a column and then you click the column header of a different column, the sort on the original column is cleared and replaced by the new column sort.

Managing report files in the Intelligence Center

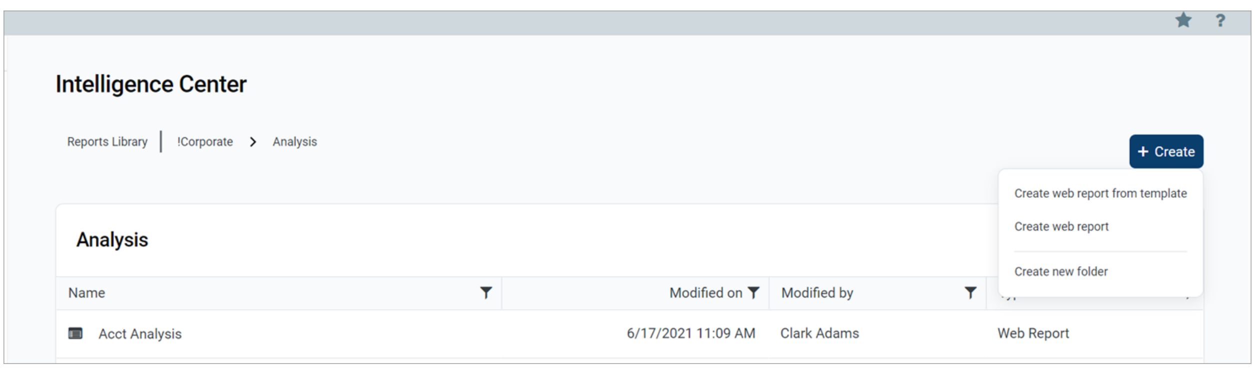
Using the Intelligence Center, you can create, edit, copy, and delete reports in the Reports Library. You can also edit report names and descriptions.

Creating new reports

Using the **Create** button at the top right of the Intelligence Center, you can create new reports and new fixed row structures for use in web reports. This button is context-sensitive, depending on what area you have selected from the left-hand panel.

To create a new report, select the **Reports** area from the left-hand panel, then click the **Create** button. Select one of the following:

- **Create web report**: This option opens the web Report Builder so that you can create a new web report from scratch. For more information, see Creating new web reports.
- **Create web report from template**: This option creates a new web report using a template provided by an installed product. See Creating new web reports from template.
- **Create new visualization**: This option creates a new visualization report. This option is only available in systems where visualization reporting is licensed and enabled.



Example Create button

To create a new fixed row structure, select the **Row Structures** area from the left-hand panel and then click **Create**. For more information, see Creating fixed row structures.

Different security permissions are required to create new web reports versus visualization reports. These security requirements are noted in the relevant topics.

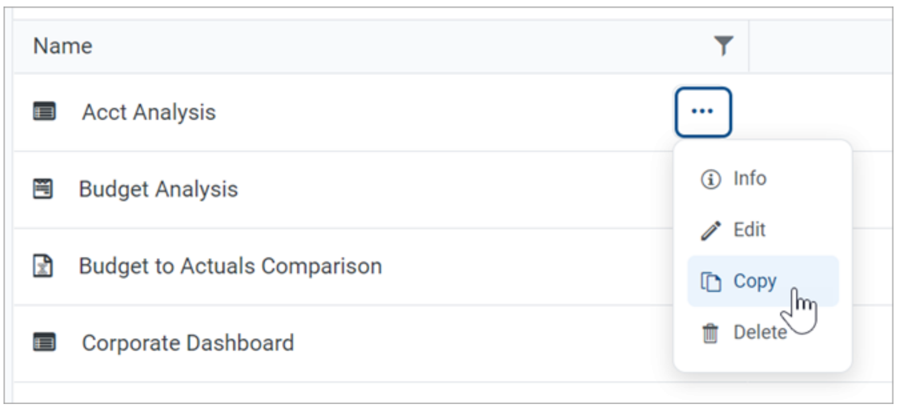
Copying reports

In the Intelligence Center, you can copy existing reports to create new reports. Currently, this functionality is only available for web reports, and only web reports that were created in the Report Builder. Web reports created from template cannot be copied.

In order to copy a web report, you must be an administrator or have the **Create Web Reports** security permission. You must also have read/write access to the current folder, because the copy is created in the current folder.

To copy a report from the Intelligence Center:

1. In the Intelligence Center, locate the web report that you want to copy. You can use folder navigation to find the report, or use the Search box at the top of the page.
2. Once the web report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Copy** from the menu.

   If the Copy action is present but disabled, then you cannot copy this report because you do not have the appropriate security permissions.
3. In the **Copy Report** dialog, enter a name for the copy. By default, the name is **Copy of *OriginalReportName***.
4. Click **OK**.

The copy is created in the current folder, with the specified name.

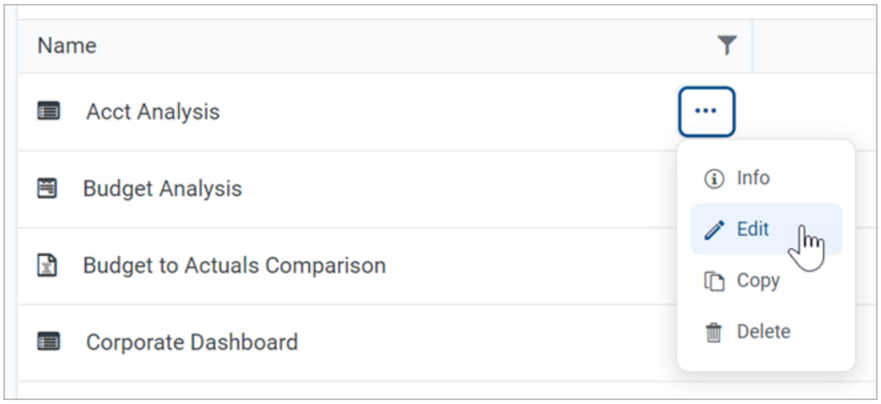
Editing reports

You can open a report for editing from the Intelligence Center if the report is eligible to be edited, and you have read/write permissions to the report.

To edit a report from the Intelligence Center:

1. In the Intelligence Center, locate the report that you want to edit. You can use folder navigation to find the report, or use the Search box at the top of the page.

2. Once the report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Edit** from the menu.



3. The report is opened for editing as follows, depending on its file type:
    - **Web reports** are opened in the Report Builder, in the current browser tab.
    - **Visualization reports** are opened in the Visualization Report Editor, in a new browser tab.
    - **Spreadsheet reports** and **Axiom forms** are opened in the Axiom Desktop Client, as spreadsheet report files. This works as follows:
        - The launch routine uses the Axiom Windows Client by default.
        - If an Axiom Enterprise Decision Support client is already open, the launch routine is skipped and the report is opened in that client—regardless of whether the open client is the Excel Client or the Windows Client. Therefore, if you want to open reports in the Excel Client, you must launch the Excel Client first using the Quick Launch menu, then you can open spreadsheet reports from the Intelligence Center.

> **NOTE:** You must have the appropriate security permissions to use the Axiom Enterprise Decision Support Desktop Client in order to open a spreadsheet report. If you do not have either the **Windows Client Access** permission or the **Excel Client Access** permission, then spreadsheet reports are hidden in the Intelligence Center because you cannot launch the client to view them.

Why is the Edit action missing for some reports?

The following report types *cannot* be opened for editing from the Intelligence Center. The Edit action does not display for these files:

- **Web reports built from template**: If a web report is built from a template, the report is tied to that template and cannot be separately edited. For more information, see Creating new web reports from template.
- **Deprecated web reports**: The prior implementation of web reporting is deprecated. To edit a deprecated web report, click the file name to open the report, then click the wrench icon in the toolbar to open the legacy web report editor.

- **Other non-report file types**: The Reports Library can be used to store other non-report, non-Axiom file types, such as PDF, DOC, PPT, JPG, and others. These file types cannot be edited in Axiom Enterprise Decision Support.

Why is the Edit action disabled for some reports?

If the Edit action is present but disabled, this means that although the report type is eligible to be edited, it is not possible for you to edit this particular report. One of the following reasons may apply:

- You do not have edit permissions (Read/Write access) to the file.
- The file is product-controlled and therefore cannot be edited.
- The file is configured to prevent editing (applies to certain visualization reports).

Changing report names and descriptions

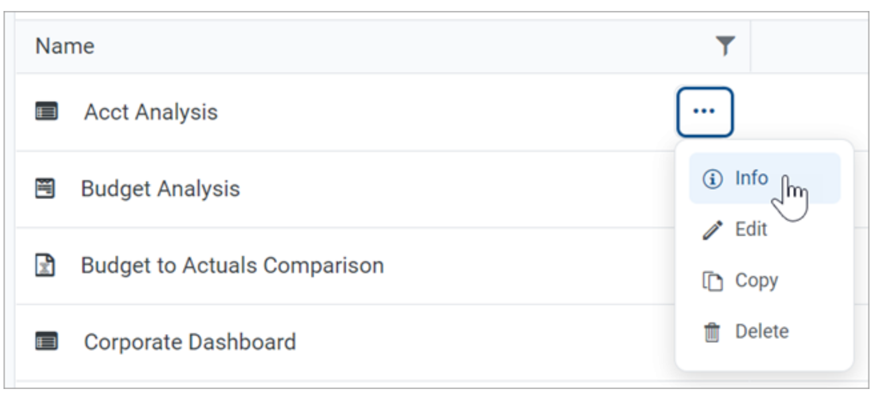
If you have read/write access to a report, then you can rename the report or change its description.

NOTES:

- In systems with installed products, the names and descriptions of product-controlled reports cannot be edited.
- If you have read/write access to a report file, but read-only access to its folder, then you cannot edit the report name.

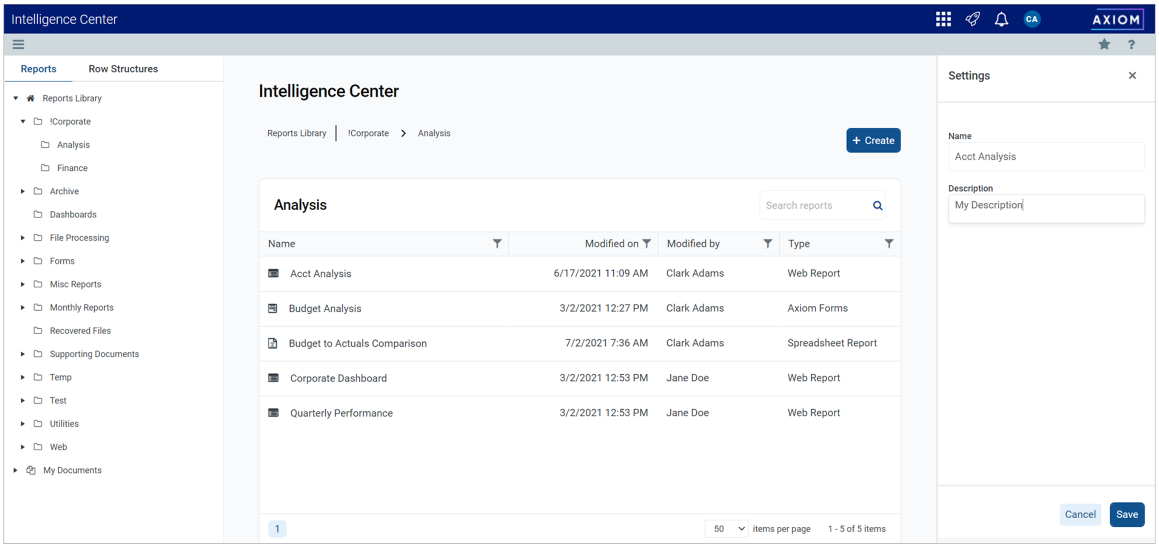
To change a report name and/or description:

1. In the Intelligence Center, locate the report that you want to edit. You can use folder navigation to find the report, or use the Search box at the top of the page.
2. Once the report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Info** from the menu.

   The Settings panel opens along the right-hand side of the page.
3. In the Settings panel, edit the report **Name** or **Description** as needed, then click **Save**.

   The name can be up to 250 characters, and the description can be up to 2000 characters.



Example Settings panel

If the report name and description cannot be edited, then the **Apply** button is not available. This may occur because you do not have the necessary permissions, or because the report belongs to an installed product.

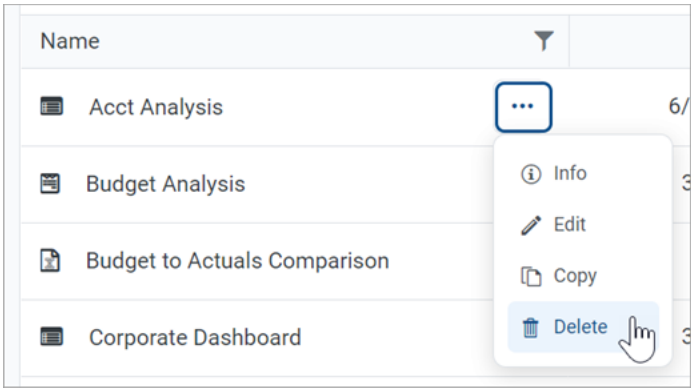
Deleting reports

If a report is no longer needed, you can delete it using the Intelligence Center. In order to delete a report (or any other file that resides in the Reports Library), you must have read-write access to the file and to the folder it resides in.

NOTE: In systems with installed products, product-controlled reports cannot be deleted.

To delete a report:

1. In the Intelligence Center, locate the report that you want to delete. You can use folder navigation to find the report, or use the Search box at the top of the page.
2. Hover your cursor over the row with the report, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Delete** from the menu.



If the report cannot be deleted, the Delete action is disabled. This may occur because you do not have the necessary permissions to delete the report, or because the report belongs to an installed product.

3. When you are prompted to confirm that you want to delete the report, click **OK**.

The report is deleted from the system and no longer displays in the Intelligence Center. If the report was deleted in error, an administrator may be able to restore the report using the **Restore Deleted Files** feature in the Desktop Client.

Managing folders in the Intelligence Center

Using the Intelligence Center, you can create, rename, and delete folders in the Reports Library.

Creating new folders

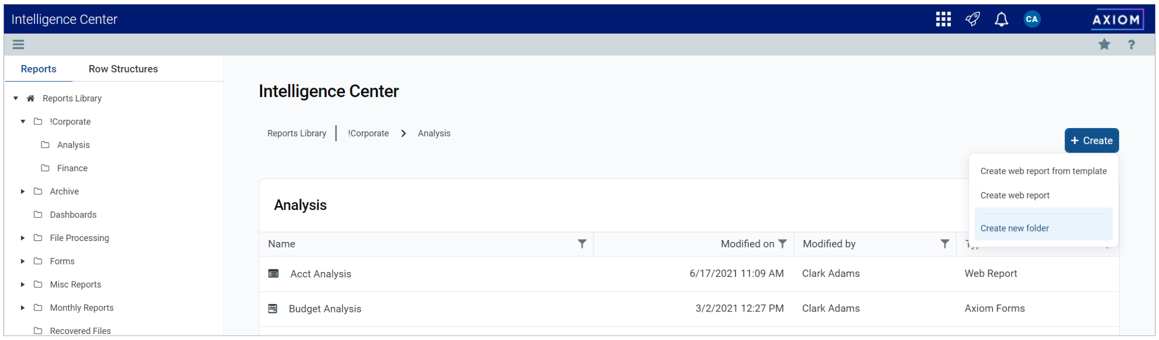
You can create new folders as needed in the Intelligence Center. In order to create a folder, you must have read-write access to the parent folder.

To create a folder:

1. In the Intelligence Center, navigate to the folder location where you want to create a new folder.

   For example, if you want to create a new top-level folder in the Reports Library, select the Reports Library. If you want to create a new subfolder within a folder, then select that folder.

2. Click **Create > Create new folder**.



3. In the **Create new folder** dialog, enter a name for the new folder, then click **OK**.

The new folder is created in the current location.

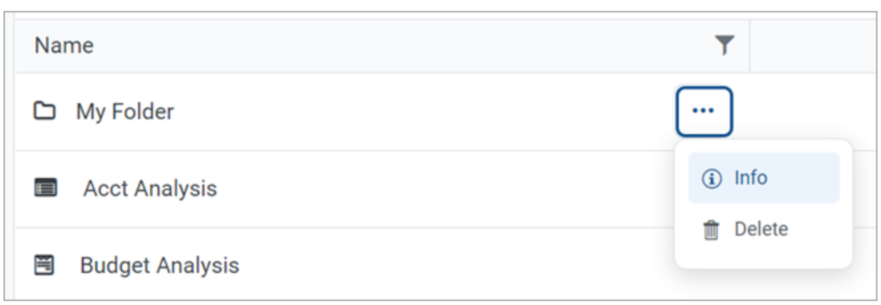
Changing folder names and descriptions

If you have read/write access to a folder, then you can rename the folder or change its description.

NOTE: In systems with installed products, the names and descriptions of product-controlled folders cannot be edited.

To change a folder name and/or description:

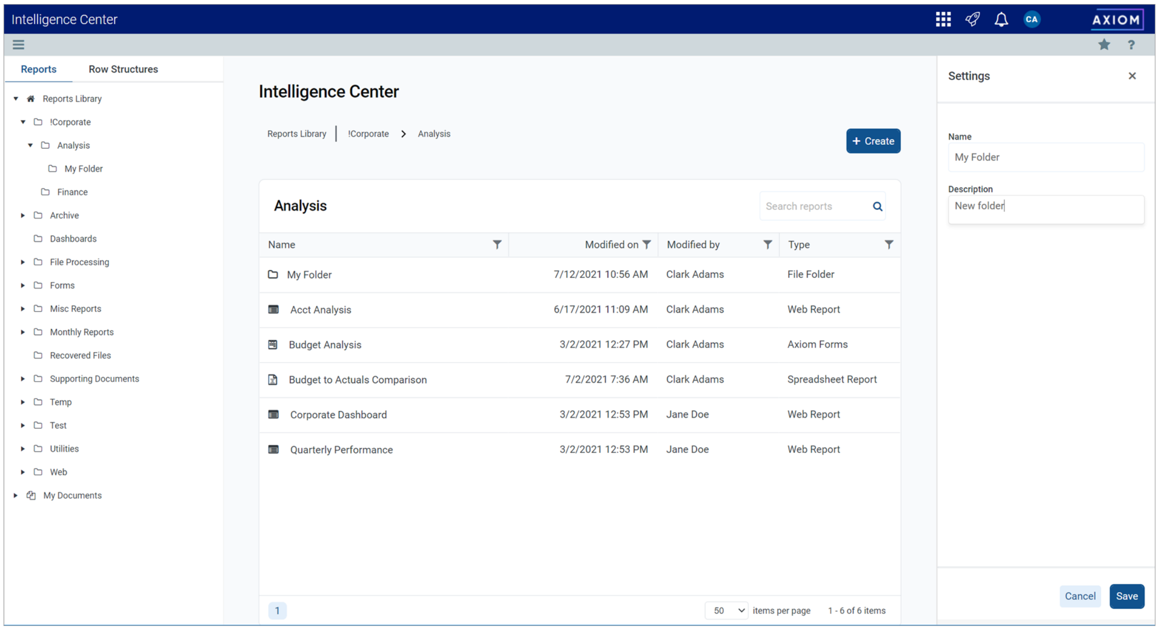
1. In the Intelligence Center, navigate to the parent folder of the folder that you want to rename, so that the folder you want to rename displays in the Intelligence Center grid.
2. Hover your cursor over the row with the folder, so that the three dots icon is visible the **Name** column. Click the icon then select **Info** from the menu.



The Settings panel opens along the right-hand side of the page.

3. In the Settings panel, edit the folder **Name** or **Description** as needed, then click **Apply**.

The name can be up to 250 characters, and the description can be up to 2000 characters.



Example Settings panel

If the folder name and description cannot be edited, then the **Apply** button is not available. This may occur because you do not have the necessary permissions, or because the folder belongs to an installed product.

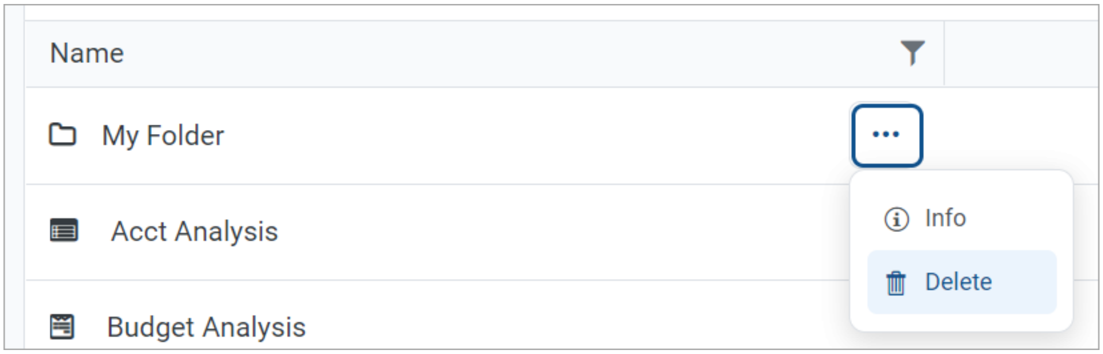
Deleting folders

If a folder is no longer needed, you can delete it using the Intelligence Center. In order to delete a folder, the folder must be empty and you must have read-write access to the folder.

NOTE: In systems with installed products, product-controlled folders cannot be deleted.

To delete a folder:

1. In the Intelligence Center, navigate to the parent folder of the folder that you want to delete, so that the folder you want to delete displays in the Intelligence Center grid.
2. Hover your cursor over the row with the folder, so that the three dots icon is visible the **Name** column. Click the icon then select **Delete** from the menu.



If the folder cannot be deleted, the Delete action is disabled. This may occur because you do not have the necessary permissions to delete the folder, or because the folder belongs to an installed product.

The folder is deleted from the system and no longer displays in the Intelligence Center. There is no confirmation dialog before deleting an empty folder. If the empty folder was deleted in error, you can create a new folder with the same name.

2

Dashboard reports

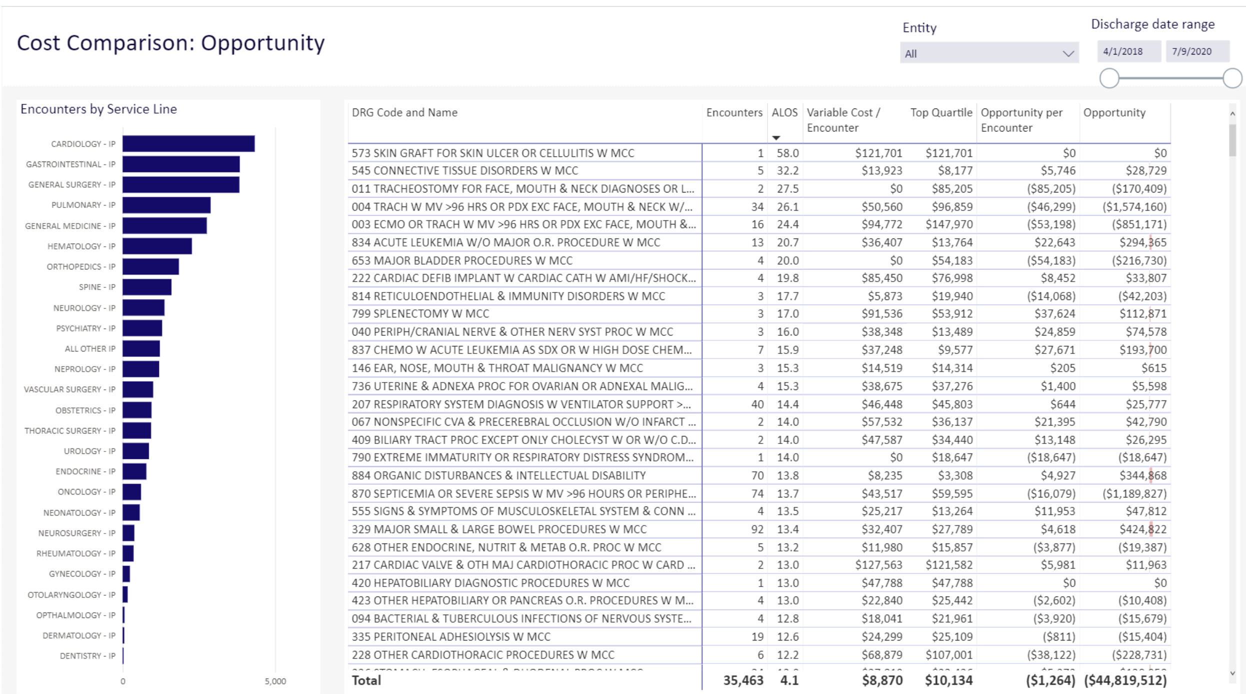
The following dashboards are available in Axiom Enterprise Decision Support.

Dashboard	Description	User Type
Cost Comparison	Comprehensive profitability by service Line, physician, case type, and payor mix to quantify volumes, cost, revenue, contribution margin, and net income by service line and physician.	• C-Suite • Director Strategic Planning • Service Line Director
COVID Impact	Monitoring the impact of COVID-19 including case volumes, length of stay, mortality rates, costs, payments, and net income.	• CFO/CNO • Financial Planning • Nursing Staffing Office
Physician Variations	Comparison of physician performance on utilization measures including probability, contribution margin, and variable costs by case type and procedure, including detailed service item utilization by revenue category and revenue code to identify specific variations in care that are driving excess costs.	• CRO/CMO • Quality Management Director • Clinical Performance Improvement
Service Line	Cost opportunities by service line, DRG, and diagnosis code based on internal peer comparisons to identify specific physicians with higher-than-expected costs compared to their peers and the areas of usage that are driving that variance (i.e., Implants, Supplies, Imaging, and so on).	• CFO/CMO • Quality Management Director • Clinical Performance Improvement

Dashboard	Description	User Type
Volumes and Financials	Reports daily volumes and financial performance and trends on inpatient, emergency, outpatient surgery and other patient types to enable an organization to understand how their performance compares to the same time in the previous year or rolling 12 months.	• CFO/CMO/CNO • Service Line Director

Cost Comparison dashboard

Overview



DRG Code and Name	Encounters	ALOS	Variable Cost / Encounter	Top Quartile	Opportunity per Encounter	Opportunity
573 SKIN GRAFT FOR SKIN ULCER OR CELLULITIS W MCC	1	58.0	$121,701	$121,701	$0	$0
545 CONNECTIVE TISSUE DISORDERS W MCC	5	32.2	$13,923	$8,177	$5,746	$28,729
011 TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES OR L...	2	27.5	$0	$85,205	($85,205)	($170,409)
004 TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W/...	34	26.1	$50,560	$96,859	($46,299)	($1,574,160)
003 ECMO OR TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH &...	16	24.4	$94,772	$147,970	($53,198)	($851,171)
834 ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W MCC	13	20.7	$36,407	$13,764	$22,643	$294,365
653 MAJOR BLADDER PROCEDURES W MCC	4	20.0	$0	$54,183	($54,183)	($216,730)
222 CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK...	4	19.8	$85,450	$76,998	$8,452	$33,807
814 RETICULOENDOTHELIAL & IMMUNITY DISORDERS W MCC	3	17.7	$5,873	$19,940	($14,068)	($42,203)
799 SPLENECTOMY W MCC	3	17.0	$91,536	$53,912	$37,624	$112,871
040 PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W MCC	3	16.0	$38,348	$13,489	$24,859	$74,578
837 CHEMO W ACUTE LEUKEMIA AS SDX OR W HIGH DOSE CHEM...	7	15.9	$37,248	$9,577	$27,671	$193,700
146 EAR, NOSE, MOUTH & THROAT MALIGNANCY W MCC	3	15.3	$14,519	$14,314	$205	$615
736 UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIG...	4	15.3	$38,675	$37,276	$1,400	$5,598
207 RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >...	40	14.4	$46,448	$45,803	$644	$25,777
067 NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT ...	2	14.0	$57,532	$36,137	$21,395	$42,790
409 BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D...	2	14.0	$47,587	$34,440	$13,148	$26,295
790 EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROM...	1	14.0	$0	$18,647	($18,647)	($18,647)
884 ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	70	13.8	$8,235	$3,308	$4,927	$344,868
870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHE...	74	13.7	$43,517	$59,595	($16,079)	($1,189,827)
555 SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN ...	4	13.5	$25,217	$13,264	$11,953	$47,812
329 MAJOR SMALL & LARGE BOWEL PROCEDURES W MCC	92	13.4	$32,407	$27,789	$4,618	$424,822
628 OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W MCC	5	13.2	$11,980	$15,857	($3,877)	($19,387)
217 CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W CARD ...	2	13.0	$127,563	$121,582	$5,981	$11,963
420 HEPATOBILIARY DIAGNOSTIC PROCEDURES W MCC	1	13.0	$47,788	$47,788	$0	$0
423 OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES W M...	4	13.0	$22,840	$25,442	($2,602)	($10,408)
094 BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTE...	4	12.8	$18,041	$21,961	($3,920)	($15,679)
335 PERITONEAL ADHESIOLYSIS W MCC	19	12.6	$24,299	$25,109	($811)	($15,404)
228 OTHER CARDIOTHORACIC PROCEDURES W MCC	6	12.2	$68,879	$107,001	($38,122)	($228,731)
Total	**35,463**	**4.1**	**$8,870**	**$10,134**	**($1,264)**	**($44,819,512)**

The Cost Comparison dashboard provides counts of encounters by service line and comprehensive profitability by DRG. With this dashboard, you can Identify specific opportunities for cost reduction.

Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

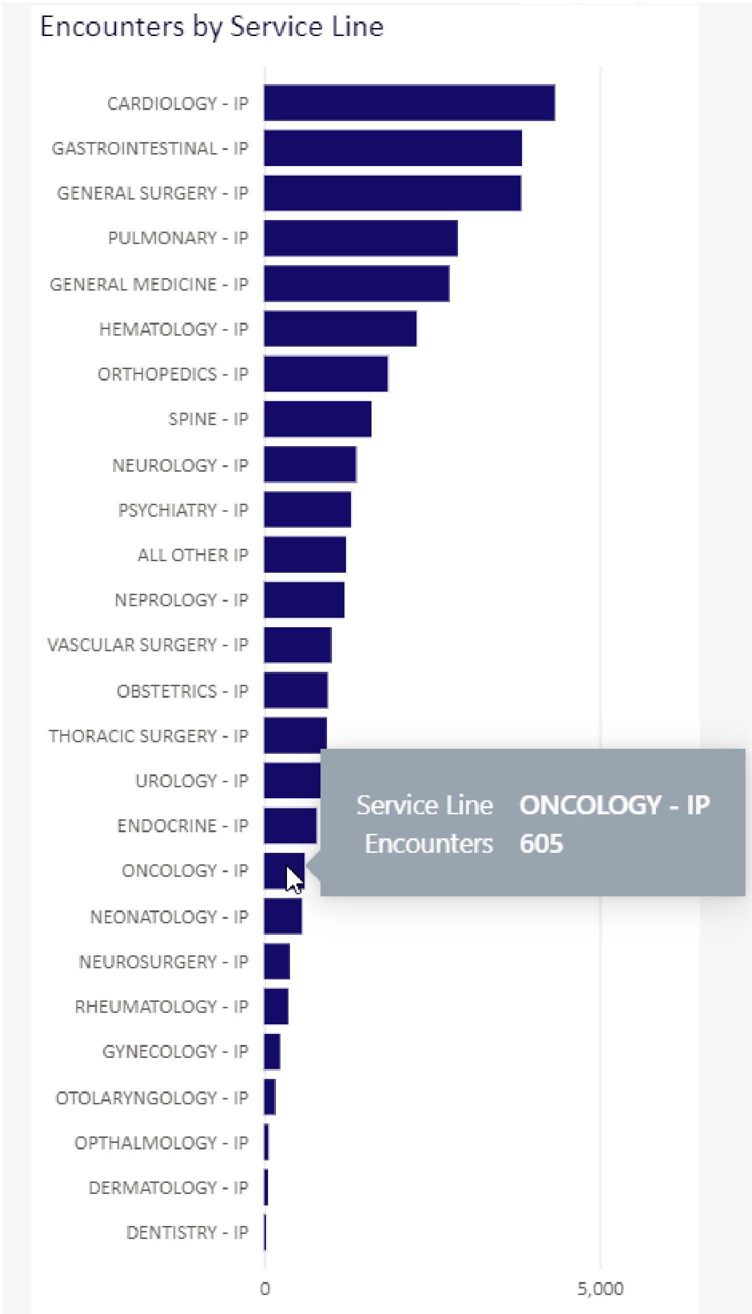
The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Encounters by Service Line



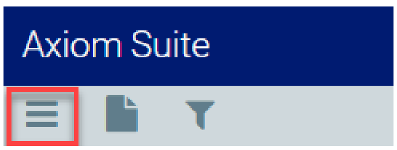
This bar chart shows the number of encounters by service line, from the most to the fewest encounters. You can view the exact number of encounters if you hover over a bar in the chart.

Cost comparisons by DRG

This table provides cost comparisons for all encounters by DRG in the data set you specified.

DRG Code and Name	The code number and name for a DRG
Encounters	The number of encounters for this DRG in your specified data set
ALOS	Average Length of Stay for this DRG
Variable Cost/Encounter	The variable cost per encounters for this DRG
Top Quartile	The cost in the top quartile of data for this DRG across your institution
Opportunity per Encounter	The profit opportunity for this DRG per encounter
Opportunity	The total opportunity for this DRG for all encounters

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



COVID Impact dashboard

This collection of reports provide data that enables institutions to understand how COVID-19 has impacted the institution. Using Axiom Intelligence, users have a rich toolset that let's them easily specify the granularity of the data to work with. They can easily choose a specific entity in the institution, the range of dates for the data, and other controls to achieve the correct set of data to work with.

▶ Confirmed COVID-19 Encounters

This report shows encounters that were confirmed to be COVID-related. Visualizations include encounter trends as well as breakdowns by gender, race, age, admission type, and discharge status.

▶ COVID-19 Geography

Use this report to view COVID encounters on a map. You can view your institution's encounters (either all encounters or deaths only) by state, county, and ZIP code. This view lets you identify clusters in the locales you operate with great specificity and can inform staffing and forecasting needs of the entities in your institution.

Utilization

The utilization report lets you examine encounters by different views of cost. Encounters by Total Cost Range shows the number of encounters by total cost, from $0 - $5,000 to more than $100,000. Cost per Case by Cost Group shows the dollar amounts by the department. such as Critical Care and Emergency. The encounters cost item table list all cost items used by the encounters, with the number of units, costs, and cost per encounter.

Encounter Detail

The Encounter Detail report lists all encounters by number, showing patient type, admit and discharge dates, expired date, length of stay, age, DRG, total cost, and attending provider. Each encounter number is a link that opens a report with details about the encounter including a summary, demographic information, groupings, coding, providers, payors, and surgeries.

Financials

This report lets you analyze the financials by DRG, patient type, or age group. Visualizations include a table showing DRG, patient type, or age group, with the number of encounters, net revenue, cost, and net income (or loss). A table shows net income by financial class, such as Medicare, Medicaid, Commercial, and more. A graph lets you choose cost per encounter or length of stay over the time period you select.

Confirmed COVID-19 Encounters

Overview

The Confirmed COVID-19 Encounters report provides historical data for all encounters as defined by your filters. You will the total number of encounters with the number deaths in that set. The encounters are shown by gender, face, admission type, discharge status, and patient age.

▶ Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

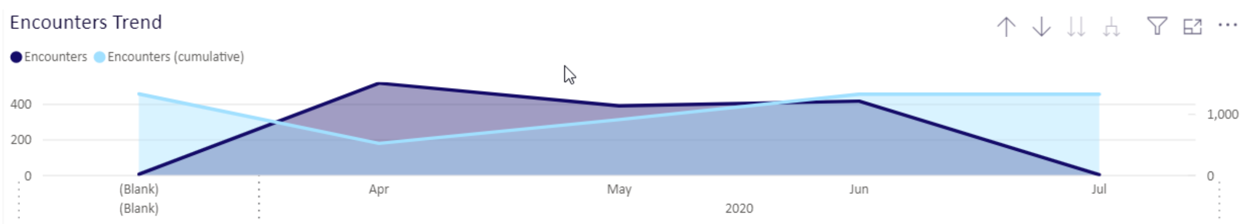
> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Encounters and deaths

This section displays the number confirmed COVID-19 encounters for the entities based on your slicer options. A confirmed encounter can occur in inpatient, observation, and emergency settings. The total number of encounters displays, as well as the number of deaths within that encounter set. The count of deaths is determined by a death entry in the encounter record. Patient records are not used to determine this count.

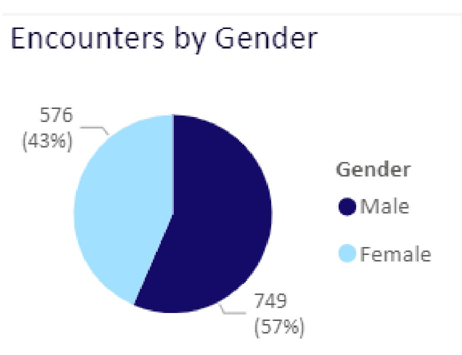
▶ Encounters Trend

This dual-bar chart shows the numbers for encounters and cumulative encounters over the discharge date range you set in that slicer. This chart offers special tools for viewing the data. You can drill up or drill down at a point in the trend line.



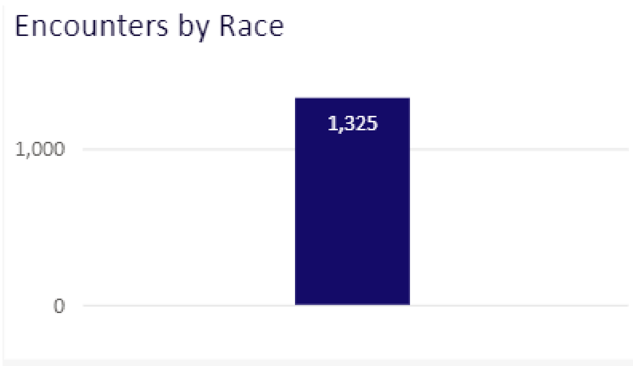
▶ Encounters by Gender

This pie chart displays the encounter count by gender, where gender is defined by your organization.



▶ Encounters by Race

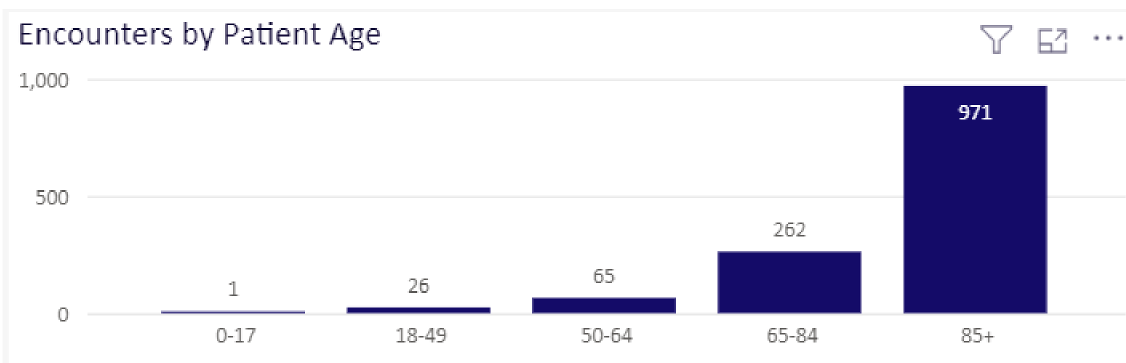
This bar chart displays the encounter count by race, where race is defined by your organization.



Encounters by Patient Age

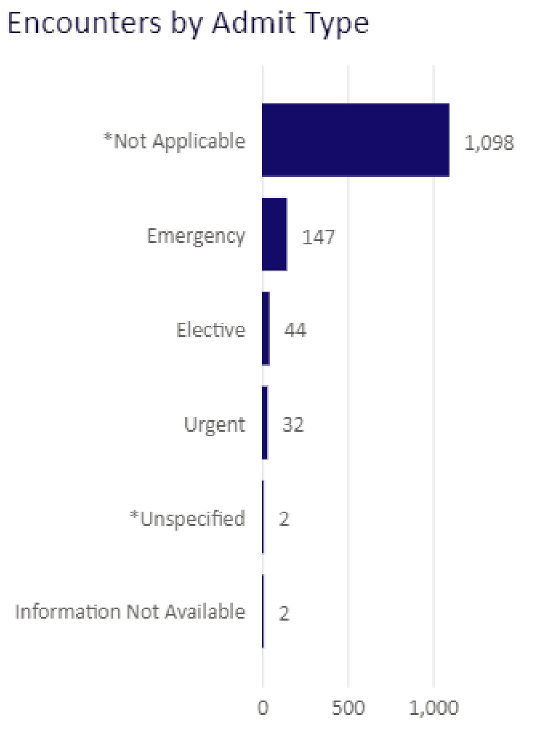
This bar chart groups the encounters by patient age. The groups are:

- 0-17
- 18-49
- 50-4
- 65-84
- 85 and older



Encounters by Admit Type

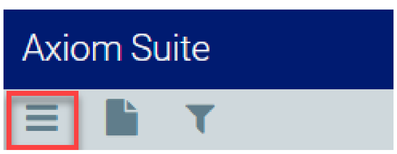
This chart breaks down the encounter group by how they were admitted. Admit types may include emergency room, urgent care, and an elective visit to a physician.



Encounters by Discharge Status

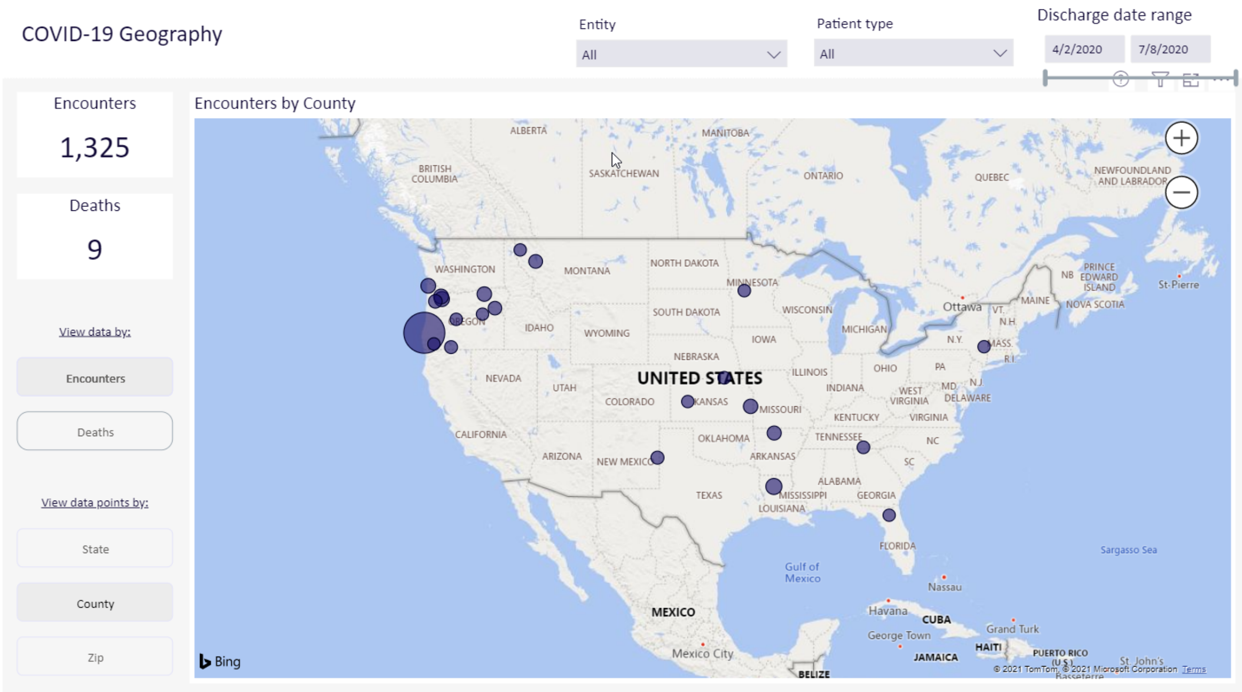
This chart shows discharge information for the encounter group. Patients may be discharged to home, hospital, or a short-term care facility. Patients who died are also listed on this chart as expired. Note that the data for deaths is taken from the encounter data set, not individual patient records.

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



COVID-19 Geography

Use this report to view encounters geographically. When you first view this report, you see a view of all encounters in the United States.



Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Viewing Encounter data

Once you have defined the patient population you are interested in, you can now choose how you want to view that patient populations geographically. These options let you examine clusters for a patient population.

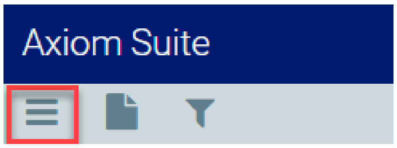
View data by:

You can choose to view all of the encounters in your patient population or view only the deaths.

View data points by:

These options let you drill down geographically on the map. Starting with the default view of the United States, you can view your patient population by state, county, or ZIP code.

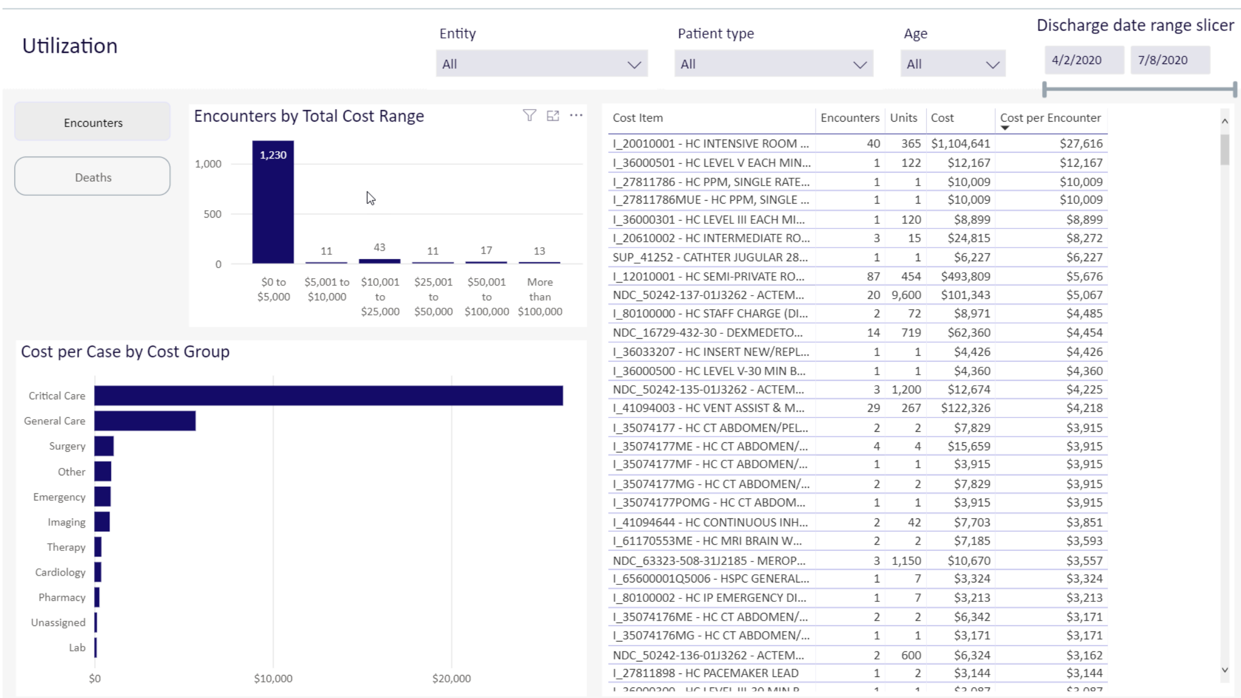
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Utilization

Overview

The Utilization report provides a view of the costs of encounters by encounter types, as part of a total cost range, and by cost group.



Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Age

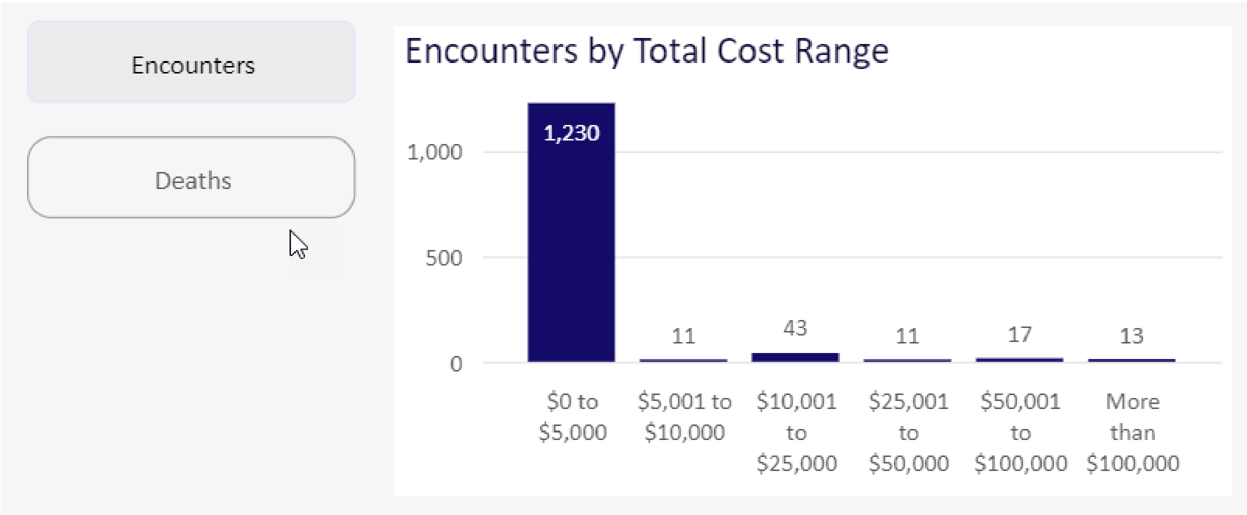
The age drop-down lists these age categories: 0-17, 18-49, 50-64, 65-84, and 85+. You can also select all or blank.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Encounters by Total Cost Range



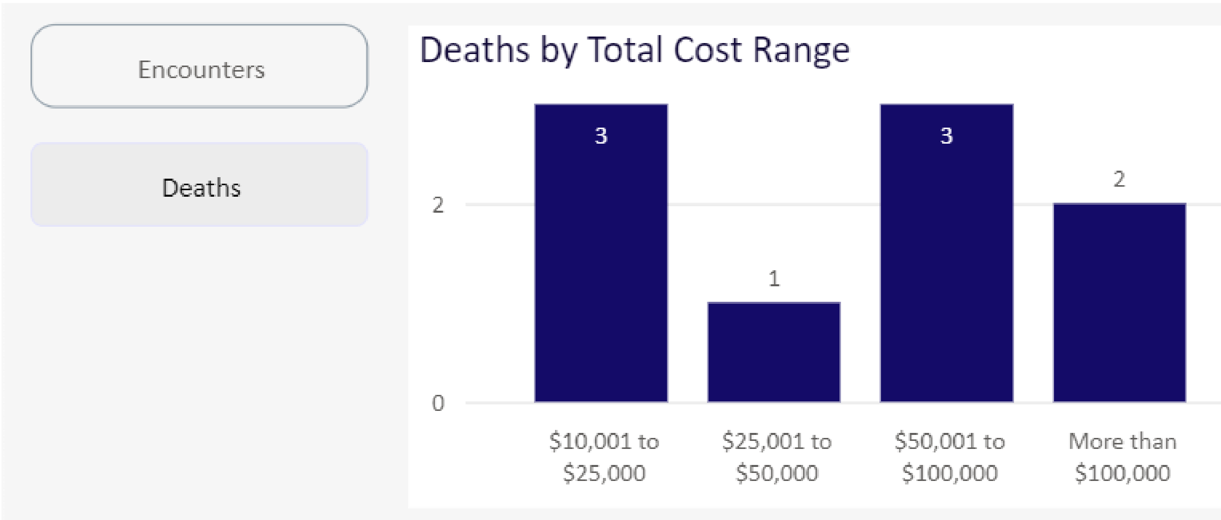
This bar chart shows the count of cases by cost groups. The cost groups are:

- $0 to $5,000
- $5,001 to $10,000
- $10,001 to $25,000
- $25,001 to $50,000
- $50,001 to $100,000

- More than $100,000

The actual count of cases is shown in the column (when space permits).

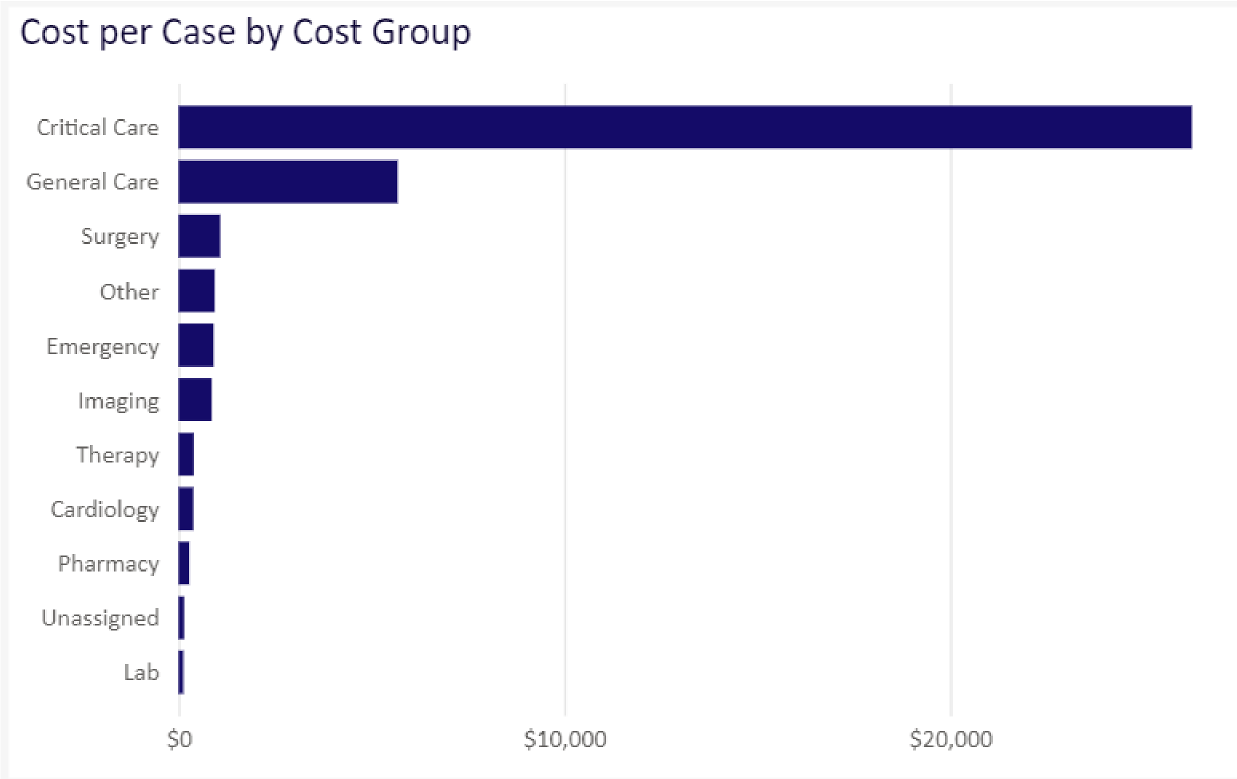
Deaths by Total Cost Range



This bar chart shows deaths in the encounter group by cost range. If no deaths occurred in a cost range, that cost range is not included in the chart.

The actual count of cases is shown in the column (when space permits).

Cost per Case by Cost Group



This chart groups cases by the cost group and shows the average of the cost of cases for each cost group.

Encounters table

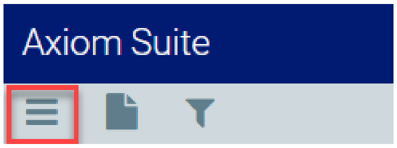
Cost Item	Encounters	Units	Cost	Cost per Encounter
I_20010001 - HC INTENSIVE ROOM ...	40	365	$1,104,641	$27,616
I_36000501 - HC LEVEL V EACH MIN...	1	122	$12,167	$12,167
I_27811786 - HC PPM, SINGLE RATE...	1	1	$10,009	$10,009
I_27811786MUE - HC PPM, SINGLE ...	1	1	$10,009	$10,009
I_36000301 - HC LEVEL III EACH MI...	1	120	$8,899	$8,899
I_20610002 - HC INTERMEDIATE RO...	3	15	$24,815	$8,272
SUP_41252 - CATHTER JUGULAR 28...	1	1	$6,227	$6,227
I_12010001 - HC SEMI-PRIVATE RO...	87	454	$493,809	$5,676
NDC_50242-137-01J3262 - ACTEM...	20	9,600	$101,343	$5,067
I_80100000 - HC STAFF CHARGE (DI...	2	72	$8,971	$4,485
NDC_16729-432-30 - DEXMEDETO...	14	719	$62,360	$4,454
I_36033207 - HC INSERT NEW/REPL...	1	1	$4,426	$4,426
I_36000500 - HC LEVEL V-30 MIN B...	1	1	$4,360	$4,360
NDC_50242-135-01J3262 - ACTEM...	3	1,200	$12,674	$4,225
I_41094003 - HC VENT ASSIST & M...	29	267	$122,326	$4,218
I_35074177 - HC CT ABDOMEN/PEL...	2	2	$7,829	$3,915
I_35074177ME - HC CT ABDOMEN/...	4	4	$15,659	$3,915
I_35074177MF - HC CT ABDOMEN/...	1	1	$3,915	$3,915
I_35074177MG - HC CT ABDOMEN/...	2	2	$7,829	$3,915
I_35074177POMG - HC CT ABDOM...	1	1	$3,915	$3,915
I_41094644 - HC CONTINUOUS INH...	2	42	$7,703	$3,851
I_61170553ME - HC MRI BRAIN W...	2	2	$7,185	$3,593
NDC_63323-508-31J2185 - MEROP...	3	1,150	$10,670	$3,557
I_65600001Q5006 - HSPC GENERAL...	1	7	$3,324	$3,324
I_80100002 - HC IP EMERGENCY DI...	1	7	$3,213	$3,213
I_35074176ME - HC CT ABDOMEN/...	2	2	$6,342	$3,171
I_35074176MG - HC CT ABDOMEN/...	1	1	$3,171	$3,171
NDC_50242-136-01J3262 - ACTEM...	2	600	$6,324	$3,162
I_27811898 - HC PACEMAKER LEAD	1	2	$3,144	$3,144

This table provides data about encounters and cost items.

Cost Item	Cost items are for an organization. Cost items can be procedures, labs, physical therapy, medications, and other items
Encounters	The number of encounters during the discharge date range for the entities, patient types, and age ranges you specified
Units	
Cost	The total dollar amount for all encounters for a cost item
Cost per encounter	The dollar amount per encounter for a cost item

You can sort this table by any of its columns using the up and down arrows.

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Encounter Detail

This report lists all encounters during discharge date range for a patient population you specify.

Slicers

This report provides filtering options that let you create a view a subset of the encounters, giving you the option of viewing the exact patient population that you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Age

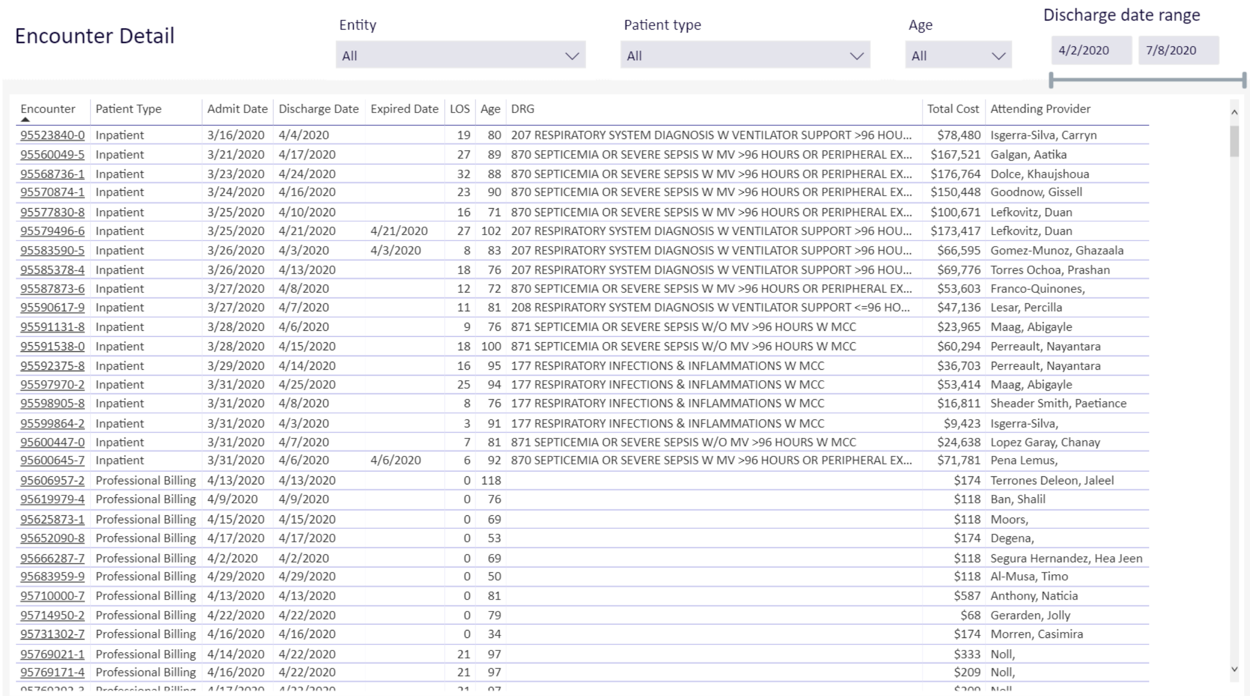
The age drop-down lists these age categories: 0-17, 18-49, 50-64, 65-84, and 85+. You can also select all or blank.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Encounter table


Encounter Detail

Entity: All

Patient type: All

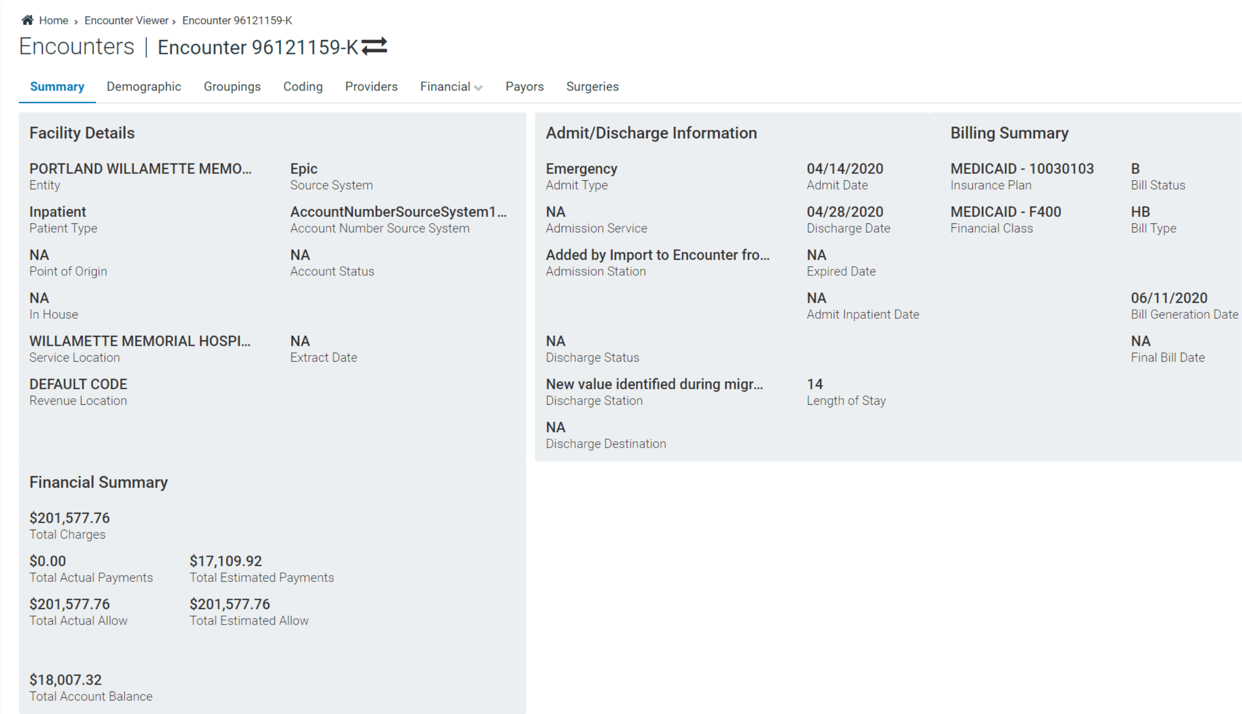
Age: All

Discharge date range: 4/2/2020 – 7/8/2020

Encounter	Patient Type	Admit Date	Discharge Date	Expired Date	LOS	Age	DRG	Total Cost	Attending Provider
95523840-0	Inpatient	3/16/2020	4/4/2020		19	80	207 RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOU...	$78,480	Isgerra-Silva, Carryn
95560049-5	Inpatient	3/21/2020	4/17/2020		27	89	870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHERAL EX...	$167,521	Galgan, Aatika
95568736-1	Inpatient	3/23/2020	4/24/2020		32	88	870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHERAL EX...	$176,764	Dolce, Khaujshoua
95570874-1	Inpatient	3/24/2020	4/16/2020		23	90	870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHERAL EX...	$150,448	Goodnow, Gissell
95577830-8	Inpatient	3/25/2020	4/10/2020		16	71	870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHERAL EX...	$100,671	Lefkovitz, Duan
95579496-6	Inpatient	3/25/2020	4/21/2020	4/21/2020	27	102	207 RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOU...	$173,417	Lefkovitz, Duan
95583590-5	Inpatient	3/26/2020	4/3/2020	4/3/2020	8	83	207 RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOU...	$66,595	Gomez-Munoz, Ghazaala
95585378-4	Inpatient	3/26/2020	4/13/2020		18	76	207 RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT >96 HOU...	$69,776	Torres Ochoa, Prashan
95587873-6	Inpatient	3/27/2020	4/8/2020		12	72	870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHERAL EX...	$53,603	Franco-Quinones,
95590617-9	Inpatient	3/27/2020	4/7/2020		11	81	208 RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <=96 HO...	$47,136	Lesar, Percilla
95591131-8	Inpatient	3/28/2020	4/6/2020		9	76	871 SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	$23,965	Maag, Abigayle
95591538-0	Inpatient	3/28/2020	4/15/2020		18	100	871 SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	$60,294	Perreault, Nayantara
95592375-8	Inpatient	3/29/2020	4/14/2020		16	95	177 RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	$36,703	Perreault, Nayantara
95597970-2	Inpatient	3/31/2020	4/25/2020		25	94	177 RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	$53,414	Maag, Abigayle
95598905-8	Inpatient	3/31/2020	4/8/2020		8	76	177 RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	$16,811	Sheader Smith, Paetiance
95599864-2	Inpatient	3/31/2020	4/3/2020		3	91	177 RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	$9,423	Isgerra-Silva,
95600447-0	Inpatient	3/31/2020	4/7/2020		7	81	871 SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	$24,638	Lopez Garay, Chanay
95600645-7	Inpatient	3/31/2020	4/6/2020	4/6/2020	6	92	870 SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS OR PERIPHERAL EX...	$71,781	Pena Lemus,
95606957-2	Professional Billing	4/13/2020	4/13/2020		0	118		$174	Terrones Deleon, Jaleel
95619979-4	Professional Billing	4/9/2020	4/9/2020		0	76		$118	Ban, Shalil
95625873-1	Professional Billing	4/15/2020	4/15/2020		0	69		$118	Moors,
95652090-8	Professional Billing	4/17/2020	4/17/2020		0	53		$174	Degena,
95666287-7	Professional Billing	4/2/2020	4/2/2020		0	69		$118	Segura Hernandez, Hea Jeen
95683959-9	Professional Billing	4/29/2020	4/29/2020		0	50		$118	Al-Musa, Timo
95710000-7	Professional Billing	4/13/2020	4/13/2020		0	81		$587	Anthony, Naticia
95714950-2	Professional Billing	4/22/2020	4/22/2020		0	79		$68	Gerarden, Jolly
95731302-7	Professional Billing	4/16/2020	4/16/2020		0	34		$174	Morren, Casimira
95769021-1	Professional Billing	4/14/2020	4/22/2020		21	97		$333	Noll,
95769171-4	Professional Billing	4/16/2020	4/22/2020		21	97		$209	Noll,

Encounter	The unique identifier for the encounter. which is a link to the encounter detail
Patient Type	The type of patient, such as outpatient emergency
Admin Date	The date of admission for the encounter
Discharge Date	The date the patient was discharged
Expired Date	If the patient died, the date of the death
LOS	The length of stay
Age	The age of the patient
DRG	
Total Cost	The total cost for the entire encounter
Attending Provider	The name of the attending provider

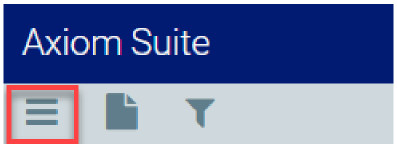
Encounter Detail



This report contains detailed information about a single encounter. It has several tabs:

Summary	High-level information about the facility used, financial summary, admit and discharge, and billing summary
Demographic	Information about the patient, including personal information, contact information, patient information, and guarantor information
Groupings	Lists the service line assignments associating with the patient
Coding	Lists the ICD diagnoses for the patient during this encounter
Providers	List each physician who attended the patient during this encounter; the date of the encounter is provided
Financial: Payments and Adjustments	Lists all payments and adjustments to costs for this encounter
Financial: Cost Details	List all billable items for the patient's stay, with description, rev code, amounts, and service dates
Payors	Information about the payors for the patient; examples include Medicare, Medicaid, Workers Comp, self pay, and commercial insurance
Surgeries	Detailed information about surgeries performed during the encounter

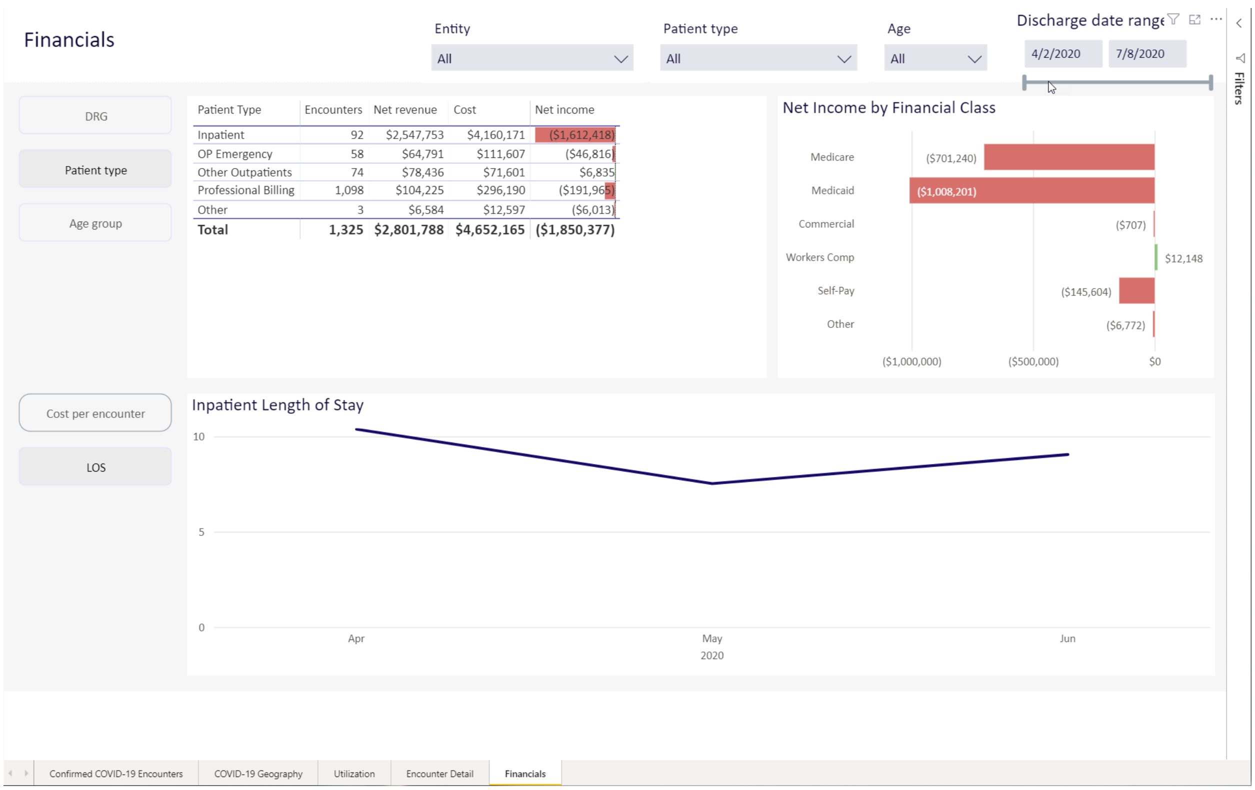
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Financials

Use this report to analyze costs in several categories:

- Net income (or loss) for encounters
- Net income (or loss) by financial class
- Cost of inpatient encounters



Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Age

The age drop-down lists these age categories: 0-17, 18-49, 50-64, 65-84, and 85+. You can also select all or blank.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Viewing encounter data

This filter contains three visualizations.

