What's New
Axiom Software
Version 2020.2

KaufmanHall
AXIOM

Contents

Introduction

Kaufman Hall is pleased to announce the release of **Axiom Software Version 2020.2**. This release features enhancements to various areas of the software, such as:

- New **Security Manager** feature in the Web Client, to assign users to roles and subsystems using an intuitive, browser-based interface
- Ability to edit and save data from **Fixed Report components** expands the options to review and modify data using Axiom forms
- Various enhancements to **file group scenarios**, including the ability to create and process scenarios using Scheduler, and greater control to configure exactly how tables are cloned for the scenario

This *What's New* document provides information on all new features and enhancements in this release. Reviewing this document should give you a basic understanding of how these new features work, and what benefits they may provide to your organization. For full details on any new feature, please see the Axiom Software Help files or the PDF guides.

IMPORTANT: Before upgrading to version 2020.2, make sure you have reviewed the separate *Release Notes* document to understand any important technical changes and upgrade considerations in this release.

Axiom forms

This section details the new features and enhancements made to Axiom forms.

Save data from Fixed Report components

You can now edit values in a Fixed Report component and then save changed data back to the database. This feature expands the available options in Axiom forms to allow users to review, edit, and save data.

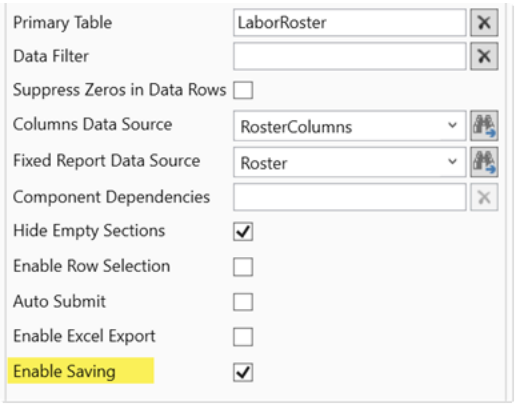
This new feature is similar to the existing feature for Data Grid components, and works as follows:

- You can configure one or more report columns as editable, so that users can edit the value in the report by typing into the cell.
- You can configure calculated columns to update live, so that if the calculation references an editable column, the value in the calculated column updates in response to the user's input.
- You can enable saving data for the report, and specify a target table and columns for the save. When a save-to-database is triggered in the form, any report rows with edited data will be saved to the database.

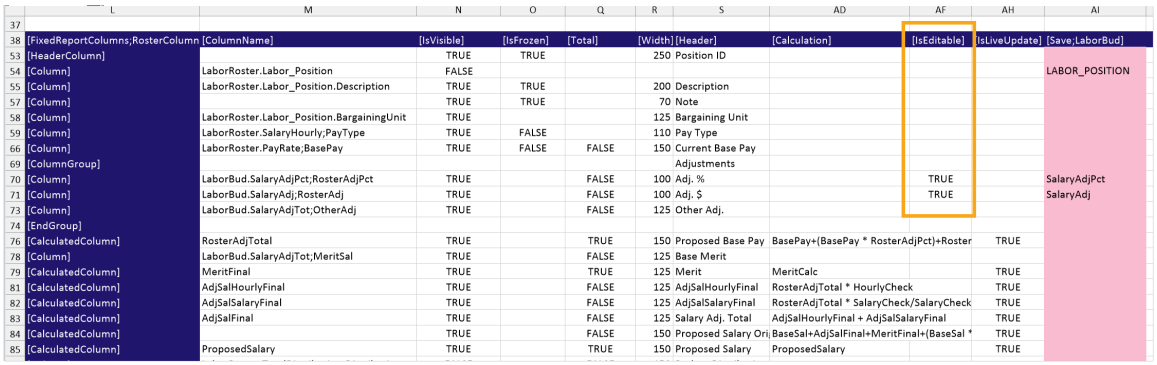
Configuring the report for editing and saving data

The component properties and the FixedReportColumns data source contain new fields to configure the ability to edit and save data in a Fixed Report component.

1. In the component properties, select **Enable Saving**.



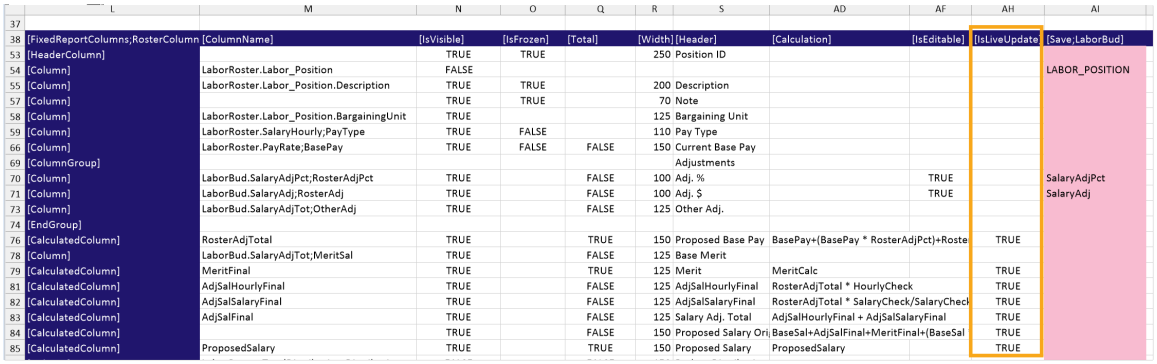
2. In the FixedReportColumns data source, for each column where you want the user to be able to edit values, enter `True` into the `[IsEditable]` column.



	L	M	N	O	Q	R	S	AD	AF	AH	AI
37											
38	[FixedReportColumns;RosterColumn	[ColumnName]	[IsVisible]	[IsFrozen]	[Total]	[Width]	[Header]	[Calculation]	[IsEditable]	[IsLiveUpdate]	[Save;LaborBud]
53	[HeaderColumn]		TRUE	TRUE		250	Position ID				
54	[Column]	LaborRoster.Labor_Position	FALSE								LABOR_POSITION
55	[Column]	LaborRoster.Labor_Position.Description	TRUE	TRUE		200	Description				
57	[Column]		TRUE	TRUE		70	Note				
58	[Column]	LaborRoster.Labor_Position.BargainingUnit	TRUE			125	Bargaining Unit				
59	[Column]	LaborRoster.SalaryHourly;PayType	TRUE	FALSE		110	Pay Type				
66	[Column]	LaborRoster.PayRate;BasePay	TRUE	FALSE	FALSE	150	Current Base Pay				
69	[ColumnGroup]						Adjustments				
70	[Column]	LaborBud.SalaryAdjPct;RosterAdjPct	TRUE		FALSE	100	Adj. %		TRUE		SalaryAdjPct
71	[Column]	LaborBud.SalaryAdj;RosterAdj	TRUE		FALSE	100	Adj. $		TRUE		SalaryAdj
73	[Column]	LaborBud.SalaryAdjTot;OtherAdj	TRUE		FALSE	125	Other Adj.				
74	[EndGroup]										
76	[CalculatedColumn]	RosterAdjTotal	TRUE		TRUE	150	Proposed Base Pay	BasePay+(BasePay * RosterAdjPct)+Roster		TRUE	
78	[Column]	LaborBud.SalaryAdjTot;MeritSal	TRUE		FALSE	125	Base Merit				
79	[CalculatedColumn]	MeritFinal	TRUE		TRUE	125	Merit	MeritCalc		TRUE	
81	[CalculatedColumn]	AdjSalHourlyFinal	TRUE		FALSE	125	AdjSalHourlyFinal	RosterAdjTotal * HourlyCheck		TRUE	
82	[CalculatedColumn]	AdjSalSalaryFinal	TRUE		FALSE	125	AdjSalSalaryFinal	RosterAdjTotal * SalaryCheck/SalaryCheck		TRUE	
83	[CalculatedColumn]	AdjSalFinal	TRUE		FALSE	125	Salary Adj. Total	AdjSalHourlyFinal + AdjSalSalaryFinal		TRUE	
84	[CalculatedColumn]		TRUE		FALSE	150	Proposed Salary Ori	BaseSal+AdjSalFinal+MeritFinal+(BaseSal *		TRUE	
85	[CalculatedColumn]	ProposedSalary	TRUE		TRUE	150	Proposed Salary	ProposedSalary		TRUE	

NOTE: If you use the right-click wizard to create a new FixedReportColumns data source, the `[IsEditable]` tag and the other new data source tags will be present by default. If you want to modify an existing FixedReportColumns data source to enable editing and saving, then you need to add the new tags manually. Remember that these tags can be in any order.

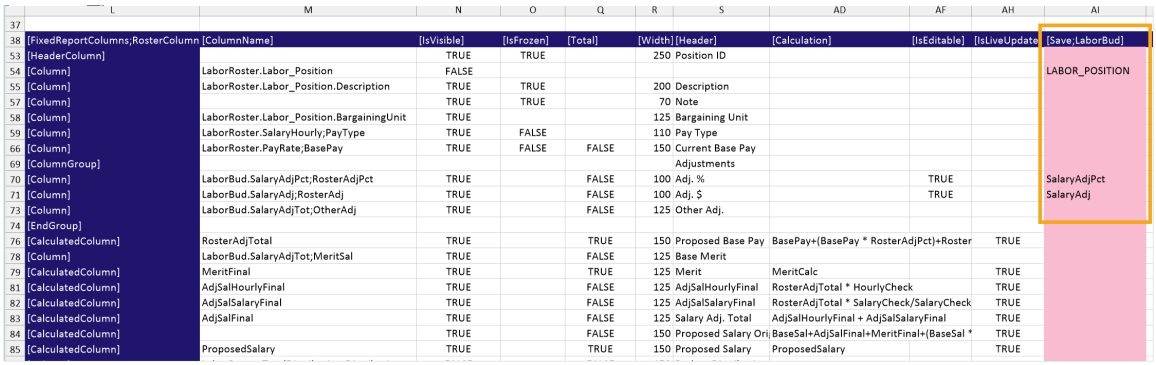
3. In the FixedReportColumns data source, for each calculated column that you want to update in response to user edits, enter `True` into the `[IsLiveUpdate]` column.



