



# Line Item Modeling Guide

Copyright © 2026 OneStream Software LLC. All rights reserved.

All trademarks, logos, and brand names used on this website are the property of their respective owners. This document and its contents are the exclusive property of OneStream Software LLC and are protected under international intellectual property laws. Any reproduction, modification, distribution or public display of this documentation, in whole or part, without written prior consent from OneStream Software LLC is strictly prohibited.

# Table of Contents

Overview .....	1
Setup and Installation .....	2
Dependencies .....	2
Load Solution .....	2
Install Overview .....	3
Install Configuration .....	3
Uninstall Installer .....	5
Instance Manager .....	6
Upgrade Instance .....	7
Uninstall Instance .....	8
Instance Security .....	9
Instance Audit Log .....	10
Application Setup Options .....	11
Setup Wizard .....	12

## Table of Contents

---

Register .....	13
Accounts .....	19
Security Setup .....	21
Configuration .....	28
Map Invalid Members .....	29
Settings .....	31
Register Definition .....	32
Register Definition Table .....	33
Control List Table .....	34
Account .....	36
Security .....	38
Configuration .....	40
Uninstall .....	41
Register .....	43
Import and Modify .....	43
Add Data to Register .....	45

## Table of Contents

---

Modify Data in the Register .....	50
Editing the Register .....	50
Audit Log .....	56
Transfer .....	59
Manage Filters .....	61
Save a Filter .....	63
Copy a Filter .....	64
Update a Filter .....	66
Delete a Filter .....	68
Calculate and Analyze .....	69
Analyze Data in the Planning Register .....	69
Formulas .....	70
Global Drivers .....	71
Import Global Drivers .....	71
Cube Drivers .....	73
Cube Driver Invalid Members .....	76

## Table of Contents

---

Add Cube Drivers .....	76
Edit Cube Drivers .....	81
Delete Cube Drivers .....	82
Lookup Drivers .....	83
Add Lookup Drivers .....	84
Edit Lookup Drivers .....	86
Delete Lookup Drivers .....	87
Formula Wizard .....	88
Create a New Formula .....	97
Edit Formulas .....	98
Copy Formulas .....	99
Delete Formulas .....	100
Enable Formulas .....	101
Plan Data .....	103
Plans Dashboard .....	103
Create a New Plan .....	104

## Table of Contents

---

Recalculate a Plan .....	106
View Plan .....	107
Lock or Unlock Plan .....	109
Delete Plan .....	110
Copy Plan .....	111
Edit Plan .....	113
Plan Log .....	114
Connector Business Rule .....	115
Select Workflow .....	117
Data Adapter .....	119
Workforce Planning FUTA Formula Use Case .....	122
Solution Setup .....	123
Monthly Salary Formula .....	126
Bonus Calculation Formula .....	129
Merit Calculation Formula .....	131
Total Monthly Salary .....	134

## Table of Contents

---

Year-To-Date Salary Formula .....	137
Year-To-Date Salary - Tax Limit Formula .....	137
Periodic - (YTD-FUTA Limit) Formula .....	140
FUTA Formula .....	142
Help and Miscellaneous Information .....	146
Display Settings .....	146
Package Contents and Naming Conventions .....	146
OneStream Solution Modification Considerations .....	147
Appendix A: Workforce Planning Formulas .....	149
Appendix B: Custom Service Factory .....	155
Set Up the Custom Service Factory .....	155
Change Assemblies Setting upon Install .....	157
Maintain Assembly .....	158
Example .....	158

# Overview

The Line Item Modeling solution in OneStream is designed to configure diverse FP&A needs for precise line-item planning throughout your organization. The solution empowers users to build detailed, driver-based operational plans directly within the OneStream platform. Designed for agility, scale, and business ownership, it enables granular modeling across operational domains like workforce, sales, capital, and contracts, with full control over logic, security, and performance with minimal IT assistance required. The solution leverages formulas and various drivers to compute data, which is then presented in structured plans for reporting purposes. It can be used independently or combined with other OneStream solutions based on your requirements. This solution offers three different configurations depending on your planning needs:

- **Workforce Planning:** This configuration aids in workforce budgeting, forecasting, and analysis, providing you with an efficient means of managing human resources. The Register uses defined start and end dates to perform calculations and includes a built-in transfer feature that enables you to manage employee movements across different areas of the organization.
- **Fixed Term Planning:** This configuration uses defined start and end dates in the Register to perform calculations and can be used for date-driven operations that aren't tied to specific individuals, such as travel planning, leases, subscriptions, or project planning.
- **Duration Based Planning:** This configuration uses a defined start date and duration to perform calculations and can be used for duration-driven operations that aren't tied to a specific end date, such as project level planning, contracts, grants or other engagements.

**NOTE:** Line Item Modeling is compatible with the Modern Browser Experience and supports all culture code settings.

# Setup and Installation

This section contains important details related to the planning, configuring, and installation of your solution. Before you install the solution, familiarize yourself with these details.

See [OneStream Solution Modification Considerations](#).

## Dependencies

Component	Description
OneStream 9.0.0 or later	Minimum OneStream Platform version required to install this version of Line Item Modeling.
Microsoft SQL Server 2017 or later	Line Item Modeling requires an instance of Microsoft SQL Server 2017 or later.

## Load Solution

1. In the OneStream Solution Exchange, go to OneStream Solutions and select the **Line Item Modeling** tile.
2. On the **Line Item Modeling Solution** page, in the **Platform Version** drop-down menu, select the appropriate OneStream Platform version.
3. In the **Solution Version** drop-down menu, select the most recent version. Click **Download**.

4. Log into OneStream.
5. On the **Application** tab, go to **Tools > Load/Extract**.
6. On the **Load** tab, use the **Select File** buttons to locate the solution package. Click **Open**.
7. When the solution file name appears, click **Load**.
8. Click **Close** to complete.

## Install Overview

Welcome to OneStream's Line Item Modeling Installer. This powerful installer offers three different configurations to install: Workforce Planning, Fixed Term Planning and Duration Based Planning. You can also install multiple instances of the different configurations depending on your planning needs.

Once the setup of your configuration type is complete, either by following the Setup Wizard or importing a configuration file, a new dashboard is created as the configuration type and instance.

**NOTE:** You can uninstall an instance on the Welcome Page or while using the setup wizard by selecting the Uninstall Full button.

## Install Configuration

Use the Line Item Modeling Installer in the OnePlace tab to install a planning configuration.

**NOTE:** Only OneStream administrators can set up the solution, adjust the settings and see the Line Item Modeling solution Installer.

## Setup and Installation




---



### Welcome to OneStream's Line Item Modeling Installer

Version PV900-SV200

Select planning configuration:

 <b>Workforce Planning</b> Enables planning of headcount, compensation, and benefits across the organization, supporting hires, transfers, terminations, and employee movement over time using date-based tracking. <a href="#">Install</a>	 <b>Fixed Term Planning</b> Model items with defined start and end dates. Ideal for leases, projects, or subscriptions where timing is critical to planning accuracy. <a href="#">Install</a>	 <b>Duration Based Planning</b> Plan over a fixed number of periods from a start date. Perfect for contracts, grants, or engagements with known durations but flexible end dates. <a href="#">Install</a>
---	---	---

[Instance Manager](#)

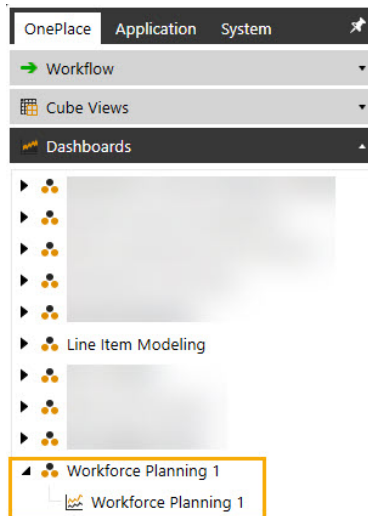
[Uninstall Line Item Modeling Installer](#)

1. Go to **Dashboards > Line Item Modeling > Line Item Modeling Installer**.
2. Click the **Install** button below the type of planning configuration you want to install.
3. In the dialog box, click the **PROCEED** button.

**NOTE:** Once the configuration is installed, a new workspace and dashboard are created as the configuration type and instance. You may have to refresh the application to see the new dashboard on the OnePlace tab.

## Setup and Installation

---



4. On the configuration Welcome Page, click **Install Tables**.

**NOTE:** Each install of the configuration options will install in its own schema and instance number. For example, Workforce Planning 1.

After tables are installed, you're directed to a welcome page to start your setup. You can either use the [Setup Wizard](#) or the [Configuration](#) option.

## Uninstall Installer

To uninstall the Line Item Modeling installer, click the **Uninstall Line Item Modeling Installer** link on the installer welcome page.

**IMPORTANT:** A dialog box will display to confirm if you want to proceed.

**NOTE:** Current planning instances will remain installed.

# Instance Manager

The Line Item Modeling Installer includes a centralized Instance Manager capability for OneStream administrators. This feature provides a clear and streamlined path to upgrade or remove existing instances of planning configurations from a single location, improving maintainability and reducing complexity.




To access the Instance Manager page, select the **Instance Manager** link on the installer welcome page.



### Welcome to OneStream's Line Item Modeling Installer

Version PV900-SV200

Select planning configuration:

 <h4>Workforce Planning</h4> <p>Enables planning of headcount, compensation, and benefits across the organization, supporting hires, transfers, terminations, and employee movement over time using date-based tracking.</p> <p><a href="#">Install</a></p>	 <h4>Fixed Term Planning</h4> <p>Model items with defined start and end dates. Ideal for leases, projects, or subscriptions where timing is critical to planning accuracy.</p> <p><a href="#">Install</a></p>	 <h4>Duration Based Planning</h4> <p>Plan over a fixed number of periods from a start date. Perfect for contracts, grants, or engagements with known durations but flexible end dates.</p> <p><a href="#">Install</a></p>
--	--	--

[Instance Manager](#)

[Uninstall Line Item Modeling Installer](#)

# Upgrade Instance

As an administrator, you can upgrade planning instances to the latest version from the Instance Manager page. This process ensures your planning instance runs on the most current version without requiring a full reinstall. The latest version of the solution will be installed on the same instance number and carryover the workspace name and profile as well as existing data and database tables. Changing the workspace name in Line Item Modeling is not recommended.

**IMPORTANT:** All business rule customizations from previous releases that reference PLNXX need to be updated to LIMXX. Example, PLNb1 becomes LIMb1.

**IMPORTANT:** Any custom changes to standard dashboards, reports, or business rules should be saved as renamed or copied objects, as future OneStream solution upgrades may overwrite standard objects and remove unsupported customizations.

To upgrade a planning instance, follow the legend and corresponding instructions:

### Instance Manager

Select an instance of planning to Upgrade, Uninstall UI, or Uninstall Full.

The screenshot shows the Instance Manager interface. At the top, there are five action buttons: Upgrade (with a blue '2' callout), Uninstall UI, Uninstall FULL, Save Security, and Audit Log. A 'Back to Installer' button is located on the right. Below the buttons is a table with three columns: Planning Instance (3), Version, and LIM Solution Administrator. The table contains three rows of data. A blue '1' callout points to the first row. At the bottom of the table, there are navigation controls (Home, Previous, 1, Next, End) and pagination information: 3 Rows, Page 1 of 1.

Planning Instance (3)	Version	LIM Solution Administrator
Workforce Planning 1	PV900 SV7000	Administrators
Workforce Planning 2	PV900 SV7000	Administrators
Workforce Planning 3	N/A	Administrators

## Setup and Installation

---

1. On the Instance Manager page, select an instance.
2. Click the **Upgrade** button.

**IMPORTANT:** A dialog box will display to confirm if you want to proceed.

After installation is complete, the instance is ready to use without needing to use the setup wizard again.

## Uninstall Instance

As an administrator, you can uninstall planning instances from the Instance Manager page.

To uninstall a planning instance, follow the legend and corresponding instructions:

### Instance Manager

Select an instance of planning to Upgrade, Uninstall UI, or Uninstall Full.

The screenshot shows the Instance Manager interface. At the top, there are several action buttons: Upgrade, Uninstall UI, Uninstall FULL, Save Security, and Audit Log. A blue circle with the number '2' is placed above the Uninstall UI and Uninstall FULL buttons, which are highlighted with a yellow box. To the right of these buttons is a 'Back to Installer' button. Below the buttons is a table with three columns: Planning Instance (3), Version, and LIM Solution Administrator. A blue circle with the number '1' is placed to the left of the first row of the table. The table contains three rows of data. At the bottom of the table, there are navigation controls (back, forward, search) and a status bar showing '3 Rows', 'Page 1', and 'of 1'.

Planning Instance (3)	Version	LIM Solution Administrator
Workforce Planning 1	PV900 SV	Administrators
Workforce Planning 2	PV900 SV	Administrators
Workforce Planning 3	N/A	Administrators

## Setup and Installation

---

1. On the Instance Manager page, select an instance.
2. Click the **Uninstall Full** or **Uninstall UI** button.
  - Use the **Uninstall Full** button to remove all related data tables, data, workspaces and workspace components, but retain business rules. The instance is removed from the table.
  - Use the **Uninstall UI** button to remove all dashboards, but retain databases, related tables and business rules. The instance name updates to start with Uninstalled.

**IMPORTANT:** A dialog box will display to confirm if you want to proceed.

## Instance Security

OneStream Administrators can now assign a specific security group to act as the Line Item Modeling Solution Administrator for a particular planning instance directly from the Line Item Modeling Installer. This allows organizations greater flexibility to delegate administrative responsibilities. The Line Item Modeling Solution Administrator inherits all administrative capabilities specific to managing a planning instance such as upgrading the solution, configuring it through the Setup Wizard or configuration file, and accessing all Settings dashboards. It's recommended to create a dedicated security group for the LIM Solution Administrator assignment to prevent unintended access.

**NOTE:** The Instance Manager does not allow the Line Item Modeling Solution Administrator group to be modified until a planning instance has been fully installed, including tables.

To assign an Line Item Modeling Solution Administrator, follow the legend and corresponding instructions:

## Setup and Installation

### Instance Manager

Select an instance of planning to Upgrade, Uninstall UI, or Uninstall Full.

The screenshot shows the Instance Manager interface. At the top, there are five buttons: Upgrade, Uninstall UI, Uninstall FULL, Save Security, and Audit Log. A blue circle with the number 4 is placed over the Save Security button. To the right of these buttons is a 'Back to Installer' button. Below the buttons is a table with the following columns: Planning Instance (2), Version, LIM Solution Administrator, and an icon column. The first row is 'Workforce Planning 1' with version 'PV900 SV200' and 'Administrators' as the administrator. The second row is 'Workforce Planning 2' with version 'PV900 SV200' and 'Administrators' as the administrator. A blue circle with the number 1 is placed over the first row. A dropdown menu is open for the 'Administrators' entry in the first row, showing 'Administrators', 'Everyone', and 'Test'. A blue circle with the number 2 is placed over the 'Administrators' option in the dropdown, and a blue circle with the number 3 is placed over the 'Everyone' option. At the bottom of the table, there is a pagination indicator '1 of 1'.

1. Select a Planning Instance.
2. In the LIM Solution Administrator column, double-click on the security group.
3. In the drop-down menu, select a security group.
4. Click the **Save Security** button.

**NOTE:** When you change the LIM Solution Administrator assignment, the solution automatically updates that instance's Security Actions to match the new assignment.

## Instance Audit Log

The Instance Audit Log records all changes to the Line Item Modeling Solution Administrator security groups for each instance, including who made the change and when it occurred.

**NOTE:** If a planning instance is fully uninstalled, all associated audit log data is removed.

To view the Instance Audit Log, click the **Audit Log** button and a new page opens.

## Setup and Installation

### Instance Manager

Instance Manager

Select an instance of planning to Upgrade, Uninstall UI, or Uninstall Full.

Upgrade   Uninstall UI   Uninstall FULL   Save Security   **Audit Log**   [Back to Installer](#)

Planning Instance (1)	Version	LIM Solution Administrator	
Workforce Planning 1	N/A	Administrators	

1 Rows   Page 1 of 1

### Instance Manager

[Instance Manager](#) > [Audit Log](#) ✕

Instance	Original Group	New Group	Changed By	Changed Date
Fixed Term Planning 1	Administrators	Everyone	admin	3/26/2026 11:28:06 AM
Workforce Planning 1	Administrators	FunctionalTestGroup	admin	3/26/2026 11:28:06 AM
Duration Based Planning 1	Administrators	FirstGroup	admin	3/26/2026 11:28:06 AM

1

## Application Setup Options

The Setup Wizard provides a user-friendly, step-by-step process, ideal for first time setup or those who prefer a more guided experience. The Configuration option offers more control for users who are comfortable importing a configuration file that already contains all the solution settings in a single JSON file. Review the sections below and select the option best suited to your setup needs.

**NOTE:** Only administrators can set up the solution, adjust the settings and see the Line Item Modeling solution Installer.

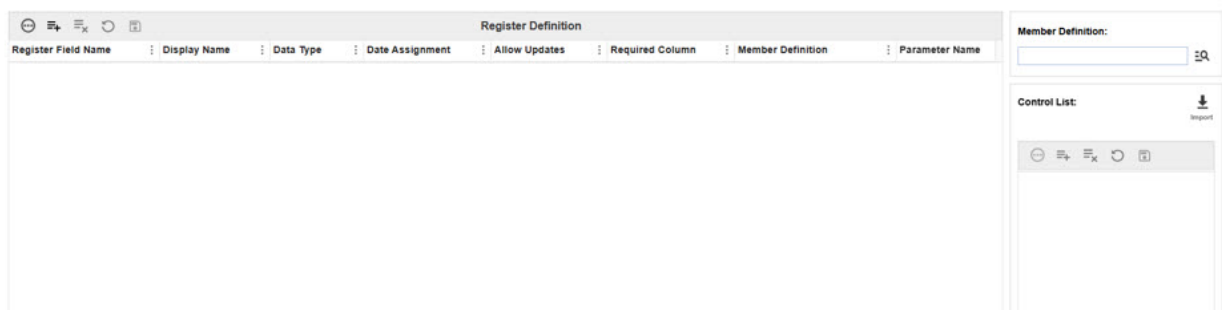
# Setup Wizard

**Launch Setup Wizard:** From your configuration Welcome Page, click the **Start** button to begin the Setup Wizard. If this is the first time you are installing the solution, or you do not have a configuration file generated from a previous version of the solution, the Setup Wizard is the recommended option.

**NOTE:** Select the Exit button at any time to return the Welcome Page.

This section will guide you through setup of the Register, Accounts, and Security steps. The Setup Wizard has built-in validations to make sure all necessary information is populated. In the Security setup, dialog boxes will display if you skip over a step and inform you to go back and fill in any missing criteria.

**IMPORTANT:** Any attribute named in the solution, such as Register Field Names, Accounts, Global Drivers, Cube Drivers, Lookup Drivers and Formula Names, must be unique from each other.



# Register

Step 1 of the Setup Wizard is the Register. This is a crucial tool that aids in the initial configuration and ongoing management of your planning environment. It is designed to streamline the setup process and make it easier to define your Register and the attributes within it.

Through the Setup Wizard Register, you can dynamically load your column definition and configure a variety of settings, including display names, data type, control lists, and data dimensions.

The Register portion of the Setup Wizard ensures that you can set up your Line Item Modeling solution according to your specific business requirements.

It is essential to review and update the settings in the Setup Wizard Register periodically to ensure they remain aligned with any changes in your business operations or planning needs.

## Register Setup

**Register Definition:** In this step, you will dynamically create the columns used for your Register. These fields, for example, can come from your human resources (HR) source if you are in the Workforce Planning solution. Some examples include Employee ID, Job Title, Department, and Status. These columns within the Register Definition table will help define your Register:

- **Register Field Name:** The column name that is imported from your .csv file.
- **Display Name:** The column name that will display on your Register. Display Name can only contain letters a to z, numbers 0 to 9, underscore characters, and spaces.
- **Data Type:** Define the data types for each Register column. You have these options: String (numbers or letters), Date, and Number. It is important to assign the correct Data Type for your Register Field Names based on the data you intend to import into the Register later in the planning process.

## Setup and Installation

---

- **Column Format:** Define the formatting for each data type using the drop-down menu. Formatting types include: decimal places (N#), dates and Percentages (P#). Choose from the following: blank (default), N0, N1, N2, N3, N4, N5, N6, N7, N8, N9, MM/dd/yyyy, dd/MM/yyyy, yyyy/MM/dd, P0, P1, P2, P3, P4, P5, P6, P7, P8 or P9.

**NOTE:** The assigned formatting for dates in the Register Definition will override date formatting from a culture code.

- **Date Assignment:**
  - For the Workforce Planning and Fixed Term Planning configurations, select a Register field to have a start and end date assigned for your incremental and periodic calculations.
  - For the Duration Based Planning configuration, select a Register field to have a start date and duration assigned for your incremental and periodic calculations. The duration selection can only be an integer ranging from 0 to 2400.
- **Allow Updates:** You have the option to allow updates on certain columns. This will determine which columns can or cannot be modified in the Register.

**IMPORTANT:** If this attribute is not assigned, you will not be able to edit regardless of security permissions.

- **Required Column:** Select which Register columns you want to be required when importing and editing Register data.
- **Member Definition:** Define which member metadata you want to assign to a Register column.

**NOTE:** If your member definition is using extensibility where there is more than one dimension, and you want to plan at a more detailed level, you can define the specific dimension in your member definition. For example, U1#CC100.Base:Dim:Equipment Cost Centers Budget. Member definitions link core dimensionality to the Register and provide data validations and security options within the Line Item Modeling solution.

- **Parameter Name:** Provides the option to select a predefined parameter in your application to assign to a Register column.
- **Control List:** Indicates if the Register column has control list values.
- **Default Value:** Define a custom default value for each Register column. If you input a value that does not match the assigned data type or input a value that is not included in the member definition, a dialog box displays. When a new row is added to the Register, the default value populates for that field.

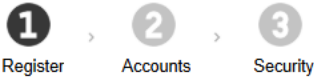
**NOTE:** If you have a default value assigned and import a new .csv file, the default value is automatically applied to the column upon saving the Register.

There is also a control list table next to the Register Definition table that enables you to populate acceptable control list values for each Register field. For example, if you have a Register field name of Region and you only have data for two regions, USA and Canada, you can input those values in the table to make sure no other regions are accepted. When you assign a member definition to a row in the Register table and save it, the control list automatically populates the associated member definition values for that row which provides the option to assign security to list members in step 3 of the Setup Wizard. See [Security Setup](#).