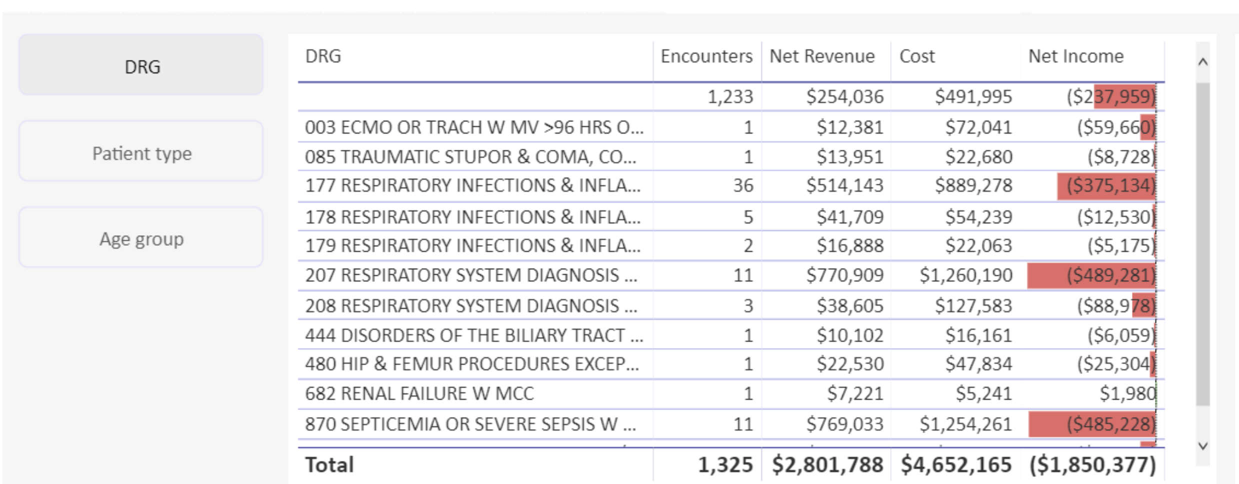
Net income for encounters

This table contains a list of all encounters that occurred in the discharge date range for the patients and entities that you chose.

You can choose between three different views of the table: by DRG, by patient type, or by age group.

DRG view

This view presents encounter financial data with a focus on individual encounter types.

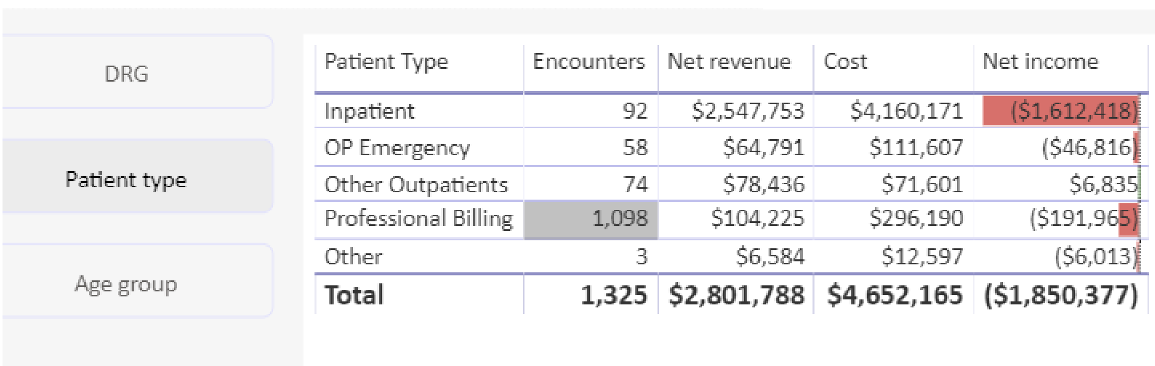


DRG	Encounters	Net Revenue	Cost	Net Income
	1,233	$254,036	$491,995	($237,959)
003 ECMO OR TRACH W MV >96 HRS O...	1	$12,381	$72,041	($59,660)
085 TRAUMATIC STUPOR & COMA, CO...	1	$13,951	$22,680	($8,728)
177 RESPIRATORY INFECTIONS & INFLA...	36	$514,143	$889,278	($375,134)
178 RESPIRATORY INFECTIONS & INFLA...	5	$41,709	$54,239	($12,530)
179 RESPIRATORY INFECTIONS & INFLA...	2	$16,888	$22,063	($5,175)
207 RESPIRATORY SYSTEM DIAGNOSIS ...	11	$770,909	$1,260,190	($489,281)
208 RESPIRATORY SYSTEM DIAGNOSIS ...	3	$38,605	$127,583	($88,978)
444 DISORDERS OF THE BILIARY TRACT ...	1	$10,102	$16,161	($6,059)
480 HIP & FEMUR PROCEDURES EXCEP...	1	$22,530	$47,834	($25,304)
682 RENAL FAILURE W MCC	1	$7,221	$5,241	$1,980
870 SEPTICEMIA OR SEVERE SEPSIS W ...	11	$769,033	$1,254,261	($485,228)
Total	**1,325**	**$2,801,788**	**$4,652,165**	**($1,850,377)**

DRG	All the encounters types that occurred, according to your filters, are listed. The DRG number and the description of the encounter type are provided
Encounters	A count of the encounters, according to your filters
Net Revenue	The dollar amount of revenue received for each encounter type
Cost	The cost of the encounters to your organization
Net Income	The net income is the subtraction of the net revenue from the cost. Dollar amounts enclose with parentheses and shaded red indicate a net loss. Dollar amounts shaded green indicate a net profit

Patient type view

This view presents encounter financial data by the types of the patients.

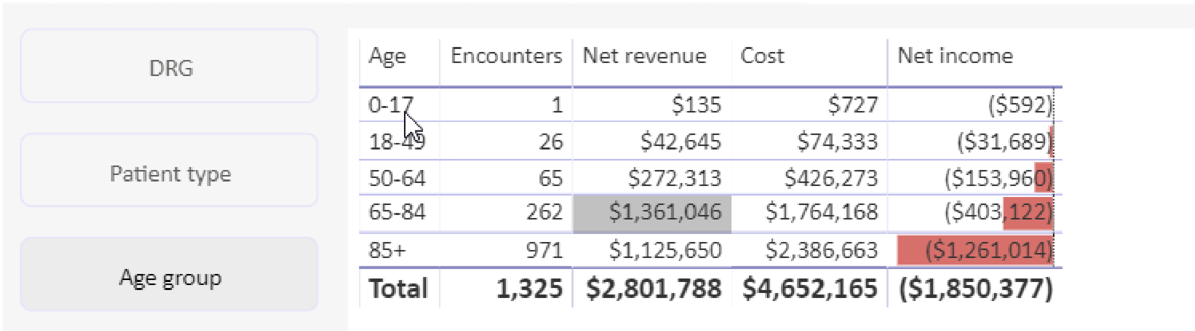


Patient Type	Encounters	Net revenue	Cost	Net income
Inpatient	92	$2,547,753	$4,160,171	($1,612,418)
OP Emergency	58	$64,791	$111,607	($46,816)
Other Outpatients	74	$78,436	$71,601	$6,835
Professional Billing	1,098	$104,225	$296,190	($191,965)
Other	3	$6,584	$12,597	($6,013)
Total	**1,325**	**$2,801,788**	**$4,652,165**	**($1,850,377)**

Patient type	Patient types are: inpatient, outpatient emergency, other outpatients, professional billing, and other
Encounters	The number of encounters, according to filters, for each patient type
Net Revenue	The revenue received for the encounters for each patient type
Cost	The cost for those encounters
Net income	The net income is the subtraction of the net revenue from the cost. Dollar amounts enclose with parentheses and shaded red indicate a net loss. Dollar amounts shaded green indicate a net profit

Age group view

This view present encounter financial data by standard age ranges.

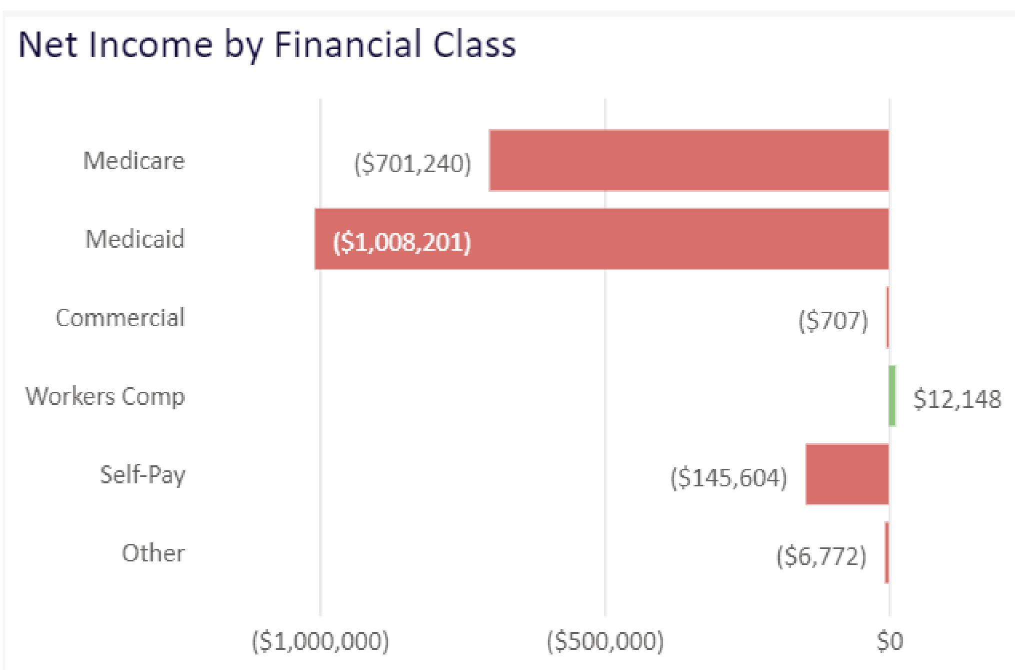


Age	Encounters	Net revenue	Cost	Net income
0-17	1	$135	$727	($592)
18-49	26	$42,645	$74,333	($31,689)
50-64	65	$272,313	$426,273	($153,960)
65-84	262	$1,361,046	$1,764,168	($403,122)
85+	971	$1,125,650	$2,386,663	($1,261,014)
Total	**1,325**	**$2,801,788**	**$4,652,165**	**($1,850,377)**

Age	The age ranges are: 0-17, 18-49, 50-64, 65-84, 85+
Encounters	The number of encounters, according to filters, in each age group
Net revenue	The revenue received for the encounters in each age group
Cost	The cost for the encounters, by age group
Net income	The net income is the subtraction of the net revenue from the cost. Dollar amounts enclose with parentheses and shaded red indicate a net loss. Dollar amounts shaded green indicate a net profit

▶ Net Income by Financial Class

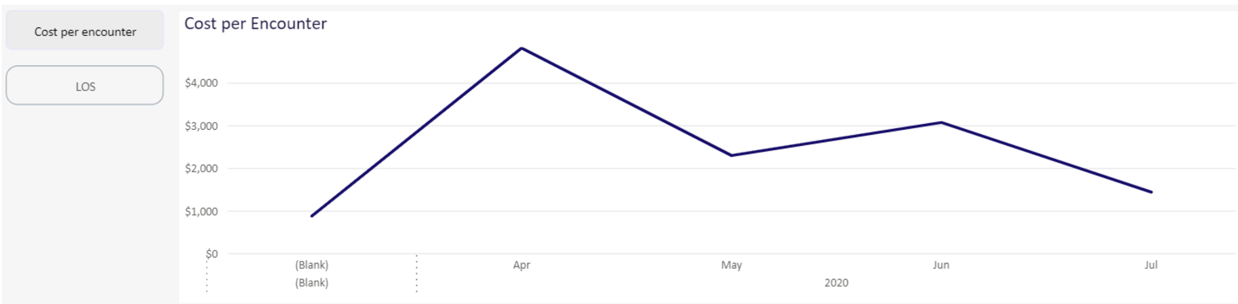
This chart explore the net income for this encounter group by the method of payment.



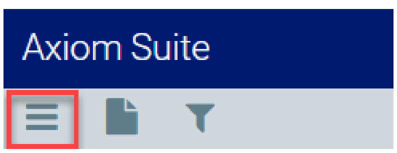
The net income for each payment method is given in dollars. The chart also shows that amount as it relates to the cost; marked as $0 on the chart. Items to the left mean the net income was less than the cost of the encounters and are shaded in red. Encounters to the right mean the net income was greater than the cost of the encounters and are shaded in green.

Cost per Encounter

This graph shows the costs of encounters over the range of dates set with the Discharge date ranger slicer. Each month shows an average of for the month. You can move your cursor over the graph to view the dollar values.



- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Physician Variations dashboard

This collection of reports provide data that enables institutions to understand cost opportunities by a number of different factors. Using Axiom Intelligence, users have a rich toolset that let's them easily specify the granularity of the data to work with. They can easily choose a specific entity in the institution, the range of dates for the data, and other controls to achieve the correct set of data to work with.

Inpatient Cost Opportunity

This report provides detailed cost opportunity data for inpatient care. You can view this data by service line, attending provider, or by DRG and cost group.

Inpatient Length of Stay Opportunity

This report provides data on length of stay opportunities. Excess days can be evaluated by attending provider or by DRG. You can also drill down on a DRG for precise details and views of individual encounters.

Inpatient Contribution Margin

This report contains data on inpatient contribution margins for one or all providers. A bubble chart shows providers in relation to each other, both in contribution margins and number of encounter. Payor mix and margins by DRG are also included.

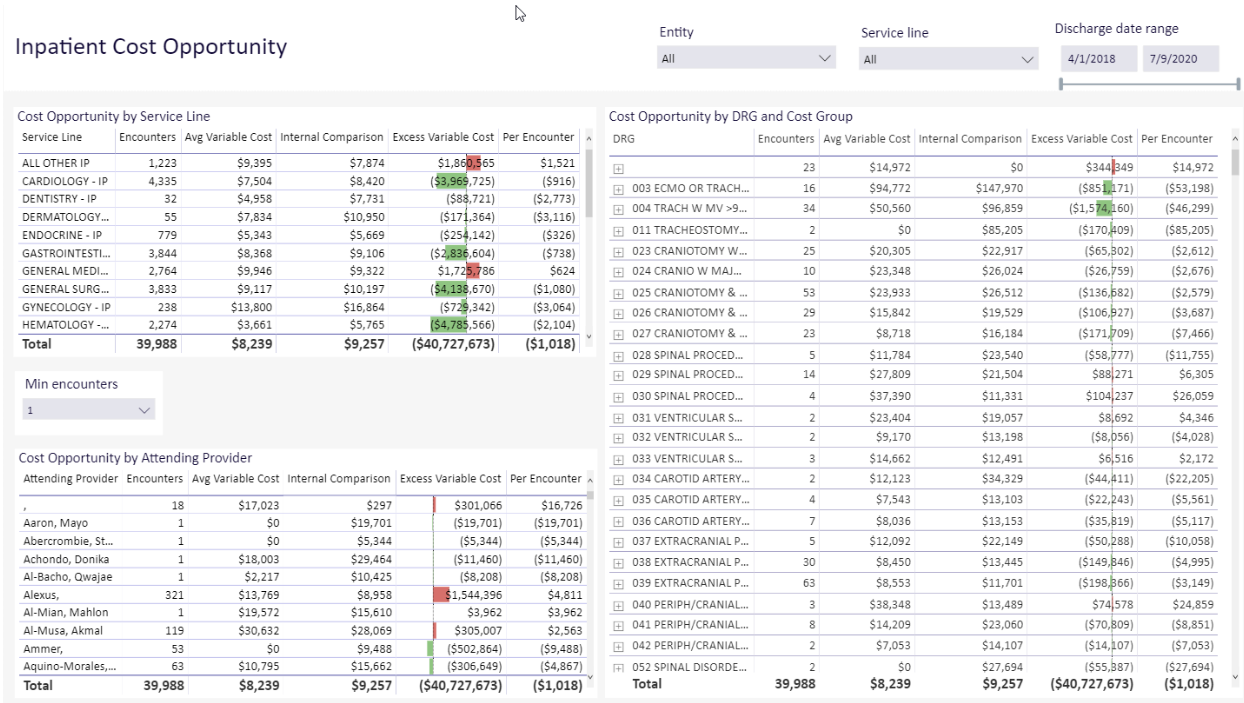
Inpatient Encounter Selection

This report lets you evaluate cost opportunities for your data selection by various items: DRG, principal diagnosis, principal procedure, and attending provider.

Inpatient Cost Opportunity

Overview

This report lets you examine inpatient cost opportunities by several factors: service line, attending provider, and DRG and cost group.



▶ Slicers

This report provides filtering options that let you create a view a subset of the encounters, giving you the option of viewing the exact patient population that you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service Line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Inpatient Cost Opportunity

The reports on this dashboard provide the following data showing cost opportunity in several categories.

Service Line	Each service line you specified is listed in this report
Encounters	Count of all encounters by this service line
Avg Variable Cost	
Internal Comparison	
Excess Variable Cost	
Per Encounter	

Cost Opportunity by Service Line

Cost Opportunity by Service Line

Service Line	Encounters	Avg Variable Cost	Internal Comparison	Excess Variable Cost	Per Encounter
ALL OTHER IP	1,223	$9,395	$7,874	$1,860,565	$1,521
CARDIOLOGY - IP	4,335	$7,504	$8,420	($3,969,725)	($916)
DENTISTRY - IP	32	$4,958	$7,731	($88,721)	($2,773)
DERMATOLOGY...	55	$7,834	$10,950	($171,364)	($3,116)
ENDOCRINE - IP	779	$5,343	$5,669	($254,142)	($326)
GASTROINTESTI...	3,844	$8,368	$9,106	($2,836,604)	($738)
GENERAL MEDI...	2,764	$9,946	$9,322	$1,725,786	$624
GENERAL SURG...	3,833	$9,117	$10,197	($4,138,670)	($1,080)
GYNECOLOGY - IP	238	$13,800	$16,864	($729,342)	($3,064)
HEMATOLOGY -...	2,274	$3,661	$5,765	($4,785,566)	($2,104)
Total	**39,988**	**$8,239**	**$9,257**	**($40,727,673)**	**($1,018)**

The report provides a table of cost opportunities for each service line you specified.

Cost Opportunity by Attending Provider

Min encounters

1

Cost Opportunity by Attending Provider

Attending Provider	Encounters	Avg Variable Cost	Internal Comparison	Excess Variable Cost	Per Encounter
,	18	$17,023	$297	$301,066	$16,726
Aaron, Mayo	1	$0	$19,701	($19,701)	($19,701)
Abercrombie, St...	1	$0	$5,344	($5,344)	($5,344)
Achondo, Donika	1	$18,003	$29,464	($11,460)	($11,460)
Al-Bacho, Qwajae	1	$2,217	$10,425	($8,208)	($8,208)
Alexus,	321	$13,769	$8,958	$1,544,396	$4,811
Al-Mian, Mahlon	1	$19,572	$15,610	$3,962	$3,962
Al-Musa, Akmal	119	$30,632	$28,069	$305,007	$2,563
Ammer,	53	$0	$9,488	($502,864)	($9,488)
Aquino-Morales,...	63	$10,795	$15,662	($306,649)	($4,867)
Total	**39,988**	**$8,239**	**$9,257**	**($40,727,673)**	**($1,018)**

This report provides a table of cost opportunities for each provider in each service line you specified. You can use the **Min encounters** drop-down to select attending providers who have had a last that many encounters in the date range you specified. The default is 1 encounter.

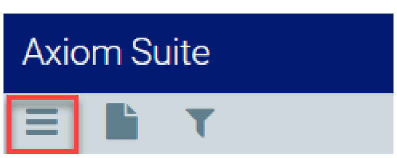
▶ Cost Opportunity by DRG and Cost Group

Cost Opportunity by DRG and Cost Group

DRG	Encounters	Avg Variable Cost	Internal Comparison	Excess Variable Cost	Per Encounter
⊞	23	$14,972	$0	$344,349	$14,972
⊞ 003 ECMO OR TRACH...	16	$94,772	$147,970	($851,171)	($53,198)
⊞ 004 TRACH W MV >9...	34	$50,560	$96,859	($1,574,160)	($46,299)
⊞ 011 TRACHEOSTOMY...	2	$0	$85,205	($170,409)	($85,205)
⊞ 023 CRANIOTOMY W...	25	$20,305	$22,917	($65,302)	($2,612)
⊞ 024 CRANIO W MAJ...	10	$23,348	$26,024	($26,759)	($2,676)
⊞ 025 CRANIOTOMY & ...	53	$23,933	$26,512	($136,682)	($2,579)
⊞ 026 CRANIOTOMY & ...	29	$15,842	$19,529	($106,927)	($3,687)
⊞ 027 CRANIOTOMY & ...	23	$8,718	$16,184	($171,709)	($7,466)
⊞ 028 SPINAL PROCED...	5	$11,784	$23,540	($58,777)	($11,755)
⊞ 029 SPINAL PROCED...	14	$27,809	$21,504	$88,271	$6,305
⊞ 030 SPINAL PROCED...	4	$37,390	$11,331	$104,237	$26,059
⊞ 031 VENTRICULAR S...	2	$23,404	$19,057	$8,692	$4,346
⊞ 032 VENTRICULAR S...	2	$9,170	$13,198	($8,056)	($4,028)
⊞ 033 VENTRICULAR S...	3	$14,662	$12,491	$6,516	$2,172
⊞ 034 CAROTID ARTERY...	2	$12,123	$34,329	($44,411)	($22,205)
⊞ 035 CAROTID ARTERY...	4	$7,543	$13,103	($22,243)	($5,561)
⊞ 036 CAROTID ARTERY...	7	$8,036	$13,153	($35,819)	($5,117)
⊞ 037 EXTRACRANIAL P...	5	$12,092	$22,149	($50,288)	($10,058)
⊞ 038 EXTRACRANIAL P...	30	$8,450	$13,445	($149,846)	($4,995)
⊞ 039 EXTRACRANIAL P...	63	$8,553	$11,701	($198,366)	($3,149)
⊞ 040 PERIPH/CRANIAL...	3	$38,348	$13,489	$74,578	$24,859
⊞ 041 PERIPH/CRANIAL...	8	$14,209	$23,060	($70,809)	($8,851)
⊞ 042 PERIPH/CRANIAL...	2	$7,053	$14,107	($14,107)	($7,053)
⊞ 052 SPINAL DISORDE...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	**39,988**	**$8,239**	**$9,257**	**($40,727,673)**	**($1,018)**

This report provides a table of cost opportunities by DRG and Cost Group.

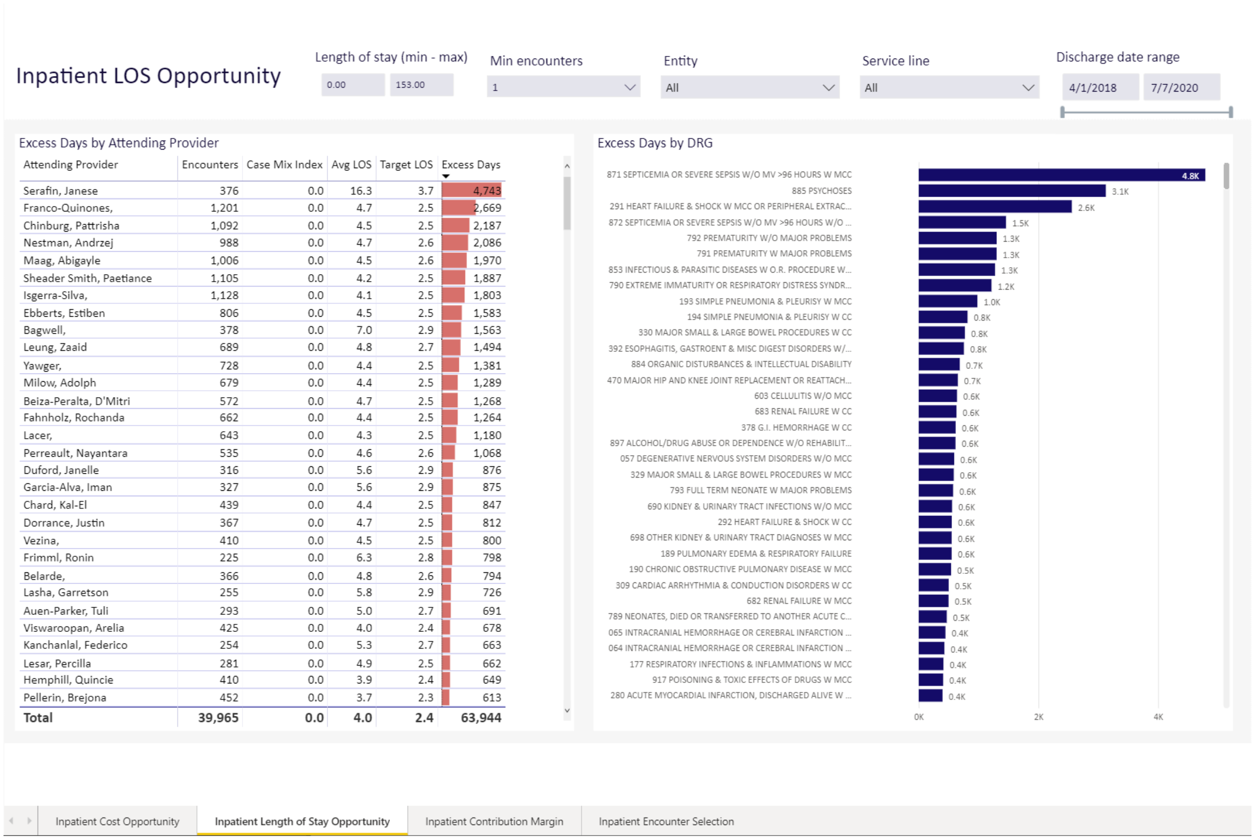
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Inpatient Length of Stay Opportunity

Overview

The Inpatient Length of Stay Opportunity report lets you evaluate excess hospital stays by attending provider and by DRG.



Attending Provider	Encounters	Case Mix Index	Avg LOS	Target LOS	Excess Days
Serafin, Janese	376	0.0	16.3	3.7	4,743
Franco-Quinones,	1,201	0.0	4.7	2.5	2,669
Chinburg, Pattrisha	1,092	0.0	4.5	2.5	2,187
Nestman, Andrzej	988	0.0	4.7	2.6	2,086
Maag, Abigayle	1,006	0.0	4.5	2.6	1,970
Sheader Smith, Paetiance	1,105	0.0	4.2	2.5	1,887
Isgerra-Silva,	1,128	0.0	4.1	2.5	1,803
Ebberts, Estiben	806	0.0	4.5	2.5	1,583
Bagwell,	378	0.0	7.0	2.9	1,563
Leung, Zaaid	689	0.0	4.8	2.7	1,494
Yawger,	728	0.0	4.4	2.5	1,381
Milow, Adolph	679	0.0	4.4	2.5	1,289
Beiza-Peralta, D'Mitri	572	0.0	4.7	2.5	1,268
Fahnholz, Rochanda	662	0.0	4.4	2.5	1,264
Lacer,	643	0.0	4.3	2.5	1,180
Perreault, Nayantara	535	0.0	4.6	2.6	1,068
Duford, Janelle	316	0.0	5.6	2.9	876
Garcia-Alva, Iman	327	0.0	5.6	2.9	875
Chard, Kal-El	439	0.0	4.4	2.5	847
Dorrance, Justin	367	0.0	4.7	2.5	812
Vezina,	410	0.0	4.5	2.5	800
Frimml, Ronin	225	0.0	6.3	2.8	798
Belarde,	366	0.0	4.8	2.6	794
Lasha, Garretson	255	0.0	5.8	2.9	726
Auen-Parker, Tuli	293	0.0	5.0	2.7	691
Viswaroopan, Arelia	425	0.0	4.0	2.4	678
Kanchanlal, Federico	254	0.0	5.3	2.7	663
Lesar, Percilla	281	0.0	4.9	2.5	662
Hemphill, Quincie	410	0.0	3.9	2.4	649
Pellerin, Brejona	452	0.0	3.7	2.3	613
Total	**39,965**	**0.0**	**4.0**	**2.4**	**63,944**

Slicers

This report provides filtering options to let you specify a group of attending providers or DRGs to examine.

Length of stay (min - max)

Use these two fields to enter the minimum and maximum number of days of hospital lengths of stay to examine in the reports.

Min encounters

Use this drop-down to select the minimum number of encounters that attending providers who have had in the date range you specified. The default is 1 encounter.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service Line

Use this drop-down to select the service lines you want to examine in this report. You can select all service lines, a single service line, or several service lines. To select multiple service lines, press and hold the CTRL key while you select the check boxes for each service line you want to view.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Excess Days by Attending Provider

Excess Days by Attending Provider

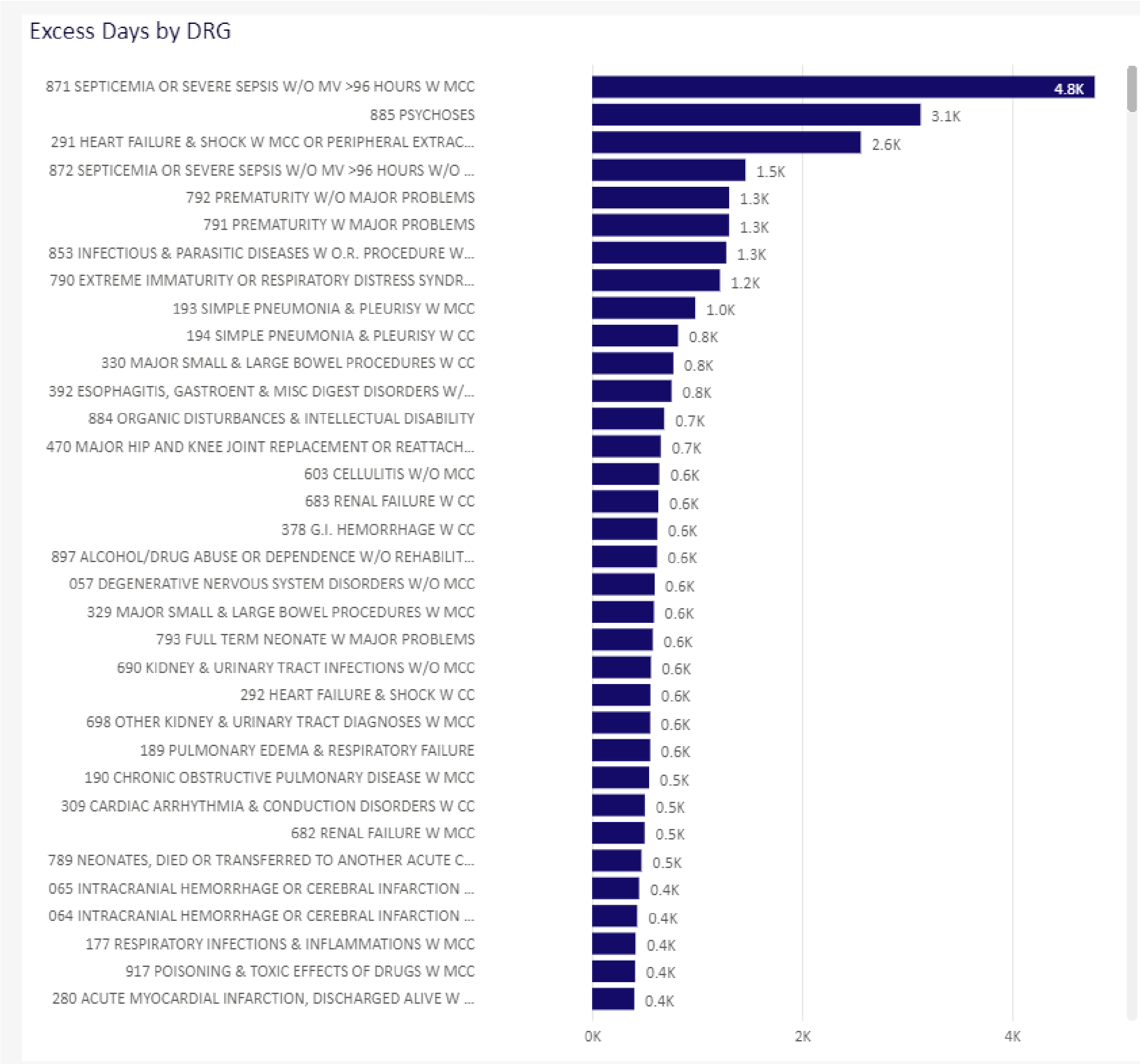
Attending Provider	Encounters	Case Mix Index	Avg LOS	Target LOS	Excess Days
Serafin, Janese	376	0.0	16.3	3.7	4,743
Franco-Quinones,	1,201	0.0	4.7	2.5	2,669
Chinburg, Pattrisha	1,092	0.0	4.5	2.5	2,187
Nestman, Andrzej	988	0.0	4.7	2.6	2,086
Maag, Abigayle	1,006	0.0	4.5	2.6	1,970
Sheader Smith, Paetiance	1,105	0.0	4.2	2.5	1,887
Isgerra-Silva,	1,128	0.0	4.1	2.5	1,803
Ebberts, Estiben	806	0.0	4.5	2.5	1,583
Bagwell,	378	0.0	7.0	2.9	1,563
Leung, Zaaid	689	0.0	4.8	2.7	1,494
Yawger,	728	0.0	4.4	2.5	1,381
Milow, Adolph	679	0.0	4.4	2.5	1,289
Beiza-Peralta, D'Mitri	572	0.0	4.7	2.5	1,268
Fahnholz, Rochanda	662	0.0	4.4	2.5	1,264
Lacer,	643	0.0	4.3	2.5	1,180
Perreault, Nayantara	535	0.0	4.6	2.6	1,068
Duford, Janelle	316	0.0	5.6	2.9	876
Garcia-Alva, Iman	327	0.0	5.6	2.9	875
Chard, Kal-El	439	0.0	4.4	2.5	847
Dorrance, Justin	367	0.0	4.7	2.5	812
Vezina,	410	0.0	4.5	2.5	800
Frimml, Ronin	225	0.0	6.3	2.8	798
Belarde,	366	0.0	4.8	2.6	794
Lasha, Garretson	255	0.0	5.8	2.9	726
Auen-Parker, Tuli	293	0.0	5.0	2.7	691
Viswaroopan, Arelia	425	0.0	4.0	2.4	678
Kanchanlal, Federico	254	0.0	5.3	2.7	663
Lesar, Percilla	281	0.0	4.9	2.5	662
Hemphill, Quincie	410	0.0	3.9	2.4	649
Pellerin, Brejona	452	0.0	3.7	2.3	613
Total	**39,965**	**0.0**	**4.0**	**2.4**	**63,944**

Use this report to examine length of stay data for all attending physicians, as specified in your data filtering.

Attending Physician	The name of an attending physician.
Encounters	The number of encounters for that physician during the date range you specified.

Case Mix Index	A calculated value indicating the relative complexity of the patients seen. Case Mix Index is a measurement of the diversity, complexity and severity of illness of the patients seen at the hospital or by a provider. The higher the CMI, the more complex the patient and the more resources required to treat the patient.
Avg LOS	The average length of stay for all encounters for this attending physician.
Target LOS	The target length of stay for encounters, based on the specialty of the attending physician.
Excess Days	The number of excess days for an attending physician, which can be positive or negative.

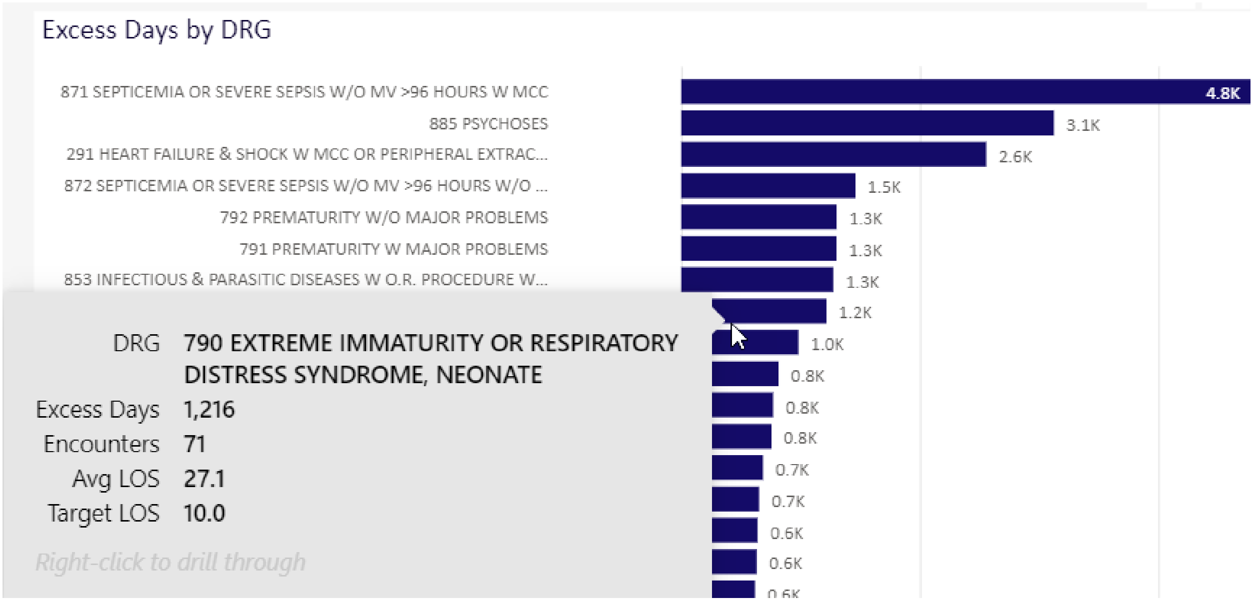
Excess Days by DRG



Use this graph to view excess length of stay days for each DRG hospitalization that matches the filters you specified. The total represented here are for all attending physicians that hospitalized patients for the DRG that match your specifications.

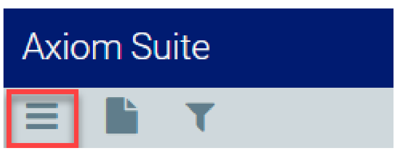
This graph displays excess days from the most number of excess days to the least number of excess days. The baseline of 0 represents target length of stay for each DRG.

Move your cursor over one the bars in the chart to view precise excess days data.



if you right-click from the hover box, you can view the data as a table or view a table of all encounters, each linked to the encounter record.

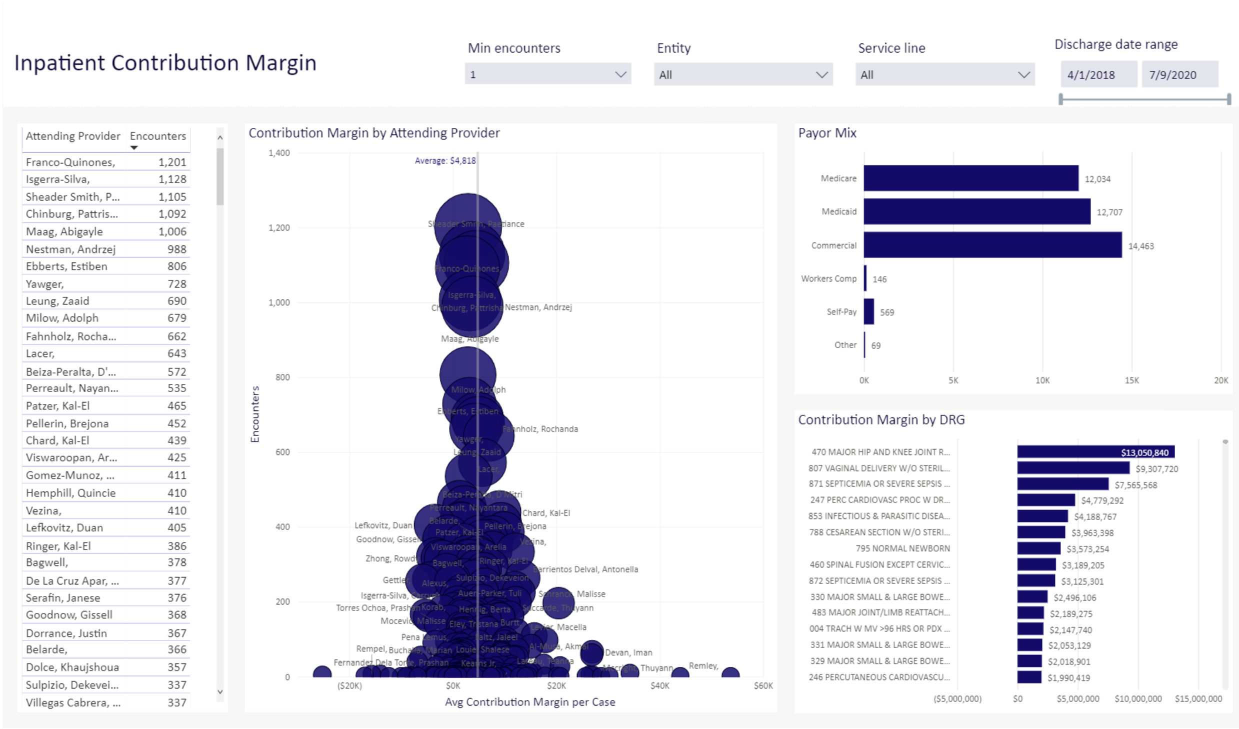
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Inpatient Contribution Margin

▶ Overview

The contribution margin let you view contributions of attending providers in the entity or entities and service line(s) you specify.



Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Min encounters

Use this drop-down to select the minimum number of encounters that attending providers who have had in the date range you specified. The default is 1 encounter.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service Line

Use this drop-down to select the service lines you want to examine in this report. You can select all service lines, a single service line, or several service lines. To select multiple service lines, press and hold the CTRL key while you select the check boxes for each service line you want to view.

Discharge date range

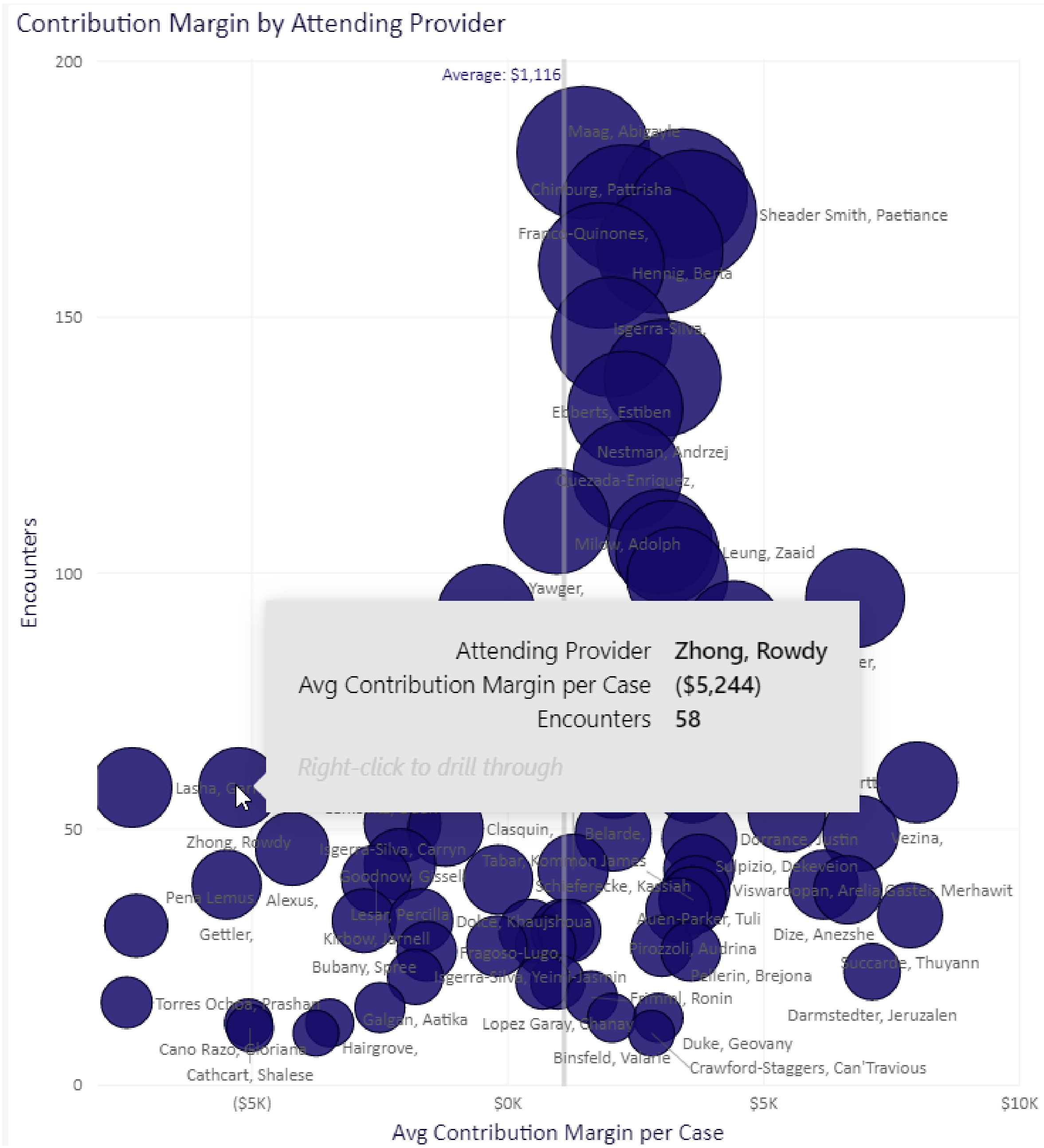
This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Attending Provider

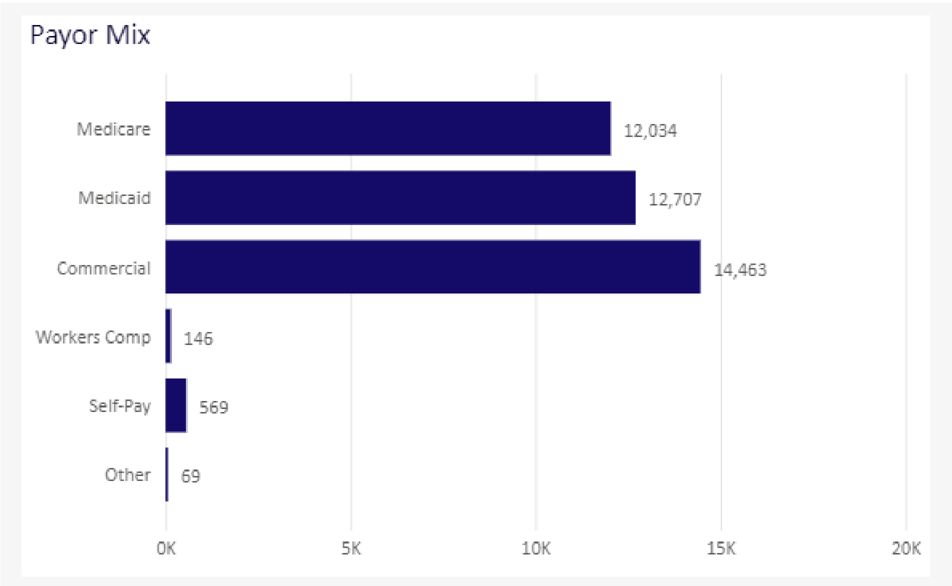
A list of all attending providers and the number of their encounters. You can select a single attending provider from the list. All of the charts in the report will redisplay, showing only the data for that attending provider.

▶ Contribution Margin by Attending Provider



This bubble chart shows the contribution margin for the attending physician(s) you specify. The y-axis is for the number of encounters; the x-axis is for the average contribution margin per case. The bubbles are sized related to the number of encounters. If you hover over a bubble, you see the provider's name, average contribution margin per case, and number of encounters.

Payor Mix

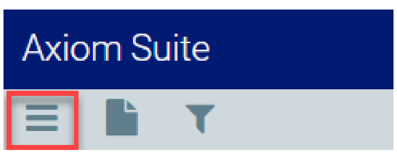


This bar chart shows the dollar amount paid by these categories: Medicare, Medicaid, Commercial insurance, Workers comp, self pay, and any other type of payment.

Contribution Margin by DRG

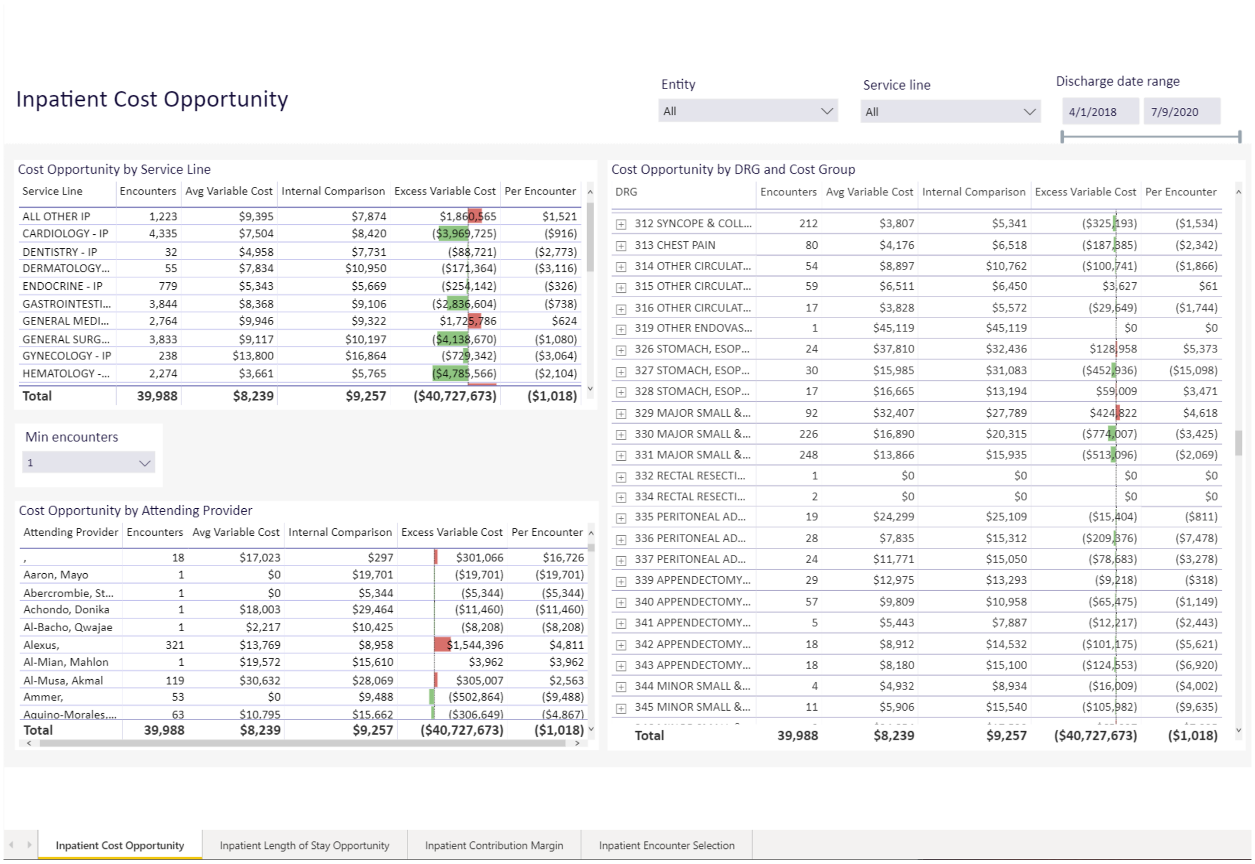
This bar chart shows the contribution margins by DRG for the attending physician(s) specified.

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Inpatient Encounter Selection

Overview



This report lets you evaluate cost opportunities for your data selection by various items: DRG, principal diagnosis, principal procedure, and attending provider.

Slicers

This report contains filters called slicers that let you define the exact set of data that you want to examine.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service Line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

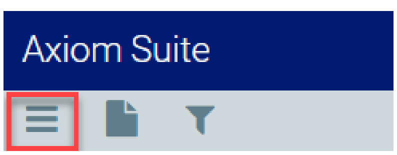
TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Cost Opportunities

This report let you examine cost opportunities by DRG, Principal Diagnosis, Principal Procedure, and Attending Provider. All of these views use the same columns.

Category	Either DRG, Principal Diagnosis, Principal Procedure, or Attending Provider
Encounters	The number of encounters for each item or person in the category
Avg Variable Cost	The average of variable costs for this category in the institution. It is the value that other costs are compared against
Internal Comparison	This is a weighted average of the underlying data for this category
Excess Variable Cost	The excess cost of all encounters for this category. This value can be positive (higher than average) or negative (lower than average)
Per Encounter	Cost per encounter for the item or person

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Service Line dashboard

The Service Line dashboard provides comprehensive profitability by service Line, physician, case type, and payor mix to quantify volumes, cost, revenue, contribution margin, and net income by service line and physician.

With this dashboard, you can:

- Compare current versus prior performance

- Understand profitability and contribution margin by physician
- Use patient origin for location planning

NOTE: Before using this dashboard, make sure your Axiom administrator has configured the proper data mappings. For more information, see Mapping data for service line reports.

▶ Profitability by Service Line

This report examines profitability by service line. It contains a summary of profitability for all service lines, with a comparison of current date range to the previous year. There is also table that shows the profitability for each service line as well as a chart showing the payor mix by financial class.

▶ Profitability Trends

Use this report to examine profitability for service line(s) you choose. A month-by-month table shows details about encounters and associated revenue and costs. Charts display trends for encounters and net income.

▶ Service Line Summary

This report shows summary information for the service line(s) you specify. You'll see a table showing profit margins by financial class, an interactive map showing locations of patients, a table showing profitability by attending provider, and a graph that shows data by measures that you can choose, such as Net Income per Encounter and Avg Inpatient Length of Stay.

▶ Provider Net Income

This report examines net income by provider. A bar chart lists each provider; if you click on the bar for a provider, a pop-up window shows the number of encounters and income for that provider. In addition, the income by DRG and by financial class redisplay for just that provider.

▶ Service Line Opportunity - Inpatient

This table examine length of stay by service line, DRG and by attending provider.

Profitability by Service Line

▶ Overview

The Profitability by Service Line report provides encounter, income, and revenue at the Service Line level. It includes a comparison of financials against the previous year, a table view by service lines, and the payor mix by financial class.

Profitability by Service Line

Current: 8/4/2019 - 8/3/2020 Prior : 8/4/2018 - 8/3/2019

Entity	Patient type	Discharge date range
All	All	Current Rolling 12

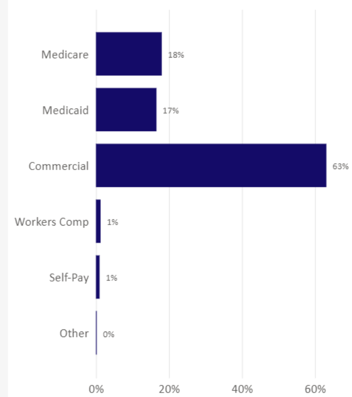
% Change Selected Dates vs Previous Year

Date Range	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
Current	1,314,124	$676,052,991	$693,143,585	($17,090,594)	$987,729,580	($311,676,589)
Prior	1,460,939	$756,137,582	$79,998,279	$676,139,302	$79,998,543	$676,139,039
% Change	(10.0%)	(10.6%)	766.4%	(102.5%)	1,134.7%	(146.1%)

Service Line Net Income and Contribution Margin

Service Line	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
ALL OTHER OUTPA...	389,110	$264,721,719	$274,120,002	($9,398,283)	$390,620,976	($125,899,257)
OP SURGERY - OP	22,226	$90,960,462	$101,327,001	($10,366,539)	$144,390,982	($53,430,520)
Professional Billing	886,133	$112,511,674	$95,696,016	$16,815,657	$136,366,816	($23,855,143)
CARDIOLOGY - IP	1,827	$17,504,870	$22,147,689	($4,642,819)	$31,560,457	($14,055,587)
THORACIC SURGER...	442	$18,593,032	$21,918,100	($3,325,068)	$31,233,292	($12,640,261)
GASTROINTESTINA...	1,568	$19,648,195	$22,509,010	($2,860,815)	$32,075,339	($12,427,144)
ORTHOPEDICS - IP	722	$15,195,137	$18,650,046	($3,454,909)	$26,576,316	($11,381,179)
GENERAL SURGERY...	1,570	$23,404,037	$24,268,248	($864,211)	$34,582,253	($11,178,216)
GENERAL MEDICIN...	1,123	$16,260,728	$17,905,269	($1,644,541)	$25,515,008	($9,254,281)
VASCULAR SURGER...	419	$10,051,370	$12,003,574	($1,952,203)	$17,105,093	($7,053,722)
PULMONARY - IP	1,166	$12,053,186	$13,395,888	($1,342,702)	$19,089,140	($7,035,954)
SPINE - IP	520	$10,425,213	$11,005,144	($579,930)	$15,682,330	($5,257,117)
NEUROLOGY - IP	574	$5,877,868	$6,686,540	($808,672)	$9,528,319	($3,650,451)
NEPROLOGY - IP	473	$3,489,362	$4,256,959	($767,597)	$6,066,167	($2,576,804)
PSYCHIATRY - IP	513	$3,923,893	$4,428,411	($504,518)	$6,310,486	($2,386,593)
UROLOGY - IP	376	$3,879,176	$4,260,306	($381,130)	$6,070,937	($2,191,761)
OBSTETRICS - IP	1,663	$8,259,553	$6,864,700	$1,394,853	$9,782,198	($1,522,645)
ONCOLOGY - IP	274	$3,807,886	$3,692,328	$115,558	$5,261,568	($1,453,681)
NEUROSURGERY - IP	146	$3,102,412	$3,038,364	$64,049	$4,329,669	($1,227,256)
HEMATOLOGY - IP	1,181	$9,875,173	$7,665,639	$2,209,534	$10,923,536	($1,048,363)
Total	**1,314,124**	**$676,052,991**	**$693,143,585**	**($17,090,594)**	**$987,729,580**	**($311,676,589)**

Payor Mix by Financial Class



▶ Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Discharge date range

The drop-down lets you choose a date range for your view. The default is the current rolling 12 months; other options include current month to date and previous month to date.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

▶ Percentage Change Selected Dates vs Previous Year

This section shows a high-level view of encounters, revenue, cost, and contribution margin for all service lines. It also shows the data for the previous year and the percentage change.

Profitability by Service Line

Current: 8/4/2019 - 8/3/2020 Prior : 8/4/2018 - 8/3/2019

Entity: All | Patient type: All | Discharge date range: Current Rolling 12

% Change Selected Dates vs Previous Year

Date Range	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
Current	1,314,124	$676,052,991	$693,143,585	($17,090,594)	$987,729,580	($311,676,589)
Prior	1,460,939	$756,137,582	$79,998,279	$676,139,302	$79,998,543	$676,139,039
% Change	(10.0%)	(10.6%)	766.4%	(102.5%)	1,134.7%	(146.1%)

Service Line Net Income and Contribution Margin

This bar chart show the encounters and financials for each service line in your data set. When you select a row in this chart, the Payor Mix by Financial Class redisplays with data for that service line.

Service Line Net Income and Contribution Margin

Service Line	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
ALL OTHER OUTPA...	389,110	$264,721,719	$274,120,002	($9,398,283)	$390,620,976	($125,899,257)
OP SURGERY - OP	22,226	$90,960,462	$101,327,001	($10,366,539)	$144,390,982	($53,430,520)
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THORACIC SURGER...	442	$18,593,032	$21,918,100	($3,325,068)	$31,233,292	($12,640,261)
GASTROINTESTINA...	1,568	$19,648,195	$22,509,010	($2,860,815)	$32,075,339	($12,427,144)
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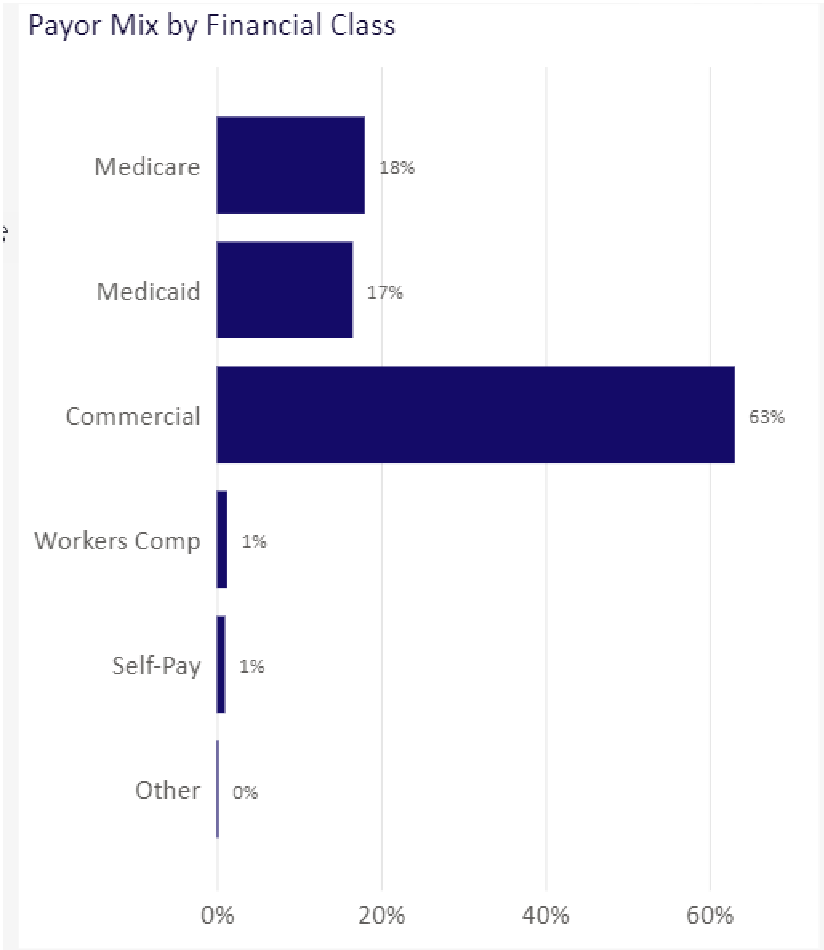
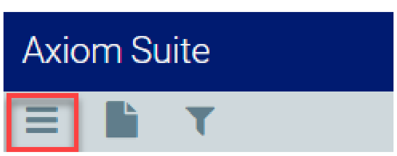
ONCOLOGY - IP	274	$3,807,886	$3,692,328	$115,558	$5,261,568	($1,453,681)
NEUROSURGERY - IP	146	$3,102,412	$3,038,364	$64,049	$4,329,669	($1,227,256)
HEMATOLOGY - IP	1,181	$9,875,173	$7,665,639	$2,209,534	$10,923,536	($1,048,363)
Total	**1,314,124**	**$676,052,991**	**$693,143,585**	**($17,090,594)**	**$987,729,580**	**($311,676,589)**

Payor Mix by Financial Class

This bar chart shows the payor mix for the service line(s) in your data set.



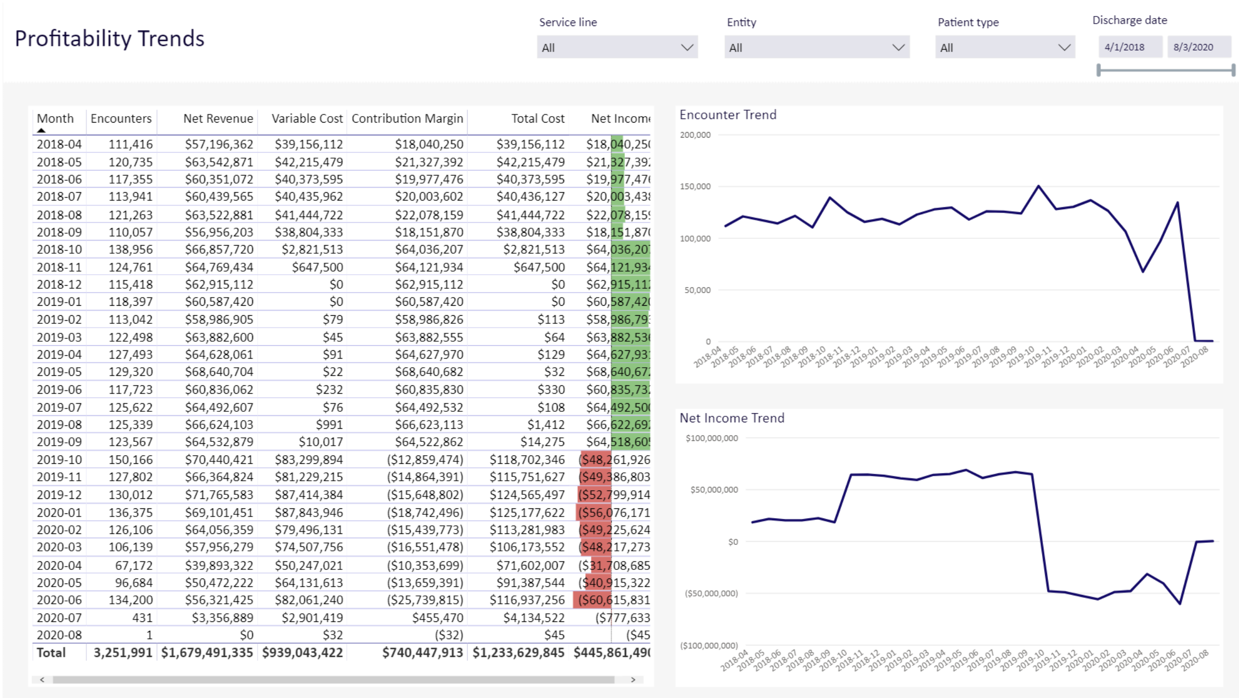
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Profitability Trends

Overview

The Profitability Trends report provides encounter and financial data for each month in your data set for all service line(s) you selected. Use the filters to select one or more service lines to view.



Month	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
2018-04	111,416	$57,196,362	$39,156,112	$18,040,250	$39,156,112	$18,040,25
2018-05	120,735	$63,542,871	$42,215,479	$21,327,392	$42,215,479	$21,327,39
2018-06	117,355	$60,351,072	$40,373,595	$19,977,476	$40,373,595	$19,977,47
2018-07	113,941	$60,439,565	$40,435,962	$20,003,602	$40,436,127	$20,003,43
2018-08	121,263	$63,522,881	$41,444,722	$22,078,159	$41,444,722	$22,078,15
2018-09	110,057	$56,956,203	$38,804,333	$18,151,870	$38,804,333	$18,151,87
2018-10	138,956	$66,857,720	$2,821,513	$64,036,207	$2,821,513	$64,036,20
2018-11	124,761	$64,769,434	$647,500	$64,121,934	$647,500	$64,121,93
2018-12	115,418	$62,915,112	$0	$62,915,112	$0	$62,915,11
2019-01	118,397	$60,587,420	$0	$60,587,420	$0	$60,587,42
2019-02	113,042	$58,986,905	$79	$58,986,826	$113	$58,986,79
2019-03	122,498	$63,882,600	$45	$63,882,555	$64	$63,882,53
2019-04	127,493	$64,628,061	$91	$64,627,970	$129	$64,627,93
2019-05	129,320	$68,640,704	$22	$68,640,682	$32	$68,640,67
2019-06	117,723	$60,836,062	$232	$60,835,830	$330	$60,835,73
2019-07	125,622	$64,492,607	$76	$64,492,532	$108	$64,492,50
2019-08	125,339	$66,624,103	$991	$66,623,113	$1,412	$66,622,69
2019-09	123,567	$64,532,879	$10,017	$64,522,862	$14,275	$64,518,60
2019-10	150,166	$70,440,421	$83,299,894	($12,859,474)	$118,702,346	($48,261,926
2019-11	127,802	$66,364,824	$81,229,215	($14,864,391)	$115,751,627	($49,386,803
2019-12	130,012	$71,765,583	$87,414,384	($15,648,802)	$124,565,497	($52,799,914
2020-01	136,375	$69,101,451	$87,843,946	($18,742,496)	$125,177,622	($56,076,171
2020-02	126,106	$64,056,359	$79,496,131	($15,439,773)	$113,281,983	($49,225,624
2020-03	106,139	$57,956,279	$74,507,756	($16,551,478)	$106,173,552	($48,217,273
2020-04	67,172	$39,893,322	$50,247,021	($10,353,699)	$71,602,007	($31,708,685
2020-05	96,684	$50,472,222	$64,131,613	($13,659,391)	$91,387,544	($40,915,322
2020-06	134,200	$56,321,425	$82,061,240	($25,739,815)	$116,937,256	($60,615,831
2020-07	431	$3,356,889	$2,901,419	$455,470	$4,134,522	($777,633
2020-08	1	$0	$32	($32)	$45	($45
Total	**3,251,991**	**$1,679,491,335**	**$939,043,422**	**$740,447,913**	**$1,233,629,845**	**$445,861,49**

Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Entity

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Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Discharge date

This control lets you select a range dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

Discharge date range

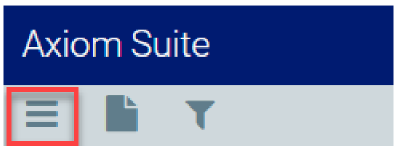
This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Profitability Trends

This report shows, by month in your date range, the encounters and financials for the service line(s) in your data set. If you click on a month, the Encounter and Net Income Trend charts redisplay with trends for month you selected.

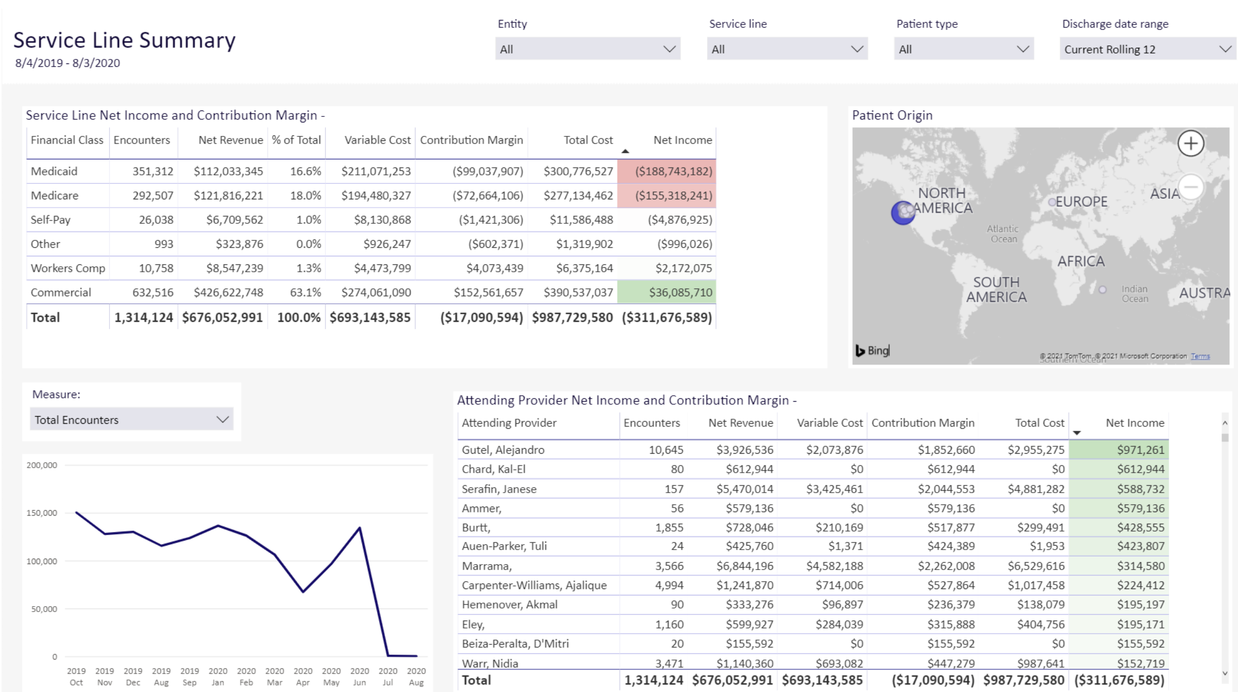
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Service Line Summary

Overview

The Service Line Summary report lets you examine data about Service Lines. Using the interactive map, you can drill down to the ZIP code to view numbers of encounters and view service line and attending provider net incomes and contribution margins.



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Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Discharge date range

The drop-down lets you choose a date range for your view. The default is the current rolling 12 months; other options include current month to date and previous month to date.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Service Line Net Income and Contribution Margin

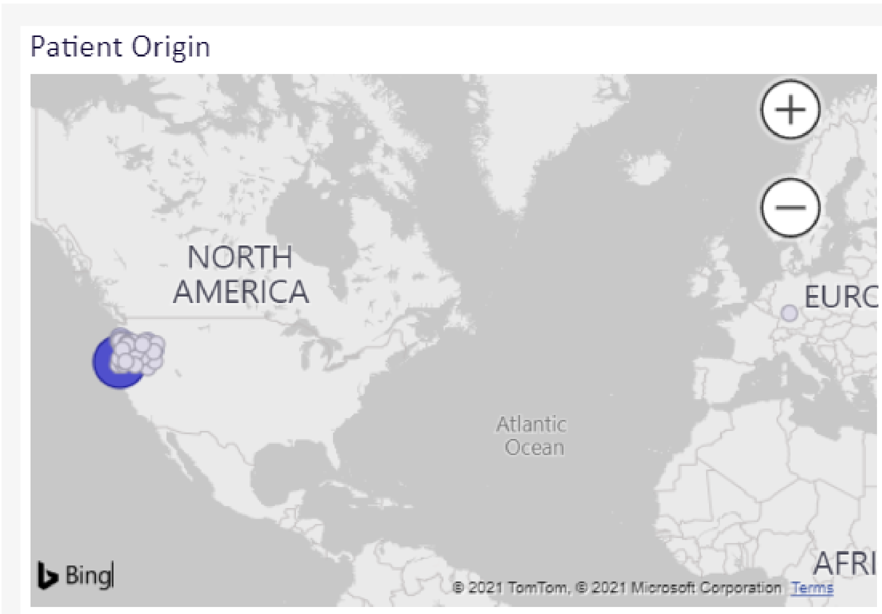
This table shows income and contribution margins by financial class for all service line(s) in your data set.