	L	M	N	O	Q	R	S	AD	AF	AH	AI
37											
38	[FixedReportColumns;RosterColumn	[ColumnName]	[IsVisible]	[IsFrozen]	[Total]	[Width]	[Header]	[Calculation]	[IsEditable]	[IsLiveUpdate]	[Save;LaborBud]
53	[HeaderColumn]		TRUE	TRUE		250	Position ID				
54	[Column]	LaborRoster.Labor_Position	FALSE								LABOR_POSITION
55	[Column]	LaborRoster.Labor_Position.Description	TRUE	TRUE		200	Description				
57	[Column]		TRUE	TRUE		70	Note				
58	[Column]	LaborRoster.Labor_Position.BargainingUnit	TRUE			125	Bargaining Unit				
59	[Column]	LaborRoster.SalaryHourly;PayType	TRUE	FALSE		110	Pay Type				
66	[Column]	LaborRoster.PayRate;BasePay	TRUE	FALSE	FALSE	150	Current Base Pay				
69	[ColumnGroup]						Adjustments				
70	[Column]	LaborBud.SalaryAdjPct;RosterAdjPct	TRUE		FALSE	100	Adj. %		TRUE		SalaryAdjPct
71	[Column]	LaborBud.SalaryAdj;RosterAdj	TRUE		FALSE	100	Adj. $		TRUE		SalaryAdj
73	[Column]	LaborBud.SalaryAdjTot;OtherAdj	TRUE		FALSE	125	Other Adj.				
74	[EndGroup]										
76	[CalculatedColumn]	RosterAdjTotal	TRUE		TRUE	150	Proposed Base Pay	BasePay+(BasePay * RosterAdjPct)+Roste		TRUE	
78	[Column]	LaborBud.SalaryAdjTot;MeritSal	TRUE		FALSE	125	Base Merit				
79	[CalculatedColumn]	MeritFinal	TRUE		TRUE	125	Merit	MeritCalc		TRUE	
81	[CalculatedColumn]	AdjSalHourlyFinal	TRUE		FALSE	125	AdjSalHourlyFinal	RosterAdjTotal * HourlyCheck		TRUE	
82	[CalculatedColumn]	AdjSalSalaryFinal	TRUE		FALSE	125	AdjSalSalaryFinal	RosterAdjTotal * SalaryCheck/SalaryCheck		TRUE	
83	[CalculatedColumn]	AdjSalFinal	TRUE		FALSE	125	Salary Adj. Total	AdjSalHourlyFinal + AdjSalSalaryFinal		TRUE	
84	[CalculatedColumn]		TRUE		FALSE	150	Proposed Salary Ori	BaseSal+AdjSalFinal+MeritFinal+(BaseSal		TRUE	
85	[CalculatedColumn]	ProposedSalary	TRUE		TRUE	150	Proposed Salary	ProposedSalary		TRUE	

4. In the FixedReportColumns data source, configure the `[Save;TABLENAME]` column as follows:
   - Replace TABLENAME with the name of the target table for the save-to-database. For example, change the column tag to `[Save;BGT2021]` if you want to save edited report data to that table.
   - For each column in the report to be saved, enter the name of the target column in the target table. All key columns must be included in the save, as well as any other columns for which you want to save changed data.

   Note that the `[HeaderColumn]` cannot be configured to save. In most cases this means you will need to add a non-visible column to the data source, in order to include the key shown in the header column in the save.



	L	M	N	O	Q	R	S	AD	AF	AH	AI
37											
38	[FixedReportColumns;RosterColumn	[ColumnName]	[IsVisible]	[IsFrozen]	[Total]	[Width]	[Header]	[Calculation]	[IsEditable]	[IsLiveUpdate	[Save;LaborBud]
53	[HeaderColumn]		TRUE	TRUE		250	Position ID				
54	[Column]	LaborRoster.Labor_Position	FALSE								LABOR_POSITION
55	[Column]	LaborRoster.Labor_Position.Description	TRUE	TRUE		200	Description				
57	[Column]		TRUE	TRUE		70	Note				
58	[Column]	LaborRoster.Labor_Position.BargainingUnit	TRUE			125	Bargaining Unit				
59	[Column]	LaborRoster.SalaryHourly;PayType	TRUE	FALSE		110	Pay Type				
66	[Column]	LaborRoster.PayRate;BasePay	TRUE	FALSE	FALSE	150	Current Base Pay				
69	[ColumnGroup]						Adjustments				
70	[Column]	LaborBud.SalaryAdjPct;RosterAdjPct	TRUE		FALSE	100	Adj. %		TRUE		SalaryAdjPct
71	[Column]	LaborBud.SalaryAdj;RosterAdj	TRUE		FALSE	100	Adj. $		TRUE		SalaryAdj
73	[Column]	LaborBud.SalaryAdjTot;OtherAdj	TRUE		FALSE	125	Other Adj.				
74	[EndGroup]										
76	[CalculatedColumn]	RosterAdjTotal	TRUE		TRUE	150	Proposed Base Pay	BasePay+(BasePay * RosterAdjPct)+Roster		TRUE	
78	[Column]	LaborBud.SalaryAdjTot;MeritSal	TRUE		FALSE	125	Base Merit				
79	[CalculatedColumn]	MeritFinal	TRUE		TRUE	125	Merit	MeritCalc		TRUE	
81	[CalculatedColumn]	AdjSalHourlyFinal	TRUE		FALSE	125	AdjSalHourlyFinal	RosterAdjTotal * HourlyCheck		TRUE	
82	[CalculatedColumn]	AdjSalSalaryFinal	TRUE		FALSE	125	AdjSalSalaryFinal	RosterAdjTotal * SalaryCheck/SalaryCheck		TRUE	
83	[CalculatedColumn]	AdjSalFinal	TRUE		FALSE	125	Salary Adj. Total	AdjSalHourlyFinal + AdjSalSalaryFinal		TRUE	
84	[CalculatedColumn]		TRUE		FALSE	150	Proposed Salary Ori	BaseSal+AdjSalFinal+MeritFinal+(BaseSal *		TRUE	
85	[CalculatedColumn]	ProposedSalary	TRUE		TRUE	150	Proposed Salary	ProposedSalary		TRUE	

To trigger the save-to-database in the form, you can use either of the following:

- An interactive component with **Save on Submit** enabled. Typically this is a Button component, however, the save can be triggered by any form component that supports the Save on Submit property.
- The save button in the gray Task Bar, if this button is enabled for the form.

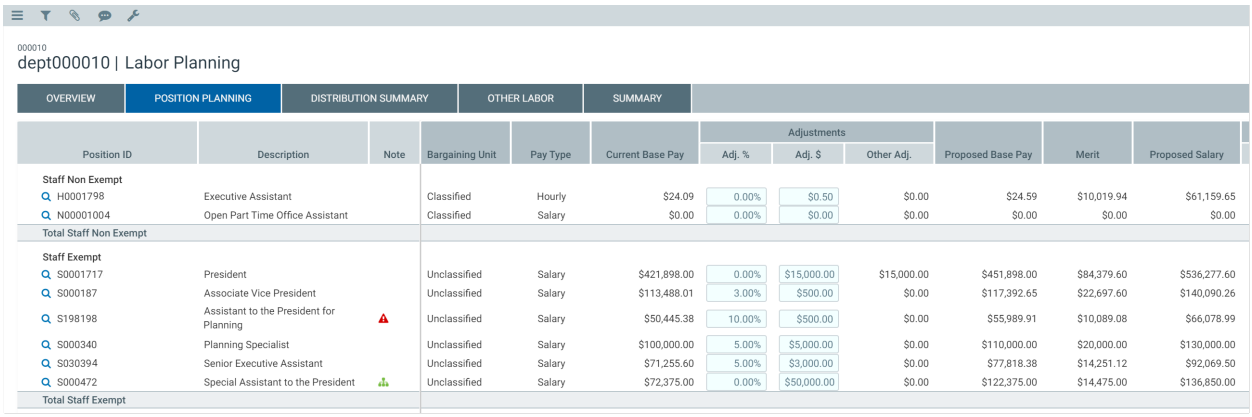
Example

In the following example, the SalaryAdjPct and SalaryAdj columns have been configured as editable. Several calculated columns reference these editable adjustment columns, so the calculations have been configured to update live in response to user edits. Lastly, the save property has been configured to save the edits back to the LaborBud table. If desired, the calculations could also be saved back to the target table.

	L	M	N	O	Q	R	S	AD	AF	AH	AI
37											
38	[FixedReportColumns;RosterColumn	[ColumnName]	[IsVisible]	[IsFrozen]	[Total]	[Width]	[Header]	[Calculation]	[IsEditable]	[IsLiveUpdate]	[Save;LaborBud]
53	[HeaderColumn]		TRUE	TRUE		250	Position ID				
54	[Column]	LaborRoster.Labor_Position	FALSE								LABOR_POSITION
55	[Column]	LaborRoster.Labor_Position.Description	TRUE	TRUE		200	Description				
57	[Column]		TRUE	TRUE		70	Note				
58	[Column]	LaborRoster.Labor_Position.BargainingUnit	TRUE			125	Bargaining Unit				
59	[Column]	LaborRoster.SalaryHourly;PayType	TRUE	FALSE		110	Pay Type				
66	[Column]	LaborRoster.PayRate;BasePay	TRUE	FALSE	FALSE	150	Current Base Pay				
69	[ColumnGroup]						Adjustments				
70	[Column]	LaborBud.SalaryAdjPct;RosterAdjPct	TRUE		FALSE	100	Adj. %		TRUE		SalaryAdjPct
71	[Column]	LaborBud.SalaryAdj;RosterAdj	TRUE		FALSE	100	Adj. $		TRUE		SalaryAdj
73	[Column]	LaborBud.SalaryAdjTot;OtherAdj	TRUE		FALSE	125	Other Adj.				
74	[EndGroup]										
76	[CalculatedColumn]	RosterAdjTotal	TRUE		TRUE	150	Proposed Base Pay	BasePay+(BasePay * RosterAdjPct)+Roster		TRUE	
78	[Column]	LaborBud.SalaryAdjTot;MeritSal	TRUE		FALSE	125	Base Merit				
79	[CalculatedColumn]	MeritFinal	TRUE		TRUE	125	Merit	MeritCalc		TRUE	
81	[CalculatedColumn]	AdjSalHourlyFinal	TRUE		FALSE	125	AdjSalHourlyFinal	RosterAdjTotal * HourlyCheck		TRUE	
82	[CalculatedColumn]	AdjSalSalaryFinal	TRUE		FALSE	125	AdjSalSalaryFinal	RosterAdjTotal * SalaryCheck/SalaryCheck		TRUE	
83	[CalculatedColumn]	AdjSalFinal	TRUE		FALSE	125	Salary Adj. Total	AdjSalHourlyFinal + AdjSalSalaryFinal		TRUE	
84	[CalculatedColumn]		TRUE		FALSE	150	Proposed Salary Ori	BaseSal+AdjSalFinal+MeritFinal+(BaseSal *		TRUE	
85	[CalculatedColumn]	ProposedSalary	TRUE		TRUE	150	Proposed Salary	ProposedSalary		TRUE	

Example FixedReportColumns data source configured to allow edits and save data

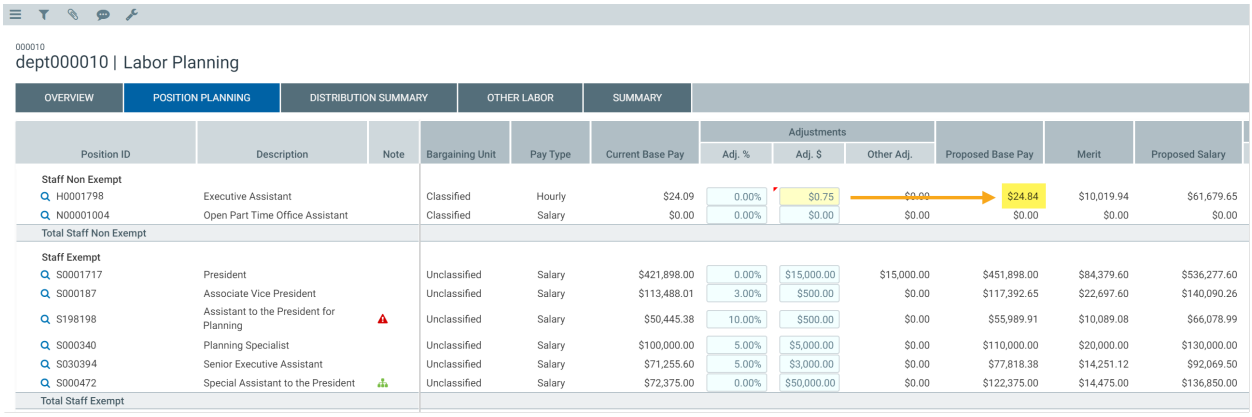
When the form is rendered, the editable column values display in editable cells:



Position ID	Description	Note	Bargaining Unit	Pay Type	Current Base Pay	Adjustments			Proposed Base Pay	Merit	Proposed Salary
						Adj. %	Adj. $	Other Adj.			
Staff Non Exempt											
H0001798	Executive Assistant		Classified	Hourly	$24.09	0.00%	$0.50	$0.00	$24.59	$10,019.94	$61,159.65
N00001004	Open Part Time Office Assistant		Classified	Salary	$0.00	0.00%	$0.00	$0.00	$0.00	$0.00	$0.00
Total Staff Non Exempt											
Staff Exempt											
S0001717	President		Unclassified	Salary	$421,898.00	0.00%	$15,000.00	$15,000.00	$451,898.00	$84,379.60	$536,277.60
S000187	Associate Vice President		Unclassified	Salary	$113,488.01	3.00%	$500.00	$0.00	$117,392.65	$22,697.60	$140,090.26
S198198	Assistant to the President for Planning	▲	Unclassified	Salary	$50,445.38	10.00%	$500.00	$0.00	$55,989.91	$10,089.08	$66,078.99
S000340	Planning Specialist		Unclassified	Salary	$100,000.00	5.00%	$5,000.00	$0.00	$110,000.00	$20,000.00	$130,000.00
S030394	Senior Executive Assistant		Unclassified	Salary	$71,255.60	5.00%	$3,000.00	$0.00	$77,818.38	$14,251.12	$92,069.50
S000472	Special Assistant to the President		Unclassified	Salary	$72,375.00	0.00%	$50,000.00	$0.00	$122,375.00	$14,475.00	$136,850.00
Total Staff Exempt											

Example Fixed Report component with editable columns

When an edit is made to a value, the background color of the cell changes to yellow, to indicate that the report contains an unsaved change. In this example, the dollar adjustment for the hourly Executive Assistant position was changed to $0.75. Because the calculated column RosterAdjTotal ("Proposed Base Pay") is configured for live updates, it has updated to show the new base pay using the edited adjustment value.



Position ID	Description	Note	Bargaining Unit	Pay Type	Current Base Pay	Adjustments			Proposed Base Pay	Merit	Proposed Salary
						Adj. %	Adj. $	Other Adj.			
Staff Non Exempt											
H0001798	Executive Assistant		Classified	Hourly	$24.09	0.00%	$0.75	~~$0.00~~	$24.84	$10,019.94	$61,679.65
N00001004	Open Part Time Office Assistant		Classified	Salary	$0.00	0.00%	$0.00	$0.00	$0.00	$0.00	$0.00
Total Staff Non Exempt											
Staff Exempt											
S0001717	President		Unclassified	Salary	$421,898.00	0.00%	$15,000.00	$15,000.00	$451,898.00	$84,379.60	$536,277.60
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S198198	Assistant to the President for Planning	▲	Unclassified	Salary	$50,445.38	10.00%	$500.00	$0.00	$55,989.91	$10,089.08	$66,078.99
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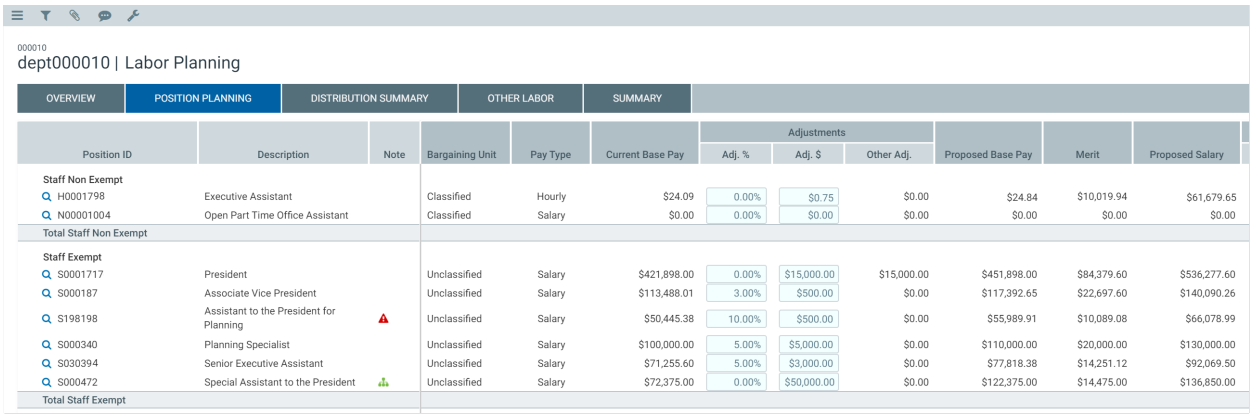
S030394	Senior Executive Assistant		Unclassified	Salary	$71,255.60	5.00%	$3,000.00	$0.00	$77,818.38	$14,251.12	$92,069.50
S000472	Special Assistant to the President		Unclassified	Salary	$72,375.00	0.00%	$50,000.00	$0.00	$122,375.00	$14,475.00	$136,850.00
Total Staff Exempt											

Example Fixed Report component after making an edit

Once the save button has been used to save changes to the database, the report updates to display the latest data from the database. The background color of the edited cell reverts back to blue, because now it is showing the queried value from the database.



Position ID	Description	Note	Bargaining Unit	Pay Type	Current Base Pay	Adjustments			Proposed Base Pay	Merit	Proposed Salary
						Adj. %	Adj. $	Other Adj.			
Staff Non Exempt											
H0001798	Executive Assistant		Classified	Hourly	$24.09	0.00%	$0.75	$0.00	$24.84	$10,019.94	$61,679.65
N00001004	Open Part Time Office Assistant		Classified	Salary	$0.00	0.00%	$0.00	$0.00	$0.00	$0.00	$0.00
Total Staff Non Exempt											
Staff Exempt											
S0001717	President		Unclassified	Salary	$421,898.00	0.00%	$15,000.00	$15,000.00	$451,898.00	$84,379.60	$536,277.60
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S000472	Special Assistant to the President		Unclassified	Salary	$72,375.00	0.00%	$50,000.00	$0.00	$122,375.00	$14,475.00	$136,850.00
Total Staff Exempt											

Example Fixed Report component after saving edits

Overview of limitations and requirements

The ability to edit and save data from a Fixed Report component is intended to meet a fairly narrow use case. You can query data from the database, edit values in designated columns, and then save the edited values and/or save calculated values which reference the edited values. Generally speaking, it is not possible to provide additional edit controls like drop-down lists of values, and it is not supported to create new records within the report.

The edit and save functionality is only supported for relatively simple report configurations. For additional information on limitations, see the following topic in Axiom Software Help: *Editing and saving data using a Fixed Report* (AX1086).

How the report save works

When the Fixed Report component is rendered in the form, any columns that are configured as editable display with their values in editable cells. For consistency, these cells use the same formatting as other editable form components, such as the Text Box component or editable cells in a Formatted Grid component. The editable cells are outlined and have a light blue background.

To edit a cell value, the user can click into the cell and then type. When the user clicks or tabs out of the cell after editing the value, the cell now displays with a light yellow background. This is intended as a signal to the user that the value has been changed, but has not yet been saved.

When the user triggers a save-to-database in the form, any edited rows in the grid are saved to the database, using the target table and columns as configured in the FixedReportColumns data source. Unlike standard form saves, the fixed report save is performed at the start of the form update cycle, before any other form processing begins. If the form contains an Axiom query that references the target table of the fixed report save, the updated data is available to the query.

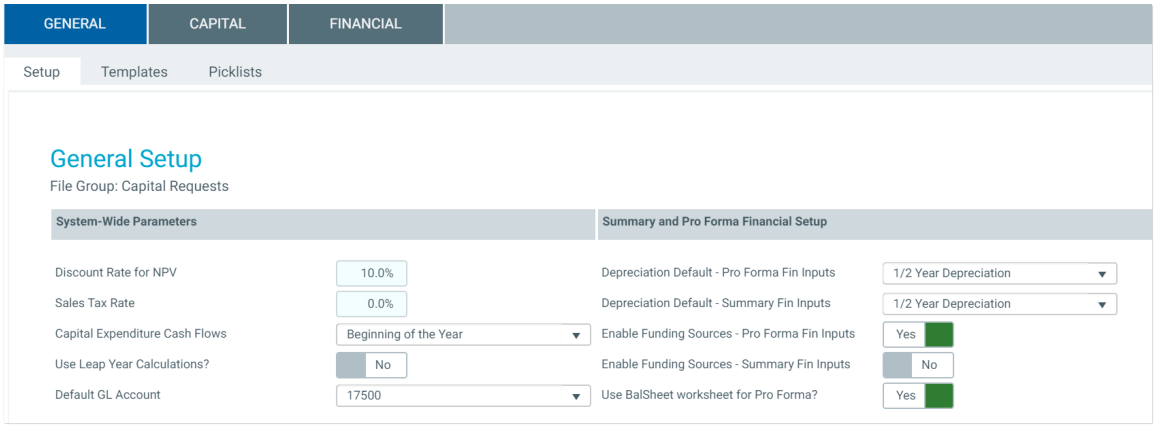
The Fixed Report component is refreshed at the end of the form update cycle, so that it displays the most current data from the database. Any cells in the report that were previously formatted as changed are now restored to their original formatting.

For additional information on design considerations, see the following topic in Axiom Software Help: *Editing and saving data using a Fixed Report* (AX1086).

Additional Axiom form enhancements

Formatting updates

- The tabular version of the Menu component was updated so that the selected tab is now blue, and the other tabs use a darker gray color. This change makes it easier to tell which tab is selected.



Example Menu component showing color changes

- The hyperlink color used in Axiom Software web pages and Axiom forms was changed to a shade of blue with higher contrast, to meet accessibility guidelines.

Use icons in a Data Grid component to open a URL stored in a table column

Data Grid components have been enhanced so that you can now store fully-qualified URLs in a table column, and then use the `{value}` variable to launch the URLs via an icon in the grid. To do this, configure the grid as follows:

- Set up a `[Column]` row in the DataGridColumns data source for the table column that holds the URLs, and configure this column as follows:
  - Enter the name of an IconConfig data source in the `[Icon]` property.
  - Set the new property `[HideValue]` to True. This will cause the column to only show the icon, and hide the URL value.
- Create an IconConfig data source, and set up an `[Icon]` row for the icon that you want to display. Configure this icon row as follows:
  - Set the `[Action]` property to `{value}`.
  - Set the new property `[ForceHyperlink]` to True. This will cause the grid to treat the column value as a hyperlink.

When the grid is rendered in the form, the column will display the icons, and users can click the icons to launch the URLs as defined in the table column.

If you create a new DataGridColumns or IconConfig data source using the right-click wizard, the wizard will automatically add the new properties. If you want to use existing data sources, then you can manually add the new tags.

File groups

This section details the new features and enhancements made to file groups.

Control how tables are cloned when creating file group scenarios

The existing file group scenario feature provides a way to automatically create a copy of a file group for purposes of performing "what-if" style analysis. When you create a file group scenario, certain associated tables are cloned so that these tables can hold the data for the scenario. You can now explicitly control which tables are cloned when creating a scenario, as well as the level of cloning (just table structure, or table structure and data). This expands the usefulness of the file group scenario feature, so that it applies to a wider variety of file group designs.

Why was this change made?

In previous releases, tables were created as follows when creating a file group scenario (based on table variables where **Allow file group to save data to this table** is enabled):

- If a table variable resolved to a reference table, the table structure and data was cloned to create the scenario table.
- If a table variable resolved to a data table, the table structure was cloned to create the scenario table. Data was not copied.