Before importing, verify that the Register columns within your .csv file only contain letters a to z, numbers 0 to 9, or underscore characters to avoid any issues or missing data in your Register.

To set up your Register, follow the legend and corresponding instructions:

# Setup and Installation



## Register

To begin defining the Register, load your 'Register Definition' file using a csv format. This should contain the column headers you wish to include in the Register. Once the file is imported, you can apply other settings necessary to configure your register columns.

Register Definition: **Select File** 1

Register Field ...	Display Name	Data Type	Date Assignment	Allow Updates	Required Column	Member	Parameter	Control List	Default Value	Column Format
--------------------	--------------	-----------	-----------------	---------------	-----------------	--------	-----------	--------------	---------------	---------------

## Register

To begin defining the Register, load your 'Register Definition' file using a csv format. This should contain the column headers you wish to include in the Register. Once the file is imported, you can apply other settings necessary to configure your register columns.

Register Definition: `PLN_RegisterColumnDefinition.csv`

Register Field...	Display ...	Data Type	Date Assign...	Allow Updates	Required Column	Member Defi...	Parameter...	Control List	Default Value	Column Format
LastName	LastName	String		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Not Used	No		
Entity	Entity	String		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E#GSC	Not Used	No		
Region	Region	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		
CostCenter	CostCenter	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		
Title	Title	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		
Status	Status	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		
FTE	FTE	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		
StartDate	Start Date	String	Start Date	<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		
EndDate	End Date	String	End Date	<input type="checkbox"/>	<input type="checkbox"/>		Not Used	No		

Member Definition: E#GSC

Control List: Title

Stored Value: Display Value

Exit Save Next


1. Click **Select File** and a dialog box displays prompting you to upload a file. The Register Definition will populate with the data and order of the .csv file. Example .csv file:

```
EmployeeID,FirstName,LastName,Entity,Region,CostCenter,Title,Status,FTE,Start Date,End Date,Grade,Salary,Bonus,HRStatus,Reason
```

**TIP:** You can manually add or remove entries using the grid toolbar or use the arrow icons at the top right of the Register Definition table to reorder the Register Definition columns.

## Setup and Installation

---

2. Once the table is populated, you will see a list of all your columns in the Register Definition table. Set the member definition by clicking the **Member Definition** button  .

The Member Filter Builder dialog box is displayed for member definition creation. Create the member definition and then click the **OK** button.

3. Copy the member definition in the text box created in step 2 and paste it into the **Member Definition** column for the **Entity** row. Entity is a required field, and it should only be applied to one **Register Field Name**.

**NOTE:** You can also assign a User-Defined (UD) member definition for other Register field names based on your planning needs. This can be done through the Member Filter Builder as well. Only one token type can be assigned to a Register Field Name.

4. Select the **Data Type** for each **Register Field Name**. Choose from the following: Number, String or Date.
5. In the **Date Assignment** column, select a cell and use the drop-down menu to select a Start Date and End Date for your corresponding **Register Field Name**. Start Date and End Date are required fields.

**NOTE:** The Workforce Planning and Fixed Term Planning configurations use the Start date and End date selections. The Duration Based Planning configuration uses a Start date and a Duration selection.

6. Select the checkbox in the **Allow Updates** column for each **Register Field Name** you want to allow editing access for. Leaving it blank means that the field is read-only and cannot be updated.

## Setup and Installation

---

7. Select the checkbox in the **Required Column** column for each **Register Field Name** to define if data is required when importing and editing the Register data during the planning process.
8. Setting the **Parameter Name** for each **Register Field Name** is optional. Set them by selecting a row and using the drop-down menu in the **Parameter Name** column. You can also search for a parameter by using the drop-down menu and then typing in the text box.
9. In the **Default Value** column, select a value for each **Register Field Name**.
10. In the **Column Format** column, select a value for each **Register Field Name**. Choose from the following: blank (default), N0, N1, N2, N3, N4, N5, N6, N7, N8, N9, MM/dd/yyyy, dd/MM/yyyy, yyyy/MM/dd, P0, P1, P2, P3, P4, P5, P6, P7, P8 or P9.
11. (Optional) You can use the control list table next to the Register Definition table to populate acceptable values for each Register field as well as the stored value and display value.

**TIP:** You can use the arrow icons in the Control List table to reorder control list values.

**NOTE:** The control list column in the Register Definition table indicates if a Register column has control list values. This will update automatically upon clicking the Save or Next button on the Setup Wizard or by going to Settings > Register Definition and clicking the Update button.

12. Click the **Next** button and a dialog box displays. Select **Proceed** or **Cancel**.

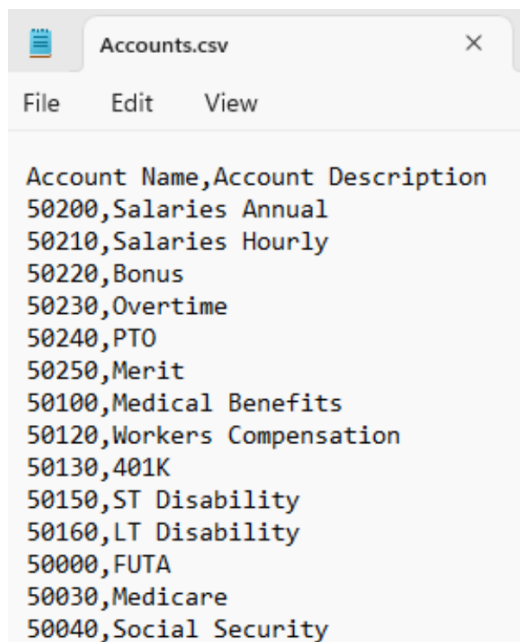
There are built-in validations, so you will not be able to move forward if there is missing or incorrect information entered in Register Definition table. For example, if you are missing a Display Name, you have two different dimensions tokens being used in the same column, or if you have the same dimension token on two different columns, a validation message will display.

# Accounts

In OneStream's Line Item Modeling solution, the term Accounts often refers to the accounts that are set up and used in formula creation and where the calculated values are stored. These accounts are crucial for ensuring the calculated values in your plan table are placed in the appropriate account. You can use the same account name and description as your application metadata or add accounts that may not be in your account structure but will help in calculating values on a more detailed level.

Before you import, verify you are using a .csv file. The column names on the .csv file must match the table shown in the solution.

Example:



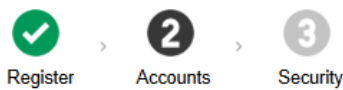
```
Account Name,Account Description
50200,Salaries Annual
50210,Salaries Hourly
50220,Bonus
50230,Overtime
50240,PTO
50250,Merit
50100,Medical Benefits
50120,Workers Compensation
50130,401K
50150,ST Disability
50160,LT Disability
50000,FUTA
50030,Medicare
50040,Social Security
```

## Setup and Installation

---

**IMPORTANT:** Any attribute named in the solution, such as Register Field Names, Accounts, Global Drivers, Cube Drivers and Formula Names, must be unique from each other.

To import Accounts, follow the legend and corresponding instructions:



### Account

Calculated results for your plan must be placed in its assigned account in your solution. To define accounts in your formula, load your 'Accounts' file which contains all the account numbers you wish to use in your solution.



1

Account Name	Account Description
--------------	---------------------

Page 1 of 1 50 rows per page 0 - 0 of 0 rows

Back Next

2

1. Click the **Import** button and a dialog box displays prompting you to upload a file.

**TIP:** You can also manually add or remove entries using the grid toolbar.

2. Click the **Next** button.

**NOTE:** There are built-in validations so you will not be able to move forward if there are issues, such as duplicate account names.

## Security Setup

OneStream's Line Item Modeling Installer allows you to have different configuration types and set up security for each using the Wizard Security Groups, ensuring secure access control and data protection. These groups define the level of access and permissions each user or user group has within the system, enabling administrators to effectively manage who can view, edit, or approve data. By structuring user access rights through the Security Groups, organizations can maintain control over sensitive information and prevent unauthorized alterations. This feature enhances the security of the planning process and fosters accountability and proper data management within the organization. It is an essential component for businesses looking to safeguard their data while promoting a collaborative planning environment. See [Security](#) to adjust Security groups.

**NOTE:** Line Item Modeling enforces nested security, evaluating parent-level security first to allow access before child-level security is applied.

**NOTE:** The Manage Transfers action is only available in the Workforce Planning configuration.

To set security groups for Actions, follow the legend and corresponding instructions:

## Setup and Installation

---

Register > Accounts > Security

1  
Actions Register Columns

Actions	Security Group
Add Register Data (Bulk)	Administrators
Edit Register Data	Administrators
Delete Register Data (Bulk)	Administrators
Delete Register Data	Administrators
Manage Transfers	Administrators
View Audit Log	Administrators
Manage Filters	Administrators
Calculate Plan	Administrators
View Plan	Administrators
Lock Plan	Administrators
Unlock Plan	Administrators
Manage Plans	Administrators
View Drivers	Administrators
Manage Drivers	Administrators
View Formulas	Administrators
Manage Formulas	Administrators

2

3

4

Undo Save

Back Finish

1. Click the **Actions** button.
2. Select a row.
3. Select security groups.

**TIP:** You can search for a security group by typing in a security group name and clicking the **Search** button.

## Setup and Installation

---

4. Click the **Save** button. You can revert your security group selections by clicking the **Undo** button.

**IMPORTANT:** You need to click the **Save** button after each Action security group selection.

To set the security groups for Register Columns, follow the legend and corresponding instructions below:

The screenshot shows a configuration interface for Register Columns. At the top, there are three steps: Register (with a green checkmark), Accounts (with a green checkmark), and Security (with a black circle containing the number 3). Below this, the 'Register Columns' tab is selected, indicated by a blue circle with the number 1. A table lists various columns and their visibility settings. A blue circle with the number 2 points to the 'Entity' row. To the right, the 'Entity' section is expanded, showing a search box and a list of security groups. A blue circle with the number 3 points to the 'Entity' label, a blue circle with the number 4 points to the search box, and a blue circle with the number 5 points to the 'Save' button. The 'Everyone' security group is selected in the list. At the bottom left, there are 'Back' and 'Finish' buttons.

Register > Accounts > Security

1 Register Columns

Register Column	Column Visibility	Control List Source
Entity	Everyone	
EmployeeType	Everyone	
EmployeeID	Everyone	
Region	Everyone	
BusinessUnit	Everyone	
CostCenter	Everyone	
FTE	Everyone	
EndDate	Everyone	
StartDate	Everyone	
StartPeriod	Everyone	
JobTitle	Everyone	

Entity 3

Column Visibility Control List

4

5

Undo Save

Back Finish

## Setup and Installation

---

1. Click the **Register Columns** tab.
2. Select a row.
3. Click the **Column Visibility** tab.
4. Select security groups.

**TIP:** You can search for a security group by typing in a security group name and clicking the **search** button.

5. Click the **Save** button. You can revert your security group selections by clicking the **Undo** button.

**IMPORTANT:** You need to click the **Save** button after each Action security group selection.

To set the security groups for control list values, follow the legend and corresponding instructions:

## Setup and Installation

Register > Accounts > Security

1 Register Columns

Register Column	Column Visibility	Control List Source
Entity	Everyone	Member Definition
EmployeeType	Everyone	
EmployeeID	Everyone	
2 Region	Everyone	Custom Control List
BusinessUnit	Everyone	
CostCenter	Everyone	
FTE	Everyone	
EndDate	Everyone	
StartDate	Everyone	
StartPeriod	Everyone	
JobTitle	Everyone	
EmployeeName	Everyone	
AnnualSalary	Everyone	
HourlyRate	Everyone	
Col_401KPercent	Everyone	
EmployeeInstance	Everyone	
EmployeeStatus	Everyone	

3 Region

DisplayValue	Read Only
4 USA	Everyone

5 Read Only Read/Write

6 Administrators  
Everyone  
Test

7 Save

8 Back Finish

1. Click the **Register Columns** tab.
2. Select a row with control list values.
3. Click the **Control List** tab.
4. Select a row.
5. Click the **Read Only** tab to set read-only permissions or click the **Read/Write** tab to set read/write permissions.
6. Select security groups.

**TIP:** You can search for a security group by typing in a security group name and clicking the **search** button.

7. Click the **Save** button.

## Setup and Installation

---

**IMPORTANT:** You need to click the **Save** button after each Action security group selection.

8. Click the **Finish** button.

The Control List Source column in the Register Columns tab indicates if control list values are populated from a Member Definition or custom control list. Security settings for members on the Entity dimension cannot be modified in Line Item Modeling. These settings are inherited from the dimension library and reflect the security applied there.

**NOTE:** Security can only be applied to member definitions or custom control lists but not to parameters.

The following table details the actions you can set security groups for.

**NOTE:** OneStream Administrators will not automatically have rights to the inner workings of this solution. If you have Administrators responsible for any of the Actions listed below, you must assign the Administrators group to the action or include those individuals to the security groups assigned. This also applies to row level security on the Entity, UD's or Control List items.

Actions	User Function
Add Register Data (Bulk)	User can import Register bulk data.
Edit Register Data	User can edit Register data. Edits include updating a row that exists and adding a row.

## Setup and Installation

---

Actions	User Function
Delete Register Data (Bulk)	User can delete Register bulk data.
Delete Register Data	User can delete Register data. This permission allows specific users to delete an existing row. If a user has permission to Delete Register Data, they also have Edit Register Data permission.
Manage Transfers	User can execute transfers and is not data dependent, meaning this role is not tied to column or member security. The user assigned to this action can apply the execution of transfers globally within any intersection of data. This action is only available in the Workforce Planning configuration.
View Audit Log	User can view the Audit Log.
Manage Filters	User can create, edit, copy or delete Register filters.
Calculate Plan	User can calculate plan data.
View Plan	User can view plan data.
Lock Plan	User can lock plans.
Unlock Plan	User can unlock plans.

Actions	User Function
Manage Plans	User can create, edit, copy, calculate or delete plans.
View Drivers	User can view Global Drivers, Lookup Drivers and Cube Drivers.
Manage Drivers	User can import Global Drivers, Lookup Drivers and Cube Drivers.
View Formulas	User can view formulas.
Manage Formulas	User can create, edit, copy or delete formulas.

## Configuration

The configuration option enables you to import a file that already contains solution settings from a different instance or another application and apply them automatically. The naming of the configurations is based on the specific planning use case:

- **LIMA1** - First instance and schema Fixed Term Planning
- **LIMB1** - First instance and schema of Workforce Planning
- **LIMC1** - First instance and schema of Duration Based Planning

**IMPORTANT:** You cannot import a configuration file into a planning instance that was created from a different planning configuration. For example, you cannot import a Workforce Planning configuration file into a Fixed Term Planning instance of the solution.

1. From the main Setup Wizard dashboard, select the **Import File** button to begin the setup process. You can only access the import of a configuration file during the Setup Wizard process.
2. Select the file you want to import and then select the **Open** button.

**NOTE:** When you import a configuration, Cube Driver and Lookup Driver values won't display in the preview table until you add Register data. Your Cube Driver or Lookup Driver is trying to compare values that are in the Register against values that are in a Cube or Lookup table so data needs to exist in the Register for that comparison to happen.

## Map Invalid Members

When importing a configuration file, the system detects Plan and Cube Driver member IDs or member names that do not exist in the target application. To help administrators resolve these issues before the configuration loads, a mapping dialog identifies invalid Plan members and allows them to be mapped to valid members within the application. A Cube Drivers tab also displays any invalid members, but is only informational and will require updates after the configuration loads. See [Cube Driver Invalid Members](#) for information on resolving invalid members.

To map invalid Plan members, follow the legend and corresponding instructions:

## Setup and Installation

**Map Invalid Members** ✕

PLAN(S) CUBE DRIVER(S)

Invalid Member(s) in the configuration file are detected and can be mapped to a valid Member within the table below (invalid member may pertain to the ID and/or the member name). The Select Valid Member dropdown populates based on the members available in your application. To map, select the valid member from the dropdown for items populated in the table below and click Save. If you close this prior to completing the mapping, you can remap the invalid member name editing the Plan via the Calculate & Analyze dashboard.

Plan(s)					
Dimension	Plan Name	Invalid Member Name	Config	Select Valid Member	
1	Scenario	Test 2	Modeling ScenariosV1	*MemberID/Name combination not found*	2
	Scenario	Test 3	PriorForecasting	*MemberID not found*	3

The image shows a screenshot of the 'Map Invalid Members' dialog box. It contains a table with columns: Dimension, Plan Name, Invalid Member Name, Config, and Select Valid Member. The first row is selected, and a dropdown menu is open for the 'Select Valid Member' cell, showing options: None, ACM\_Import, Actual, Actual Scenarios, and ActualAR. Numbered callouts 1 through 4 indicate the steps: 1. Select a row, 2. Select the Select Valid Member cell, 3. Select a valid member, and 4. Select the Save icon.

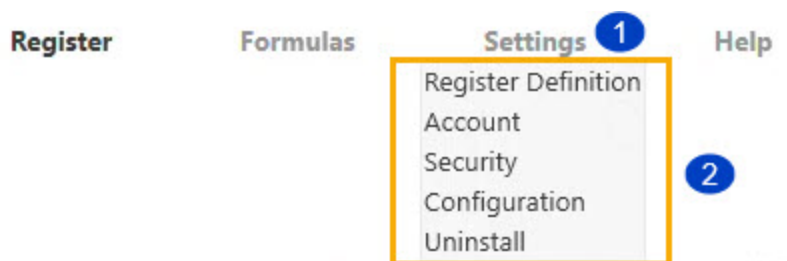
1. Select a row.
2. Select the Select Valid Member cell.
3. Select a valid member.
4. Select the Save icon.

After closing the mapping dialog, the configuration continues to load and the Plan members map correctly.

# Settings

In OneStream's Line Item Modeling solution, the Settings drop-down menu enables the Line Item Modeling solution administrator to access the settings for Register Definition, Accounts, and Security. If further adjustments need to be made to the settings, you can do so from the respective dashboards. In addition to accessing your current solution configuration, this solution offers a way to export your configuration and apply it to another application or instance. See [Configuration](#). As an administrator, you can export your configuration JSON file to capture additional settings, such as [Global Drivers](#), [Cube Drivers](#), [Lookup Drivers](#) or [Formulas](#), which are detailed in the documentation. The standard Uninstall Full option is available in Settings as well. See [Uninstall](#).

To access the settings menu, follow the legend and corresponding instructions:



1. Hover your cursor over the **Settings** menu.
2. Choose from the following settings menus: Register Definition, Account, Security, Configuration, and Uninstall.

# Register Definition

The Register Definition menu enables you to add new member definitions and make row and column updates to your Register Definition. After your changes are made you can click the **Save** button on the Register Definition table and your changes will only be reflected in the Register Definition table. To save your changes and apply them throughout the solution, click the **Update** button. If you update a data type, you are notified that the Register data will be removed because a new structure for the Register Definition has been established and you can either proceed or cancel.

**NOTE:** To change the start and end date assignments, Register data must be removed.

Register Definition

Register Definition: PPL\_UKG\_SmallData-StartEnd.csv

Register Field Name	Display Name	Data Type	Date Assignment	Allow Updates	Required Column	Member Definition	Parameter Name
EmployeeID	EmployeeID	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
Instance	Instance	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
FirstName	FirstName	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
LastName	LastName	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
Entity	Entity	String		<input type="checkbox"/>	<input type="checkbox"/>	E#Top.Base	Not Used
Region	Region	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
CostCenter	CostCenter	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
Title	Title	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
Status	Status	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
FTE	FTE	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used
StartDate	Start Date	Date	Start Date	<input type="checkbox"/>	<input type="checkbox"/>		Not Used
EndDate	End Date	Date	End Date	<input type="checkbox"/>	<input type="checkbox"/>		Not Used
Grade	Grade	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used

Member Definition:

Control List: Grade

Stored Va... : Display V...





There are built-in validations preventing you from moving forward if there is missing or incorrect information entered in the Register Definition table or control list table. Some examples are:

- You are missing a display name
- You have two different dimensions being used in the same column
- You have control list values that don't match the data type of the Register column

# Register Definition Table



In the Register Definition table, you can insert a new row, remove row, cancel all changes prior to saving and save any updates without having to do a bulk .csv file import of Register fields. Once your changes have been saved and you click the **Update** button, your Register reflects the updates made in the Register Definition.

Use the following icons to reorder your Register Definition columns:

-  Move to top
-  Move up one
-  Move down one
-  Move to bottom



Click the **Update** button to apply your changes.

The column order defined in the Register Definition table is applied throughout the solution. When a new row is added or the .csv file is reloaded, any new fields or fields in use will automatically be shifted to the bottom of the Register Definition and, by default, display on the far right side of the Register. The grid component will allow you to modify your column order in its saved state.

- To Insert a Register row, click the  button. Enter the Register field and display name and update any other column attributes.
- To remove a Register row, click the  button.

## Settings


---

- To cancel all changes prior to saving, click the  button.
- To save, click the  button.

**NOTE:** There may be instances that will prevent an update to your Register Definition in which you will receive a message that describes why it's prevented. For example, if you are trying to delete a Register Field that is in-use, you will receive a message stating where it's being used (a Register Filter Group, Driver, or Formula).

## Control List Table

In the Control List table, you can perform the following actions:

Control List: Grade 1   
Import

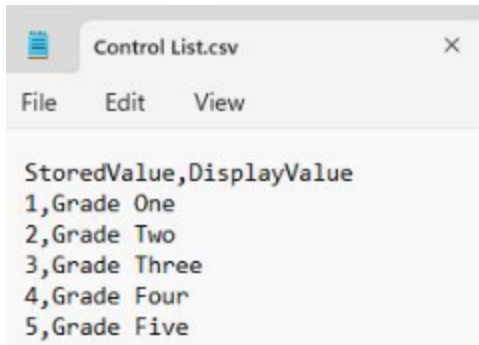
2 3 4 5

Stored Value	Display Value
1	Grade Level 1
2	Grade Level 2

## Settings

---





1. Import a .csv file. Example:



**NOTE:** File must have the Stored Value and Display Value columns in that order. Importing a .csv file enables you to load many control list values at once.


2. Insert Row
3. Delete Row(s)
4. Cancel all changes prior to saving
5. Save

Use the following icons to reorder your control list values:

-  Move to top
-  Move up one
-  Move down one
-  Move to bottom

## Settings

---

Click the **Update** button to apply your changes. You can also use the Sort icon  to sort by ascending or descending order.

The control list table enables you to input a stored value and display value to manage control list values with greater detail and description. The data type selected in the Register Definition must match the data type of the control list values. You cannot enter a date value in a control list.