Attending Provider Net Income and Contribution Margin -

Attending Provider	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
Shetterly,	1	$4,982	$0	$4,982	$0	$4,982
Giunta, Farhan	1	$591	$0	$591	$0	$591
Evertz,	3	$429	$0	$429	$0	$429
Van Zeghbroeck, Rhea	2	$399	$0	$399	$0	$399
Almanza-Parra, La'Quan	1	$349	$44	$304	$63	$286
Townley, Blayne	2	$663	$265	$398	$378	$285
Hudak,	2	$283	$0	$283	$0	$283
Gilg, Gaines	2	$228	$0	$228	$0	$228
Ringer, Kal-El	3	$588	$264	$324	$376	$211
Serratos, Sherron	1	$202	$0	$202	$0	$202
Herbert,	1	$199	$0	$199	$0	$199
Fronteraocasio,	1	$195	$0	$195	$0	$195
Total	**993**	**$323,876**	**$926,247**	**($602,371)**	**$1,319,902**	**($996,026)**

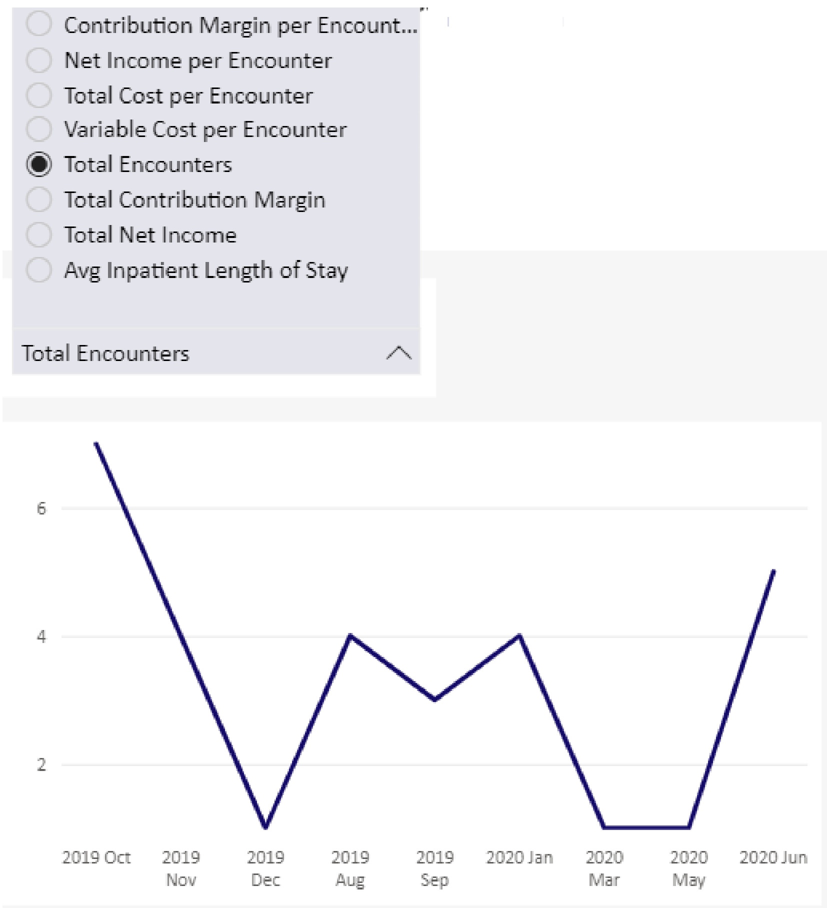
▶ Patient Origin

Use this interactive map to view your patient clusters. Use the + and - controls to drill down and up in the map. At the ZIP code level, you can hover on a bubble to view the ZIP code and the number of encounters from there during your date range. When you select a ZIP code bubble, the chart and tables on the page redisplay with information about just those encounters.



▶ Measure chart

Use this chart to view any of several elements on a graph.



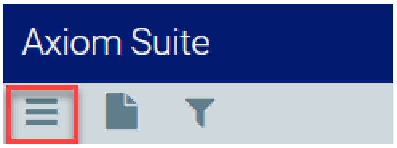
▶ Attending Provider Net Income and Contribution Margin

This table lists the attending providers in your data set, with encounters, financials, and contribution margins.

Attending Provider Net Income and Contribution Margin -

Attending Provider	Encounters	Net Revenue	Variable Cost	Contribution Margin	Total Cost	Net Income
Shetterly,	1	$4,982	$0	$4,982	$0	$4,982
Giunta, Farhan	1	$591	$0	$591	$0	$591
Evertz,	3	$429	$0	$429	$0	$429
Van Zeghbroeck, Rhea	2	$399	$0	$399	$0	$399
Almanza-Parra, La'Quan	1	$349	$44	$304	$63	$286
Townley, Blayne	2	$663	$265	$398	$378	$285
Hudak,	2	$283	$0	$283	$0	$283
Gilg, Gaines	2	$228	$0	$228	$0	$228
Ringer, Kal-El	3	$588	$264	$324	$376	$211
Serratos, Sherron	1	$202	$0	$202	$0	$202
Herbert,	1	$199	$0	$199	$0	$199
Fronteraocasio,	1	$195	$0	$195	$0	$195
Total	**993**	**$323,876**	**$926,247**	**($602,371)**	**$1,319,902**	**($996,026)**

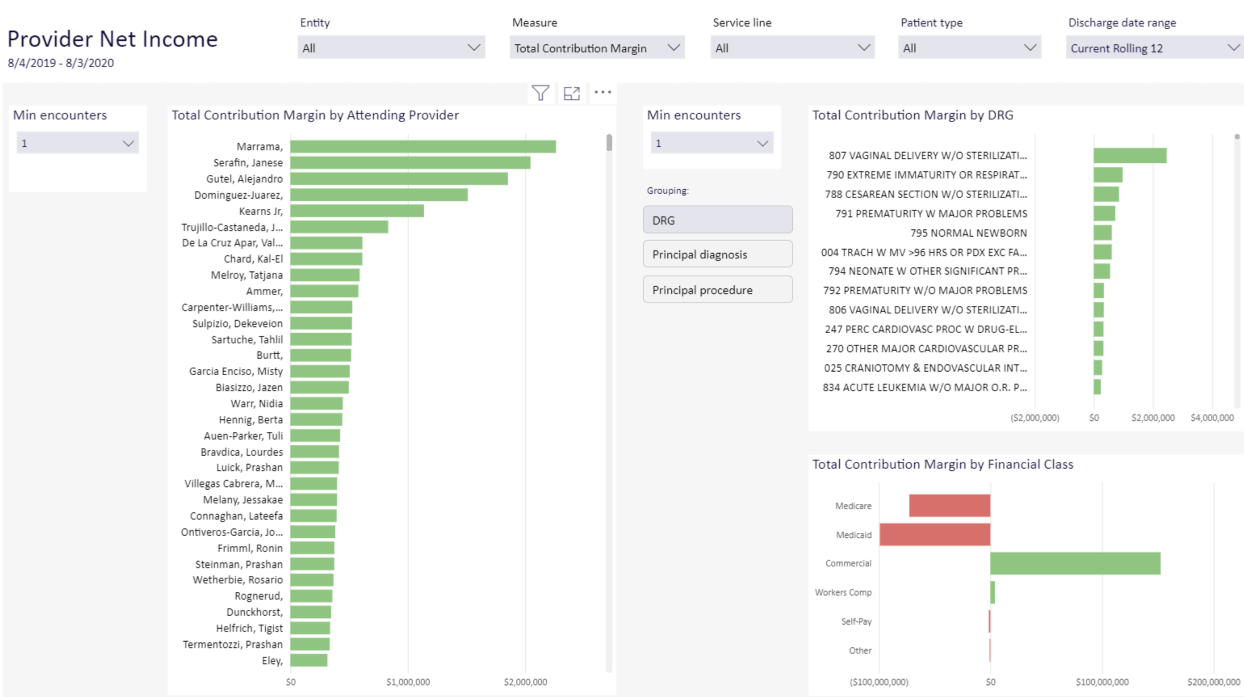
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Provider Net Income

Overview

This report contains information let you measure total net income or total contribution margin by provider.



Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Measure

Use the Measure drop-down to select either Total Net Income or Total Contribution Manager.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

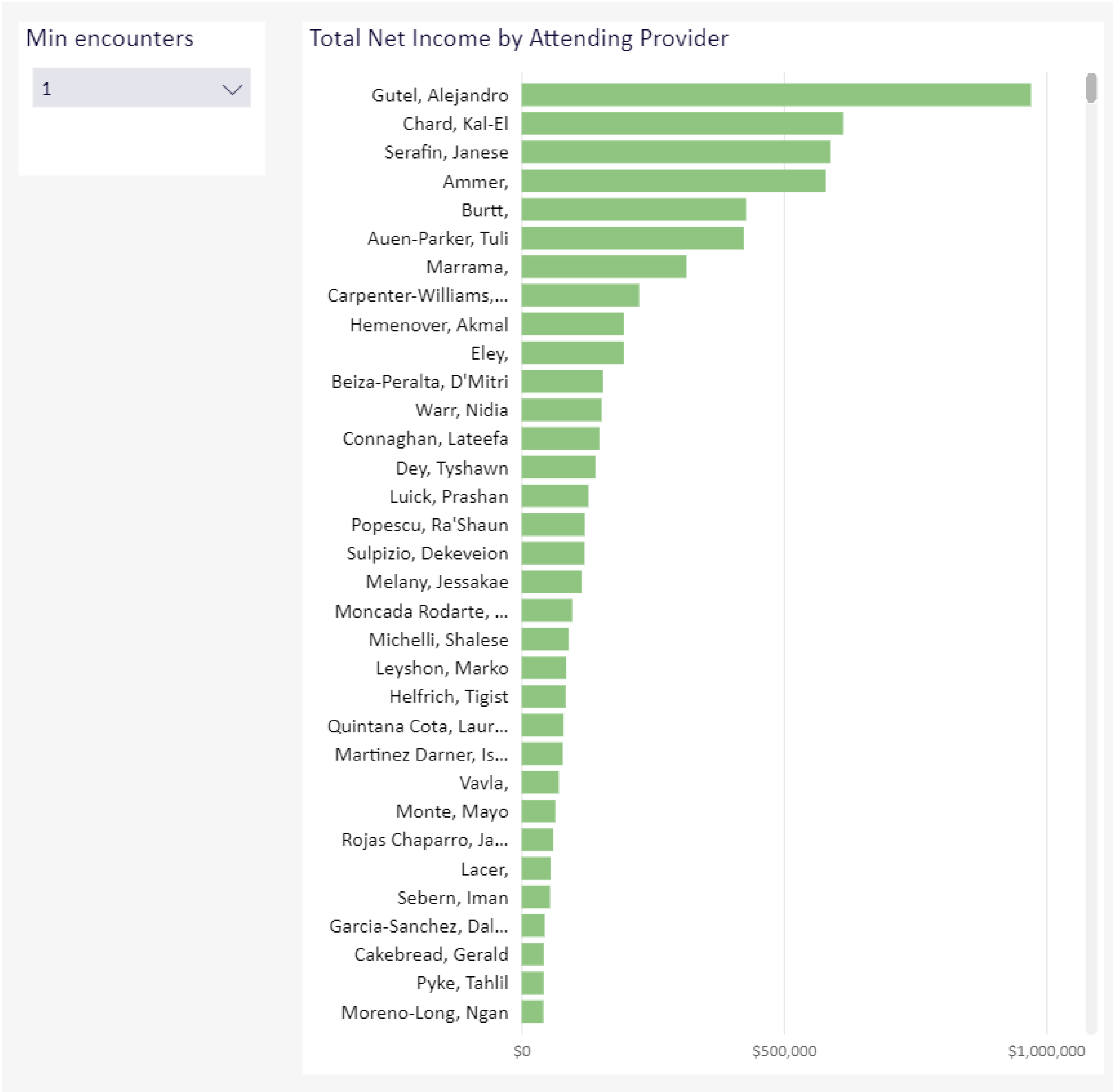
Discharge date range

The drop-down lets you choose a date range for your view. The default is the current rolling 12 months; other options include current month to date and previous month to date.

> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

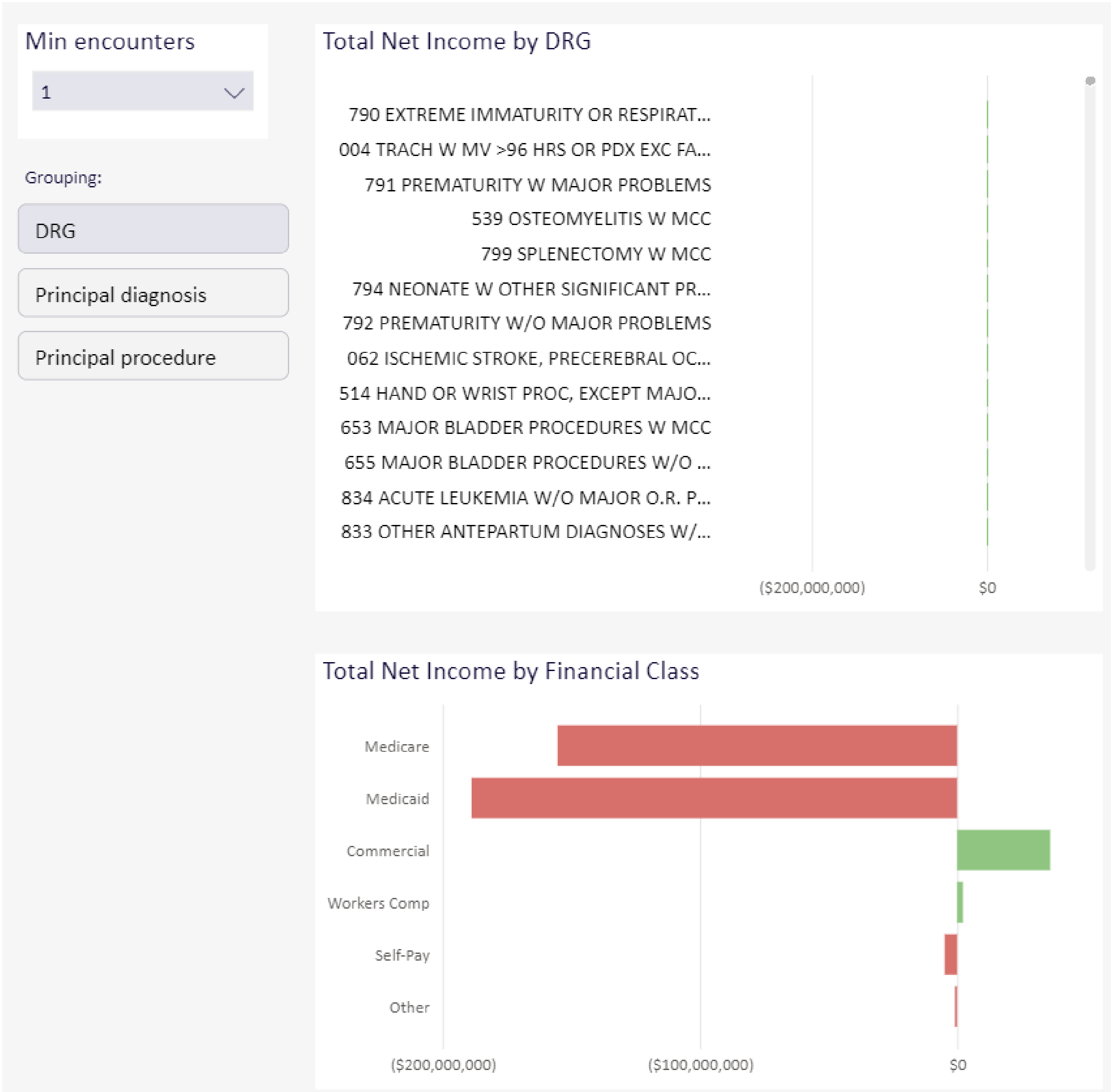
▶ Total Net Income by Attending Provider

This bar chart lists all of the attending providers in the specified data set. You can view net income or contribution margins by all attending providers or you can select a single attending provider. When a single provider is selected, the charts in the report redisplay for just that provider.

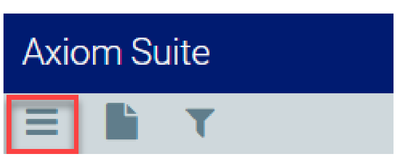


▶ Total Net Income by DRG, principal diagnosis, or principal procedure

Use the grouping feature to let you view total net income / contribution margin by DRG, principal diagnosis, or principal procedure. Total net income / contribution margin by financial class is also displayed.



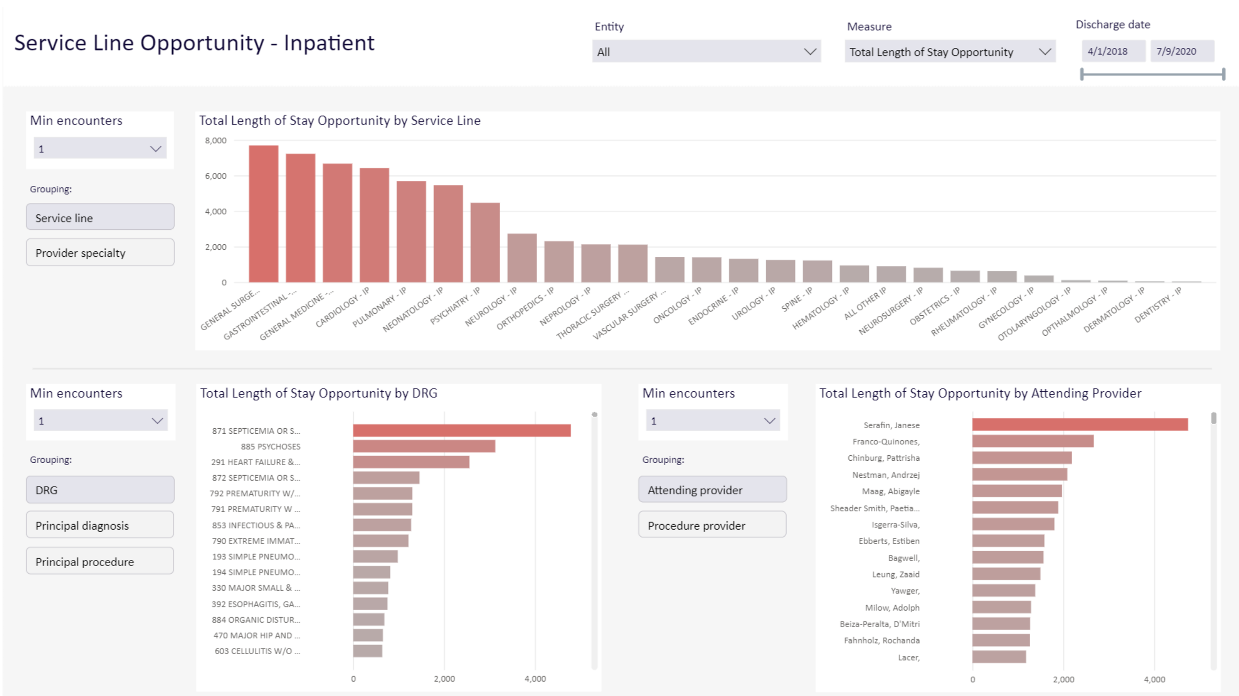
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Service Line Opportunity Inpatient

Overview

Use the Service Line Opportunity - Inpatient report to analyze length of stay opportunities by several factors, each with specialized groupings. With these options, you can focus on the exact view of the data you require.



Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Measure

This drop-down let you select either Total Cost Opportunity or Total Length of Stay Opportunity as the basis for the report.

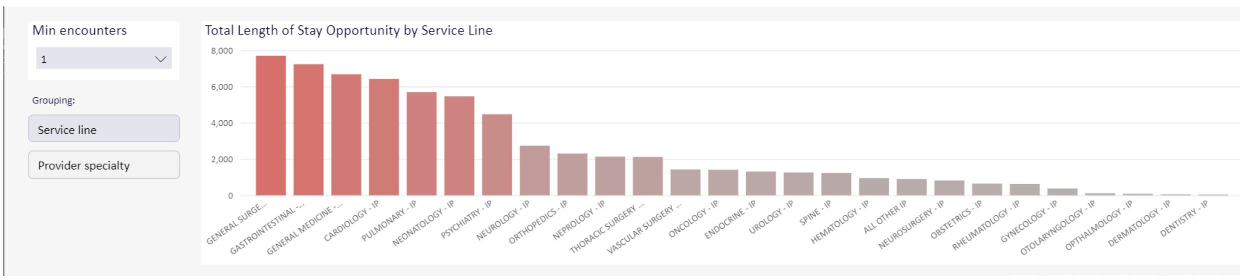
Discharge date

Use this control to specify the date range for the report. You can use the slider or, for a precise setting, click in each date box to choose dates from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

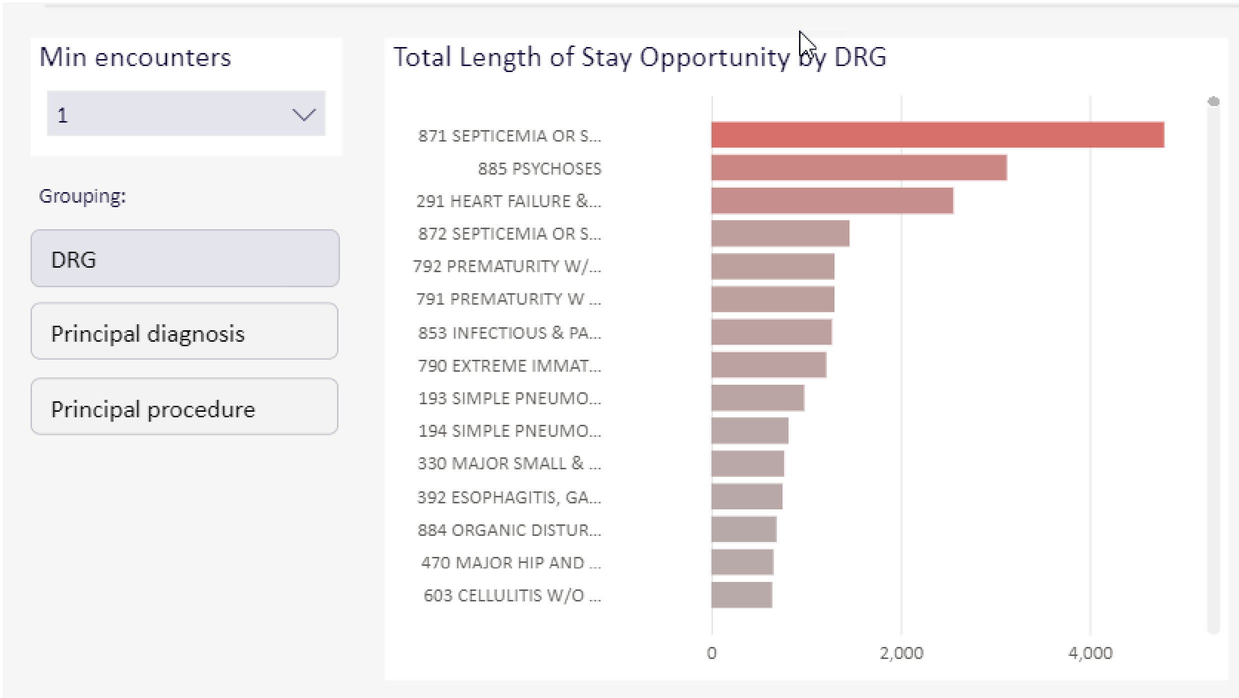
Total Length of Stay Opportunity by Service Line

Use this bar chart to view data grouped by Service line or Provider specialty. You can also change the minimum number of encounters for your view of the data.



Total Length of Stay Opportunity by DRG

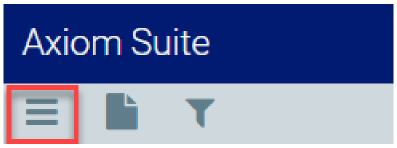
Use this chart to view data grouped by DRG, Principal Diagnosis, or Principal procedure. You can also change the minimum number of encounters for your view of the data.



▶ Total Length of Stay Opportunity by Attending Provider

Use this chart to view data grouped by Attending provider or Procedure provider. You can also change the minimum number of encounters for your view of the data.

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Volumes and Financials dashboard

The Volumes and Financials dashboard reports daily volumes and financial performance and trends on inpatient, emergency, outpatient surgery and other patient types to enable an organization to understand how their performance compares to the same time in the previous year or rolling 12 months.

Using Axiom Intelligence, users have a rich toolset that let's them easily specify the granularity of the data to work with. They can easily choose a specific entity in the institution, the range of dates for the data, and other controls to achieve the correct set of data to work with.

▶ Volumes and Financials dashboard

Use this report to examine encounters by patient type; compare encounters for this year to the previous year, and view net income by month. The report includes a Month Detail table that fully examines financials for your data set.

▶ Trends

Use this report to view graphs of trends in encounters and net income over your chosen date range. A table with encounters, estimated revue, total cost, and net income for each month in your date range is shown.

▶ Provider Detail

This report let you view detailed financial information for attending providers and procedure providers. Graphs showing percentages of encounters by financial class.

▶ Provider Net Income

Use this report to view a bubble chart that displays volume and net income by attending provider. A list of encounters by service line lets you choose a single service line to view in the bubble chart.

Inpatient Mortality

Use this report to view data about deaths in your institution. A graph shows, by percentage, inpatient mortality rates over the date range you specify. A table shows mortality rates by attending provider, DRG, provider specialty, or service line. Another graph shows deaths by age category.

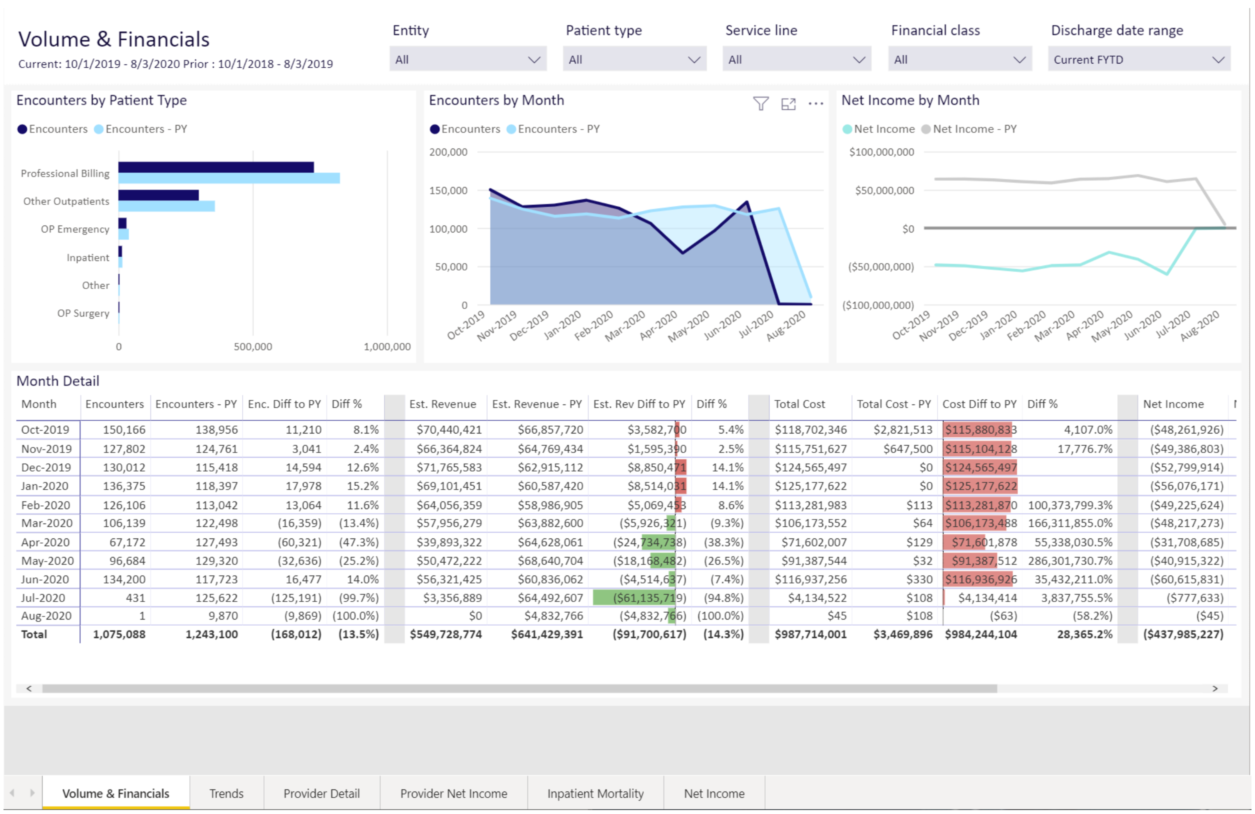
Net Income

The Net Income report displays net income for a fiscal year.

Volume & Financials

Overview

Use this report to view financial details for each month in your date range.



Month	Encounters	Encounters - PY	Enc. Diff to PY	Diff %	Est. Revenue	Est. Revenue - PY	Est. Rev Diff to PY	Diff %	Total Cost	Total Cost - PY	Cost Diff to PY	Diff %	Net Income
Oct-2019	150,166	138,956	11,210	8.1%	$70,440,421	$66,857,720	$3,582,700	5.4%	$118,702,346	$2,821,513	$115,880,833	4,107.0%	($48,261,926)
Nov-2019	127,802	124,761	3,041	2.4%	$66,364,824	$64,769,434	$1,595,390	2.5%	$115,751,627	$647,500	$115,104,128	17,776.7%	($49,386,803)
Dec-2019	130,012	115,418	14,594	12.6%	$71,765,583	$62,915,112	$8,850,471	14.1%	$124,565,497	$0	$124,565,497		($52,799,914)
Jan-2020	136,375	118,397	17,978	15.2%	$69,101,451	$60,587,420	$8,514,031	14.1%	$125,177,622	$0	$125,177,622		($56,076,171)
Feb-2020	126,106	113,042	13,064	11.6%	$64,056,359	$58,986,905	$5,069,453	8.6%	$113,281,983	$113	$113,281,870	100,373,799.3%	($49,225,624)
Mar-2020	106,139	122,498	(16,359)	(13.4%)	$57,956,279	$63,882,600	($5,926,321)	(9.3%)	$106,173,552	$64	$106,173,488	166,311,855.0%	($48,217,273)
Apr-2020	67,172	127,493	(60,321)	(47.3%)	$39,893,322	$64,628,061	($24,734,738)	(38.3%)	$71,602,007	$129	$71,601,878	55,338,030.5%	($31,708,685)
May-2020	96,684	129,320	(32,636)	(25.2%)	$50,472,222	$68,640,704	($18,168,482)	(26.5%)	$91,387,544	$32	$91,387,512	286,301,730.7%	($40,915,322)
Jun-2020	134,200	117,723	16,477	14.0%	$56,321,425	$60,836,062	($4,514,637)	(7.4%)	$116,937,256	$330	$116,936,926	35,432,211.0%	($60,615,831)
Jul-2020	431	125,622	(125,191)	(99.7%)	$3,356,889	$64,492,607	($61,135,719)	(94.8%)	$4,134,522	$108	$4,134,414	3,837,755.5%	($777,633)
Aug-2020	1	9,870	(9,869)	(100.0%)	$0	$4,832,766	($4,832,766)	(100.0%)	$45	$108	($63)	(58.2%)	($45)
Total	**1,075,088**	**1,243,100**	**(168,012)**	**(13.5%)**	**$549,728,774**	**$641,429,391**	**($91,700,617)**	**(14.3%)**	**$987,714,001**	**$3,469,896**	**$984,244,104**	**28,365.2%**	**($437,985,227)**

Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Financial class

This drop-down lists types of payors. You can view all payors or one or more individual payors. To select multiple payor, press and hold the CTRL key while you select.

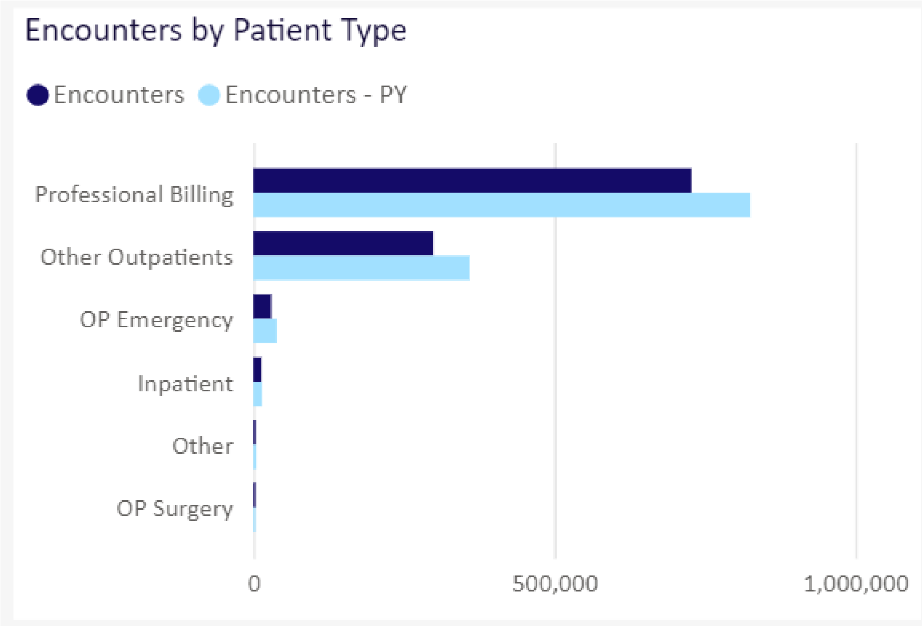
Discharge date range

The drop-down lets you choose a date range for your view. The default is the current rolling 12 months; other options include current month to date and previous month to date. You can also select specific months in the past.

> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

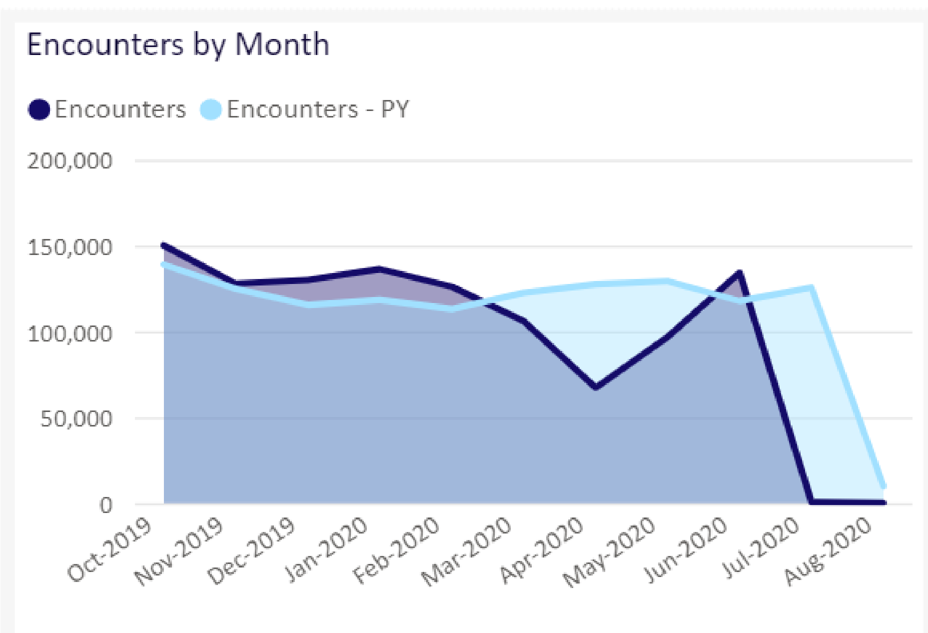
▶ Encounters by Patient Type

This bar chart shows all encounters by patient types compared to the previous year, for the date range you selected.



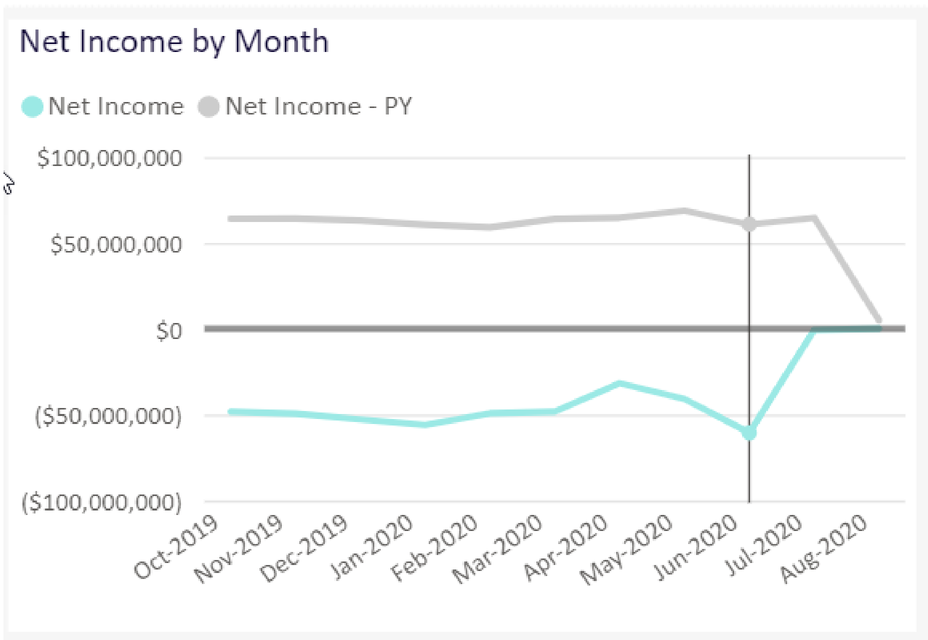
Encounters by Month

This area chart shows all encounters by month compared to the previous year, for the date range you selected.



Net Income by Month

This chart shows net income, by month, for the date range you selected, compared to the previous year.



Month Detail

This table provides a wide range of financials for encounters, by month, for the date range you selected. Four sets of data are examined: encounters, estimated revenue, total cost, and net income.

Month Detail

Month	Encounters	Encounters - PY	Enc. Diff to PY	Diff %	Est. Revenue	Est. Revenue - PY	Est. Rev Diff to PY	Diff %	Total Cost	Total Cost - PY	Cost Diff to PY	Diff %	Net Income
Oct-2019	150,166	138,956	11,210	8.1%	$70,440,421	$66,857,720	$3,582,700	5.4%	$118,702,346	$2,821,513	$115,880,833	4,107.0%	($48,261,926)
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Jan-2020	136,375	118,397	17,978	15.2%	$69,101,451	$60,587,420	$8,514,031	14.1%	$125,177,622	$0	$125,177,622		($56,076,171)
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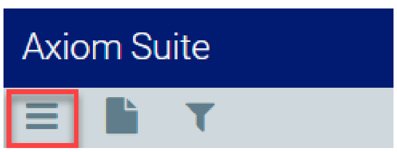
Aug-2020	1	9,870	(9,869)	(100.0%)	$0	$4,832,766	($4,832,766)	(100.0%)	$45	$108	($63)	(58.2%)	($45)
Total	**1,075,088**	**1,243,100**	**(168,012)**	**(13.5%)**	**$549,728,774**	**$641,429,391**	**($91,700,617)**	**(14.3%)**	**$987,714,001**	**$3,469,896**	**$984,244,104**	**28,365.2%**	**($437,985,227)**

Month	The month and year
Encounters	Number of encounters for the month
Encounters- PY	Number of encounters for the month in the previous year
Enc. Diff to PY	Difference in encounters for this month and the month in the previous year
Diff %	Difference expressed as a percentage
Est. Revenue	Estimated revenue for this month
Est. Revenue - PY	Estimated revenue for month in the previous year

Est. Rev Diff to PY	Difference in estimated revenue for this month and the month in the previous year
Diff %	Difference expressed as a percentage
Total Cost	Total cost of all encounters for the month
Total Cost - PY	Total cost of all encounters for the month in the previous year
Cost Diff to PY	Difference in total cost for this month and the month in the previous year
Diff %	Difference expressed as a percentage
Net Income	Net income for the month
Net Income - PY	Net income for the month in the previous year
Income Diff to PY	Different in net income for this month and the month in the previous year
Diff %	Difference expressed as a percentage

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Trends

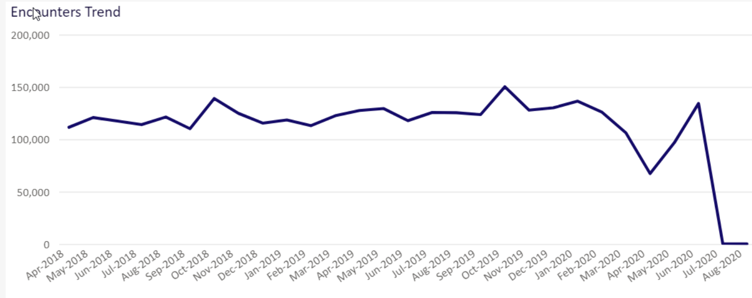
▶ Overview

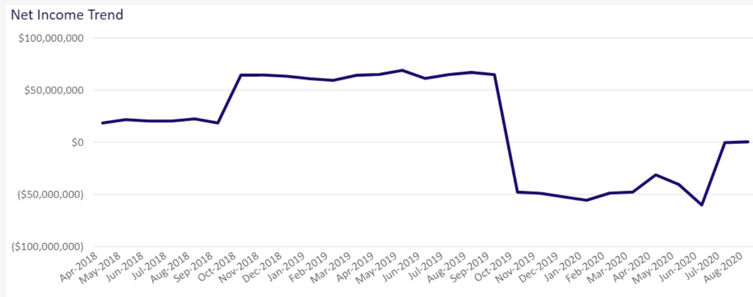
Use this report to examine trends in encounters and net income for the date range you specify/

Trends

Entity: All | Patient type: All | Service line: All | Financial class: All | Discharge date range: 4/1/2018 – 8/3/2020

Month	Encounters	Est. Revenue	Total Cost	Net Income
Apr-2018	111,416	$57,196,362	$39,156,112	$18,040,250
May-2018	120,735	$63,542,871	$42,215,479	$21,327,392
Jun-2018	117,355	$60,351,072	$40,373,595	$19,977,476
Jul-2018	113,941	$60,439,565	$40,436,127	$20,003,438
Aug-2018	121,263	$63,522,881	$41,444,722	$22,078,159
Sep-2018	110,057	$56,956,203	$38,804,333	$18,151,870
Oct-2018	138,956	$66,857,720	$2,821,513	$64,036,207
Nov-2018	124,761	$64,769,434	$647,500	$64,121,934
Dec-2018	115,418	$62,915,112	$0	$62,915,112
Jan-2019	118,397	$60,587,420	$0	$60,587,420
Feb-2019	113,042	$58,986,905	$113	$58,986,793
Mar-2019	122,498	$63,882,600	$64	$63,882,536
Apr-2019	127,493	$64,628,061	$129	$64,627,931
May-2019	129,320	$68,640,704	$32	$68,640,672
Jun-2019	117,723	$60,836,062	$330	$60,835,732
Jul-2019	125,622	$64,492,607	$108	$64,492,500
Aug-2019	125,339	$66,624,103	$1,412	$66,622,692
Sep-2019	123,567	$64,532,879	$14,275	$64,518,605
Oct-2019	150,166	$70,440,421	$118,702,346	($48,261,926)
Nov-2019	127,802	$66,364,824	$115,751,627	($49,386,803)
Dec-2019	130,012	$71,765,583	$124,565,497	($52,799,914)
Jan-2020	136,375	$69,101,451	$125,177,622	($56,076,171)
Feb-2020	126,106	$64,056,359	$113,281,983	($49,225,624)
Mar-2020	106,139	$57,956,279	$106,173,552	($48,217,273)
Apr-2020	67,172	$39,893,322	$71,602,007	($31,708,685)
May-2020	96,684	$50,472,222	$91,387,544	($40,915,322)
Jun-2020	134,200	$56,321,425	$116,937,256	($60,615,831)
Jul-2020	431	$3,356,889	$4,134,522	($777,633)
Aug-2020	1	$0	$45	($45)
Total	**3,251,991**	**$1,679,491,335**	**$1,233,629,845**	**$445,861,490**





▶ Slicers

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Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Financial class

This drop-down lists types of payors. You can view all payors or one or more individual payors. To select multiple payor, press and hold the CTRL key while you select.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

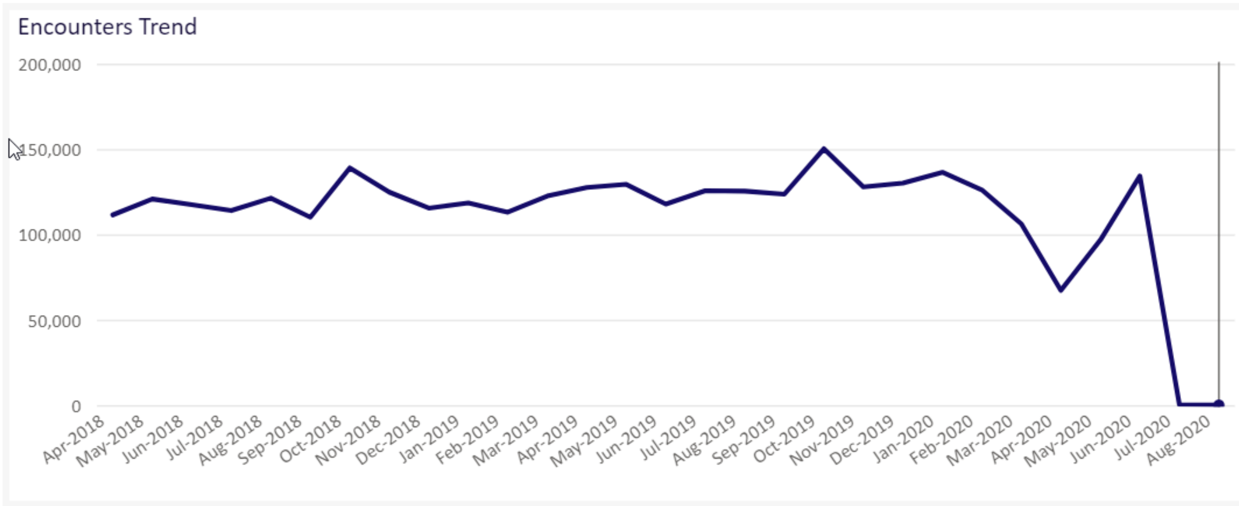
Monthly encounters table

This table provide encounter numbers, estimated revenue, total cost, and net income for each month in the date range you specified.

Month	Encounters	Est. Revenue	Total Cost	Net Income
Apr-2018	111,416	$57,196,362	$39,156,112	$18,040,250
May-2018	120,735	$63,542,871	$42,215,479	$21,327,392
Jun-2018	117,355	$60,351,072	$40,373,595	$19,977,476
Jul-2018	113,941	$60,439,565	$40,436,127	$20,003,438
Aug-2018	121,263	$63,522,881	$41,444,722	$22,078,159
Sep-2018	110,057	$56,956,203	$38,804,333	$18,151,870
Oct-2018	138,956	$66,857,720	$2,821,513	$64,036,207
Nov-2018	124,761	$64,769,434	$647,500	$64,121,934
Dec-2018	115,418	$62,915,112	$0	$62,915,112
Jan-2019	118,397	$60,587,420	$0	$60,587,420
Feb-2019	113,042	$58,986,905	$113	$58,986,793
Mar-2019	122,498	$63,882,600	$64	$63,882,536
Apr-2019	127,493	$64,628,061	$129	$64,627,931
May-2019	129,320	$68,640,704	$32	$68,640,672
Jun-2019	117,723	$60,836,062	$330	$60,835,732
Jul-2019	125,622	$64,492,607	$108	$64,492,500
Aug-2019	125,339	$66,624,103	$1,412	$66,622,692
Sep-2019	123,567	$64,532,879	$14,275	$64,518,605
Oct-2019	150,166	$70,440,421	$118,702,346	($48,261,926)
Nov-2019	127,802	$66,364,824	$115,751,627	($49,386,803)
Dec-2019	130,012	$71,765,583	$124,565,497	($52,799,914)
Jan-2020	136,375	$69,101,451	$125,177,622	($56,076,171)
Feb-2020	126,106	$64,056,359	$113,281,983	($49,225,624)
Mar-2020	106,139	$57,956,279	$106,173,552	($48,217,273)
Apr-2020	67,172	$39,893,322	$71,602,007	($31,708,685)
May-2020	96,684	$50,472,222	$91,387,544	($40,915,322)
Jun-2020	134,200	$56,321,425	$116,937,256	($60,615,831)
Jul-2020	431	$3,356,889	$4,134,522	($777,633)
Aug-2020	1	$0	$45	($45)
Total	**3,251,991**	**$1,679,491,335**	**$1,233,629,845**	**$445,861,490**

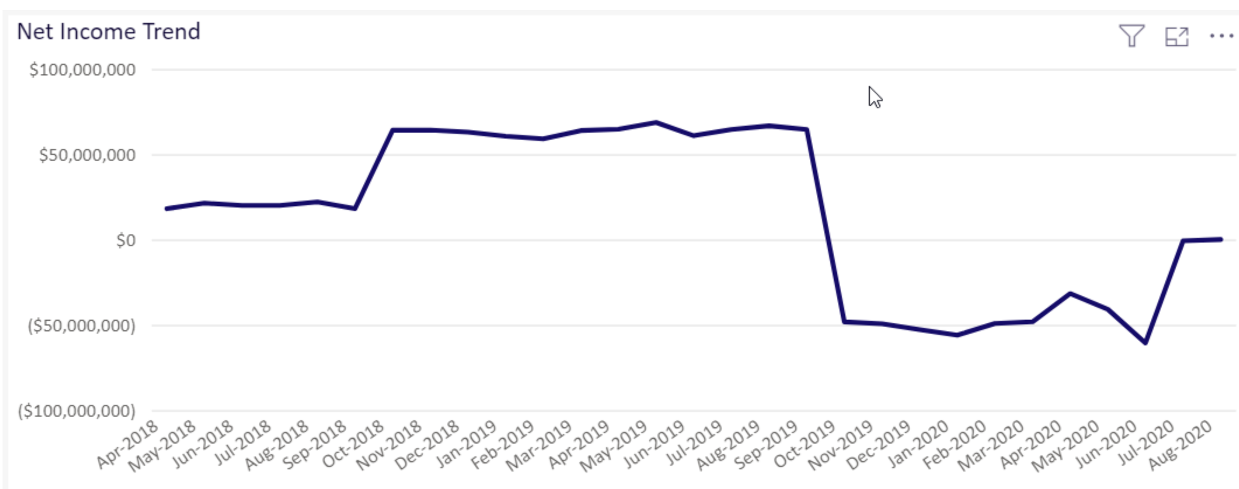
Encounters Trend

This chart graphs encounters by month for your date range. Hover over any point on the graph and click to view the precise number of encounters for that month.



Net Income Trend

This chart graphs net income by month for your date range. Hover over any point on the graph and click to view the actual net income for that month.

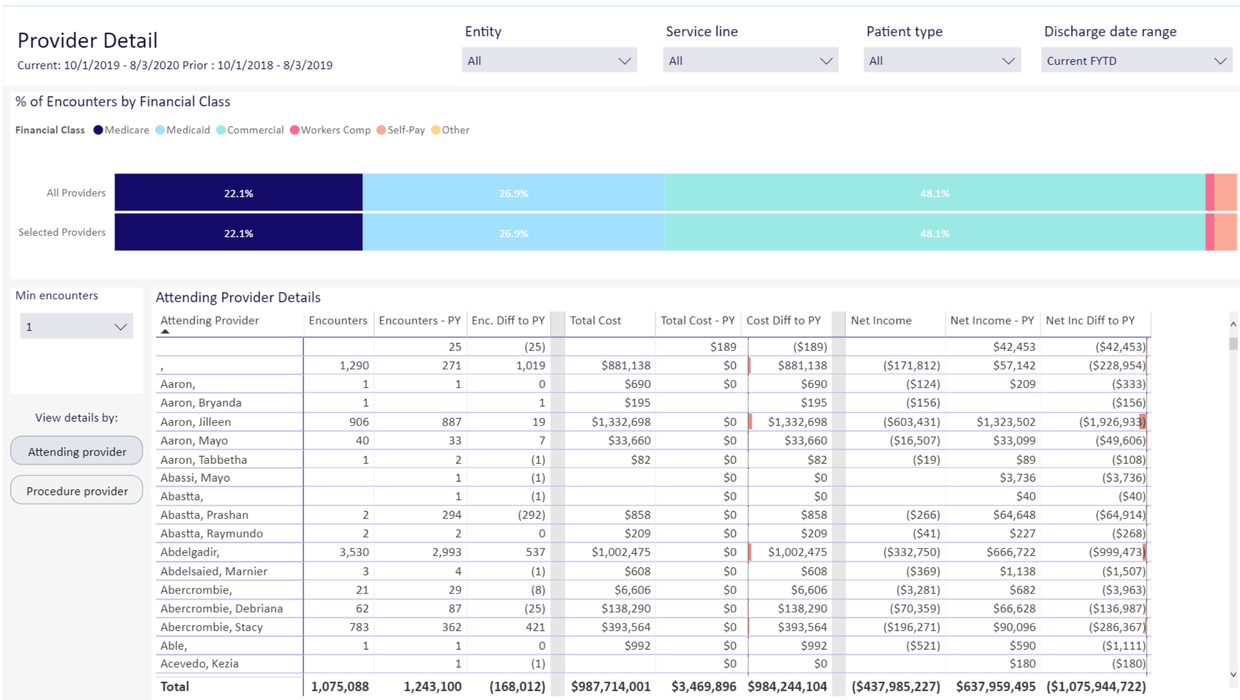


- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.

Provider Detail

▶ Overview

This report examines encounters and detailed financial records for both attending providers and procedure providers.



Attending Provider	Encounters	Encounters - PY	Enc. Diff to PY	Total Cost	Total Cost - PY	Cost Diff to PY	Net Income	Net Income - PY	Net Inc Diff to PY
		25	(25)		$189	($189)		$42,453	($42,453)
,	1,290	271	1,019	$881,138	$0	$881,138	($171,812)	$57,142	($228,954)
Aaron,	1	1	0	$690	$0	$690	($124)	$209	($333)
Aaron, Bryanda	1		1	$195		$195	($156)		($156)
Aaron, Jilleen	906	887	19	$1,332,698	$0	$1,332,698	($603,431)	$1,323,502	($1,926,933)
Aaron, Mayo	40	33	7	$33,660	$0	$33,660	($16,507)	$33,099	($49,606)
Aaron, Tabbetha	1	2	(1)	$82	$0	$82	($19)	$89	($108)
Abassi, Mayo		1	(1)		$0	$0		$3,736	($3,736)
Abastta,		1	(1)		$0	$0		$40	($40)
Abastta, Prashan	2	294	(292)	$858	$0	$858	($266)	$64,648	($64,914)
Abastta, Raymundo	2	2	0	$209	$0	$209	($41)	$227	($268)
Abdelgadir,	3,530	2,993	537	$1,002,475	$0	$1,002,475	($332,750)	$666,722	($999,473)
Abdelsaied, Marnier	3	4	(1)	$608	$0	$608	($369)	$1,138	($1,507)
Abercrombie,	21	29	(8)	$6,606	$0	$6,606	($3,281)	$682	($3,963)
Abercrombie, Debriana	62	87	(25)	$138,290	$0	$138,290	($70,359)	$66,628	($136,987)
Abercrombie, Stacy	783	362	421	$393,564	$0	$393,564	($196,271)	$90,096	($286,367)
Able,	1	1	0	$992	$0	$992	($521)	$590	($1,111)
Acevedo, Kezia		1	(1)		$0	$0		$180	($180)
Total	**1,075,088**	**1,243,100**	**(168,012)**	**$987,714,001**	**$3,469,896**	**$984,244,104**	**($437,985,227)**	**$637,959,495**	**($1,075,944,722)**

▶ Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

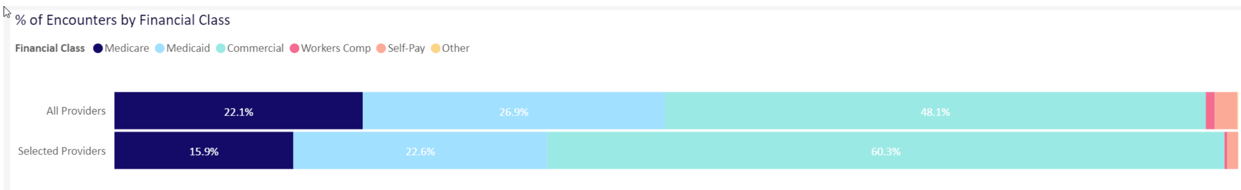
Discharge date range

The drop-down lets you choose a date range for your view. The default is the current rolling 12 months; other options include current month to date and previous month to date.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Percentage of Encounters by Financial Class

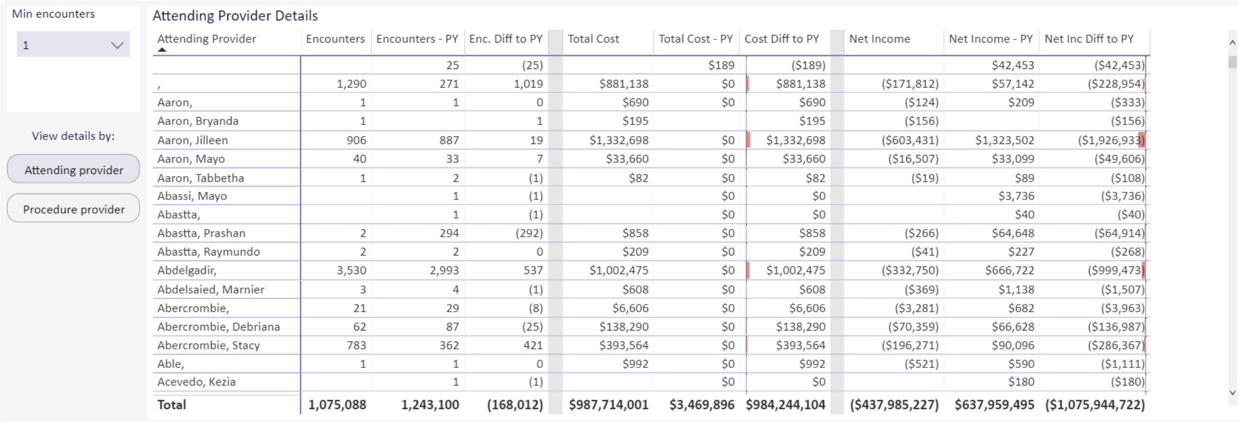
This bar chart shows the percentage of encounters by financial class. The All Providers bar shows the percentages for all providers. The second bar shows the percentages for a provider you can select from the Attending Provider Details table.



Attending / Procedure Provider Details

This table shows detailed encounter and financial information for all of the providers in your institution, based on the data set you selected. You can view these details for either attending providers or procedure providers. You can also use the Min encounters drop-down to choose the minimum number of encounters for a providers to be included in the report.

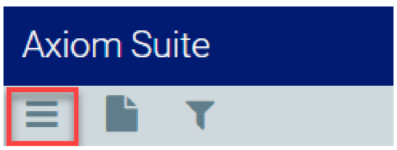
Attending or Procedure Provider	Name of provider
Encounters	Number of encounters for provider during your date range
Encounters - PY	Number of encounters in the previous year
Enc. Diff to PY	Difference between current and previous year
Total Cost	Total cost of encounters
Total Cost - PY	Total cost of encounters in previous year
Cost Diff to PY	Difference in cost between current and previous year
Net Income	Net income for encounters
Net Income - PY	Net income for encounters in previous year
Net Inc Diff to PY	Difference in net income for encounters



Attending Provider Details

Attending Provider	Encounters	Encounters - PY	Enc. Diff to PY	Total Cost	Total Cost - PY	Cost Diff to PY	Net Income	Net Income - PY	Net Inc Diff to PY
		25	(25)		$189	($189)		$42,453	($42,453)
,	1,290	271	1,019	$881,138	$0	$881,138	($171,812)	$57,142	($228,954)
Aaron,	1	1	0	$690	$0	$690	($124)	$209	($333)
Aaron, Bryanda	1		1	$195		$195	($156)		($156)
Aaron, Jilleen	906	887	19	$1,332,698	$0	$1,332,698	($603,431)	$1,323,502	($1,926,933)
Aaron, Mayo	40	33	7	$33,660	$0	$33,660	($16,507)	$33,099	($49,606)
Aaron, Tabbetha	1	2	(1)	$82	$0	$82	($19)	$89	($108)
Abassi, Mayo		1	(1)		$0	$0		$3,736	($3,736)
Abastta,		1	(1)		$0	$0		$40	($40)
Abastta, Prashan	2	294	(292)	$858	$0	$858	($266)	$64,648	($64,914)
Abastta, Raymundo	2	2	0	$209	$0	$209	($41)	$227	($268)
Abdelgadir,	3,530	2,993	537	$1,002,475	$0	$1,002,475	($332,750)	$666,722	($999,473)
Abdelsaied, Marnier	3	4	(1)	$608	$0	$608	($369)	$1,138	($1,507)
Abercrombie,	21	29	(8)	$6,606	$0	$6,606	($3,281)	$682	($3,963)
Abercrombie, Debriana	62	87	(25)	$138,290	$0	$138,290	($70,359)	$66,628	($136,987)
Abercrombie, Stacy	783	362	421	$393,564	$0	$393,564	($196,271)	$90,096	($286,367)
Able,	1	1	0	$992	$0	$992	($521)	$590	($1,111)
Acevedo, Kezia		1	(1)		$0	$0		$180	($180)
Total	**1,075,088**	**1,243,100**	**(168,012)**	**$987,714,001**	**$3,469,896**	**$984,244,104**	**($437,985,227)**	**$637,959,495**	**($1,075,944,722)**

- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Provider Net Income

Overview

Use this report to examine provider net income by service line for a fiscal year.

▶ Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

This drop-down lists types of payors. You can view all payors or one or more individual payors. To select multiple payor, press and hold the CTRL key while you select.

Fiscal Year

This drop-down lists fiscal years that you can select for viewing.

> **TIP:** Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Encounters by Service Line

This table lists service lines at your institution. When you open this report, all providers for all services lines are selected and displayed on the bubble chart. Select an individual service line to only show those providers for the fiscal year. You can further filter the report by selecting a minimum number of encounters per provider to include.

Min encounters

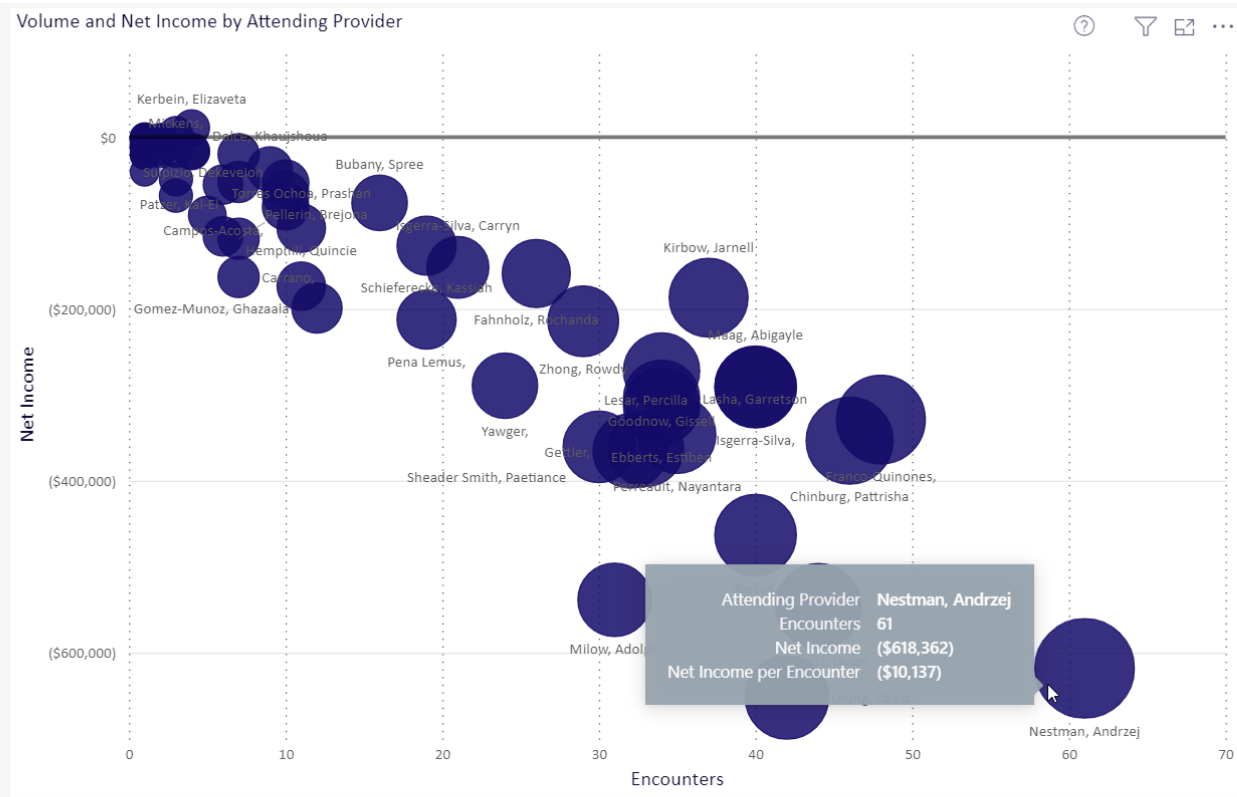
1

Encounters by Service Line

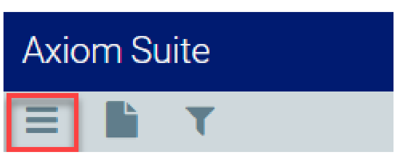
Service Line	Encounters
VASCULAR SURGERY - IP	350
UROLOGY - IP	283
THORACIC SURGERY - IP	376
SPINE - IP	419
RHEUMATOLOGY - IP	106
PULMONARY - IP	980
PSYCHIATRY - IP	415
Professional Billing	728,330
OTOLARYNGOLOGY - IP	62
ORTHOPEDICS - IP	595
OPTHALMOLOGY - IP	17
OP SURGERY - OP	17,965
OP EMERGENCY - OP	272
ONCOLOGY - IP	221
OBSTETRICS - IP	1,354
NEUROSURGERY - IP	107
NEUROLOGY - IP	467
NEPROLOGY - IP	385
NEONATOLOGY - IP	805
HEMATOLOGY - IP	950
GYNECOLOGY - IP	75
GENERAL SURGERY - IP	1,290
GENERAL MEDICINE - IP	960
GASTROINTESTINAL - IP	1,268
Total	**1,075,088**

Volume and Net Income by Attending Provider

Use this bubble chart to view attending providers for a service line. The size of a bubble is based on the number of encounters for a provider. The x-axis measures the number of encounters while the y-axis measure the net income. If you hover on a bubble, a pop-up window displays encounter and net income data for that provider.



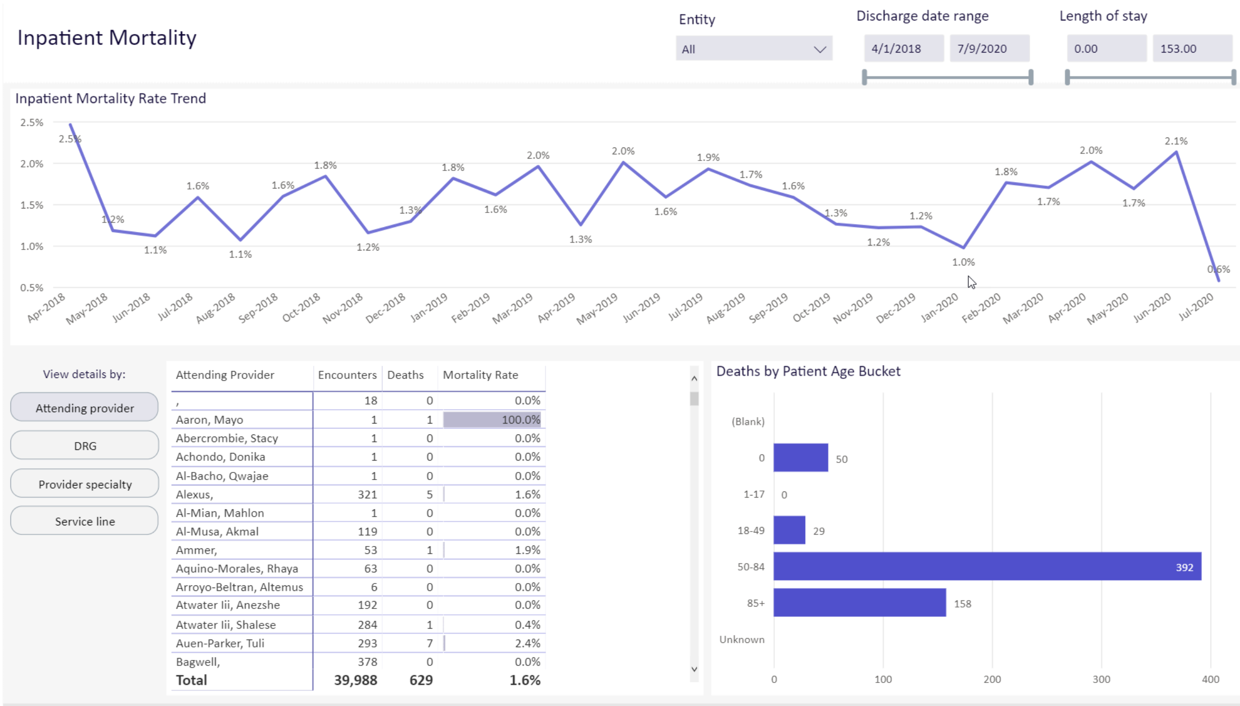
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Inpatient Mortality

Overview

Use this report to examine the institution's mortality rates by date range and/or length of stay. You can view mortality details by several different categories and see patient death by age range.



Slicers

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Discharge date range

This control lets you select a range of dates of discharge. You can use the slider or, for more precision, click on each date box to choose a date from a calendar.

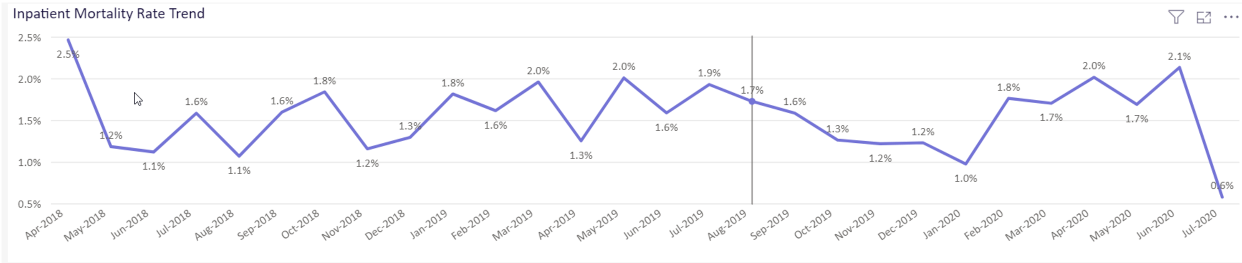
Length of stay

This control lets you select a range of days for length of stay. You can use the slider or, for more precision, click on each box to type in a number of days.

Inpatient Mortality Rate Trend

This chart shows mortality trends over your date range. You can view the trend for all providers, or choose a single attending physicians, DRG, provider specialty, or service line to view.

You can move your cursor over any node on the chart to view mortality details.



▶ View details by

This chart allows you to choose to view details by attending provider, DRG, provider specialty, or service line. For each category, you will see the number of encounters and deaths and the effective mortality rate. The choice of category determines the data for the rate trend chart.

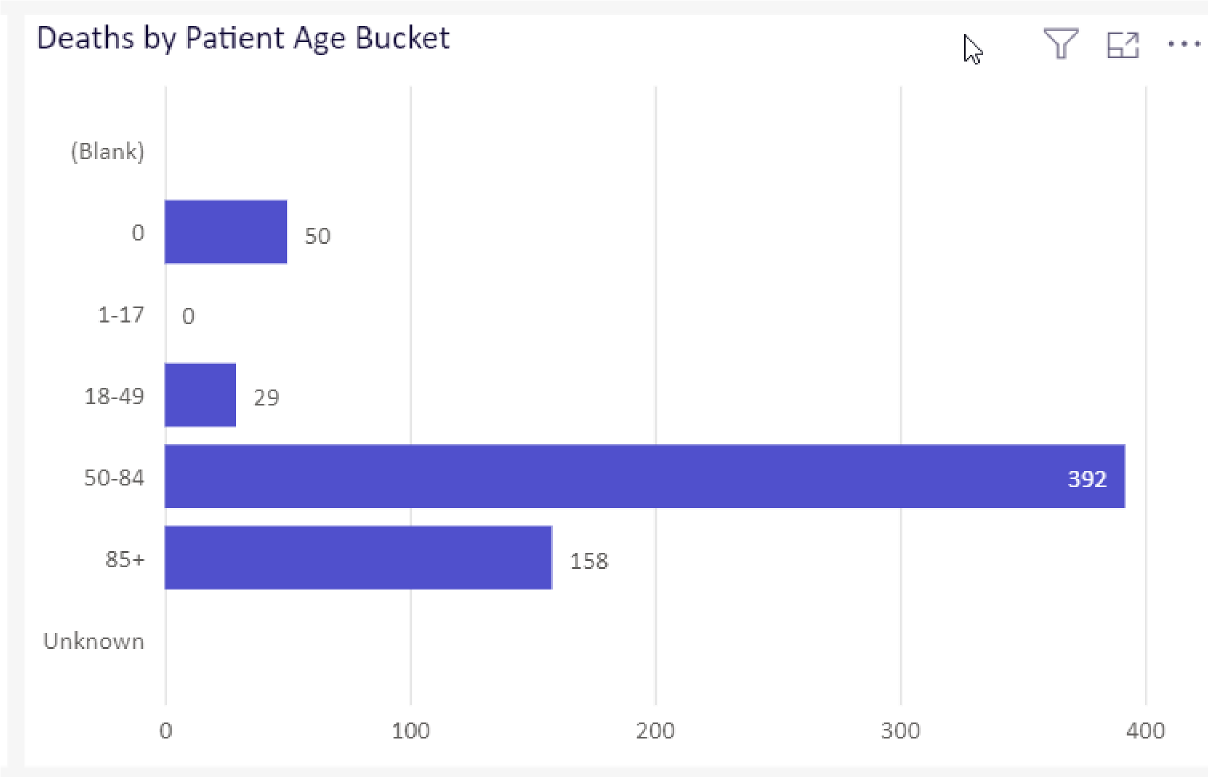
View details by:

- Attending provider
- DRG
- Provider specialty
- Service line

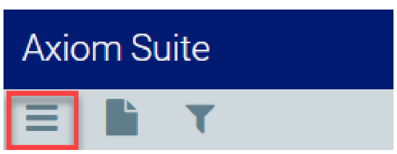
Attending Provider	Encounters	Deaths	Mortality Rate
,	18	0	0.0%
Aaron, Mayo	1	1	100.0%
Abercrombie, Stacy	1	0	0.0%
Achondo, Donika	1	0	0.0%
Al-Bacho, Qwajae	1	0	0.0%
Alexus,	321	5	1.6%
Al-Mian, Mahlon	1	0	0.0%
Al-Musa, Akmal	119	0	0.0%
Ammer,	53	1	1.9%
Aquino-Morales, Rhaya	63	0	0.0%
Arroyo-Beltran, Altemus	6	0	0.0%
Atwater Iii, Anezshe	192	0	0.0%
Atwater Iii, Shalese	284	1	0.4%
Auen-Parker, Tuli	293	7	2.4%
Bagwell,	378	0	0.0%
Total	**39,988**	**629**	**1.6%**

▶ Death by Patient Age Bucket

This bar chart shows the number of inpatient deaths by standard age categories.



- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Net Income

▶ Overview

Use this report to examine net income for your institution for a fiscal year.

▶ Slicers

This report provides filtering options that let you create a set of data, giving you the option of viewing the precise data you want to view.

Entity

The entity drop-down lists all of the clinics, hospitals, and other entities that comprise your institution. You can choose to view all of those entities or select a single entity to view.

Service line

This drop-down lists all of the service lines defined for your institution. You can view all service lines or one or more individual service lines. To select multiple service lines, press and hold the CTRL key while you select.

Patient type

The patient drops-down lists the ways a patient was seen, such as inpatient or outpatient emergency. The list will show the patient types used in your organization.

Financial class

This drop-down lists types of payors. You can view all payors or one or more individual payors. To select multiple payor, press and hold the CTRL key while you select.

Fiscal year

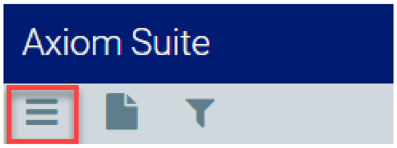
This drop-down lists fiscal years that you can select for viewing.

TIP: Use the dashboard tools to view, export, and sort the data; view data as table; and more.

Net Income By Month

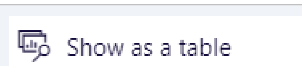
This waterfall chart shows you, month by month, the net income for the fiscal year. All charts start a $0 and a chart may either an increase or a decrease. It also shows the total on the right side of the chart.

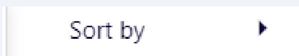
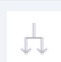
- Use the Navigation menu in the upper-left corner to return to Recent places that you've visited or to the Intelligence Center.



Dashboard tools

Dashboard sections provide one or more of these tools for viewing a visual. You can use these tools to personalize your view and use of the data in the dashboard.

	Filter	Displays which, if any, filters that affect the visualization
	Focus mode	Displays an enlarged version of the visualization. Click the Back to report button to return to the dashboard
	Export data	Use to export the data for the visualization in an Excel or a .cvs format. You can choose to export summarized or underlying data
	Show as a table	Displays an enlarged version of the visualization and a table of its data. Click the Back to report button to return to the dashboard

	Spotlight	Dims all of the dashboard except for the visualization
	Sort descending	Sorts the data in descending order: 9 to 0 or Z to A
	Sort ascending	Sorts the data in ascending order: 0-9 or A to A
	Sort by	Displays a list of the data elements used in the visualization, letting you control how to sort the data for that visualization
	Drill down	tbd
	Drill up	tdb
	Go to the next level in the hierarchy	tbd
	Expand all down one level in the hierarchy	tbd
	Clear selections	Resets a slicer to the default settings

3

Web Reports

Axiom web reports provide a fully browser-based reporting option for Axiom Enterprise Decision Support data. You can create, edit, and view web reports all within the Axiom Enterprise Decision Support Web Client.

Web reports are designed to be intuitive for report designers to build, and easy for report viewers to use. The Intelligence Center provides a centralized hub to create new web reports and to view any report that you have access to.

Web reports support two different ways to display reporting data in a grid:

- **Dynamic rows**: Dynamically display data rows based on a specified dimension or grouping.
- **Fixed rows**: Use predefined fixed row structures to organize data rows into sections with headers, totals, and subtotals.

Web reports can be created from scratch using the Report Builder, or you can create them from templates provided by installed Axiom Enterprise Decision Support products.

Managing Web Reports

Using the Intelligence Center in the Axiom Enterprise Decision Support Web Client, you can create, edit, copy, and delete web reports as needed. Web reports are designed to be intuitive for report builders to create, and easy for end users to consume.

▶ Creating new web reports

To create a new web report, select the **Reports** area from the left-hand panel of the Intelligence Center, then click **Create**. From the Create menu, select one of the following:

- New web report: This option opens the Report Builder so that you can create a new web report from scratch.
- New web report from template: This option creates a new web report based on a template provided by an installed product.

If you want to create a web report that uses a fixed row structure, the fixed row structure must be defined separately and then assigned to the report. Using the Intelligence Center, you can create, edit, and delete fixed row structures. For more information, see Managing Fixed Row Structures.

In order to create a web report, you must be an administrator or have the **Create Web Reports** security permission. You must also have read/write access to at least one folder in the Reports Library.

Copying web reports

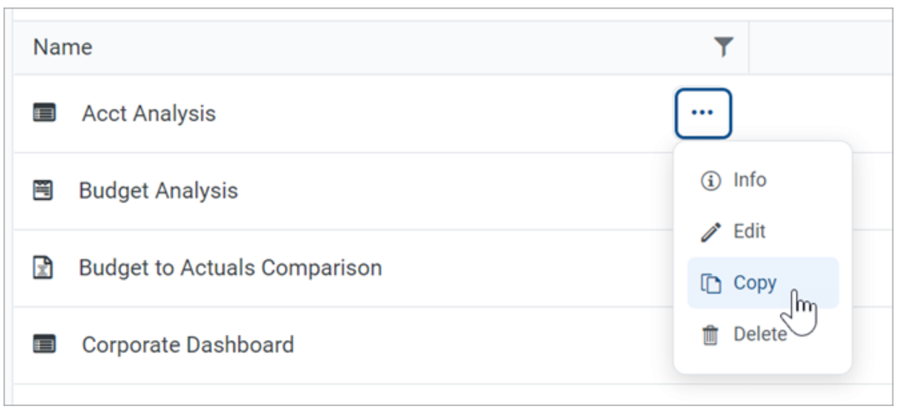
In the Intelligence Center, you can copy existing web reports to create new reports. In order to copy a web report, you must be an administrator or have the **Create Web Reports** security permission. You must also have read/write access to the current folder, because the copy is created in the current folder.

NOTE: Only web reports created in the Report Builder can be copied. Web reports created from template cannot be copied.

To copy a web report from the Intelligence Center:

1. In the Intelligence Center, locate the web report that you want to copy. You can use folder navigation to find the report, or use the Search box at the top of the page.

2. Once the web report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Copy** from the menu.



   If the Copy action is present but disabled, then you cannot copy this report because you do not have the appropriate security permissions.

3. In the **Copy Report** dialog, enter a name for the copy. By default, the name is **Copy of *OriginalReportName***.

4. Click **OK**.

The copy is created in the current folder, with the specified name. If you want to save a copy in a different folder, then you can **Edit** the report instead and use **Save As** within the Report Builder.

TIP: You can also copy a web report in the Desktop Client, using Axiom Explorer or the Explorer task pane.

Editing web reports

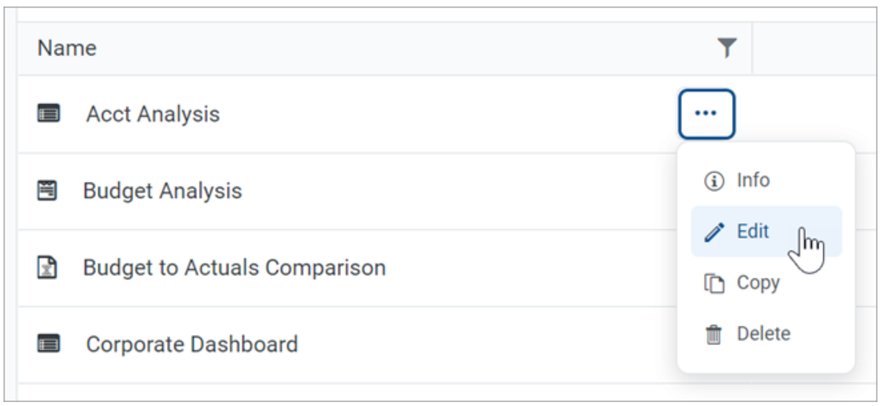
You can open a web report for editing from the Intelligence Center if the report is eligible to be edited, and you have read/write permission to the report.

> **NOTE:** Only web reports created in the Report Builder can be edited. Web reports created from template cannot be edited.

Only one user at a time can open a web report for editing in the Report Builder. However, other users can continue to view the report as normal.

To edit a web report from the Intelligence Center:

1. In the Intelligence Center, locate the web report that you want to edit. You can use folder navigation to find the report, or use the Search box at the top of the page.
2. Once the web report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three dots icon visible. Click the icon then select **Edit** from the menu.

   If the Edit action is present but disabled, then you cannot edit this report. This may be because the report belongs to an installed product and cannot be edited, or because you do not have read/write access to the report, or because the report was created from template.

The report opens in the Report Builder, in the current browser tab. You can now edit it as needed. For more information, see Using the Report Builder.

Changing web report names and descriptions

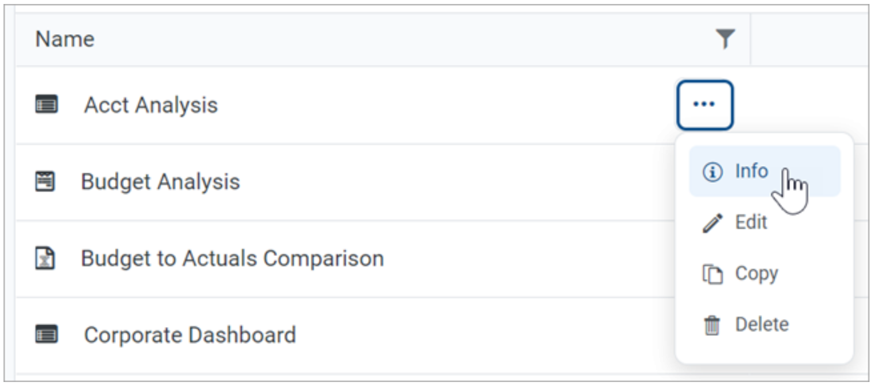
If you have read/write access to a web report, then you can rename the report or change its description.

> **NOTES:**
>
> - In systems with installed products, the names and descriptions of product-controlled reports cannot be edited.
> - If you have read/write access to a report file, but read-only access to its folder, then you cannot edit the name or description.

To change a web report name and/or description:

1. In the Intelligence Center, locate the web report that you want to edit. You can use folder navigation to find the report, or use the Search box at the top of the page.

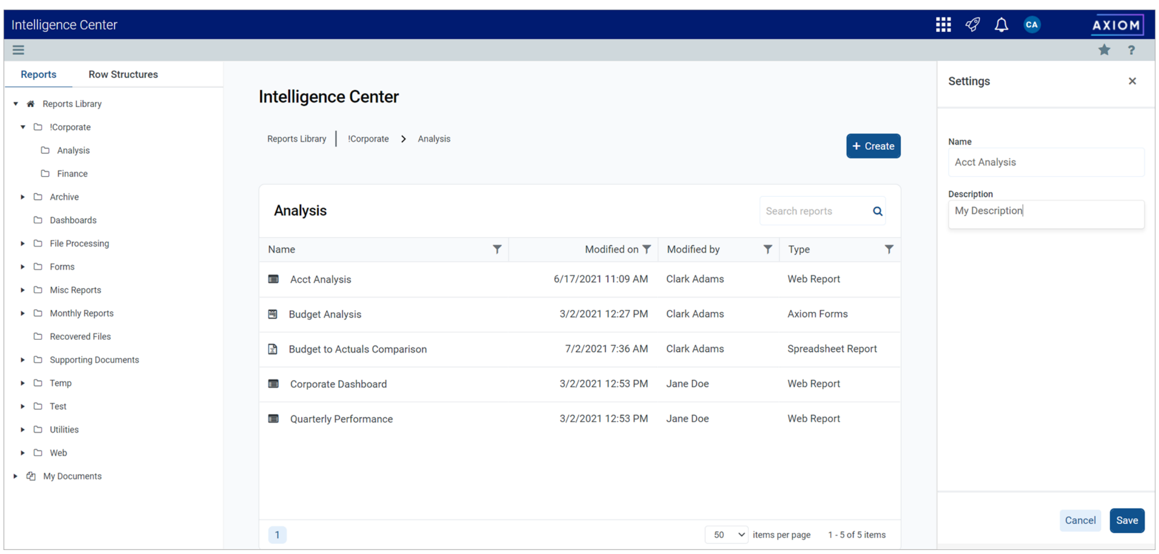
2. Once the web report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Info** from the menu.



   The Settings panel opens along the right-hand side of the page.

3. In the Settings panel, edit the web report **Name** or **Description** as needed, then click **Apply**.

   The name can be up to 250 characters, and the description can be up to 2000 characters.



Example Settings panel

   If the web report name and description cannot be edited, then the **Apply** button is not available. This may occur because you do not have the necessary permissions, or because the report belongs to an installed product.

Deleting web reports

You can delete a client-created web report if it is no longer needed. You must have read/write access to the report and its folder in order to delete a report. Product-controlled web reports cannot be deleted.

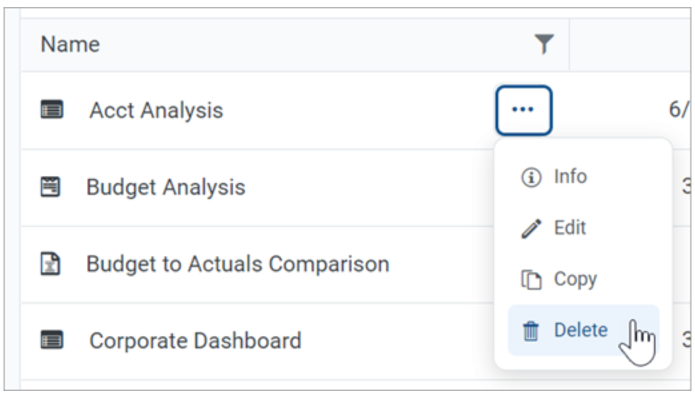
Reports can be deleted from the Intelligence Center in the Axiom Enterprise Decision Support Web Client, or from Axiom Enterprise Decision Support Explorer in the Axiom Desktop Client.

> **TIP:** If a report is deleted in error, an administrator may be able to restore the report using the **Restore Deleted Files** feature in the Axiom Desktop Client.

To delete a web report from the Intelligence Center:

1. In the Intelligence Center, locate the web report that you want to delete. You can use folder navigation to find the report, or use the Search box at the top of the page.

2. Once the web report displays in the Intelligence Center grid, hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Delete** from the menu.

   If the report cannot be deleted, the Delete action is disabled. This may occur because you do not have the necessary permissions to delete the report, or because the report belongs to an installed product.

3. When you are prompted to confirm that you want to delete the report, click **OK**.

The report is deleted from the system and no longer displays in the Intelligence Center.

To delete a web report from Axiom Explorer:

1. Launch the Desktop Client.

2. On the **Axiom** tab, in the **Administration** group, click **Manage > Axiom Explorer**.

   > **NOTE:** If your system uses installed Axiom products, you can access this feature from the **Admin** tab. Click **System Browser** to open Axiom Explorer.

   > **TIP:** You can also use the Explorer task pane to delete a web report.

3. Navigate to the **Reports Library**, and then locate the web report that you want to delete.
4. Right-click the report and then select **Delete**.
5. When you are prompted to confirm that you want to delete the report, click **Yes**.

The report is deleted from the system and no longer displays in Axiom Explorer.

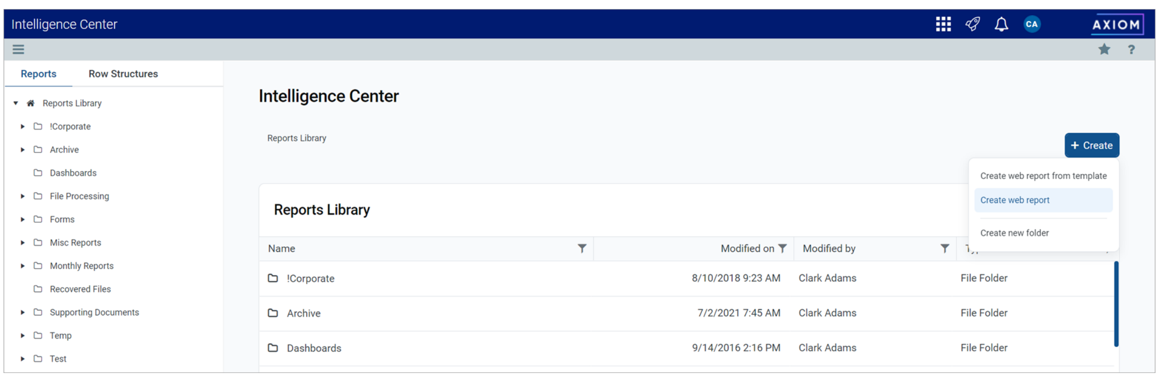
Creating new web reports

Using the Intelligence Center, you can create new web reports from scratch so that you can build the report as needed.

In order to create a web report, you must be an administrator or have the **Create Web Reports** security permission. In order to save the new report you must have read/write access to at least one folder in the Reports Library or access to the My Documents folder. If you do not have permission to create web reports, then the option to create a new web report will not be available from the **Create** button in the Intelligence Center.

To create a new web report:

1. In the Intelligence Center, click **Create > Create web report**.



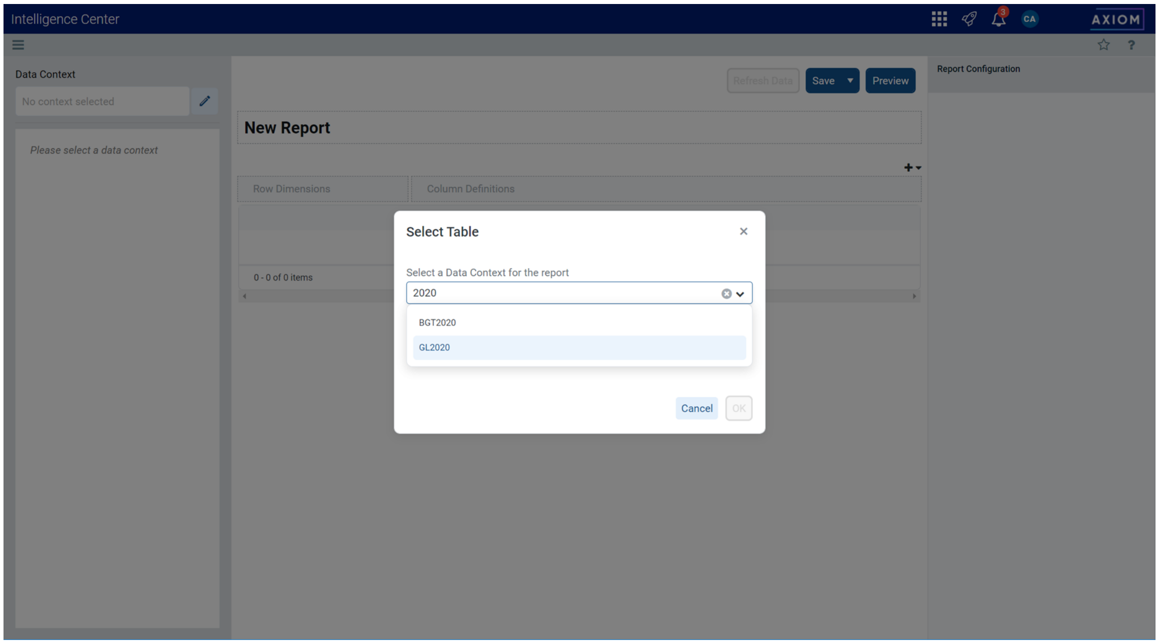
NOTE: The **Reports** area must be selected in the left-hand panel of the Intelligence Center in order to create a new web report.

The Report Builder opens in the current browser tab, displaying a new blank report.

2. In the **Select Table** dialog, select a primary table to determine the data context for the report, then click **OK**.

   The *data context* determines the overall pool of data that is eligible to be included in the report. The selected primary table determines which other tables are eligible for inclusion in the report, based on lookup relationships and shared dimensions. All table columns and filters used in the report must be compatible in the context of the primary table.

You can select a table from the drop-down list directly, or type into the box to search for a table name. The search uses "contains" matching to return any tables that contain the search text within the table name. Tables that start with the search text are listed first, followed by tables that contain the search text anywhere in the table name. In the following screenshot, the text `2020` has been used to search for tables with the year 2020 in the name.



Selecting a primary table for the data context

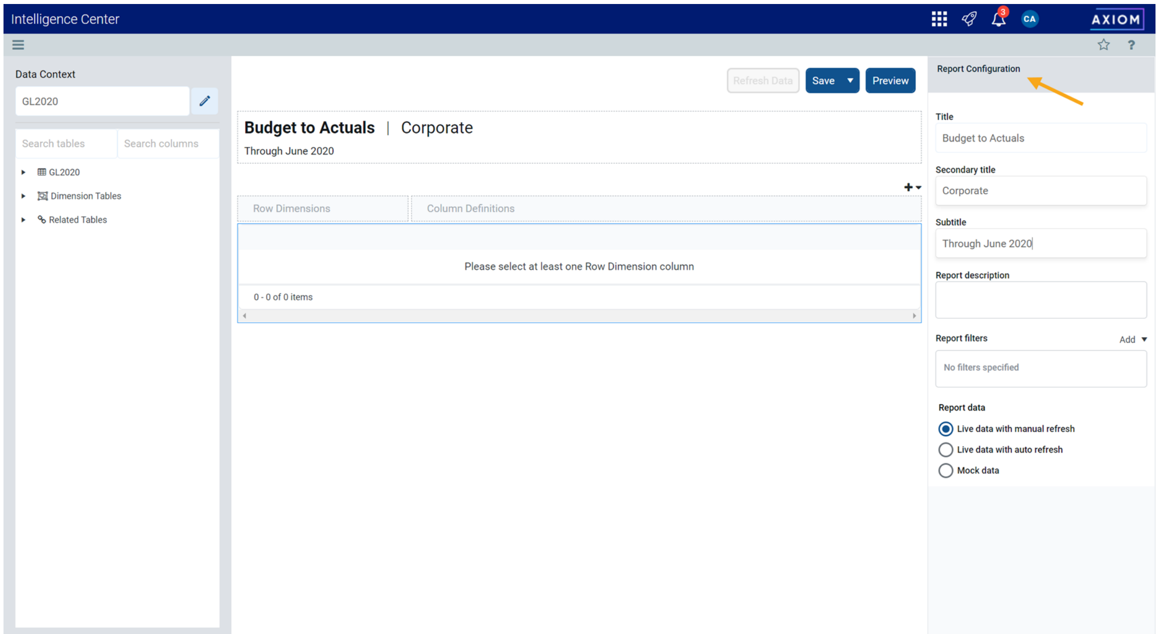
Although you can click **Cancel** at this point, most activities in the Report Builder require a data context to be selected.

Once a table is selected for the data context, you can work with the report in the Report Builder. The Report Builder consists of three main areas as follows:

- The **Data Panel** on the left side is where you select the data to include in your report.
- The **Report Canvas** in the middle is where you build the report. Columns can be dragged and dropped from the Data Panel to the Report Canvas. You can also create calculations to display in the report columns, and define column groups.
- The **Configuration Panel** on the right side is where you define properties for the report, the data grid, and the individual columns. You can configure properties such as report titles, drilling and filtering options, and column formatting.

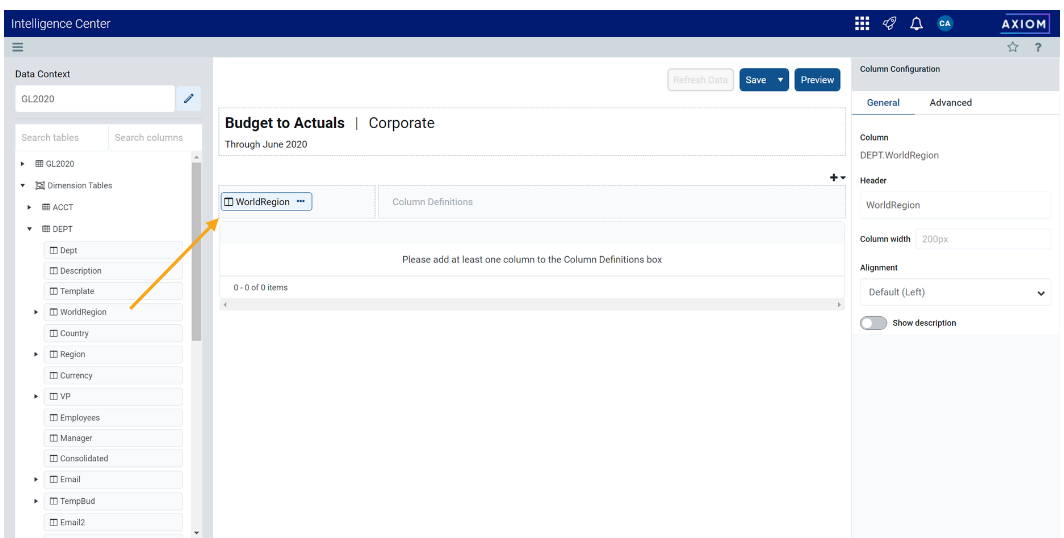
For more information on using the Report Builder, see Using the Report Builder.

3. In the **Report Configuration** panel along the right side of the page, define the report titles and description as needed. For more information, see Defining report titles and description for a web report.



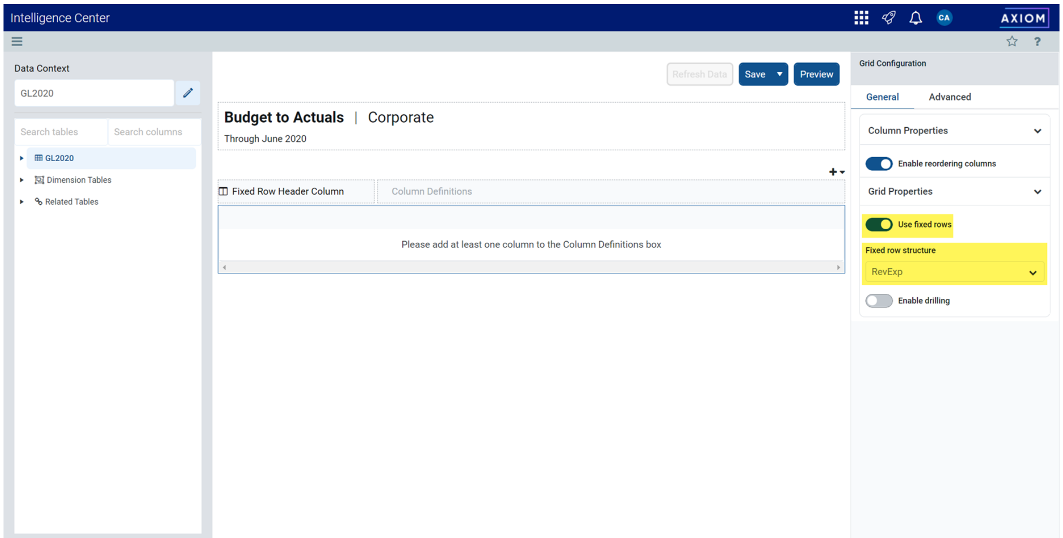
Defining titles for the report

4. Define the rows of the report by doing one of the following, depending on whether you want to generate the rows dynamically or use a fixed row structure:
   - **Dynamic rows**: In the Data Panel, locate the table column that you want to use as the row dimension. Drag and drop the column to the **Row Dimensions** box in the Report Canvas. For more information, see Specifying the row dimension for a web report.



Dragging and dropping a column to use as the row dimension

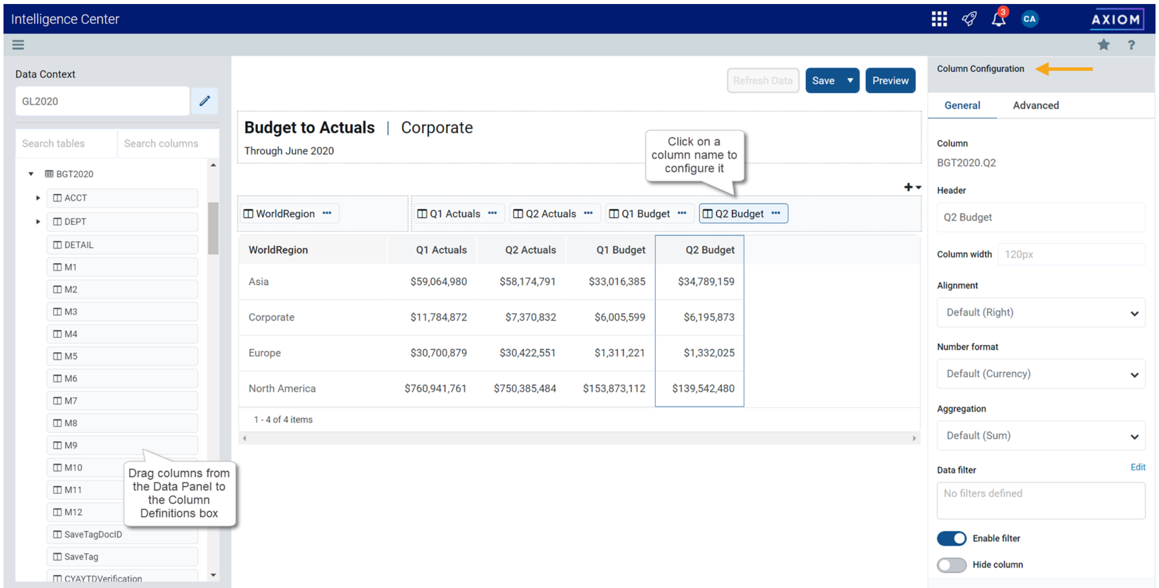
- **Fixed rows**: Select the grid placeholder text in the Report Canvas so that the **Grid Configuration** properties load into the Configuration Panel. On the **General** tab, enable **Use fixed rows** then select an existing **Fixed row structure**. For more information, see Specifying the fixed row structure for a web report.



Specifying a fixed row structure to define the rows

5. Use the Data Panel to locate the data columns that you want to display in the report, then drag and drop those columns out to the **Column Definitions** box in the Report Canvas. Once the columns are added to the grid, you can configure data and display properties for each column.

   For more information, see Adding data columns and calculated columns to a web report and Configuring column properties for a web report.

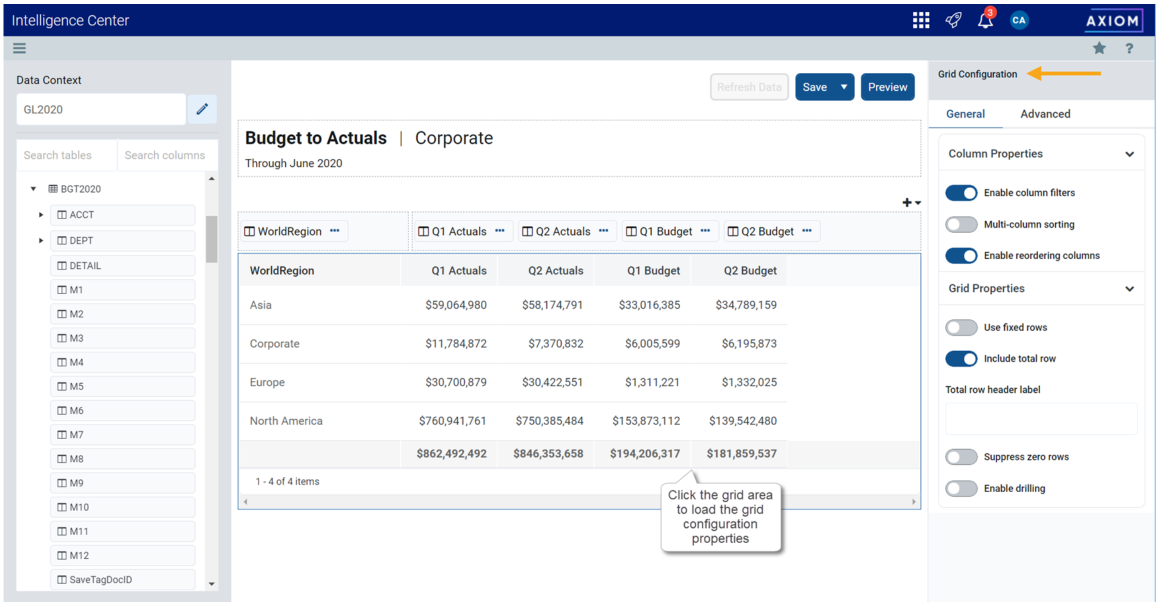


Adding and configuring data columns

> **NOTE:** To populate the grid with data after adding columns to the Column Definitions box, click the **Refresh Data** button. By default, the Report Builder uses live data, but you must manually refresh in order to see the result of any data changes. For more information, see Changing data display options for the Report Builder.

6. Select the grid in the report canvas so that the configuration panel changes to show the **Grid Configuration** settings. Define the grid settings as needed, such as to enable the total row or enable drilling options. For more information, see Configuring grid properties in a web report.

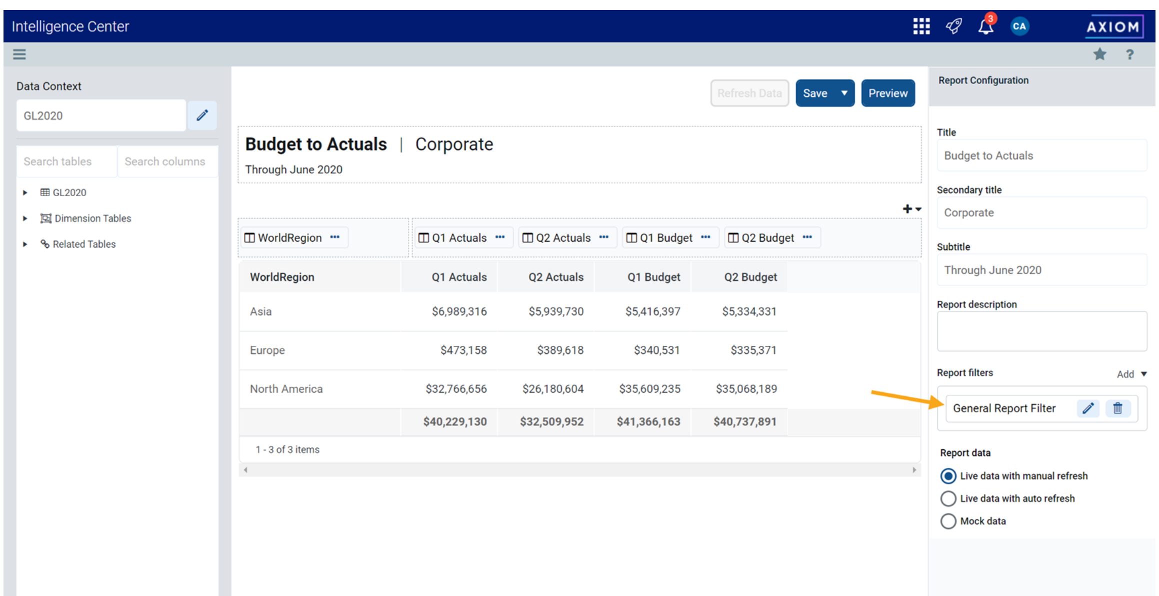
   In the following example, the total row was enabled for the grid.



Configuring grid properties

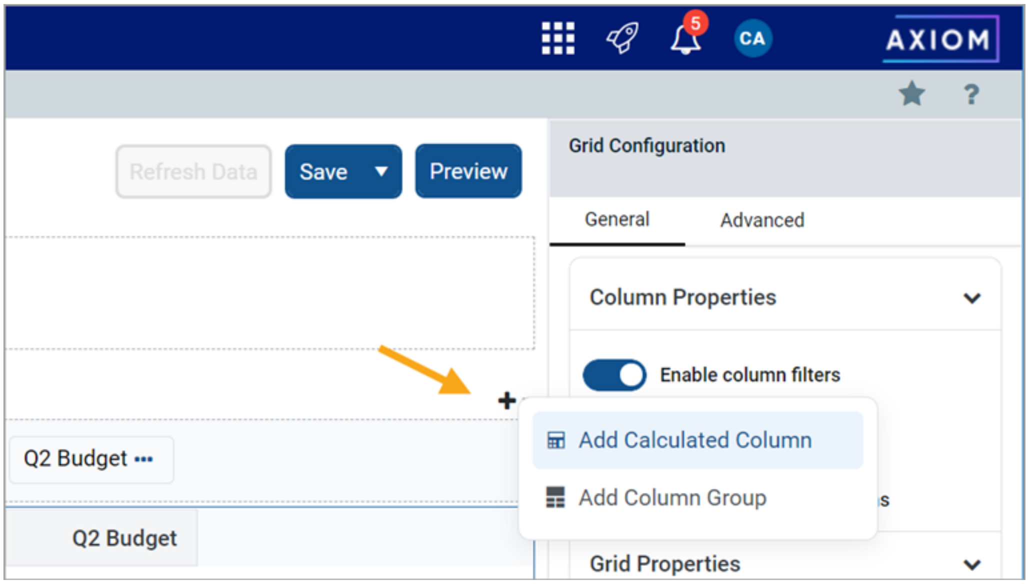
7. Click the report titles to re-load the Report Configuration properties, then define report-level filters as needed to limit the data shown in the report. For more information, see Defining report-level data filters for a web report.

   In the following example, a general filter was added to exclude the Corporate world region value from the report and to only show data for revenue accounts.



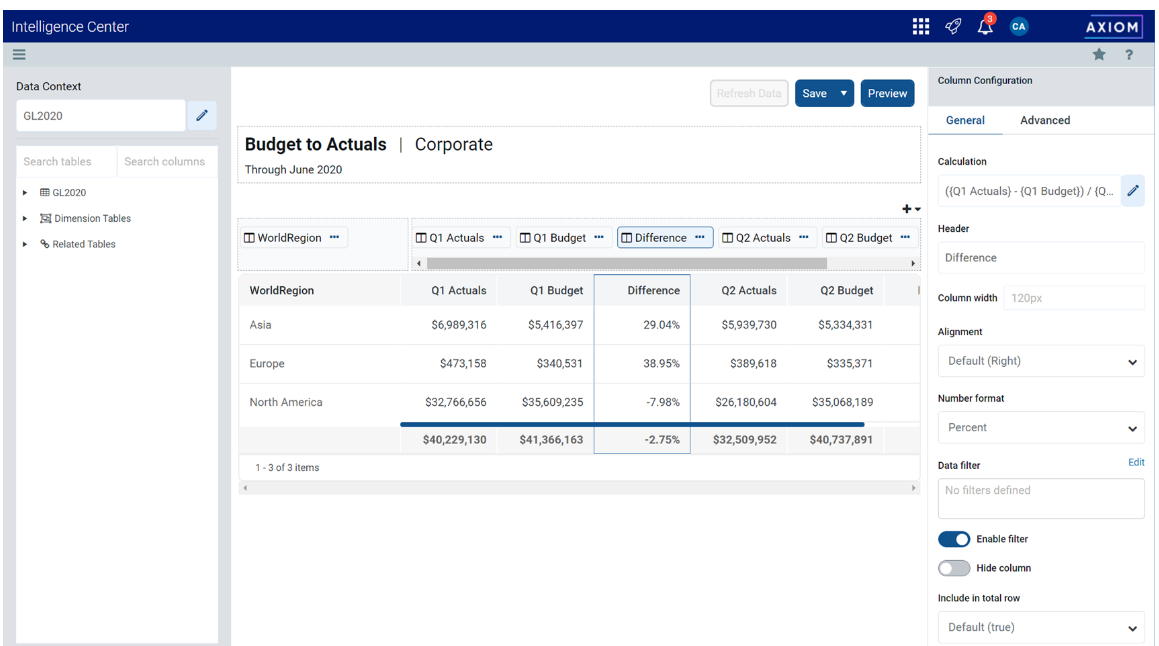
Defining a report-level filter to limit data in the report

8. Use the plus icon at the top right of the **Column Definitions** box to add calculated columns to the grid as needed. For more information, see Adding data columns and calculated columns to a web report.



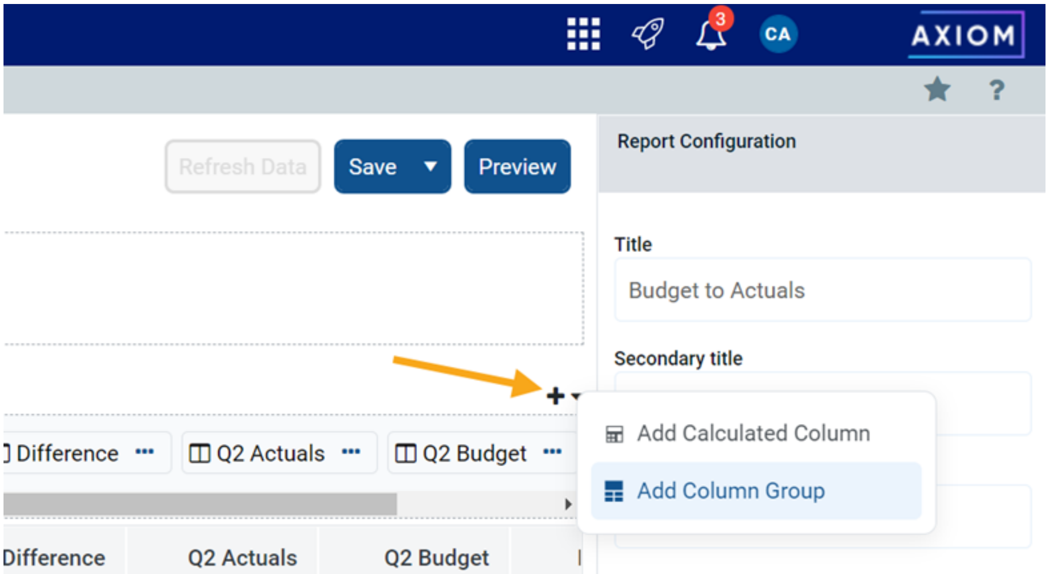
Click the plus icon to add a calculated column

In the following example, two calculated columns have been added to calculate the difference between actuals and budget for each quarter.



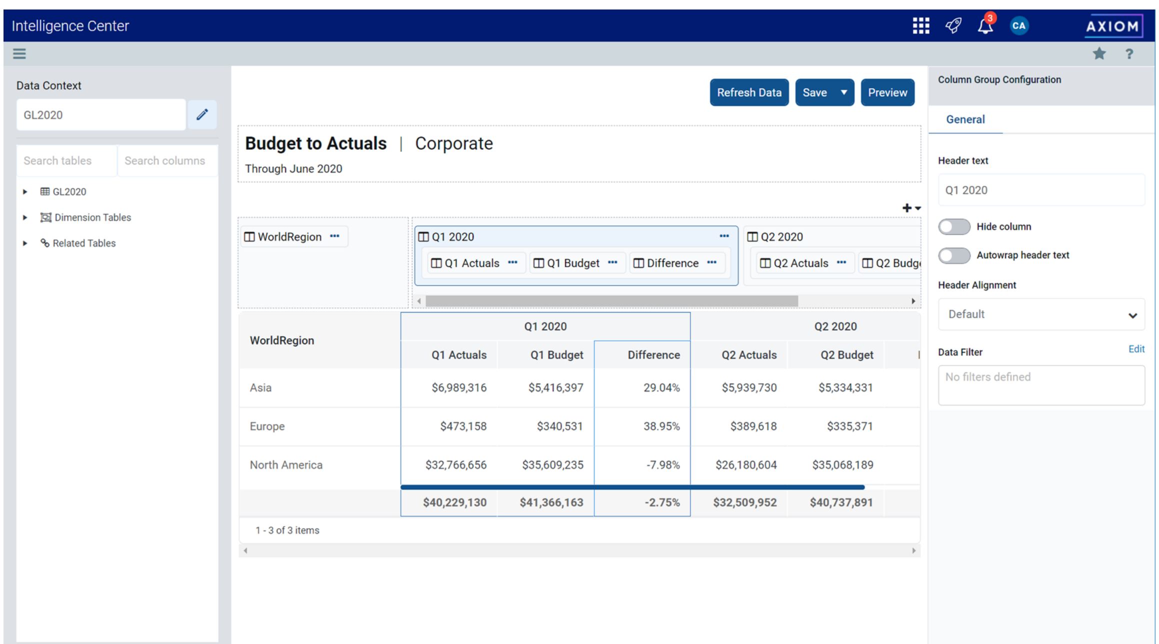
Adding and configuring calculated columns

9. Use the plus icon at the top right of the **Column Definitions** box to add column groups to the grid as needed. Using column groups, you can display multiple columns grouped underneath a header. For more information, see Defining column groups for a web report.



Click the plus icon to add a column group

In the following example, two column groups have been added for Q1 and Q2.



Adding and configuring column groups

10. Click **Save** to save the report.

11. In the **Save Report As** dialog, complete the following fields and then click **Save**:

Item	Description
File name	The name of the report file. This is the name that users will see in the Intelligence Center.
Description	Optional. A description of the report. Currently, descriptions do not display in the Intelligence Center, but they can be viewed in the Axiom Enterprise Decision Support Desktop Client using Axiom Explorer.
Save to folder	The folder in the Axiom repository where you want to save the report. • Click the folder icon to the right of the field. • In the **Choose output folder** dialog, select a folder in the Reports Library. You can only select folders where you have read/write access to the folder. If a folder name displays with a lock icon, this means you have read-only access to that folder and therefore cannot save a new report there. **NOTE:** If you have access to the My Documents folder, then you can also save reports to that location for your personal use. • Click **OK** to choose the folder and return to the save dialog. The path to your selected folder now displays in the field.

If you use a file name that already exists in the target folder, you will be prompted to choose whether or not to overwrite the existing file. If you choose not to overwrite, you are returned to the Save Report As dialog so that you can use a different name and/or output folder.

Keep in mind that many of these steps can be done in any order. You can configure the grid settings before defining report titles, and so on. The main dependency is that you must select a primary table for the data context before you can begin adding columns to the report.

Creating new web reports from template

Using the Intelligence Center, you can create new web reports from a template. Currently, templates are only provided by installed Axiom Enterprise Decision Support products. For more information about any templates provided by your installed products, see the separate product documentation.

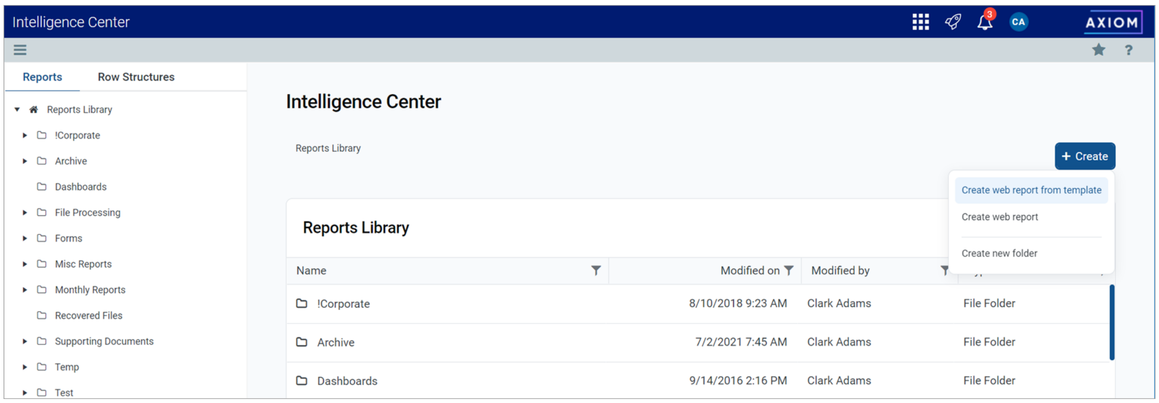
Some report templates require a fixed row structure to define the row dimensions and sections of the report. If you want to create a new web report from a template that requires a fixed row structure, this row structure must already exist so that you can assign it to the report when you create it. For more information, see Managing Fixed Row Structures.

Web reports created from template remain linked to that template. If a template changes, that change is automatically available in all reports created from that template.

In order to create a web report, you must be an administrator or have the **Create Web Reports** security permission. In order to save the new report you must have read/write access to at least one folder in the Reports Library or access to the My Documents folder. If you do not have permission to create web reports, then the option to create a new web report from template will not be available from the **Create** button in the Intelligence Center.

To create a new web report from template:

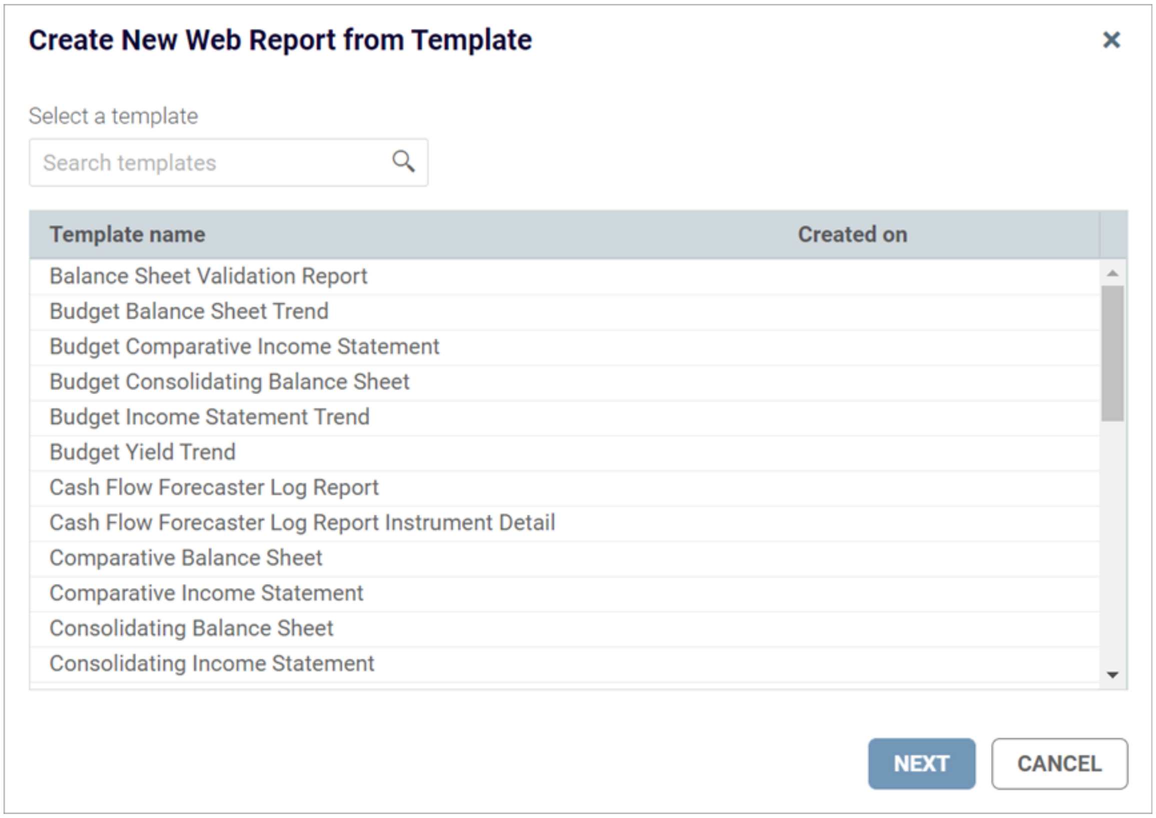
1. In the Intelligence Center, click **Create > Create web report from template**.



> **NOTE:** If your system does not have any product-delivered templates available, then this option will not be present on the **Create** menu.

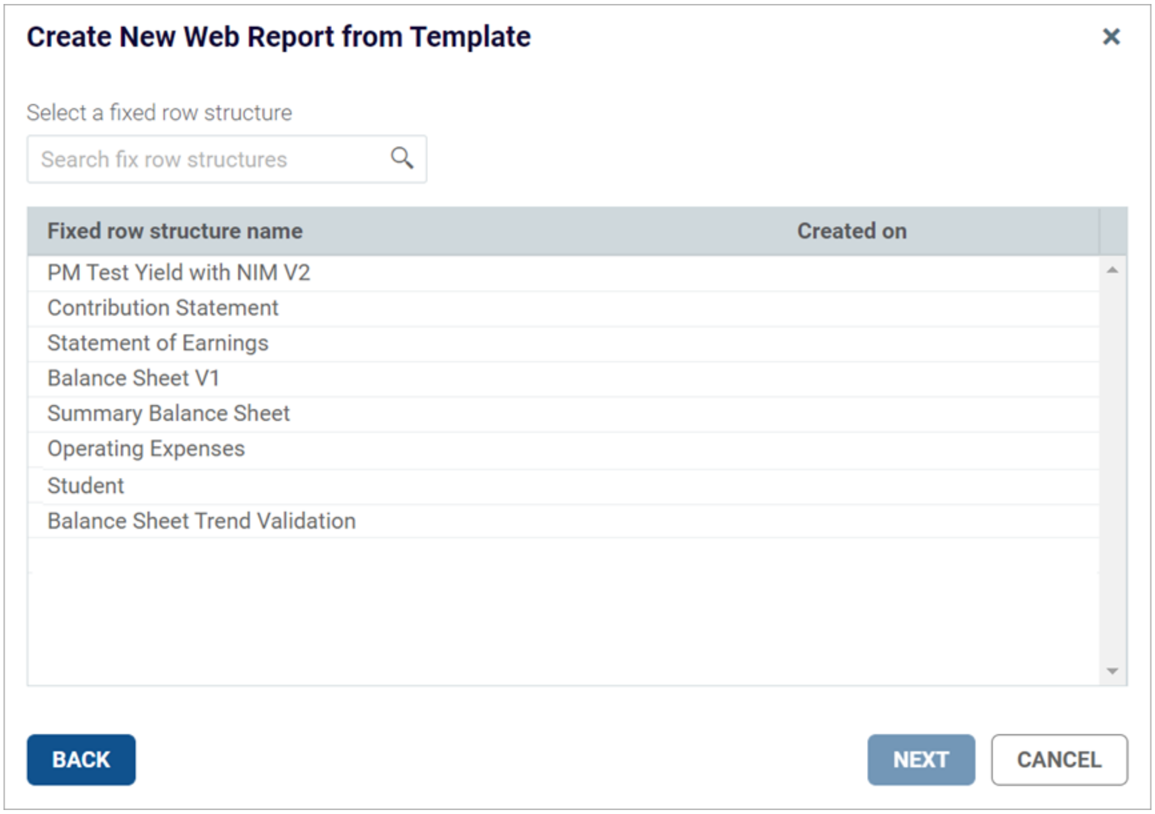
   The **Create New Web Report from Template** dialog opens to walk you through the report creation process.

2. On the template screen, select the template that you want to use to create the report, and then click **Next**.



Example template screen showing product-delivered templates

3. On the fixed row structure screen, select the fixed row structure to use in the report, and then click **Next**. If the template you selected does not use a fixed row structure, then this screen does not display and you can skip to step 4.



Example screen showing fixed row structures

> **NOTE:** If no fixed row structures are listed, then your system does not have any available fixed row structures. You must create one before you can create a web report using the selected template. You can click **Back** to select a different template, or you can click **Cancel** to exit the dialog and return to the Intelligence Center. For more information, see Managing Fixed Row Structures.

4. On the final screen, complete the following fields to save the new report, and then click **Create**.

Item	Description
Name	The name of the report file.
Description	Optional. A description for the report.

Item	Description
Save report in	The folder in the Axiom repository where you want to save the report. • Click the folder icon to the right of the field. • In the **Choose output folder** dialog, select a folder in the Reports Library. You can only select folders where you have read/write access to the folder. If a folder name displays with a lock icon, this means you have read-only access to that folder and therefore cannot save a new report there. **NOTE:** If you have access to the My Documents folder, then you can also save reports to that location for your personal use. • Click **OK** to choose the folder and return to the save dialog. The path to your selected folder now displays in the field.

The report is opened in the current browser tab. You can now review the data using a variety of tools available to web reports, such as sorting, filtering, and drilling. For more information, see Viewing and exploring data in web reports.

Once a report is created from template, it cannot be edited—for example, to choose a different fixed row structure. If you want to use a different fixed row structure, create a new report from template again. Remember that any changes to the template or to the fixed row structure will automatically flow through to all reports that use the template or the fixed row structure.

Using the Report Builder

Using the Report Builder, you can create and edit web reports using a drag-and-drop interface. Web reports are intended to be intuitive for report builders to create and easy for report viewers to use.

Web reports support two different ways to display reporting data in a grid:

- **Dynamic rows**: Dynamically display data rows based on a specified dimension or grouping.
- **Fixed rows**: Use predefined fixed row structures to organize data rows into sections with headers, totals, and subtotals.

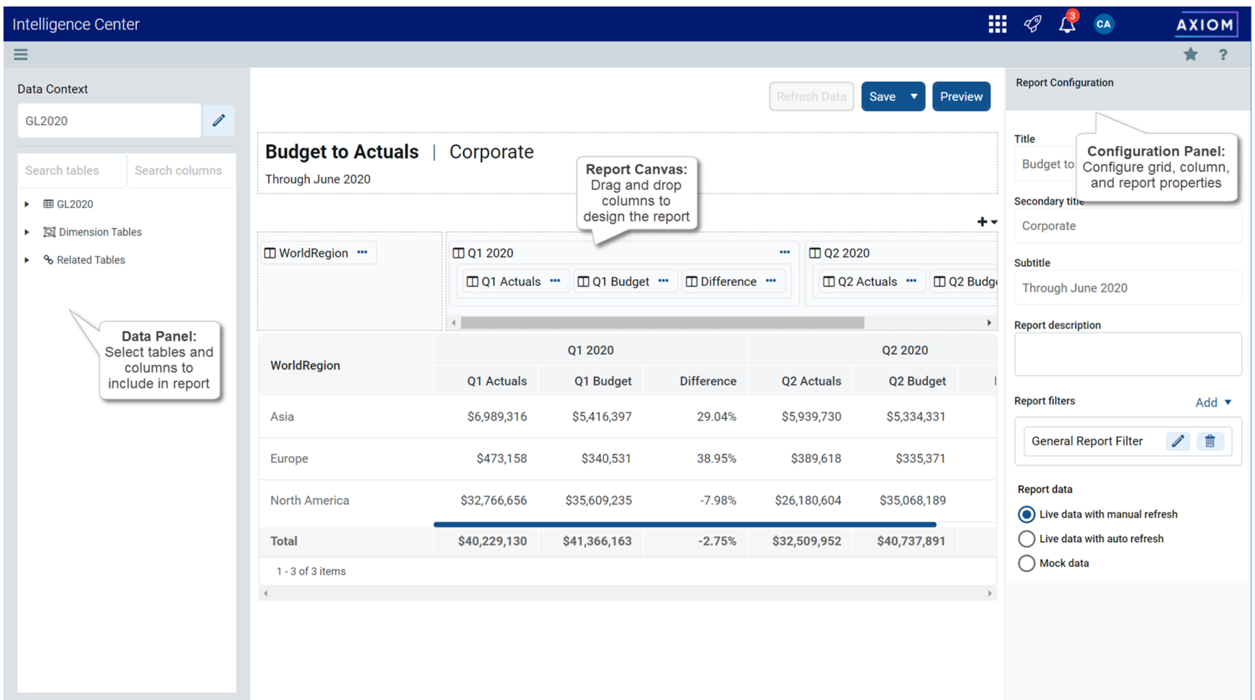
The Report Builder opens when you do either of the following:

- Create a new web report from the Intelligence Center.
- Edit an existing web report from the Intelligence Center.

Overview of Report Builder

The Report Builder has three main areas:

- The **Data Panel** on the left side is where you select the data to include in your report.
- The **Report Canvas** in the middle is where you build the report. Columns can be dragged and dropped from the Data Panel to the Report Canvas. You can also create calculations to display in the report columns, and define column groups.
- The **Configuration Panel** on the right side is where you define properties for the report, the data grid, and the individual columns. You can configure properties such as report titles, drilling and filtering options, and column formatting.



Overview of the Report Builder

As you build and configure the report, a preview of the grid displays in the Report Canvas area. Several options are available to control how data is shown in this grid. For more information, see Changing data display options for the Report Builder.

Building a report in the Report Builder

The following is an overview of how to build a report in the Report Builder:

- Define a data context: Each report must have a specified primary table to determine the data context for the report. Once the data context is defined, you can build the report using columns from the primary table and from related tables.

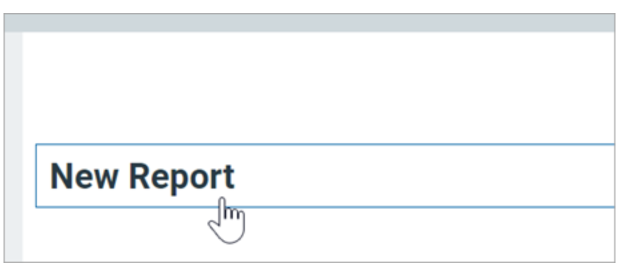
- Define the grid rows: Web reports can use dynamically generated rows based on a dimension, or they can use a fixed row structure. Do one of the following depending on the type of report that you want to make:
    - For dynamic rows, add a row dimension to the grid by dragging and dropping a table column.
    - For fixed rows, specify a fixed row structure by modifying the grid properties.
- Add data columns and calculated columns: Drag and drop table columns out to the grid to define the data columns for the report, and define calculated columns as needed. You can also define column groups to create grouped headers in the report.
- Configure report-level properties:
    - Define general report properties: You can define report title text and an optional report description.
    - Define report filters: You can define general and table-specific filters to limit the data shown in the report grid.
- Configure grid properties: Configure grid properties such as the total row and user interaction options, including enabling and configuring drilling options as needed.
- Configure column properties: Configure properties for each column such as alignment, width, number format, and column filters.

▶ Changing data display options for the Report Builder

As you build and configure the report, a preview of the grid displays in the Report Canvas area. This grid accurately reflects report configuration details such as column headers, column width, and number format. Additionally, you can choose how data displays in the Report Builder.

To change how data displays in the Report Builder:

1. In the Report Canvas area, click on the title text to load the Report Configuration properties. For example, if the report currently uses the default name of New Report, click on the New Report text or next to it.

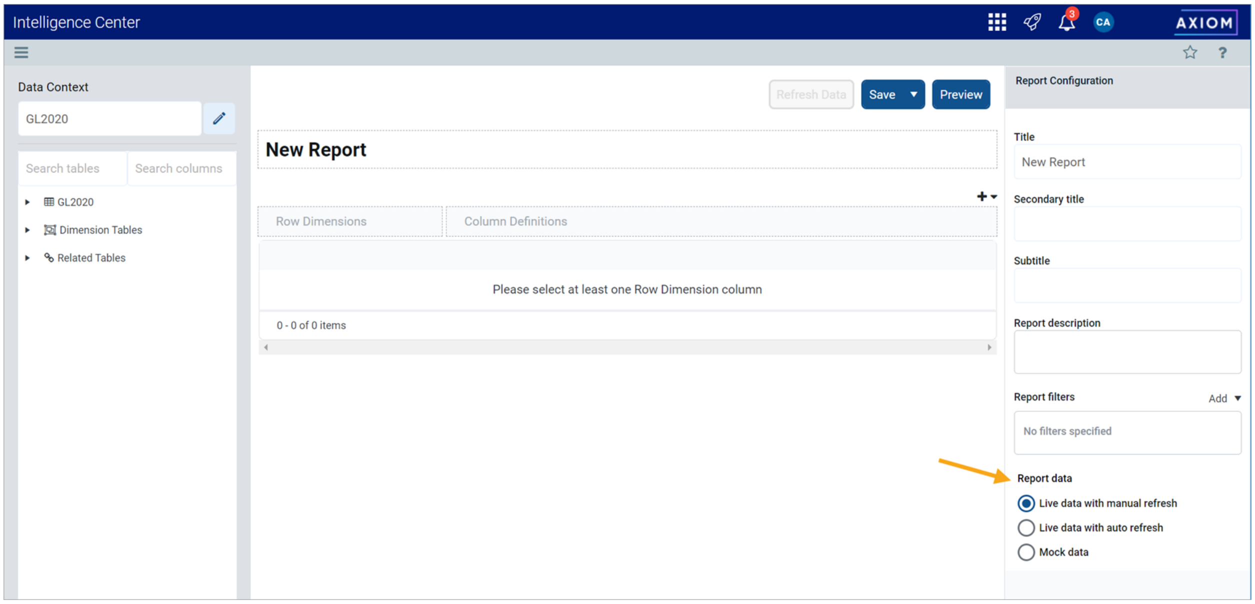


Click on the title text to load the Report Configuration properties

If you are in a brand new report, the Report Configuration properties display by default when you first enter the Report Builder. However, as soon as you drag and drop a column to the Row Definitions box or the Column Definitions box, the column becomes selected which causes the Column Configuration properties to display. In this case you need to click on the report title to return to the Report Configuration properties.

2. Select one of the following options for **Report data**:

   - **Live data with manual refresh** (default): Live data is shown in the grid, however, you must manually refresh the data after making configuration changes that affect the data shown. This is for performance reasons, so that you do not have to wait for data queries to complete in order to continue working on your report. When using this option, data updates are handled as follows:
     - If you add a new column, or make a configuration change that would affect the data shown in the column, the column will be blank. To populate the grid for data in this column, click the **Refresh Data** button.
     - If you make a configuration change that would affect the data shown in the entire grid, the grid will be blank. To populate the grid with the current data, click the **Refresh Data** button.
   - **Live data with automatic refresh**: Live data is shown in the grid, and the data automatically updates after you make any configuration changes. Generally speaking, this option should only be used when the report queries a small set of data so that updates will be quick, or when you do not expect to be making many configuration changes that affect data.
   - **Mock data**: Mock data is shown in the grid. When using this option, you can get a basic idea of how the report columns and format will display to the user, without viewing actual data. This is a good option if you do not need to made configuration changes that affect the data, or if you do not need to view the data while you are making these changes.



Data display options for the Report Builder

The **Refresh Data** button is only available when using **Live data with manual refresh**, and this button only becomes active when configuration changes have been made that affect data.

Even if you are viewing live data, keep in mind that the grid shown in the Report Canvas is simply meant as a guide to help you build the report—it is not intended to be a fully functional representation of the report. If you want to see how the report will display to end users, click the **Preview** button.

NOTE: The **Report data** option is not saved in the report, and your selection is not saved for future Report Builder sessions. Every Report Builder session defaults to using live data with manual refresh.

▶ Previewing a report

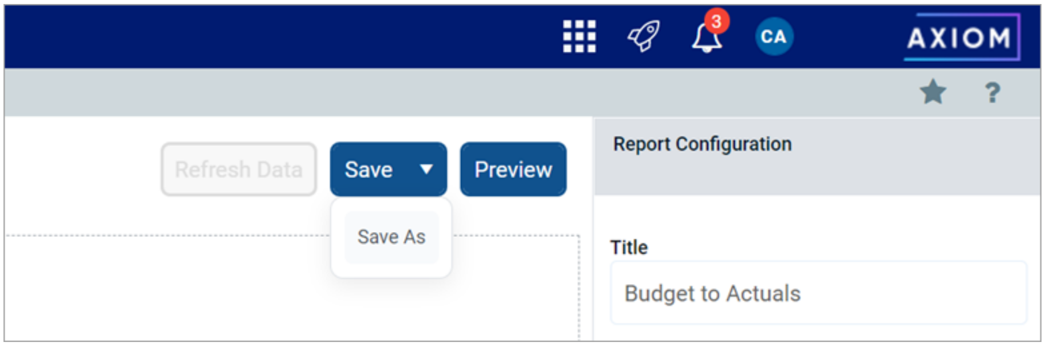
If you want to see how the report will display to end users in the report viewer, click the **Preview** button at the top of the Report Canvas.

The report preview opens in a separate dialog that overlays the Report Builder. Using this preview, you can view the report data and try out end-user features like sorting, filtering, and drilling the report. When you are done viewing the preview, click **Close** at the bottom of the dialog to return to the Report Builder (or click the **X** in the top right corner).

▶ Saving a report

Use the **Save** button at the top of the Report Canvas to save the report. If the report is a brand new report, you will be prompted to define a name and folder location for the report. Otherwise, the existing report is saved.

If you have opened an existing report for editing and you want to save a copy of it with a new name, click the down arrow to the right of the Save button and select **Save As**.



Save button with Save As option

NOTE: The **Create Web Reports** security permission is required in order to use **Save As**.

If you have made changes to the report but have not yet saved, you will be prompted to save when you attempt to close the browser tab or navigate to a new location.

Defining the data context for a web report

The *data context* for a web report determines the overall pool of data that is eligible to be included in the report. To define the data context, you select a *primary table* as the "base" table for the report. This primary table then determines which other tables are eligible for inclusion in the report, based on lookup relationships. All table columns used in the report must be compatible in the context of the primary table.

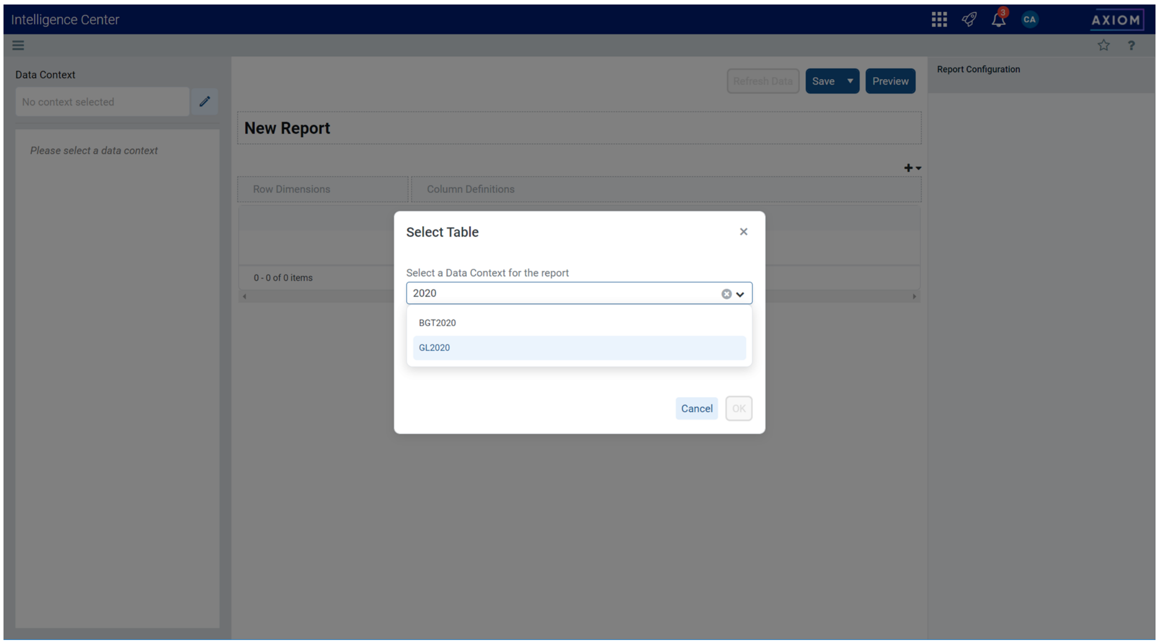
In the Report Builder, the primary table for the data context is specified in the left-hand Data Panel. You must select the primary table before you can drag and drop any table columns out to the grid.

To select a primary table for the data context:

There are two ways to select a primary table for the data context.

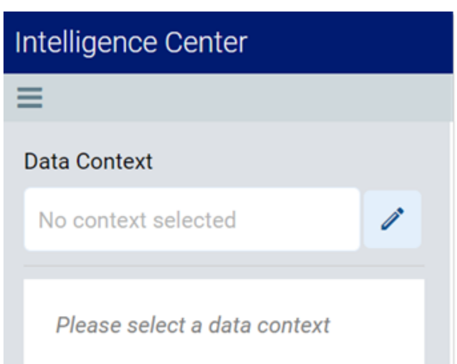
- When you create a brand new report, you are automatically prompted to select a primary table for the data context.

  You can select a table from the drop-down list directly, or type into the box to search for a table name. The search uses "contains" matching to return any tables that contain the search text within the table name. Tables that start with the search text are listed first, followed by tables that contain the search text anywhere in the table name. In the following screenshot, the text `2020` has been used to search for tables with the year 2020 in the name.



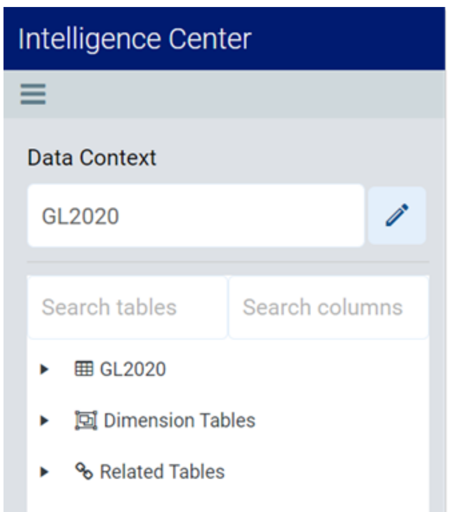
Example Select Table prompt when creating a new report

- If you are already in the Report Builder, then you can define or change the primary table using the **Data Context** box at the top of the Data Panel. Click the Edit icon to open the **Select Table** dialog (as shown in the previous screenshot).



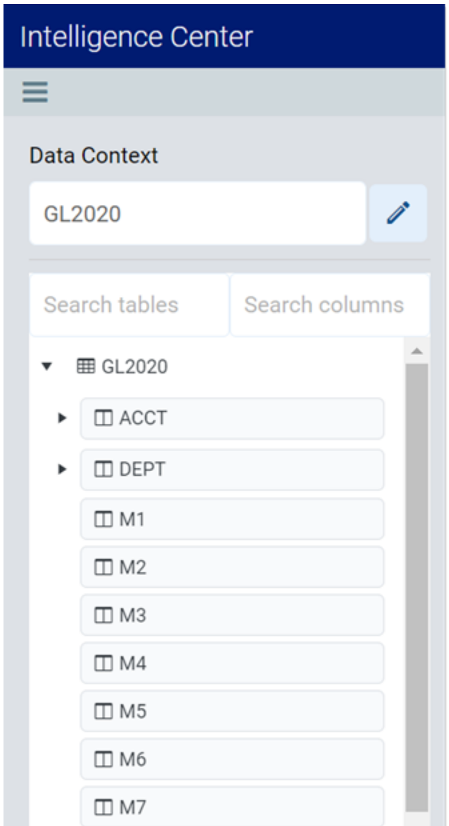
Once you have selected a table, that table name is shown in the **Data Context** box, and the Data Panel populates to show a table tree in three expandable/collapsible sections:

- ***TableName***: The selected table and its columns. This table is the primary table.
- **Dimension Tables**: Reference tables that the primary table looks up to. If the reference tables have lookups to other reference tables, these multi-level reference tables are accessible through the first-level reference tables.
- **Related Tables**: The contents of this section depend on the type of table selected as the primary table.
  - If the primary table is a data table, then this section contains other tables that look up to one or more of the same reference tables as the primary table.
  - If the primary table is a reference table, then this section contains tables that look up to the reference table.