This automatic behavior covered only a certain type of file group design. Other file group designs required the data in some data tables to be copied, or required some reference tables not to be copied. Although limited customizations could be made when creating the scenario, the customization process was not intuitive and some customizations could not be made (such as copying data for a data table). This meant that some file groups could not effectively leverage the file group scenarios feature.

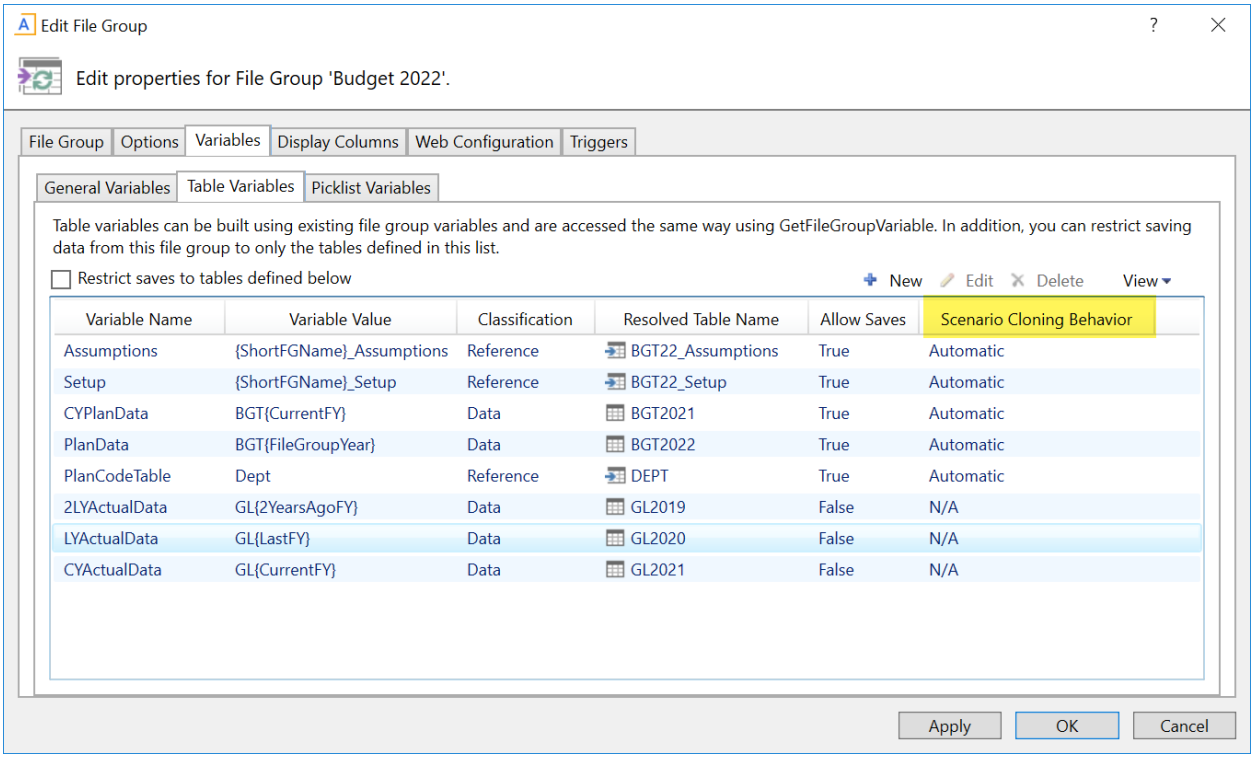
To address this issue, we have introduced the ability to configure the table cloning behavior for table variables. By default, table variables use the same table cloning behavior as in previous versions when creating a scenario—so if the old behavior worked for a particular file group, it will continue to work. However, if the default behavior is not applicable to a particular file group, you can now "override" this behavior per table variable, and specify exactly how the table variable should be handled when creating a scenario.

Configuring table variables for scenario creation

Table variables in file groups have a new option of **Scenario Cloning Behavior** to control what happens to the table when creating a file group scenario.

- By default, all table variables that are eligible to be cloned when creating a scenario display **Automatic** as the scenario cloning behavior. This means that the tables will be cloned using the default cloning behavior (as described in the previous section).
- Table variables where the scenario cloning behavior does not apply display **N/A** as the scenario cloning behavior. For example, this applies to table variables that resolve to document reference tables, or table variables where **Allow file group to save data to this table** is not enabled.

After upgrading, your existing table variables in a file group might look something like the following screenshot. If you create a file group scenario at this point, the table cloning behavior is the same as in previous versions. If this existing behavior works for your file group, then no changes are necessary and you can continue to create scenarios.



Example table variables using the default cloning behavior

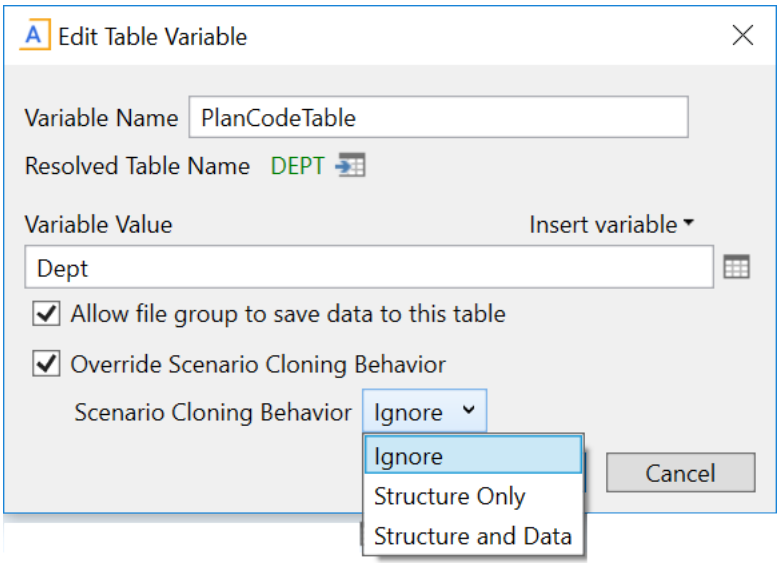
Going forward, you now have the option to override the scenario cloning behavior on a per table variable basis. For example, you may want to override the cloning behavior for the following reasons:

- If the plan code table of the file group is the target of a table variable, then that table should not be cloned for the scenario. All scenarios for a file group must use the same plan code table.

- If the file group has table variables for other dimension reference tables besides the plan code table, these tables probably should not be cloned for the scenario. For example, if a table variable references an Entity table or an Account table, there is likely no need to create a copy of this table for the scenario.
- If the plan files in the file group are rebuildable—either virtual plan files, or persistent plan files designed as rebuildable—then tables that hold planning data should copy data as well as structure. Otherwise, any planning inputs made in the original file group and saved to the planning tables will not be available to the scenario.

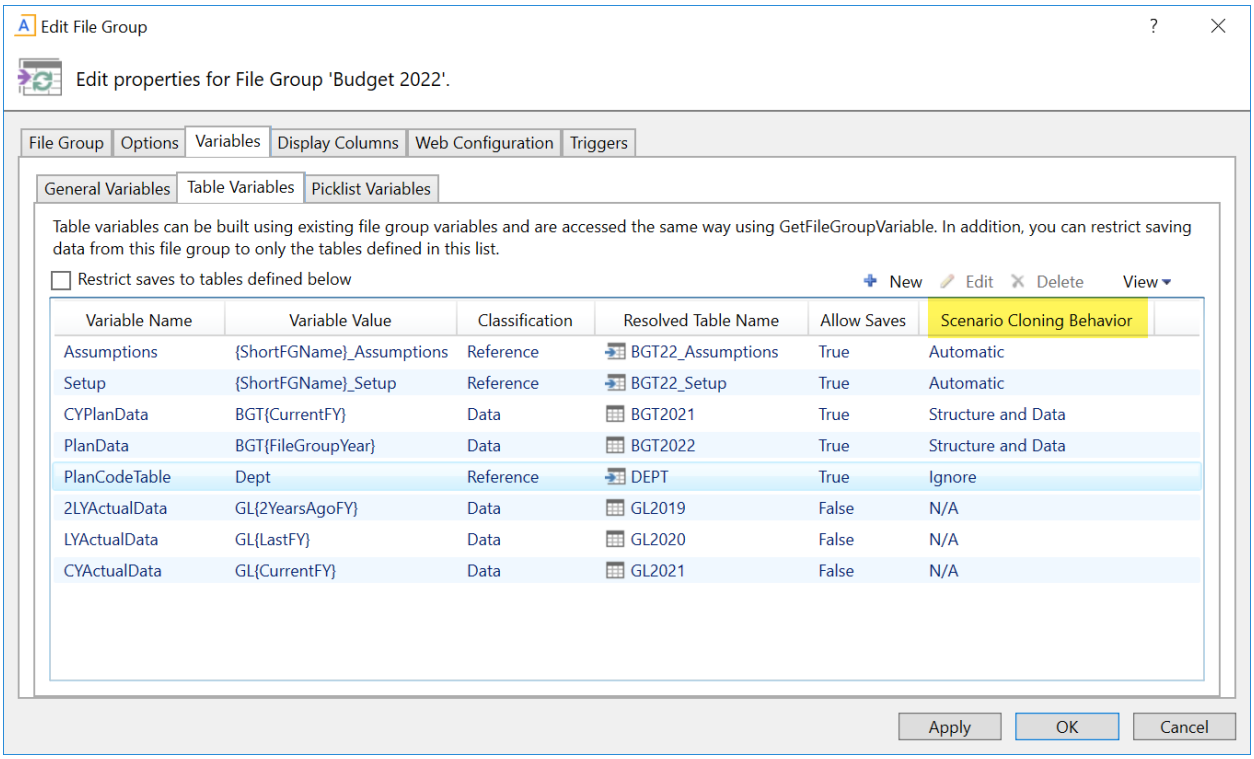
To configure a table variable to override the default scenario cloning behavior, double-click the variable to open it for editing, then enable **Override Scenario Cloning Behavior**. You can then select one of the following options for the behavior:

- **Ignore**: The table is not cloned when creating a scenario. The scenario will continue to use the same table as the original file group.
- **Structure**: The table is cloned when creating a scenario, but only the structure is copied, not the data. Essentially, the table is empty until data is saved to it from the scenario.
- **Structure and Data**: The table is fully cloned when creating a scenario—both structure and data. This means that the scenario starts with the same data as the original file group.



New option to override the scenario cloning behavior

In the following example, the table variables have been configured so that the plan code table will not be cloned, and so that the planning data tables will clone both the table structure and data.