**NOTE:** You cannot remove control list values that are used in a Register filter group or formula.

If you make an update in the Control List table and click the **Save** button, the updated control list values will only be reflected in the Register Definition.

**IMPORTANT:** Once the changes have been saved, if you want the update to be reflected throughout the solution, click the **Update** button.

## Account

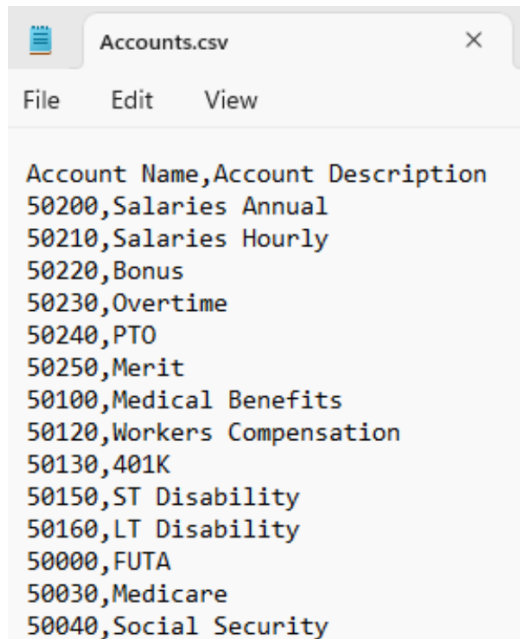
The Account menu enables you to view, import, add, update, and remove accounts. After any updates are made, click the **Save** button.

Click the **Import** button to load any bulk changes to your .csv file.

Example:

## Settings

---

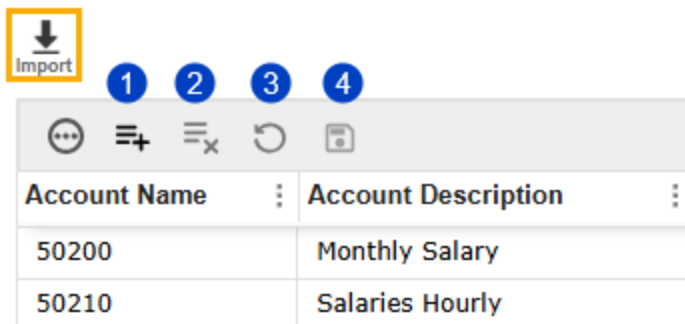


```
Account Name,Account Description
50200,Salaries Annual
50210,Salaries Hourly
50220,Bonus
50230,Overtime
50240,PTO
50250,Merit
50100,Medical Benefits
50120,Workers Compensation
50130,401K
50150,ST Disability
50160,LT Disability
50000,FUTA
50030,Medicare
50040,Social Security
```

**NOTE:** If an account is currently being used in a formula, the account automatically remains in the table. All other accounts are removed, and the table then includes the new .csv file as well as the accounts used in formulas.

In the Accounts table, you can perform the following actions:

### Account



Import

- 1
- 2
- 3
- 4

Account Name	Account Description
50200	Monthly Salary
50210	Salaries Hourly

## Settings

---

1. Insert Row
2. Delete Row(s)
3. Cancel all changes prior to saving
4. Save

**NOTE:** You cannot remove an account that is used in a formula; however, you can edit the Account Description of an account that is currently being used in a formula.

## Security

Security in OneStream's Line Item Modeling solution is a fundamental component designed to protect sensitive data and ensure access control. The Security Groups feature enables administrators to define access levels and permissions for each user or user group, providing granular control over who can perform specific actions, access certain pages, or view and edit data. Furthermore, OneStream's Line Item Modeling solution complies with industry-standard security protocols, ensuring your data is safeguarded according to best practices. This robust security framework enables organizations to leverage the power of the Line Item Modeling tool confidently, knowing their data is well-protected.

**NOTE:** Line Item Modeling enforces nested security, evaluating parent-level security first to allow access before child-level security is applied.

You can add, save, edit, or remove Security Groups. Multiple security groups can be assigned to Actions or Register Columns for more control of what users can have access to. The Register Columns shown are based on the .csv file load from the Register setup.

For additional information on updating security groups for Actions, Register Columns and Control List values, see [Security Setup](#).

# Settings

People Planning

Register

Formulas

Settings

Help

Security

Actions Register Columns

Actions	Security Group
Add Register Data...	Administrators
Edit Register Data	Administrators
Delete Register D...	Administrators
Delete Register D...	Administrators
Manage Transfers	Administrators
View Audit Log	Administrators
Manage Filters	Administrators
Calculate Plan	Administrators
View Plan	Administrators
Lock Plan	Administrators
Unlock Plan	Administrators
Manage Plans	Administrators
View Drivers	Administrators
Manage Drivers	Administrators
View Formulas	Administrators
Manage Formulas	Administrators

Search:

- Administrators
- Everyone
- Test

**NOTE:** The Manage Transfers action is only available on the Workforce Planning configuration.

# Configuration

Configuration enables you to package and reuse the current settings of your solution, such as: Register Definition, accounts, security, Register group filters, Global Drivers, Cube Drivers, Lookup Drivers, Formulas and Plan criteria. Using a Configuration can be helpful when switching from a development environment to a production environment, allowing for faster implementation and less manual setup.

The naming of the configurations is based on the specific planning use case:

- **LIMA1** - First instance and schema Fixed Term Planning
- **LIMB1** - First instance and schema of Workforce Planning
- **LIMC1** - First instance and schema of Duration Based Planning

**IMPORTANT:** The Audit Log, Register and Plan data cannot be exported with a configuration file.

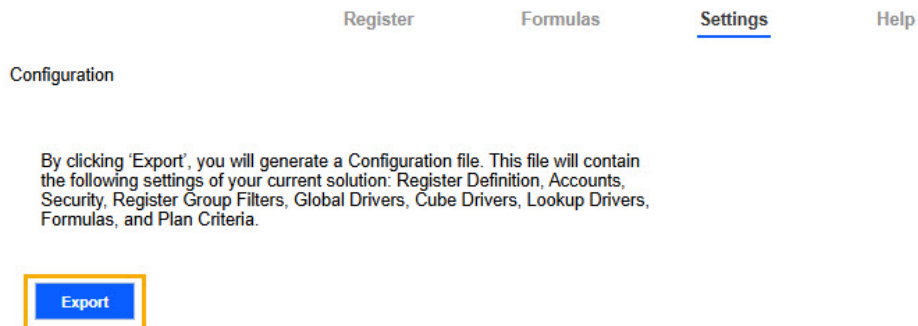
**NOTE:** When you import a configuration, Cube Driver and Lookup Driver values won't display in the preview table until you add Register data. Your Cube Driver or Lookup Driver is trying to compare values that are in the Register against values that are in a Cube or Lookup table so data needs to exist in the Register for that comparison to happen.

To export a configuration, follow these instructions:

## Settings

---

1. Click the **Export** button.



2. In the File Explorer, select the folder location to store the configuration file, and click the **Select Folder** button.

**NOTE:** A placeholder file name is given to the configuration file in the following format: Solution/Type Code/Instance\_Configuration\_Version Number\_Timestamp. For example, LIMB6\_Configuration\_v1\_20250929-1115.json.

## Uninstall

To uninstall a planning configuration, follow the instructions:

1. Hover your cursor over the **Settings** menu.
2. In the drop-down menu, select **Uninstall**.
3. Click the **Uninstall Full** or **Uninstall UI** button.

## Settings

---

- Use the **Uninstall Full** button to remove all related data tables, data, workspaces and workspace components, but retain business rules.
- Use the **Uninstall UI** button to remove all dashboards, but retain databases, related tables and business rules.

**IMPORTANT:** A dialog box will display to confirm if you want to proceed.

### Uninstall

The 'Uninstall UI' option removes all dashboards, but databases and related tables will remain intact.

The 'Uninstall Full' option removes all the related data tables, data, workspace and workspace components.

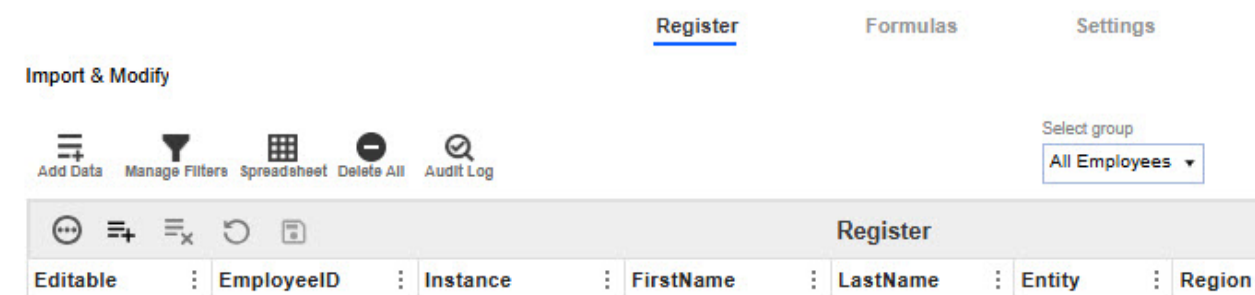
Uninstall UI

Uninstall Full

**IMPORTANT:** The Uninstall UI option retains business rules and extenders in the application. The Uninstall Full option removes all solution components including business rules and extenders. Business rules or extenders created outside of Line Item Modeling that are referenced by Line Item Modeling are not removed during either uninstall option.

# Register

The Register in planning and management is usually a record keeping tool that tracks various details and data points. In the context of Workforce Planning, it refers to a tool for managing details about personnel, such as their roles, skills, and schedules. It might be used in human resources or project management to ensure that the right personnel are allocated to the right tasks. You can import and modify data and then calculate and analyze that data to make decisions about various types of planning.



## Import and Modify

There are two options for importing data into the solution: using a .csv file or a connector.

1. Prepare your data: Before importing, ensure your data is in the correct format.

### CSV import:

Organize your data in a .csv file, with each column representing a different data point (for example, name, role, schedule), and each row representing a different individual.

The following delimiters can be used in a .csv file import:

## Register

---

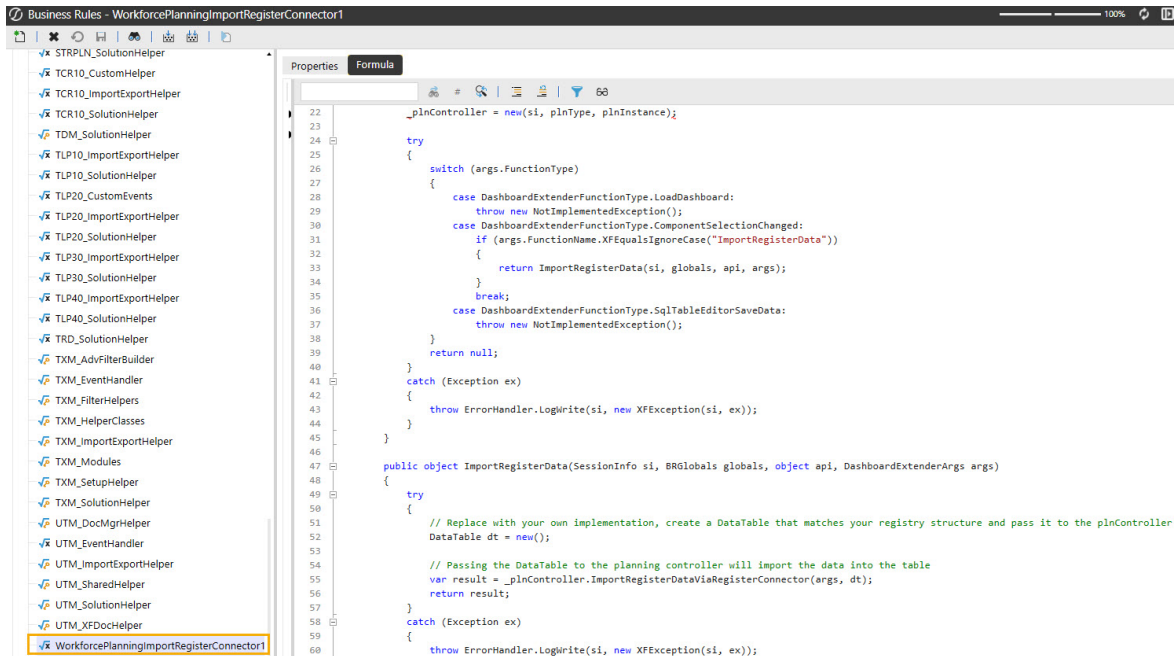
- ,
- ;
- \t
- |
- :

### Connector:

The connector option uses a business rule to connect to an external source like an HR system.

An application business rule template is preconfigured for loading from a connector but requires you to replace information with your own implementation to populate the Register structure. Each instance of a configuration has its own business rule. To access this business rule template, go to **Application > Business Rules > DashboardExtender** and then locate your planning configuration import Register connector instance [ConfigurationName]ImportRegisterConnector[InstanceNumber]. See the example below for the first instance of the Workforce Planning configuration (WorkforcePlanningImportRegisterConnector1):

## Register



The screenshot shows the Business Rules editor interface. On the left is a tree view of solution helpers, with 'WorkforcePlanningImportRegisterConnector1' selected and highlighted in orange. The main area displays the 'Formula' tab for this connector. The code is as follows:

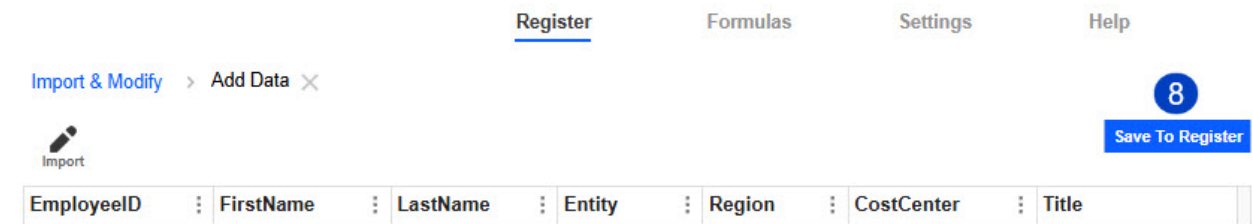
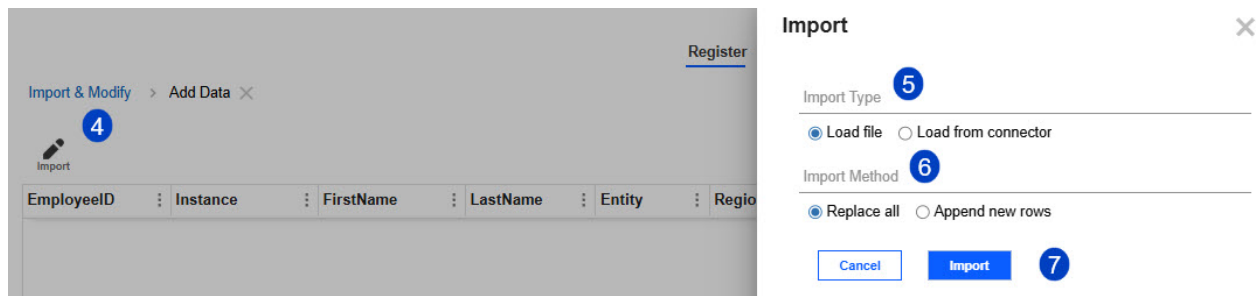
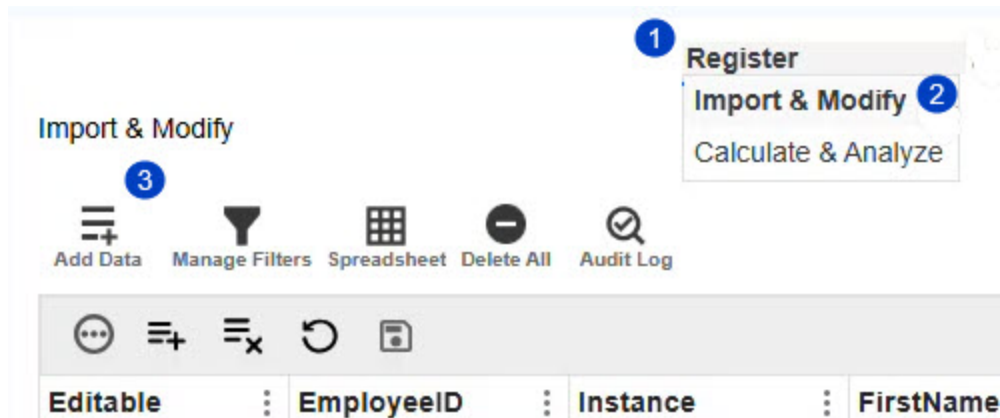
```
22  _pinController = new(si, pinType, pinInstance);
23
24  try
25  {
26      switch (args.FunctionType)
27      {
28          case DashboardExtenderFunctionType.LoadDashboard:
29              throw new NotImplementedException();
30          case DashboardExtenderFunctionType.ComponentSelectionChanged:
31              if (args.FunctionName.XFEqualsIgnoreCase("ImportRegisterData"))
32              {
33                  return ImportRegisterData(si, globals, api, args);
34              }
35              break;
36          case DashboardExtenderFunctionType.SqlTableEditorSaveData:
37              throw new NotImplementedException();
38      }
39      return null;
40  }
41  catch (Exception ex)
42  {
43      throw ErrorHandler.LogWrite(si, new XFException(si, ex));
44  }
45
46
47  public object ImportRegisterData(SessionInfo si, BRGlobals globals, object api, DashboardExtenderArgs args)
48  {
49      {
50          try
51          {
52              // Replace with your own implementation, create a DataTable that matches your registry structure and pass it to the pinController
53              DataTable dt = new();
54
55              // Passing the DataTable to the planning controller will import the data into the table
56              var result = _pinController.ImportRegisterDataViaRegisterConnector(args, dt);
57              return result;
58          }
59          catch (Exception ex)
60          {
61              throw ErrorHandler.LogWrite(si, new XFException(si, ex));
62          }
63      }
64  }
```

2. Import your data: Navigate to the import function in your planning Register and load from a local file or an external source. You can import a file and replace all the current data or only add new rows of data by selecting the append new rows option.
3. Map your data: The solution compares the fields used in your import to the fields that are defined in your Register Definition. If they match, the data loads into the Add data stage table. If they do not match, the system will consider that column name as invalid. The stage table in the Add Data breadcrumb is utilized to validate the data being imported. The validation checks that the date type matches, invalid members are not imported and duplicate line items do not exist.
4. Complete the import: Once everything is correctly mapped and all data validations are successful, save the Register. The system will populate the Register with your data and the stage table will be cleared.

## Add Data to Register

To add data to the Register, follow the legend and corresponding instructions:

## Register



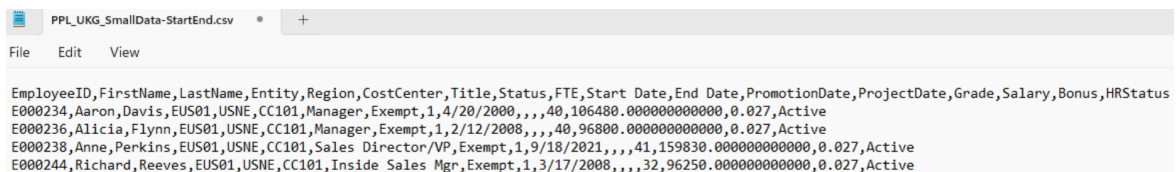
1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Import & Modify**.
3. Click the **Add Data** button.
4. Click the **Import** button.
5. In the Import pane, select an import type:

## Register

---

- a. Select the **Load file** checkbox to load data from a local file.
  - b. Select the **Load from connector** checkbox to load data from an external source.
6. In the Import pane, select an import method:
- a. Select the **Replace all** checkbox to replace all data in the Register.
  - b. Select the **Append new rows** checkbox to only add new rows of data to the Register.
7. Click the **Import** button and upload a file.

Example:



```
EmployeeID,FirstName,LastName,Entity,Region,CostCenter,Title,Status,FTE,Start Date,End Date,PromotionDate,ProjectDate,Grade,Salary,Bonus,HRStatus
E000234,Aaron,Davis,EUS01,USNE,CC101,Manager,Exempt,1,4/20/2000,,,40,106480.000000000000,0.027,Active
E000236,Alicia,Flynn,EUS01,USNE,CC101,Manager,Exempt,1,2/12/2008,,,40,96800.000000000000,0.027,Active
E000238,Anne,Perkins,EUS01,USNE,CC101,Sales Director/VP,Exempt,1,9/18/2021,,,41,159830.000000000000,0.027,Active
E000244,Richard,Reeves,EUS01,USNE,CC101,Inside Sales Mgr,Exempt,1,3/17/2008,,,32,96250.000000000000,0.027,Active
```

8. Click the **Save To Register** button.

Validations upon import ensure your data is correctly formatted and matches what was set up for the solution, such as:

- **Register column definition:** You have a column in your import file that is not defined in the solution.
- **Duplicate column:** You have duplicate column headings or values.
- **Data type:** You have an incorrect data type in one of your columns.
- **Control list:** You have values in a column that do not match the control list values for that column.
- **Connector:** You do not have a connector implemented correctly.

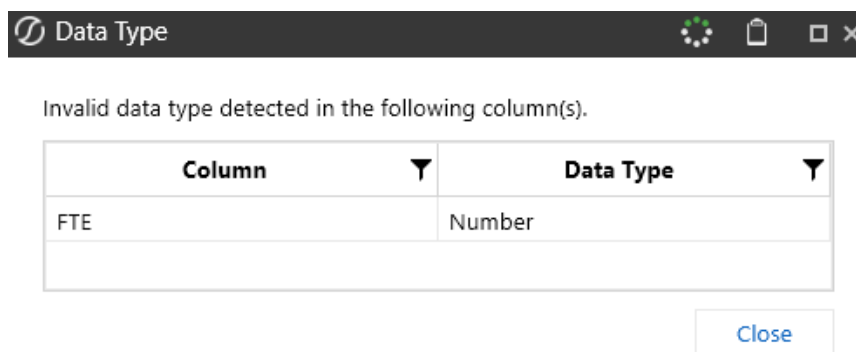
## Register

---

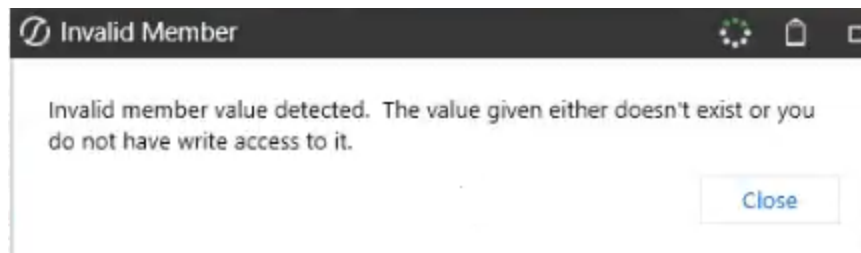
- **Required column:** You do not have data in your required column.
- **Invalid Value:** You have incorrect cultural date or number format values.