Example Data Panel with a defined data context

You can expand these tables to view the columns, and then drag and drop columns out to the Report Canvas area so that they can be used as row dimensions or data columns.



In this example, we have selected GL2020 as the primary table. GL2020 is a data table that looks up to reference tables Dept and Acct. The table tree is populated as follows:

- **GL2020**: This node contains all columns in GL2020, as well as columns in the lookup tables Dept and Acct.
- **Dimension Tables**: This node contains the lookup reference tables Dept and Acct. If the reference tables look up to other downstream reference tables (multi-level lookups), those downstream reference tables can be used through these tables.
- **Related Tables**: This node contains other tables that also look up to Dept or Acct (or to a multi-level lookup through Dept or Acct). This may include tables such as GL2021, BGT2021, and BGT2020.

When you save the report, the data context is saved for that report and will be reloaded into the Data Panel whenever the report is opened in the Report Builder.

NOTES:

- When choosing the data context, the list of tables is automatically filtered to only show tables that you have access to. If you have the **Administer Tables** security permission, all tables will be shown. This means it can be possible to select a primary table where you do not have access to any of the data in the table. You can build the report but it will not populate with data.
- Certain tables can be restricted from showing the in the Report Builder using the system configuration setting **TablesRestrictedFromReportWriter**. If a table that you have access to is not available, it has likely been restricted using this setting.

Changing the data context

You can change the data context freely until you have done either of the following:

- Dragged and dropped columns out to the grid setup boxes in the Report Canvas
- Selected a fixed row structure for use with the report (when using the **Use fixed rows** option in the Grid Configuration properties)

You can still change the data context if needed, but any newly selected primary table must be compatible with the table columns you have already added to the grid, and with the fixed row structure you have selected (if applicable). If the newly selected primary table is not compatible, an error will occur when the Report Builder tries to refresh the grid in the Report Canvas. At this point you have the choice of selecting a different primary table that is compatible (which may mean returning to the original primary table), or removing the incompatible columns from the grid, or choosing a different fixed row structure.

Other settings that must be compatible with the primary table include columns selected as drilling columns for a Directed drilling configuration. If you change the primary table and any of these settings are incompatible with the new primary table, an error will occur.

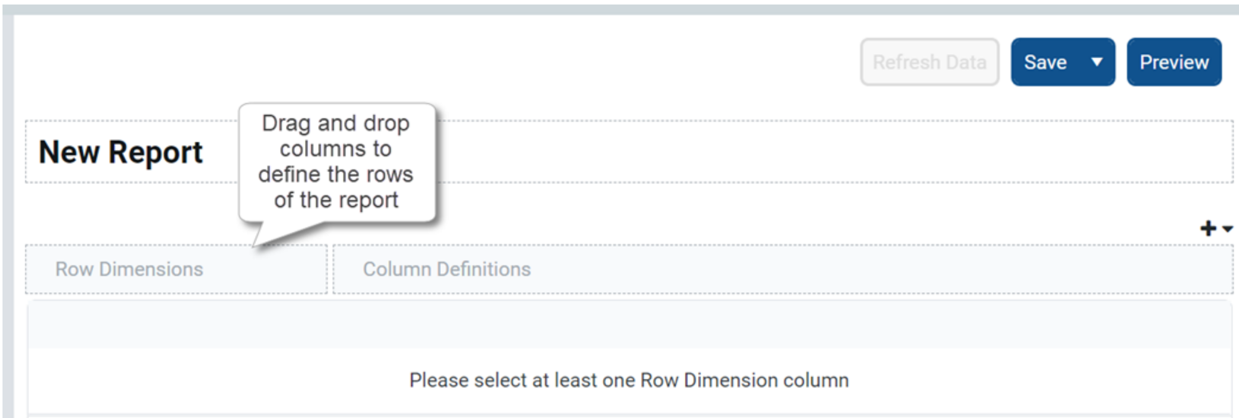
If you change the data context and save the report, the new primary table is now saved for the report and will be reloaded into the Data Panel whenever the report is opened in the Report Builder.

Specifying the row dimension for a web report

The row dimension for a web report defines the summation level for the row data. For example, you may want the rows in your grid to show data by department, region, entity, account, or some combination of dimensions. You specify a table column to use as the row dimension, and then the rows in the grid are dynamically generated based on the unique values in that column.

NOTE: If you want your report to use a static row structure with multiple sections instead of dynamically generating the rows, then use a fixed row structure instead of a row dimension.

The row dimension for the report is placed in the left-hand box at the top of the Report Canvas, known as the **Row Dimensions** box. The report grid cannot render until you specify either a row dimension or a fixed row structure.



Row Dimensions box at the top of the Report Canvas

Web reports can have multiple row dimensions. If two or more row dimensions are specified, then each row in the report represents a unique combination of the dimensions. For example, if the row dimension is just Dept, then each row shows data for a department. If the row dimension is Dept and Acct, then each row shows data by the unique combinations of department and account.

To specify a row dimension for a web report:

1. In the Data Panel of the Report Builder, expand the table tree until you locate the column that you want to use as a row dimension.

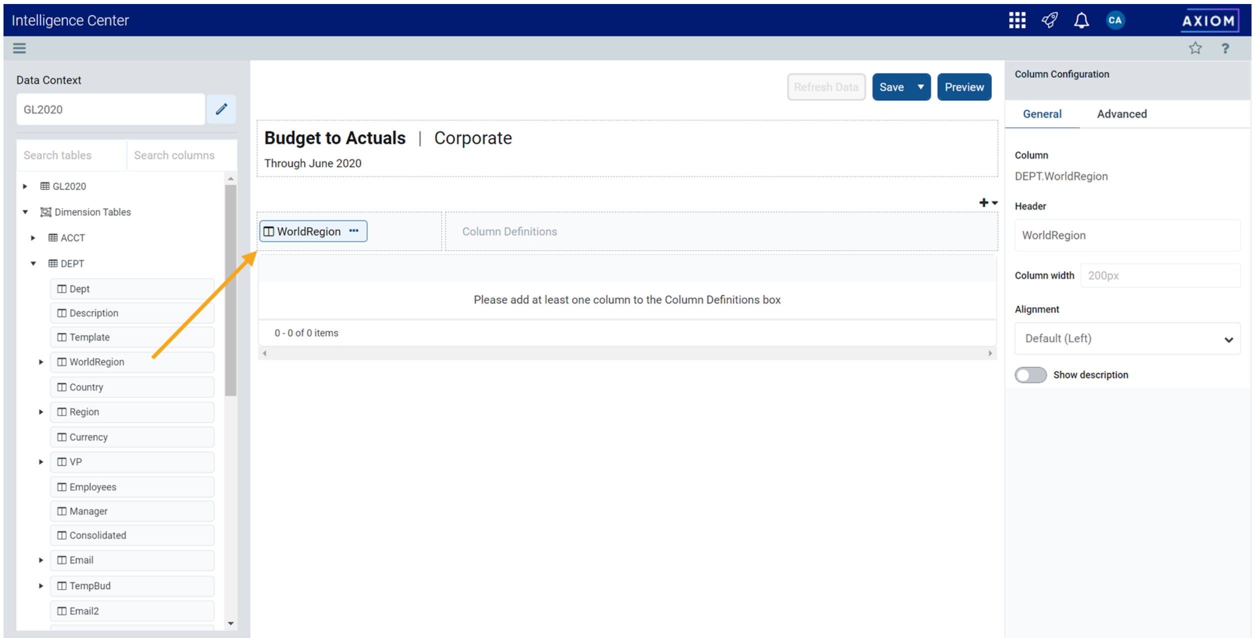
   If the Data Panel is empty, this means you must select a primary table first.

2. Drag and drop the column to the **Row Dimensions** box at the top of the Report Canvas.

3. Select the column name in the Row Dimensions box, and then use the **Column Configuration** panel to configure display properties such as column width, alignment, header text, and formatting. For more information, see Configuring column properties for a web report.

4. If multiple columns are present in the Row Dimensions box, you can drag and drop them within the box so that they display in the desired order within the grid.

Once a row dimension is specified, the Data Panel updates to remove any tables that are incompatible with the specified row dimension. You can now build out the data columns of the report by dragging and dropping columns from the Data Panel, and by creating calculated columns. For more information, see Adding data columns and calculated columns to a web report.



Defining a row dimension for a web report

NOTE: If you drag and drop a validated column from a data table to use as the row dimension, such as GL2020.Dept, this column reference is automatically updated to point to the lookup table instead, meaning Dept.Dept. This is done so that the column reference is compatible with other data tables that reference the same lookup table.

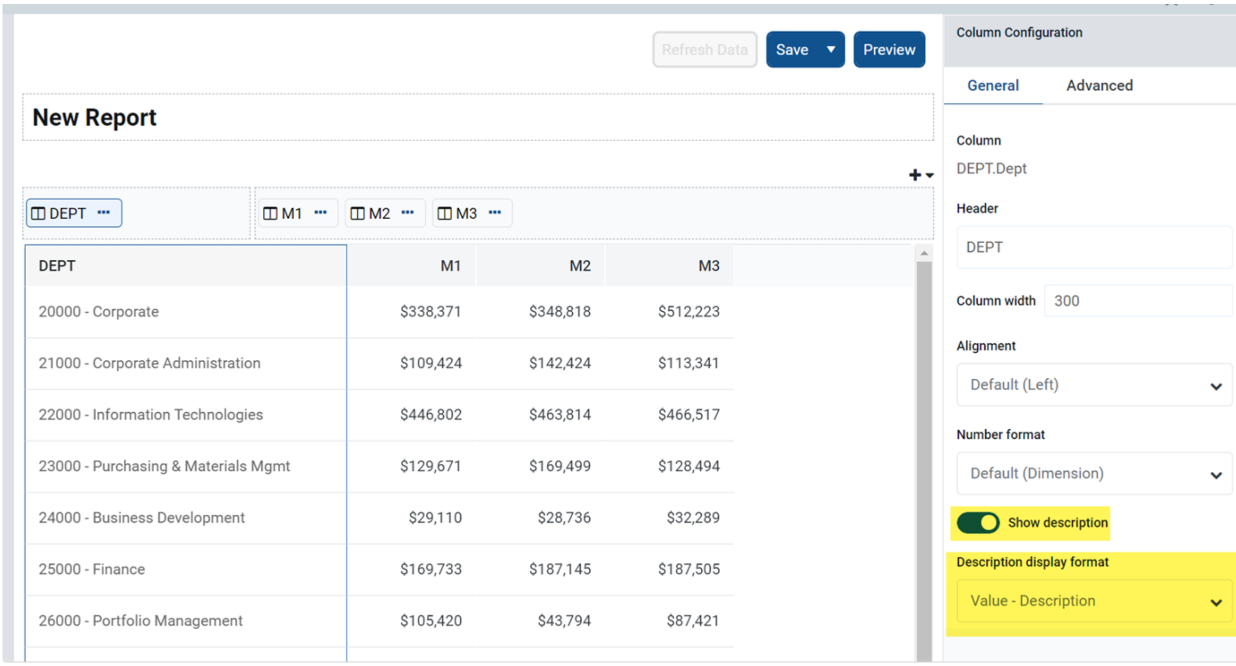
▶ Displaying descriptions for the row dimension

In many cases your row dimension will be a code, such as a department code or an account code, and you want to display the description for the code next to it.

To display descriptions on a dimension column:

1. Select the row dimension column in the **Row Dimensions** box.
2. In the **Column Configuration** settings, on the **General** tab, enable **Show description**.
3. From the **Description display format** list, select the desired display format.

In the following example, the Dept column has been configured to show descriptions using the **Value - Description** format. If you select a format that shows descriptions first, such as **Description (Value)**, then the rows will be sorted by the descriptions instead of the underlying values.



Example row dimension column configured to show descriptions

Although you can add the description column to the grid as a separate column instead of using the **Show description** option, this may not always achieve the desired results. For example:

- If you add the description column as a row dimension, then it will display next to the dimension values but it will cause the data to be additionally grouped by the description values. This is not recommended because the additional grouping is unnecessary, and in some cases may not produce the desired results (for example, if descriptions are not unique).
- If you add the description column as a regular column, then the descriptions will not be frozen next to the dimension codes for scrolling purposes.

▶ Filtering the row dimension

In some cases you want the report to display a subset of values from the row dimension column, instead of all values. To filter the row dimension values, use the Report Configuration properties to define a general filter for the report.

For example, if the row dimension is Dept but you want the report to only display departments that belong to a specific entity, define a general filter such as `Dept.Entity='Entity 1'`. This will filter the grid so that it only shows data that belongs to Entity 1, including the row dimension values. Department codes that do not belong to Entity 1 will not be included in the data query.

▶ Changing the row dimension

You can change the row dimension at any time by dragging and dropping additional columns to the **Row Dimensions** box, or by removing existing row dimensions.

To remove a row dimension, click the three-dots icon to the right side of the column name and then select **Delete Column**. If you remove the only row dimension, the grid in the Report Canvas cannot be rendered until you specify a new one.

If you change the row dimension after adding data columns and calculated columns, or if you change the primary table after specifying a row dimension, it is possible that some of the selections may be incompatible with each other. In this case, an error will display when the Report Builder attempts to refresh the data in the Report Canvas. You may have to remove incompatible columns, change the row dimension, or change the primary table in order to restore a valid grid configuration.

If you decide that you want to change the report to use a fixed row structure instead of a row dimension, use the **Grid Configuration** properties to enable fixed rows and then choose a fixed row structure. For more information, see Specifying the fixed row structure for a web report. Any columns currently placed in the Row Dimensions box will be ignored while fixed rows are enabled for the report.

Using upstream grouping columns as row dimensions in web reports

Delete this text and replace it with your own content.

Specifying the fixed row structure for a web report

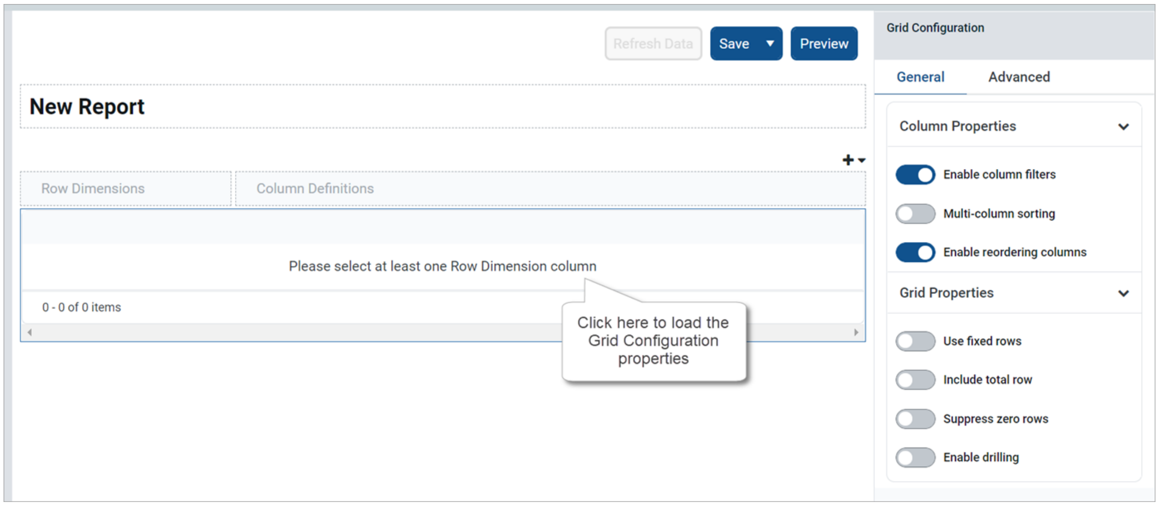
Web reports can optionally use fixed row structures to define the data sections in the report. Instead of dynamically generating the rows based on a table column, fixed row structures individually define each row of data, including section headers, subtotals, and totals.

Fixed row structures are defined separately so that you can reuse them in different web reports, and so that you can update the row structure in one place and have the changes propagate to all reports that reference the fixed row structure. The fixed row structure that you want to use in the web report must already exist—they cannot be created or edited in the Web Report Builder. For more information, see Managing Fixed Row Structures.

The fixed row structure is specified in the Configuration Panel, using the **Grid Configuration** properties. The grid in the Report Canvas cannot render until you specify either a fixed row structure or a row dimension.

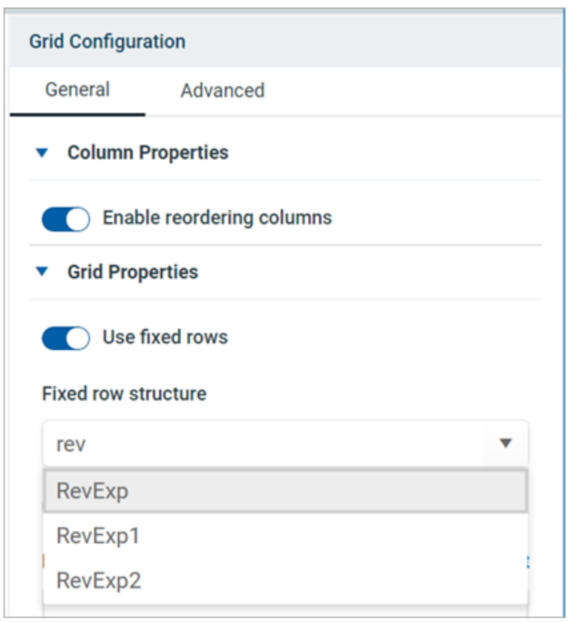
To specify a fixed row structure for a web report:

1. In the Report Canvas of the Report Builder, click the grid area below the column setup boxes. This area displays with placeholder text until either a row dimension or a fixed row structure is specified.



2. In the **Grid Configuration** properties, enable **Use fixed rows**.

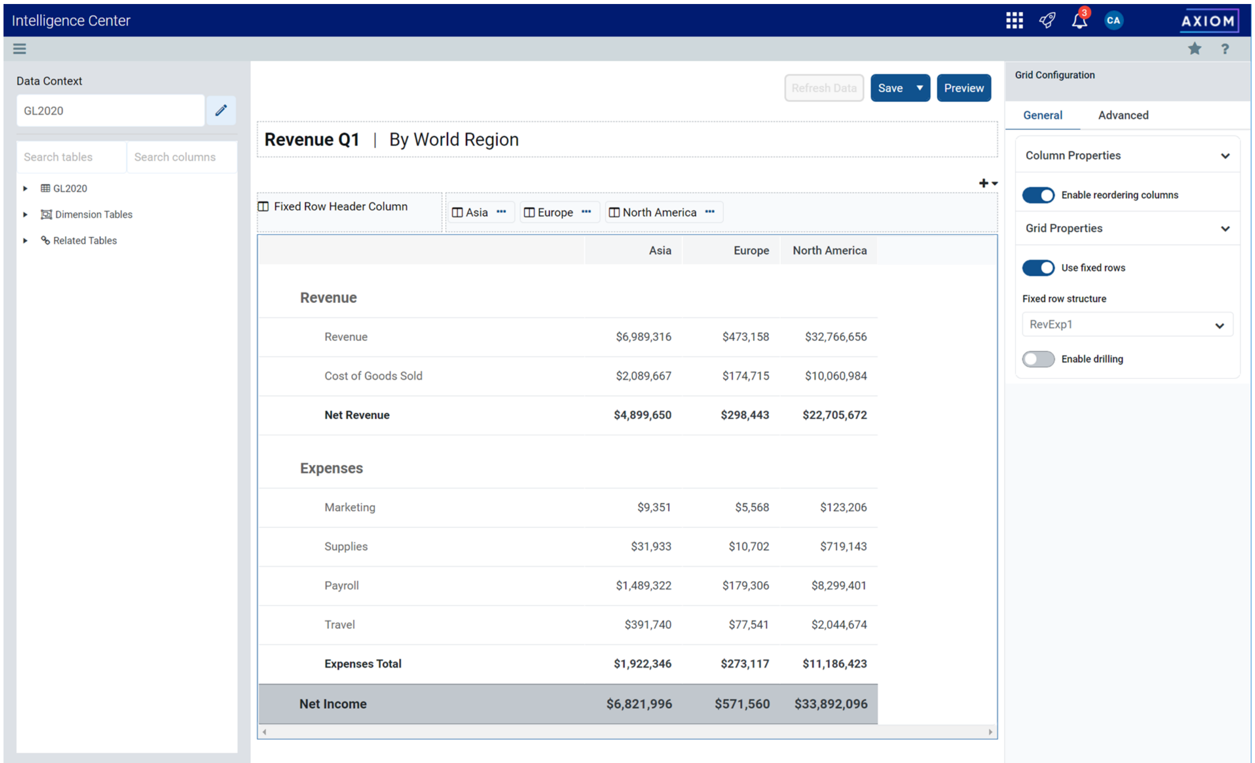
3. From the **Fixed row structure** drop-down list, select an existing fixed row structure. You can type into the box to filter the list by name.



After selecting a fixed row structure, the Report Canvas area updates as follows:

- The Row Dimensions box updates to show a placeholder column named **Fixed Row Header Column**. This column is the column that holds the section titles and data row labels as defined in the fixed row structure. You can select this placeholder column in order to configure certain display details about this column within the web report.

- Once you have dragged and dropped at least one data column to the Column Definitions box, you can use **Refresh Data** to update the grid and show the sections and rows as defined in the fixed row structure.



Example web report using a fixed row structure

> **NOTES:**
>
> - If you want to make changes to the fixed row structure, you must edit the structure in the separate fixed row structure editor. Any changes made to the row structure will automatically apply to any web report that uses the fixed row structure.
> - If you decide that you want to use dynamically generated rows instead of a fixed row structure, you can simply disable **Use fixed rows** and then drag a column to the Row Dimension setup box. For more information see Specifying the row dimension for a web report.

Impact on Grid Configuration options

When **Use fixed rows** is enabled for the grid, multiple grid configuration options become unavailable because they do not apply to web reports that use fixed row structures. If these options were configured before fixed rows were enabled for the grid, the configuration will be ignored.

- **Enable column filters**: End users cannot filter columns when using fixed rows.
- **Multi-column sorting**: End users cannot sort columns when using fixed rows.
- **Include total row** (and related settings): This option does not apply because fixed row structures have their own defined subtotal and total rows.
- **Suppress zero rows**: This option does not apply to fixed row structures; all configured rows will display regardless of whether they return all zero data.

▶ Configuring the Fixed Row Header Column

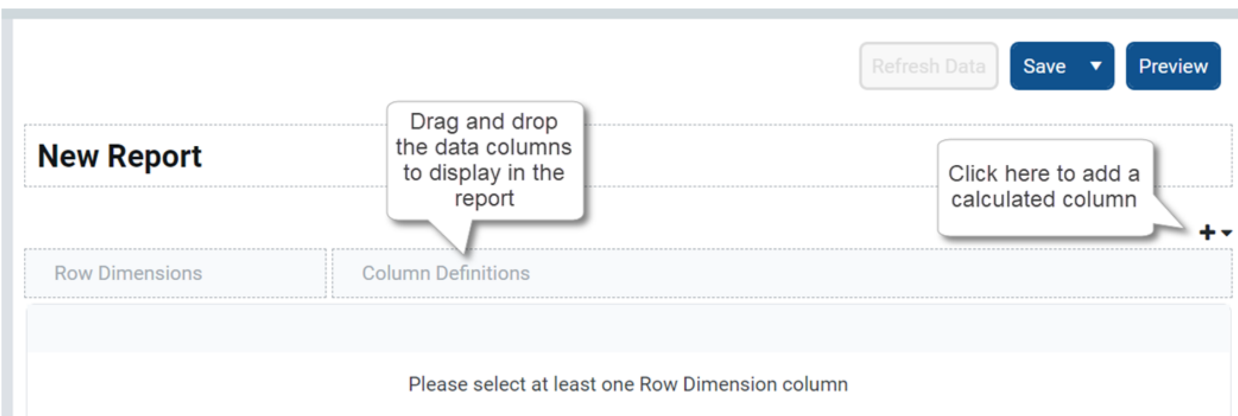
Most of the display details for the Fixed Row Header Column are configured within the fixed row structure and therefore cannot be changed within the web report. However, if you select the **Fixed Row Header Column** item in the Row Dimension setup box, you can configure the following:

Item	Description
Column width	The column width of the column in the grid, in pixels. Enter the desired column width as a whole integer between 30 and 600. The default width of the Fixed Row Header Column is 400.

Adding data columns and calculated columns to a web report

When creating a web report, you can add as many columns as needed to define the data that you want to display in the report. You can also define calculated columns, such as to show the difference between two columns.

The data columns and calculated columns for the grid are placed in the right-hand box at the top of the Report Canvas, known as the **Column Definitions** box. This box defines the columns to display in the report. Although it is possible to add columns and calculated columns to the Column Definitions box before specifying a row dimension or a fixed row structure, the grid in the Report Canvas will not populate until the rows are defined.



Column Definitions box at the top of the Report Canvas

▶ Adding data columns

To display data in the report, you can drag and drop table columns from the Data Panel to the Column Definitions box in the Report Canvas. The Data Panel displays the tables and columns that are eligible to be included in the report, based on the selected data context (primary table) and the specified row dimension.

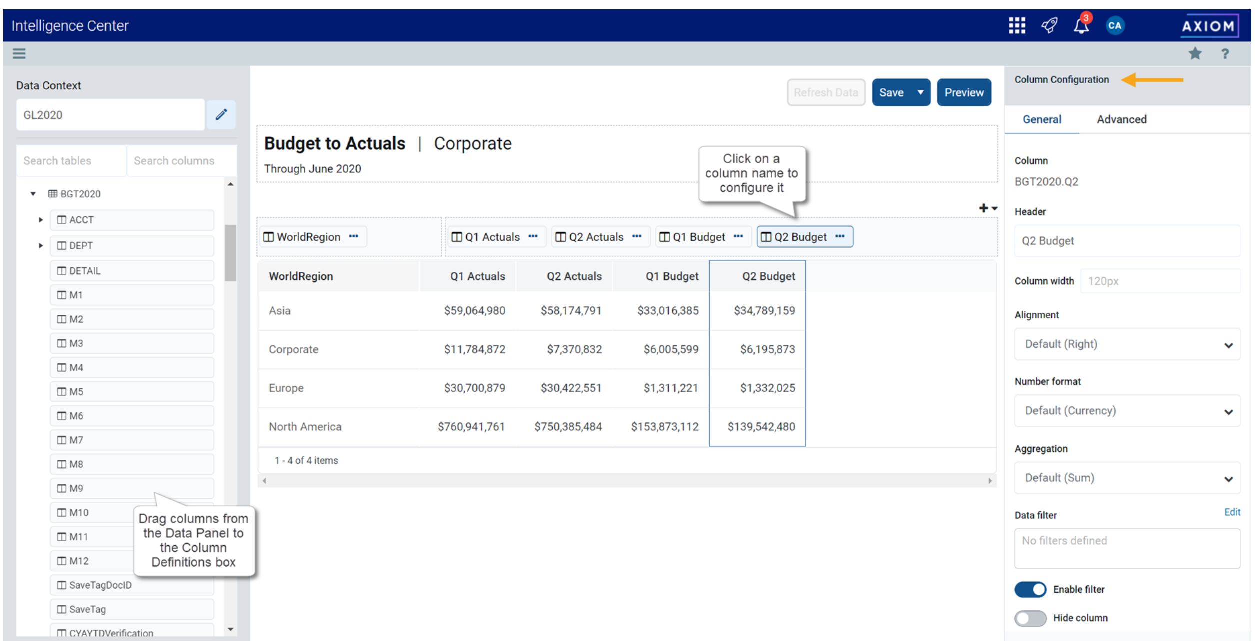
To add a data column to a web report:

1. In the Data Panel of the Report Builder, expand the table tree until you locate the column that you want to add to your report. You can also use the search boxes at the top of the panel to find a particular table or column by name.
2. Drag and drop the column to the **Column Definitions** box at the top of the Report Canvas.

   > **NOTE:** When using the default behavior, the new column will render as blank in the report until you click **Refresh Data**.

3. If the column is not in the desired location within the grid, drag and drop it within the Column Definitions box to reorder the columns.
4. Use the **Column Settings** in the Configuration Panel to configure display properties for the column, such as column width, alignment, header text, and formatting. For more information, see Configuring column properties for a web report.

   By default, when you drag and drop a column to the grid, that column is selected and its column properties display in the Configuration Panel. You can return to the column properties at any time by clicking the column name in the Column Definitions box.



Example web report after adding data columns

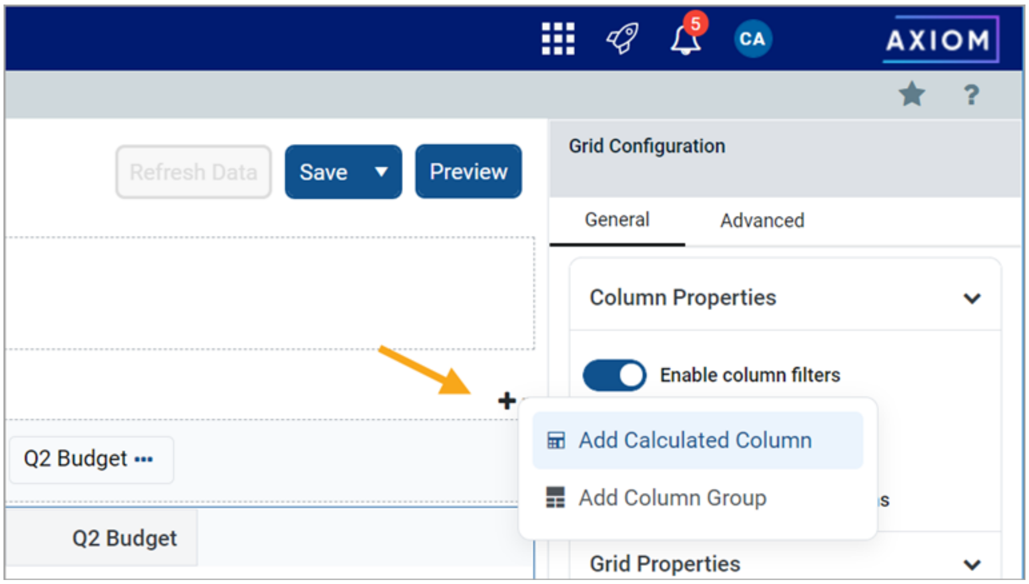
> **NOTE:** If **Use fixed rows** is enabled for the grid, currently the Report Builder does not dynamically update the tables listed in the Data Panel based on the specified fixed row structure. If you drag and drop a column from a table that is not valid in the context of the fixed row structure, a generic error will occur when the Report Builder attempts to populate the grid.

Adding calculated columns

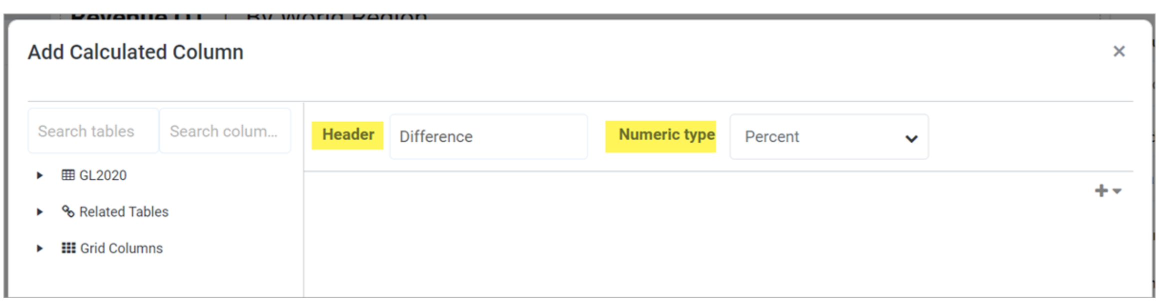
Calculated columns can be used to display totals, differences, percentages, and other calculations within a column of the report. Calculations can be based on columns from related tables that are eligible to be included in the report.

To add a calculated column to a web report:

1. In the Report Canvas of the Report Builder, click the plus sign in the top right corner of the **Column Definitions** box, and then click **Add Calculated Column**.

2. At the top of the **Add Calculated Column** dialog, define the following properties:
   - **Header**: Enter the column header text for the calculated column. This is effectively the name of the calculated column. By default, the header text is "Calculation".
   - **Numeric type**: Select the desired numeric type for the calculated column. If this is left at **Default**, the default numeric type for calculated columns is Currency.

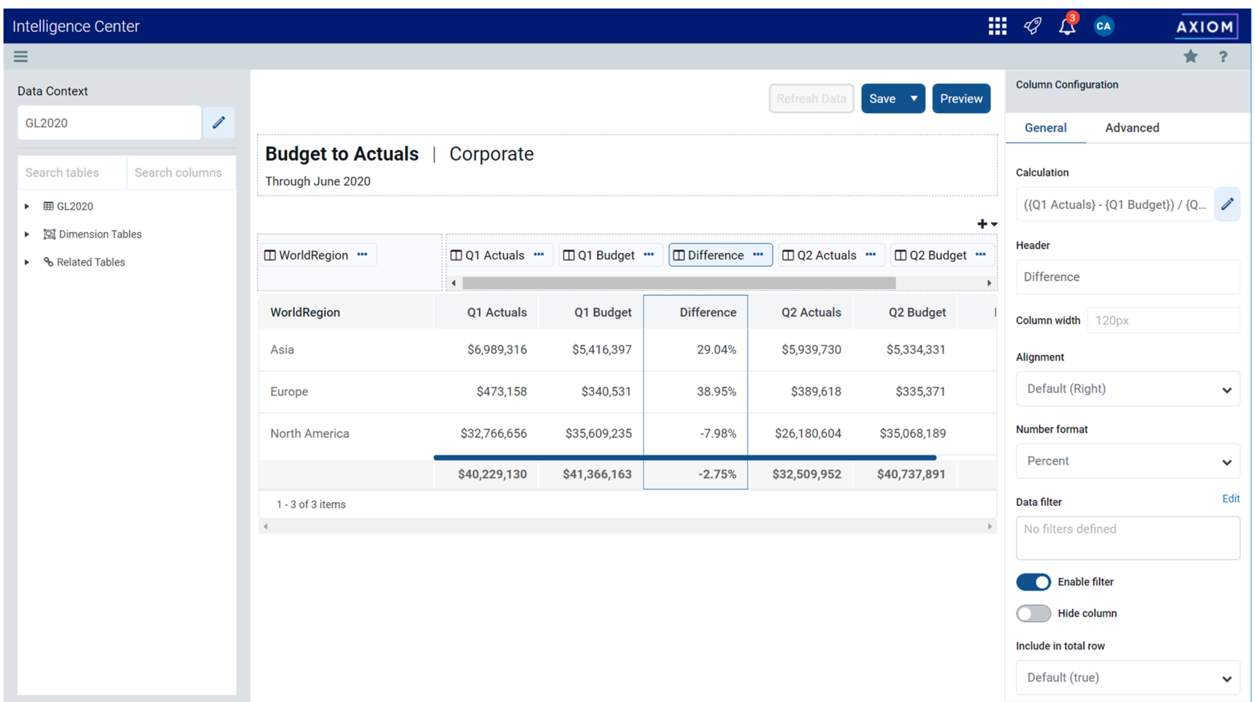
   

   You can change these properties later using the Column Configuration properties in the Configuration Panel.

3. To create the calculation, drag and drop columns from the table tree on the left to the calculation canvas. See Defining calculations for more information.
4. When you are finished creating the calculated column, click **OK**.

   The calculated column is added to the Column Definition box. By default, the new column is blank until you click **Refresh Data**.
5. If the calculated column is not in the desired location within the grid, drag and drop it within the Column Definition box to reorder the columns.
6. Use the **Column Configuration** properties in the Configuration Panel to configure display properties for the column, such as column width and alignment. For more information, see Configuring column properties for a web report.

   By default, when you define a calculated column, that column is selected and its column properties display in the Configuration Panel. You can return to the column properties at any time by clicking the column name in the Column Definitions box.



Example web report after creating a calculated column

▶ Defining calculations

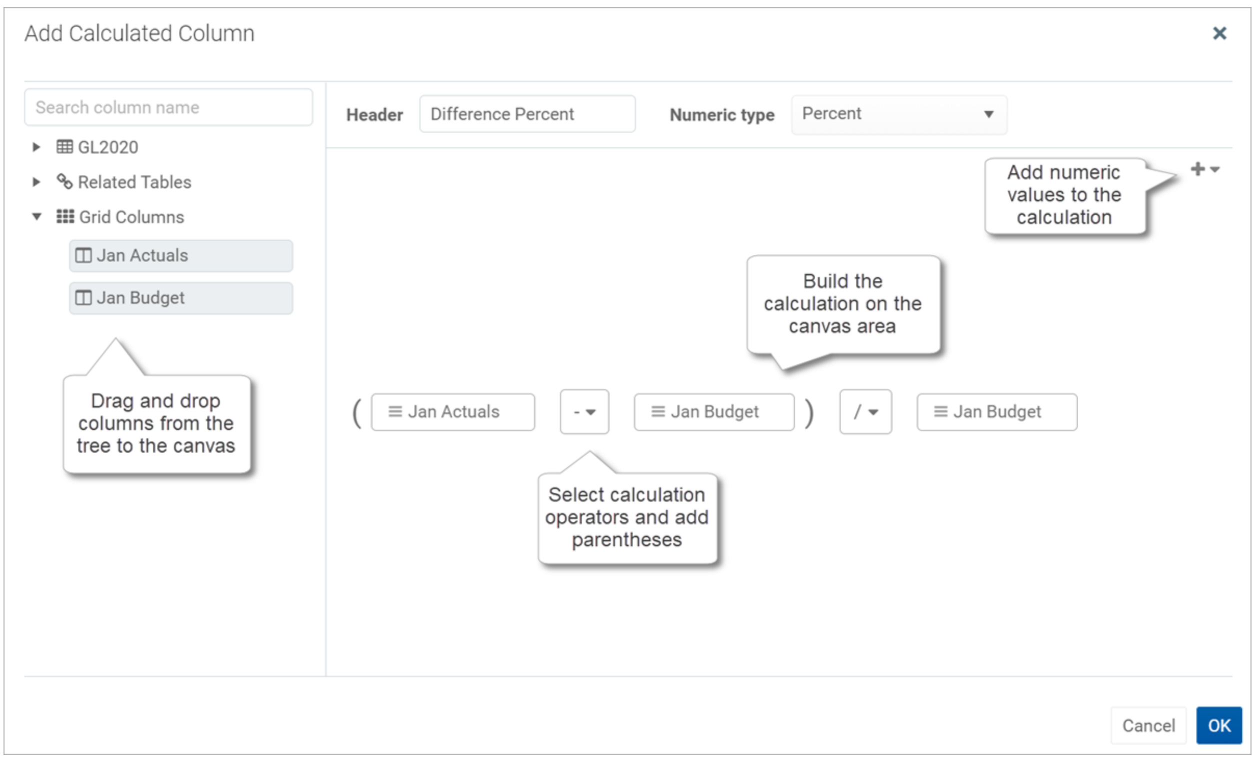
Using the **Add Calculated Column** dialog, you can build a calculation based on columns from related tables that are eligible to be included in the report. The column does not have to be present in the grid in order to be used in a calculation. Numeric values can also be used in the calculation.

The left-hand side of the dialog lists a table tree of available columns, while the right-hand side of the dialog—the calculation "canvas"—is where you build the calculation. To start the calculation:

- Drag and drop two columns out to the canvas. The two columns are separated by an operator selector.
- Select the desired operator.

You can continue building the calculation by dragging and dropping additional columns and selecting the operator. You can also do the following:

- **Numeric values**: To add a numeric value to the calculation, click the plus icon at the top right of the dialog. You can then move, reorder, or delete the numeric value just like columns.
- **Reorder items**: To change the order of columns in the calculation, drag and drop them on the canvas.
- **Parentheses**: To add parentheses to a part of the calculation, select **Add Parentheses** from the operator selector. The two columns affected by the operator will become enclosed in parentheses.
- **Delete items**: To delete an item, hover your cursor over the column and then click the trash can icon.



Example calculation in the calculation editor

Calculations can use the following operators: addition (+), subtraction (-), multiplication (*), and division (/). Use parentheses to determine calculation order, such as: `(GL2021.Q1-BGT2021.Q1)/BGT2021.Q1`.

Calculations can use the following columns:

- Numeric columns from the primary table, whether or not those columns are also in the grid.
- Numeric columns from related tables, whether or not those columns are also in the grid.
- Numeric columns from the grid, including other calculated columns. Grid columns display using the header text defined for the column.

  If you use a table column from the grid instead of from the table itself, then the calculation will use the column as it is configured to display in the grid. For example, if the grid column has a column filter or uses an alternate aggregation, the calculation will be based on that modified version of the column.

NOTES:

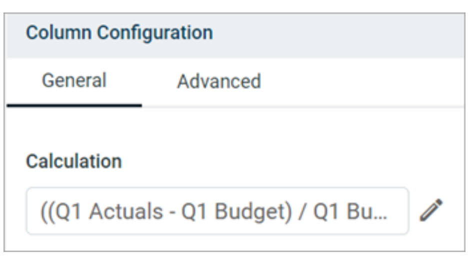
- If you drag and drop a column from the primary table or a related table, it displays on the canvas using the column name only—such as M1. You can hover your cursor over the column box to see a tooltip with the full table.column name—such as GL2021.M1. If you drag and drop the column from the Grid Columns node, then it will display using the defined header text for the column.
- If you use a grid column in the calculation, then the grid column cannot be deleted from the grid because deleting it would cause the calculation to become invalid. An error message will display if you attempt to delete a referenced column from the grid. To resolve the issue, you can do one of the following: edit the calculation to remove the reference, delete the calculated column, or configure the grid column as hidden so that it can still be referenced in the calculation but not display in the report.

Editing calculated columns

You can edit an existing calculated column to change the calculation.

To edit a calculated column in a web report:

1. In the Report Canvas of the Report Builder, click the calculated column in the Column Definitions box.
2. On the **General** tab of the **Column Configuration** properties, click the Edit icon to the right of the **Calculation** box.

3. In the **Edit Calculated Column** dialog, edit the calculation as needed, then click **OK**.

Additional column actions

Once data columns and calculated columns have been added to the grid, you can further adjust them as follows:

- **Reorder columns**: To reorder a column in the grid, drag and drop it to any location in the Column Definitions box. Note that you cannot drag and drop a column from the Column Definitions box to the Row Definitions box. If you accidentally dragged a column to the wrong box, you must remove the column and then drag and drop it again from the Data Panel.

- **Remove columns**: To remove a column from the grid, click the three-dots icon to the right of the column name and then select **Delete Column**. Use caution before removing a calculated column—if you later decide you want to re-add the column, you will need to re-create the calculation from scratch.

- **Copy columns**: To copy a column in the grid, click the three-dots icon to the right of the column name and then select **Clone Column**. A copy of the column is created to the right of the original column. The new column has the same properties as the original column, except that the text **(Copy)** is appended to the header text. You can modify the new column as needed in order to differentiate it from the original, such as to define a filter for the column, or to modify the calculation.

  > **NOTE:** If you copy a table column in the grid (as opposed to a calculated column), it is not possible to point the column to a different table column. The purpose of copying a table column is to display multiple instances of the same table column, but using different filters or different aggregation types.

- **Group columns**: If you want a set of columns to display under a group header, you can define a column group and then add the columns to that group. For more information, see Defining column groups for a web report.

- **Configure columns**: To configure display properties for a column, select the column name in the Column Definitions box, then use the **Column Configuration** properties in the Configuration Panel. For more information, see Configuring column properties for a web report.

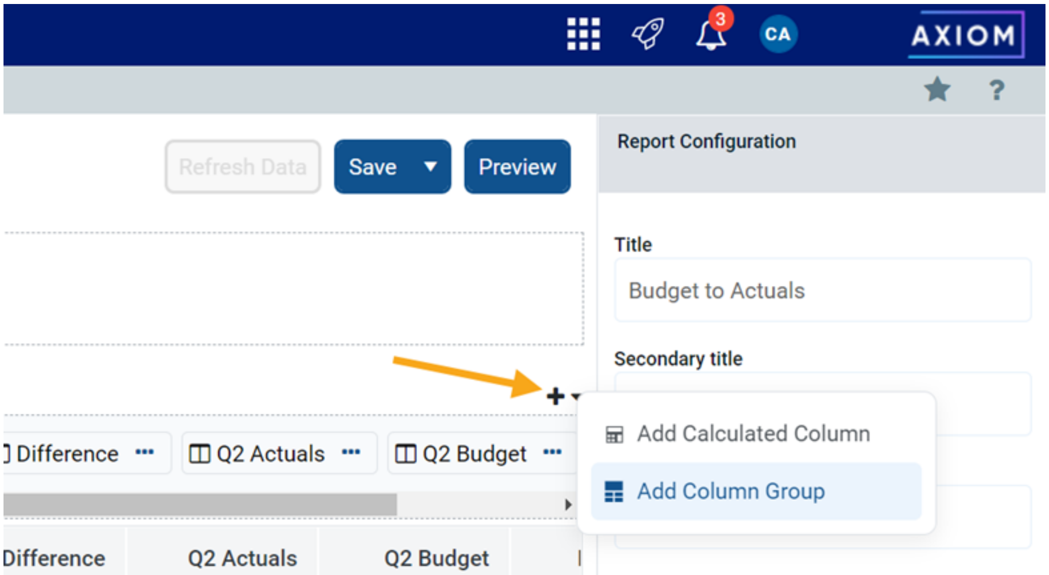
Defining column groups for a web report

You can define column groups in web reports so that certain columns can display together under a group header. For example, your report might have several actuals columns followed by several budget columns, and you want these columns to display under the group headers "Actuals" and "Budget".

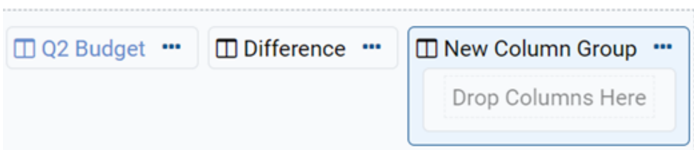
To define a column group, first you add the group "container" to the Column Definitions box of the grid, then you add table columns to the group container.

To define a column group:

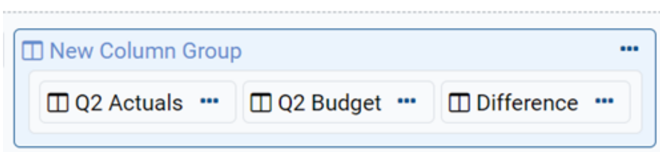
1. In the Report Canvas of the Report Builder, click the plus sign in the top right corner of the Column Definitions box, and then click **Add Column Group**.



A new empty column group is added to the Column Definitions box.

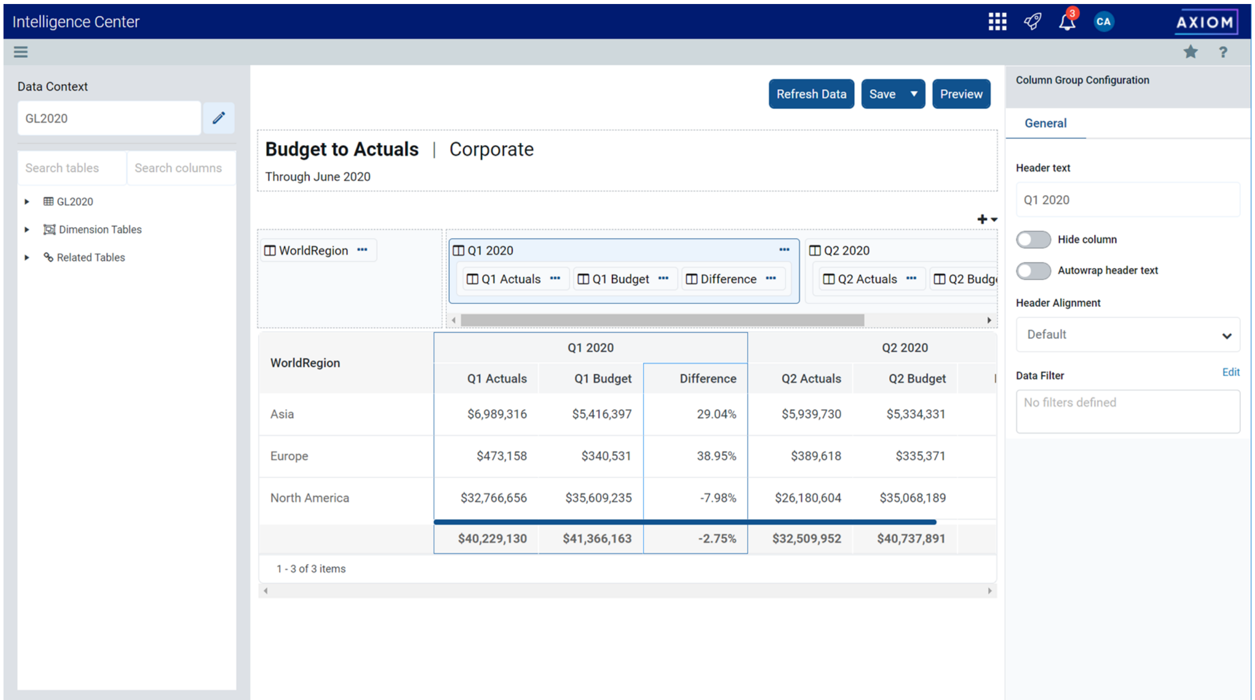


2. Drag and drop the desired columns into the column group. Columns must first be added to the Column Definitions box before they can dragged and dropped into a column group. It is not possible to drag and drop a table column directly from the Data Panel into a column group.



3. Select the column group box, and use the **Column Group Configuration** panel to define the header text and other properties. See the following section for more information on the available properties.

The column group displays in the grid with its child columns underneath.



Example web report with column groups

Once a column group has been created, you can work with it as follows:

- **Reordering groups**: To reorder a column group, drag and drop the group to another location within the Column Definitions box.
- **Deleting groups**: To delete a column group, click the three-dots icon in the top right corner of the group box and then select **Delete Group**. However, if you still want to use the columns in the group, you should drag and drop the columns out of the group before deleting the group. If you delete the group with columns in it, all of the columns will be deleted as well.
- **Copying groups**: To copy a column group, click the three-dots icon in the top right corner of the group box and then select **Clone Group**. A copy of the group is created to the right of the original group, including copies of the child columns within the group. The new group has the same properties as the original group, except that the text **(Copy)** is appended to the header text. You can modify the new group as needed in order to differentiate it from the original, such as to define a filter for the group, or to populate the group with different child columns.
- **Configuring groups**: To configure display properties for a column group, select the group in the Column Definitions box, then use the **Column Group Configuration** properties in the Configuration Panel.
- **Nested groups**: Currently, nested groups are not allowed. You cannot drag and drop a group within another group.

You can work with columns within the group as follows:

- **Adding columns**: You can continue to add columns by dragging and dropping them into the group box. You can also copy columns within the group.
- **Removing columns**: You can drag and drop columns out of the column group box to remove them from the group. If you don't want the column to be in the report at all, you can delete the column as normal.
- **Reordering columns**: You can reorder columns in the group by dragging and dropping them within the group box.
- **Configuring columns**: Columns in a column group can be configured as normal. Select the column box within the group box to bring up the **Column Configuration** properties in the Configuration Panel.

Column group properties

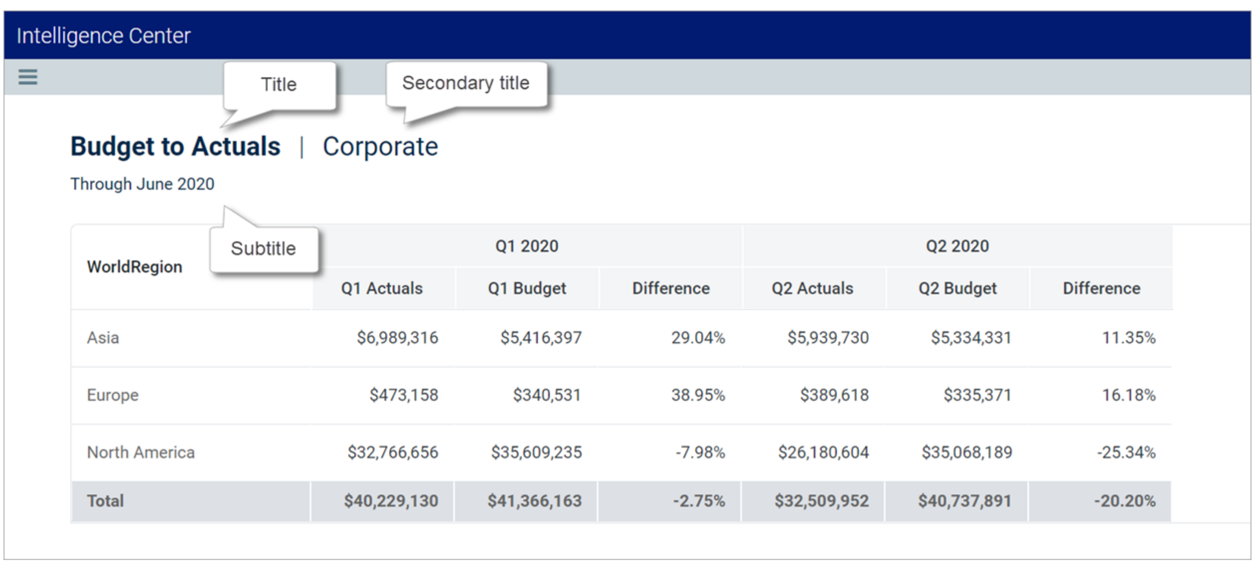
The following column group properties are available for web reports on the **General** tab of the **Column Group Configuration** panel:

Item	Description
Header	The header text to display on the group header. Enter the desired header text.
Hide column	Specifies whether the column group is hidden in the report: • If enabled, then the group is hidden in the report. The group remains visible in the Column Definitions box so that you can continue to configure the group as needed. • If disabled (default), then the group is visible.
Autowrap header text	Specifies whether header text wraps: • If enabled, then header text that exceeds the group width will wrap. • If disabled (default), then header text that exceeds the group width is truncated. The user can resize the group wider to view the full header text.
Header alignment	The alignment of the header text over the columns in the group. Select one of the following: **Default**, **Left**, **Right**, **Center**. Group headers use center alignment by default.

Item	Description
Data filter	Optional. Defines a filter to limit the data shown in the columns within this group. This is equivalent to defining the same data filter at the column level for each column in the group. Click the **Edit** button to open the Filter Wizard and define a filter. Once you have defined a filter, it displays in the **Data filter** box. If you want to change or remove the filter, click the **Edit** link again and change or delete the filter within the Filter Wizard. The **Data filter** box is not directly editable. Data filters defined at the group level are combined with any filters defined at the column level. If the group contains calculated columns, the group filter is applied to all columns referenced in the calculation. If the calculation references grid columns, the group filter is combined with any other filters applied to the grid columns (either at the column level or at the group level, if the column belongs to a different group). Additionally, if a data filter is defined at the report level, it is also applied. All relevant filters are combined using AND to determine the data that can display in a particular column.

Defining report titles and description for a web report

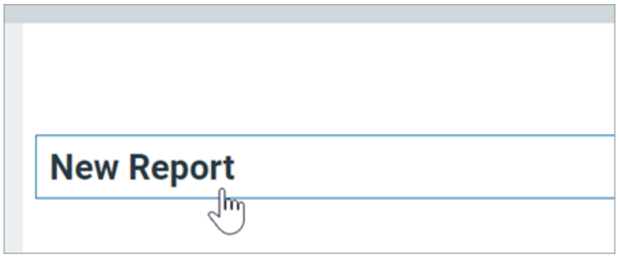
Using the general **Report Configuration** properties in the Configuration Panel, you can define a title, subtitle, and secondary title for the web report. You can also define an optional report description.



Example titles as they display in a rendered report

To configure report titles and description for a web report:

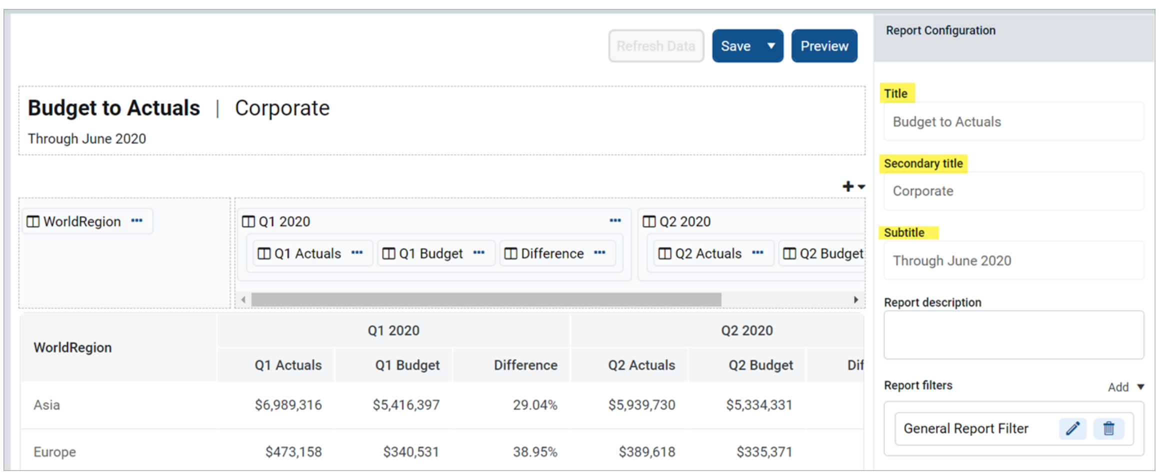
1. In the Report Canvas of the Report Builder, click on the title text to load the Report Configuration properties. For example, if the report currently uses the default name of New Report, click on the New Report text or next to it.

   Click on the title text to load the Report Configuration properties

   If you are in a brand new report, the Report Configuration properties display by default when you first enter the Report Builder. However, as soon as you drag and drop a column to the Row Definitions box or the Column Definitions box, the column becomes selected which causes the Column Configuration properties to display. In this case you need to click on the report title to return to the Report Configuration properties.

2. In the **Report Configuration** panel, complete the report properties as needed.

   Title-related report configuration properties

The following title and description properties are available:

Item	Description
Title	The main title for the report. This text displays at the top of the report, over the grid.

Item	Description
Secondary title	Optional. The secondary title for the report. If defined, this text displays in the same line as the main title, separated by a horizontal pipe character. For example: *Title | Secondary Title*
Subtitle	Optional. The subtitle for the report. This text displays in smaller font underneath the main title.
Description	Optional. A description for the report.

NOTE: Currently, it is not possible to use variables in web report titles.

Defining report-level data filters for a web report

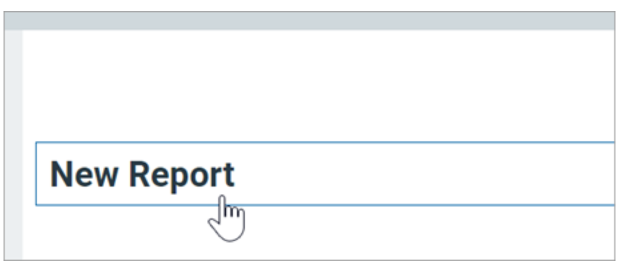
Using the **Report Configuration** properties in the Configuration Panel, you can define report-level filters to limit the data shown in the report.

You can use two types of filters:

- **General filters**: General filters are based on reference tables, and impact all tables in the report that look up to the reference tables used in the filter.
- **Table-specific filters**: Table-specific filters only impact a single specific data table used in the report.

To define report filters for a web report:

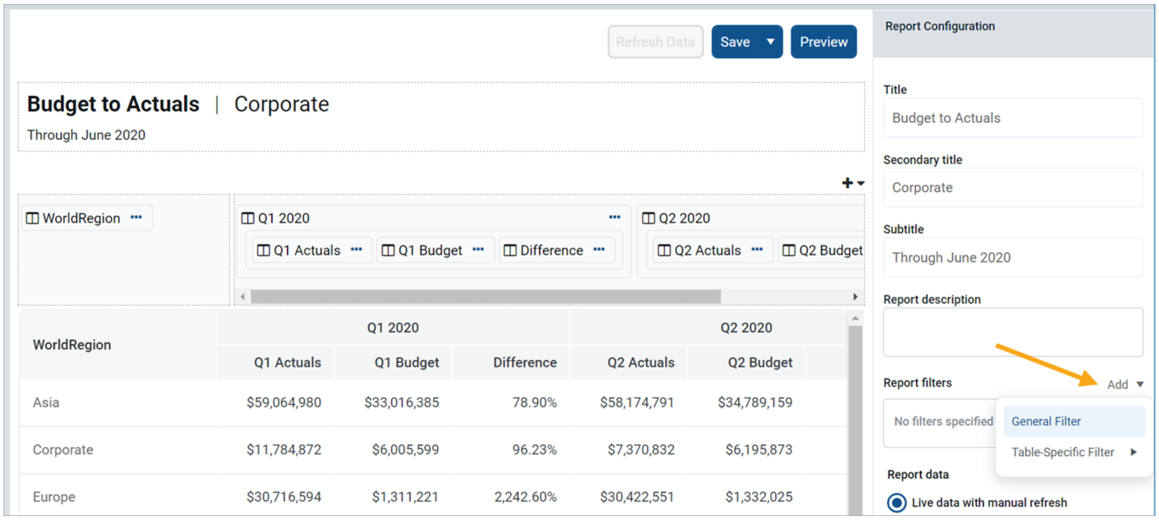
1. In the Report Canvas of the Report Builder, click on the title text to load the Report Configuration properties. For example, if the report currently uses the default name of New Report, click on the New Report text or next to it.

   Click on the title text to load the Report Configuration properties

   If you are in a brand new report, the Report Configuration properties display by default when you first enter the Report Builder. However, as soon as you drag and drop a column to the Row Definitions box or the Column Definitions box, the column becomes selected which causes the Column Configuration properties to display. In this case you need to click on the report title to return to the Report Configuration properties.

2. In the **Report Configuration** panel, click **Add** over the **Report Filters** box, then do one of the following:
    - Click **General Filter** to create a general filter.
    - Click **Table-Specific Filter > *TableName*** to create a table-specific filter. All data tables used in the report are listed on this menu.



Creating a report-level data filter

3. In the Filter Wizard, create your filter as needed, then click **OK**. Note the following:
    - If you are defining a general filter, the Filter Wizard only shows reference tables that the primary table looks up to.
    - If you are defining a table-specific filter, the Filter Wizard only shows the table that you selected from the menu.
    - After building the filter, remember to click **Apply** to move the filter from the **Preview** box to the **Filter** box at the bottom of the dialog. A filter statement must be present in the Filter box when you click **OK**, or else the saved filter will be blank. If you are creating a compound filter, you can click **And** or **Or** to append the preview filter to any currently existing filter in the Filter box.
    - You can manually type a filter statement in the **Filter** box (or load a saved filter), but that filter must follow the same rules as any filter that you would create using the current Filter Wizard context. If the filter statement is not valid within the current context, it may have no effect on the report or cause an error when viewing the report.

The filter is added to the **Report filters** box. You can hover your cursor over the filter name to view details about the filter, such as whether it is a general or table-specific filter, and to view the actual filter statement.

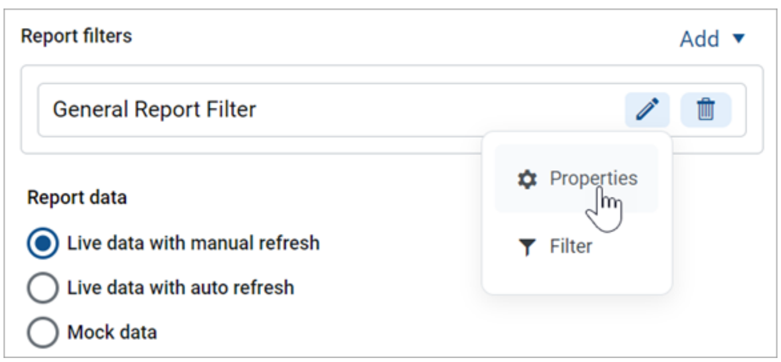
If desired, you can edit the filter properties to give the filter a specific name, define an optional filter description to document the purpose of the filter, and toggle the filter as enabled or disabled. You can also edit the filter statement.

▶ Editing existing filters

You can edit general filter properties and you can edit the filter criteria statement.

To edit an existing filter:

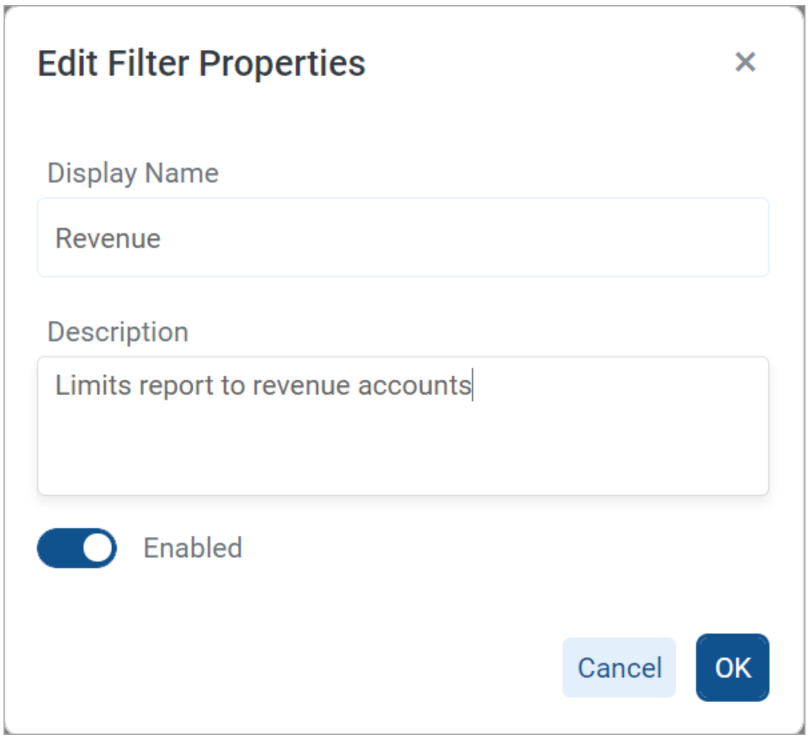
- Click the Edit icon next to the filter name, and then select either **Properties** or **Filter**.



If you are editing the filter properties, edit the following fields in the **Edit Filter Properties** dialog as needed, then click **OK**:

Item	Description
Display Name	The display name of the filter. By default, the filter displays in the **Report filters** box as follows: • General filters display using the name **General Report Filter**. • Table-specific filters display using the name ***TableName*** **Filter**. You can change this name to something more descriptive or specific if you choose. If you change the name so that it is no longer obvious whether the filter is general or table-specific, then you can still view this information using the filter tooltip (as shown in the previous section).

Item	Description
Description	Optional. If desired, you can define a description to document the purpose and scope of the filter.
Enabled	By default, filters are enabled and will impact the data shown in the report. If desired, you can toggle the filter to disabled in order to keep the filter in the report properties for future use, but temporarily disable it. When you are ready to use the filter again, you can toggle it back to enabled. While the filter is disabled, it shows as grayed out in the **Report filters** section. The filter will not be applied to the data queries in the report.



Example filter properties

If you are editing the filter, the Filter Wizard opens with the current filter shown in the **Filter** box. You can manually adjust the current filter, or you can create a new filter using the wizard to overwrite the existing filter, or you can create a new filter using the wizard and append it to the existing filter using **And** or **Or**. Remember that whatever filter statement is in the Filter box when you click **OK** will become the new filter.

Deleting existing filters

You can delete a report filter if it is no longer needed. Remember that you can disable the filter instead, if you want to temporarily remove the filter without deleting it from the report (see the previous section).

To delete an existing filter:

1. Click the Delete icon 🗑 next to the filter name.
2. When prompted to confirm the deletion, click **OK**.

The filter is deleted from the report.

General filter notes

General filters are based on reference tables (also often known as dimension tables):

- If the primary table is a data table, you can define a general filter using any reference table that the primary table looks up to.
- If the primary table is a reference table, you can define a general filter using the primary table.

When creating the filter, you can use any column on the reference table, including multi-level lookups through the reference table. For example, if the primary table looks up to Dept, the filter could be `Dept.Dept=24000` or `Dept.Region='West'` or `Dept.Region.RegionType=1`.

The general filter applies to all tables in the report that look up to the reference table (as well as the reference table itself). For example, imagine that you have a report that compares GL2021 to BGT2021. You want to define a filter so that the report only shows data for the West Region. In this case you can define a general filter on the Dept table of `Dept.Region='West'`. Since both tables look up to the Dept table, the general filter will apply to both tables and limit the data in the report.

NOTES:

- If the primary data table looks up to multiple reference tables, the general filter can be a compound filter that uses multiple reference tables. In this case, the filter will only apply to data tables that look up to both reference tables. For example, imagine you define a general filter of `Dept.Region='West' and Acct.Category='Revenue'`. If the report contains a table that only looks up to the Acct table but not the Dept table, then the filter will not apply to that table and no error will occur.
- If you define a general filter and then change the primary table of the report to a table that has different reference table lookups, the filter will not cause an error. If the existing filter does not apply to any tables in the report, it will simply be ignored.

Table-specific filter notes

Table-specific filters apply only to the selected table for the filter. All other tables are unaffected by the filter.

The table-specific filter can use any column in the table, including multi-level lookups. For example, if the selected table is BGT2020, the filter could be `BGT2020.m1<>0` or `BGT2020.Acct.Category='Revenue'`.

Table-specific filters can only be defined on data tables used in the report. If you want to define a filter on a reference table, it must be a general filter.

> **NOTE:** If you define a table-specific filter and then later edit the report configuration so that the table no longer has any columns in the report, the filter will not cause an error. It will simply be ignored.

Defining report parameters for web reports

Delete this text and replace it with your own content.

Configuring grid properties in a web report

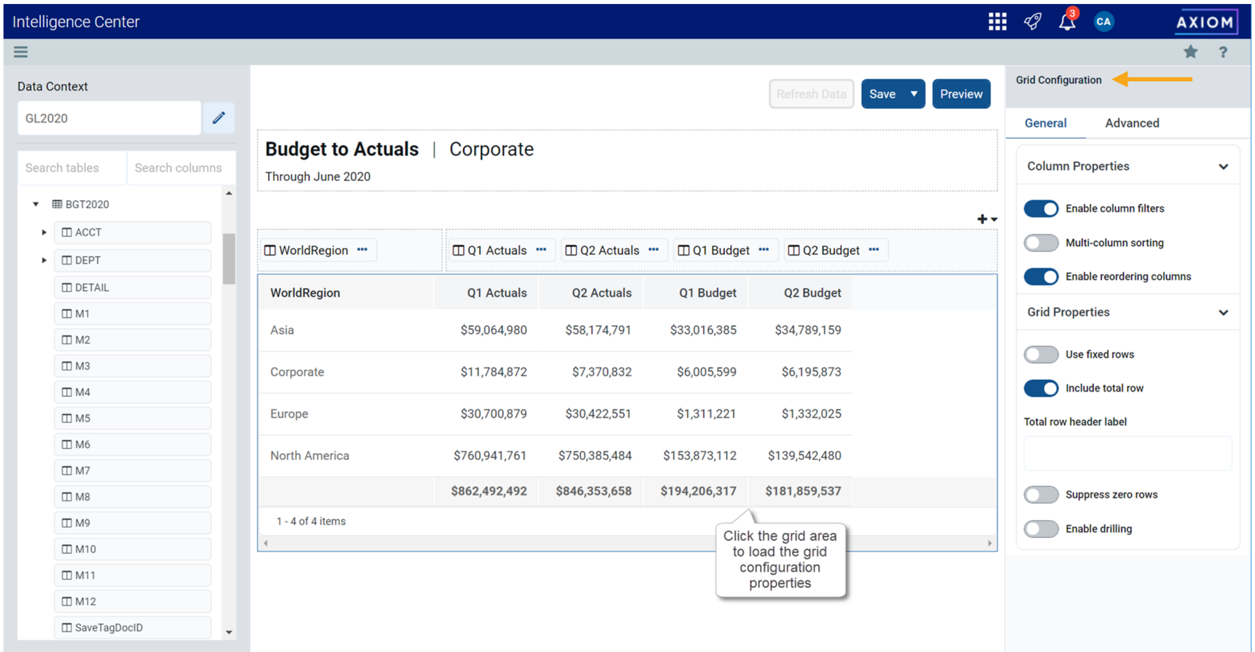
The grid properties define the available features and the overall presentation of data in a web report. Using the grid properties, you can configure:

- User interaction properties such as whether users can filter columns, sort columns, and reorder columns
- Display properties such as whether the grid has a total row and whether rows with all zero values display
- Drilling properties such as what type of drilling is enabled and configuration for directed drilling

In the Report Builder, the grid properties are defined in the right-hand Configuration Panel.

To configure grid properties for a web report:

1. In the Report Canvas of the Report Builder, click the grid that displays below the column setup boxes.
2. In the right-hand Configuration Panel, complete the **Grid Configuration** properties as needed.



Example Grid Configuration properties

The grid configuration properties are separated into two tabs:

- **General**: Basic grid properties that should be reviewed and configured for all web reports.
- **Advanced**: Advanced grid properties such as default column formats for the grid.

General grid properties

The following grid properties are available for web reports on the **General** tab of the **Grid Configuration** panel:

Column Properties

Item	Description
Enable column filters	Specifies whether users can filter columns in the grid. Only applies to grids with dynamic rows; users cannot filter columns in grids where **Use fixed rows** is enabled. • If enabled (default), then filter icons display on columns where **Enable filter** is enabled in the column configuration properties. Report users can use these icons to filter the data shown in the column. If **Enable filter** is disabled on a column, the filter icon is not available for that column. • If disabled, then filter icons do not display on any columns, regardless of whether **Enable filter** is enabled for the column.