Example table variables where the default cloning behavior has been overridden

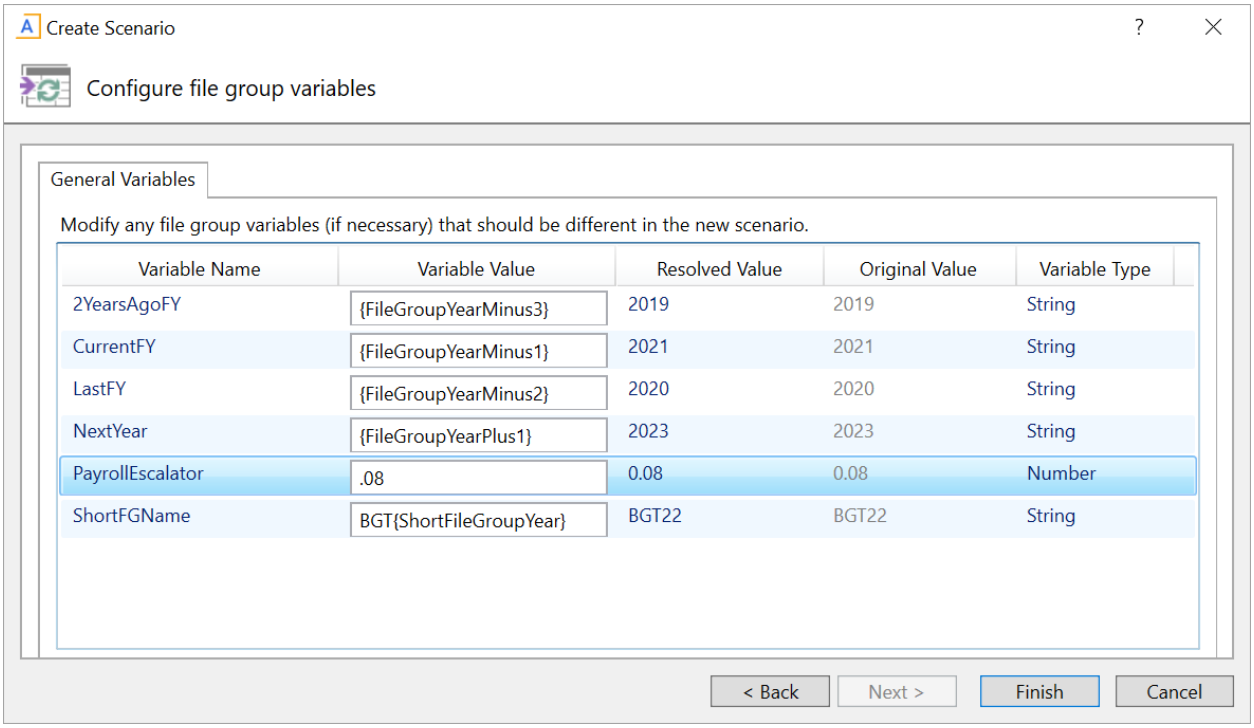
Related changes to the scenario creation process

When you create a file group scenario, the variables screen of the wizard has been updated to only display the general file group variables. The table variables and picklist variables no longer display.

- The general variables continue to be shown so that you can edit them for the scenario if needed. For example, if you are storing an escalator value as a general file group variable, then you can change the value for the scenario, just like in previous versions.
- In previous versions, the table variables were shown so that you could optionally edit a table variable name and prevent a particular table from being cloned for the scenario. However, this is no longer necessary, because if you do not want a table to be cloned, then you can override the scenario cloning behavior for the table variable and set it to **Ignore**. Therefore, these variables no longer display. Scenario tables will be created based on the scenario cloning behavior defined for the table variables.

  NOTE: The names of scenario tables are still determined by appending the scenario **Table Suffix** to the current table name. For example, if the current table name is BGT2021 and the table suffix is _V1, the scenario table is named BGT2021_V1. The table suffix is defined on the first screen of the scenario wizard just like in previous versions.

- In previous versions, picklist variables had unintended behavior when creating a scenario. Although picklist variables are considered as "read only" for save-to-database purposes (meaning it is not enabled to save data to the picklist table from the file group), the target tables of picklist variables were always cloned when creating a scenario. This inconsistent behavior has been corrected, and picklist variables are now ignored when creating a scenario. Since there is no useful action to perform on picklist variables when creating a scenario, the picklist variables also no longer display in the wizard.



Variables screen of the Create Scenario wizard, showing just the general file group variables

One additional change was made that affects table variables in a scenario file group. The table variable property **Allow file group to save data to this table** can only be edited if the table variable points to a scenario table. In other words, you cannot edit a table variable in a scenario to allow saving data if the target table was not created for the scenario.

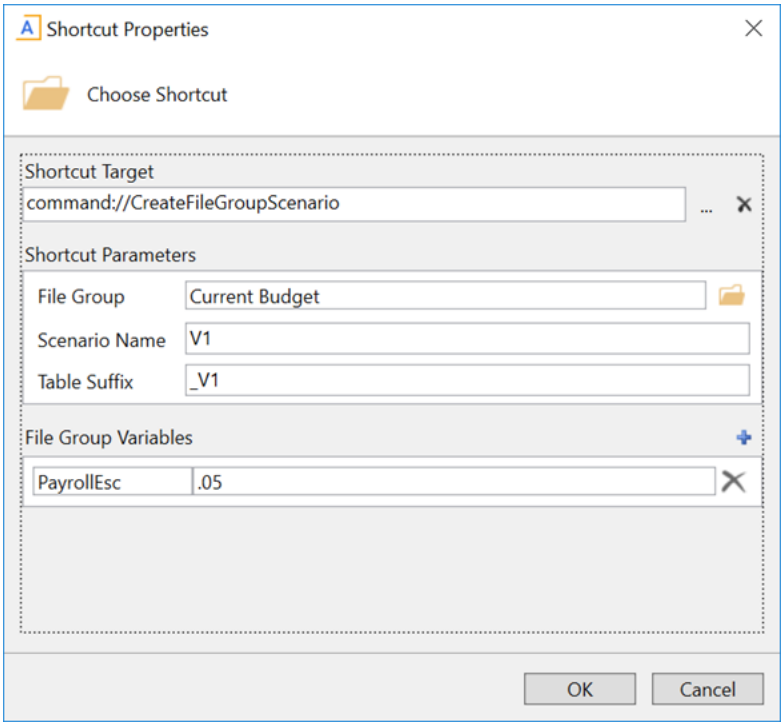
Command to create file group scenarios

Using the new Create File Group Scenario command, you can now create scenarios from custom task panes or ribbon tabs, or schedule the scenario creation for server-side processing via Scheduler. This command provides greater flexibility to control the presentation and timing of scenario creation.

The new command works just like the option on the file group menu to create a scenario for the file group. When setting up the command, you specify the following:

- The file group for which to create a scenario
- The name of the scenario

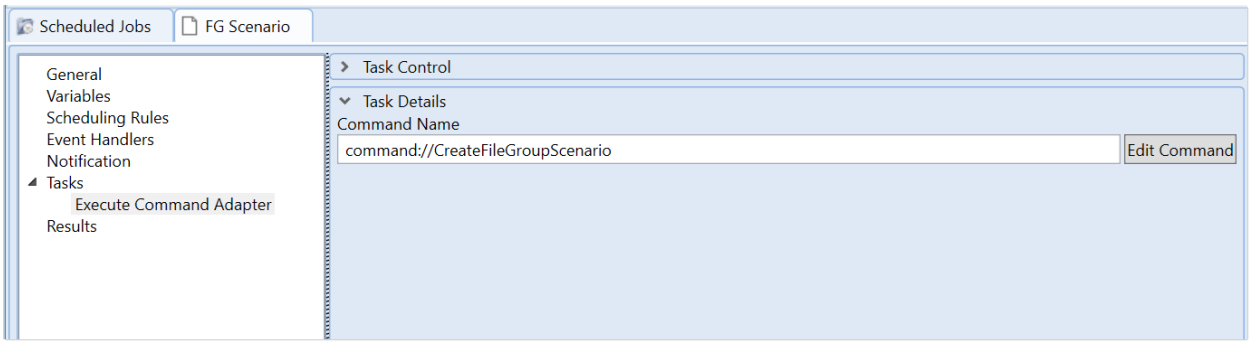
- The table suffix to apply to scenario tables
- Optional values for file group variables to apply to the scenario (such as variables that define driver values to change in the scenario)



Example command to create a file group scenario

When using the command in a custom task pane or ribbon tab, you can optionally leave the scenario name blank to open the Create Scenario dialog. If the scenario name is specified in the command, then the dialog does not display and the scenario creation starts automatically when the command is used.

To use the command in Scheduler, add an **Execute Command Adapter** task to the job and then configure it to run the Create File Group Scenario command. When the job is run, the scenario is created using server-side processing, which is preferable if the scenario creation involves creating a lot of tables. Scheduler job variables can also be used to set values for the scenario name, table suffix, and file group variables.



Example Scheduler job to create a scenario

For example, you could create an Axiom form that gathers user inputs such as the scenario name, table suffix, and key drivers to change for the scenario. The form could use a RunEvent command to trigger a Scheduler job to create the scenario, and pass in the user inputs from the form to the Scheduler job variables. The scenario is created using server-side processing, so the current user can move on to other tasks instead of waiting for a potentially lengthy and resource-intensive process to complete.

Scheduler jobs as file group utilities

You can now store Scheduler jobs in the Utilities folder of a file group, so that these jobs are associated with the file group and can be configured to perform actions on the current file group. When a file group is cloned to create a new file group or scenario, the Scheduler jobs in the Utilities folder are copied along with the other utilities and will automatically point to the new file group.

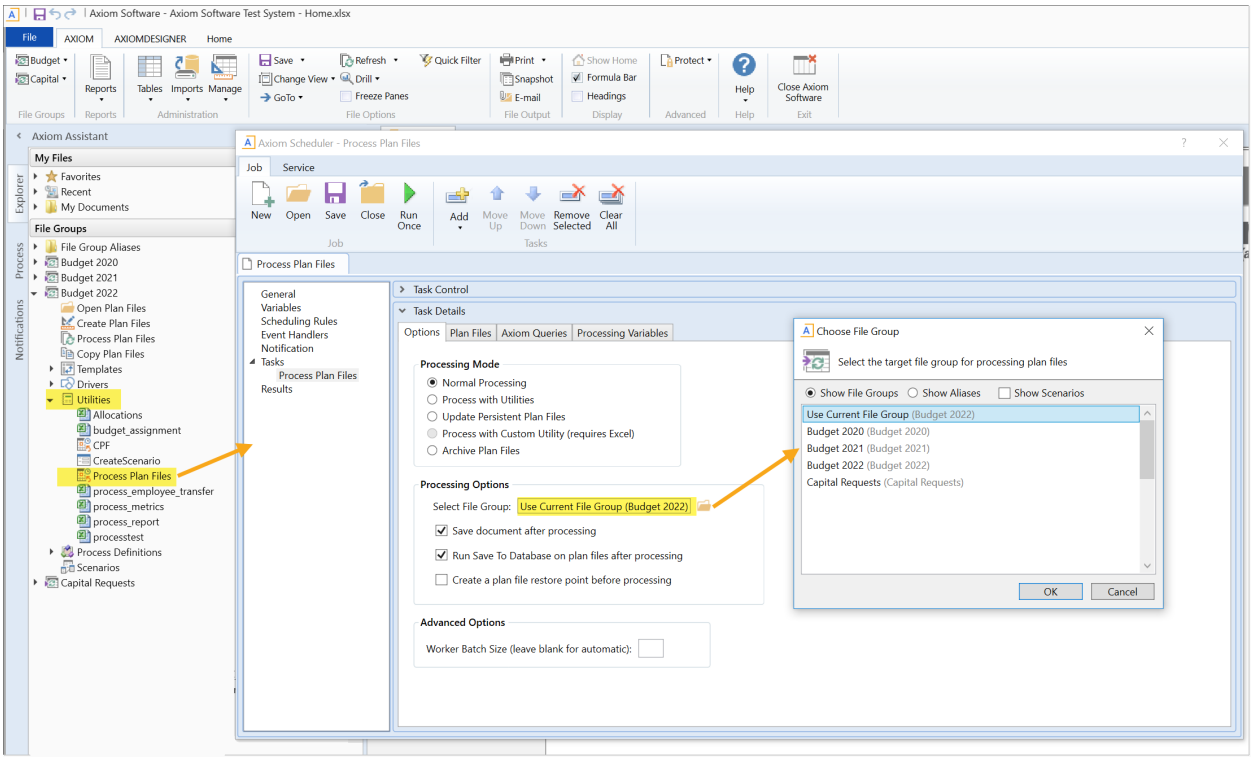
NOTE: Currently it is not possible to directly save a Scheduler job to a file group Utilities folder when creating the job. You must first create the job and save it to the Scheduler Jobs Library, then use Axiom Explorer to copy the file to the file group Utilities folder. You can also export the job and then import it into the Utilities folder.