Validations upon editing ensure your information does not get removed or go against any preselected attributes of the solution.

- If you input the wrong value type in a cell, for example, you enter letters in a column that should only have numbers, a dialog box opens informing you of an error.



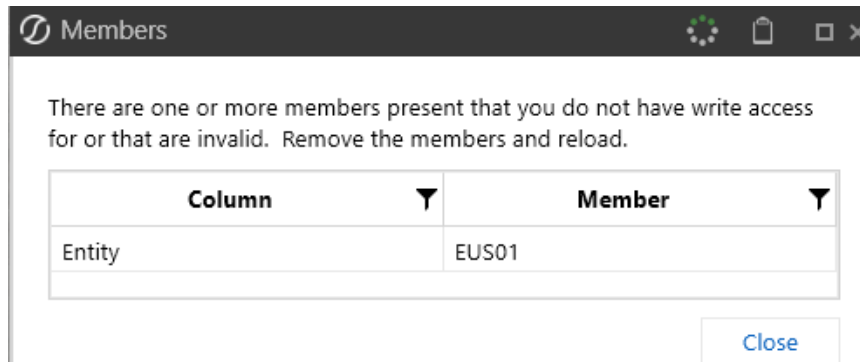
- If you try to add or replace any data for a column that has a member definition that you do not have write access to, a dialog box displays and your change is unsaved. Resolve any issues before saving again because the solution will not complete a save until all edits are valid.



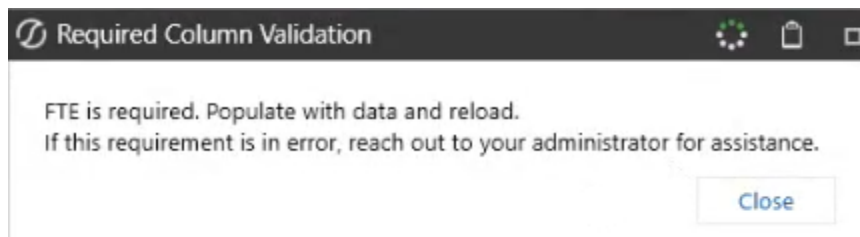
## Register

---

- If you try to load and then save a new .csv file that has members that you are not permitted to edit, a dialog box will display. Only the entities that you have write access to will be updated and will replace the previous data.



- If you are missing values in a required column, a dialog box displays.



If you import a .csv file with numbers used at the beginning of a column name or spaces used in a column name, the application automatically adds the prefix of **Col\_** to ensure the import is usable and compatible with the solution.

**NOTE:** If you import a .csv file that has different member definitions than what you defined in the **Setup Wizard** or **Configuration** import, a dialog box displays informing you of an invalid member.

### Modify Data in the Register

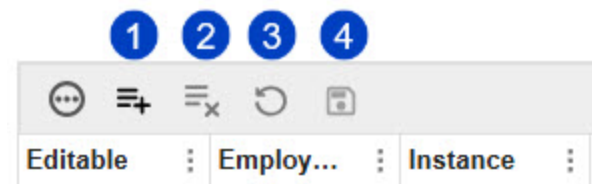
1. **Locate the data:** Navigate to the data you want to modify. This involves searching for a specific individual or record, or filtering the Register to display certain data.
2. **Edit the data:** Once you've located the data, select the field you want to edit. This enables you to directly input new data or select from a drop-down menu. You must have security access to edit data.
3. **Save your changes:** After editing the data, ensure you save your changes. This is done by clicking **Save** button.

### Editing the Register

You can edit the Register by using the Register grid controls, Spreadsheet tool or the Excel Add-In.

#### Register

The Register uses the Dynamic Grid enabling you to add, remove, cancel all changes prior to saving, and save Register values. You can also select a cell in the Register and a list of drop-down values will display based on member definitions, control lists, or parameter values assigned from the Register Definition.



## Register

---

1. Insert Row

**NOTE:** When you insert a row, default values will automatically populate.

2. Delete Row(s)
3. Cancel all changes prior to saving
4. Save

All of these functions are tied to security access, so if you do not have security access to delete rows, you will not be able to perform that action. You can view the **Editable** column to verify which rows of information you have read/write access to. A checked box indicates read/write access. If you make edits to information you do not have access to, a dialog box displays and the information will remain.

### Spreadsheet Tool

The Spreadsheet tool opens a new page which enables you to make edits to your Register and not have to upload a new set of data every time you need to make an update. The tool enables you to edit a single cell, edit multiple cells at once, copy and paste from cell to cell, copy and paste a row to a new row, right-click and insert a row, and delete rows.

The spreadsheet tool also utilizes drop-down menus within cells in a column. These drop-down menus populate from control lists and parameters that have been assigned in the Register Definition for a quick way to make updates and avoid invalid entries.

To edit your Register using the Spreadsheet tool, follow the legend and corresponding instructions:

## Register

---

The screenshot shows the Register interface. At the top, there is a menu with three options: Register, Import & Modify, and Calculate & Analyze. The Import & Modify option is highlighted with a blue circle labeled '2'. Below the menu, there are five buttons: Add Data, Manage Filters, Spreadsheet, Delete All, and Audit Log. The Spreadsheet button is highlighted with a blue circle labeled '3'. Below these buttons, there is a toolbar with icons for undo, redo, and save. Below the toolbar, there is a table with columns: Editable, EmployeeID, Instance, and FirstName. Below the table, there is a search bar with the text 'Import & Modify > Edit Data' and a close button (X) highlighted with a blue circle labeled '5'. To the right of the search bar, there is a Save button highlighted with a blue circle labeled '4'. Below the search bar, there is a spreadsheet grid with columns B through G and rows 1 through 1. The header row contains the following text: EmployeeID, FirstName, LastName, Entity, Region, CostCenter, and Title.

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Import & Modify**.
3. Click the **Spreadsheet** button.
4. Complete edits and click the **Save** button.
5. Click the **X** button to navigate back to the Register read-only page.

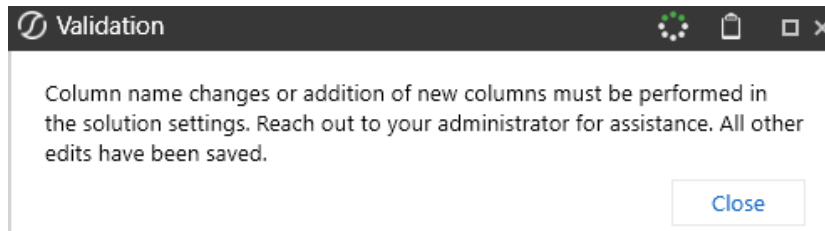
**NOTE:** When scrolling through your data, the header row remains fixed at top of the spreadsheet so you do not lose track of which column the information is in.

Certain validations are put in place to make sure your information does not get removed or go against any preselected attributes of the solution, such as:

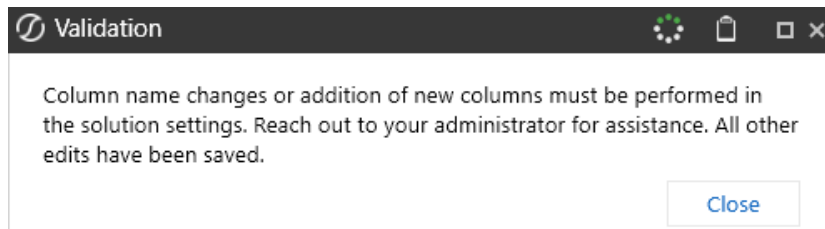
## Register

---

- Columns cannot be removed if selected column data is being used in a formula. To remove the column data, formula information must be updated to reflect the change you want to make.



- When editing the Register, you cannot update the column name or add a new column. If you right-click on a column, the Insert and Delete selections are unavailable. If changes are made to the column name and other row information, a dialog box displays and only the row information changes are saved.



### Excel Add-In

You can edit Register data directly through the Excel Add-In which provides a streamlined, spreadsheet-based editing experience without navigating into the Line Item Modeling solution. See "Excel-Add-In" in the *Design and Reference Guide*.

To access Register data in Excel:

## Register

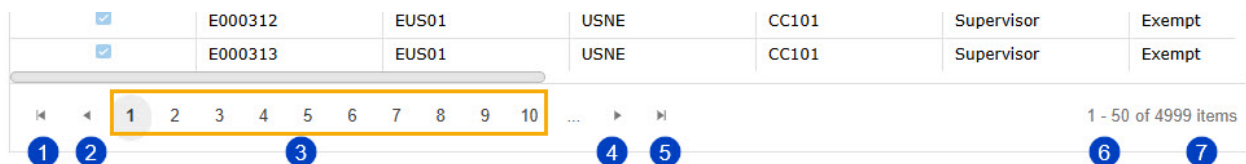
---

1. On the Onestream tab in Excel, click the **Log In** button.
2. Sign in to the OneStream application, then click the **Table Views** button.
3. In the Table View Definitions dialog box, click the **Add** button.
4. In the **Name** field, enter RegisterEditor.
5. In the **Table View Business Rule** field, click the ellipses icon to select the workspace business rule for a Line Item Modeling instance.
6. Click the **OK** button.

The table view automatically filters the displayed records so you only see items you have read/write access for. Updates flow through to the Line Item Modeling Register, and each modification is recorded in the audit log. Given you have permission for the actions in the instance Security Model, you can delete, add or edit row data.

## View Data

To view your Register data or plan data, use the pagination tools. Users are only able to view the Register information they have security access to.



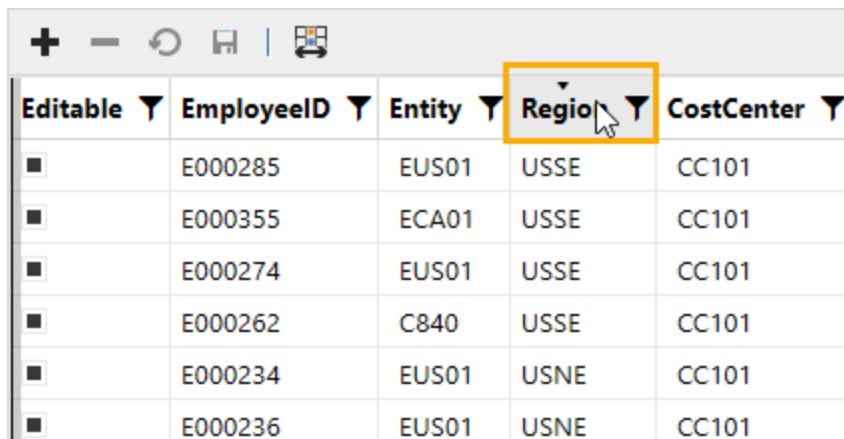
1. Skip to the first
2. Navigate to the previous page
3. Select a page
4. Navigate to the next page
5. Skip to the last page

## Register

---

6. Number of rows
7. Total number of rows

Select a column header to sort a column in ascending or descending order.



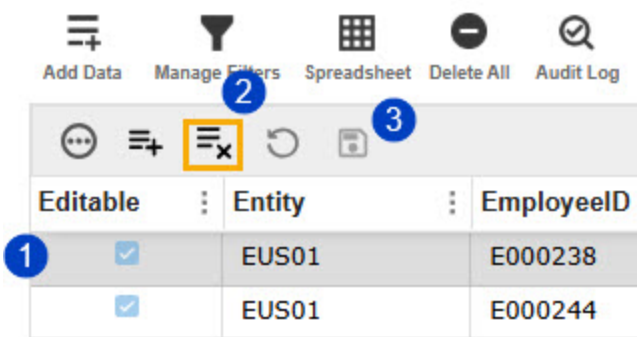
The screenshot shows a table with a toolbar at the top containing icons for expand, collapse, refresh, save, and print. The table has five columns: Editable, EmployeeID, Entity, Region, and CostCenter. The 'Region' column header is highlighted with a yellow box, and a mouse cursor is pointing at it. The table contains six rows of data.

Editable	EmployeeID	Entity	Region	CostCenter
<input type="checkbox"/>	E000285	EUS01	USSE	CC101
<input type="checkbox"/>	E000355	ECA01	USSE	CC101
<input type="checkbox"/>	E000274	EUS01	USSE	CC101
<input type="checkbox"/>	E000262	C840	USSE	CC101
<input type="checkbox"/>	E000234	EUS01	USNE	CC101
<input type="checkbox"/>	E000236	EUS01	USNE	CC101

## Delete Rows

To delete rows in the Register, you must have security access.

To delete a row, follow the legend and corresponding instructions:



The screenshot shows a toolbar with icons for Add Data, Manage Filters, Spreadsheet, Delete All, and Audit Log. Below the toolbar is a table with three columns: Editable, Entity, and EmployeeID. The 'Editable' column has checkboxes. A yellow box highlights the 'Delete Row' icon (a list with an 'x') in the toolbar, and a blue circle '2' is next to it. A blue circle '1' is next to the first row's checkbox, and a blue circle '3' is next to the 'Delete Row' icon. The table contains two rows of data.

Editable	Entity	EmployeeID
<input checked="" type="checkbox"/>	EUS01	E000238
<input checked="" type="checkbox"/>	EUS01	E000244

## Register

---

1. Select a row.
2. Click the **Delete Row(s)** button.
3. Click the **Save** button.

## Delete All Rows

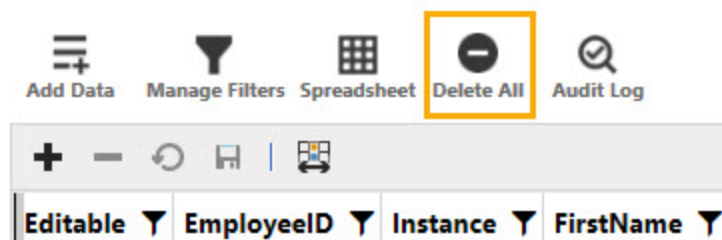
To delete all rows in the Register using the Delete All action, you must have the Delete All Register Rows (Bulk) action permission.

**IMPORTANT:** The Delete All action deletes all rows, not just the rows you have write access to.

To delete all rows, click the **Delete All** button. A validation message displays to confirm the deletion.

**NOTE:** Plan data and Register filter groups will remain.

### Import & Modify

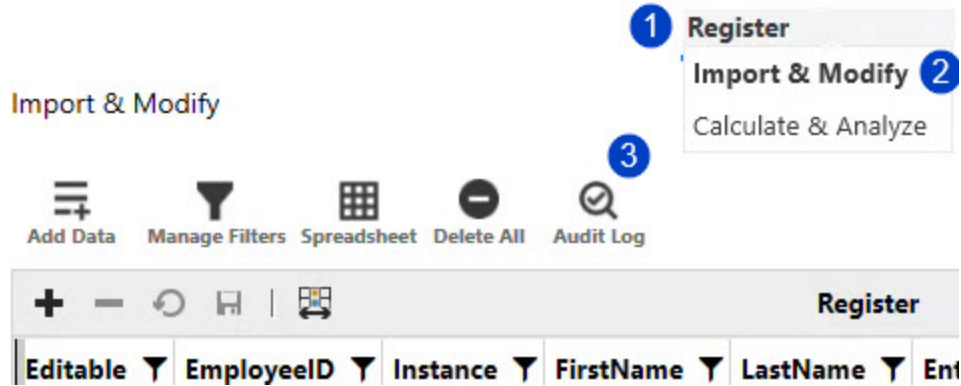


## Audit Log

The Audit Log provides a detailed history of data changes in the Register and allows you to track who made them. It is read-only and can be viewed if you have security access. Only saved changes display in the Audit Log.

## Register

To view the Audit Log, follow the legend and corresponding instructions:



1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Import & Modify**.
3. Click the **Audit Log** button and a new page opens.

Audit Log						
Type	Source	Original Data	Changed Data	User	Date/Time	
Delete All	Grid/Spreadsheet	NA		Admin	5/28/2025 1:46:32 PM	
Update	Grid/Spreadsheet	EmployeeID=E000236, Instance=0.00000, FirstName=Alicia, LastName=, Entity=EUS01, Region=USNE, CostCenter=CC101, Title=Manager, Status=Exempt, FTE=1.00000, StartDate=Feb 12 2008 12:00AM, EndDate=, Grade=40.00000, Salary=96800.00000, Hourly=, Bonus=0.02700, HRStatus=Active, Reason=	Region=USSE	Admin	5/28/2025 1:46:12 PM	
Insert	Grid/Spreadsheet		EmployeeID=, Instance=0.00000, FirstName=Mark, LastName=, Entity=EUS01, Region=USSE, CostCenter=CC101, Title=, Status=, FTE=1.00000, StartDate=Jan 1 1900 12:00AM, EndDate=Jan 1 1900 12:00AM, Grade=0.00000, Salary=0.00000, Hourly=0.00000, Bonus=0.00000, HRStatus=, Reason=	Admin	5/28/2025 1:46:12 PM	
Delete	Grid/Spreadsheet	EmployeeID=E000234, Instance=0.00000, FirstName=Aaron, LastName=, Entity=EUS01, Region=USNE, CostCenter=CC101, Title=Manager, Status=Exempt, FTE=1.00000, StartDate=Apr 20 2000 12:00AM, EndDate=, Grade=40.00000, Salary=106480.00000, Hourly=, Bonus=0.02700, HRStatus=Active, Reason=		Admin	5/28/2025 1:46:12 PM	

The Audit Log displays the following columns:

## Register

---

- Type: Displays the type of change made such as Delete, Delete All, Update, Insert, Transfer or Import.

**NOTE:** The Audit Log history will remain when the Delete All action is used.

- Source: Displays the source of the change such as Grid, Spreadsheet, Append-File, Replace all-File, Replace all-connector or Append-connector.
- Original Data: Displays all column values of the original data.
  - If data is inserted, the Original Data cell is blank since there is no previous information.
  - If data is imported by a file or a connector, the Original Data cell displays NA.
  - If the Delete All action is used, the Original Data cell is blank since all data was removed.
  - If the Transfer feature is used, the Original Data cell is blank since a new row is added to the Register once a transfer is complete.
- Changed Data: Displays the specific changed data.
  - If the specific data is removed or the Delete All action is used, the Changed Data cell is blank since the data was removed.
  - If data is imported by a file or a connector, the Changed Data cell displays NA.
  - If data is inserted, the Changed Data cell displays all column values of the new data.
- User: Displays who made the change.
- Date/Time: Displays when the change was made.

### Transfer

The Transfer feature enables you to manage employee transfers between different parts of your business such as departments, entities or cost centers and execute the transfer in the Register. When you click the transfer button, a separate transfer pane opens for editing the employee Register information. Only users with the Manage Transfers action security permission can utilize the Transfer feature and view the transfer changes in the Register.

**IMPORTANT:** The Transfer feature is only available in the Workforce Planning configuration.

### Execute Transfer

To execute a transfer, follow the legend and corresponding instructions:

## Register

Import & Modify

Add Data Manage Filters Spreadsheet Delete All Audit Log Transfer

Select group  
All Employees

Editable	Entity	Employee...	Region	CostCenter
<input checked="" type="checkbox"/>	EUS01	E000234	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000236	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000238	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000244	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000248	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000248	USNE	CC102
<input checked="" type="checkbox"/>	EUS01	E000250	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000253	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000261	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000262	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000274	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000285	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000293	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000305	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000312	USNE	CC101
<input checked="" type="checkbox"/>	EUS01	E000313	USNE	CC101

Register Fields	Values
Entity	EUS01
Region	USNE
CostCenter	CC101
Title	Manager
Status	Exempt
FTE	1.00000
Start Date	04/20/2000
Grade	40.00000
Salary	106480.00000
Bonus	0.02700
HRStatus	Active

1

2

3

4

Cancel Execute Transfer

1. Click the **Transfer** button. The Transfer pane opens.
2. In the Register, select a row.
3. In the Transfer pane, update Register fields.

**NOTE:** You have access to Register fields that have the Allow Updates or Required column enabled in the Register Definition.

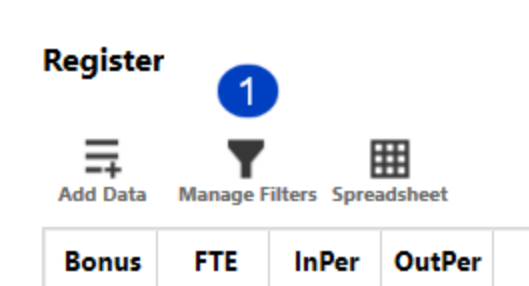
4. Click the **Execute Transfer** button. A new row is added to the bottom of the Register.

**NOTE:** The start date of the Transfer becomes the end date of the initial row.

## Manage Filters

After a Register is saved, you can use the **Manage Filters** button to set specifications to populate distinct sets of information. You can select a variety of factors in the filter tool to create new conditions or groups.

To create a new filter, follow the legend and corresponding instructions:



## Register

---

The screenshot shows the 'Filter Group Manager' interface. At the top, there are icons for 'Add Data', 'Spreadsheet', 'Delete All', and 'Audit Log'. The main area is a white box with a close button (X) in the top right. Inside this box, there is a red 'And' button with a plus sign to its right (callout 2). Below this, there is a filter condition: a grey 'x' button, a blue 'FirstName' button (callout 4), a green 'Equals' button (callout 5), and a grey 'aaron' button (callout 6). At the bottom of the box is a blue '7' callout. Below the box are two buttons: a dark grey 'APPLY' button and a white 'CLEAR' button. Below the buttons is a text input field labeled 'Filter group name:' with a plus icon, a refresh icon, and a trash icon to its right.

1. Click the **Manage Filters** button and a new pane will open.
2. Click the **And** button and a drop-down menu will open to display options: And, Or.
3. Click the plus button to display options: Add Condition or Add Group.

**NOTE:** For the Windows application, select the drop-down arrow next to the plus icon to display the options.

## Register

---

4. Click the first box to display a drop-down menu of your columns. Make a selection.
5. Click the second box to display a drop-down menu of operations. Make a selection.
6. Click the third box, and type in the value you want to filter for.
7. Click the **Apply** button.

After the filter has finished running, your Register view displays the filtered data as well as an updated row and page count.

## Save a Filter

To reuse a filter, save it as a group and avoid recreating filters.