Item	Description
Multi column sorting	Specifies whether users can sort by multiple columns in the grid. Only applies to grids with dynamic rows; users cannot filter columns in grids where **Use fixed rows** is enabled. • If enabled, then users can sort the grid by multiple columns. If the grid is already sorted by a column and a user clicks another column to sort, then the grid is first sorted by the most recent column and then sorted by the original column. Columns will remain sorted until the user toggles the sort disabled for that column. • If disabled (default), then users can sort the grid by a single column. If the grid is already sorted by a column and a user clicks another column to sort, then the sort is disabled on the original column and the grid becomes sorted by the most recent column. Users can sort columns by clicking on the column header. Each click toggles through sort ascending, sort descending, and no sort. **NOTE:** The ability to clear the sort is only available if multi-column sorting is enabled. Otherwise, clicking a column header will toggle between sort ascending and sort descending. You can click a different column header to sort by that column, but you cannot clear the sort.
Enable reordering columns	Specifies whether users can reorder columns in the grid. • If enabled (default), then users can drag and drop columns within the grid to temporarily reorder them. • If disabled, then users cannot reorder columns in the grid.

Grid Properties

Item	Description
Use fixed rows	Specifies whether the grid uses dynamic rows or a fixed row structure. • If enabled, then the grid uses a fixed row structure to define the rows. Select the structure using the **Fixed row structure** field. For more information, see Specifying the fixed row structure for a web report. • If disabled (default), then the grid dynamically generates rows based on a table column specified as the row dimension. The row dimension is specified by dragging and dropping the desired table column into the Row Dimensions box at the top of the Report Canvas. For more information, see Specifying the row dimension for a web report.

Item	Description
Fixed row structure	Specifies the fixed row structure to use in the grid. Only applies when **Use fixed rows** is enabled. Select an existing fixed row structure to define the rows of the grid. You can type into the box to filter the list of fixed row structures by name. Fixed row structures can be created from the Intelligence Center. For more information on creating fixed row structures, see Managing Fixed Row Structures.
Include total row	Specifies whether a total row is present on the grid. Only applies to grids with dynamic rows; if **Use fixed rows** is enabled then the grid uses subtotal and total rows as defined in the fixed row structure. • If enabled, then a total row displays at the bottom of the grid. If the grid data is paged, the total row shows the total of all rows across all pages. Use the **Total row header label** field to define label text for the total row, such as "Total". This text displays in the last row dimension column. Columns displaying numeric, non-dimensional data are included in the total row by default. If desired, you can exclude a numeric column from the total row using the column configuration properties. • If disabled (default), then the grid does not have a total row.
Suppress zero rows	Optional. Specifies whether data rows with all zeros are suppressed from showing in the grid. Only applies to grids with dynamic rows; all zero rows cannot be suppressed in grids where **Use fixed rows** is enabled. Non-key columns that meet both of the following criteria are evaluated to determine whether a row should be hidden: • The column data type is Integer (all types) or Numeric. • The column is from the primary table or an additional data table. If the primary table is a data table, Integer and Numeric columns on lookup reference tables are ignored—meaning these columns may have values, but the row is still suppressed if all applicable data table columns have zero values. There is one exception: reference table columns are considered if the column classification is Values and the numeric type is Currency. Calculated columns defined in the grid are not evaluated for this purpose and do not prevent a row from being suppressed.

Item	Description

Enable drilling	Specifies whether users can drill down rows in the grid to view the underlying data.
	• If enabled, then users can drill rows in the grid. Use the **Drilling type** property to specify what type of drilling options are present:
	  ◦ **Key columns** (default): Users can drill down to the key column level of the data. These drilling options are automatically generated based on the validated key columns of the primary table. No additional setup is required.
	  ◦ **Directed**: Users can drill down predefined drilling paths. Use the **View/Edit Configuration** link underneath the **Directed** option to configure the drilling paths.
	For more information, see Configuring drilling for web reports.
	• If disabled (default), then users cannot drill rows in the grid.

Item	Description
Grid sort order	Specifies the sort order for data in the grid. • **Default**: Data is sorted by the row dimension columns specified for the grid, in ascending order. If multiple row dimension columns are present, the first row dimension column is the primary sort column, followed by the second row dimension column, and so on. • **Custom**: Specify one or more columns to sort the grid data, in either ascending or descending order. Use the **View/Edit Configuration** link underneath the **Custom** option to select the drill columns. ◦ The **Edit Sorting Configuration** dialog lists all columns in the grid. It is not currently possible to sort by a column that is not present in the grid. If necessary, you can add a column to the grid in order to sort by that column, then configure the column as hidden so that it does not show in the grid. ◦ To add a column to the sorting configuration, drag the column from the left-hand panel to the right-hand panel, and then select **Asc** (default) or **Desc** for the sort order. To remove a column from the sorting configuration, click the **X** icon on the right-hand side of the column box. ◦ If multiple columns are added to the sorting configuration, the top-most column is the primary sort column, followed by the next column, and so on. You can reorder the columns in the list by clicking the drag handle on the left-hand side of the column box and then dragging and dropping it to a new location. **NOTE:** If **Multi column sorting** is not enabled for the grid, the grid will still honor a multi-column sort configuration when the report is initially rendered. However, if a user sorts by any column, the grid reverts to single-column sorting with no way to return to the previous sort configuration other than by reloading the report. If a custom sort is specified but no columns are added to the sorting configuration, the grid will revert to using the default sort order.

NOTE: If you created a web report using the Report Builder in version 2021.1, that report may have had a defined **Data Filter** in the Grid Configuration properties. These filters are now defined at the report level, in the Report Configuration properties. Any existing grid filter will be automatically converted to a general report filter. In rare cases, this conversion may result in report errors if the grid-level filter is not valid as a general report filter. If this occurs, you can delete the converted filter and re-create it as a table-specific filter.

Advanced grid properties

The following grid configuration properties are available for web reports on the **Advanced** tab of the **Grid Configuration** panel:

Default column formats

Use this section to view and define default column formats for the grid based on column data type. All columns added to the grid will inherit the settings defined here. By default, columns will continue to inherit any changes made to the default column formats unless the format has been overridden at the column level.

For example, the default alignment for String columns is Left. When String columns are added to the grid, they are configured to use the Default alignment, meaning Left. If desired, you can change the default alignment for String columns to Center, and all String columns in the grid that are using the Default alignment will now update to use Center alignment. However, if you have manually configured a particular String column to use Right alignment instead of the Default alignment, that column will continue to use its configured alignment of Right.

Item	Description
Data type	Select a column data type to view and edit the default column formats for that type. The following data types are available: • **String**: Columns containing text or alphanumeric values. Includes table columns using the String data type. • **Date**: Columns containing dates. Includes table columns using Date or DateTime data types. • **Boolean**: Columns containing True or False values. Includes table columns using the Boolean data type. • **Dimension**: Columns containing numeric dimension codes. Includes table columns using Numeric, Integer, or Identity data types, where the Column Classification is Dimension. • **Decimal**: Columns containing decimal numeric values. Includes table columns using the Numeric data type, where the column has a Numeric Type of Number. • **Number**: Columns containing whole integer numeric values. Includes table columns using Integer or Identity data types, where the Column Classification is Value. • **Currency**: Columns containing currency numeric values. Includes table columns using the Numeric or Integer data types, where the column has a Numeric Type of Currency. • **Percent**: Columns containing percent numeric values. Includes table columns using the Numeric or Integer data types, where the column has a Numeric Type of Percent. Additionally, when you create a calculated column, you can specify its data type as one of the numeric data types. The column will then use the default column formats for that data type. The default data type for calculated columns is Currency. **NOTE:** Columns that would normally be treated as Number data type are treated as Dimension data type if they are used as row dimension columns or drill columns.
Column width	The default column width for the selected **Data Type**, in pixels. Enter the desired column width as a whole integer between 30 and 600. The default width for each data type is as follows: • Currency, Decimal, Percent, Date, Boolean: 120 • Number: 150 • String, Dimension: 200

Item	Description
Alignment	The default alignment of the column values for the selected **Data Type**. If you want to change the default alignment for a data type, select one of the following: **Left**, **Right**, **Center**. The default alignment for each data type is as follows: • String, Date, Boolean, Dimension: Left • Decimal, Number, Currency, Percent: Right

Numeric properties

Use this section to view and define default number formats for the grid based on column data type. All columns added to the grid will inherit the settings defined here. By default, columns will continue to inherit any changes made to the default number formats unless the column has been configured to use a custom format.

For example, the default number format for the Currency data type uses 0 decimal places, with a thousands separator, and a negative number format of red parentheses. When a Currency column is added to the grid, the contents automatically display using this number format. If desired, you can update the default number format for Currency so that it uses 2 decimal places, and all columns using the Currency number format will now update to show 2 decimal places. This applies to columns that use the Currency number format by default, as well as columns that you have manually configured to use the Currency format. However, if you have changed a column so that it now uses a Custom number format instead of the Currency number format, then it will continue to use its custom configuration.

This section only applies to numeric data types. It does not display for data types such as String or Date.

Item	Description
Decimal places	The number of decimal places used by the selected **Data Type**. Enter any whole number from 0 to 10. You can also use the arrow keys to move the number up or down. The default number of decimal places for each numeric data type is as follows: • Currency: 0 • Decimal, Percent: 2 The Number data type does not use decimals.
Use 1000's separator	Specifies whether the selected **Data Type** uses a thousands separator: • If enabled (default), numbers show with a thousands separator, such as 1,000. • If disabled, numbers do not use a thousands separator, such as 1000.

Item	Description
Negative number format	The format used by the selected **Data Type** to display negative numbers. Select the desired format from the drop-down list. Available formats use the minus sign, or parentheses, or red text (or a combination of these formats). The default negative number format for each numeric data type is as follows: • Decimal, Number, Percent: Minus sign • Currency: Red text in parentheses

▶ Frequently asked questions

Can I disable paging for a dynamic row grid?

Currently, if the grid uses dynamic rows then the grid is automatically paged if it exceeds 25 rows. This paging cannot be disabled. However, keep in mind that when the grid is exported to PDF or Excel, the paging is automatically disabled and the export file will show all rows.

How do I define a grid-level filter to limit the data in the report?

If you want to filter the data in the grid, you can define a report-level filter. Select the report title on the Report Canvas to load the Report Configuration properties, then use the **Report filters** section to define one or more filters.

Because currently web reports can only contain a single grid, defining a report-level filter is effectively the same as defining a grid-level filter.

Configuring column properties for a web report

The column properties define the presentation of each column in the grid. Using the column properties, you can configure:

- Display properties such as header text, column width, alignment, and number formatting
- Data properties such as column filters, alternate aggregation, and display formats for data
- Grid behavior properties such as inclusion in the total row, and whether end users can sort and filter using the column

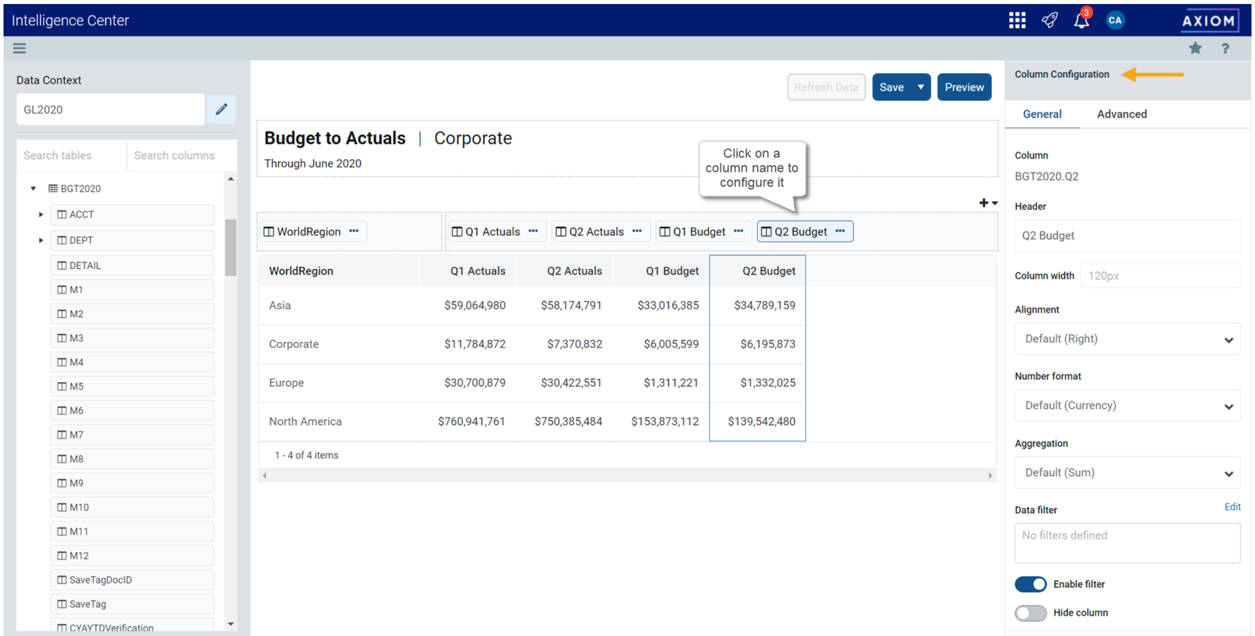
In the Report Builder, the column properties are defined in the right-hand Configuration Panel. The column properties can be defined for both table columns and calculated columns.

To configure column properties for a column in a web report:

1. In the Report Canvas of the Report Builder, click a column name in either the Row Dimensions box or the Column Definitions box to select that column.

You must select the column name in the setup boxes and not the column name in the grid below. Selecting a column name in the preview grid causes the Grid Configuration to display instead of the Column Configuration.

2. Complete the **Column Configuration** properties that display in the Configuration Panel.

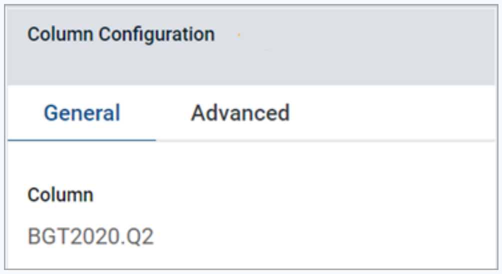
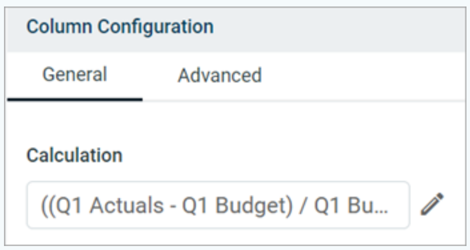


The column configuration properties are separated into two tabs:

- **General**: Basic column properties that should be reviewed and configured for all columns in the grid.
- **Advanced**: Advanced column properties to be configured as needed.

General column properties

The following column properties are available for web reports on the **General** tab of the **Column Configuration** panel. These properties apply to table columns and to calculated columns.

Item	Description
Column or Calculation	The following information displays at the top of the panel to identify the column: • **Column**: If the column is a table column, the full Table.Column path displays for your reference.  • **Calculation**: If the column is a calculated column, a text representation of the calculation displays for your reference. You can click the Edit icon to the right of the box to open the **Edit Calculated Column** dialog and edit the calculation as needed. 
Header	The header text to display on the column header. Enter the desired header text. • If the column is a table column, the column name is used as the header text by default. • If the column is a calculated column, the text "Calculation" is used as the header text by default.
Column width	The width of the column in the grid, in pixels. Enter the desired column width as a whole integer between 30 and 600. The default width depends on the column data type, and is configured at the grid level. If you do not enter a custom width, then the default width displays in the **Column width** box in gray text. If you leave this default width and the grid-level defaults are changed, then column will update to use the new default width. For more information, see Default column formats.

Item	Description
Alignment	The alignment of the column values. Select one of the following: **Default**, **Left**, **Right**, **Center**. The default alignment depends on the column data type, and is configured at the grid level. If a column is set to use Default and the grid-level defaults are changed, the column will update to use the new default alignment. For more information, see Default column formats.
Number Format	The number format used by the column. Only applies to columns that hold numeric data. Select one of the following: • **Default**: The column uses the default number format as defined for the column's data type at the grid level. If a column is set to use **Default** and the grid-level defaults are changed, the column will update to use the new default number format. For more information, see Numeric properties. • **Currency**, **Decimal**, **Number**, **Percent**, or **Dimension**: The column uses the default number format as defined for the selected data type. For example, you may have a column that is natively a Decimal column, but you want it to display using Currency format in a particular report. If a column is assigned to a different number format, it will also inherit the default column width and alignment set for the associated data type, if the column is using the default column with and alignment. • **Custom**: The column uses a custom number format as defined in the column properties. If Custom is selected, then several additional properties become available to configure the number format. In this case, the column is no longer tied to any particular default number format. ◦ **Decimal places**: Specify the number of decimal places to display, from 0 to 10. ◦ **Use 1000's separator**: Specify whether the number uses a thousands separator or not. ◦ **Negative number format**: Specify the format to use for negative numbers.
Aggregation	The aggregation type used to aggregate data queried from the database column. Does not apply to calculated columns or to columns used as row dimensions. If you want to override the default aggregation type for a database column, select an aggregation type.

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Data filter</td><td>Optional. Defines a filter to limit the data shown in this column. The column-level data filter should be used instead of a grid-level data filter when you want the filter to impact just this column.

Click the Edit button to open the Filter Wizard and define a filter. Once you have defined a filter, it displays in the Data filter box.

If you want to change or remove the filter, click the Edit link again and change or delete the filter within the Filter Wizard. The Data filter box is not directly editable.

Data filters defined at the column level are combined with any filters defined at the column group level and at the grid level. All relevant filters are combined using AND to determine the data that can display in a particular column.

NOTES:
• If a data filter is defined for a calculated column, the filter is applied to the columns referenced in the calculation.
• Column-level data filters cannot be defined for columns used as row dimensions. To limit the rows shown in the grid, use a report-level filter in the Report Configuration properties.</td></tr>
<tr><td>Enable filter</td><td>Specifies whether end users can filter based on the column contents.
• If enabled (default), and if Enable Column Filters is enabled in the Grid Configuration properties, then a filter icon is available on the column in the rendered report. Users can use this column to filter the grid based on the column contents.
• If disabled, then the filter icon is not available on the column.

This property does not apply to columns used as row dimensions. It also does not apply to any column in the grid if Use fixed rows is enabled in the Grid Configuration properties. Fixed row reports do not support end-user column filtering.</td></tr>
<tr><td>Hide column</td><td>Specifies whether the column is hidden in the report:
• If enabled, then the column is hidden. The column remains visible in the Report Builder so that you can continue to configure the column as needed.
• If disabled (default), then the column is visible.</td></tr>
</table>

Item	Description
Show description	Specifies whether you want descriptions to display for dimension values. This option only applies to key columns, alternate key columns, and validated columns that have an associated description column. • If enabled (default), then descriptions display alongside the dimension values or instead of the dimension values. For example, if the column is Acct then you likely want the account descriptions to display along with the account codes. When this option is enabled, the **Description display format** field becomes available. Select the desired display format from this list. By default, the format **Description (Value)** is used. • If disabled, then only the dimension values display. For example, if the column is Acct then only the account codes will display. **NOTE:** If the dimension table has multiple description columns (meaning columns where **Describes Key** is **True**), then the first description column is used.
Include in total row	Specifies whether the column is included in the total row, if a total row is enabled in the Grid Configuration properties. Select one of the following: • **Default**: The column is included or not based on its data type. All numeric columns are included by default unless they are the Dimension data type. All other non-numeric columns are not included by default, unless you change the aggregation so that the column returns a number (such as using Count aggregation on a String column). • **Include**: Override the default behavior and include the column in the total row. • **Exclude**: Override the default behavior and exclude the column from the total row. This option does not apply if **Use fixed rows** is enabled in the Grid Configuration properties. Columns will be included or excluded in subtotal or total rows using the default behavior.
Date part to retrieve	Specifies the date or datetime part to retrieve, if the column is a Date or DateTime column. For example, you can return the full date value, or just the year or month, or the fiscal year or month. For more information, see Date formatting options.

Item	Description
Date format	Specifies the format to display the date values, if the column is a Date or DateTime column. The available format options depend on the specified **Date part to retrieve**. For more information, see Date formatting options. The label and visibility of this setting varies depending on the selected date part. For example, if you select **Month** as the date part, then the label for this setting is **Month format**. If you select a date part that does not have any formatting options, such as **Year**, then this setting is hidden.

▶ Advanced column properties

The following column configuration properties are available for web reports on the **Advanced** tab of the **Column Configuration** panel:

Header Properties

Item	Description
Header text (row 1)	The header text to display on the column header. Enter the desired header text. **NOTES:** • This is the same property that displays on the **General** tab as **Header**. The header text can be edited from either tab. • The **(row 1)** label only displays if **Multi-row header** has been enabled. In this case, the property defines the header text for the top row of the multi-row header.
Header text (row 2)	The header text to display on the second row of the column header. Enter the desired header text. This property is only available if **Multi-row header** has been enabled.

Item	Description
Multi-row header	Specifies whether the column header has multiple rows: • If enabled, then the header text property updates so that there are two properties: **Header text (row 1)** and **Header text (row 2)**. The default header text populates row 1. You can define additional text to display on row 2. • If disabled (default), then only one row of header text can be defined. Keep in mind that enabling a multi-row header is different than wrapping header text. If you enable multi-row headers, then you can define two separate rows of header text. A line break separates each row. If autowrap is enabled, then each row of header text wraps individually. If you just want a single row of header text that wraps, you can leave this option disabled and then enable **Autowrap header text**.
Autowrap header text	Specifies whether header text wraps: • If enabled, then header text that exceeds the column width will wrap. If **Multi-row header** is enabled, both rows of header text will wrap individually. • If disabled (default), then header text that exceeds the column width is truncated. The user can resize the column wider to view the full header text.
Header alignment	The alignment of the header text. Select one of the following: **Default**, **Left**, **Right**, **Center**. All column headers use **Default** alignment by default. By default, the header text uses the same alignment as the column contents (as determined by the **Alignment** property on the **General** tab). If you leave the header alignment set to Default, then the header alignment will adjust to match the column alignment. If, however, you want the header alignment to be different than the column alignment, you can configure this property.

Date formatting options

If a column is a Date or DateTime column, then various formatting options are available to present the date information in the report. This is separated into two options:

- **Date part**: Specify the part of the date or datetime value that you want to display—such as the full date (or datetime), the year or fiscal year of the date, the month or fiscal month of the date, or the hour or minute from the time.
- **Format**: Specify the format to display the selected date part. For example, if you select full date, you can display it as 10/15/2020 or October 2020 or Thursday, October 15, 2020. If you select Month, you can display it as 10 (the month number), Oct, or October.

The following tables detail the date part and format options. Where multiple formats are available, the default format is shown in bold.

Standard date and time options

Part	Description	Format
Full Date	Display the full date stored in the column, using a specified format. Only applies to Date columns. This option is the default part for Date columns.	• Custom • ShortMonth Year (Oct 2020) • Month Year (October 2020) • **Day/Month/Year as Date (10/15/2020)** • Day, Month Date, Year (Thursday, October 15, 2020) • YearMonth as Number (202010) • YearMonthDay as Number (20201015)
Full DateTime	Display the full date-time stored in the column, using a specified format. Only applies to DateTime columns. This option is the default part for DateTime columns.	Same as Full Date, plus the following additional options: • **Day/Month/Year Hour:Minute as DateTime (10/15/2020 13:25)** • Day/Month/Year Hour:Minute:Second DayPeriod as DateTime (10/15/2020 1:25:00 PM) • Day, Month Date, Year Hour:Minute:Second DayPeriod (Thursday, October 15, 2020 1:25:00 PM) • YearMonthDay Hour:Minute as Number (20201015 13:25)
Year	Display the year part of the date.	Full year (2020)
Quarter	Display the quarter for the date.	• Number of the Quarter (1-4) • **Number of the Quarter with Prefix (Q1)** • Text Description (1st quarter)
Month	Display the month part of the date.	• Number of the Month (1-12) • Number of the Month with 2-Digits (01) • Short Name of the Month (Jan) • **Name of the Month (January)**
Week	Display the number of the week for the date, within the year.	Number of the Week (1-52)

Part	Description	Format
Day of Year	Display the day of the year for the date.	Number of the Day (1-365)
Day of Month	Display the day of the month for the date.	Number of the Day (1-31)
Day of Week	Display the day of the week for the date. The first day of the week is Sunday.	• Number of the Day (1-7) • 2-Letter Abbreviation for the Day (Su) • Short Name of the Day (Sun) • **Name of the Day (Sunday)**
Hour	Display the hour of the datetime. Only applies to DateTime columns.	• 24-Hour Clock Number (1-24) • **12-Hour Clock with Day Period (1 AM)** • 24-Hour Clock as Hundreds (100)
Minute	Display the minute of the datetime. Only applies to DateTime columns.	Number of the minute (0-59)

NOTES:

- If a column is configured to display the full date or date-time, but the selected format only shows a part of it, the column sorting and filtering remains based on the full date or date-time value.
- If a DateTime column is configured to display the hour, the column filtering is always based on 0-23, regardless of the display format. For example, if the display format is a 12-hour clock with day period, filtering by 13 displays values of 1 PM.
- When using a DateTime column, currently it is not possible to filter the column based on date and time. When displaying the full date-time, the column filter options only allow selection of a date. If you want to filter based on time, you must select the hour and/or minute display format.

Fiscal year options

The fiscal year for your system is determined by the system configuration setting **ClientFiscalYearEndMonth**. By default, this is set to 12, which means the fiscal year is the same as the calendar year. If your organization uses a different fiscal year end, your implementation consultant should adjust this setting accordingly. For more information on system configuration settings, see System configuration settingsSystem Configuration Settings.

For example, if your organization's fiscal year ends in June, the **ClientFiscalYearEndMonth** setting should be changed to 6. This means:

- A date of 6/1/2021 is in fiscal year 2021 and represents month 12 of the 2021 fiscal year.

- A date of 7/1/2021 is in fiscal year 2022 and represents month 1 of the 2022 fiscal year.

When the fiscal year is different than the calendar year, the fiscal year options will return different date information than the corresponding standard date options. Continuing the example where the fiscal year end is June, the following return values apply to a date of 7/1/2021:

- The Year part will return 2021, whereas the Fiscal Year part will return 2022.
- The Quarter part will return Q3, whereas the Fiscal Quarter part will return Q1.
- The Month part will return 7, whereas the Fiscal Month part will return 1.

Part	Description	Format
Fiscal Year	Display the fiscal year that the date belongs to.	Full year (2020)
Fiscal Quarter	Display the fiscal quarter that the date belongs to.	• Number of the Quarter (1-4) • **Number of the Quarter with Prefix (Q1)** • Text Description (1st quarter)
Fiscal Month	Display the fiscal month that the date belongs to .	• **Number of the Month (1-12)** • Number of the Month with 2-Digits (01) • Number And Short Name of the Month (1 - Jan) • Number And Name of the Month (1-January)

Custom formats

When using the Full Date or Full DateTime parts, you can optionally specify a custom format to display the date or datetime value. When you select **Custom** as the format, a **Custom Date Format** box becomes available so that you can enter the custom format syntax. The following case-sensitive syntax can be used in the custom format:

Desired Date/Time Part	Syntax	Notes
Day Period	a	Returns the day period AM or PM.
Day of Month	d	For the day number (1), use one or two letters (d or dd). dd enforces 2 digits.
Day of Week	E or e	• For the abbreviated day name (Sun), use one upper-case letter (E). • For the full name (Sunday), use four upper-case letters (EEEE). • For the numerical day of the week (1), use one lower-case letter (e). Sunday is the first day.

Desired Date/Time Part	Syntax	Notes
Hour	H or h	• For the hour in the 12-hour clock (1-12), use one or two lower-case letters (h or hh). hh enforces two digits. • For the hour in the 24 hour clock (0-23), use one or two upper-case letters (H or HH). HH enforces two digits. **NOTE:** Use k if you want to display the 24 hour clock as 1-24 instead of 0-23.
Minutes	m	For the minutes number (1), use one or two letters (m or mm). mm enforces 2 digits.
Month	M	• For the numerical month (1), use one or two letters (M or MM). MM enforces 2 digits. • For the short name (Jan), use three letters (MMM). • For the wide name (January), use four letters (MMMM).
Seconds	s	For the seconds number (1), use one or two letters (s or ss). ss enforces 2 digits.
Quarter	Q	• For the numerical quarter (1), use one or two letters (Q or QQ). QQ enforces 2 digits. • For the abbreviation (Q1), use three letters (QQ). • For the text description (1st quarter), use four letters (QQQQ).
Year	y	• To render the full year (2020), use one letter (y). • To render a two-digit year (20), use two letters (yy).

For example, to render a date as "2020 Oct 10", you would enter the following into the **Custom Date Format** box: `y MMM d`.

Example custom date format

Frequently asked questions

I defined a column filter but it isn't impacting the grid data as I expected—why do I still see rows that don't match the column filter?

A column filter only filters the data coming into that specific column. If you want to define a filter that impacts the entire report, including the row data, then you should define a filter at the report level. Select the report title and then use the Report Configuration properties to define one or more **Report filters**.

To illustrate the difference, imagine the following uses of a filter to only show data from the West region:

- **Report**: When the general filter `Dept.Region='West'` is defined for the report, the entire grid is filtered to only show data from the West region. Row dimension values (such as departments) will only display if they belong to the West region, and column data is limited to only show data for the West region.
- **Column**: When the filter `Dept.Region='West'` is defined on a column, that single column is filtered to only show data from the West region. Other columns and row dimension values are not limited by this filter. You might do this if you want to create a report that shows the different region data in different columns, such as to compare data from the West, East, North, and South regions side-by-side.

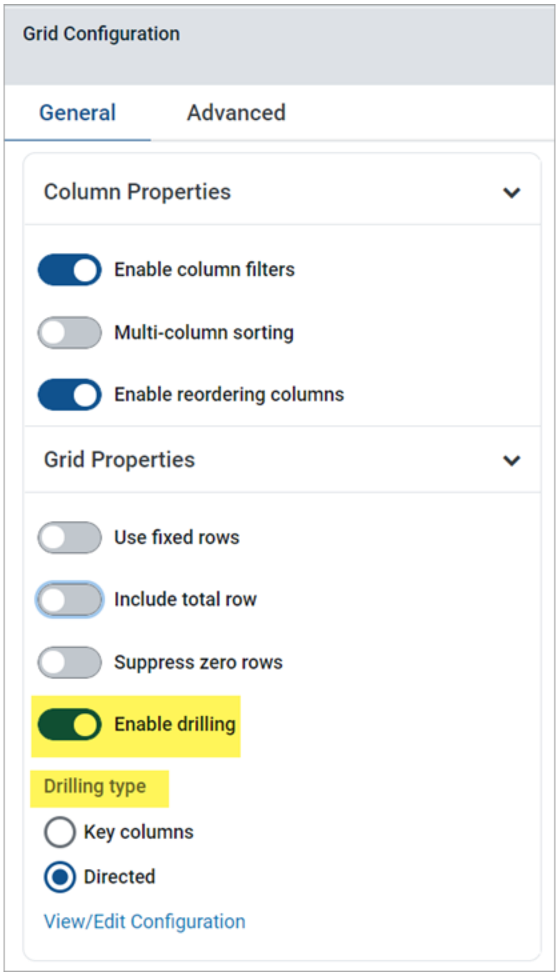
Configuring drilling for web reports

You can enable two types of drilling for web reports:

- **Key columns**: Users can drill to view the underlying data based on the key columns of the table specified as the **Data Context**. This option provides limited "out-of-the-box" drilling functionality that does not require any further setup.
- **Directed**: Users can drill to view the underlying data based on predefined drilling paths. The report designer defines the available drilling paths and can configure certain display attributes for the drill.

To enable either drilling option:

1. In the Report Builder, select the grid so that the **Grid Configuration** properties display in the Configuration Panel.
2. On the **General** tab of the **Grid Configuration** properties, enable **Enable Drilling**.
3. For **Drilling type**, select either **Key columns** or **Directed**.
4. If you selected **Directed**, click the **View/Edit Configuration** link to define the directed drilling paths.



Example drill options enabled for the grid

Configuring directed drilling paths

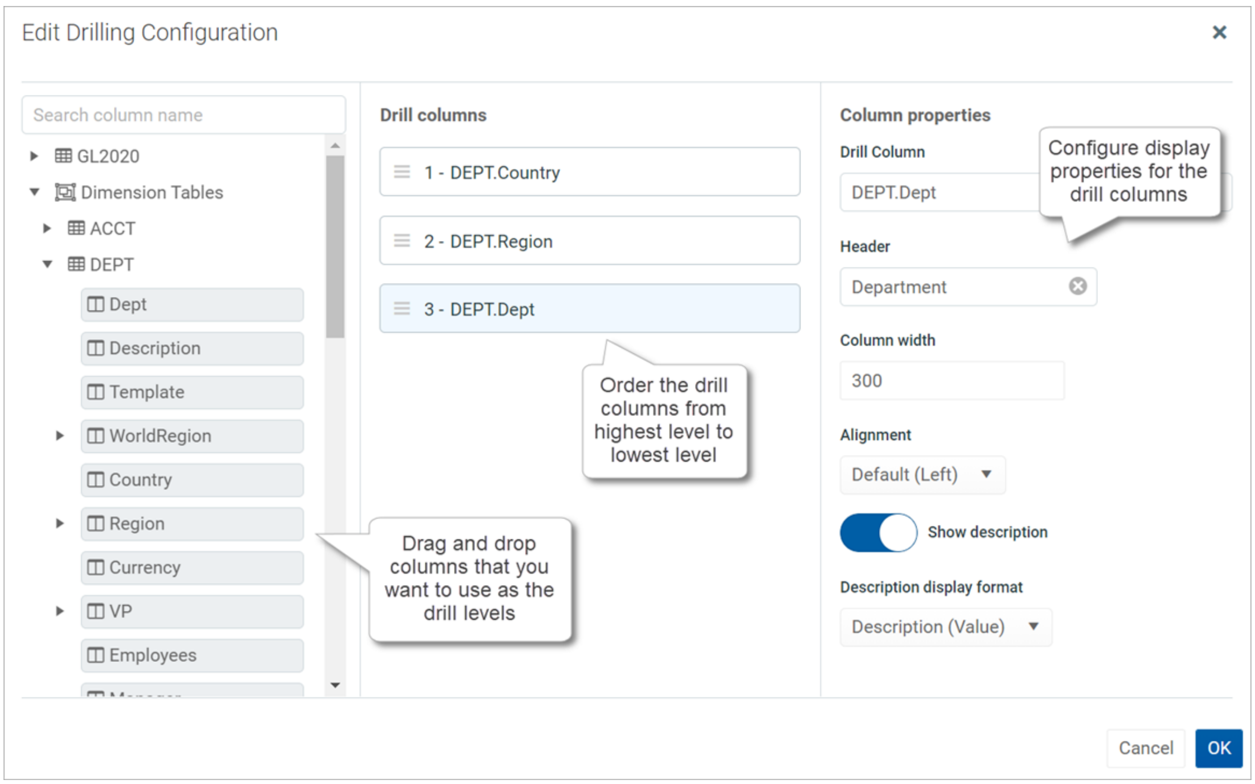
Use the **Edit Drilling Configuration** dialog to define the drilling paths for directed drilling.

To define drilling paths:

1. In the **Grid Configuration** properties, click the **View/Edit Configuration** link under the **Directed** drilling option.
2. Drag and drop columns from the table tree to the **Drill Columns** area in the middle of the dialog. The available columns for drilling depend on the table specified as the primary table for the data context:
    - If the primary table is a data table, then you can use any column on the primary table or on a lookup reference table (the Dimension Tables).

- If the primary table is a reference table, then you can only use column paths that originate from the primary table. The Dimension Tables node is not present, but you can still use columns from those tables by expanding the primary table and selecting the desired columns through the primary table.

3. Place the drill columns in the desired order for the directed drilling. Users can drill from the column at the top of the list down to the column at the bottom of the list. Generally speaking, the lowest level of detail should be at the bottom—for example: VP > Director > Manager > Dept.
    - To reorder columns, click the handle on the left side of the column box to drag and drop the column to a new position.
    - To remove a column, hover your cursor over the column and then click the **X** on the right side of the column box.
4. Select each drill column and configure the drill properties in the right side of the dialog. See the following table for information on these properties.
5. Click **OK** to complete the drill configuration and return to the Report Builder.



Example drilling configuration dialog

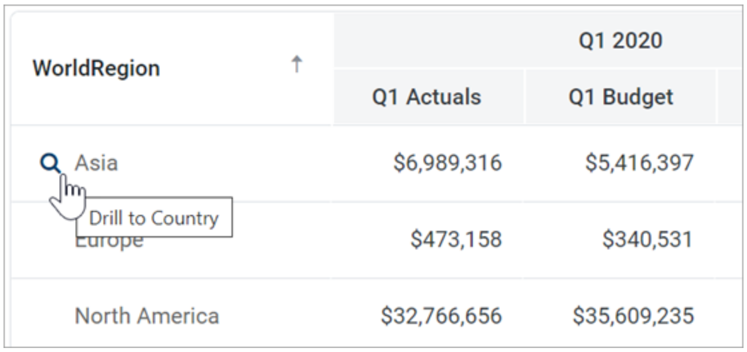
Drill Column Properties

Item	Description
Drill column	The full Table.Column path of the drill column displays for your reference, so that you know which column you are configuring.
Header	Header text for the column in the drill results. Enter the desired text. The column name is used by default.
Column width	The width of the column in the drill results, in pixels. Enter the desired column width as a whole integer between 30 and 600. By default, the width is 300 for all drill columns, regardless of data type.
Alignment	The alignment of the column values. Select one of the following: **Default**, **Left**, **Right**, **Center**. The default alignment depends on the column data type. If a column is set to use Default and the grid-level defaults are changed, the column will update to use the new default alignment. For more information, see Default column formats.
Show description	Specifies whether you want descriptions to display for dimension values. This option only applies to key columns, alternate key columns, and validated columns that have an associated description column. • If enabled (default), then descriptions display alongside the dimension values or instead of the dimension values. For example, if the column is Acct then you likely want the account descriptions to display along with the account codes. When this option is enabled, the **Description display format** field becomes available. Select the desired display format from this list. By default, the format **Description (Value)** is used. • If disabled, then only the dimension values display. For example, if the column is Acct then only the account codes will display. **NOTE:** If the dimension table has multiple description columns (meaning columns where **Describes Key** is **True**), then the first description column is used.

Using directed drilling

If directed drilling is enabled and configured, you can drill down the predefined drilling paths to view the underlying data. Directed drilling works as follows:

- When you view the report, you can hover your cursor over a row to show the magnifying glass icon on the left side of the row.



- Click the magnifying glass to drill to the first level of the drill. This is the column positioned at the top of the **Drill Columns** list in the **Edit Drilling Configuration** dialog.The drill results open in a new browser tab.
- From here, you can continue to drill by hovering over a row and clicking the magnifying glass to go to the next level of the drill. All subsequent drills are performed in the same browser tab.
- Once you reach the final level of the drill, no more drilling options are available and the magnifying glass no longer displays.

Using key column drilling

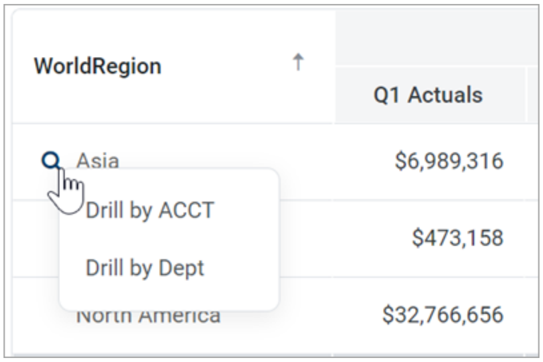
If key column drilling is enabled, you can automatically drill to the key column level to view the underlying data. The available key columns are determined as follows:

- If the primary table used as the data context is a data table, you can drill to the validated key columns on the table. However, any key column used as a row dimension will not be available for drilling, since the report already shows data at that level.
- If the primary table used as the data context is a reference table, you can drill to the key of the reference table, unless the key is used as the row dimension.

When you view the report, you can hover your cursor over a row to show the magnifying glass icon on the left side of the row. From here you can drill as follows:

- If there is only one available key for drilling, click the magnifying glass to drill.

- If multiple keys are available for drilling, click the magnifying glass to show a list of the available keys, then click on the key you want to drill.



The drill results open in a new browser tab. If multiple keys were available for drilling, you can optionally drill the drill results to view the other key(s).

If no keys are available for drilling, then the magnifying glass does not display when you hover your cursor over the row.

Presentation of drill results

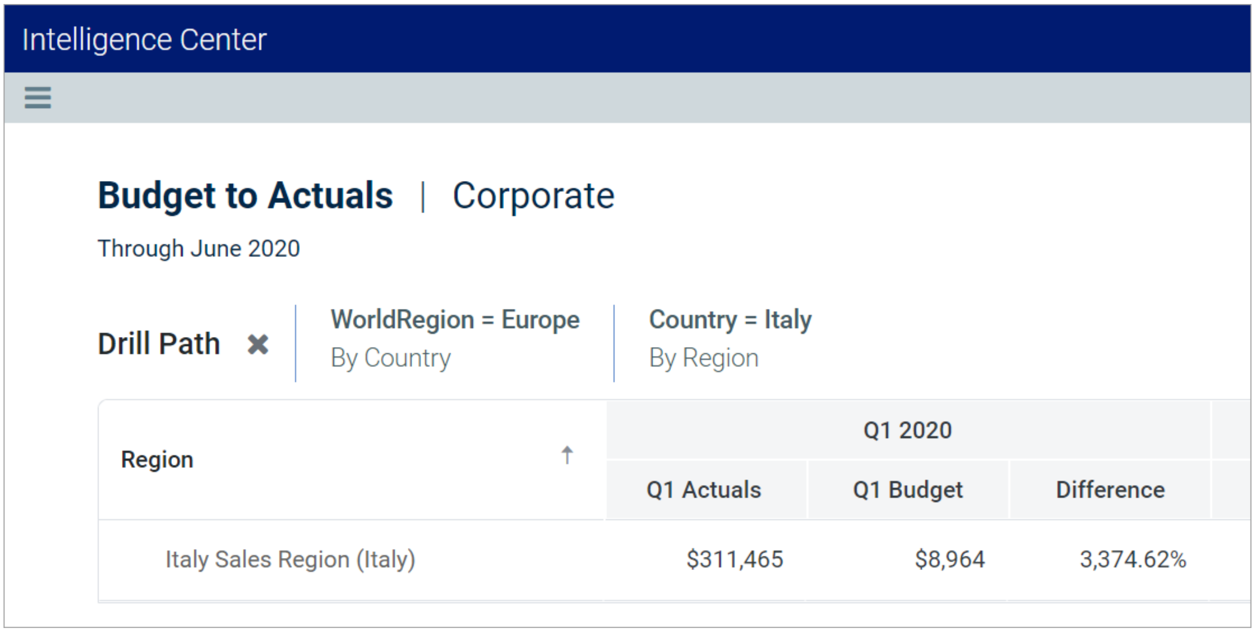
When you drill, the drill results display in the same browser tab, replacing the original report grid. The data contents of the drill results are as follows:

- The row dimension(s) of the original report are removed from the grid and replaced with the current drill column. The drill column is either the current column of a directed drilling path, or the selected key column.
- All other columns of the report are included in the drill results and show data for the current drill level.
- If the drill results contain multiple rows of data, the grid includes a total row. If the drill results contain a single row of data, the total row is omitted.
- Drill results are paged if the results contain many rows.

The current drill path displays along the top of the page. The drill path identifies the row that was drilled and the current drill level. If you have drilled the drill results, the previous drill levels also display in the drill path. You can click a previous drill level to return to that level, or you can click the **X** icon to clear the drill and return to the original report grid.

The drill column displays as follows:

- For key column drilling, the column alignment and width are determined by the column data type. The header text is the key column name. Key column values are presented as Description (Value).
- For directed drilling, the column alignment, width, and header text are as configured in the **Edit Drilling Configuration** dialog.



Example drill results with drilling path displayed at the top

Reporting on process information in web reports

You can include process columns in a web report in order to display status information for plan files in a plan file process. You can display information such as:

- Current process status for a plan file, including the current step name and number
- Process step history per plan file, including the name and number of each step the plan file has been active in, the plan file's step status, and the time spent in the step
- Step statistics, such as average time spent in each step and number of workbooks in each step

In order to report on process information, the web report must be associated with a file group. The process columns are then available to be added to the report, and will return information on the designated plan file process for the file group.

▶ Configuring a web report to use process columns

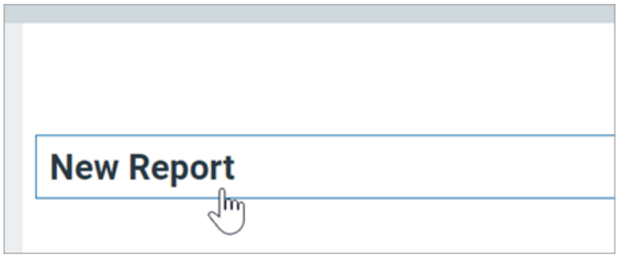
Process columns are not available for use in the Report Builder unless the report is associated with a file group. This association is made in the Report Configuration properties.

Primary table prerequisite

Process reporting will only work if the primary table selected as the **Data Context** for the report is compatible with the plan code table for the file group. In the majority of cases you should select the plan code table itself. For example, if the plan code table is Dept, then you should select Dept as the primary table for the report. However, if needed you can use a table with a lookup to the plan code table instead.

To associate a web report with a file group:

1. In the Report Canvas of the Report Builder, click on the title text to load the Report Configuration properties. For example, if the report currently uses the default name of New Report, click on the New Report text or next to it.

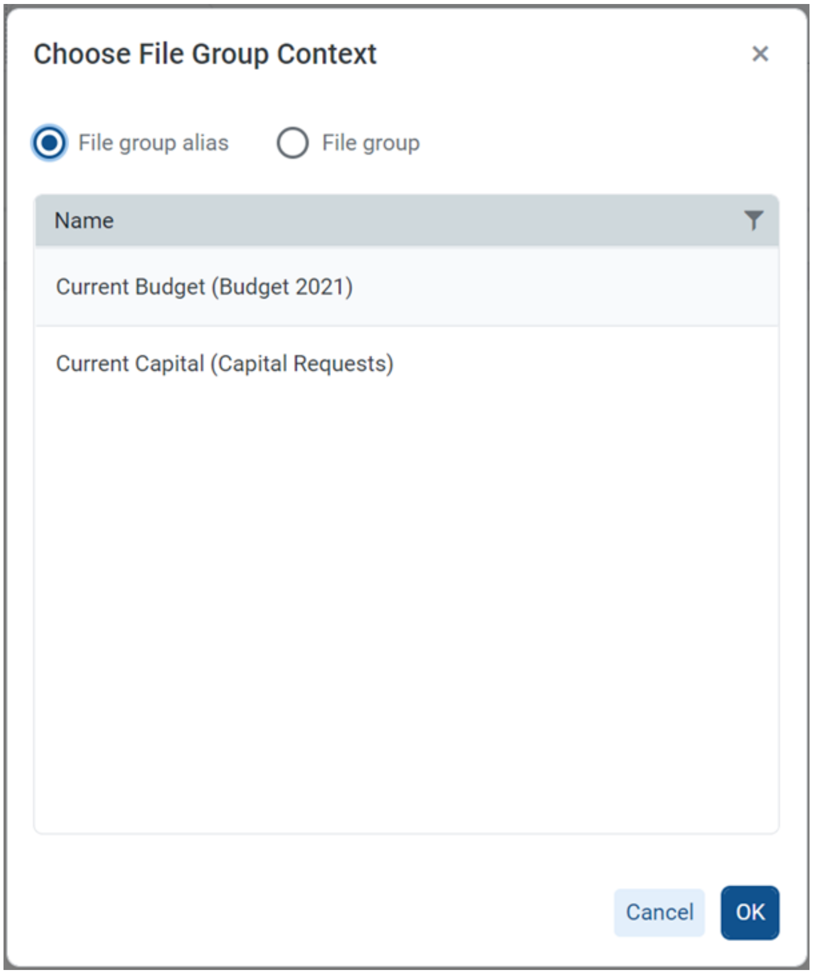
   Click on the title text to load the Report Configuration properties

   If you are in a brand new report, the Report Configuration properties display by default when you first enter the Report Builder. However, as soon as you drag and drop a column to the Row Definitions box or the Column Definitions box, the column becomes selected which causes the Column Configuration properties to display. In this case you need to click on the report title to return to the Report Configuration properties.

2. In the **Report Configuration** properties, click the **Edit** link next to the **File group context** field.

3. In the **Choose File Group Context** dialog, select a file group or a file group alias, then click **OK**.

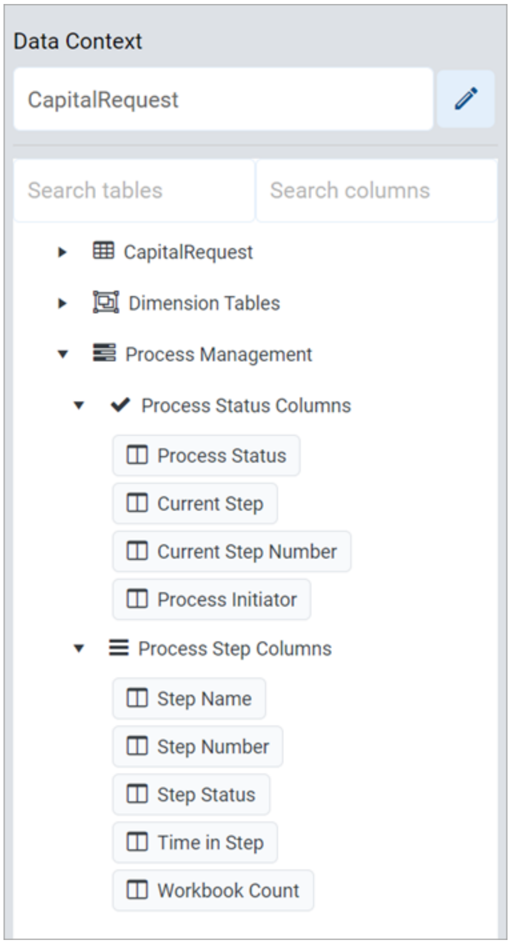
   Use the radio buttons at the top of the list to toggle between viewing file group aliases or file groups. When viewing file group aliases, the name of the file group that is currently assigned to the alias displays in parentheses after the alias name.



Selecting a file group alias means the report will be dynamically associated with the file group that is currently assigned to the alias. For example, if the Current Budget alias is updated so that it points to the Budget 2022 file group instead of the Budget 2021 file group, the report will update to show the process information for the Budget 2022 file group.

NOTE: The selected file group must have a designated **Plan File Process** in the file group properties.

Once a file group context has been selected, a new node appears in the Data Panel named **Process Management**. The process columns are listed under this node, organized into **Process Status Columns** and **Process Step Columns**. To use a process column in the report, drag and drop it to the setup boxes at the top of the Report Canvas just like any other column.



Process columns available in the Data Panel

▶ Using process columns

The following tables detail what each process column returns, as well as usage and configuration guidance for each column. Additionally, note the following:

- When a process column is used in a report, the plan code values are automatically filtered to only return codes that have any activity in the plan file process. It is not necessary to filter the report by a ShowOnList column in order to suppress plan code values that are not active in the file group.
- Process columns can be used as row dimensions or as column definitions, however, only certain process columns make sense to use as row dimensions. See the column details for more information.
- Process columns cannot be used in data filters defined in the report—either at the report level or the column level—but end-user filtering can be used with process columns. For example, a user viewing the report could filter the Current Step column to only show plan codes that are in a specific step.

Process status columns

The process status columns can be used to display current process status information for plan codes in the file group. These columns are best used if you want to create a report that shows the current step and status for each plan file.

When using the process status columns, the row dimension for the report should be just the key column of the plan code table for the file group. For example, if the plan code table is Dept, the row dimension should be the Dept key column of that table. This means that each row of the report will be a plan code in the file group, showing the process status for that plan code. Note the following:

Column Name	Description
Process Status	Returns the current process status for each plan code. For example: Active, Stalled, Completed, or Aborted.
Current Step	Returns the name of the current step of the plan file.
Current Step Number	Returns the number of the current step of the plan file. Note that this is always a top-level step number.
Process Initiator	Returns the name of the user who initiated the process for the plan file. This column is only available if the associated file group is an on-demand file group.

Process step columns

The process step columns can be used to return process information for each step that a plan file has been active in. When using process step columns, you should set the row dimension as follows, depending on the goal of the report:

- If the goal of the report is to see step detail by plan code, then the row dimension should be set to both the key column of the plan code table and the Step Name column. (Alternatively, the Step Number column can be used instead of the Step Name column.) This means that the report will contain a separate row for each combination of plan code and step.
- If the goal of the report is to see grouped information about the step, then the sum level for the query should be set to just the Step Name column. (Alternatively, the Step Number column can be used instead of the Step Name column.) This is useful to see information such as average time in step, and the count of workbooks that have been active in the step.

Column Name	Description
Step Name	Returns the name of the step. When using process step columns, either this column or the Step Number column should be a row dimension for the report.

Column Name	Description
Step Number	Returns the number of the step. When using process step columns, either this column or the Step Name column should be a row dimension for the report. Sub-steps are returned using decimals, such as 2.1 and 2.2. Even though the Step Number column is a string column, if the report is sorted by the Step Number column the numbers will be sorted in the correct order.
Step Status	Returns the status of the step per plan file. This column is only useful when the row dimension is set to both the key column of the plan code table and the Step Name (or Step Number) column.
Time In Step	Returns the time spent in each step per plan file. Although the raw value for this column is seconds, the total seconds are translated into the highest useful time value for display in the report—whether that is seconds, minutes, hours, or days. Therefore, one plan file may list the time in step as "25 minutes" while another plan file may list the time in step as "2 days". If the row dimension for the report is set to just the Step Name (or Step Number) column, then the **Aggregation** for the Time In Step column should be changed to **Average** so that the column returns the average time spent in the step (for all plan codes that were ever active in the step). Otherwise the column will return the total time spent by all plan codes in the step, which is likely not a useful value. **NOTE:** If you use this column in a calculation, the calculation will be based on the raw seconds value. Therefore if you want to return the time in step using the same time unit for all plan codes, regardless of how long they have been in the step, you can use a calculation to do so. For example, divide the time in step by 86400 to convert the seconds to days.
Workbook Count	Returns the count of workbooks that have been active in the step. This column is only useful when the row dimension is set to just the Step Name (or Step Number) column, so that you can see the count for all plan codes that have been active in the step. If the key column of the plan code table is included as the row dimension, then the Workbook Count will always return 1 for each plan code / step combination, which is likely not a useful value. This column always uses Count aggregation and cannot be changed.

Example process reports

The following screenshots show some of the reports that can be created using process columns. These examples only use process columns, but the reports could contain additional columns from the plan code table or from related data tables, in cases where it makes sense to show this additional information.

The first example shows a report using process status columns, for the purpose of viewing the current status of each plan code. The row dimension is the key column of the plan code table (CapitalID).

Process Status

CapitalID ↑	Process Status	Current Step	Current Step Number	Process Initiator
11 - New machinery	Completed	Executive Approval	4	Wendy Hunter
13 - Equipment maintenance	Active	Manager Inputs	2	Wendy Hunter
14 - Warehouse remodel	Active	Initial Request	1	Rufus Xavier Sasparilla
16 - Computer upgrades	Active	Approval Step	3	Wendy Hunter

Web report with process status columns

The second example shows a report using process step columns, for the purpose of viewing process history for each plan code. The row dimension is set to the step name and the key column of the plan code table (Dept). The end user could filter the Dept column to view the history for a specific plan code.

Step History per Plan File

Dept ↑	Step Name	Step Number	Step Status	Time in Step
20000	Budget Development	1	Active	3 days
21000	Budget Development	1	Active	3 days
22000	Budget Development	1	Active	3 days
23000	Budget Development	1	Active	3 days
24000	Budget Development	1	Completed	35 seconds
24000	Management Approval	2	Skipped	0 seconds
24000	Management Edits	3	Active	3 days

Web report with process step columns, grouped by key column and step name

The third example shows a report using process step columns, for the purpose of viewing process statistics. The row dimension is set to the step number only, so that the process data is aggregated at the step level. The columns show the count of workbooks that have been active in each step, as well as the average time in step per workbook.

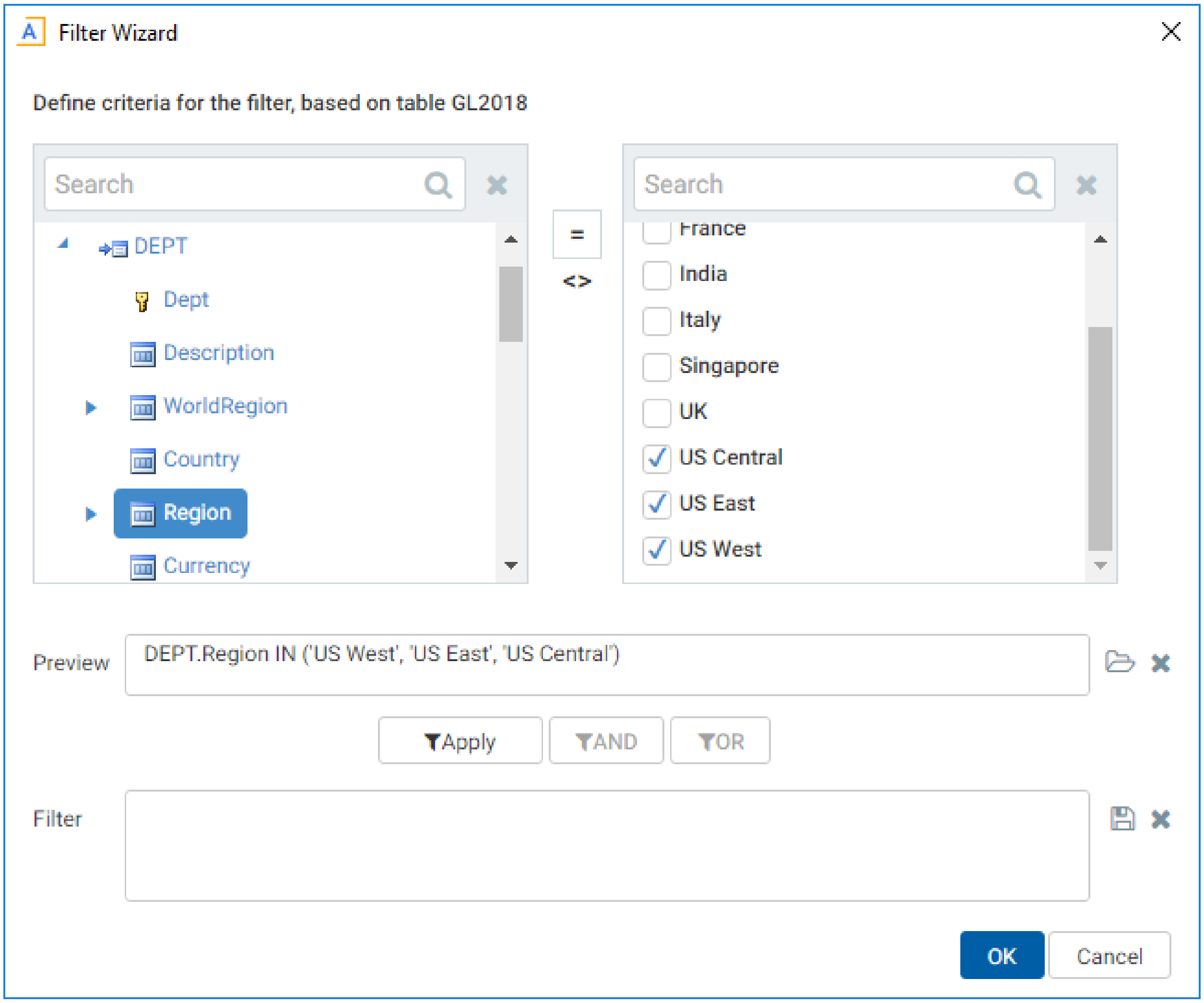
Average Time in Step

Step Number	Step Name	Time in Step	Workbook Count
1	Budget Development	2 days	127
2	Management Approval	2 days	63
3	Management Edits	3 days	27
4	Finance Approval	3 days	1
4.1	CFO	3 days	1
4.2	Axiom Administrator	3 days	1

Web report with process step columns, grouped by step number

Using the Filter Wizard

The Filter Wizard is available in various locations to assist you in building a valid filter criteria statement.



Example Filter Wizard

The tables available in the wizard depend on the current context. For example, if you are creating a data filter for a web report, the wizard only shows valid tables in relation to the specified primary table. In other areas, the tables in the wizard may be limited based on other factors.

To create a filter:

1. In the left-hand side of the dialog, select the table column on which you want to base the filter.

   For example, if you want to create a filter such as `DEPT.DEPT>=5000`, then you must select the DEPT column from the DEPT table.

   To find the desired table and column, you can filter the list by typing into the Search box. The filter matches based on table and column names.

   Once you select a table column, the values in that column display in the right-hand side of the dialog.

> **TIP:** Alternatively, you can use the folder icon to the right of the **Preview** box to load a previously saved filter from the Filters Library. If you do this, your selected filter is placed in the Preview box, overwriting any current content in the preview. Skip to step 4.

2. In the right-hand side of the dialog, select the value(s) on which you want to base the filter.

   You can type into the filter box below the list of values to filter the list. Your current typed value is always placed at the top of the list. You can select this typed value regardless of whether it currently matches an actual value in the column. This behavior is to allow you to create a filter for empty tables, or for tables where the value you want to filter on is not yet present in the column. This is why you may see the "no matches" message but still have one value in the list—your typed value.

3. In the space between the two selection boxes, select the operator to use for the filter criteria statement, such as equals, not equals, greater than, or less than. By default, the filter statement uses equals (=).

   Note the following about filter operators:

   - Greater than / less than options are only available if the column data type holds numbers or dates.
   - If multiple items are selected, then IN and NOT IN syntax is automatically used for equals and not equals respectively.
   - If the column is a string column and the value contains an apostrophe (such as O'Connor), the wizard automatically converts this value to double apostrophes so that it is valid for use in the filter (O''Connor). Apostrophes in string values must be escaped this way so that they are not interpreted as the closing apostrophe for the filter criteria statement.
   - The LIKE operator is supported, but is not available for selection in the Filter Wizard. You must manually edit the filter criteria statement if you want to use it. Only advanced users with knowledge of valid SQL LIKE syntax should do this.

4. Review the filter criteria statement in the **Preview** box to ensure that it is as intended. If you need to make changes, you can manually edit the statement, or you can start again with a new statement. If you want to clear the statement, click the **X** icon to the right of the Preview box.

5. If no filter is currently present in the **Filter** box, click **Apply** to move the filter down to the Filter box. If a filter is currently present in the Filter box, you can do one of the following:

   - Click **Replace** to overwrite the current filter with the preview filter.
   - Click **AND** or **OR** to add the preview filter to the current filter. This creates a compound criteria statement.

   You can repeat the filter creation process as many times as necessary to create the desired statement. You can also manually modify the filter in the Filter box as needed, such as to add parentheses to group statements.

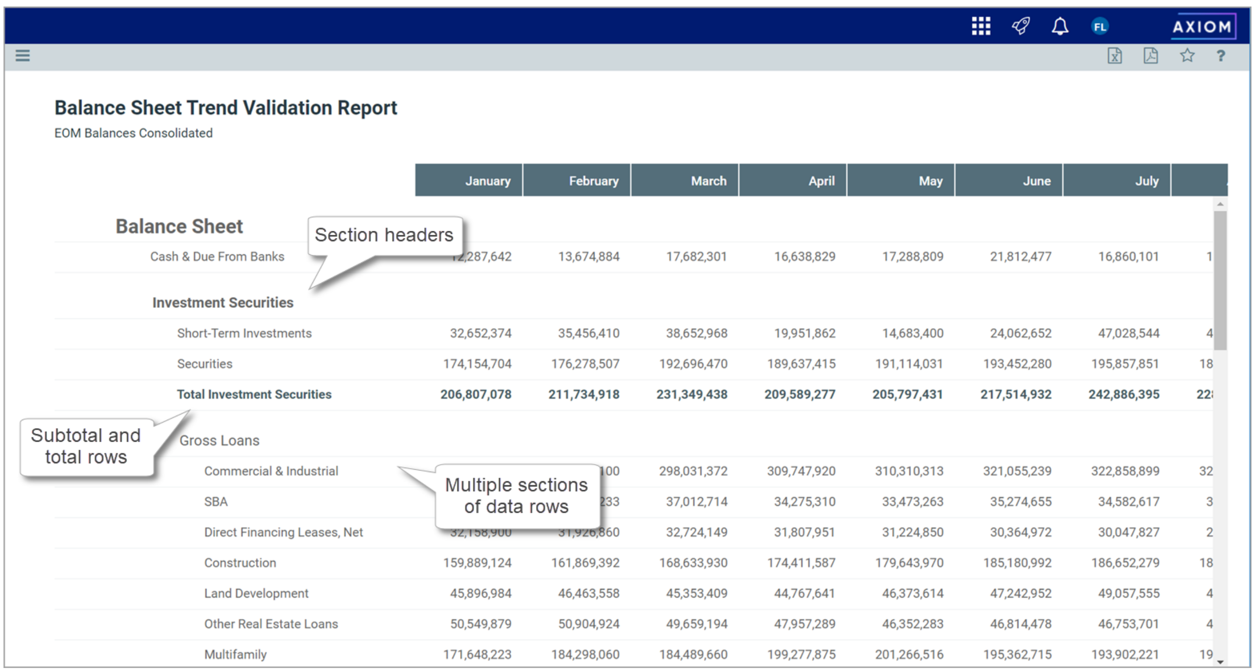
6. When the filter in the Filter box is complete, click **OK**.

TIP: If you want to save the filter you have created for future use, click the save icon to the right of the Filter box. You can select a folder location in the Filters Library (or My Documents if applicable), and specify a name for the filter. This option is only available if you have read/write access to at least one location where filters can be stored.

Managing Fixed Row Structures

Fixed row structures can be used to define data sections for a web report, including section headers, data rows, subtotals, and totals. Fixed row structures are defined separately so that you can reuse them with different web reports, and so that you can update the row structure in one place and have the changes propagate to all reports that reference the structure.

Fixed row structures can be used with "custom" web reports created in the Report Builder, and with web report templates provided by installed Axiom Enterprise Decision Support products. The fixed row structure defines the data sections in the report, while the web report defines other report properties such as the data columns, filters, and drilling options.

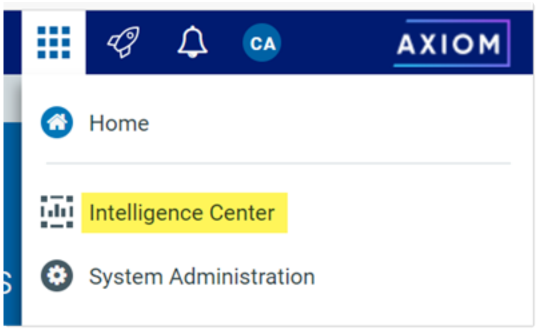


Example report using a fixed row structure

You can define as many different fixed row structures as you need. A row structure can be used with any web report where the structure's row dimensions are compatible with the report's columns, filters, drilling options, and any other report property that impacts queried data. Row structures can be created, edited, and deleted using the Intelligence Center.

To access the Intelligence Center:

- Click the menu icon in the Global Navigation Bar. From the Area menu, select **Intelligence Center**.



Fixed row structures are not file-based—they are stored directly in the database. There is no file type or library folder for fixed row structures, and you cannot see them in Axiom Explorer. The only place to view and manage fixed row structures is using the Intelligence Center.

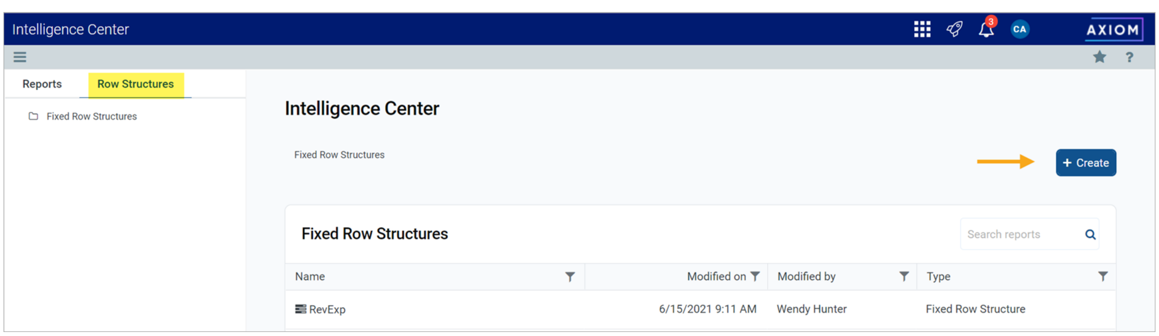
Creating fixed row structures

You can create new fixed row structures as needed for use in web reports.

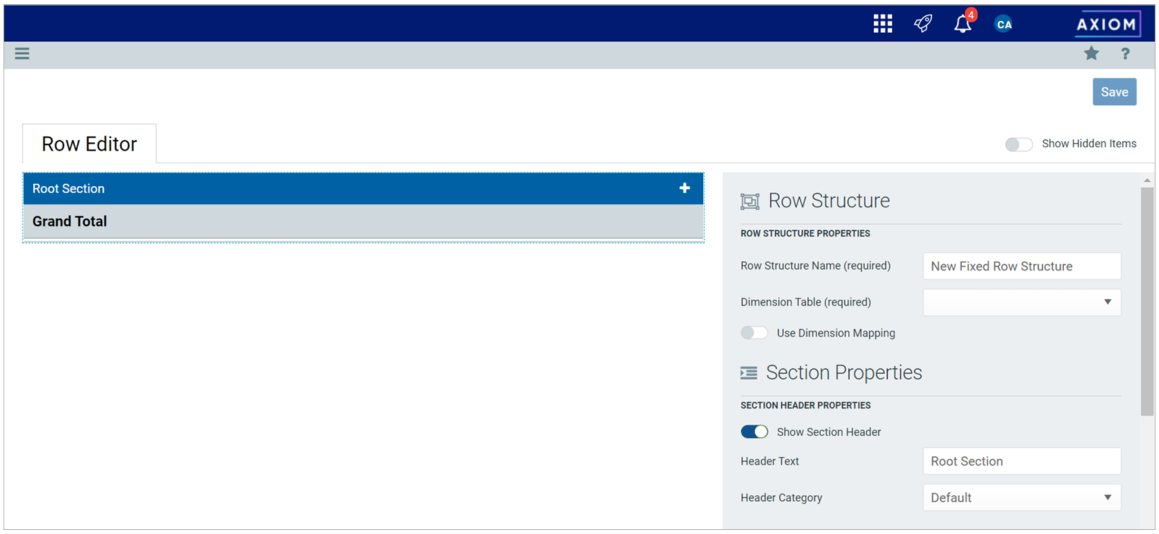
In order to create a fixed row structure, you must be an administrator or have the **Create Web Reports** security permission. If you do not have permission to create web reports, then the option to create a new fixed row structure will not be available in the Intelligence Center.

To create a new fixed row structure:

1. In the Intelligence Center, select the **Row Structures** area from the left-hand panel, then click **Create**.



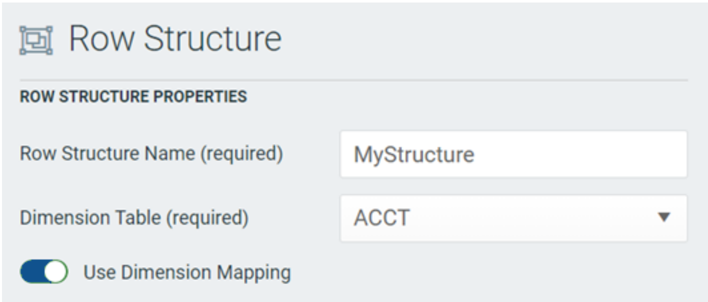
The row structure editor opens in the current browser tab, showing a new blank row structure. The row structure starts with just a top-level section header and a grand total row.



Example new blank row structure

2. In the top of the right-hand panel, complete the following required properties for the row structure:

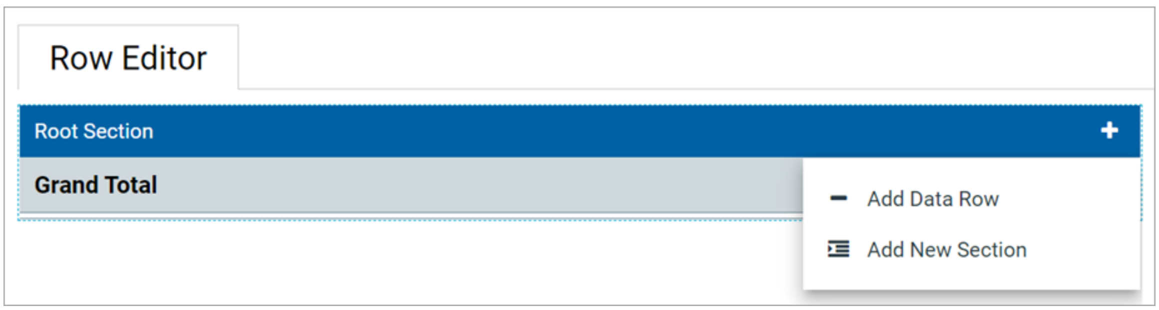
Item	Description
Row Structure Name	Enter the name of the row structure. The name identifies the row structure so that users can select it when creating a new fixed report.
Dimension Table	Specify the dimension table to use for the Filter Wizard when defining row data. For example, if rows will be defined using accounts or account groupings, select the ACCT table.
Use Dimension Mapping	Enable this toggle switch if you want to map specific items in the dimension table to specific rows in the structure. When using dimension mapping, all row data is defined at the key column level of the dimension table, and each dimension item can only be assigned to a single row. The toggle switch shows as green when enabled and as gray when disabled. If this option is not enabled, then row data is determined by defining filter criteria statements at the row and section level. For more information, see Using dimension mapping versus row filters in a fixed row structure.