Configuring a Scheduler job to use the current file group

If a Scheduler job is stored in a file group Utilities folder, the following task types can be configured as relative to the current file group. This is the recommended way to configure the tasks, so that the tasks will automatically reference the current file group when the file group is cloned.

Task	Notes
Create Plan Files	When selecting the file group for the task, you can optionally select **Use Current File Group** instead of selecting a specific file group or alias.
File Processing	When selecting the file to process for the task, you can optionally select a report utility file underneath the **Current File Group** node at the top of the file groups list. If you do this, the path to the file is stored relative to the current file group.
Process Plan Files	When selecting the file group for the task, you can optionally select **Use Current File Group** instead of selecting a specific file group or alias.
Start Process	When selecting the process definition file for the task, you can optionally select a plan file process in the **Current File Group** node at the top of the file groups list. If you do this, the path to the file is stored relative to the current file group.

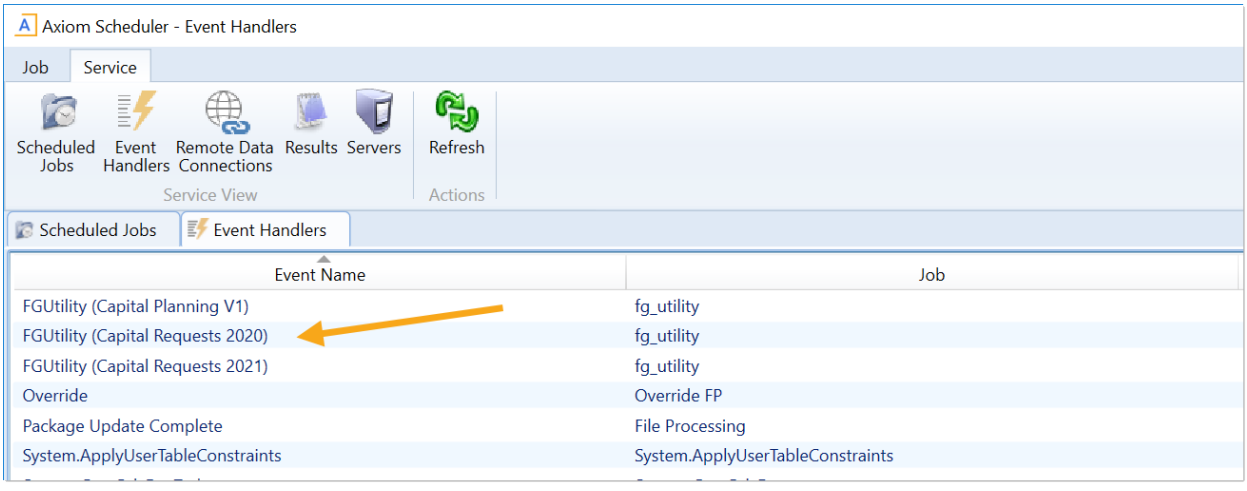
In the following example, a Scheduler job is stored in a file group Utilities folder. The Scheduler job is configured to **Use Current File Group**, which is currently Budget 2022. If this file group is cloned to create a new year of budgeting, or if a file group scenario is created for the file group, this Scheduler job will be copied with the other utilities and it will automatically point to its new current file group.



Example Scheduler job as a file group utility, configured to use the current file group

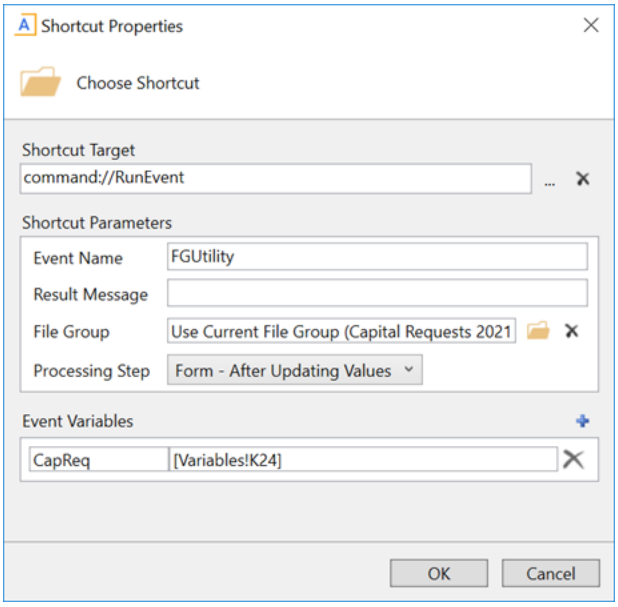
Using event handlers to trigger events specific to a file group

When a Scheduler job with an active event handler is stored in a file group Utilities folder, the event handler becomes specific to the file group. The **Event Handlers** tab in Scheduler displays the name of the associated file group next to the event handler name. If the file group and its utilities are cloned using any process—such as regular file group clone, create scenario, or file group rollover—then the event handler is copied for use in the new file group. If a file group and its utilities are deleted, the associated event handler will also be deleted.



Example event handlers associated with a file group

The RunEvent command can be configured to target event handlers stored in a specific file group. If a file group context is specified, then Axiom Software looks for the event handler name in that file group and in the general Scheduler Jobs Library, but not in any other file groups.



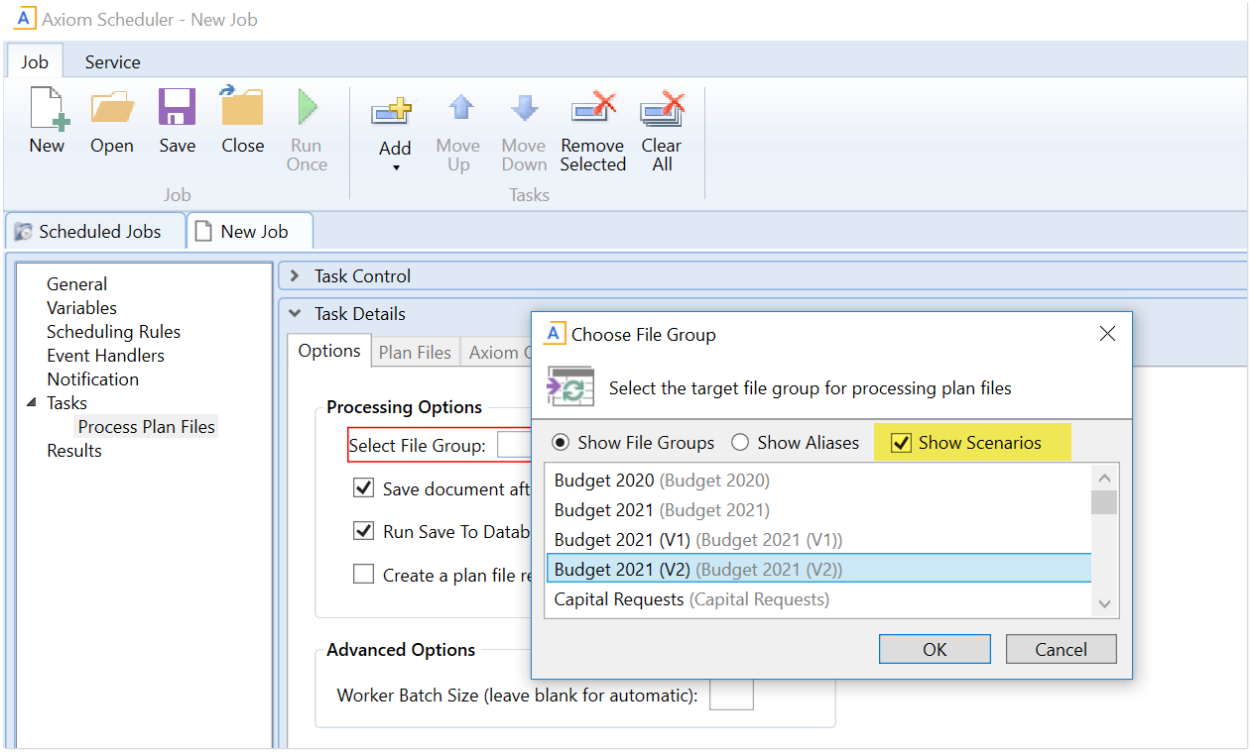
Example RunEvent command to trigger an event within a file group

Additional file group enhancements

Use Scheduler to process plan files in scenario file groups

The **Process Plan Files** task in Scheduler can now be used to process scenario file groups. Previously, scenario file groups could not be processed by this task, so all processing for scenarios had to be done manually in the Desktop Client.

When selecting the file group for the Process Plan Files task, you can now select the **Show Scenarios** option to display scenarios in the list of file groups.



New option to show and select scenarios for the Process Plan Files task

NOTE: This enhancement was originally delivered in a 2020.1 patch. However, it is included in the *What's New* for 2020.2 because this release provides the official rollout of the enhancement.

Also, now that Scheduler jobs can be stored as file group utilities and configured as relative to the current file group, these utilities will be copied when creating a scenario and can also be used to process plan files in the scenario.

Plan file processes

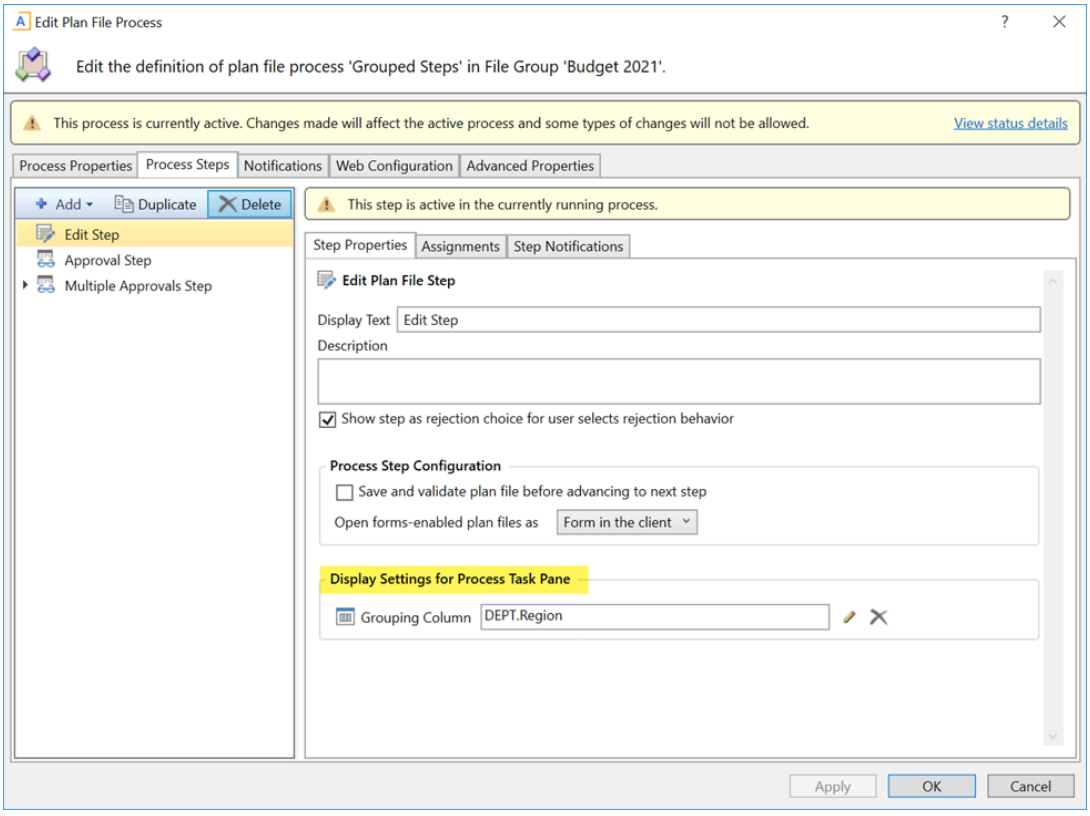
This section details the new features and enhancements made to plan file processes.