To save a filter as a group, follow the legend and corresponding instructions:

# Register

Import & Modify

Add Data Spreadsheet Delete All Audit Log Transfer

3 Select group  
All Employees

### Filter Group Manager

And +

EmployeeID Equals <enter a value>

APPLY CLEAR

Filter group name: 2

1

Editable	Entity	Employee...	Region
<input checked="" type="checkbox"/>	EUS01	E000234	USNE
<input checked="" type="checkbox"/>	EUS01	E000236	USNE
<input checked="" type="checkbox"/>	EUS01	E000238	USNE
<input checked="" type="checkbox"/>	EUS01	E000244	USNE
<input checked="" type="checkbox"/>	EUS01	E000248	USNE
<input checked="" type="checkbox"/>	EUS01	E000248	USNE
<input checked="" type="checkbox"/>	EUS01	E000250	USNE
<input checked="" type="checkbox"/>	EUS01	E000253	USNE
<input checked="" type="checkbox"/>	EUS01	E000261	USNE
<input checked="" type="checkbox"/>	EUS01	E000262	USNE
<input checked="" type="checkbox"/>	EUS01	E000274	USNE
<input checked="" type="checkbox"/>	EUS01	E000285	USNE
<input checked="" type="checkbox"/>	EUS01	E000293	USNE
<input checked="" type="checkbox"/>	EUS01	E000305	USNE
<input checked="" type="checkbox"/>	EUS01	E000312	USNE
<input checked="" type="checkbox"/>	EUS01	E000313	USNE
<input checked="" type="checkbox"/>	EUS01	E000314	USNE
<input checked="" type="checkbox"/>	EUS01	E000328	USNE
<input checked="" type="checkbox"/>	EUS01	E000338	USNE

1

1. With a filter created and applied, locate the text box at the bottom of the Filter Group Manager pane and add a name.
2. Click the **Add/Copy Filter Group** button.
3. The filter displays in the Select group drop-down menu.

## Copy a Filter

To copy a filter, follow the legend and corresponding instructions:

# Register

**Register** 1

≡ 🔍 📄  
 Add Data    Manage Filters    Spreadsheet

<b>Bonus</b>	<b>FTE</b>	<b>InPer</b>	<b>OutPer</b>
--------------	------------	--------------	---------------

## Import & Modify

≡ 📄 ⊖ 🔍 ↔  
 Add Data    Spreadsheet    Delete All    Audit Log    Transfer

Select group 2

All Employees ▾

**Filter Group Manager** ✕

And +

✕ EmployeeID Equals <enter a value>

APPLY CLEAR

Filter group name: 3

4 + ↺ 🗑️

Register			
Editable	Entity	Employee...	Region
<input checked="" type="checkbox"/>	EUS01	E000234	USNE
<input checked="" type="checkbox"/>	EUS01	E000236	USNE
<input checked="" type="checkbox"/>	EUS01	E000238	USNE
<input checked="" type="checkbox"/>	EUS01	E000244	USNE
<input checked="" type="checkbox"/>	EUS01	E000248	USNE
<input checked="" type="checkbox"/>	EUS01	E000248	USNE
<input checked="" type="checkbox"/>	EUS01	E000250	USNE
<input checked="" type="checkbox"/>	EUS01	E000253	USNE
<input checked="" type="checkbox"/>	EUS01	E000261	USNE
<input checked="" type="checkbox"/>	EUS01	E000262	USNE
<input checked="" type="checkbox"/>	EUS01	E000274	USNE
<input checked="" type="checkbox"/>	EUS01	E000285	USNE
<input checked="" type="checkbox"/>	EUS01	E000293	USNE
<input checked="" type="checkbox"/>	EUS01	E000305	USNE
<input checked="" type="checkbox"/>	EUS01	E000312	USNE
<input checked="" type="checkbox"/>	EUS01	E000313	USNE
<input checked="" type="checkbox"/>	EUS01	E000314	USNE
<input checked="" type="checkbox"/>	EUS01	E000328	USNE
<input checked="" type="checkbox"/>	EUS01	E000338	USNE

⏪ ⏩ 1 ⏪ ⏩

## Register

---

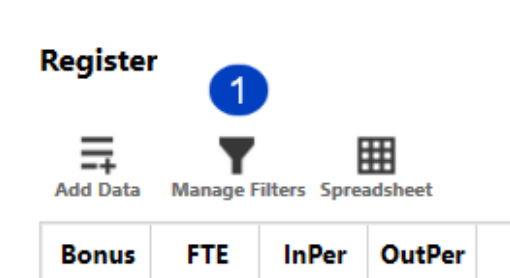
1. Click the **Manage Filters** button.
2. Select a filter group from the drop-down.
3. Add a new Filter Group Name.

**NOTE:** Filter Group Name must be unique.

4. Click the **Add/Copy Filter Group** button.

## Update a Filter

To update a filter, follow the legend and corresponding instructions:



## Register

---

The screenshot displays the Register application interface. At the top, there are navigation icons: 'Add Data', 'Spreadsheet', 'Delete All', and 'Audit Log'. A 'Select group' dropdown menu is set to 'Test'. The 'Filter Group Manager' dialog is open, showing a filter rule: 'And' (operator), 'FirstName' (field), 'Equals' (operator), and 'aaron' (value). Below the dialog are 'APPLY' and 'CLEAR' buttons. At the bottom, there is a 'Filter group name:' field with 'Test' and an 'Update Filter Group' button. To the right, a data table is visible with columns 'Editable' and 'EmployeeID'. The table contains one row with a checked checkbox and the value 'E000234'. A pagination control shows '1' of 1 items.

1. Click the **Manage Filters** button.

2. Select a filter group from the drop-down.

3. Update the filter criteria.

4. Click the **Apply** button.

5. Click the **Update Filter Group** button.

## Delete a Filter

To delete a filter, follow the legend and corresponding instructions:

The screenshot illustrates the process of deleting a filter in the Register application. It is divided into three numbered steps:

- Step 1:** The 'Manage Filters' icon in the top navigation bar is highlighted with a blue circle containing the number '1'. Below the navigation bar, a table with columns 'Bonus', 'FTE', 'InPer', and 'OutPer' is visible.
- Step 2:** The 'Filter Group Manager' dialog is open. It shows a filter rule: 'EmployeeID Equals E000234'. The dialog has 'APPLY' and 'CLEAR' buttons. In the background, the 'Register' application window shows a table with columns 'Editable', 'Entity', and 'Empl...'. A dropdown menu labeled 'Select group' is open, showing 'filter' as the selected option.
- Step 3:** The 'Filter group name' field in the 'Filter Group Manager' dialog is highlighted with a blue circle containing the number '3'. The field contains the text 'filter'.

1. Click the **Manage Filters** button.
2. Select a filter group from the drop-down.
3. Click the **Delete Filter Group** button.

**NOTE:** You cannot delete a filter group being used in a formula.

## Calculate and Analyze

1. **Use Built-in Calculation Functions:** Most planning registers or management software have built-in calculation functions. The Line Item Modeling solution offers DateDIFF (Month), DateDIFF(Year), DateDIFF(Day), IIF, CurrentPeriod, AND, OR, ISNULL, RollingPeriod, Like, and CurrentYear functions.
2. **Create Custom Formulas:** If the built-in functions are insufficient, you can create custom formulas. See [Formulas](#). This enables you to combine data in unique ways to identify insights, specific to your needs.
3. **Apply Calculations to Data Groups:** You can apply these calculations to specific groups of data created by the filter builder. For example, you might calculate the average skill level of employees in a certain department or the total hours worked by employees on a specific project.

## Analyze Data in the Planning Register

To narrow your analysis, you can filter and sort your data by using the Manage Filters button. See [Manage Filters](#). For example, you might filter to only show data from a certain time period or sort data by highest to lowest values. You can also add more Register columns to a plan for reference. See [Plan Data](#).

# Formulas

Formulas in OneStream's Line Item Modeling solution are used to leverage Global Drivers, Lookup Drivers, and Cube Drivers to create meaningful and accurate calculations and develop driver-based operational plans. They can be applied to a wide range of data fields, from basic arithmetic operations to complex business calculations.

Register   Formulas   Settings   Help

Formulas

New   Edit   Copy   Delete

Enabled	Calculation Name	Scenario Type	Account	Period	Register Group	Value Type	Calculation Definition
<input checked="" type="checkbox"/>	MthlySalary	All Scenario Types	50200 - Month...	M1,M2,M3,M4,...	Exempt Employees	Periodic	FTE*Salary/12
<input checked="" type="checkbox"/>	DisabilityBen	All Scenario Types	50150 - ST Dis...	M1,M2,M3,M4,...	All Employees	Periodic	MthlySalary*Disb Ins R

## Workforce Planning Use Case

This Use Case demonstrates the following situation:

- **Scenario:** Build a set of formulas to determine if the federal tax amount still applies for an employee in a specific month.
- **Role:** Implementer, Administrator
- **Benefits:** Formulas can be individually created and the accounts applied to the formulas can be used as dependencies or building blocks for more advanced formulas to calculate more complex data.

See [Workforce Planning FUTA Formula Use Case](#) for more information.

# Global Drivers

Global Drivers in OneStream's Line Item Modeling solution are key variables or factors that can be used in formulas. These drivers can be financial indicators that are common concepts across organizations, for example, merit, bonus, tax limits and percentages, benefit amounts, and vacation days. Global Drivers can be used when you have a static value that can be used across all time or dimensions (one driver with one value).

By using Global Drivers, organizations can align their planning processes, improve accuracy, and enhance the comparability of results across different units or departments. It is a powerful tool for strategic planning, budgeting, and forecasting, helping decision-makers understand the impact of various factors on the company's performance.

**IMPORTANT:** Any attribute named in the solution, such as Register Field Names, Accounts, Global Drivers, Cube Drivers, Lookup Drivers and Formula Names, must be unique from each other.

## Import Global Drivers

To import a bulk file of Global Drivers, follow the legend and corresponding instructions:

The screenshot shows the 'Register' interface. At the top right, a dropdown menu is open, showing 'Formulas' (1), 'Global Drivers' (2), 'Cube Drivers', and 'Formulas'. On the left, there is a section for 'Global Drivers' with an 'Import' button (3). Below this is a table with the following data:

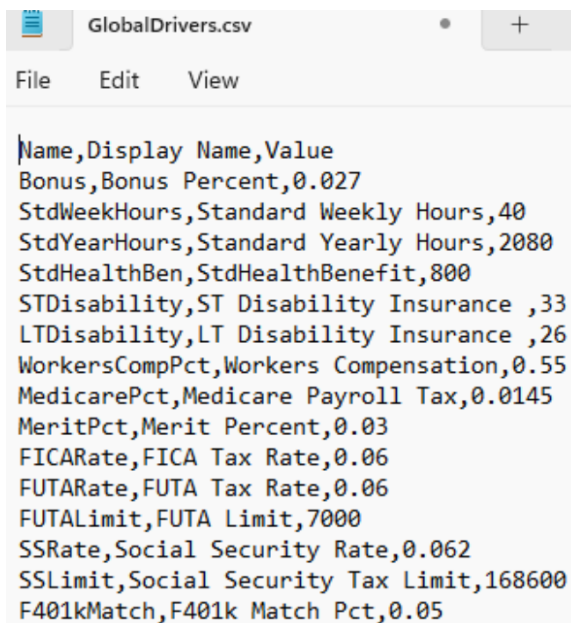
Name	Display Name	Value
SickPayFactor	Sick Pay Factor	0.00500
VacationFactor	Vacation Factor	0.01500

## Formulas

---

1. Hover your cursor over the **Formulas** menu.
2. In the drop-down menu, select **Global Drivers**.
3. Select the **Import** button. In the dialog box, select a file and select the **Open** button.

Example:







```
Name,Display Name,Value
Bonus,Bonus Percent,0.027
StdWeekHours,Standard Weekly Hours,40
StdYearHours,Standard Yearly Hours,2080
StdHealthBen,StdHealthBenefit,800
STDisability,ST Disability Insurance ,33
LTDisability,LT Disability Insurance ,26
WorkersCompPct,Workers Compensation,0.55
MedicarePct,Medicare Payroll Tax,0.0145
MeritPct,Merit Percent,0.03
FICARate,FICA Tax Rate,0.06
FUTARate,FUTA Tax Rate,0.06
FUTALimit,FUTA Limit,7000
SSRate,Social Security Rate,0.062
SSLimit,Social Security Tax Limit,168600
F401kMatch,F401k Match Pct,0.05
```

**NOTE:** You cannot save if there is a duplicated Name or Display Name.

To update or add to the current Global Drivers, you can import an updated .csv file or use the Global Drivers grid controls. In the Global Drivers grid, you can add, remove, cancel all changes since last save, and save Global Drivers.

## Formulas

---

- To Insert, click the  button.
- To remove, click the  button.
- To cancel all changes prior to saving, click the  button.
- To save, click the  button.

**NOTE:** Global Drivers that are referenced in a saved formula cannot be removed.

When you import a new .csv file, that file is compared with the current list of Global Drivers. Drivers that are not used in a saved formula are removed if they are not included in the imported file. Drivers that are used in saved formula are retained, even if they are not included in the imported file.

**NOTE:** If you import a .csv file with numbers used at the beginning of a column name or spaces used in a column name, the application will automatically add the prefix Col\_ to ensure the import is usable and compatible with the solution.

## Cube Drivers

Cube Drivers take the dimensionality of cubes used across OneStream and enables you to utilize their information for formula building and plan data creation within the Line Item Modeling solution. You can connect driver values from a Cube View to the solution by adding a Cube Driver. The Cube Driver is dynamic and changes based on any Cube View changes. When creating a Cube Driver, you can select the Variable option for Time Frequency to track values across multiple months and years to view all potential results from different time periods or you can select Fixed which will take the value of the specific month and year the driver is stored in.

## Formulas

**NOTE:** A Cube Driver can be utilized across multiple years in the plan calculation, however, the Preview table of the Cube Driver only displays values for a single year.

On the Cube Drivers page, Cube Driver Names, Display Names and Statuses are stored in the table on the left and the associated cube driver values are presented in the table on the right. When you select a Cube Driver from the table on the left, the cube driver values will display in the table on the right. A Cube Driver may be tied to multiple entities, each with unique values.

**NOTE:** When you import a configuration, Cube Driver values won't display in the preview table until you add Register data and preview the new data. Your Cube Driver is trying to compare values that are in the Register against values that are in a Cube so data needs to exist in the Register for that comparison to happen.

**IMPORTANT:** Any attribute named in the solution, such as Register Field Names, Accounts, Global Drivers, Cube Drivers and Formula Names, must be unique from each other.

### Workforce Planning

Register

Formulas

Settings

Help

Cube Drivers



Name	Display Name	Status
MeritbyGrade	Merit by Grade	
RetirementRate	Retirement Match Rate	
RetirementLimit	Retirement Match Li...	

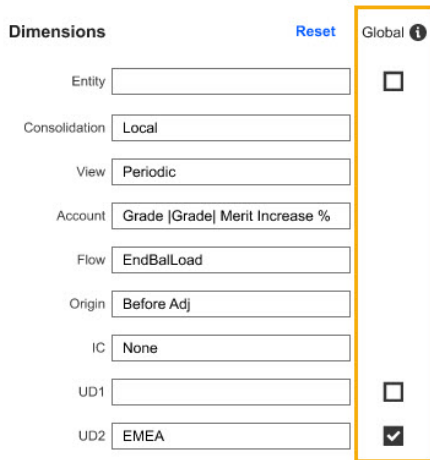
MeritbyGrade (Merit by Grade)			
Entity	CostCenter	2026M1	

## Formulas

---

When adding or editing a Cube Driver, you can use the Global checkbox to control whether a cube driver applies universally or only to specific dimensions. When selected, the driver is applied to all Register records, and the corresponding dimension column is removed from the preview. If left unchecked, the driver applies only to the selected dimension, and those columns remain visible in the preview. This setting ensures flexibility in managing calculations and configurations. Global checkboxes only display if a Member Definition is assigned in the Register Definition for a given Dimension.

**NOTE:** Global selections are preserved when exporting configuration files.



The screenshot shows a configuration interface for dimensions. On the left, there are several input fields with labels: Entity, Consolidation (set to 'Local'), View (set to 'Periodic'), Account (set to 'Grade |Grade| Merit Increase %'), Flow (set to 'EndBalLoad'), Origin (set to 'Before Adj'), IC (set to 'None'), UD1, and UD2 (set to 'EMEA'). To the right of these fields is a vertical column of checkboxes. The top checkbox is unchecked, and the bottom checkbox is checked. Above this column is a 'Global' label with an information icon. A yellow box highlights the Global label and the checkboxes.

When adding or editing a Cube Driver, you can use Register fields as substitution variables by using the Substitution Variable Reference drop-down menu. It only lists the Register fields you have security access to and displays in pipe format such as |Grade|. When you select a Register field, its value appears in the text box, allowing you to quickly copy and paste it into your Cube Driver definition without navigating back to the Register.

## Formulas

---

**Dimensions** Reset Global ⓘ

Entity: EUS01

Consolidation: Local

View: Periodic

Account: Grade |Grade| Merit Increase

Substitution Variable Reference: [Grade] [Grade]

Entity ▼	Value ▼

## Cube Driver Invalid Members

If a configuration file is loaded with invalid Cube Driver members, the Status column on the Cube Drivers page indicates that edits are required for the Cube Driver to function properly.

Name	Display Name	Status
Test	Test	Edit Cube Driver - Contains invalid members
Test 2	Test 2	Edit Cube Driver - Contains invalid members
Test 3	Test 3	Edit Cube Driver - Contains invalid members
Test 4	Test 4	Edit Cube Driver - Contains invalid members

To resolve, edit the Cube Driver and correct the \*Invalid Member\* values. See [Edit Cube Drivers](#).

## Add Cube Drivers

There are two methods for adding Cube Drivers: copying and pasting the member script information from a cube view POV within the OneStream application or manually selecting all criteria.

You also can apply the column name of a Register field in the Account or UD dimension for a cube driver by typing the column name in between pipes. The pipe substitution variable using a Register column name dynamically injects the values from that column and will match values stored in the cube to generate a preview for those intersections. This allows you to leverage alternate Register fields that don't have a member definition assigned.

## Formulas

**Example:** Input the Register column name Grade Level in the Account dimension as **|GradeLevel|**. Do not include spaces.

To add a Cube Driver by using the Member Script Helper, follow the legend and corresponding instructions:

**NOTE:** When you use a Top level cube in a member script, the solution finds the base cube level of which the Entity and the dimension resides in and will preview the data from that base cube.

### Cube Drivers



Name	Display Name
MeritbyGrade	Merit by Grade

Cube Drivers > Add Cube Driver ✕

Member Script Helper **2**

**4** Name **5** Display Name **3** Apply

Cube **6** Time Frequency Fixed **9** Save

Time Select Time Scenario Select Scenario

Dimensions **7** Global **8** Preview

Reset

	Entity	Value
Entity		
Consolidation		
View		
Account		
Flow		
Origin		
IC		
UD1		
UD2		

## Formulas

---

1. On the Cube Drivers page, click the **Add** button.
2. Paste the member script from your cube view in the **Member Script Helper** field.

**NOTE:** If a dimension is blank, all the values for that dimension will dynamically be pulled based on member definition. If you do not populate Entity, all Entity values from the Register are compared to the cube Entities and data will preview based on those intersections available. You can also leave a UD blank and if there is data stored at the UD level, it will retrieve the same way as entities. Leaving a field blank relies on there being a member definition to use the data from the Register to dynamically return values based on the intersection of where the data is stored in the cube.

3. Click the **Apply** button.

**TIP:** If you need to update your dimensions, you can click on the **Reset** button to clear all your selections and the preview.

**NOTE:** If there are multiple cubes referenced in a UD or Flow Register column in the Register Definition, only the dimension correlating with the cube selection is utilized.

4. Enter a Name.
5. Enter a Display Name.
6. Select a Time Frequency. Select **Fixed** for a single value based on the time selection. Select **Variable** for the values across the time selection.
7. Select a Global checkbox to control whether a cube driver applies universally or only to that specific dimension.
8. Click the **Preview** button.

## Formulas

**NOTE:** If there is an invalid data intersection, a message box displays and you will need to update your selections on the **Add Cube Driver** page.

9. Click the **Save** button.

**IMPORTANT:** The **Save** button displays once the preview table is populated successfully with no invalid intersections.

To add a Cube Driver without using the Member Script Helper, follow the legend and corresponding instructions:

### Cube Drivers



Name	Display Name
FicaRateCD	FICA Rate Cube Dvr
RetirementRate	Retirement Match Rate

Cube Drivers > Add Cube Driver

Member Script Helper

Apply

Name 2 Display Name 3 Cube 4 Time Frequency Fixed 5 Time 6 Select Time Scenario 7 Select Scenario

10 Save

8

9 Preview

Dimensions Reset Global

Entity	Value
Consolidation	
View	
Account	
Flow	
Origin	
IC	
UD1	
UD2	

## Formulas

---

1. On the Cube Drivers page, click the **Add** button.
2. Enter a Name.
3. Enter a Display Name.
4. From the Cube drop-down menu, select a Cube.
5. Select a Time Frequency. Select **Fixed** for a single value based on the time selection. Select **Variable** for the values across the time selection.
6. Select a Time.
7. Select a Scenario.
8. Select the member filters for your dimensions by clicking on each dimension or entering values in the field. Select a Global checkbox to control whether a cube driver applies universally or only to that specific dimension.

If no selection is made, all the values for that dimension will dynamically be pulled based on member definition. If you do not populate Entity, all Entity values from the Register are compared to the cube Entities and data will preview based on those intersections available. You can also leave a UD blank and if there is data stored at the UD level, it will retrieve the same way as entities. Leaving a field blank relies on there being a member definition to use the data from the Register to dynamically return values based on the intersection of where the data is stored in the cube.

**TIP:** If you need to update your dimensions, you can click on the **Reset** button to clear all your selections and the preview.

**NOTE:** If there are multiple cubes referenced in a UD or Flow Register column in the register definition, only the dimension correlating with the cube selection is utilized.

## Formulas

---

- Click the **Preview** button and the table will populate the corresponding member definitions and values.

**NOTE:** If there is an invalid intersection of data, a message box displays and you will need to update your selections on the **Add Cube Driver** page.

- Click the **Save** button.

**IMPORTANT:** The **Save** button displays once the preview table is populated successfully with no invalid intersections.

The values will display in the Cube Drivers table.

**NOTE:** You cannot save if there is a duplicated Name or Display Name.

**NOTE:** Ensure the entities used in the Register have the Member Property setting of InUse set to True in order for the Cube Driver dashboard to preview results. This can be configured in the Entity Dimensions area of the Application tab.