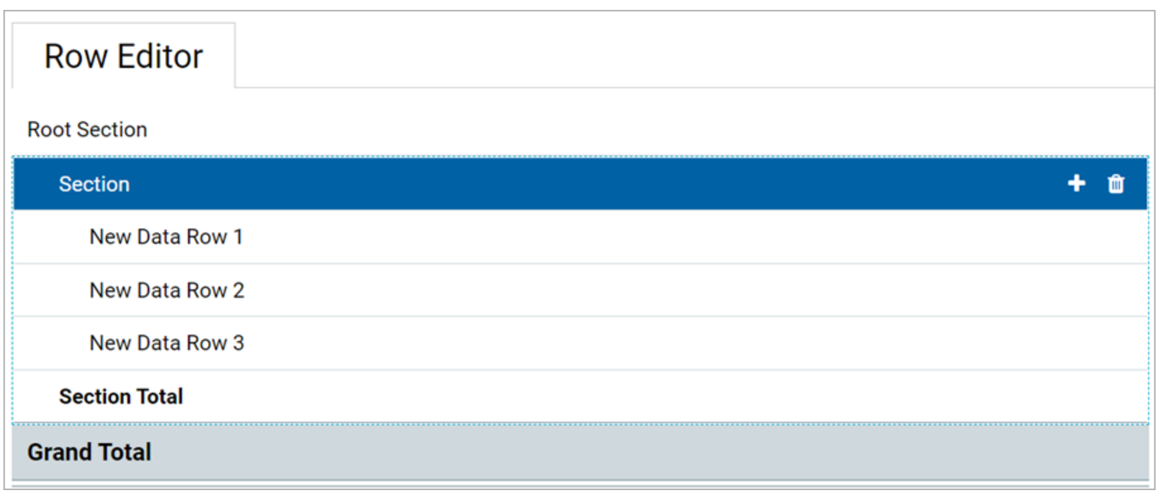
Example required properties with dimension mapping enabled

Once these items are completed, you can use the **Save** button to save the row structure.

3. In the left-hand row editor, add sections and data rows as desired to create the overall row structure. Think of the Root Section as the overall "wrapper" in which all row sections are placed. To create the first row section, click the plus icon on the **Root Section** header and then select **Add New Section**.



Your row structure will now look like this:



You can then continue to add data rows or additional sections:

- **To add a section**, select the section header where you want to add the section, then click the plus icon > **Add New Section**. The new section is added as a subsection to the current section. By default, all new sections contain a section header row, three data rows, and a total row. You can add or remove data rows as needed.
- **To add a data row within a section**, select the section header where you want to add the data row, then click the plus icon > **Add Data Row**. The new data row is added to the current section.

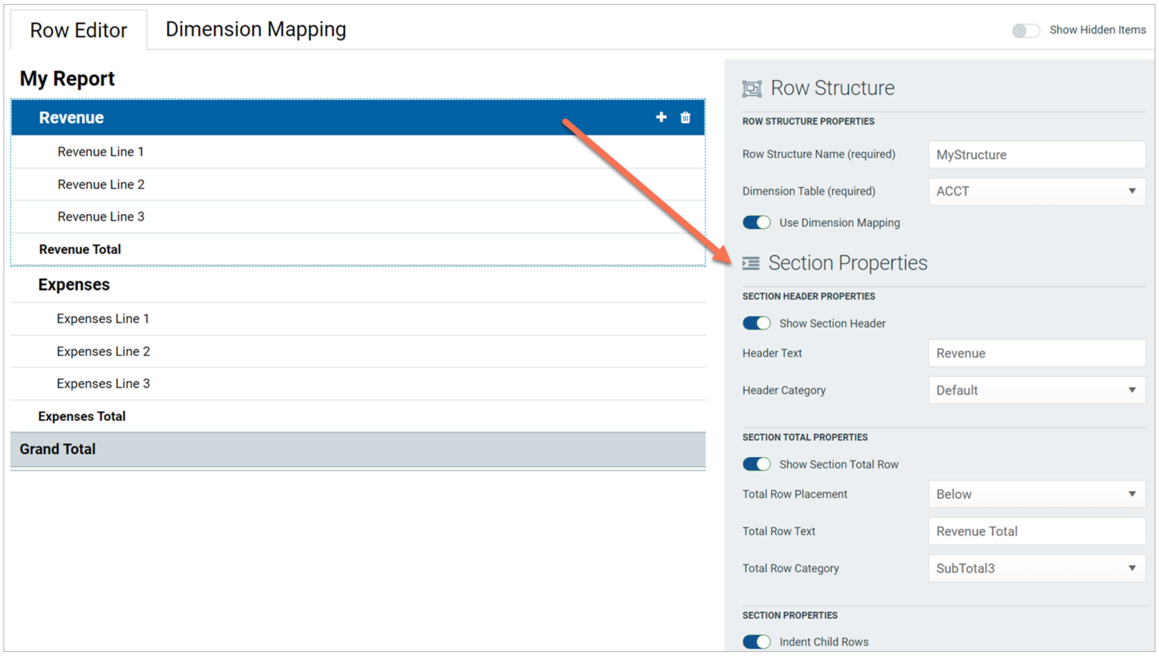
When you add a new data row or section, it is always added at the bottom of the current section. You can drag and drop the row or section to a different location within the section as needed (but not to a different section).

If a data row or a section is not needed, select the row or section header and then click the trash can icon. The row or section is deleted from the row structure.

> **NOTE:** Header rows and total rows cannot be deleted from a section. The trash can icon on a section header row is used to delete the entire section, not the header row. If you do not want a particular section to display a header row or a total row, you can hide these rows on a per section basis using the Section Properties.

4. For each section in the report—including the Root Section—configure the properties for that section. To configure a section, select the section header and then complete the **Section Properties** in the right-hand panel. The section properties control the following:
   - Visibility, text, and style of the section header row
   - Visibility, text, placement, and style of the section total row
   - Whether data rows are indented from the parent section
   - Whether section data is added or subtracted when calculating the parent total
   - An optional data filter to apply to all data rows in the section (only available if the structure does not use dimension mapping)

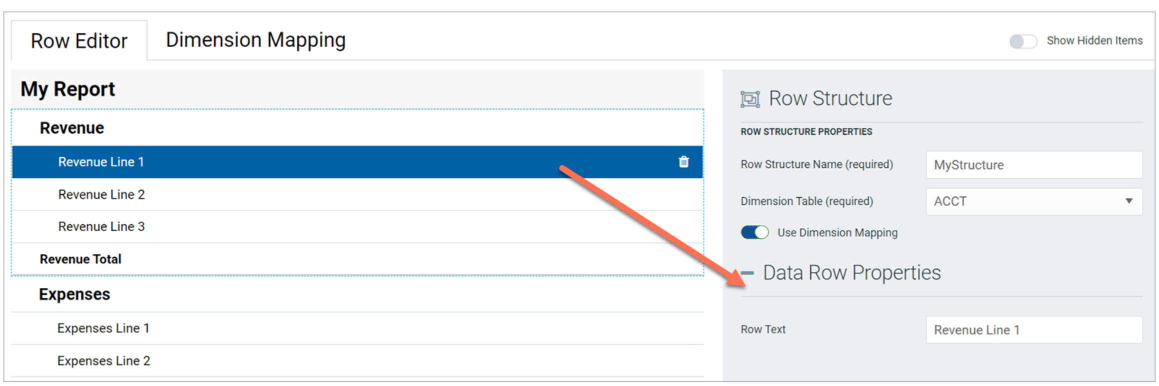
   For more information on all of the section properties, see Section properties.



In most cases, the row structure immediately updates to reflect section properties that affect the display. For example, if you define header text, that text is immediately shown on the row structure. However, if you hide the section header row, the row will continue to display in the row structure unless you disable the option **Show Hidden Items**. This option is located at the top right of the row editor, under the Save button. By default, the row editor continues to show hidden section headers so that you can use the Add Data Row and Add New Section actions on the header row.

5. For each data row in the report, configure the properties for that row. To configure a row, select the row and then complete the **Row Properties** in the right-hand panel.

   At minimum, the row properties define the label text for the row. If the structure does not use dimension mapping, then the row properties also define a data filter to determine the data to be shown on the row. For more information on defining the row properties, see Row properties.



6. If **Use Dimension Mapping** is enabled for the row structure, click the **Dimension Mapping** tab to map dimension elements to each row. This mapping determines the data to be shown on each row, instead of defining a filter. For more information on mapping dimension elements, see Using the Dimension Mapping editor.

7. Click **Save** to save the row structure.

The new row structure can now be used when creating or editing web reports.

Copying fixed row structures

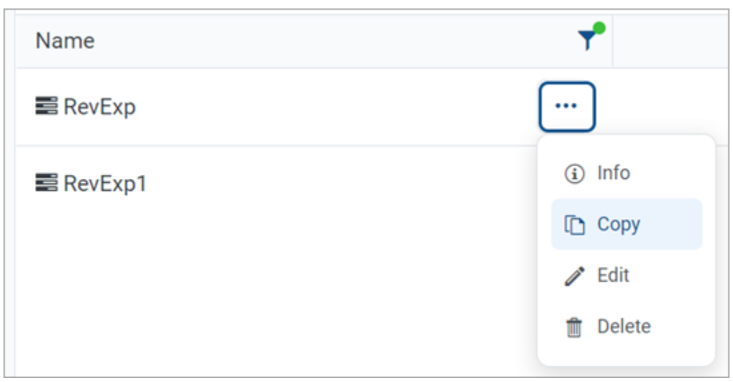
You can copy existing fixed row structures as needed to create additional fixed row structures.

In order to copy a fixed row structure, you must be an administrator or have the **Create Web Reports** security permission. If you do not have permission to create web reports, then the Copy action is disabled.

To copy a fixed row structure:

1. In the Intelligence Center, select the **Fixed Row Structure** area from the left-hand panel.

2. Locate the fixed row structure that you want to copy, then hover your cursor over the **Name** column to make the three dots icon visible. Click the icon then select **Copy** from the menu.



3. In the **Copy Fixed Row Structure** dialog, enter a **Name** for the new fixed row structure, then click **OK**. By default, the name is **Copy of *OriginalName***.

The fixed row structure is copied with the specified name. You can now open this fixed row structure for editing.

Editing fixed row structures

Any user can edit a fixed row structure. The **Create Web Reports** permission is not required.

Keep in mind that when a row structure is assigned to a report, that report always uses the most current version of the row structure. Any edits that you make to a row structure are immediately available in any reports that use the row structure.

To edit a fixed row structure:

1. In the Intelligence Center, select the **Fixed Row Structure** area from the left-hand panel.
2. Locate the fixed row structure that you want to edit, then click on the row structure name to open it.

   > **TIP:** You can also select **Edit** from the actions menu (using the three dots icon) to edit the fixed row structure.

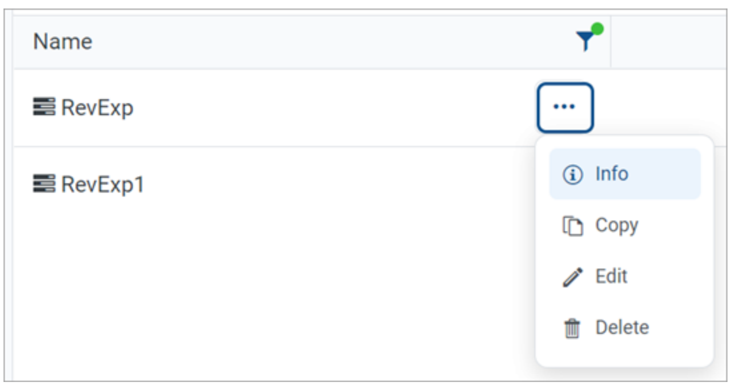
   The row structure opens in the row structure editor, in the current browser tab.
3. Using the row structure editor, make changes to the row structure as needed.
4. Click **Save** to save your changes.

Changing fixed row structure names and descriptions

You can rename a fixed row structure or change its description. If existing reports use the fixed row structure, those reports will continue to reference the renamed structure.

To change a fixed row structure name and/or description:

1. In the Intelligence Center, select the **Fixed Row Structure** area from the left-hand panel.
2. Locate the fixed row structure that you want to edit, then hover your cursor over the **Name** column to make the three dots icon visible. Click the icon then select **Info** from the menu.

   The Information panel opens along the right-hand side of the page.
3. In the Information panel, edit the fixed row structure **Name** or **Description** as needed, then click **Apply**.

   The name can be up to 250 characters, and the description can be up to 2000 characters.

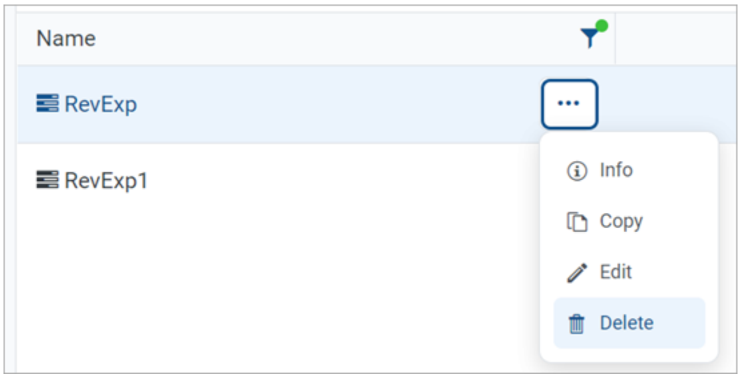
Deleting fixed row structures

Any user can delete a fixed row structure. The **Create Web Reports** permission is not required. If the fixed row structure was used by any web reports, those reports will no longer function correctly until they are edited to use a different fixed row structure.

IMPORTANT: If the deleted fixed row structure was used by a web report built from a template, that report will no longer work. Currently, there is no way to edit the row structure assignment for template-based reports. If the report is still needed, it must be re-created from template with a different fixed row structure.

To delete a fixed row structure:

1. In the Intelligence Center, select the **Fixed Row Structure** area from the left-hand panel.
2. Locate the fixed row structure that you want to delete, then hover your cursor over the **Name** column to make the three dots icon visible. Click the icon then select **Delete** from the menu.



3. When you are prompted to confirm that you want to delete the structure, click **OK**.

The structure is deleted from the system and no longer displays in the Intelligence Center.

Using the Row Editor

Using the Row Editor, you can define fixed row structures for use in web reports. Fixed row structures define the following:

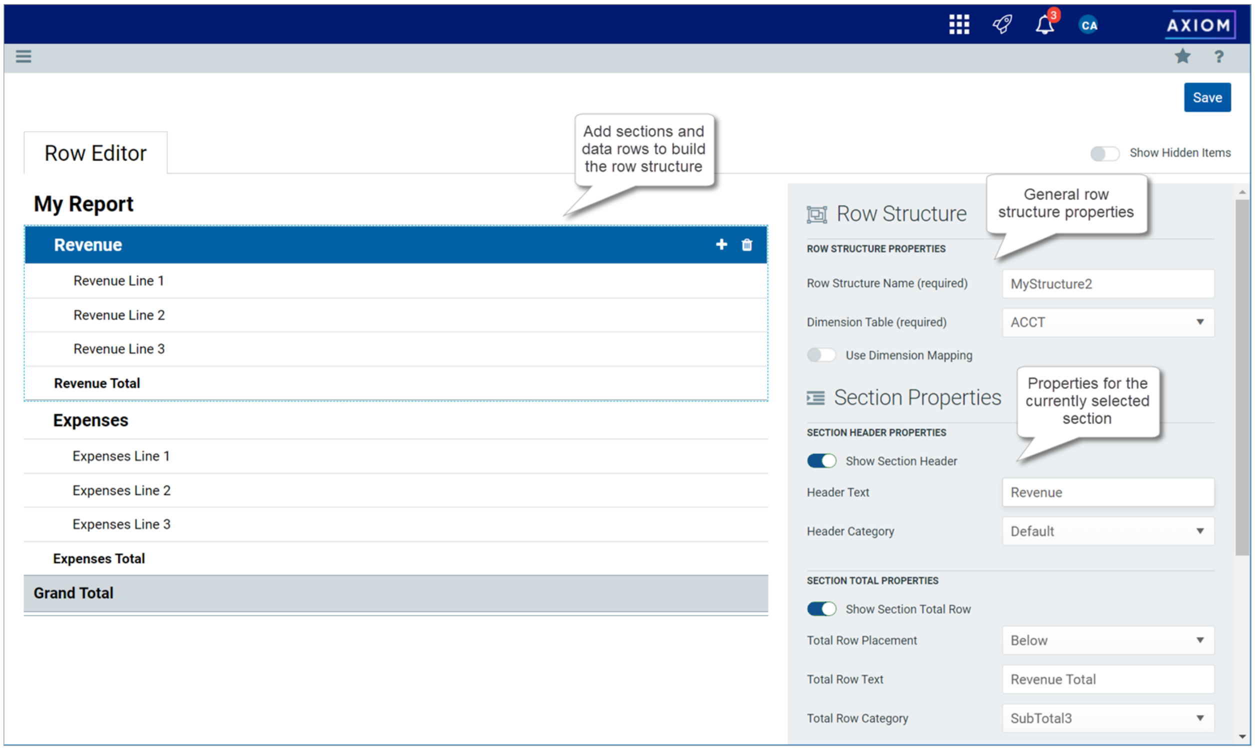
- The sections to be displayed in the report, including section titles and subtotal rows
- The data rows to be displayed within each section

When you use the Intelligence Center to create a new fixed row structure or to edit an existing fixed row structure, it opens in the fixed row structure editor.

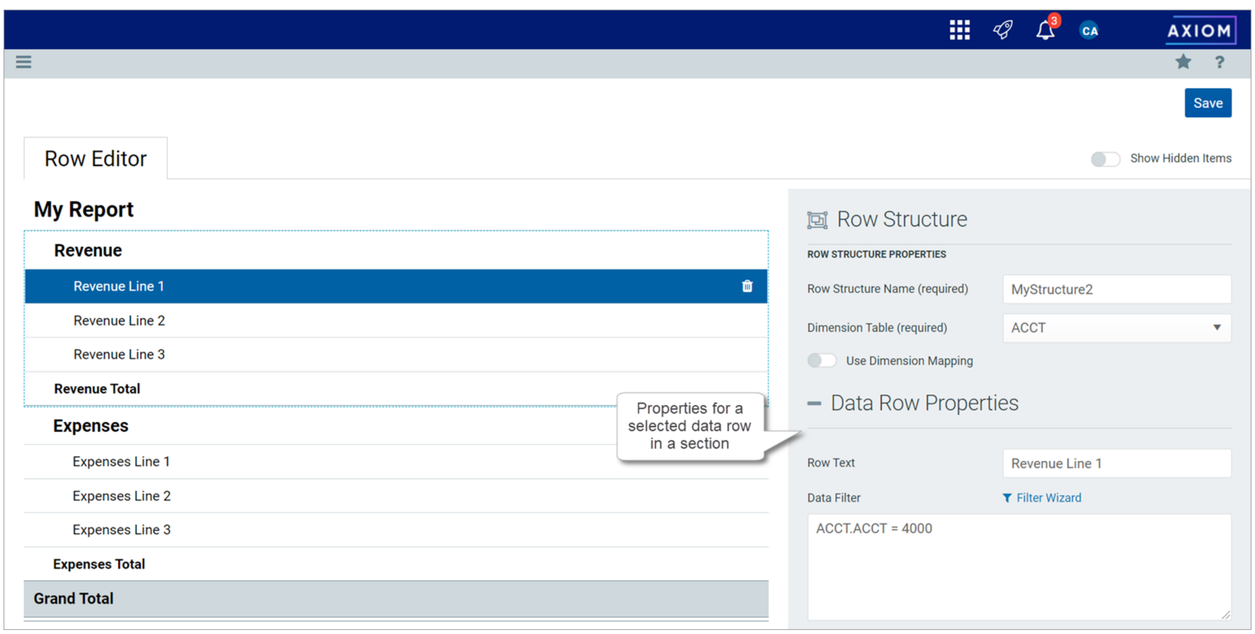
▶ Overview

By default, the Row Editor consists of two primary areas:

- The section editor on the left-hand side, where you can add, reorder, and remove sections and data rows
- The property editor on the right-hand side, where you can define properties for the overall row structure, the selected section, or the selected row

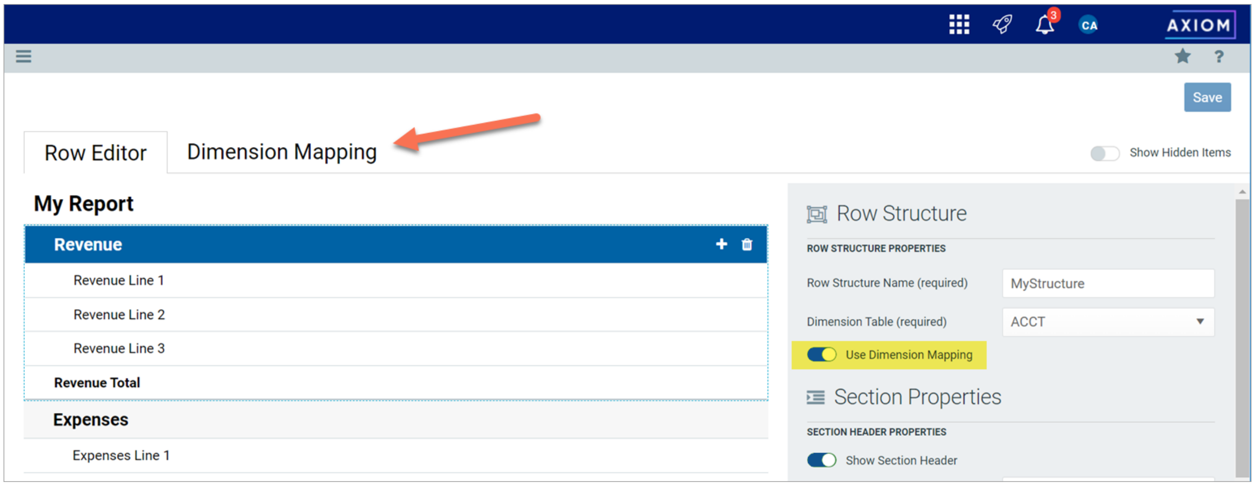


Row structure editor with a selected section



Row structure editor with a selected data row

If the row structure is configured to **Use Dimension Mapping** to define the row data, then another area is available via the **Dimension Mapping** tab. You can use the Dimension Mapping area to map dimension items to individual data rows. For more information on using dimension mapping, see Using the Dimension Mapping editor.



Row structure editor with Dimension Mapping tab

To save the row structure after making changes, use the **Save** button located at the top right of the editor.

Certain parts of the row structure can be configured as hidden, such as section header rows or total rows. By default, these hidden items no longer display in the editor. If you need to view these items so that you can work with them and configure them, you can toggle the option **Show Hidden items** at the top right of the editor.

Using dimension mapping versus row filters in a fixed row structure

When you build a fixed row structure, there are two different ways to define the data to be shown each in row:

- **Filters**: Each row can have a filter criteria statement that defines the data for that row. For example, `Acct.Acct=4100` or `Acct.Category='Revenue'`.
- **Dimension mapping**: Each row can be assigned one or more items in a specified dimension. For example, if Acct is the specified row dimension, then you can view the list of accounts and map them to specific rows in the report as needed.

The filter option is the most flexible way to build a fixed row structure, because:

- You can use any valid filter criteria statement to define the data in each row, including compound statements using AND or OR, and referencing any table (not just the specified dimension table).
- You can define filters at the section level, which then combine with all row-level filters in the section.
- You can repeat dimension elements within the row structure—for example, to create multiple sections that show revenue for different regions or lines of business.

However, because the filter option is more flexible, it also requires a more advanced level of knowledge about your data structures. You must take care not to create invalid or conflicting filters, and make sure that your filters result in the data that you want to display in the report.

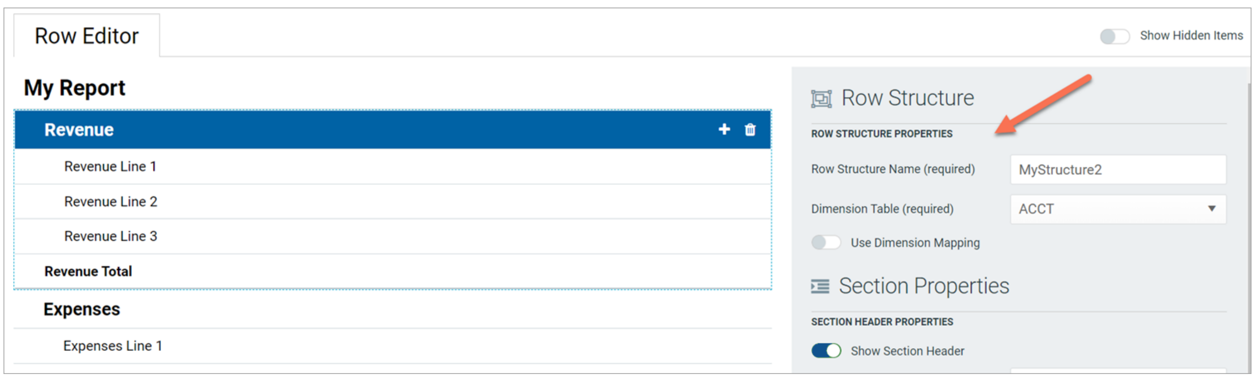
In contrast, the dimension mapping option is the easiest to set up, because:

- You are presented with a full list of all items in the specified dimension, which you can search and filter as needed.
- To assign an item to a row in the report, you simply select the item and then click the arrow button to move it over to the row. Each row can be assigned as many items in the dimension as needed.
- It is very easy to see exactly which dimension items will display on each row, and to see which items have not yet been assigned to rows.

However, the dimension mapping option is less flexible. Rows can only display data from the specified row dimension, and each item in the dimension can only be assigned to a single row.

Row structure properties

The following required properties at the top of the right-hand pane apply to the entire row structure.



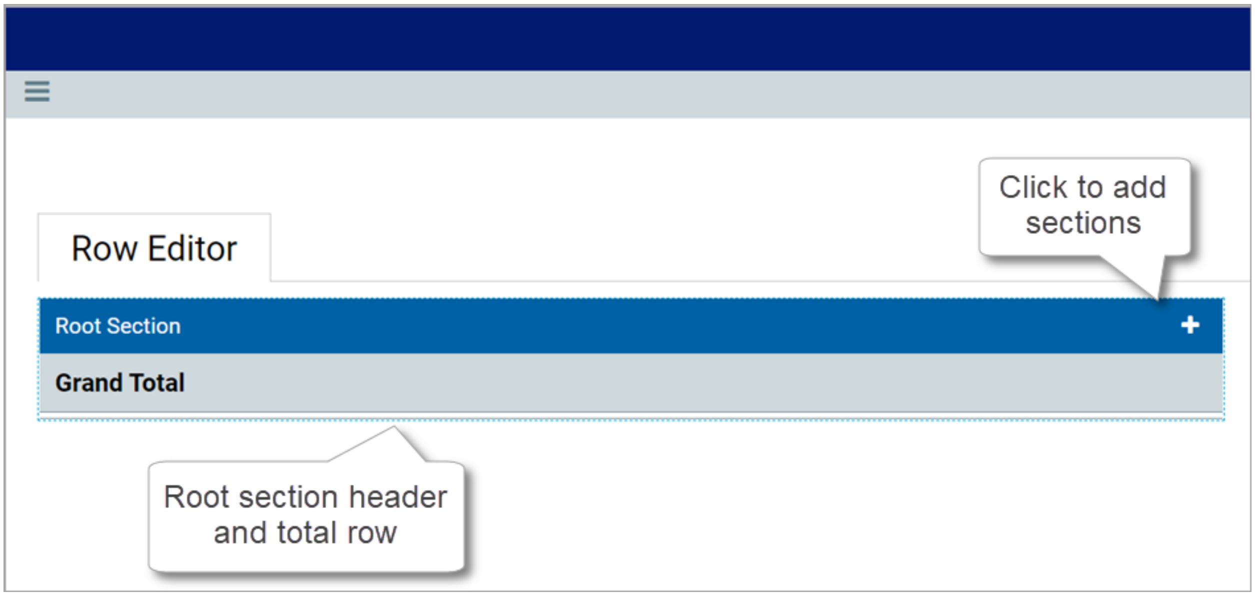
Example Row Structure properties area

Item	Description
Row Structure Name	The name of the row structure. The name identifies the row structure so that it can be selected when creating or editing a web report.

Item	Description
Dimension Table	The primary dimension table to be used on the data rows. You can select any reference table in your system. This selection is used as follows: • By default, it determines the table available to the Filter Wizard when defining filters for sections and data rows. For example, if the dimension table is Acct, then you can use the Filter Wizard to build filters based on Acct. **NOTE:** When using filters to define the data in sections and rows, the dimension table is simply a default table. If you want to define a filter using a different dimension, then you can manually enter a filter criteria statement using that dimension. • If **Use Dimension Mapping** is enabled, then it determines the dimension table for the row mappings. For example, if the dimension table is Acct, then you can map one or more accounts to each data row. In this case, data rows can only use the dimension table.
Use Dimension Mapping	Specifies whether the data in data rows is defined by using filters or by using dimension mapping. By default, this is disabled, so data is defined using filters. If instead you want to use dimension mapping for the rows, click the toggle switch to enable this option. The toggle switch shows as green when enabled and as gray when disabled. If **Use Dimension Mapping** is enabled, the row structure editor updates as follows: • A new tab named **Dimension Mapping** becomes available next to the **Row Editor** tab. You can use this tab to define dimension mappings for the rows. Typically, you should define the sections and rows in the structure first, then go to the **Dimension Mapping** tab to assign mappings to each row. • The **Filter** fields in the **Section Properties** and the **Row Properties** become hidden, because they do not apply when using dimension mapping. If a filter is defined for a section or a row before dimension mapping is enabled, the filter is retained in the properties (assuming it was saved) but it will be ignored in reports. For more information on the differences between using filters or dimension mapping to define data rows, see Using dimension mapping versus row filters in a fixed row structure.

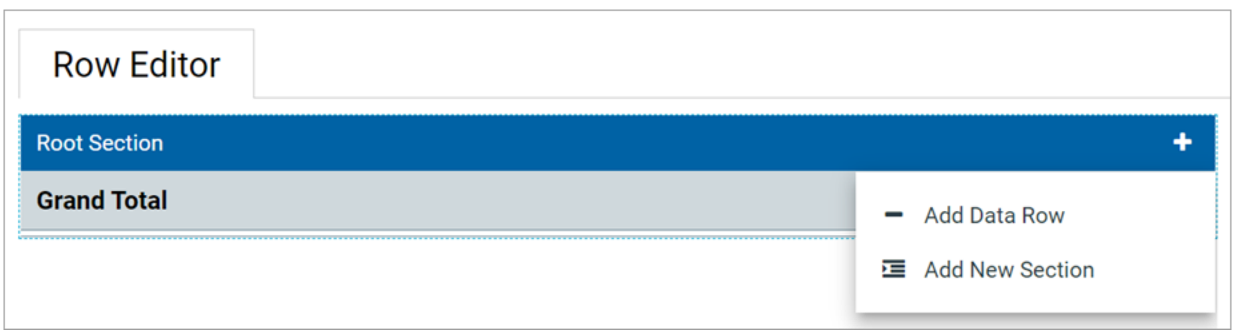
Adding, removing, and reordering sections

Using the **Row Editor** tab, you can build your row structure by adding, removing, or reordering sections. Each row structure starts with a top-level root section that includes an optional header and an optional grand total.



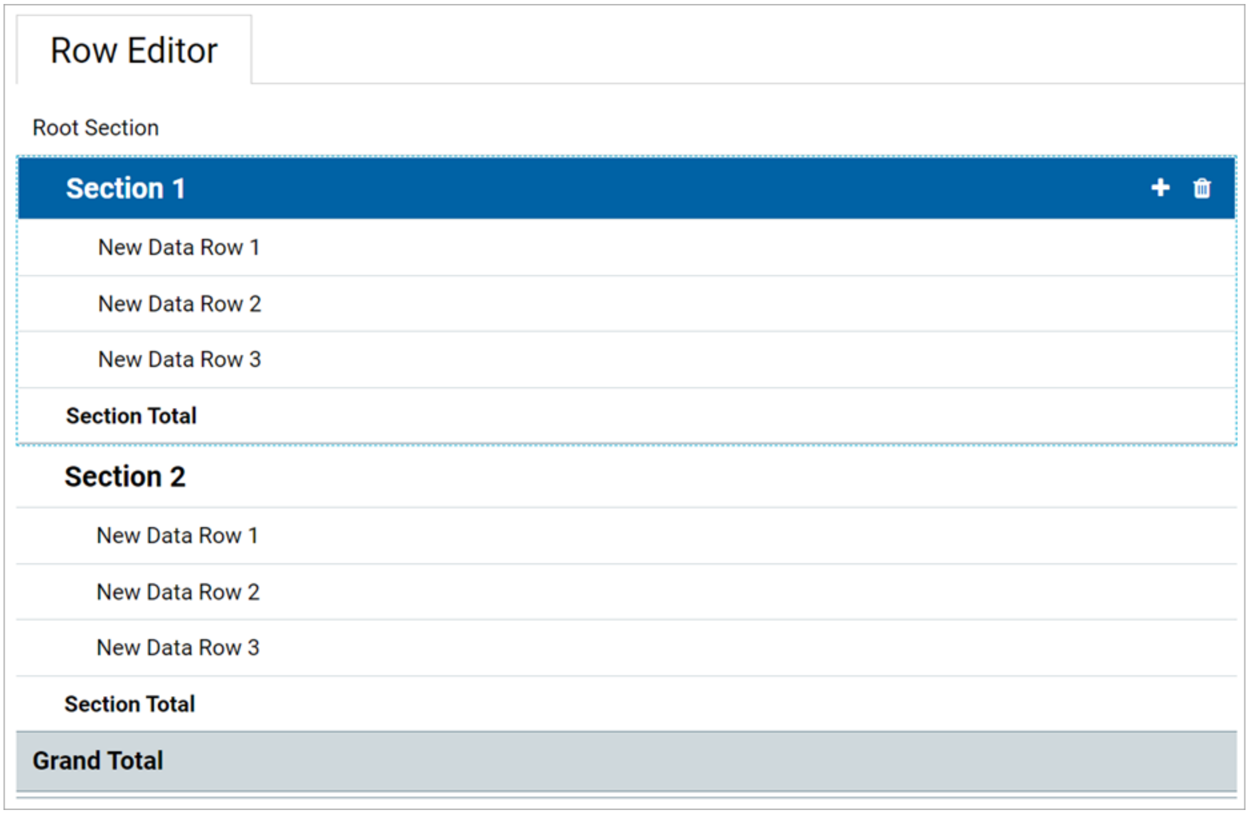
Row editor with starting root section

To add new sections to the row structure, select the section header row—the **Root Section** row—and then click the plus sign and select **Add New Section**.



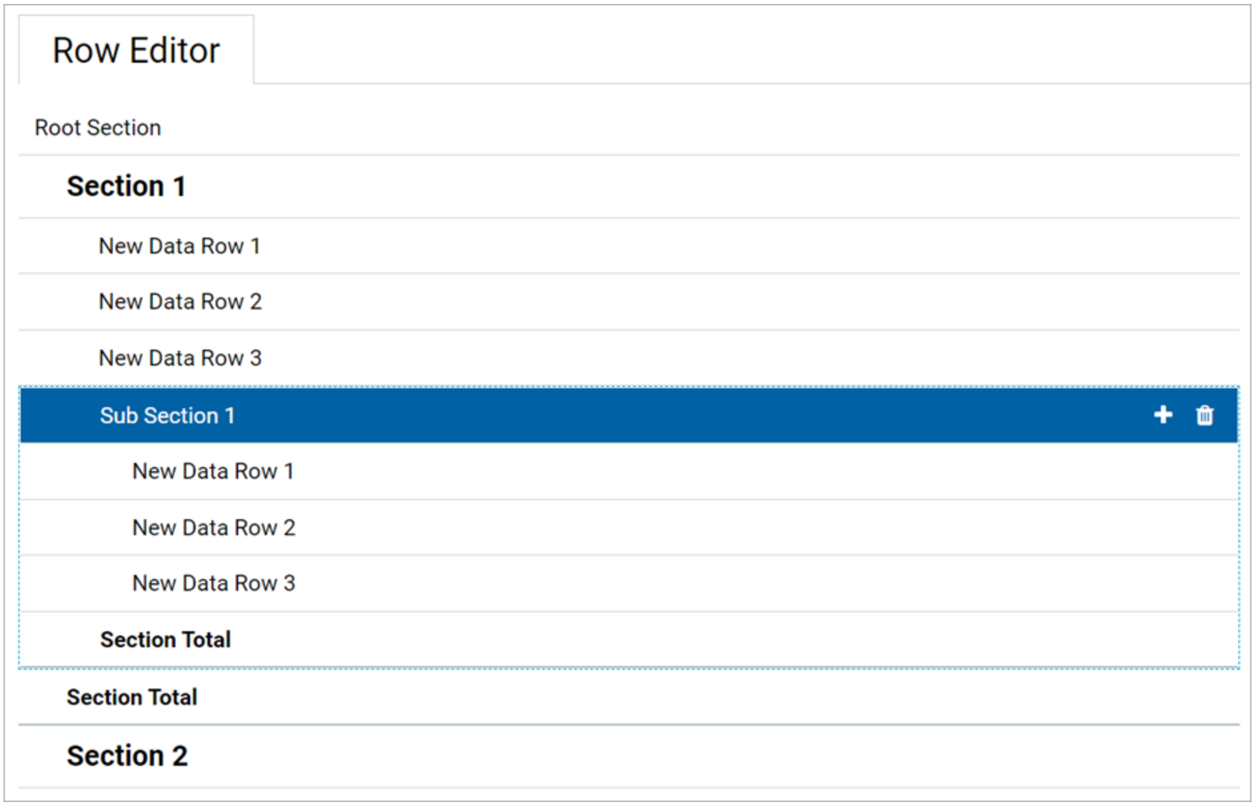
Option to add a new section

The new section is added within the root section. You can continue to add as many sections as needed at this level.



Row editor with two newly added sections

To add subsections within a section, select the section header row for any section, and then click the plus sign and select **Add New Section**. The new subsection is added to the current section. You can nest as many section levels as you need by adding subsections to sections.



Row editor with newly added subsection

Newly added sections use default text and styling, which can be configured for each section. Each newly added section consists of the following by default:

- A **header row** to display optional header text for the section. If you do not want a header row to display for a particular section (including the root section), you can hide it by disabling **Show Section Header** when configuring the section properties.
- Three **data rows** to display queried data in the section. You can add or remove data rows as needed.
- A **total row** to display the totaled data for the section. If you do not want a total row for this section (including the root section), you can hide it by disabling **Show Section Total Row** when configuring the section properties.

Once you have added sections, you can make further section changes as follows:

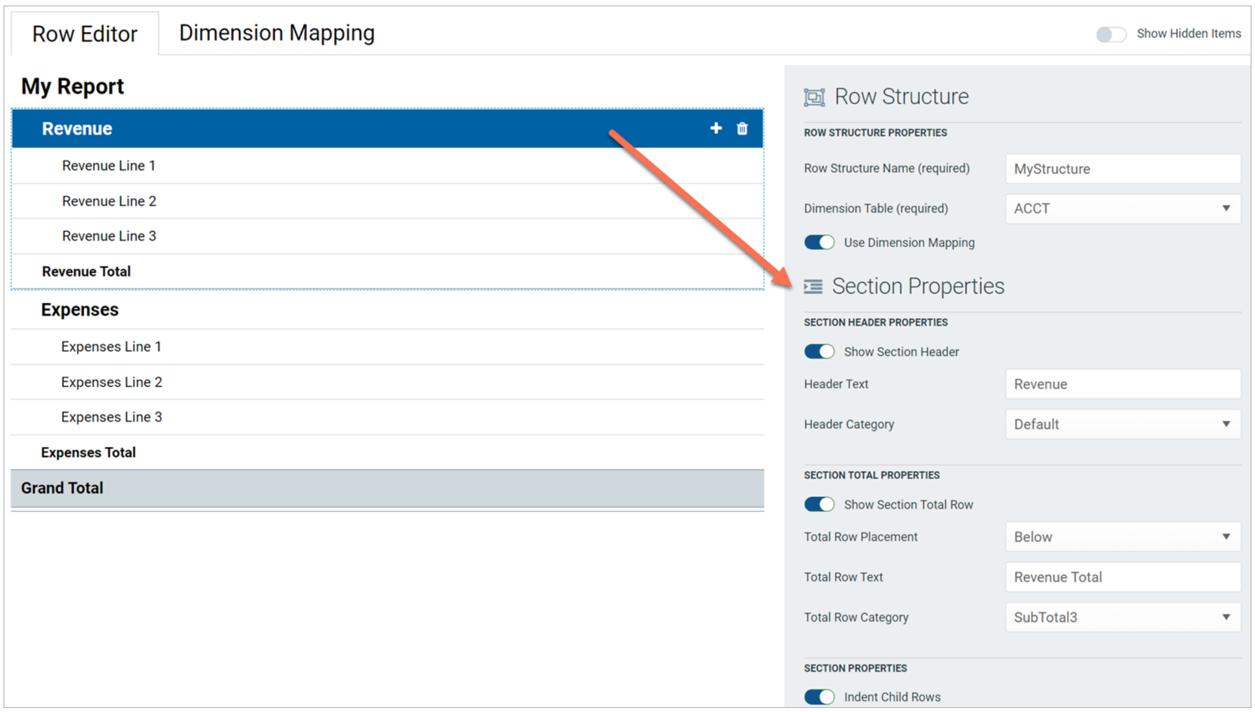
- **To reorder sections**: Select the header row of a section and then drag and drop it to a new location within the same level of the structure. For example, if you have three sections at the same level, you can drag and drop these three sections to change their order. But you cannot drag and drop one of these three sections to a lower level or a higher level.

- **To delete a section**: Select the header row of the section and then click the delete icon (trash can). The section and all of its subsections are deleted. Note that the root section is required and cannot be deleted.

  IMPORTANT: Make sure you no longer need the section before clicking the delete icon. The section will be deleted immediately with no confirmation prompt. If you deleted a section by accident, then you can exit the row structure editor without saving, but you will also lose any other unsaved changes that you have made during the current session.

Section properties

To configure the properties for a section, select the section header and then complete the **Section Properties** in the right-hand pane.



Example Section Properties area

Section Header Properties

Item	Description
Show Section Header	Specifies whether the section header row is visible when the row structure is used in a report. By default, this option is enabled, so the section header row is visible. If you do not want this section to have a header row, disable this option. The toggle switch shows as green when enabled and as gray when disabled. If this option is disabled, then the remaining section header properties become hidden because they do not apply. Note that you may want to define header text before disabling the option, to make it easier to identify the section when working within the row structure editor. **NOTE:** If you hide the section header, then you will no longer be able to select the header row in the editor for purposes of adding rows or subsections, configuring the section, reordering the section, or removing the section. If you need to work with the section header row, you can enable the option **Show Hidden Items**, located at the top right of the editor. This will cause all hidden items to show in the row structure, so that they can be selected and configured.
Header Text	The text to display on the section header row. By default, this is set to "Root Section" for the root section header and "Section" for all other newly added sections. The header text should be edited to reflect the data shown in this section.
Header Category	The style to use on the section header row. The style determines display attributes such as font size and font weight. Select one of the following: • **Header1** through **Header6**: These styles apply specific formatting to the header row. Although Header1 is designed to be used as the top-level section header, followed by Header2, and so on, you can assign these styles to any section header row as needed. • **Default**: Axiom Enterprise Decision Support automatically applies the appropriate header style depending on the section's placement in the row structure hierarchy. The header row for the root section uses Header1, sections in the next level use Header2, and so on. By default, the header category is set to **Header1** for the root section header, and **Default** for all newly added sections.

Section Total Properties

Item	Description
Show Section Total Row	Specifies whether the section total row is visible when the row structure is used in a report. By default, this option is enabled, so the section total row is visible. If you do not want this section to have a total row, disable this option. The toggle switch shows as green when enabled and as gray when disabled. If this option is disabled, then the remaining section total properties become hidden because they do not apply.
Total Row Placement	The location of the total row in the section, either **Below** the data rows or **Above** the data rows. The total row is located below the data rows by default.
Total Row Text	The text to display on the section total row. By default, this is set to "Grand Total" for the root section total and "Section Total" for all other newly added sections.
Total Row Category	The style to use on the section total row. The style determines display attributes such as font size, font weight, shading, and borders. Select one of the following: • **Grand Total** or **Total**: These styles are intended to be used for "final" total rows. Both styles use shading and top and bottom borders. The bottom border of the Grand Total is a double border. • **SubTotal1** through **SubTotal4**: These styles are intended to be used for subtotal rows. These options provide varying combinations of bold and regular text, shading or no shading, and border or no border. By default, the total row category is set to **Grand Total** for the root section total row, and **Subtotal3** for all newly added sections.

Section Properties

Item	Description
Indent Child Rows	Specifies whether the rows in this section are aligned with the section header row or indented. By default, this is enabled, so the rows are indented. If instead you want the rows to be aligned with the section header row, disable this option. The toggle switch shows as green when enabled and as gray when disabled.

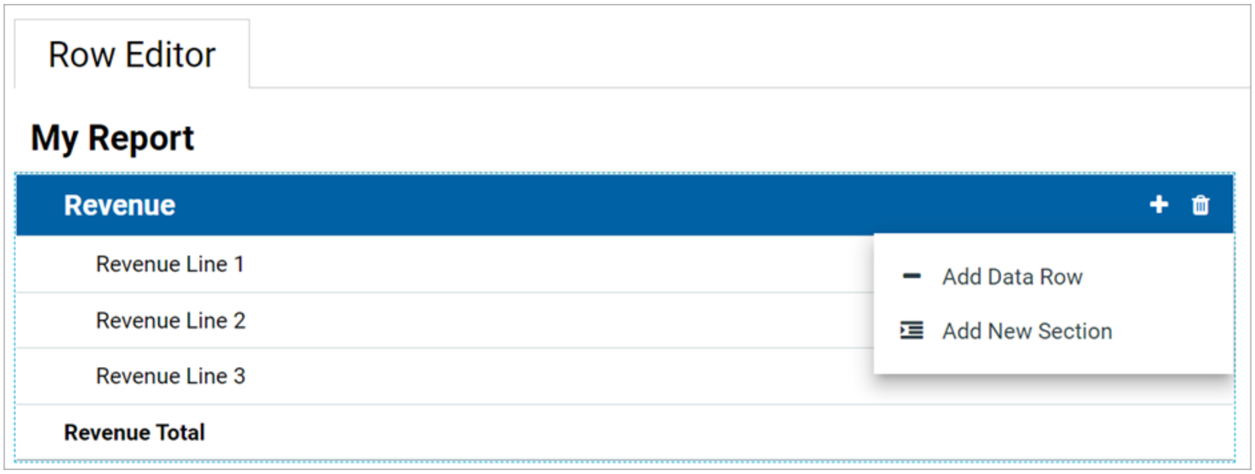
Item	Description
Parent Total Row Behavior	Specifies how the data in this section is treated when computing the total row of the parent section. Select one of the following: • **Add**: The data in this section is added when computing the parent total. This is the default behavior. • **Subtract**: The data in this section is subtracted when computing the parent total. • **Ignored**: The data in this section is ignored when computing the parent total. You might do this if the rows in this section contain supporting detail that should not impact the overall totals. Although this option displays on the root section, it does not apply because the root section does not have a parent section. For example, imagine that you have a parent section with two subsections. Subsection A totals 5000, and Subsection B totals 1000. • If both subsections are set to add, then the total of the parent section is 6000. • If Subsection A is set to add but Subsection B is set to subtract, then the total of the parent section is 4000. • If Subsection A is set to add but Subsection B is set to ignore, then the total of the parent section is 5000.
Section Data Filter	Optional. A data filter to apply to all of the data rows in this section, including any subsections. This is intended to be used when all rows in the section need to be filtered by a particular dimension or grouping, so that you do not need to repeat that dimension grouping on each individual data row. Only applies when **Use Dimension Mapping** is disabled. Enter the filter criteria statement to apply to the data rows in this section. Section data filters use normal filter syntax for Axiom Enterprise Decision Support. Although you can use the Filter Wizard to create the filter criteria statement, it is limited to creating filters based on the specified dimension table for the row structure. In many cases the section data filter needs to use a different dimension, so you must manually create the filter criteria statement. For example, imagine that you want to show revenue accounts in the rows of your report, but you want to split the data into two sections reflecting two different sales regions. You can create two sections and define section filters for each, such as `Dept.Region='East'` and `Dept.Region='West'`. All of the data rows in those sections will be filtered by the specified region in addition to the specific account filters listed on each row.

▶ Adding, removing, and reordering data rows

Using the **Row Editor** area, you can add data rows to a section, remove unneeded rows, and reorder rows. Each data row represents a record of data that you want to query from the database and display within the report.

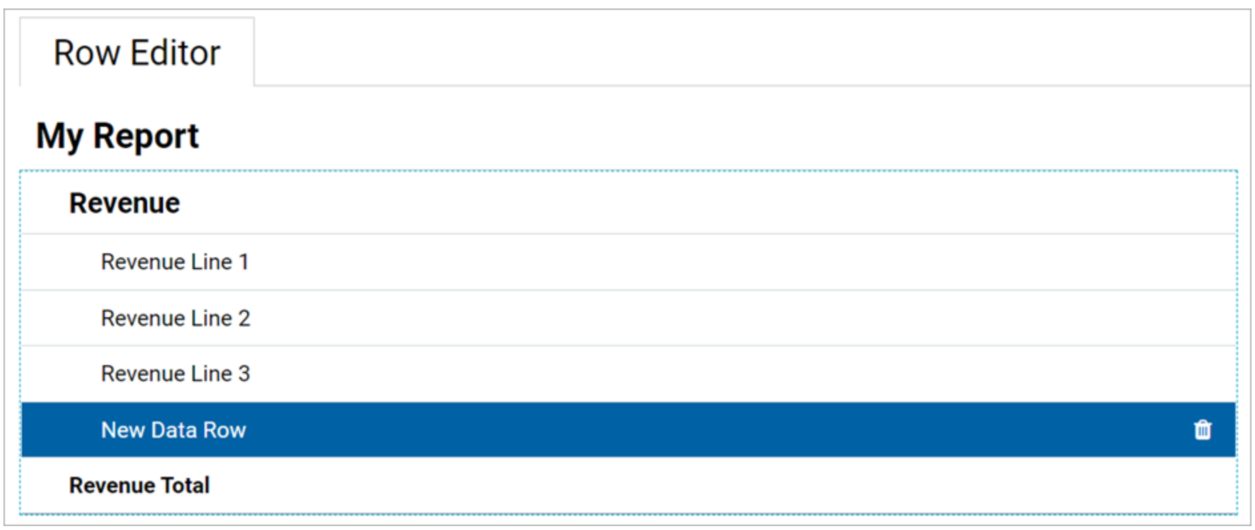
To add new data rows to a section:

- Select the section header row, then click the plus sign and select **Add Data Row**.



Option to add a new data row

The new row is added to the bottom of the section. You can continue to add as many new rows to the section as needed.



Section with a newly added data row

Once you have added data rows, you can make further row changes as follows:

- **To reorder rows**: Select the data row that you want to move, and then drag and drop it to a new location within the same section. For example, if you want a newly added row to be at the top of the section instead of the bottom, then you can drag and drop it to that location. But you cannot drag and drop the row to a different section, not even to subsections of the current section.

- **To delete a row**: Select the data row that you want to delete and then click the delete icon (trash can). The row is deleted.

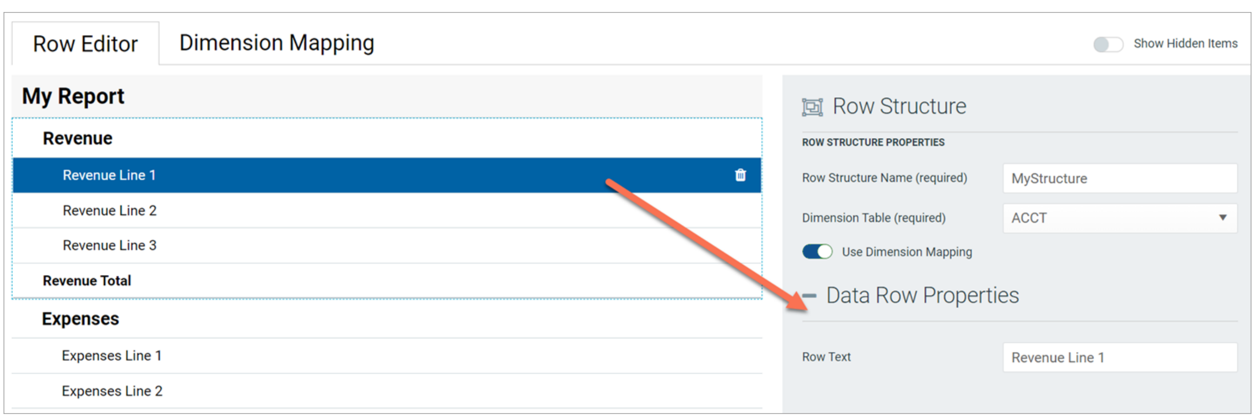
  IMPORTANT: Make sure you no longer need the row before clicking the delete icon. The row will be deleted immediately with no confirmation prompt. If you deleted a row by accident, then you can exit the row structure editor without saving, but you will also lose any other unsaved changes that you have made during the current session.

Only data rows can be individually added, deleted, and reordered. Section header rows and section total rows are not considered to be data rows and are managed as part of the section. Note the following:

- The delete icon on section header rows does not delete the header row; it deletes the entire section. If you do not want a particular section to have a header row, you can configure the section to hide the header row.
- Section total rows do not have delete icons. If you do not want a particular section to have a total row, you can configure the section to hide the total row.
- Section header rows are always located at the top of the section. When you drag and drop a section header row you are moving the entire section, not just the header row. It is not possible to move just the header row.
- Section total rows can be located at either the top or bottom of the section, but not by dragging and dropping. When you configure the section, you can specify the location of the total row.

Row properties

To configure the properties for a data row, select the row and then complete the **Row Properties** in the right-hand pane.



Example Row Properties area

Item	Description
Row Text	The text to display on the data row. By default, this is set to "New Data Row". The row text should be edited to reflect the data shown on this row. For example, if this row is going to display data for the Travel account, the row text should be something like "Travel" or "Account 5000 - Travel".
Data Filter	A filter criteria statement to define the data to query into this row. Only applies when **Use Dimension Mapping** is disabled. If dimension mapping is enabled, then use the Dimension Mapping tab to map the data for this row. Row filters use normal filter syntax for Axiom Enterprise Decision Support. You can type the filter, or you can use the **Filter Wizard** to create a filter based on the specified Dimension Table for the row structure. For example, if the data filter is `Acct.Category='Revenue'`, then this row will display data for all revenue accounts when this row structure is used in a report. The specific data returned will depend on the data columns used in the report, and any other filters applied to the report. Each row's data filter is independent from any other row, and does not need to use the same grouping level or even the same dimension as other rows. For example, one row can be `Acct.Acct=4000`, while another row is `Acct.Category='Marketing'`, and a third row is `Fcst.Acct=670`. However, keep in mind the following: • If you use the Filter Wizard to make the filter, it is limited to the table selected as the **Dimension Table** for the row structure. If you want to use a different table for a particular row, you must manually write the filter. • Although there are no restrictions on the individual row filters, all of the filters used must be compatible with the eventual primary table selected for the report, when the fixed row structure is used in a report.

If the row uses a data filter, then the row's data filter will be combined with any upstream section data filters (using AND). For example, imagine the row structure has sections and rows configured as follows:

Parent Section Filter	`Dept.Company='Company A'`
Current Section Filter	`Dept.Region='US West'`
Row Filter	`Acct.Acct=4000`

Then the data for this row is determined as follows:

```
Dept.Company='Company A' AND Dept.Region='US West' AND Acct.Acct=4000
```

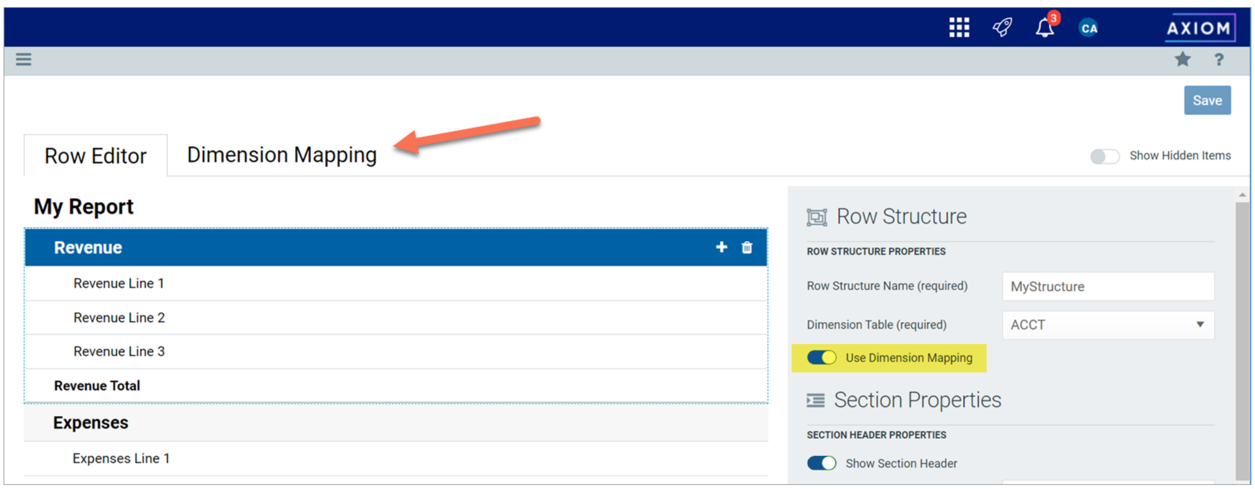
Using the Dimension Mapping editor

Using the Dimension Mapping editor, you can assign dimension items to specific rows of a fixed row structure. When the row structure is used in a web report, the rows will display data for the assigned dimension items.

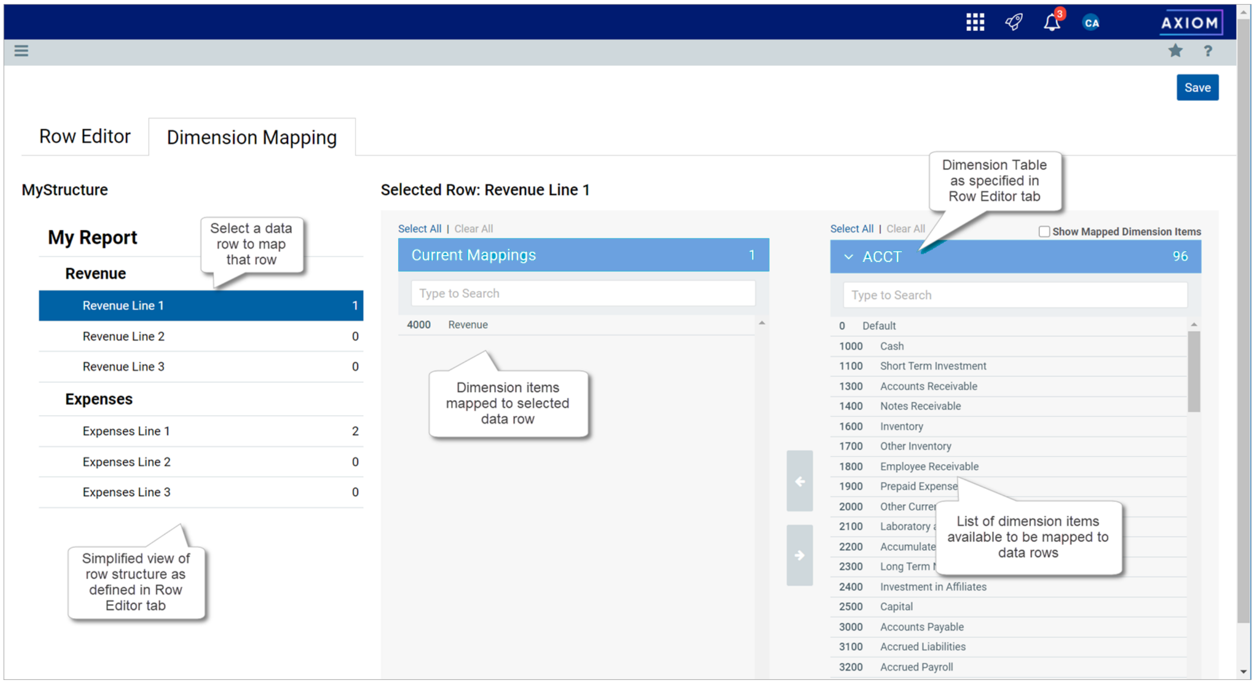
For example, if the row dimension is Acct, you can assign one or more accounts to each row in the row structure. If a row is assigned Acct 4000, then that row will display data for Acct 4000, for each of the columns used in the report.

Dimension Mapping editor overview

The Dimension Mapping editor is only accessible when creating or editing a row structure. If **Use Dimension Mapping** is enabled for the row structure, then a **Dimension Mapping** tab displays next to the **Row Editor** tab. You can click this tab to open the Dimension Mapping editor and assign dimension items to each row.



Dimension Mapping tab available in row structure when Use Dimension Mapping is enabled



Example Dimension Mapping editor

- The left side of the Dimension Mapping editor displays a simplified view of the row structure defined on the **Row Editor** tab. You can select a data row in the row structure in order to map dimension items to that row.
  - Each data row must be assigned at least one dimension item when using dimension mapping. It is not possible to mix use of data filters and dimension mappings.
  - The number to the left of the row label shows how many dimension items have been assigned to that row.
- The two columns on the right side of the Dimension Mapping editor are used to map dimension items.
  - The **Current Mappings** column in the middle of the page shows the dimension items mapped to the currently selected data row.
  - The dimension column on the right side of the page shows the remaining unmapped dimension items. The dimension used for the mappings is determined by the specified **Dimension Table** in the **Row Editor** tab. In this example, the dimension table is **Acct** and the column shows the list of accounts defined in that table.
  - You can use the arrow buttons between the columns to move dimension items from the dimension column to the Current Mappings column and vice versa.

Each dimension item can only be assigned to a single row in the row structure. Once a dimension item is moved to the Current Mappings column, it is removed from the list of unmapped dimension items and cannot be assigned to another row.

Assigning dimension items to data rows

Each data row in the row structure must be assigned at least one dimension item. When the row structure is used in a report, the dimension mappings determine what data displays in each row.

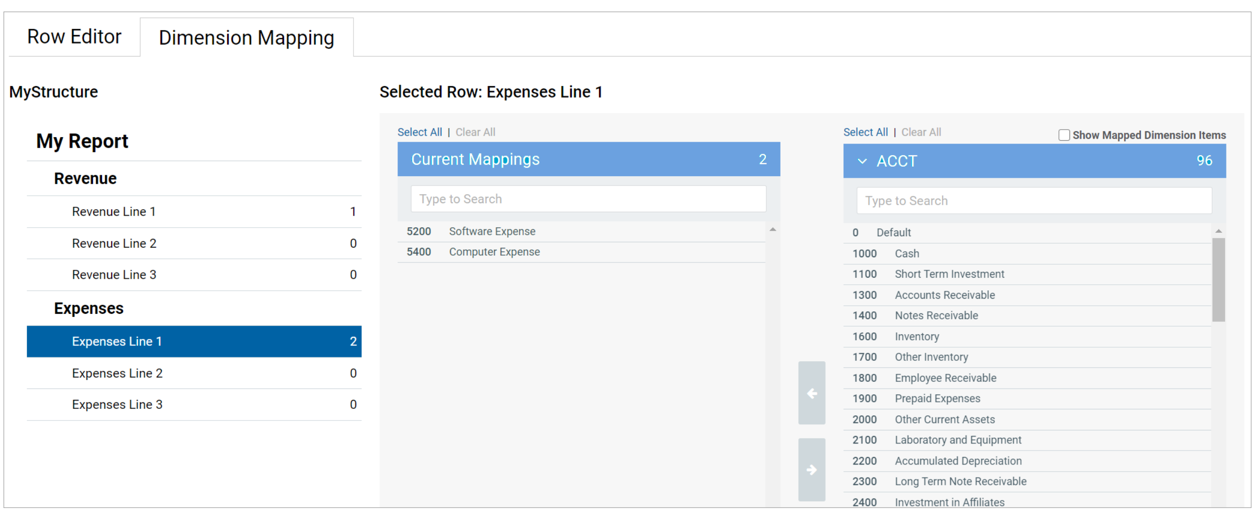
To assign one or more dimension items to a data row:

1. In the row structure on the left side of the page, select the data row that you want to map. If any dimension items are already mapped to this row, those dimension items display in the **Current Mappings** column.
2. In the dimension column on the right side of the page, select the dimension item or items that you want to map to the data row.
   - Click a dimension item once to select it. If you select a dimension item by accident, click it again to de-select it.
   - Note that using the Shift key or the CTRL key to select multiple dimension items at once does *not* work here. You must individually click on each dimension item that you want to assign.

   You can search and filter the dimension list to help find the desired dimension items.
3. Once all of the dimension items that you want to assign are highlighted, click the left arrow to move the selected dimension items to the **Current Mappings** column.

If you want to remove a mapped dimension item from a data row, you can select the item in the Current Mappings column and then click the right arrow to move it back to the dimension column.

In the following example, two accounts have been mapped to the Expenses Line 1 data row. When this row structure is used in a report, this row will display summed data for the Software Expense and Computer Expense accounts. (In a real report, the label text for this data row would likely be defined as "Software and Computer Expenses" or something similar.)



Example data row with mapped dimension items

The two accounts that are mapped to this data row no longer display in the dimension column and cannot be mapped to any other row. You can optionally enable **Show Mapped Dimension Items** to see all items in the dimension column, but mapped items will display as grayed out and cannot be selected.

Searching and filtering the dimension column

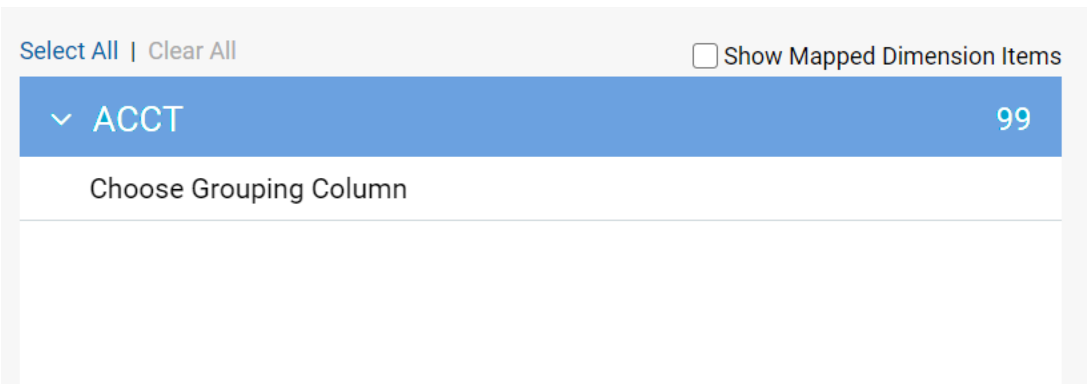
You can search and filter the dimension column to more easily find the dimension items that you want to map.

- You can type into the search box at the top of the column to find items by dimension value. The search matches any dimension value that contains the search text. Currently, the description text is not included in the search.
- You can select a grouping column so that the dimension column is filtered to only show values for a particular grouping. For example, you may have a grouping column of Category, which you can use to show accounts within a particular category—such as Revenue, Capital, or Marketing.

If you use **Select All** when the list is filtered by a search or by a grouping value, then only the currently visible items are selected. This can be a convenient way to find, select, and map multiple dimension items at a time.

To filter the dimension column by a grouping value:

1. Click the down arrow icon in the column header, and then click **Choose Grouping Column**.

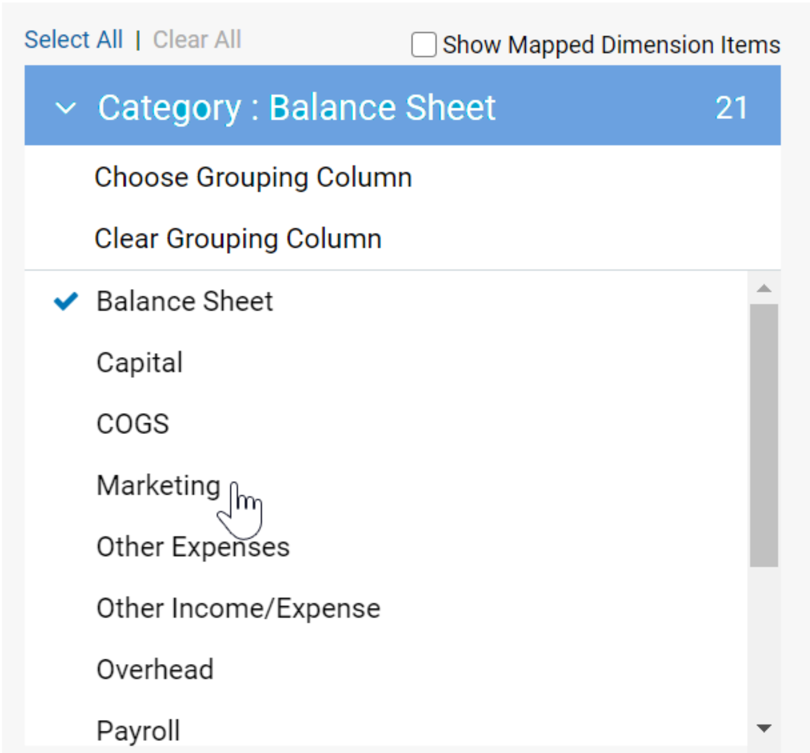


2. In the **Choose a Grouping Column** dialog, select the grouping column that you want to use, and then click **OK**.

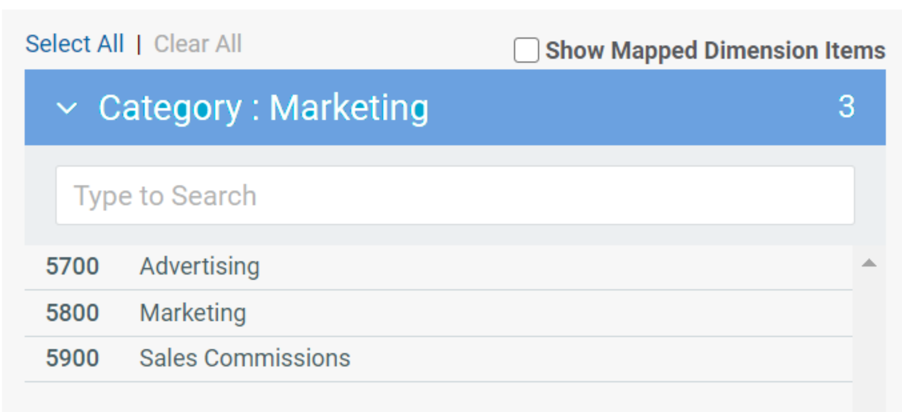
   The dimension column becomes filtered by the first value in the selected grouping column. This value displays in the column header.

3. To filter the dimension column by a different value in the grouping column, click the down arrow icon in the column header, and select the desired value.

   In the following example, "Balance Sheet" was the automatically-selected value from the grouping column, and we are now going to select "Marketing" instead.



The dimension column is now filtered to only show accounts that belong to the Marketing category.



If you want to clear the grouping column filter, click the down arrow icon in the column header, and select **Clear Grouping Column**.

Opening web reports

In order to open an existing web report, you must have at least read-only access to the report, as defined in Axiom Enterprise Decision Support security. Web reports can be opened from either the Web Client or the Desktop Client.

This topic discusses the default ways to access and view web reports. Your system may be designed so that you can open web reports in other ways, such as:

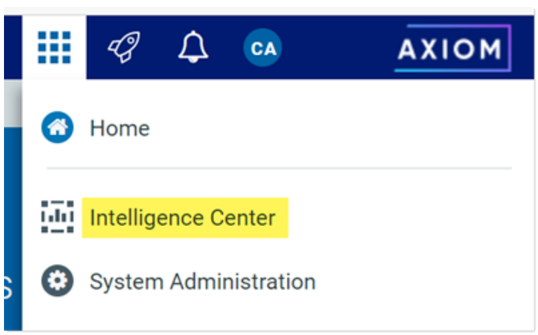
- Using the Navigation panel in the Web Client
- Using links within your home page or product pages
- Using links within a task pane or ribbon tab in the Desktop Client

Opening web reports from the Intelligence Center

The Intelligence Center in the Web Client is a hub where you can access all of your available reports, regardless of the report type. The Intelligence Center is automatically filtered to show only the reports that you have access to.

To open a web report from the Intelligence Center:

1. Click the menu icon in the Global Navigation Bar. From the Area menu, select **Intelligence Center**.



2. In the left-hand panel, select the **Reports** tab if it is not already selected.
3. Do one of the following to locate the report that you want to open:
    - Use the folder tree in the left-hand panel to navigate to the folder where the report is located.

      OR

    - Use the Search box to search for the report by name.

   For more information on how to search, filter, and sort the Intelligence Center, see Intelligence Center overview.

4. Once the report displays in the Intelligence Center grid, click on the report name to open it.

The report opens in the current browser tab. You can now view and explore the data using various features. For more information, see Viewing and exploring data in web reports.

Opening web reports from the Desktop Client

You can open a web report from the Reports Library in the Desktop Client (Excel Client or Windows Client). You can differentiate web reports from other types of Axiom Enterprise Decision Support reports using the following icons:

Web report

Visualization report

Axiom form

Spreadsheet Axiom file

To open a web report from the Desktop Client:

1. On the **Axiom** tab, in the **Reports** group, click **Reports** to bring up the Reports menu.

   NOTE: In systems with installed products, this feature may be present on a different ribbon tab, such as the **Main** tab.

   TIP: You can also open reports from the Explorer task pane or Axiom Explorer.

2. Use the Reports Library folders at the bottom of the menu to navigate to the specific web report that you want to open, and then click on it.

The web report opens in the Web Client using your default browser. You can now view and explore the data using various features. For more information, see Viewing and exploring data in web reports.

Viewing and exploring data in web reports

Once a web report is opened, you may have access to a variety of features to view and explore the data in the report, including filtering, sorting, and drilling.