Group tasks in the Process task pane

You can now optionally display process tasks in groups within the Process task pane. This feature is intended to be used for steps where users may have many active tasks at one time, so that the groupings can help the step owners identify and complete their tasks. Groupings can be defined on a per step basis, so that each step can use a different grouping or no grouping as needed.

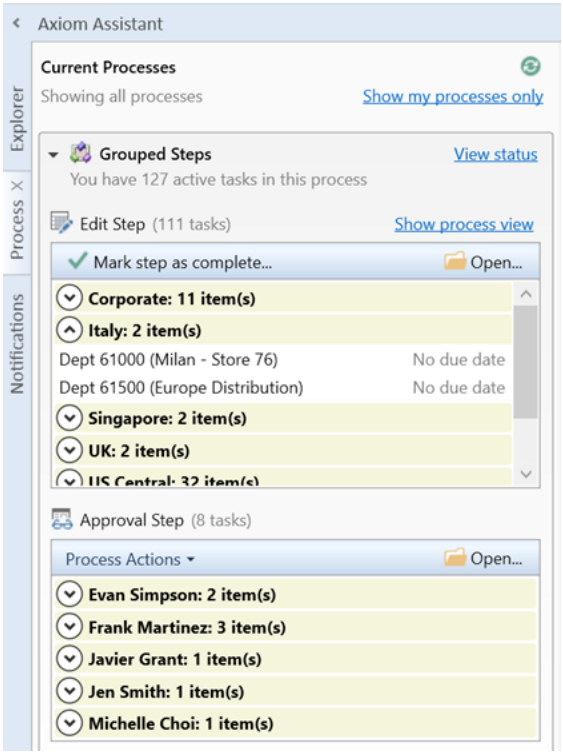
NOTE: This enhancement was originally delivered in a 2020.1 patch. However, it is included in the *What's New* for 2020.2 because this release provides the official rollout of the enhancement.

To configure a process step to display its tasks in groupings, use the **Grouping Column** option in the step properties of the plan file process definition:



Option to display process tasks for a step in groupings

When the Grouping Column option is used, process tasks for the step display in expandable/collapsible groupings in the Process task pane, based on the values in the specified grouping column. For example, if the grouping column is Dept.Region, the tasks display in groups such as US West, US East, and so on. In the following example, the first step shown in the task pane is grouped by regions, and the second step is grouped by vice presidents.



Example Process task pane with grouped tasks

The task owner can use these groupings to quickly find and review the tasks that they want to complete. If you want to complete all tasks for a particular grouping, you can right-click the grouping name and choose a process action. The **Process Action** dialog is automatically filtered to only show tasks for the current grouping. You can click **Select All** in this dialog to select and complete all of the tasks for the grouping.

NOTE: The grouping column for a step only impacts the display of the Process task pane in the Desktop Client, or a custom task pane that uses the **User Process View** command. Tasks do not display in groupings in other process dialogs or pages.

Enhancements to copy plan files action for plan file processes

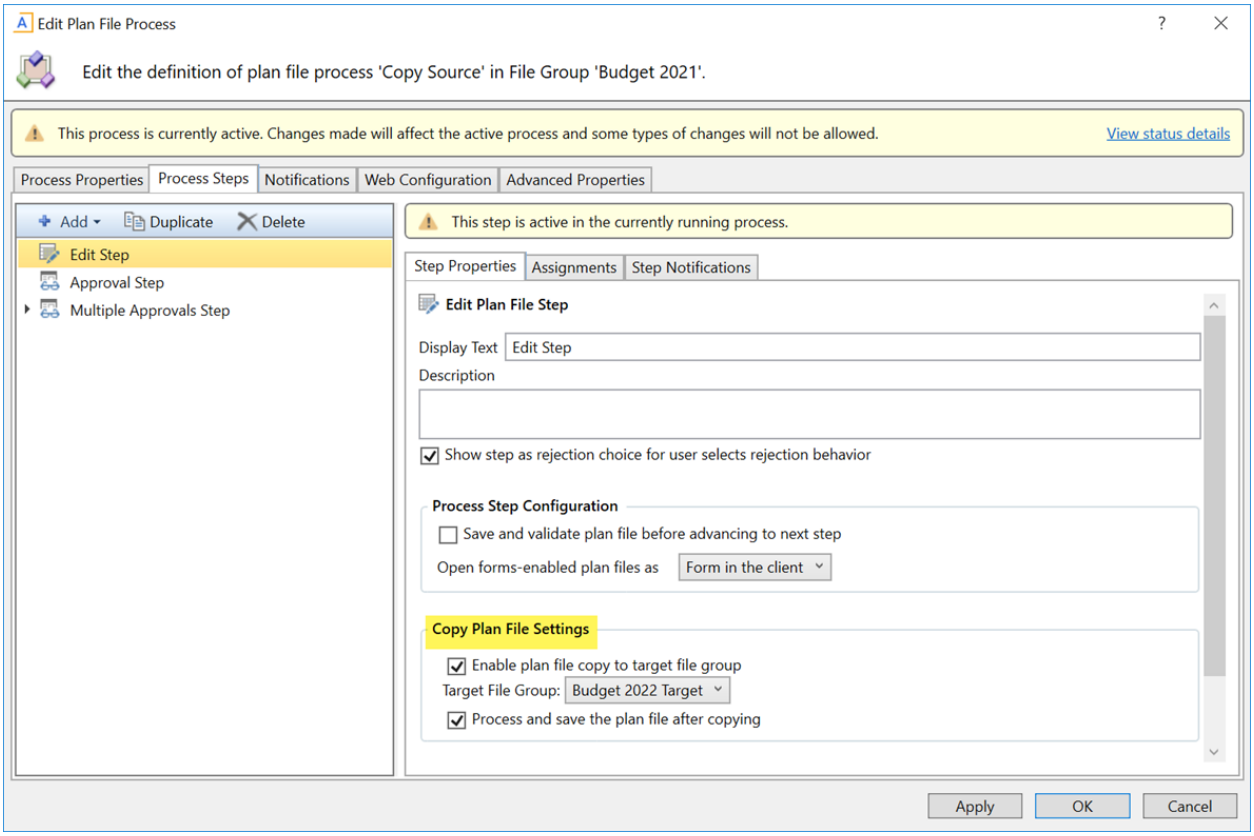
In version 2020.1, a new feature was introduced to automatically copy plan files from one file group to another when completing a process task in a plan file process. This feature has been further enhanced so that the copy plan files action can now be used on any type of step, and to automatically start the copied plan file in a process within the target file group.

NOTE: These enhancements were originally delivered in a 2020.1 patch. However, they are included in the *What's New* for 2020.2 because this release provides the official rollout of the enhancements.

The copy plan files feature for plan file processes is only available if you enable the following system configuration setting for your installation: **ShowCopyPlanfilesActionInProcess**. Otherwise, the feature is hidden by default.

Copy plan files action for edit steps

Previously, the copy plan files action was only available on approval steps. It is now available on edit steps as well, so that you can enable the option on any step as needed.



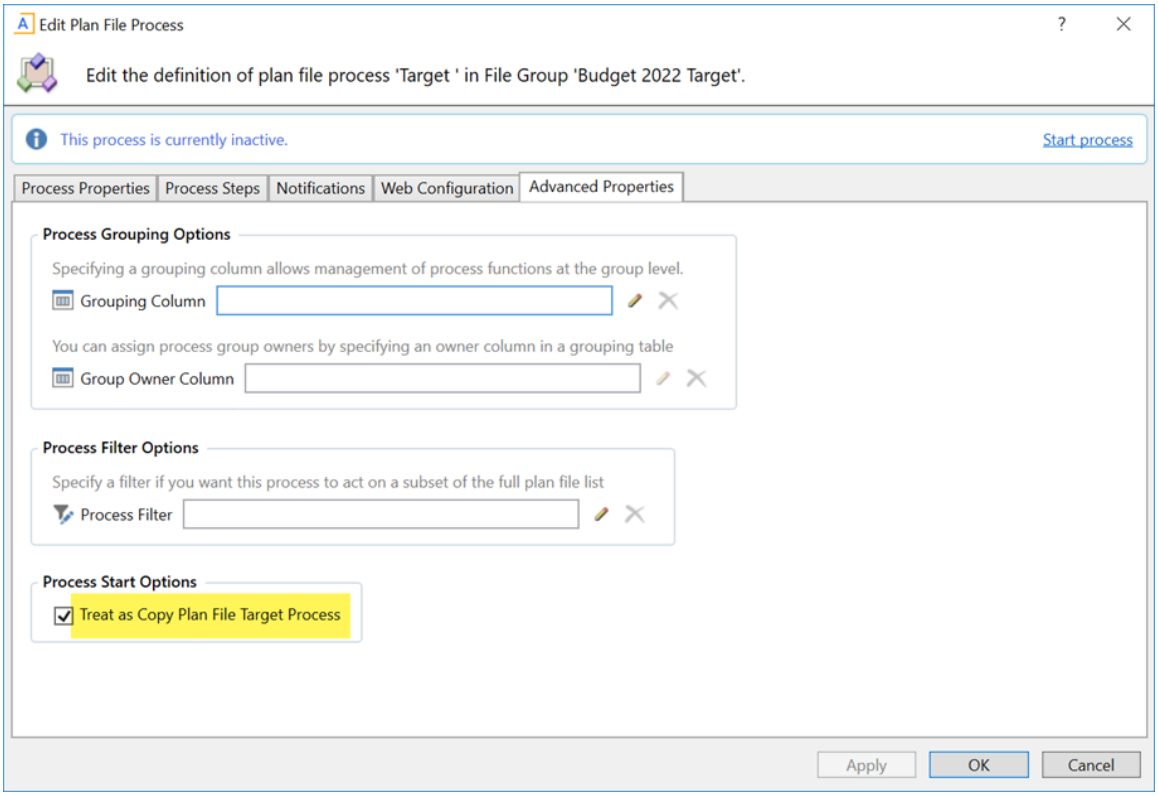
Copy plan files action now available on edit steps

Starting copied plan files in a target process

If you want the copied plan files to progress through a process in the target file group, the copy plan files action can now automatically start the plan files in this process. To do this, the process in the target file group should be configured as follows:

1. On the **Advanced** tab of the plan file process definition, enable the option **Treat as copy plan files**

target process. When this option is enabled, plan files are not started in the process when the overall process is started. Instead, the plan files will be started in the process when they are copied from the source file group.



2. The process must be the designated **Plan File Process** for the target file group, in the file group properties. This identifies the process to start plan files in when the plan files are copied.
3. Start this process before any plan files will be copied from the source file group to the target file group, so that the process is active and ready to deal with copied plan files.