## Edit Cube Drivers

To edit a Cube Driver, follow the legend and corresponding instructions:

Register Formulas Settings Help

Cube Drivers

Add Edit Delete

Name	Display Name
FicaRateCD	FICA Rate Cube Dvr
RetirementRate	Retirement Match Rate

FicaRateCD (FICA Rate Cube Dvr)	
Entity	Value
EUS99	0

## Formulas

Cube Drivers > Edit Cube Driver ×

Member Script Helper

Apply

5 Save

Name: MeritbyGrade | Display Name: Merit by Grade | Cube: Equipment Division | Time Frequency: Variable | Time: 2026 | Scenario: BudgetWorking

3

4 Preview

Dimensions

Entity:

Consolidation: Local

View: Periodic

Account: Grade |Grade| Merit Increase %

Flow: EndBallLoad

Origin: BeforeAdj

IC: None

UD1: CCTop

UD2: REGTop

Entity	CostCenter	Grade

1. On the Cube Drivers page, select a Cube Driver from the table.
2. Click the **Edit** button.
3. Update all relevant criteria.
4. Click the **Preview** button.
5. Click the **Save** button.

## Delete Cube Drivers

To delete a Cube Driver, follow the legend and corresponding instructions:

Register Formulas Settings Help

Cube Drivers

2

1

Add Edit Delete

Name	Display Name
FicaRateCD	FICA Rate Cube Dvr
RetirementRate	Retirement Match Rate

FicaRateCD (FICA Rate Cube Dvr)	
Entity	Value
EUS99	0

1. On the Cube Drivers page, select a Cube Driver from the table.
2. Click the **Delete** button.

**NOTE:** You cannot delete a cube driver that is being used in a formula.

## Lookup Drivers

Lookup Drivers enable you to utilize values stored in XFC tables (any table with the prefix XFC\_) within OneStream for formula and plan creation. Users often store ad hoc data in XFC tables to avoid unnecessary data inclusion in a cube or the Register. Lookup Drivers provide the ability to match column names in the Register with the column names in the Lookup table applied. The data points that match between the Register data and Lookup table within those columns provide a preview based on the return values drop-down selection that is available via the Lookup table.

If more than one Register field is populated in the Lookup Driver column, the values in the preview will concatenate the values of the Register Fields and display the Return Value based on those combinations.




**NOTE:** When you import a configuration, Lookup Driver values won't display in the preview table until you add Register data and preview the new data. Your Lookup Driver is trying to compare values that are in the Register against values that are in a Lookup table so data needs to exist in the Register for that comparison to happen.

**IMPORTANT:** Any attribute named in the solution, such as Register Field Names, Accounts, Global Drivers, Cube Drivers, Lookup Drivers and Formula Names, must be unique from each other.

# Formulas

Register    Formulas    Settings

Lookup Drivers

 Add   
  Edit   
  Delete

Name	Display Name
BonusByGrade	BonusByGrade


BonusByGrade (BonusByGrade)				
Entity	CostCenter	GradeLevel	Bonus	
C840	CC101	40.00000	.028	
EBS01	CC101	32.00000	.018	
ECA01	CC101	41.00000	.03	
EMX30	CC101	30.00000	.015	
EUS01	CC101	40.00000	.028	


## Add Lookup Drivers


To add a Lookup Driver, follow the legend and corresponding instructions:

Lookup Drivers

1

 Add

 Edit

 Delete

Name	Display Name
BonusByGrade	BonusByGrade
FXRateByRegion	FXRateByRegion

# Formulas

Register   **Formulas**   Settings   Help

Lookup Drivers > Add Lookup Driver ✕

**1** Select Table **2**  
XFC\_PLN.LookupDrivers **3** Apply

Name **4**   Display Name **5**   Return Value **6**  
BonusByGrade   BonusByGrade   Bonus **9** Save

**7**

Register Field	Lookup Column	Entity	CostCenter	GradeLevel	Bonus
EmployeeID		C840	CC101		40.00000 .028
Instance		EBS01	CC101		32.00000 .018
FirstName		ECA01	CC101		41.00000 .03
LastName		EMX30	CC101		30.00000 .015
Entity	Entity	EUS01	CC101		40.00000 .028
Region					
CostCenter	CostCenter				
Title					
Status					
FTE					
Start Date					
End Date					
Grade	GradeLevel				
Salary					
Hourly					
Bonus					
HRStatus					
Reason					

**8** Preview

1. On the Lookup Driver page, click the **Add** button.
2. In the Select Table drop-down menu, select an XFC table.  
**NOTE:** Only tables with the prefix XFC\_ can be selected.
3. Click the **Apply** button.
4. Enter a name.
5. Enter a display name.
6. In the Return Value drop-down menu, select the column with the driver value you want to return.
7. In the Lookup Column drop-down menus for each Register Field, select a column to map the Register field value to the Lookup column value. Values must match to return a result.
8. Click the **Preview** button. The Preview table on the right will populate with data.
9. Click the **Save** button. Once saved, the Lookup Driver displays in the Lookup Drivers page.

## Formulas

**IMPORTANT:** The **Save** button displays once the Preview table is populated successfully.

## Edit Lookup Drivers

To edit a Lookup Driver, follow the legend and corresponding instructions:

### Lookup Drivers



Name	Display Name
<b>1</b> BonusByGrade	BonusByGrade
FXRateByRegion	FXRateByRegion

Register **Formulas** Settings Help

Lookup Drivers > Edit Lookup Driver

Select Table: XFC\_PLNLookupDrivers Apply

Name	Display Name	Return Value
BonusByGrade	BonusByGrade	Bonus

5 Save

Register Field	Lookup Column	Entity	CostCenter	GradeLevel	Bonus
EmployeeID		CB40	CC101		40.00000
Instance		EBS01	CC101		32.00000
FirstName		ECA01	CC101		41.00000
LastName		EMX30	CC101		30.00000
Entity	Entity	EUS01	CC101		40.00000
Region					
CostCenter	CostCenter				
Title					
Status					
FTE					
Start Date					
End Date					
Grade	GradeLevel				
Salary					
Hourly					
Bonus					
HRStatus					
Reason					

4 Preview

## Formulas

---

1. On the Lookup Driver page, select a Lookup Driver.
2. Click the **Edit** button.
3. Update all relevant criteria.
4. Click the **Preview** button.
5. Click the **Save** button.

**IMPORTANT:** The **Save** button displays once the Preview table is populated successfully.

## Delete Lookup Drivers

To delete a Lookup Driver, follow the legend and corresponding instructions:

Lookup Drivers



	Name	⋮	Display Name
1	BonusByGrade		BonusByGrade
	FXRateByRegion		FXRateByRegion

1. On the Lookup Driver page, select a Lookup Driver.
2. Click the **Delete** button.

**NOTE:** You cannot delete a Lookup Driver that is being used in a formula.

# Formula Wizard

The Formula Wizard provides a guided and intuitive experience for formula creation. It offers selectable criteria to help generate specific formulas based on the required data. You can only select criteria to which you have security access.

**IMPORTANT:** Any attribute named in the solution, such as Register Field Names, Accounts, Global Drivers, Cube Drivers, Lookup Drivers and Formula Names, must be unique from each other.

There is a wide variety of selections and functions available in the Formula Wizard. Review the following sections to guide you through the process:

- **Formula Name:** This is a required field that can have a maximum of 100 characters. As a best practice, create a unique formula name and avoid using the Account Name as the Formula Name.
- **Formula Description:** This optional field enables you to add a description for your Formula Name. It is recommended that you use 100 characters or less.
- **Register Group:** The Register Group defaults to All Employees for the Workforce Planning configuration or All Records for the Fixed Term Planning and Duration Based Planning configurations. If the formula only applies to a filtered data set, select the drop-down menu to apply a saved Register filter to pare down the calculated data set and remove unnecessary data points.
- **Value Type:** Select either **Year-To-Date (YTD)** to calculate for the cumulative value or **Periodic** to calculate the periodic value.
- **Account:** Informs the calculation engine where to place the result amount for a formula when calculating a plan.

## Formulas

---

- **Scenario Type:** Informs the calculation engine which formulas apply to a plan. If the formula applies to all scenarios, select **All Scenarios**. For example, If the formula only applies to the budget scenario type, select the budget scenario type. See [Plan Data](#).
- **Periods:** Apply the months you want the formula to be calculated in. You can select all 12 months, a single month, or any combination of months depending on your planning needs. You can also select the time profile.

**TIP:** For a detailed list of formulas, see [Appendix A](#).

Formula Name	Formula Description	Register Group	Value Type
<input type="text"/>	<input type="text"/>	All Employees	Periodic
Account	Scenario Type	Periods	
<input type="text"/>	<a href="#">Select Scenario Type</a>	<a href="#">Select Period(s)</a>	

The gray area below your selectable criteria is the Formula Preview. When creating a new formula, this area will display No formula to preview. Once you start building your formula, this area will dynamically populate a concatenated view of your formula for easier viewing. If the formula is too long to fit in the space, the formula text will wrap in format and you can scroll down to view the full formula.

Below the gray Formula Preview is the Formula Block area where you are prompted to add blocks. The yellow highlighted block is automatically selected so you can freely add blocks and operations to your formula.

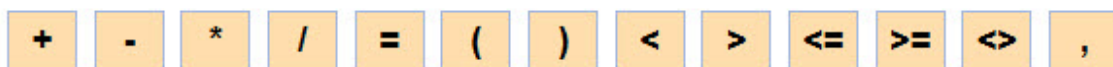
No formula to preview

Start your formula by creating or adding blocks below.



There is an About section available for each formula block type that gives a brief explanation of how each block functions. The building block options are:

- **Operators:** These are the mathematical symbols above each of the building block options, like the equal sign. Click the operator you need, and it will display in the Formula Block area.



- **Text:** In the Text Field, you can type in text, numbers or certain operators listed in the About Text description. You can also type in formulas or parts of formulas such as global drivers or functions to be converted into blocks.

A wildcard or specific string data can be entered as a text block by wrapping it in quotation marks, inserting the LIKE function, and then entering a second string data block with a percentage prefix.

**Example:** "Test String" LIKE "%string"

Before you input text, you can use the Separator, Date Format and Number Format drop-down menus to override your default culture settings. This is helpful if you are trying to copy in formulas that use a different culture setting.

## Formulas

**NOTE:** The default value of the Separator, Date Format, and Number Format drop-down menus is based on your culture settings.

The screenshot shows a formula builder interface. At the top, a formula is displayed: `FTE * Salary / 12`. Below this is a toolbar with mathematical operators: `+`, `-`, `*`, `/`, `=`, `(`, `)`, `<`, `>`, `<=`, `>=`, `<>`, and `,`. Below the toolbar are tabs for different data sources: `Text`, `Register`, `Globals`, `Cube`, `Lookup`, `Functions`, and `Accounts`. Under the `Text` tab, there are three dropdown menus: `Separator` (set to `,`), `Date Format` (set to `M/d/yyyy`), and `Number Format` (set to `###.00`). Below these is a `Text Field` input area and an `Add To Formula` button. To the right of the input area is an `About Text` section with the following text: "To override your default culture settings for text input select a Separator, Date Format, or Number Format. Content populated in the Text block may contain text, digits, and the following operators + - \* / % (=). Adding a formula via text and clicking Add to Formula will parse out the text into blocks into the formula wizard. If you would like to reference an Account to the formula via Text Field, use A#AccountName (ex. A#50200)."

**IMPORTANT:** When you type in a formula, each block within that typed formula has to match the specific formula block naming or a validation will display. For example, if you type in the formula, `FTE+Salaries`, but the Register column name is `Salary`, the formula will not populate until all blocks are valid.

### Partial Text Tokenization



Text Input is partially portioned into blocks. Review the remaining text to ensure field names are written properly.

**Valid Blocks** FTE+  
**Invalid Blocks** Salaries

## Formulas

---

- **Register:** The Register tab enables you to select from any of the columns you have permission to view. When you add a named block, the value tied to the Register field is used in the formula creation. You can also pin all the fields available in the Register tab by clicking the **Pin** button, and they will display in the Recently Pinned pane for easy reuse when building your formulas.

The screenshot displays a formula builder interface. At the top, the formula  $FTE * Salary / 12$  is shown. Below it are navigation buttons: Move Left, Move Right, Delete Block, and Clear All Blocks. The formula components are visualized as blocks: FTE, \*, Salary, and /12. A toolbar contains mathematical operators: +, -, \*, /, =, (, ), <, >, <=, >=, <>, and ,. Below the toolbar are tabs: Text, Register (highlighted with a yellow box), Globals, Cube, Lookup, Functions, and Accounts. The Register tab is active, showing a 'Select register field' dropdown menu and an 'Add To Formula' button. An 'About Register' tooltip is visible, explaining that the Register dropdown lists columns the user is permitted to see. To the right of the main interface is a 'Recently Pinned' pane, which is currently empty.

- **Globals:** The Globals tab enables you to select from any of the Global Drivers that were previously imported. When you add a named block, the value tied to the Global Driver is used in the formula calculation. You can also pin all the fields available in the Globals tab by clicking the **Pin** button, and they will display in the Recently Pinned pane for easy reuse when building your formulas.

## Formulas

The screenshot shows a formula editor interface. At the top, the formula  $FTE * Salary / 12$  is displayed. Below the formula, there are navigation icons: Move Left, Move Right, Delete Block, and Clear All Blocks. The formula components are shown as blocks: FTE, \*, Salary, and /12. Below the formula, there is a toolbar with mathematical operators: +, -, \*, /, =, (, ), <, >, <=, >=, <>, and ,. The 'Globals' tab is selected and highlighted in yellow. Below the toolbar, there are tabs for Text, Register, Globals, Cube, Lookup, Functions, and Accounts. The 'Globals' tab content includes a 'Select driver' dropdown menu, an 'Add To Formula' button, and an 'About Globals' section. The 'About Globals' section contains the text: 'Content populated in the Globals dropdown come from the table in the Global Drivers tab. If you would like to include the value of a global driver, select the name of the driver and click the Add Block button.'

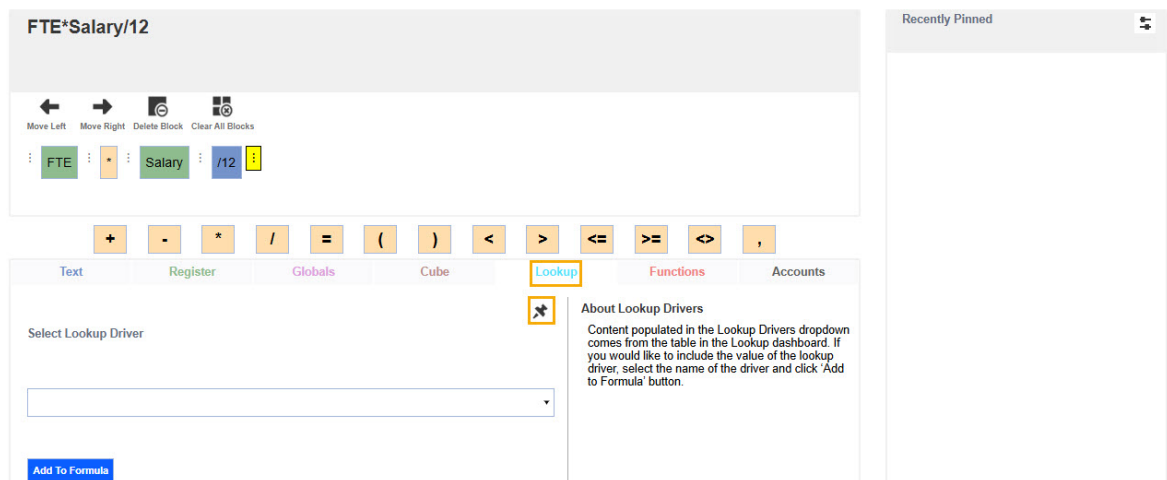
- **Cube:** The Cube tab enables you to select from any of the Cube drivers added to the solution. When you add a named block, the value tied to the Cube driver is used in the formula calculation. You can also pin all the fields available in the Cube tab by clicking the **Pin** button and they will display in the Recently Pinned pane for easy reuse when building your formulas.

The screenshot shows the same formula editor interface as above, but with the 'Cube' tab selected and highlighted in yellow. The 'Select driver' dropdown menu is now labeled 'Select Cube driver'. The 'About Cube Drivers' section contains the text: 'Content populated in the Cube Drivers dropdown come from the table in the Cube Drivers tab. If you would like to include the value of a cube driver, select the name of the driver and click the Add Block button.'

## Formulas

---

- **Lookup:** The Lookup tab enables you to select from any of the Lookup drivers added to the solution. When you add a named block, the value tied to the Lookup driver is used in the formula calculation. You can also pin all the fields available in the Lookup tab by clicking the **Pin** button and they will display in the Recently Pinned pane for easy reuse when building your formulas.



- **Functions:** The function block content enables you to select from several different functions that help define your formula.
  - **DateDiff(day):** Returns the number of day boundaries between two dates.
  - **DateDiff(month):** Returns the number of months between two dates.
  - **DateDiff(year):** Returns the number of years between two dates.
  - **IIF:** Returns a value based on the condition of a true or false statement.
  - **AND:** Displays or uses records if all the conditions are true.
  - **OR:** Displays or includes records if any of the conditions are true.
  - **CurrentPeriod:** Applies the current month in the formula.

## Formulas

- **IsNull**: Evaluates if there are blank values in a calculation.
- **RollingPeriod**: Returns the number of periods in a plan.
- **CurrentYear**: Returns the current year in the formula.
- **LIKE**: Checks whether a text value matches a pattern using wildcards.

You can reference the definition for each function to the right of the function blocks in the About Functions pane.

**Function Block Content**

DateDiff(day)

DateDiff(month)

DateDiff(year)

IIF

AND

OR

CurrentPeriod

CurrentYear

RollingPeriod

IsNull

LIKE

**About Functions**

- DateDiff(Day, StartDate, EndDate) will return the number of day boundaries between two dates.
- DateDiff(Month, StartDate, EndDate) will return the number of months between two dates.
- DateDiff(Year, StartDate, EndDate) will return the number of years between two dates.
- IIF(Condition, Value if True, Value if False) will return a value based on the condition of a true or false statement.

- **Accounts**: The Account Library enables you to include formulas that are tied to a specific account as a dependency in a formula you are creating. In the Account Name drop-down menu, select an account name and a view-only field of the selected account information such as Account, Calculation Name and Register Group populates. Click the **Add Block** button to add that formula as a block into an active formula.

+
-
\*
/
=
(
)
<
>
<=
>=
<>
,

Text
Register
Globals
Cube
Lookup
Functions
Accounts

Account Name

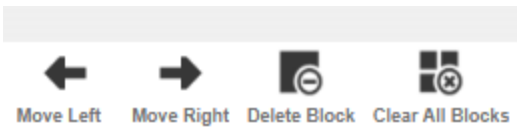
Add Block

Account Name	Calculation Na	Description	Register Group	Calculation De	Period
50200 - Monthly ...	MthlySalary	MthlySalary	All Employees	FTE*Salary/12	M1,M2,M3,M4,M5,...

After you have made all your selections and built your formula using the block options available, you can view your formula in the Formula Preview and additional buttons will display in your Formula Builder area:

## Formulas

---



- To move a block to the left, select it and then click the **Move Left** button.
- To move a block to the right, select it and then click the **Move Right** button.
- To delete a block no longer needed in your formula, select it and then click the **Delete Block** button.
- To remove all blocks, click the **Clear All Blocks** button.

The Recently Used or Recently Pinned pane will automatically populate based on the blocks you have used or pinned. This enables you to easily reference blocks that are frequently used.

Clicking the toggle button to switch between the Recently Used and Recently Pinned panes gives you the flexibility to set your own preferences when building formulas. You can select a block from either list to insert it into the formula you are working on.

**NOTE:** After creating, copying, or editing a formula, the last pinned information will remain.





# Create a New Formula


To create a new formula, follow the legend and the corresponding instructions:


Register      **Formulas**

Formulas

1  
  
 New

  
 Edit

  
 Copy

  
 Delete

Calculation Name	Description	Scenario Type	Account
Monthly Salary		All Scenario Types	50200 - Monthly Salary

Formula Name 2

Formula Description 3

Register Group 4

Value Type 5

11

Account 6

Scenario Type 7

Periods 8

**FTE\*Salary/12**

← → ⊗ ⊞  
Move Left   Move Right   Delete Block   Clear All Blocks

FTE

\*

Salary

/12

+ - \* / = ( ) < > <= >= <> ,

Text
Register
Globals
Cube
Lookup
Functions
Accounts

Separator

Date Format

Number Format

Text Field

10

**About Text**

To override your default culture settings for text input select a Separator, Date Format, or Number Format.

Content populated in the Text block may contain text, digits, and the following operators +-\*/% (=)

Adding a formula via text and clicking Add to Formula will parse out the text into blocks into the formula wizard.

If you would like to reference an Account to the formula via Text Field, use A#AccountName (ex. A#50200).

Recently Pinned

## Formulas

---

1. Click the **New** button.
2. Name the formula. This step is required.
3. (Optional) Enter a formula description.
4. From the Register Group drop-down menu, select a Register Group.
5. From the Value Type drop-down menu, select a Value Type.
6. From the Account drop-down menu, select an Account.
7. Click **All Scenario Types** to select a Scenario Type.
8. Click **Period(s) Selected** to select a periods.
9. Build your formula blocks by choosing from operators, **Text, Register, Globals, Cube, Lookup, Functions** or **Accounts**. When selected, each block is automatically added to the end of the formula unless otherwise designated.
10. After you have entered text in the Text Field or selected a block from the **Register, Globals** or **Cube** option, click the **Add to Formula** button. The block will populate in the formula preview.
11. Click the **Save** button.

**NOTE:** After you save a formula a dialog displays and provides an option to Return to Formula Library or Create Another Formula. If you select Create Another Formula, the Register Group field in the Formula Wizard resets automatically. For Workforce Planning, it resets to All Employees. For Fixed Term Planning and Duration Based Planning, it resets to All Records.





## Edit Formulas

To edit a formula, follow the legend and the corresponding instructions:

## Formulas

[Register](#)   **Formulas**   [Settings](#)

Formulas

New   Edit   Copy   Delete

Calculation Name	Description	Scenario Type	Account
Monthly Salary		All Scenario Types	50200 - Monthly Salary
Disabililty Ben		All Scenario Types	50150 - ST Disability

Formula Name   Formula Description   Register Group   Value Type

MthlySalary   Exempt   Exempt Employees   Periodic

Account   Scenario Type   Periods

50200 - Monthly Salary   All Scenario Types   Period(s) Selected

1. Select an existing formula from the formulas page.
2. Click the **Edit** button. The Formula Wizard will open enabling you to make any updates.
3. Click the **Save** button.