Drilling data

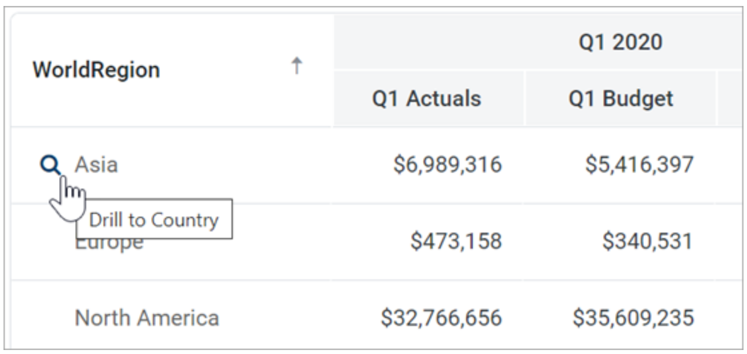
If the web report has been configured to enable drilling, you can drill any data row in the report. Total rows, subtotal rows, and section header rows are not drillable.

To drill a data row:

1. Hover your cursor over the far left column in the report so that a magnifying glass icon appears on the row.

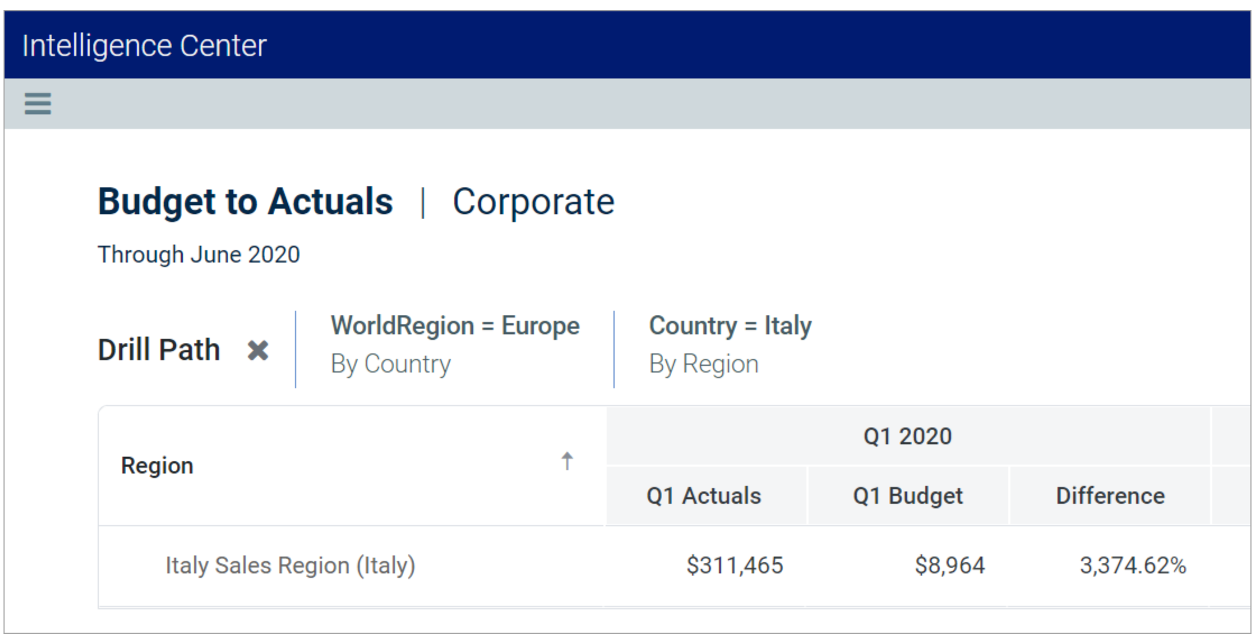
   The tooltip for the magnifying glass will be either "Drill" (if multiple drill paths are available) or "Drill to <path>" (if a single drill path is available). For example, the tooltip will say "Drill to Acct" if the Acct drill path is the only available drill path.

2. Click the icon to drill the row.
   - If multiple drill paths are available, these paths display in a menu when you click the icon. Click the drilling path that you want to view.
   - If a single drill path is available, that path is automatically used when you click the icon to drill.



Hover and click to drill

The drill results are presented within the current tab, replacing the original report. The current row being drilled and the current drill level display at the top of the drill results.



Example drill results with drilling path displayed at the top

You can continue drilling the drill results if additional drill paths are available. You can return to a previous path by clicking on that path name in the header. When you are finished viewing the drill results, you can click the **X** icon in the drill path to clear the drill and return to the original report.

▶ Adjusting column width and order

You can make minor adjustments to the column display as follows:

- To change the column width, hover your cursor along the right edge of the column header, then drag to make the column thinner or wider.
- To reorder columns, click on a column header and then drag it to a new location. Note that columns cannot be moved in or out of a column group (meaning a set of columns grouped under header text). If a column belongs to a column group, you can change its order within the group but you cannot drag it out of the group.

▶ Sorting data

If the web report uses a data grid with dynamic rows, then you can sort the data by any column in the grid. To sort the grid by a column, click on the column header. Each click toggles between ascending sort, descending sort, and no sort. If the grid is currently sorted by a column, the sort direction is indicated by an arrow on the column header (up for ascending, down for descending).

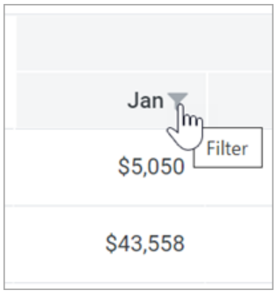
The web report may only allow sorting by a single column, or it may allow sorting by multiple columns. This is configured by the report designer. If the grid uses single-column sorting, then it is not possible to clear the sort on a column. Instead you must click on a different column to change the sort to use that column.

If the web report uses a fixed row structure, then the row values are fixed in position and cannot be sorted.

▶ Filtering by column data

If the web report uses a data grid with dynamic rows, you may be able to filter the report by the column data. For example, you might want to filter a column to hide zero-value records, or to show all records above or below a certain value. You might want to filter a dimension column to hide or show certain dimensions (such as departments, accounts, and so on). The report designer determines whether a column is enabled for filtering.

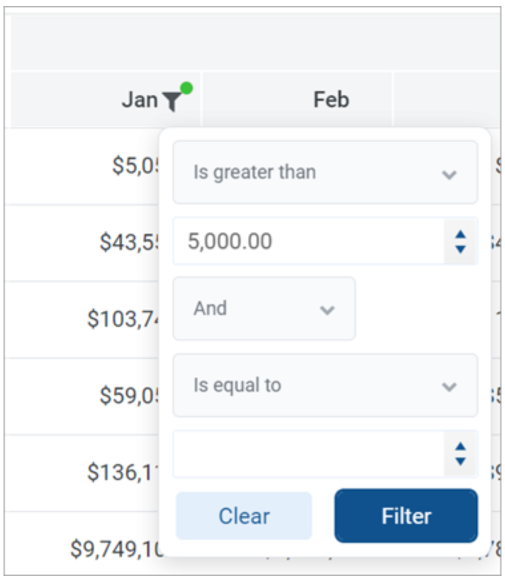
If a column allows filtering, the filter icon displays in the column header when you hover your cursor over the column header.



Filter icon for a column with filtering enabled

To filter the report based on a column:

1. Click the filter icon in the column header to show the filter options.
2. Set the filter options as desired. You can set up to two filter options, combined with either AND or OR.



Example filtering options

3. Click **Filter**.

The report updates to only show records that meet the filter. Additionally, the filter icon in the column header remains visible to indicate that the grid is filtered by this column.

The filter is retained until you clear it, or until the report is refreshed with new data.

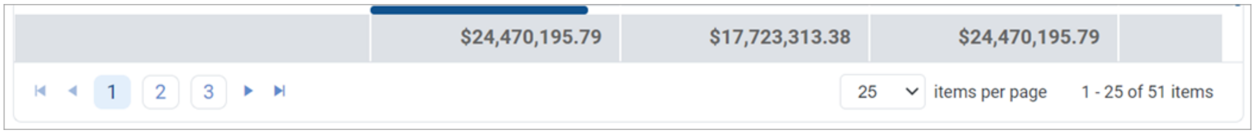
To clear a filter:

1. Click the filter icon in the column header to show the filter options.
2. Click **Clear**.

The grid updates to clear the filter. The filter icon is now only visible when hovering over the column header.

Viewing paged data

If the web report uses dynamic rows, the data is paged to show a specified number of records per page. If the data in the grid exceeds the page limit, you can move between pages using the page controls at the bottom left of the grid.



Page controls for data grids

- Click a page number to move directly to that page.
- Click the single arrow buttons to move one page back or forward.
- Click the double arrow buttons to move to the first page or the last page.

By default, the data grid shows 25 records per page. You can use the drop-down list next to the page controls to change this to 50, 100, or 500 as needed.

Web report sharing, export, and distribution

TBD Delete this text and replace it with your own content.

Exporting a PDF copy of a web report

You can export a web report as a PDF file, and save the file locally or to the Axiom Enterprise Decision Support repository.

Any user who can view the report can export to PDF and save it to a local folder location. In order to save a PDF copy to the Axiom Enterprise Decision Support repository, you must have read/write access to at least one folder in the Reports Library.

To export a web report as a PDF file:

1. In the Intelligence Center, locate the report in the folder tree and click on the report name to open it.
2. Click the PDF button located in the top right of the gray task bar.

   TBD

3. In the **Export Report** dialog, enter a file name into the **File name** field. By default, the file name is the same as the web report file name.
4. Select the export destination from the **Export to** drop-down:
   - **My computer**: Save the PDF to your computer.

- **Axiom repository**: Save the PDF to a folder in the Axiom Enterprise Decision Support Reports Library, or to your My Documents folder.

> **NOTES:**
>
> - If you save the PDF to a folder in the Reports Library, any user with at least read-only access to that folder will be able to view the PDF. You should be sure that it is acceptable for users with permission to the target folder to view the data in the PDF.
> - If you do not have read/write access to any folders in the Axiom repository, then the **Export to** option is not available and does not display in the dialog. The PDF will be automatically saved to your computer.

5. If you are saving to the Axiom repository, select an **Output folder**:

   - Click the folder icon to the right of the field.
   - In the **Choose output folder** dialog, select a folder in the Reports Library. The dialog only shows folders where you have read/write access to that folder or a child folder.

     > **NOTE:** If you have access to the My Documents folder, then you can also save reports to that location for your personal use.

   - Click **OK** to choose the folder and return to the **Export to PDF** dialog.

   The path to your selected folder now displays in the **Output folder** field.

6. In the **Configuration Settings** section, select the following:

   - **Layout**: Select the page size for the PDF. You can choose from the following standard page sizes: **A3**, **A4**, **A5**, **Legal**, **Letter**, or **Tabloid**. Letter is the default size.
   - **Orientation**: Select the orientation for the PDF, either **Portrait** or **Landscape**. Portrait is the default orientation.

7. Click **Export** to create the PDF.

   - If you are saving to the Axiom repository, and you used a file name that already exists in the target folder, you are prompted to choose whether or not to overwrite the existing file. If you choose not to overwrite, you are returned to the Export to PDF dialog so that you can use a different name and/or output folder.
   - If you are saving to your computer, the exact behavior is determined by your browser settings. The default behavior for most browsers is to save the file to the **Downloads** folder on your computer.
   - In either case, a notification message displays at the top of the page to indicate whether the PDF creation succeeded or failed.

▶ Export behavior

When you create the PDF, the web report contents are handled as follows:

- If the grid in the web report has paged data, the grid is expanded so that all rows display in the PDF. Column headers do not repeat on multiple pages.
- If you have sorted, filtered, or drilled the data displayed in the report, these changes are reflected in the PDF. The exception is if you have reordered columns—columns display in their original order.

  > **NOTE:** Drill results can only be saved as a PDF if the report was created in the Report Builder. Web reports created from template display drill results slightly differently, and these results cannot be saved to PDF.

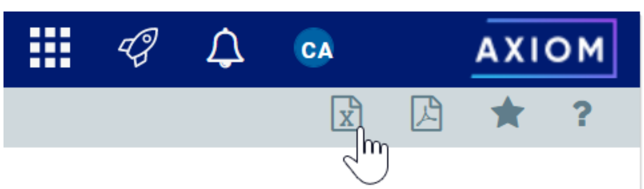
Exporting grid data in a web report to Excel

You can export grid data in a web report to a spreadsheet, so that you can further examine the data using spreadsheet features. You can save the spreadsheet locally, or save it to the Axiom Enterprise Decision Support repository.

Any user who can view the report can save the spreadsheet export locally. In order to save the spreadsheet export to the Axiom Enterprise Decision Support repository, you must have read/write access to at least one folder in the Reports Library.

To export grid data to an Excel spreadsheet:

1. In the Intelligence Center, locate the report in the folder tree and click on the report name to open it.
2. Click the Excel icon located in the top right of the gray task bar.

3. In the **Export to Excel** dialog, enter a file name into the **File name** field. By default, the file name is the same as the web report file name.
4. Select the export destination from the **Export to** drop-down:
   - **My computer**: Save the spreadsheet to your computer.
   - **Axiom repository**: Save the spreadsheet to a folder in the Axiom Enterprise Decision Support Reports Library, or to your My Documents folder.

> **NOTES:**
>
> - If you save the spreadsheet to a folder in the Reports Library, then any user with at least read-only access to that folder will be able to view the spreadsheet. You should be sure that it is acceptable for users with permission to the target folder to view the data in the spreadsheet.
> - If you do not have read/write access to any folders in the Axiom repository, then the **Export to** option is not available and does not display in the dialog. The spreadsheet will be automatically saved to your computer.

5. If you are saving to the Axiom repository, select an **Output folder**:

   - Click the folder icon 🗁 to the right of the field.
   - In the **Choose output folder** dialog, select a folder in the Reports Library. The dialog only shows folders where you have read/write access to that folder or a child folder.

     > **NOTE:** If you have access to the My Documents folder, then you can also save reports to that location for your personal use.

   - Click **OK** to choose the folder and return to the **Export to Excel** dialog.

   The path to your selected folder now displays in the **Output folder** field.

6. Click **Export** to create the spreadsheet.

   - If you are saving to the Axiom repository, and you used a file name that already exists in the target folder, you are prompted to choose whether or not to overwrite the existing file. If you choose not to overwrite, you are returned to the Export to Excel dialog so that you can use a different name and/or output folder.
   - If you are saving to your computer, the exact behavior is determined by your browser settings. The default behavior for most browsers is to save the file to the **Downloads** folder on your computer.
   - In either case, a notification message displays at the top of the page to indicate whether the spreadsheet creation succeeded or failed.

▶ Export behavior

When the grid data is exported, the behavior is as follows:

- The full data contents of the grid are exported (all rows).
- By default, the basic number format applied to the column is preserved in the export. The exception is negative numbers, which will always be shown using a minus sign regardless of the configured format. Other formats such as background colors and borders are not applied to the exported data.

- User changes to the grid—such as changing the sort order, filtering a column, or drilling—are preserved. The exception is reordered columns—columns are exported in their original order.

  NOTE: Drill results can only be exported to Excel if the report was created in the Report Builder. Web reports created from template display drill results slightly differently, and these results cannot be exported.

- Column group headers are omitted from the export. Additionally, if a column has a 2-row header, only the first row of that header is exported.

Exporting grid data in a web report to a delimited file

You can export grid data in a web report to a delimited file such as comma-separated (CSV). You can save the delimited file locally, or save it to the Axiom Enterprise Decision Support repository.

Any user who can view the report can save the delimited file locally. In order to save the delimited file to the Axiom Enterprise Decision Support repository, you must have read/write access to at least one folder in the Reports Library.

To export grid data to a delimited file:

1. In the Intelligence Center, locate the report in the folder tree, then do one of the following:
   - Click on the report name to open it. Once the report is open, click **Export > CSV** in the top right corner of the report.

     TBD Image

   - Hover your cursor over the **Name** column to make the three-dots icon visible. Click the icon then select **Export > CSV** from the Actions menu.

     TBD Image

2. In the **Export Report** dialog, enter a file name into the **File name** box. By default, the file name is the same as the web report file name.

3. For **Export to**, select the export destination:
   - **My computer**: Save the delimited file to your computer.
   - **Axiom repository**: Save the delimited file to a folder in the Axiom Enterprise Decision Support Reports Library, or to your My Documents folder.

> **NOTES:**
>
> - If you save the delimited file to a folder in the Reports Library, then any user with at least read-only access to that folder will be able to view the file. You should be sure that it is acceptable for users with permission to the target folder to view the data in the file.
> - If you do not have read/write access to any folders in the Axiom repository, then the **Export to** option is not available and does not display in the dialog. The file will be automatically saved to your computer.

4. If you are saving to the Axiom repository, select an **Output folder**:
   - Click the folder icon 🗁 to the right of the field.
   - In the **Choose output folder** dialog, select a folder in the Reports Library. The dialog only shows folders where you have read/write access to that folder or a child folder.

     > **NOTE:** If you have access to the My Documents folder, then you can also save reports to that location for your personal use.

   - Click **OK** to choose the folder and return to the **Export to Excel** dialog.

   The path to your selected folder now displays in the **Output folder** field.

5. In the **Configuration options** section, select the desired **Delimiter**. You can select any of the following: **Comma** (default), **Space**, **Period**, **Pipe**, **Tab**, **Semi-Colon**, **Colon**.

   If the delimiter is a comma, the file format for the exported file is CSV. For any other delimiter, the file format is TXT.

6. Click **Export** to create the delimited file.
   - If you are saving to the Axiom repository, and you used a file name that already exists in the target folder, you are prompted to choose whether or not to overwrite the existing file. If you choose not to overwrite, you are returned to the Export Report dialog so that you can use a different name and/or output folder.
   - If you are saving to your computer, the exact behavior is determined by your browser settings. The default behavior for most browsers is to save the file to the **Downloads** folder on your computer.
   - In either case, a notification message displays at the top of the page to indicate whether the file creation succeeded or failed.

▶ Export behavior

When the grid data is exported, the behavior is as follows:

- The full data contents of the grid are exported (all rows).

- The first row of data in the file contains the column headers. Group headers are omitted from the export. Additionally, if a column has a 2-row header, only the first row of that header is exported.
- The raw data is exported to the delimited file. No formatting is applied. For example, this means number formats are not applied, date formats are not applied, and the Show Description option is not applied.
- If a data value in the export contains the delimiter, that value is escaped in double quotation marks. For example, if the delimiter is a space character, then values with spaces are wrapped in double quotation marks (such as "Finance Department").
- User changes to the grid—such as changing the sort order, filtering a column, or drilling—are preserved. The exception is reordered columns—columns are exported in their original order.

  > **NOTE:** Drill results can only be exported to a delimited file if the report was created in the Report Builder. Web reports created from template display drill results slightly differently, and these results cannot be exported.

- If the report uses a fixed row structure, all rows are included in the delimited file, including header rows and subtotal rows.

Sharing a web report via email

Delete this text and replace it with your own content.

Production reporting for web reports

Using production reporting features with web reports, you can generate and deliver report "snapshots" to various audiences as needed.

- You can perform multipass processing on a web report over a specified dimension, such as by department, region, or entity. The report is iteratively refreshed—one "pass" for each value of the dimension—and during each pass a filter is automatically applied to limit the data to the current dimension value.
- The output of each pass is a filtered PDF or Excel "snapshot" of the report. This static snapshot is then saved to a target folder location—either a local folder in your network or the Axiom repository—and/or emailed to a specified recipient. Folder locations and email recipients can be determined dynamically so that the location and recipient changes as needed for each pass.
- Multiple PDF or Excel snapshots can be optionally collected into larger "report books" and then dynamically saved and/or emailed as needed. For example, you might process three different web reports by entity, and then collect the three resulting entity snapshots into a single file per entity.

To perform multipass processing on a web report, use the Scheduler task **Web Report Processing**. This task will process a target report by a specified dimension, and then save and/or email the output files as configured in the task.

To collect output files into report books, use the File Collect option of File Processing. To do this, you must create a spreadsheet report, enable it for file processing, and then configure file collect options. Once it is configured, file collect processing can be run manually in the Desktop Client, or can be run using the Scheduler task **File Processing**.

> **IMPORTANT:** In phase one of production reporting for web reports, processing is only supported for web reports created from product-delivered templates. Ad hoc web reports created in the Report Builder cannot be processed yet. Support for ad hoc report processing is planned for an upcoming phase two.

Setting up web report processing

You can perform production reporting for web reports using multipass processing. The report can be processed multiple times over a dimension, generating a filtered PDF or Excel copy of the report for each value of the dimension. The report copies can be saved to a designated location and/or emailed to designated recipients.

To perform multipass processing on a web report, use the Scheduler task **Web Report Processing**. When you set up this task, you configure the following:

- The web report to process. You can process any web report created from a product-delivered template.
- The output format of the processing. Each pass will generate a filtered PDF or Excel output file. The name of the file can be set dynamically using processing variables and job variables.
- The delivery option for the processing. Each output file can be saved to a folder location, emailed to a recipient, or both.
    - If the output is saved, you specify the location of the target folder (local or Axiom repository) and the folder path. The folder path can be set dynamically using processing variables and job variables.
    - If the output is emailed, you specify the recipients of the email, and the email subject and body text. The recipients can be manually entered into the task settings (and can optionally use job variables), or you can specify a table column to dynamically look up the recipients. Recipients can be email addresses, or you can list user and role names to look up email addresses from Axiom security. The email subject and body text can be set dynamically using processing variables and job variables.
- The dimension to process. You can specify any dimension that will be compatible against the data queried in the target web report. The web report will be processed once for each value in the dimension. If desired, you can define a filter to limit the dimension values to process.

Configuring a web report processing task

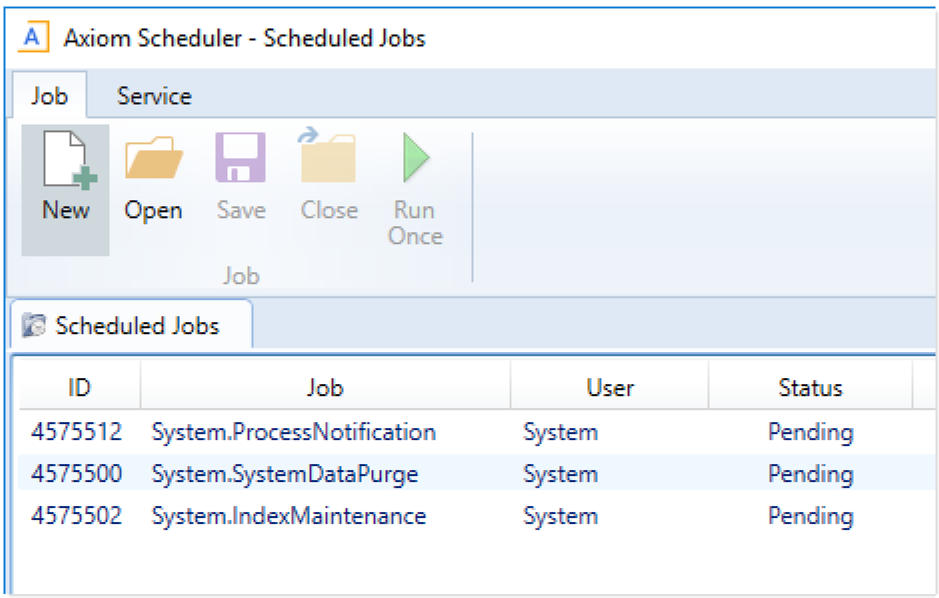
In order to create a Scheduler job with a Web Report Processing task, you must be an administrator or a user with the **Scheduled Jobs User** permission. You must also have read/write access to at least one folder in the Scheduler Jobs Library to save the job. Scheduler jobs can only be created in the Desktop Client.

To create a Scheduler job with a web report processing task:

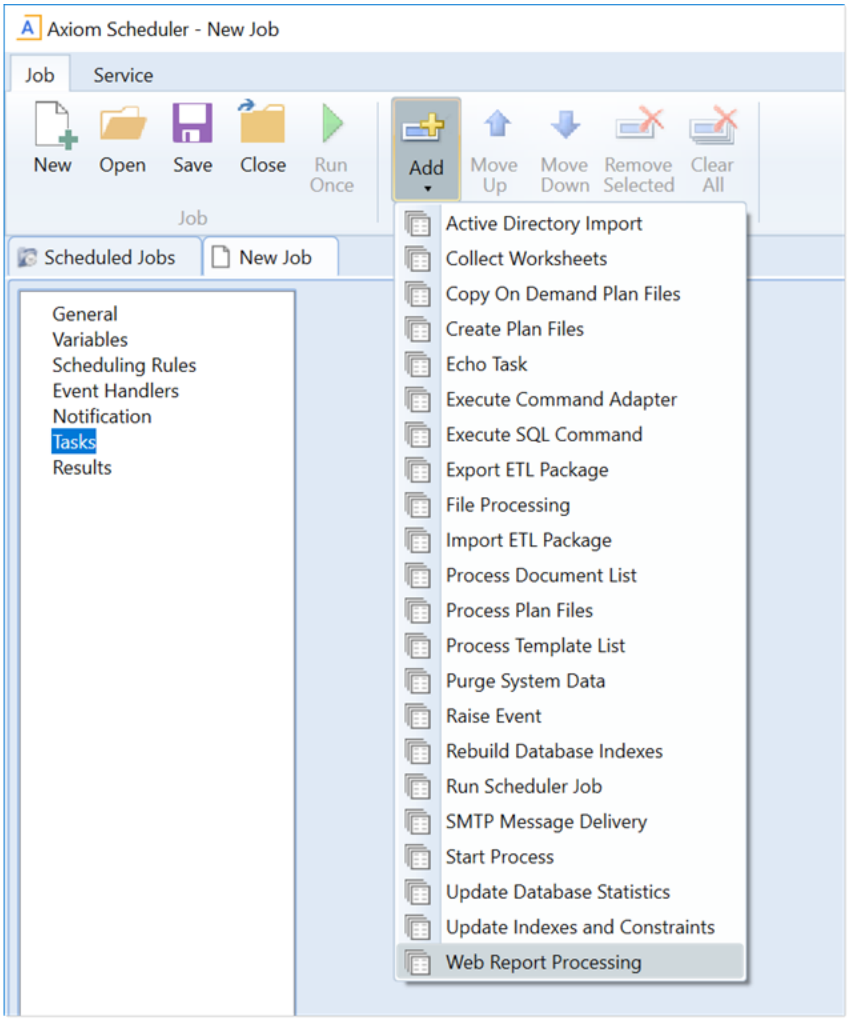
1. On the **Axiom** tab, in the **Administration** group, click **Manage** > **Scheduler**.

   NOTE: In systems with installed products, this feature may be located on the **Admin** tab. In the **System Management** group, click **Scheduler**.

2. In the **Scheduler** dialog, on the **Job** tab, click **New**.

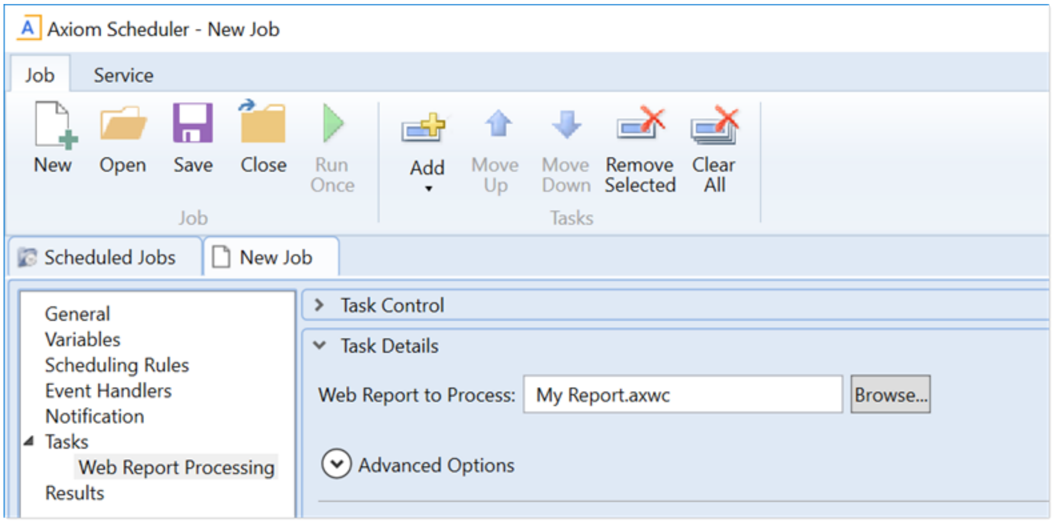
3. Select the **Tasks** section of the job, then on the **Job** tab, click **Add** > **Web Report Processing**.



4. Select the **Web Report to Process**. This is the report that will be processed by the task.
   - Click the **Browse** button to open the Axiom Explorer dialog.
   - Navigate to the web report that you want to process, then select the report and then click **Open**.

   The selected report is listed in the Web Report to Process box.

> **IMPORTANT:** Remember, only web reports that are created from a product-delivered template can be processed. The Axiom Explorer dialog is filtered to only show reports that were created from template.



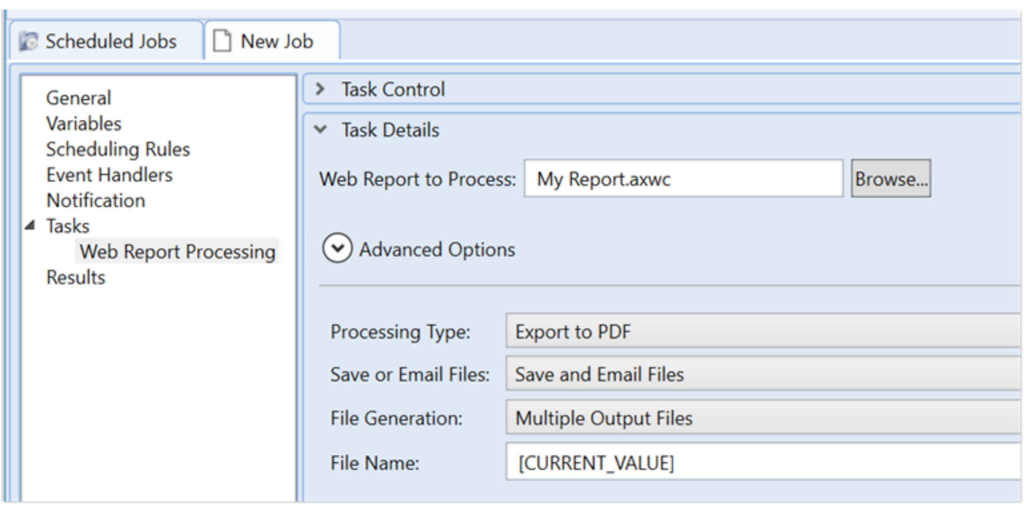
Example task with report selected for processing

5. Complete the general processing properties that determine the processing type and the output:

Item	Description
Processing Type	Select one of the following to determine the output format of each pass: • **Export to Excel** (default): The contents of the report are exported to a spreadsheet (XLSX) file. The output uses the same behavior as when you export to spreadsheet while viewing the web report. • **Export to PDF**: The report is saved as a PDF file. The output uses the same behavior as when you save to PDF while viewing the web report.
Save or Email Files	Select one of the following to determine the delivery method for the output: • **Save Files** (default): The output files are saved to the specified output folder. • **Email Files**: The output files are emailed to the specified recipients. The output files are not saved anywhere on the file system. • **Save and Email Files**: The output files are both saved and emailed.

Item	Description
File Generation	Select one of the following to determine whether the output is saved as a single file or multiple files: • **Multiple Output files** (default): The results of each pass are saved as individual output files. For example, if the multipass settings result in 10 passes, then 10 output files are created (one file for each pass). • **Single Output File**: The results of each pass are collected into a single output file. For example, if the multipass settings result in 10 passes, then the results of all 10 passes are placed in a single output file. If the output type is Excel, then each pass is a separate sheet in the Excel file. If the output type is PDF, then the PDF for each pass is combined into one large PDF file.
File Name	Specify how the output file (or files) should be named. You can do the following: • You can use processing variables and/or Scheduler job variables to generate dynamic file names. • You can type a "hard-coded" file name. If the task will generate multiple output files, then the file name (or the output folder path) must use a processing variable so that the output of each pass is unique. If the task will generate a single output file, then variables are not required. To use a processing variable, you can type the variable or you can click the pencil icon to open a text editor. From the **Insert Variable** list, select the variable that you want to use. For example, you could set the file name to `Income Statement [Current_Value]`. If the report is being processed by region to multiple output files, this will generate file names such as `Income Statement West`, `Income Statement East`, and so on (where "East" and "West" are region names). **NOTE:** Processing variables and Scheduler variables use different syntax. Processing variables are enclosed in square brackets. Scheduler job variables are enclosed in curly brackets.

Item	Description
Sheet Name	Specify how the sheet for each pass should be named. This property only applies when the processing type is **Export to Excel**. You can do the following: • You can use processing variables and/or Scheduler job variables to generate dynamic sheet names. • You can type a "hard-coded" sheet name. If the task will collect all of the output into a single spreadsheet file, then the sheet name must use a processing variable so that the output of each pass is unique. If the task will generate multiple output files, then variables are not required. To use a processing variable, you can type the variable or you can click the pencil icon to open a text editor. From the **Insert Variable** list, select the variable that you want to use. For example, you could set the sheet name to `[Current_Value]`. If the report is being processed by region, this will generate sheet names such as `West`, `East`, and so on (where "East" and "West" are region names). **NOTE:** Processing variables and Scheduler variables use different syntax. Processing variables are enclosed in square brackets. Scheduler job variables are enclosed in curly brackets.



Example task with general processing properties configured

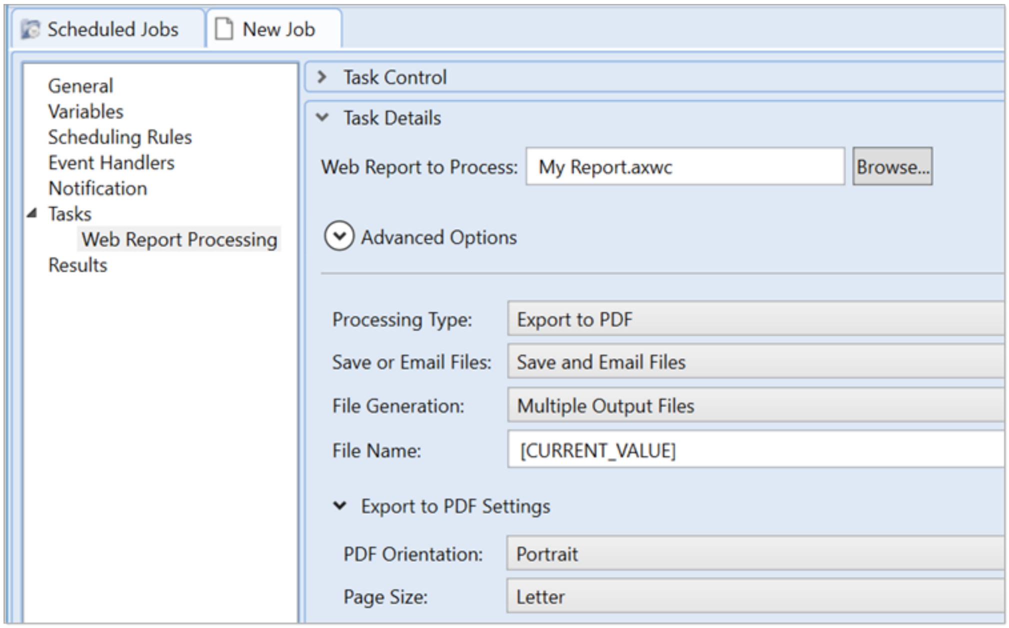
6. Depending on the selected processing type (PDF or Excel), complete the properties specific to that processing type:

Export to PDF Settings

Item	Description
PDF Orientation	Select the orientation for the PDF, either **Portrait** or **Landscape**. Portrait is the default orientation.
Page Size	Select the page size for the PDF. You can choose from the following standard page sizes: **A3**, **A4**, **A5**, **Legal**, **Letter**, or **Tabloid**. Letter is the default size.

Export to Excel Settings

Item	Description
Include Column Headers	Specifies whether column headers are included in the file output. By default this is set to **On**, which means column header text is included in the first row of the spreadsheet. Column grouping headers and multi-row headers are not included. If this option is set to **Off**, then column headers are omitted from the file output and the data starts in the first row of the spreadsheet.
Include total row	Specifies whether the total row is included in the file output. By default this is set to **On**, which means that the total row is included in the spreadsheet. If this option is set to **Off**, then the total row is omitted from the file output. **NOTE:** This option only applies when the web report being processed is a dynamic row report with the total row enabled. If the web report being processed uses a fixed row structure, then the total and subtotal rows defined in the fixed row structure are always included in the spreadsheet.



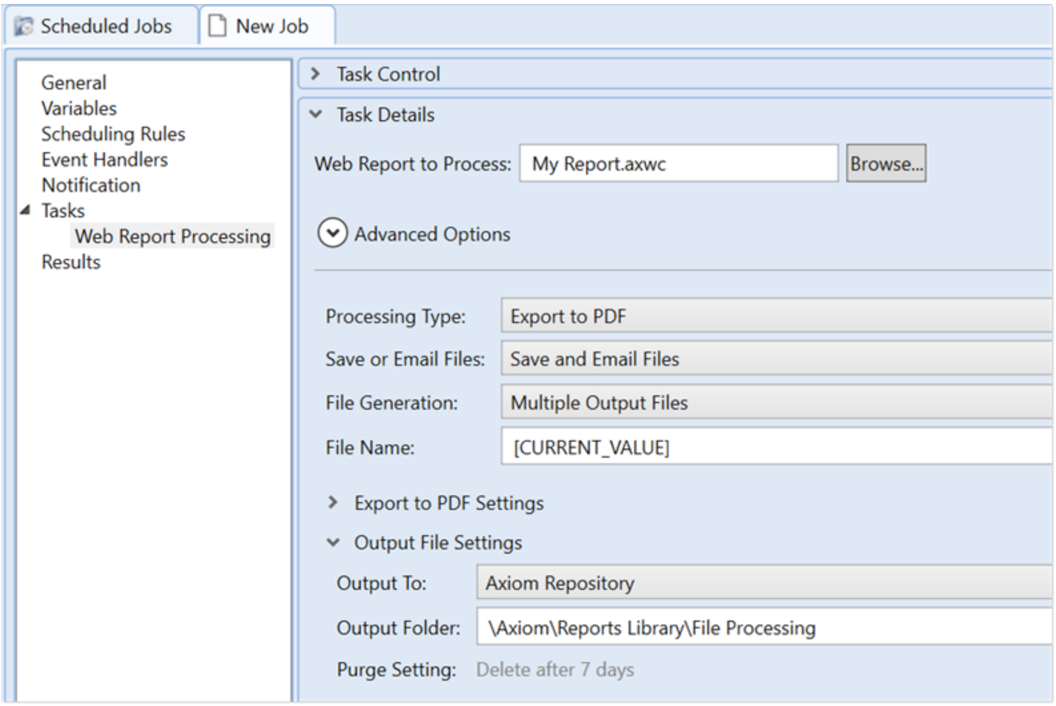
Example task with PDF-specific settings

7. If the processing is set to **Save Files** or **Save and Email Files**, complete the **Output File Settings**:

Item	Description
Output To	Select one of the following: • **Local File System** (default): The output location is outside of Axiom Enterprise Decision Support, to a location on your local network share. The specific path is detailed in the **Output Folder** setting. Access to output files is not controlled by Axiom Enterprise Decision Support. • **Axiom Repository**: The output location is the Axiom Enterprise Decision Support file system, within the Reports Library. The specific path is detailed in the **Output Folder** setting. Access to output files is controlled by security access to the designated folder within Axiom Enterprise Decision Support.

Item	Description
Output Folder	Specify the folder location for the file output. You can type a folder path, or you can click the folder icon to browse to the folder location. The browse dialog will display either your local file system or the Axiom file system, depending on what you selected for **Output To**. The output folder can be made dynamic as follows: • If **File Generation** is set to **Multiple Output Files**, then processing variables can be used in the output folder path. For example, you can include `[Current_Value]` in the output folder path, and this will be replaced with the current multipass value. Processing variables are not valid in the output folder path if the task is configured to generate a single output file. • Scheduler job variables can be used in the output folder path. **NOTE:** Processing variables and Scheduler variables use different syntax. Processing variables are enclosed in square brackets. Scheduler job variables are enclosed in curly brackets. **Local file system** The output folder location must be entered as a UNC path, and must be accessible by the Scheduler service user account (for on-premise systems) or the Axiom Cloud Integration Service (for cloud systems). The ability to save files to the specified location and access them after saving is controlled by local network security. **Axiom repository** The specified location in the Axiom file system must be within the Reports Library, and the location must use the full path (meaning: `\Axiom\Reports Library\...`). The ability to save files to the specified location and to create new folders (if necessary) depends on the Axiom Enterprise Decision Support security permissions for the user processing the file. Users can only create new folders if they have read/write permissions to the parent folder, and they can only create new files if they have read/write permissions to the target folder. Once the files are created within the Axiom file system, access to those files is dependent on the user's permissions to the output folder. Typically you should create the output folder in advance (or if you want to create output folders on-the-fly, create a parent folder to hold the output folders), and then set permissions for that folder as appropriate in Axiom Enterprise Decision Support security, so that the appropriate users will be able to access the files after they are created.

Item	Description
Remote Data Connection	This option only applies when the file output is being saved to your local file system, and only for Axiom Cloud systems that are using remote data connections. Select the name of the remote data connection to use for the file processing operation. The designated remote data connection will be used to access the local file system and save output file(s) to the designated location. A remote data connection is required to save files locally from an Axiom Cloud system. For more information, see the section on remote data connections in the *Scheduler Guide*.
Purge Setting	This option only applies when the file output is being saved to the Axiom Repository. If you want the file output to be automatically deleted after a specified period of time, then click the pencil icon to open the **Choose Date** dialog. • **No purge date** (default): File output is not automatically deleted. • **Static purge date**: Select a specific date, after which the output will be deleted. • **Relative purge date**: Specify a number of days to keep the output after it has been generated. The output will be deleted after the specified number of days have passed.



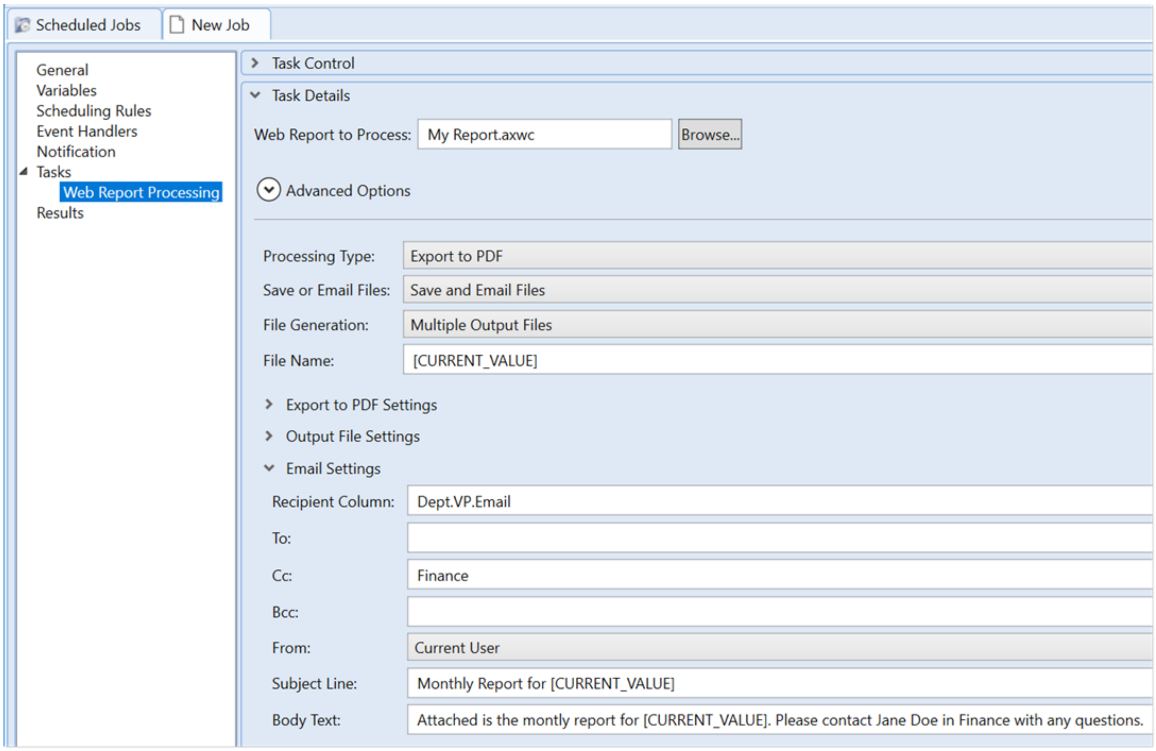
Example task saving output to the Axiom Repository

8. If the processing is set to **Email Files** or **Save and Email Files**, complete the **Email Settings**:

Item	Description
Recipient column	Optional. Specify a table column that holds the desired email recipients for each pass. This option only applies if **File Generation** is set to **Multiple Output Files**, so that each pass will be sent a separate email. You can type the name of a table column, or click the column button to select a column from the multipass table or a lookup table. (You must select a multipass column first before you can use the column button to select a column.) For example, if the multipass column is Dept.VP, the recipient column might be Dept.VP.Email. The specified column can contain any of the following: email addresses, user login names, and/or role names. The column can contain multiple values separated by a semicolon. The recipients listed in the column will be used as the To address for the email (in addition to any recipients listed directly in the To field). If the column contains a user login name, that user's email address as defined in security will be used. If the column contains a role name, the email will be sent to all users in the role. To verify that the recipient column will resolve as you expect for each pass, you can click the **Preview Multipass List** button in the **Multipass Data Settings** section. The specified recipient column displays in this preview so that you can see the recipient column values associated with the multipass column values. **NOTE:** The recipient column must have a one-to-one relationship with the values in the specified multipass column.
To	Specify the To recipient(s) for the email. This is required if a recipient column is not specified. If a recipient column is specified, the recipients listed here will be added to the recipients listed in the column for each pass. You can type one or more email addresses, user login names, and/or role names. Separate multiple recipients with semicolons. If a user login name is listed, that user's email address as defined in security will be used. If a role name is listed, the email will be sent to all users in the role. **NOTE:** If **File Generation** is set to **Multiple Output Files**, the recipients in the To field will receive a separate email for each pass. The only way to dynamically send the emails to different recipients per pass is to use the **Recipient Column** option.
CC	Optional. Specify the CC recipient(s) for the email. This field follows the same rules as the To field.

Item	Description
BCC	Optional. Specify the BCC recipient(s) for the email. This field follows the same rules as the To field.
From	Select one of the following to specify the From address for the email: • **Current User**: The email will be sent from the user who executes the Scheduler job. • **System User**: The email will be sent from the designated From user for Scheduler. This is the same value returned by the `{Scheduler.FromEmailAddress}` job variable.
Subject Line	Enter the subject line for the email. Processing variables can be used in the subject line when **File Generation** is set to **Multiple Output Files**. To use a processing variable, you can type the variable or you can click the pencil icon to open a text editor. From the **Insert Variable** list, select the variable that you want to use. For example, you could set the subject line to `Monthly report for [Current_Value]` in order to include the current pass value in the subject line.
Body Text	Enter the body text for the email. Processing variables can be used in the body text when **File Generation** is set to **Multiple Output Files**. To use a processing variable, you can type the variable or you can click the pencil icon to open a text editor. From the **Insert Variable** list, select the variable that you want to use.

Scheduler job variables can be used in any of the email settings except the From setting.



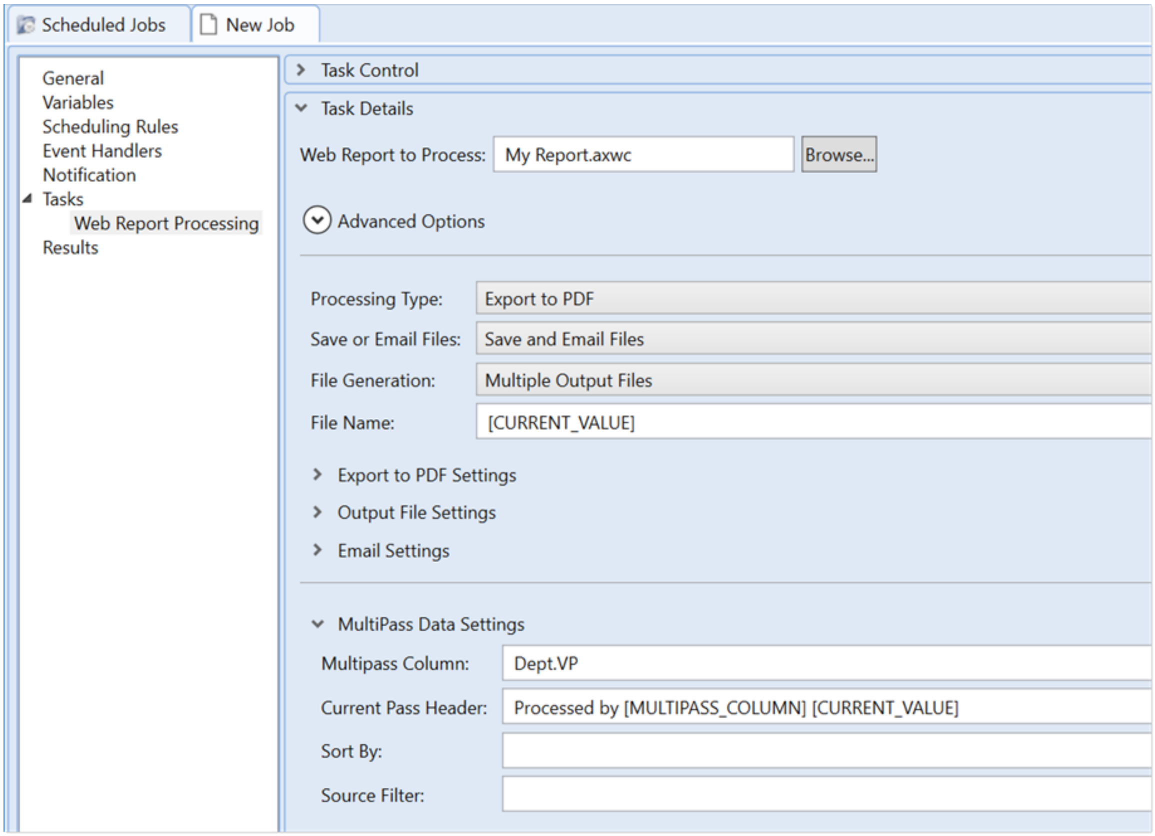
Example task looking up email addresses from a recipient column

9. Complete the multipass settings for processing:

Item	Description
Multipass Column	Specify the column to use for multipass processing. You can type a Table.Column name, or click the column icon to select the column from a dialog. You can select any column on a data or reference table, though typically processing is performed by a dimension such as Dept.Dept, or a grouping such as Dept.Region. The report will be processed once for each unique value in the specified column (except for any values excluded by the Source Filter). A filter is applied to the data query in the report so that the data is limited to the current pass value. For example, if you are processing by Dept.Dept, then the report will be processed once for each department, and the report data will be limited to only the data for that department. Keep in mind the difference between processing by a data table column such as GL2021.Dept, versus a dimension table column such as Dept.Dept. When processing by GL2021.Dept, the report will be processed by each department with data in the GL2021 table. When processing by Dept.Dept, the report will be processed by each department in the Dept table. To verify the list of values for processing, click the **Preview Multipass List** button to view the list of items. The first 100 values are shown, in the order they will be processed. If the task configuration includes a **Recipient Column** (in the email settings) or a **Sort By** column, these columns are also shown in the preview.

Item	Description
Current Pass Header	Optional. Define a header to display in the report output file. This option only applies if the processing type is **Export to PDF**. The current pass header should use processing variables to display information about the current pass. To use a processing variable, you can type the variable or you can click the pencil icon to open a text editor. From the **Insert Variable** list, select the variable that you want to use. For example, you can define a header such as: `Processed by [MULTIPASS_COLUMN] [CURRENT_VALUE]` When processing by Dept.Dept, this would resolve such as **Processed by Dept 22000** By default, if the current pass header is left blank, then the PDF output will not include a header to indicate the current pass information. However, it is possible that the template used to create the report may have been designed with a dynamic header that will display this information.
Sort By	Optional. Specify one or more sort columns for the list of multipass values. You can type a Table.Column name, or click the column icon to select the column from a dialog. You can also optionally specify `Asc` or `Desc` after the column name (ascending order is used if not specified). For example: `Dept.Dept Desc`. Separate multiple values with semicolons. By default, the values are sorted by the multipass column in ascending order. The Sort By field only needs to be used if you want the values to be sorted in descending order instead, or if you want the values sorted by a different column in the same table. The processing order is only relevant when **File Generation** is set to **Single Output File**, since it determines the order of each individual pass within the single file. When outputting to **Multiple Output Files**, the order is still used during processing but it has no useful impact on the outcome.
Source Filter	Optional. Specify a filter to limit the multipass list of items. You can type a filter, or you can click the filter icon to use the Filter Wizard. When the multipass list of values is generated, any value that does not meet the source filter will be excluded from processing. By default, all values in the specified multipass column are processed if the source filter is left blank.

Scheduler job variables can be used in any of the multipass settings.



10. Complete the remaining task and job settings as desired. For more information, see the Scheduler documentation. Note the following:
    - Generally speaking, the **Advanced Options** displayed at the top of the Web Report Processing task should only be modified as advised by Axiom Support.
    - If you want to schedule the job for execution at a later date and/or time, including setting up recurring execution, use the **Scheduling Rules** section of the job.
    - If you want to use Scheduler job variables in any task settings, these variables should be defined in the **Variables** section of the job.
    - It is recommended to review the **Notification** settings for the job and adjust them as needed. By default, Scheduler jobs are configured to send an email to the user who executed the job when the job completes, regardless of the job status.
11. On the **Job** tab, click **Save** to save the job.
12. In the Axiom Explorer dialog, select a folder location in the Scheduler Jobs Library and define a name for the job, then click **Save**.

If the job settings included an active scheduling rule, this rule is evaluated when the job is saved and the next scheduled execution is added to the Scheduler job queue.

Executing web report processing

Once you have set up a Scheduler job with a Web Report Processing task, you can execute the web report processing by executing the Scheduler job. Scheduler jobs can be executed on demand by using the **Run Once** feature within Scheduler, or you can schedule the job for future execution by defining and saving a scheduling rule in the job. Scheduler jobs can also be executed on demand using RunEvent, such as to kick off the Scheduler job from a custom task pane, Axiom form, or spreadsheet Axiom report.

When web report processing is executed, the following occurs:

- The list of multipass values to process is obtained using the Multipass Column limited by the Source Filter, sorted in the default or specified sort order.
- The specified report is processed once for each value in the multipass list.
    - The report data query is filtered by the current pass value and the report data is refreshed.
    - A PDF or Excel copy of the report is generated, depending on the specified Processing Type.
- If the File Generation is Multiple Output Files, then the output file for each pass is saved and/or emailed according to the task configuration.
- If the File Generation is Single Output File, then the result of each pass is saved in temporary storage and then merged into a single file once all passes are complete. This single file is then saved and/or emailed according to the task configuration.

Each pass of multipass processing can succeed or fail independently without affecting the other passes. For example, imagine the multipass list has 10 items. Pass 1 fails because the specified recipient column does not contain a valid email address, user name, or role for the pass 1 value. This pass-level failure does not stop passes 2-10 from being processed. The job status will report partial success in this case.

A Scheduler job can contain multiple Web Report Processing tasks, followed by a File Processing task to collect the various output files into "report books", and then save and/or deliver the collected books. For more information, see Setting up file collect with web report processing.

Using processing variables

The following processing variables can be used in various settings within the Web Report Processing task, in order to dynamically change the setting using information for the current pass.

Item	Description
[CURRENT_VALUE]	This variable returns the current multipass processing value. For example, if you are processing by Dept.Dept, and the current pass is for department 20000, the variable will be replaced by the value "20000" for this pass. This variable is typically used in settings such the file name, sheet name (when generating Excel output), and folder path.
[CURRENT_PASSNUMBER]	This variable returns the current pass number. For example, if the current pass is number 20 of 35 passes, the variable will be replaced by the value "20" for this pass.
[MULTIPASS_COLUMN]	This variable returns the name of the multipass column. For example, if you are processing by Dept.Dept, the variable will be replaced by the value "Dept" for all passes. This variable could be used whenever you want to reference the name of the dimension processed. For example, instead of just referencing the current value in the file name, you might want to reference the column name and the value. A variable construction like `[MULTIPASS_COLUMN] [CURRENT_VALUE]` would resolve to "Dept 20000" when processing by Dept.Dept and the current pass is for department 20000.

Processing variables can only be used in certain settings, and sometimes only when the output is multiple files (versus a single file). See the documentation for each individual setting to see if processing variables are supported in that setting.

> **NOTE:** Processing variables and Scheduler variables use different syntax. Processing variables are enclosed in square brackets. Scheduler job variables are enclosed in curly brackets.

▶ Using Scheduler job variables in task settings

Scheduler job variables can be used in any Web Report Processing task setting that you can directly type into, such as the file name, sheet name, folder path, and various email settings. To use a Scheduler job variable, you first define the variable on the **Variables** tab of the job, then you enter the variable in the desired setting using curly brackets. For example, if the variable name as defined on the Variables tab is `columnname`, then enter `{columnname}` in the task setting. When the job is executed, the variable in curly brackets will be replaced by the current value of the variable.

Scheduler job variables are useful when you want a task setting to change dynamically based on a variable value that gets passed to the Scheduler job. Various processes in Axiom Enterprise Decision Support can trigger a Scheduler job for execution and pass variable values to the job. Additionally, previous tasks in the job can set a variable value that is then passed to subsequent tasks in the job.

NOTE: Processing variables and Scheduler variables use different syntax. Processing variables are enclosed in square brackets. Scheduler job variables are enclosed in curly brackets.

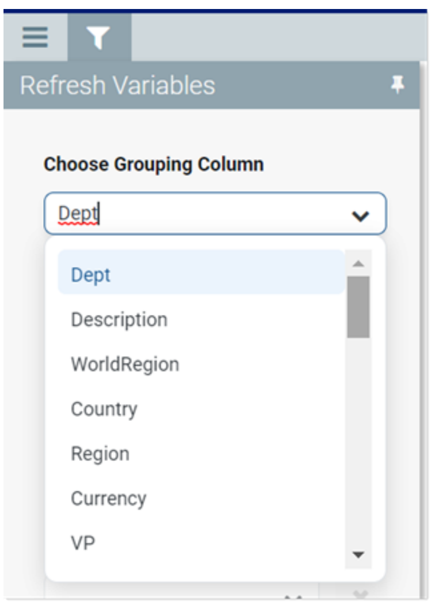
Using Scheduler job variables to pass refresh variable values

If the web report uses refresh variables, Scheduler job variables can be used to pass variables to these variables. For example, in some cases the report may require certain refresh variables to be set before data can be queried. In this case, the Scheduler job must pass values for these required refresh variables. The refresh variables will be used to refresh data for each pass, in addition to the multipass filter for the current pass.

In order to pass a Scheduler job variable value to the report as a refresh variable value, special syntax is used for the job variable:

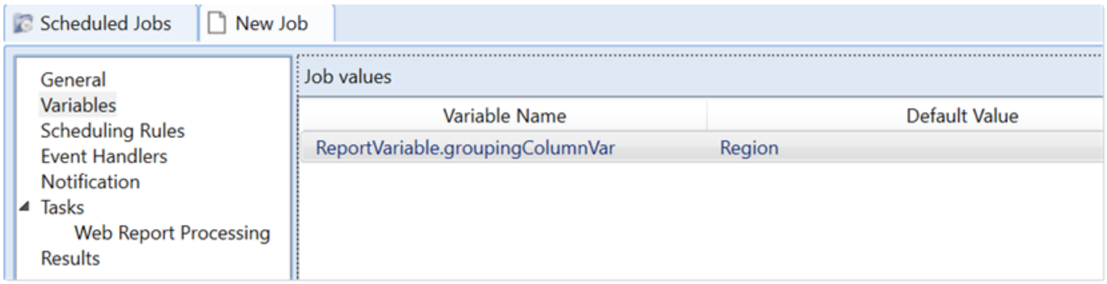
> `ReportVariable.`*`VariableID`*
>
> Where ReportVariable is a dedicated keyword that tells processing to apply the variable as a report parameter, and VariableID is the name of the specific report parameter.

For example, the report may contain a refresh variable that specifies the grouping level (row dimension) of the report. This refresh variable takes values such as Dept, WorldRegion, Country, and so on.



Example refresh variable

In this example, the ID of this refresh variable is `groupingColumnVar`. Therefore to pass a value to this refresh variable, a Scheduler job variable named `ReportVariable.groupingColumnVar` can be used. This variable must be assigned a value that exactly corresponds to a value that can be selected for the refresh variable within the Refresh Variables panel.



When this report is processed, the value for this refresh variable will be set to Region.

NOTES:

- The processing variable `[Current_Value]` can be used as the variable value, if it will resolve to a valid value for the refresh variable. In this case, the value of the variable will change dynamically for each pass.
- Because the variable IDs are not exposed on the report, this feature is primarily useful for product developers to deliver a pre-configured Scheduler job with a product.

Setting up file collect with web report processing

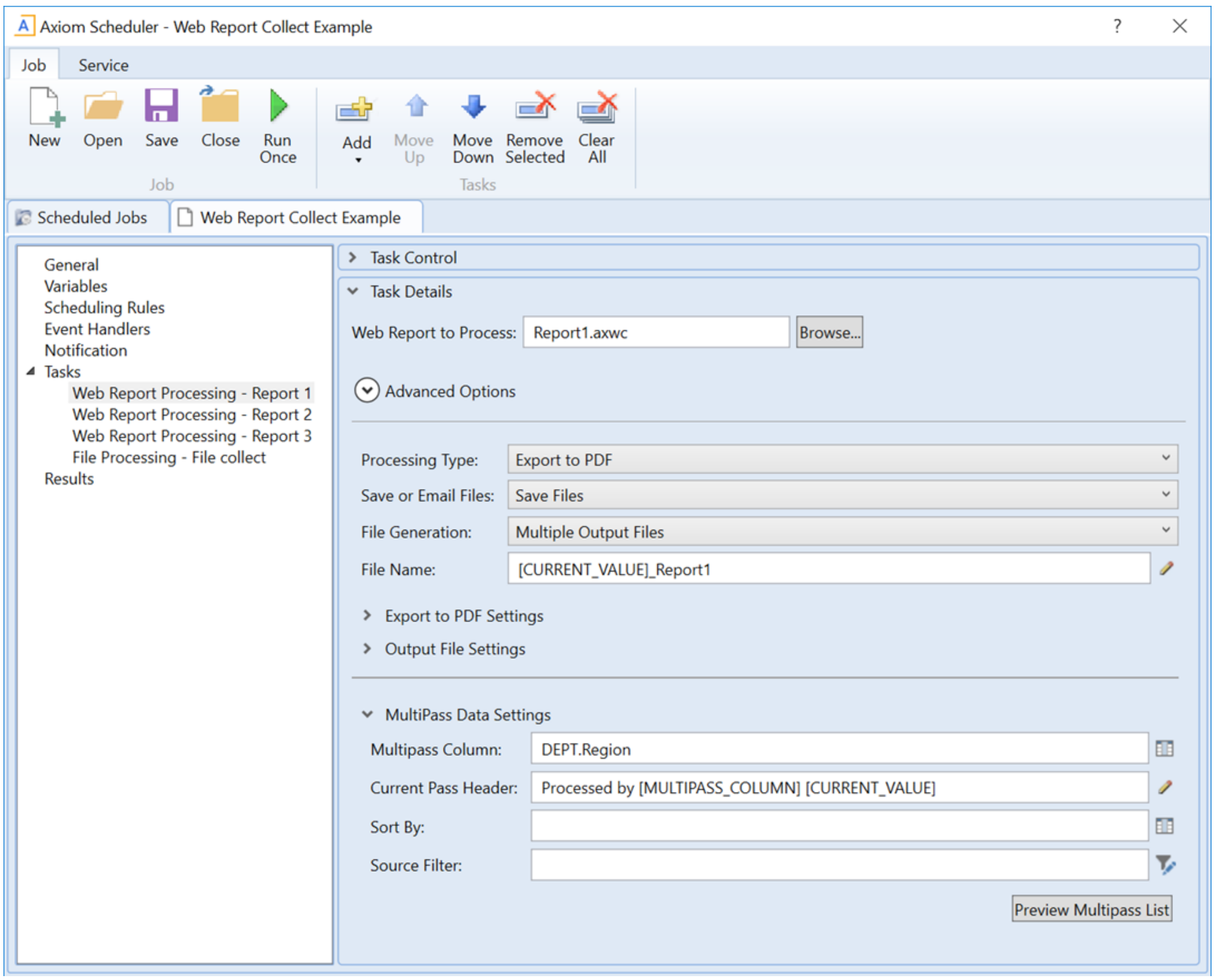
You can combine web report processing with the File Collect feature to create and deliver "report books". For example, you may have three different reports that you want to process by region, then you want to collect the output into region-specific report books to deliver to each regional manager.

This process works as follows:

- You set up multiple Web Report Processing tasks in Scheduler to process the web reports and save the output to a designated location. The output can be PDF or Excel.
- You set up File Collect in a separate spreadsheet utility to collect the output from the Web Report Processing tasks. This configuration specifies:
    - The type of files to collect, PDF or Excel.
    - The source folder(s) from which to gather the files to collect.
    - The file filter to specify the files to collect.
    - The file name of the output file, and the file type if applicable—PDF files can only be collected as PDF, but Excel files can be collected as either PDF or Excel.
    - The delivery method of the output file—save only, email only, or save and email—as well as the output folder and email settings (as applicable).
    - Optional common files to include in each output file, such as a cover page.
    - Optional multipass column to perform the file collect operation iteratively over a dimension
- You set up a File Processing task in Scheduler and configure it to run the File Collect report utility. Typically all of the tasks would be in a single Scheduler job, so that the Web Report Processing tasks are run first, then the File Processing task runs afterward to perform the final collect operation.

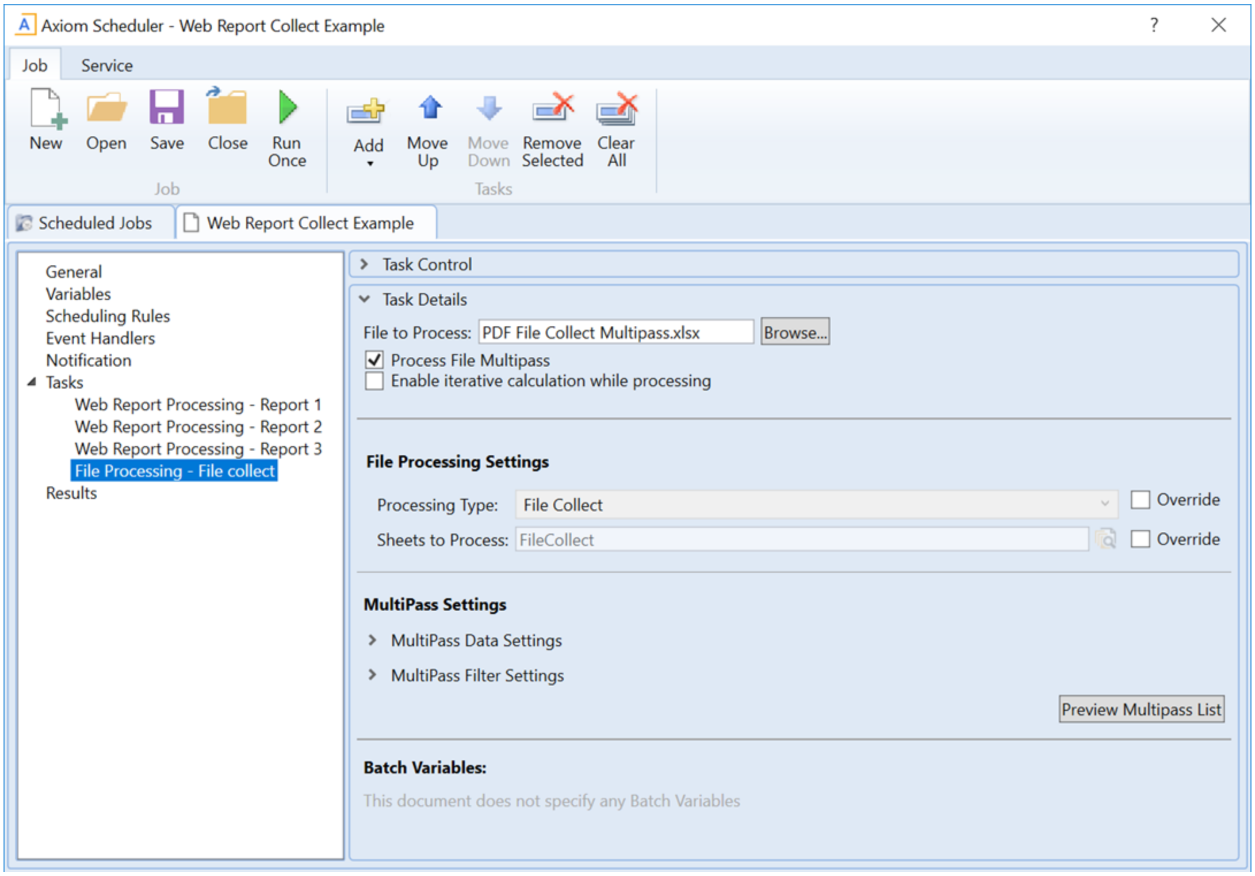
File Collect is an option of File Processing. It can be used to collect any PDF or Excel files, regardless of how they are generated. For more information on how to configure file collect, see the File Collect documentation.

The following example shows a Scheduler job with three Web Report Processing tasks and one File Processing task. The three Web Report Processing tasks are used to process three different web reports by region and then save the output files to a designated folder in the Axiom Enterprise Decision Support repository.



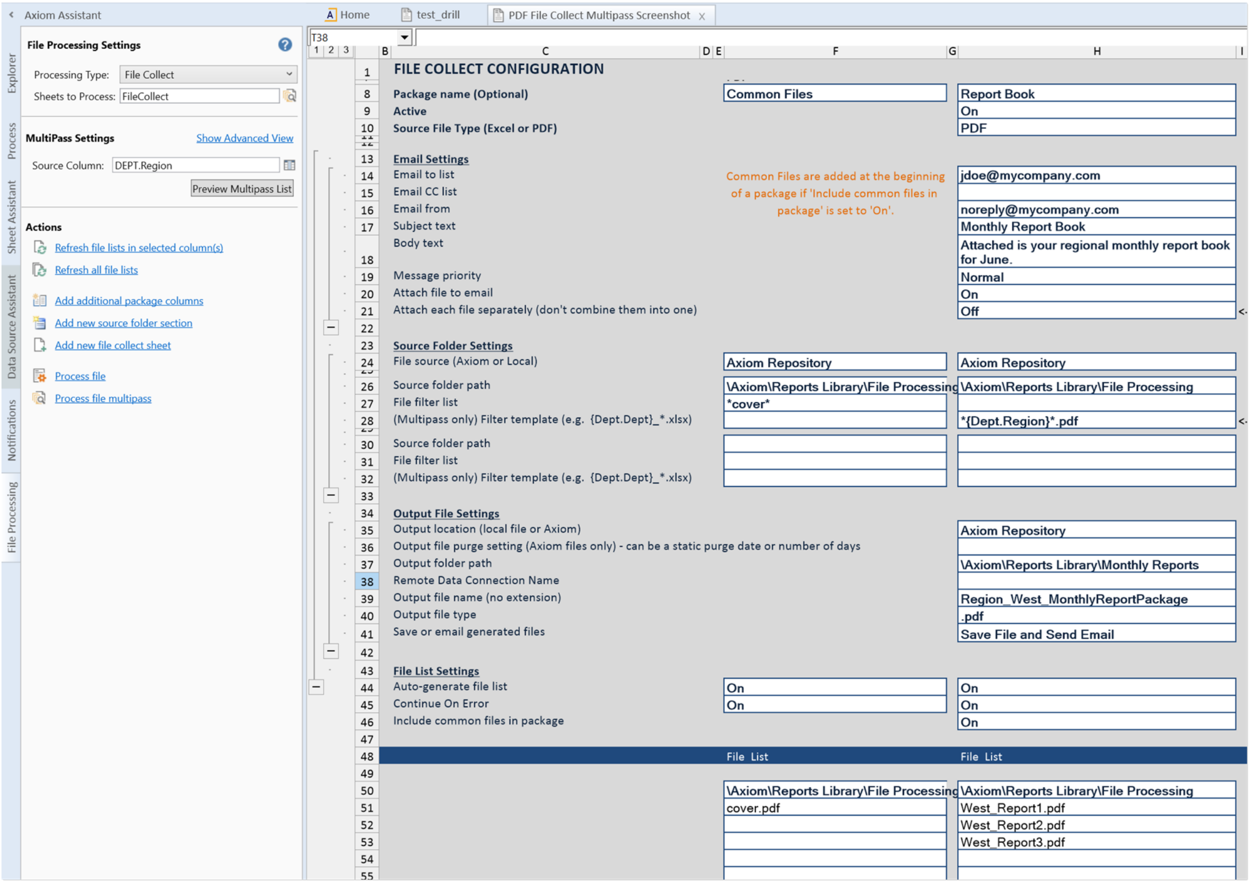
Example Scheduler job with multiple Web Report Processing tasks

The File Processing task is used to run the File Collect report utility once all of the Web Report Processing tasks are completed. Note that the File Processing task simply points to the spreadsheet report that contains the File Collect configuration; the settings are not defined within the Scheduler job.



Example Scheduler job with File Processing task to run the File Collect operation

The following screenshot shows an example of how the File Collect settings could be configured within the spreadsheet report. The File Collect operation will be performed using multipass processing by region. The file filter will collect all files in the source folder location based on the current pass region name, then save and email the output file. The email address and file name settings use a formula with a GetCurrentValue function in order to dynamically set the email address and file name for each pass.



Example File Collect configuration to collect the PDF output into a PDF report book