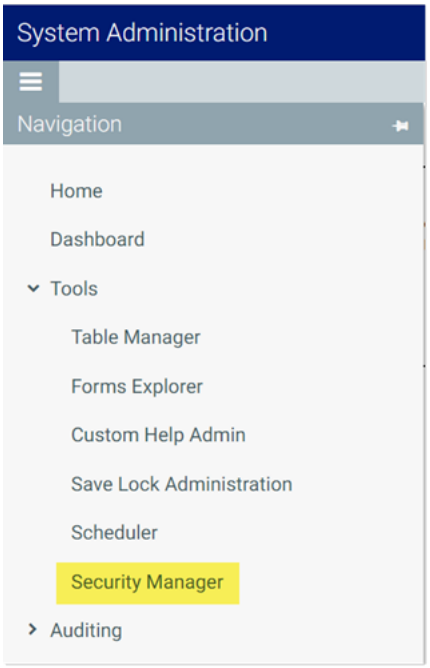
Security

This section details the new features and enhancements made to security.

Assign users to roles and subsystems using the Web Client

You can now assign users to roles and subsystems using the browser-based Web Client, instead of needing to launch the Desktop Client. The new web Security Manager is intended to provide a quick and user-friendly way to manage role and subsystem assignments, without all of the overhead of the full Security Management dialog.

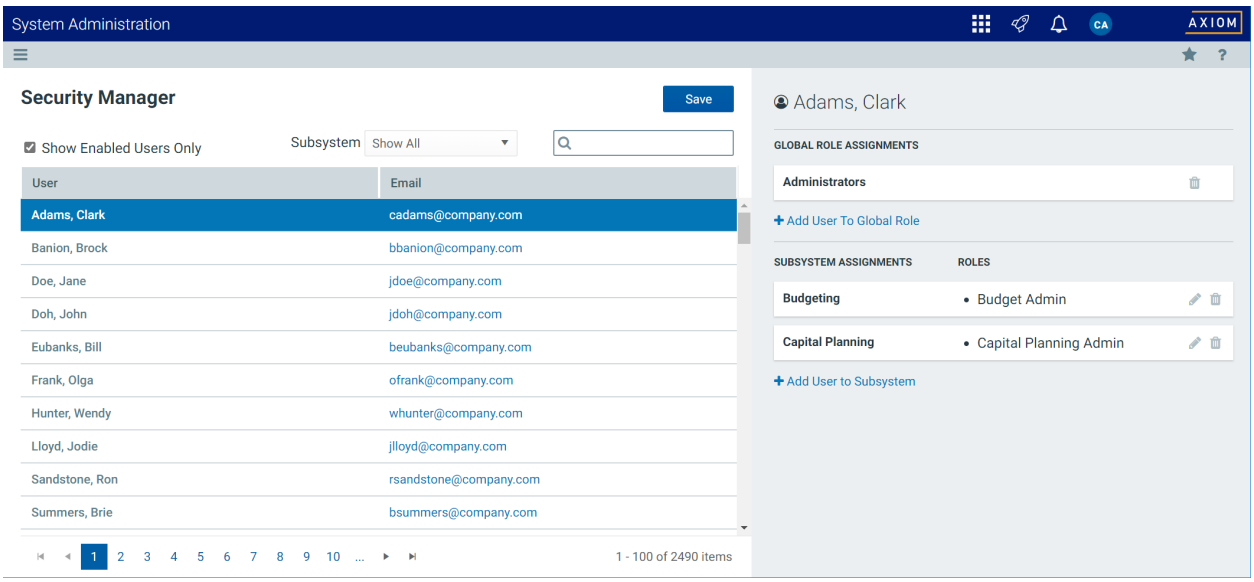
The web Security Manager is accessible in the System Administration area of the Web Client, under **Tools > Security Manager**. You can also navigate to the page directly as follows: `<YourAxiomURL>/ax/securitymanager`.



The page contains a searchable and filterable list of users in your system. Once you have selected a user, you can use the right-hand pane to assign the user to roles and subsystems.

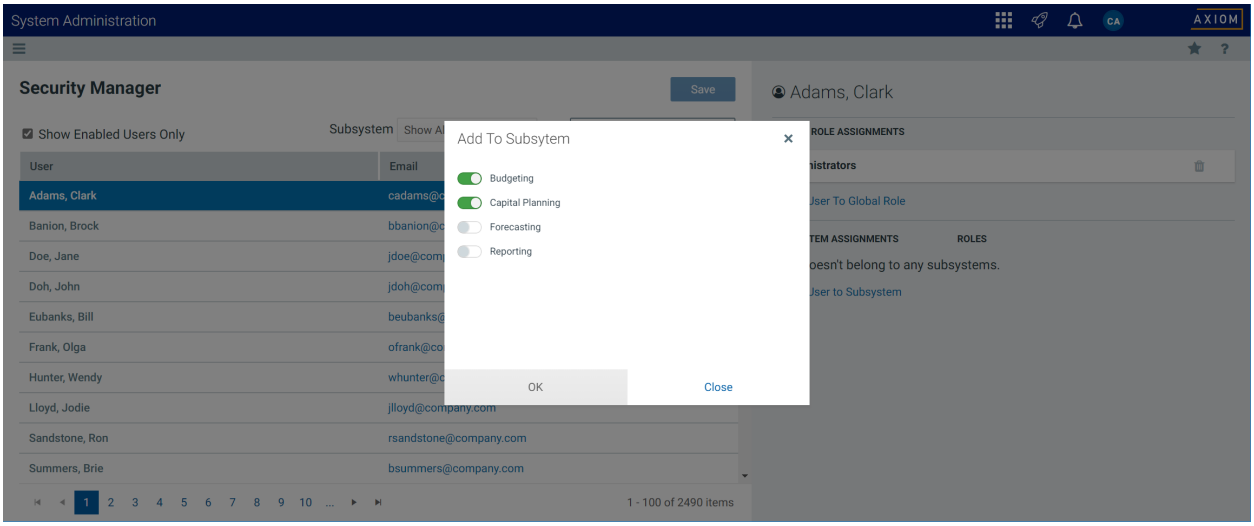
- Use the **Global Role Assignments** section to add the user to global roles. Global roles are roles that are not associated with a subsystem.
- Use the **Subsystem Assignments** section to add the user to subsystems, and to roles within the assigned subsystems.

NOTE: If security subsystems are not enabled in your system, then the Subsystem Assignments section and the subsystem filter are not present. Additionally, the word "global" is removed from the Role Assignments section.

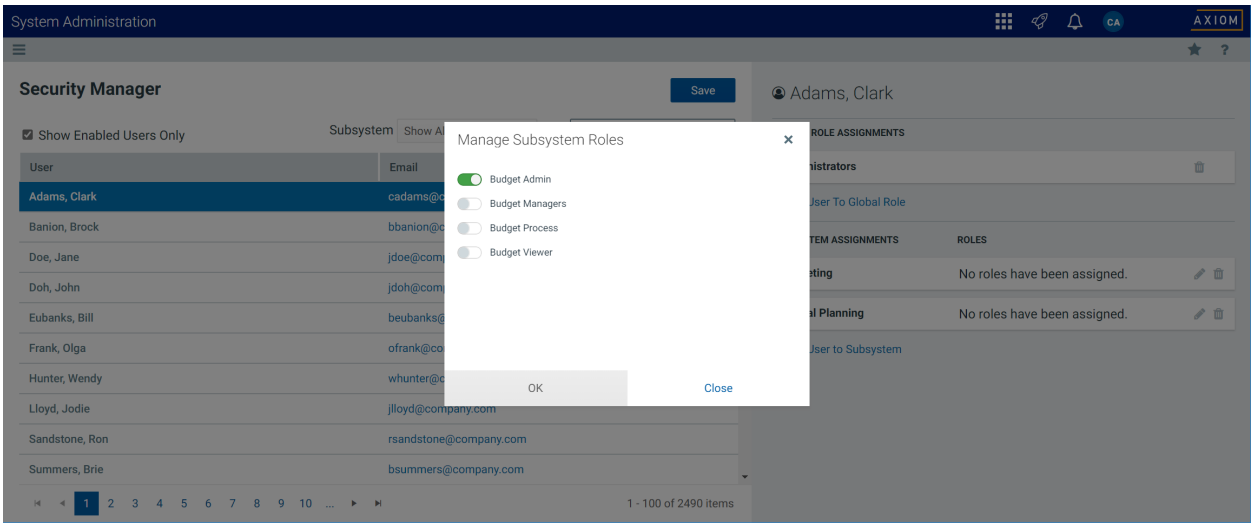


New web Security Manager page

For example, to assign a user to a subsystem, click **Add User to Subsystem**, then select one or more subsystems.



Once a user belongs to a subsystem, click the pencil icon next to the subsystem name to add the user to one or more roles in the subsystem (or to remove the user from a subsystem role).



To remove the user from a global role or a subsystem, click the trash icon next to the global role or subsystem name. When a user is removed from a subsystem they are also automatically removed from any roles in that subsystem.

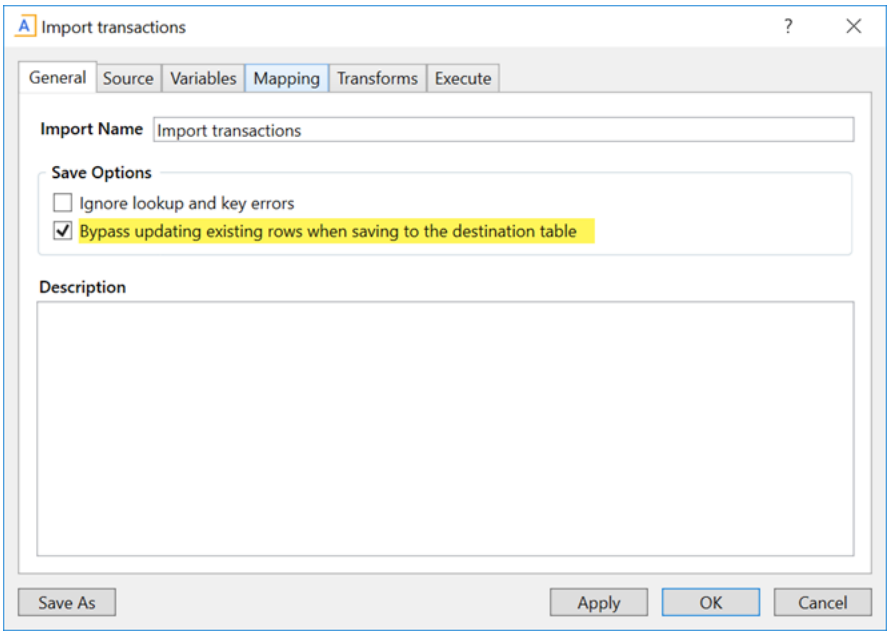
Like other security management features, the web Security Manager is available to administrators, subsystem administrators, and users with the Administer Security permission. For subsystem administrators, the page is automatically filtered to only show users that belong to the subsystem.

Currently, the functionality of the web Security Manager is limited to managing role and subsystem assignments for users. If you need to create new users, roles, or subsystems, or if you need to manage security permissions, this full functionality remains available in the Desktop Client.

Additional enhancements

Option to skip updating existing records during an import

Imports have a new option to skip updating existing records, so that only new records are added when the import is run. This option is located on the **General** tab of the import wizard, and is named **Bypass updating existing rows when saving to the destination table**. This option is disabled by default, so that existing imports will continue to both update and add records.



Enabling this option may improve import performance for use cases where the import source is not expected to contain updates to existing data. Keep in mind that if you enable the option and the import source does contain updates to existing data, the updates are simply ignored with no warning.