## Copy Formulas

To copy a formula, follow the legend and the corresponding instructions:

## Formulas

**Register      Formulas**

Formulas

2

+      ✎      📄      🗑️  
New      Edit      Copy      Delete

Calculation Name	Description	Scenario Type
Monthly Salary		All Scenario Types
1 Disability Ben		All Scenario Types

Formula Name      Formula Description      Register Group      Value Type

MthlySalary      Exempt      Exempt Employees      Periodic

Account      Scenario Type      Periods

50200 - Monthly Salary      All Scenario Types      Period(s) Selected

CANCEL      3 SAVE

1. Select an existing formula from the grid.
2. Click the **Copy** button. The Formula Wizard will open, enabling you to make any updates.

**NOTE:** When a formula is copied, the Formula Name adds the word Copy to the end of it, and the Formula Description is updated to Copy. Ensure the Formula Name is updated before saving.

3. Click the **Save** button.

## Delete Formulas

You can only delete formulas if you have **Manage Formulas** security access. See [Security](#).

To delete a formula, follow the legend and the corresponding instructions:

## Formulas

---

Formulas

Register Formulas Settings

Global Drivers  
Cube Drivers  
Formulas

New Edit Copy Delete

Calculation Name	Description	Scenario Type	Account
Monthly Salary		All Scenario Types	50200 - Monthly Salary
Disability Ben		All Scenario Types	50150 - ST Disability

1. Hover your cursor over the **Formulas** menu.
2. In the drop-down menu, select **Formulas**.
3. Select a formula from the formula table.
4. Click the **Delete** button.

Data in an active or unlocked plan linked to a formula will remain until the next time a calculation is run. If a plan is locked and you delete a formula that is linked to the locked plan, the data will not change.

**NOTE:** You cannot delete a formula that is being used within another formula as a dependency.

## Enable Formulas

You can modify the enablement and execution of formulas in the Formula dashboard to determine how formulas are used. You can only enable formulas if you have **Manage Formulas** security access. When you create, copy or edit a formula, the enable column is automatically set to enabled.





## Formulas

**NOTE:** You cannot disable the final active formula when its account is still used as a dependency.

To enable a formula, follow the legend and corresponding instructions:

Register      Formulas      Settings

Formulas

Enabled	Calculation Name	Scenario Type	Account	Period	Register Group
<input checked="" type="checkbox"/>	MthlySalary	All Scenario Types	50200 - Mo...	M1,M2,M3,...	Exempt Employees
<input checked="" type="checkbox"/>	DisabilityBen	All Scenario Types	50150 - ST ...	M1,M2,M3,...	All Employees
<input checked="" type="checkbox"/>	MedicalBen	All Scenario Types	50100 - Me...	M1,M2,M3,...	All Employees
<input checked="" type="checkbox"/>	WorkersComp	All Scenario Types	50120 - Wo...	M1,M2,M3,...	All Employees

1. Select a formula.
2. In the Enable column, select the checkbox.

**IMPORTANT:** You cannot disable a formula that is being used within another formula as a dependency or enable a formula that contains a disabled formula.









# Plan Data

Plan data is the calculated output of the Line Item Modeling solutions. Plans are produced when your data is calculated using the formulas you create.

## Plans Dashboard

**Workforce Planning**      Register      Formulas      Settings      Help

Calculate & Analyze

New      Edit      Copy      Delete      View      Lock      Unlock      Plan Log

Plan Name	Scenario Type	Scenario Name	Start Period	Number of Periods	Status
BudgetWorking	Budget	BudgetWorking	2026 M1	24	Unlocked

The Plans dashboard features all the functions for managing and running calculations on plans. Within the dashboard, you can see a table of created plans and all criteria related to each plan. You can also perform and view the following actions depending on your security access:

- [Create a New Plan](#)
- [Recalculate a Plan](#)
- [View Plan](#)
- [Lock or Unlock Plan](#)
- [Delete Plan](#)
- [Copy Plan](#)

## Plan Data

---

- [Edit Plan](#)
- [Plan Log](#)
- [Connector Business Rule](#)
- [Data Adapter](#)
- [Select Workflow](#)

## Create a New Plan

To create a new plan, follow the legend and corresponding instructions:

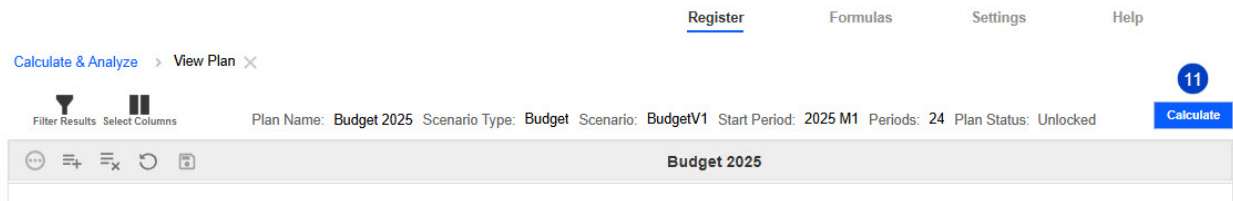
The screenshot displays the 'Workforce Planning' interface. At the top, there are tabs for 'Register', 'Formulas', 'Settings', and 'Help'. The 'Calculate & Analyze' menu is open, showing options: 'New' (marked with a blue circle 3), 'Edit', 'Copy', 'Delete', 'View', 'Lock', 'Unlock', and 'Plan Log'. A dropdown menu is visible under 'Register', with options 'Import & Modify' and 'Calculate & Analyze' (marked with a blue circle 2). Below the menu is a table with the following data:

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

Below the table is the 'Add Plan' form. It includes fields for 'Plan Name' (marked with a blue circle 4), 'Scenario Type' (marked with a blue circle 5), 'Scenario' (marked with a blue circle 6), 'Start Year' (marked with a blue circle 7), 'Period' (marked with a blue circle 8), and 'Number of Periods' (marked with a blue circle 9). A 'Create Plan' button (marked with a blue circle 10) is located at the bottom right of the form. The 'Register' tab is selected at the top of the form.

## Plan Data

---



1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Click the **New** button.
4. Enter a plan name in the text box.

**NOTE:** Do not include special characters in the plan name, as the data adapter will not run if the plan name contains them.

5. Select **Scenario Type**. A dialog box displays with available options.

**NOTE:** Selecting your scenario type before selecting your scenario filters down the available scenario options. If you select your scenario before selecting your scenario type, you'll see all the scenario base members except for actuals.

6. Select **Scenario**. A dialog box displays with available options.
7. Select **Start Year**. A drop-down menu will display years.
8. Select **Period**. A dialog box displays available months.
9. Select the number of periods using the drop-down menu. You can select up to 120 months.
10. Click the **Create Plan** button. After the table is created, a **CALCULATE** button displays.
11. Click the **CALCULATE** button. A data management job displays showing the progression of the formulas being calculated. When the calculation is complete and the data

## Plan Data

---

management job closes, you have to refresh the application to display your results.

**NOTE:** The Windows Application refreshes the page automatically.









**NOTE:** If you do not populate all the necessary criteria, a dialog box displays reminding you to fill out any remaining items.

To filter your results, you can use the filter editor component. See [Manage Filters](#).

Plan data generates the columns in the table based on the criteria chosen, including any saved formulas. After the calculation is complete, you can navigate back to the Plans dashboard and your new plan is listed in the table with all of the chosen criteria including Last Calculation Date and Last Modified By. When you have other Register columns with member definitions assigned, those columns show up in the calculated plan data.

**Workforce Planning**      Register      Formulas      Settings      Help

Calculate & Analyze

New   Edit   Copy   Delete   View   Lock   Unlock   Plan Log

Plan Name	Scenario Type	Scenario Name	Start Period	Number of Periods	Status
BudgetWorking	Budget	BudgetWorking	2026 M1	24	Unlocked

## Recalculate a Plan

If you update a formula or edit Register or plan data, you can recalculate a saved plan. If you upload new plan data, you will need to refresh the page. You might consider recalculating when:

## Plan Data

---

- Adding a new employee to the Register
- Updating the base wage of the employee
- Updating a Global Driver
- Updating an existing formula

**NOTE:** If you delete all Register data and then try to recalculate a plan, a dialog box displays reminding you to populate Register data. When there is no Register data, the Calculate button does not display.

To recalculate a plan, follow these steps:

1. Navigate to the Plans dashboard.
2. Select the plan you want to run a new calculation on.
3. Click the **View** button.
4. Click the **CALCULATE** button.

When the calculation is complete, the plan data populates and overwrites the previous data.

## View Plan

To view a saved plan, follow the legend and corresponding instructions:

## Plan Data

The screenshot shows the 'Workforce Planning' interface. At the top, there is a 'Calculate & Analyze' menu with several options: New, Edit, Copy, Delete, View, Lock, Unlock, and Plan Log. A red circle '1' highlights the 'Register' menu, and a red circle '2' highlights the 'Calculate & Analyze' option in the drop-down menu. A red circle '3' highlights the 'BudgetWorking' plan in a table, and a red circle '4' highlights the 'View' button.

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Selected a previously created plan.
4. Click the **View** button.

A new page opens and you can view the calculated data of the selected plan.


Calculate & Analyze > View Plan

Plan Name: Plan 1 - 10K - 20 Formulas Scenario Type: Budget Scenario: Test Start Period: 2026 M1 Periods: 90 Plan Status: Unlocked

Select Preview Date Range: Start: 2026M1 End: 2026M12 Refresh Date: 4/6/2026 2:47:55 PM

Plan 1 - 10K - 20 Formulas											
Entity	AccountName	AccountDescription	EmpNum	DisplayName	2026M1	2026M2	2026M3	2026M4	2026M5	2026M6	2026M7
EUS01	50200	Salaries Annual	1	FormulaWage	17,636.000	17,636.000	17,636.000	17,636.000	17,636.000	17,636.000	17,636.000
EUS01	50200	Salaries Annual	2	FormulaWage	5,404.600	5,404.600	5,404.600	5,404.600	5,404.600	5,404.600	5,404.600
EZA01	50200	Salaries Annual	3	FormulaWage	10,641.700	10,641.700	10,641.700	10,641.700	10,641.700	10,641.700	10,641.700
EUK01	50200	Salaries Annual	4	FormulaWage	16,643.200	16,643.200	16,643.200	16,643.200	16,643.200	16,643.200	16,643.200

There are several ways you can filter the plan data:


- Use the **Select Columns** button to filter and view all the Register columns you have access to within a selected plan.
- Select the context menu  icon on a column header to sort by descending or ascending order or use filter drop-down menu to set specifications.

## Plan Data

---

- Select a date range to preview using the **Start** and **End** drop-down menus. After selecting the date ranges, select the **Apply Dates** icon.

Select Preview Date Range: Start:  End:  

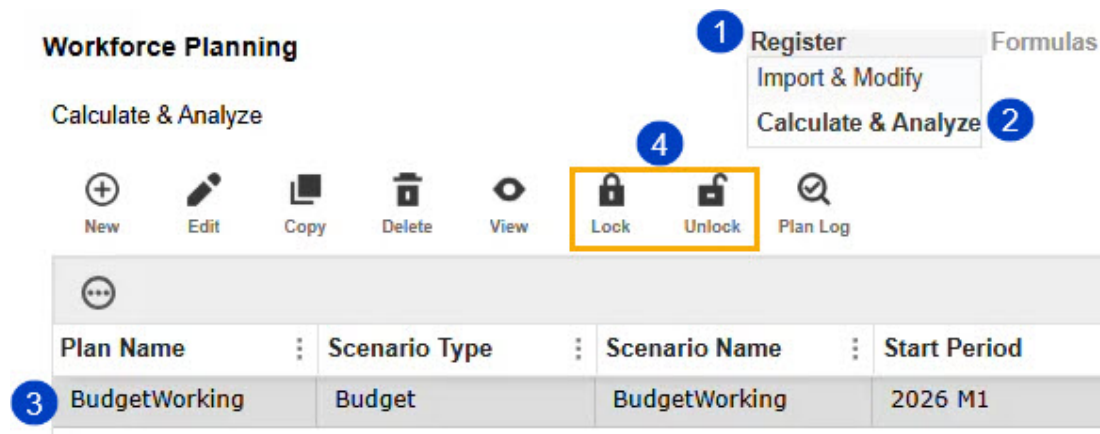
If you need to do a full refresh of the plan data, select the Refresh Plan Data  icon. The Refresh Date will update. The Refresh Date also updates when a plan is recalculated.

**NOTE:** If you do not have security access to calculate data or if all Register data is deleted, the **CALCULATE** button is not visible on the View Plan page. The **CALCULATE** button is unavailable if the plan is locked.

## Lock or Unlock Plan

Once a plan is created and has data, you can lock or unlock plans depending on your security access. Locking a plan prevents any calculations from being made. Unlocking a plan enables you to run a calculation.

To lock or unlock a plan, follow the legend and corresponding instructions:



**Workforce Planning**

Calculate & Analyze

Register Formulas

Import & Modify

Calculate & Analyze

New Edit Copy Delete View Lock Unlock Plan Log

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

## Plan Data

---

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Select a plan.
4. Click the **Lock** button to lock the plan or click the **Unlock** button to unlock the plan. The **Status** column will update.

If the plan is locked and you click the **View** button, the following page will not show the **CALCULATE** button. If the plan is unlocked and you click the **View** button, the **CALCULATE** button will be available.

**NOTE:** If you do not have security access to lock and unlock plan data, the **Lock** or **Unlock** buttons are not visible.

## Delete Plan

If you want to delete a plan, it must be unlocked and finished calculating. If you try to delete a locked plan, a dialog box informs you that it cannot be removed. If you try and delete a plan that is calculating, a validation message informs you that calculations are in progress.

To delete a plan, follow the legend and corresponding instructions:

## Plan Data

---

The screenshot shows the 'Workforce Planning' interface. At the top, there are two tabs: 'Register' (highlighted with a blue circle '1') and 'Formulas'. Below the tabs is a 'Calculate & Analyze' section with a row of icons: New, Edit, Copy, Delete (highlighted with a blue circle '4'), View, Lock, Unlock, and Plan Log. A dropdown menu is open under the 'Register' tab, showing 'Import & Modify' and 'Calculate & Analyze' (highlighted with a blue circle '2'). Below the icons is a table with a header row and one data row. The data row is highlighted with a blue circle '3' on the left. The table has columns: Plan Name, Scenario Type, Scenario Name, and Start Period.

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Select a plan.
4. Click the **Delete** button.

A dialog box displays to confirm if you want to proceed with removing the selected plan data. If there is no data in the plan, a dialog box will not display.

## Copy Plan

You can copy a plan to utilize another plan's selected criteria. You can copy a locked plan because the copy function only copies the plan criteria.

To copy a plan, follow the legend and corresponding instructions:

## Plan Data

The screenshot shows the 'Workforce Planning' interface. At the top, there are tabs for 'Register' and 'Formulas'. The 'Register' tab is active, and a dropdown menu is open, showing options: 'Import & Modify' and 'Calculate & Analyze'. Below the tabs is a toolbar with icons for 'New', 'Edit', 'Copy', 'Delete', 'View', 'Lock', 'Unlock', and 'Plan Log'. A table below the toolbar lists plans. The first row is highlighted, and a 'Copy' button is visible next to it. Below the table, there is a 'Calculate & Analyze' section with a 'Copy Plan' button. The 'Plan Name' field is set to 'Budget 2025 Copy'. The 'Scenario Type' is 'Budget', 'Scenario' is 'BudgetV1', 'Start Year' is '2025', 'Period Selected' is 'M1', and 'Number of Periods' is '24'. A 'Create Plan' button is visible. Below this, there is a 'View Plan' section with a 'Calculate' button. The 'Plan Name' is 'Budget 2025 Copy', 'Scenario Type' is 'Budget', 'Scenario' is 'BudgetV1', 'Start Period' is '2025 M1', 'Periods' is '24', and 'Plan Status' is 'Unlocked'.

**Workforce Planning**

Calculate & Analyze

New Edit Copy Delete View Lock Unlock Plan Log

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

Calculate & Analyze > Copy Plan

Plan Name: Budget 2025 Copy Scenario Type: Budget Scenario: BudgetV1 Start Year: 2025 Period Selected: M1 Number of Periods: 24

Calculate & Analyze > View Plan

Filter Results Select Columns Plan Name: Budget 2025 Copy Scenario Type: Budget Scenario: BudgetV1 Start Period: 2025 M1 Periods: 24 Plan Status: Unlocked

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Select a plan.
4. Click the **Copy** button.
5. (Optional) Rename the plan.

**NOTE:** When a plan is copied, the word *Copy* is added to the end of the Plan Name.

6. (Optional) Update plan criteria.
7. Click the **Create Plan** button.
8. Click the **CALCULATE** button.

# Edit Plan

You can edit a plan to update any of the plan criteria and re-run a calculation. You can only edit an unlocked plan.

To edit a plan, follow the legend and corresponding instructions:

The screenshot illustrates the 'Edit Plan' process in the Workforce Planning application. It shows the 'Calculate & Analyze' menu with the 'Register' option selected, which opens a sub-menu where 'Calculate & Analyze' is chosen. The 'Edit' button in the toolbar is highlighted. The table below shows the 'BudgetWorking' plan selected. The filter bar at the bottom shows the current plan criteria: Plan Name: Test, Scenario Type: Budget, Scenario: BudgetV2, Start Year: 2025, Period Selected: M1, and Number of Periods: 24. The 'Update Plan' and 'Calculate' buttons are also visible.

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Select a plan.
4. Click the **Edit** button.
5. Update plan criteria.

## Plan Data

---

6. Click the **Update Plan** button.
7. Click the **CALCULATE** button.

## Plan Log

The plan log records information from the last calculation of a plan. You can use the plan log to audit your plans and verify what entities were calculated for.

To view a plan log, follow the legend and corresponding instructions:

The screenshot shows the 'Workforce Planning' interface. At the top, there are two tabs: 'Register' (highlighted with a blue circle '1') and 'Formulas'. Below the tabs is a 'Calculate & Analyze' button (highlighted with a blue circle '2'). Below this is a toolbar with icons for 'New', 'Edit', 'Copy', 'Delete', 'View', 'Lock', 'Unlock', and 'Plan Log' (highlighted with a blue circle '4'). Below the toolbar is a table with a header row and one data row. The data row is highlighted with a blue circle '3' on the left. The table has columns for 'Plan Name', 'Scenario Type', 'Scenario Name', and 'Start Period'. The data row contains 'BudgetWorking', 'Budget', 'BudgetWorking', and '2026 M1'.

Plan Name	Scenario Type	Scenario Name	Start Period
BudgetWorking	Budget	BudgetWorking	2026 M1

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Select a plan.
4. Click the **Plan Log** button.

A new page will open, and you can view the filter groups calculated based on the security assigned, what time the plan was last calculated and who calculated it. The plan log will also display the number of calculated rows and total rows in the plan.

## Plan Data

---

[Calculate & Analyze](#) > [Plan Log](#) ✕

Plan Name: Budget 2025 Scenario Type: Budget Scenario: BudgetV1 Start Period: 2025 M1 Periods: 24 Plan Status: Unlocked Calculated Row(s): 56 Total Row(s): 56

Filter_Group	Run_By	Run_Date_Time
r.CostCenter IN ('CC101'...	Admin	9/2/2025 5:27:...

# Connector Business Rule

A connector business rule is created automatically when you install the solution and captures relevant column information the entity member definition is assigned to within a plan. That plan data can then be directly imported to a OneStream workflow profile. You will need a corresponding **Data Source**, **Transformation Rule**, and **Workflow Profile** to connect the plan data to the workflow. For example, if you create a Workflow Profile with a scenario type that does not match the selected plan, the data will not populate and you will have to select the correct scenario type.

To access the connector business rule, go to **Application > Business Rules > Connector** and then locate your planning configuration plan data connector instance. See the example below for the first instance of the Workforce Planning configuration:

## Plan Data

The screenshot displays a software development environment with a project explorer on the left and a code editor on the right. The project explorer shows a list of data entities, with 'WorkforcePlanningPlanDataConnector1' highlighted. The code editor shows the following C# code:

```
1 using System;
2 using System.Data;
3 using System.Linq;
4 using System.Collections.Generic;
5 using OneStream.Shared.Common;
6 using OneStream.Shared.Database;
7 using OneStream.Shared.Wcf;
8 using OneStream.Stage.Engine;
9 using Workspace.LIMB1.LIM.Controllers;
10
11 namespace OneStream.BusinessRule.Connector.WorkforcePlannin
12 {
13     #region PlanConnector
14     public class MainClass
15     {
16         private SessionInfo _si;
17
18         // /// Installer Generated Code - Do Not Modify ///
19         private PlanDataConnectorController _LIMController;
20         private string LIMType = "2";
21         private int LIMInstance = 1;
22         ///////////////////////////////////////////////////////////////////
23
24         public object Main(SessionInfo si, BRGlobals global
25         {
26             _si = si;
27             _LIMController = new PlanDataConnectorControlle
28
29             try
30             {
31                 switch (args.ActionType)
```

# Select Workflow

The Line Item Modeling solution enables you to launch multiple workflows for multiple time periods to export plan data into a workflow and run the plan data through the entire workflow process and into a cube. The data in the plan table will integrate with the Workflow based on specific settings around the Can Load Unrelated Entities profile property and the Substitution Text Strings in the Workflow Profile. When the Can Load Unrelated Entities profile property is set to True, then the processing of the Plan Data to the Workflow will reference the Substitution Text Settings populated with LIMEntity=MemberDefinition, and will import data based on security defined in the solution. When the Can Load Unrelated Entities profile property is set to False, then the processing of the Plan Data to the Workflow will reference Entity Assignment tab within the Workflow Profile and match Entities that exist in the plan table to know which Entities to import (this will be done for users that have write access for the respective Entities).

**NOTE:** Workflow security defaults to the Execution Group to align with the group used during workflow execution.

Once data is exported, you can navigate to **OnePlace > Workflow** and select the periods that were loaded to view the data in the import step.

**NOTE:** You must have the Manage Plans security permission to use the select workflow feature.



## Plan Data

---

1. Hover your cursor over the **Register** menu.
2. In the drop-down menu, select **Calculate & Analyze**.
3. Select a plan.
4. Click the **View** button.
5. Click the **Process** button.
6. In the **Cube Root Workflow** drop-down menu, select a workflow.
7. Select a Workflow checkbox.

**NOTE:** You can select multiple workflows.

8. Select a Period checkbox.

**NOTE:** You can select multiple periods.

9. Click the **Process** button. A message box displays how many rows were loaded for each period.

## Data Adapter

When a plan has calculated data, a permitted user can run a data adapter query to access the plan. You can do so by going to the Application tab, clicking on Workspaces, opening the Workforce Planning Workspace, expanding Dashboarding > Data Adapters, and selecting the **da\_GetPlanData\_LIM** data adapter.

**NOTE:** The Data Adapter executes the designated security method to comply with all solution-specific security configurations within the Line Item Modeling solution. Security is a critical component of the adapter, ensuring that data accessed outside the solution continues to adhere to the established security protocols applied to the data set.

## Plan Data

The screenshot shows the 'Application Workspaces - da\_GetPlanData\_LIM (Data Adapter)' interface. On the left, a tree view shows the workspace structure, with 'da\_GetPlanData\_LIM' selected under 'Data Adapters'. On the right, a properties pane shows the configuration for the selected data adapter.

General (Data Adapter)	
Name	da_GetPlanData_LIM
Workspace	Workforce Planning 1
Maintenance Unit	Dashboarding (LIM)
Description	Plan Data Preview
Processing	
Template Parameter Values (e.g., Param1=Value1, ...)	
Text 1	
Text 2	
Data Source	
Command Type	Method
Method Type	BusinessRule
Method Query	{WS}{GetPlanData}{PlanNar
Results Table Name	

Once the data adapter is selected, click on Run button on the toolbar. Doing so will offer parameters for you to select the specific Plan Name, option to preview the data, and it's corresponding Start and End dates. Doing so will provide the resulting query in the Data Preview along with the total number of rows based on the query parameters.

## Plan Data

---

Data Preview - da\_GetPlanData\_LIM

Original Query

```
{WS}{GetPlanData}{PlanName=[!Plan Name!],StartDate=[!Start Date!], EndDate=[!End Date!], Preview=[!Data Preview!]}
```

Substituted Query

```
{WS}{GetPlanData}{PlanName=[BudgetWorking],StartDate=[2026M1], EndDate=[2026M1], Preview=[true]}
```

Data Table

Table

	Entity	AccountName	AccountDescription	CostCenter	EmployeeID	FirstName	LastName	Region	Title
▶	EUS01	50200	Monthly Salary	CC101	E000234	Aaron		USNE	Manager
	EUS01	50200	Monthly Salary	CC101	E000236	Alicia		USNE	Manager
	EUS01	50200	Monthly Salary	CC101	E000238	Anne		USNE	Sales Director/V

Total Number Of Rows: 378

# Workforce Planning FUTA Formula Use Case

The following use case provides a detailed look into using formulas in the Workforce Planning configuration.

**Scenario:** Build a set of formulas to determine if the federal tax amount applies to an employee in a specific month. Federal tax calculation compares total monthly earnings of any employee to the federal tax limit.

**Role:** Implementer, Administrator

**Benefits:** Formulas can be individually created and the accounts applied to the formulas can be used as dependencies or building blocks for more advanced formulas to calculate more complex data.

You need to create a formula to calculate each category of earnings an employee could have, then populate the federal tax limit formula. You can create the following example formulas:

- [Monthly Salary Formula](#)
- [Bonus Calculation Formula](#)
- [Merit Calculation Formula](#)
- [Total Monthly Salary](#)
- [Year-To-Date Salary Formula](#)
- [Year-To-Date Salary - Tax Limit Formula](#)

- [Periodic - \(YTD-FUTA Limit\) Formula](#)
- [FUTA Formula](#)

**IMPORTANT:** There are many ways of creating formulas based on your configured Register fields, Global Drivers, Cube Drivers, and Register Field Groups. These formulas are examples to detail a particular use case.

## Solution Setup

Before you can create the formulas for this use case, you have to set up the solution by installing the Workforce Planning configuration. Follow these instructions for an example setup:

1. Set up the solution by using the Setup Wizard.
  - Register fields that are needed include: Salary (this field could be a yearly amount), FTE (this helps determine if the salary is dedicated to one Entity, Region, or Cost Center or should be split between multiple). For additional information, see [Register](#).

Example:

## Workforce Planning FUTA Formula Use Case

Register Field Name	Display Name	Data Type	Date Assignment	Allow Updates	Required Column	Member Definition	Parameter Name	Default Value
EmployeeID	EmployeeID	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Instance	Instance	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
FirstName	FirstName	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
LastName	LastName	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Entity	Entity	String		<input type="checkbox"/>	<input type="checkbox"/>	E#GSE.Base, E#GSP.Base	Not Used	
Region	Region	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
CostCenter	CostCenter	String		<input type="checkbox"/>	<input type="checkbox"/>	U1#CC100.Base	Not Used	
Title	Title	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Status	Status	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
FTE	FTE	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
InPer	InPer	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
OutPer	OutPer	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
StartDate	Start Date	Date	Start Date	<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
EndDate	End Date	Date	End Date	<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Grade	Grade	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Salary	Salary	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Bonus	Bonus	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
HRStatus	HRStatus	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
Reason	Reason	String		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	
TermPer	TermPer	Number		<input type="checkbox"/>	<input type="checkbox"/>		Not Used	

- Ensure there is an account in your import that can hold your monthly salary amounts. In this example, Account Name 50200 and Account Description of Monthly Salary are used. For additional information, see [Accounts](#).

Example:

# Workforce Planning FUTA Formula Use Case

---

↓  
Import

Account Name	Account Description
50200	Monthly Salary
50210	Salaries Hourly
50220	Bonus
50230	Overtime
50240	PTO
50250	Merit
50100	Medical Benefits
50120	Workers Compensation
50130	401K
50150	ST Disability
50160	LT Disability
50000	FUTA
50001	SUTA
50030	Medicare
50040	Social Security
50201	YTD Salary
50300	Total Salary
50221	YTD Bonus
50251	YTD Merit
50299	Monthly Total Salary
50202	YTD-FUTA Limit
50203	Periodic-YTD-FUTA Limit

- Security needs to be configured in order to complete the setup wizard. Assign as necessary. For additional information, see [Security](#).
2. Load Register Data. For additional information, see [Import and Modify](#).

Example:


## Workforce Planning FUTA Formula Use Case

Bonus	FTE	InPer	OutPer	Salary	EmployeeID	Instance	FirstName	LastName	Entity	Region	CostCenter	Title	Status	Start Date	End Date	Grade	HRStatus	Reason	TermPer
0.02700	1.00000	0.00000	0.00000	106480.00000	E000234	0.00000	Aaron	Davis	EUS01	USNE	CC101	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Active		0.00000
0.02700	1.00000	0.00000	0.00000	96800.00000	E000236	0.00000	Alicia	Flynn	EUS01	USNE	CC101	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Active		0.00000
0.02700	1.00000	0.00000	0.00000	159830.00000	E000238	0.00000	Anne	Perkins	EUS01	USNE	CC101	Sales Director/VP	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	41	Active		0.00000
0.02700	1.00000	0.00000	0.00000	96250.00000	E000244	0.00000	Richard	Reeves	EUS01	USNE	CC101	Inside Sales Mgr	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	32	Active		0.00000
0.02700	0.70000	0.00000	0.00000	98200.00000	E000248	0.00000	Michelle	Andersen	EUS01	USNE	CC101	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Split		0.00000
0.02700	0.30000	0.00000	0.00000	98200.00000	E000248	1.00000	Michelle	Anderson	EUS01	USNE	CC102	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Split		0.00000
0.02700	1.00000	0.00000	0.00000	116160.00000	E000250	0.00000	Jennifer	Adams	EUS01	USNE	CC101	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Active		0.00000
0.02700	1.00000	7.00000	5.00000	105000.00000	E000253	0.00000	Janet	Flores	EUS01	USNE	CC101	Inside Sales Mgr	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	32	Leave		0.00000
0.02700	1.00000	0.00000	0.00000	116160.00000	E000261	0.00000	Eric	Tapia	EUS01	USNE	CC101	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Active		0.00000
0.02700	1.00000	0.00000	0.00000	108800.00000	E000262	0.00000	Angela	Brown	EUS01	USNE	CC101	Manager	Exempt	1/1/1900 12:00:00 AM	1/1/1900 12:00:00 AM	40	Active		0.00000

- Import Global Drivers. For additional information, see [Global Drivers](#).

Example:

### Global Drivers

 Import

Name	Display Name	Value
SickPayFactor	Sick Pay Factor	0.00500
VacationFactor	Vacation Factor	0.01500
WageWhatIf	Wage What If	1.02000
SUTARate	SUTA rate	0.05000
BonusPer	Bonus Per	9.00000

## Monthly Salary Formula

The monthly salary formula is determined by the Full Time Equivalent (FTE) amount multiplied by the salary and divided by 12.

## Workforce Planning FUTA Formula Use Case

---

Formulas

Formula Name	Formula Description	Register Group	Value Type
MthlySalary		All Employees	Periodic

Account	Scenario Type	Periods
50200 - Monthly Salary	All Scenario Types	Period(s) Selected

### FTE\*Salary/12

← Move Left   → Move Right   🗑️ Delete Block   🧼 Clear All Blocks

⋮ FTE ⋮ \* ⋮ Salary ⋮ / ⋮ 12 ⋮

There are two different options for creating this formula:

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula by selecting each block:

1. Populate the formula criteria:
  - Formula Name: Monthly Salary
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50200 - Monthly Salary

## Workforce Planning FUTA Formula Use Case

---

- Scenario Type: All Scenarios
- Periods: All periods selected

Formula Name	Formula Description	Register Group	Value Type
Monthly Salary		All Employees	Periodic
Account	Scenario Type	Periods	
50200 - Monthly Salary	All Scenario Types	Period(s) Selected	

2. Click the Register tab, select **FTE** from the drop-down menu and click the **Add To Formula** button.
3. Click the \* operator block.
4. Click the Register tab, select **Salary** from the drop-down menu and click the **Add To Formula** button.
5. Click the / operator block.
6. Click the Text tab, type 12 in the text field and click the **Add To Formula** button.
7. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create this formula by typing the formula in the Text tab:

1. Populate the formula criteria:
  - Formula Name: Monthly Salary
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50200 - Monthly Salary

## Workforce Planning FUTA Formula Use Case

---

- Scenario Type: All Scenarios
- Periods: All periods selected

Formula Name	Formula Description	Register Group	Value Type
Monthly Salary		All Employees	Periodic
Account	Scenario Type	Periods	
50200 - Monthly Salary	All Scenario Types	Period(s) Selected	

2. Click the Text tab, type **FTE\*Salary/12** in the text field and click the **Add To Formula** button.
3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

## Bonus Calculation Formula

The bonus calculation formula uses a conditional IIF statement to determine if the CurrentPeriod is equal to the bonus period as defined in the Global Drivers as well as multiplying salary and bonus percent.

Formula Name	Formula Description	Register Group	Value Type
BonusCalc		All Employees	Periodic
Account	Scenario Type	Periods	
50220 - Bonus	All Scenario Types	Period(s) Selected	

**IIF(CurrentPeriod=Bonus Per,Salary\*Bonus,0)**

There are two different options for creating this formula:

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula by selecting each block:

## Workforce Planning FUTA Formula Use Case

---

1. Populate the formula criteria:
  - Formula Name: Bonus Calc
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50220 - Bonus
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Functions tab and select the **IIF** block.
3. Click the Functions tab and select the **CurrentPeriod** block.
4. Click the = operator block.
5. Click the Globals tab, select **Bonus Per** from the drop-down menu and click the **Add To Formula** button.
6. Click the , operator block.
7. Click the Register tab, select **Salary** from the drop-down menu and click the **Add To Formula** button.
8. Click the \* operator block.
9. Click the Register tab, select **Bonus** from the drop-down menu and click the **Add To Formula** button.
10. Click the , operator block.
11. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.

## Workforce Planning FUTA Formula Use Case

---

12. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create this formula by typing the formula in the Text tab:

1. Populate the formula criteria:
  - Formula Name: Bonus Calc
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50220 - Bonus
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Text tab, type **IIF(CurrentPeriod=Bonus Per,Salary\*Bonus,0)** in the text field and click the **Add To Formula** button.
3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

## Merit Calculation Formula

The merit calculation formula uses a conditional IIF statement to determine if the CurrentPeriod is greater than or equal to merit increase period. If that value is true, the monthly salary will be multiplied by the merit rate.

## Workforce Planning FUTA Formula Use Case

---

Formula Name	Formula Description	Register Group	Value Type
<input type="text" value="MeritCalc"/>	<input type="text" value="Merit Calc"/>	<input type="text" value="All Employees"/>	<input type="text" value="Periodic"/>
Account	Scenario Type	Periods	
<input type="text" value="50250 - Merit"/>	<a href="#">All Scenario Types</a>	<a href="#">Period(s) Selected</a>	

**IIF(CurrentPeriod>=Merit Incr Per,A#50200\*Merit Rate Ex,0)**

There are two different options for creating this formula:

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula by selecting each block:

1. Populate the formula criteria:
  - Formula Name: Merit Calc
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50250 - Merit
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Functions tab and select the **IIF** block.
3. Click the Functions tab and select the **CurrentPeriod** block.
4. Click the **>=** operator block.
5. Click the Globals tab, select **Merit Inc Per** from the drop-down menu and click the **Add To Formula** button.

## Workforce Planning FUTA Formula Use Case

---

6. Click the , operator block.
7. Click the Accounts tab, select **50200** from the Account Name drop-down menu, select the **Monthly Salary** formula and click the **Add Block** button.
8. Click the \* operator block.
9. Click the Globals tab, select **Merit Rate Ex** from the drop-down menu and click the **Add To Formula** button.
10. Click the , operator block.
11. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.
12. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create this formula by typing the formula in the Text tab:

1. Populate the formula criteria:
  - Formula Name: Merit Calc
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50250 - Merit
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Text tab, type **IIF(CurrentPeriod>=Merit Incr Per,A#50200\*Merit Rate Ex,0)** in the text field and click the **Add To Formula** button.

## Workforce Planning FUTA Formula Use Case

---

3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

## Total Monthly Salary

After you have created a monthly salary, bonus, and merit formula, you can create a formula that adds all of those calculations together. This formula utilizes the IsNull block from the Functions tab which determines if there are blank values for a specific period in the calculated results from the monthly salary, bonus, and merit formulas. You can enter a 0 in the IsNull calculation to replace any blank values to make sure there is no impact to the overall calculation. For example, if a bonus calculation for a given month is \$1000 and the IsNull function is used with a value of 0 for all other periods, the bonus calculation will remain at \$1000. If you use a value of 1 in the IsNull calculation, then the bonus calculation for the year would be \$1,011 (based on the 11 months carrying a 1 dollar value).

Formula Name	Formula Description	Register Group	Value Type
<input type="text" value="TTL Mthly Sal"/>	<input type="text" value="TTL Mthly Sal"/>	<input type="text" value="All Employees"/>	<input type="text" value="Periodic"/>
Account	Scenario Type	Periods	
<input type="text" value="50299 - Monthly Total Salary"/>	<input type="text" value="All Scenario Types"/>	<input type="text" value="Period(s) Selected"/>	

**IsNull(A#50200,0)+IsNull(A#50220,0)+IsNull(A#50250,0)**

There are two different options for creating this formula:

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula by selecting each block:

## Workforce Planning FUTA Formula Use Case

---

1. Populate the formula criteria:
  - Formula Name: Total Monthly Salary
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50299 - Monthly Total Salary
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Functions tab and select the **IsNull** block.
3. Select the vertical ellipses to the right of the IsNull block.
4. Click the Accounts tab, select **50200** from the Account Name drop-down menu, select the **Monthly Salary** formula and click the **Add Block** button.
5. Select the vertical ellipses after the next comma block.
6. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.
7. Select the vertical ellipses after the next comma block.
8. Click the **+** operator block.
9. Click the Functions tab and select the **IsNull** block.
10. Select the vertical ellipses to the right of the IsNull block.
11. Click the Accounts tab, select **50220** from the Account Name drop-down menu, select the **BonusCalc** formula and click the **Add Block** button.
12. Select the vertical ellipses after the next comma block.
13. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.

## Workforce Planning FUTA Formula Use Case

---

14. Select the vertical ellipses after the next comma block.
15. Click the **+** operator block.
16. Click the Functions tab and select the **IsNull** block.
17. Select the vertical ellipses to the right of the IsNull block.
18. Click the Accounts tab, select **50250** from the Account Name drop-down menu, select the **Merit Calc** formula and click the **Add Block** button.
19. Select the vertical ellipses after the next comma block.
20. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.
21. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create this formula by typing the formula in the Text tab:

1. Populate the formula criteria:
  - Formula Name: Total Monthly Salary
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50299 - Monthly Total Salary
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Text tab, type **IsNull(A#50200,0)+IsNull(A#50220,0)+IsNull(A#50250,0)** in the text field and click the **Add To Formula** button.

## Workforce Planning FUTA Formula Use Case

---

3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

## Year-To-Date Salary Formula

The year-to-date salary formula is similar to the total monthly salary formula except that it calculates a year-to-date value type instead of a periodic.

Formula Name	Formula Description	Register Group	Value Type
<input type="text" value="TTL Mthly Sal YTD"/>	<input type="text" value="TTL Mthly Sal YTD"/>	<input type="text" value="All Employees"/>	<input type="text" value="YTD"/>
Account	Scenario Type	Periods	
<input type="text" value="50201 - YTD Salary"/>	<a href="#">All Scenario Types</a>	<a href="#">Period(s) Selected</a>	

**IsNull(A#50200,0)+IsNull(A#50220,0)+IsNull(A#50250,0)**

Follow these instructions to create a year-to-date salary formula using example data and dependency formulas:

1. Select the Total Monthly Salary formula from the formula dashboard and click the **Copy** button.
2. Update the Formula Name to YTD Salary.
3. From the Value Type drop-down menu, select **YTD**.
4. From the Account drop-down menu, select **50201 - YTD Salary**.
5. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

## Year-To-Date Salary - Tax Limit Formula

The year-to-date salary - tax limit formula determines the difference between the YTD salary and the FUTA limit.

## Workforce Planning FUTA Formula Use Case

---

Formula Name	Formula Description	Register Group	Value Type
<input type="text" value="YTD - FutaLimit"/>	<input type="text" value="YTD - FutaLimit"/>	<input type="text" value="All Employees"/>	<input type="text" value="Periodic"/>
Account	Scenario Type	Periods	
<input type="text" value="50202 - YTD-FUTA Limit"/>	<a href="#">All Scenario Types</a>	<a href="#">Period(s) Selected</a>	

**IsNull(A#50201,0)-Federal Tax Limit**

There are two different options for creating this formula:

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula using example data and dependency formulas:

1. Populate the formula criteria:
  - Formula Name: YTD - FUTA Limit
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50202-YTD-FUTA Limit
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Functions tab and select the **IsNull** block.
3. Select the vertical ellipses to the right of the IsNull block.
4. Click the Accounts tab, select **50202** from the Account Name drop-down menu, select the **YTD Salary** formula and click the **Add Block** button.
5. Select the vertical ellipses after the next comma block.

## Workforce Planning FUTA Formula Use Case

---

6. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.
7. Select the vertical ellipses after the next parentheses block.
8. Click the - operator block.
9. Click the Globals tab, select the **Federal Tax Limit** from the drop-down menu and click the **Add To Formula** button.
10. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create this formula by typing the formula in the Text tab:

1. Populate the formula criteria:
  - Formula Name: YTD - FUTA Limit
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50202 - YTD-Futa Limit
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Text tab, type **IsNull(A#50201,0)-Federal Tax Limit** in the text field and click the **Add To Formula** button.
3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

# Periodic - (YTD-FUTA Limit) Formula

The Periodic - (YTD - FUTA Limit) formula determines the difference between the total monthly salary formula and the year-to-date - FUTA Limit formula.

Formula Name	Formula Description	Register Group	Value Type
<input type="text" value="Periodic - YTD - FutaLimit"/>	<input type="text" value="Periodic - YTD - FutaLimit"/>	<input type="text" value="All Employees"/>	<input type="text" value="Periodic"/>
Account	Scenario Type	Periods	
<input type="text" value="50203 - Periodic-YTD-FUTA Limit"/>	<input type="text" value="All Scenario Types"/>	<input type="text" value="Period(s) Selected"/>	

**IsNull(A#50299,0)-(IsNull(A#50201,0)-Federal Tax Limit)**

There are two different options for creating this formula:

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula using example data and dependency formulas:

1. Populate the formula criteria:
  - Formula Name: Periodic - (YTD - FUTA Limit)
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50203 - Periodic - (YTD - FUTA Limit)
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Functions tab and select the **IsNull** block.

## Workforce Planning FUTA Formula Use Case

---

3. Select the vertical ellipses to the right of the IsNull block.
4. Click the Accounts tab, select **50299** from the Account Name drop-down menu, select the **Total Monthly Salary** formula and click the **Add Block** button.
5. Select the vertical ellipses after the next comma block.
6. Click the Text tab and type **0** in the text field and click the **Add To Formula** button.
7. Select the vertical ellipses after the next parentheses block.
8. Click the - operator block.
9. Click the Functions tab and select the **IsNull** block.
10. Select the vertical ellipses to the right of the IsNull block.
11. Click the Accounts tab, select **50201** from the Account Name drop-down menu, select the **YTD Salary - Tax Limit** formula and click the **Add Block** button.
12. Select the vertical ellipses after the next comma block.
13. Click the Text tab, type **0** in the text field and click the **Add To Formula** button.
14. Select the vertical ellipses after the next parentheses block.
15. Click the - operator block.
16. Click the Globals tab, select the **Federal Tax Limit** from the drop-down menu and click the **Add To Formula** button.
17. Click the ) operator block.
18. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create the formula by typing in the Text tab:

## Workforce Planning FUTA Formula Use Case

---

1. Populate the formula criteria:
  - Formula Name: Periodic - (YTD - FUTA Limit)
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50203 - Periodic - (YTD - FUTA Limit)
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Text tab, type **IsNull(A#50299,0)-(IsNull(A#50201,0)-Federal Tax Limit)** in the text field and click the **Add To Formula** button.
3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

## FUTA Formula

The FUTA formula utilizes two IIF statements. The first is used to determine if the year-to-date salary is less than or equal to the federal tax limit. If it is, then the calculation will apply the total monthly salary multiplied by the FUTA rate. If the first IIF statement is false and the federal tax limit is surpassed, then the calculation will apply the difference between the total monthly salary and the result of the (YTD Salary - Tax Limit) value multiplied by the FUTA rate.

Formula Name	Formula Description	Register Group	Value Type
<input type="text" value="FUTA Calc"/>	<input type="text" value="FUTA Calc"/>	<input type="text" value="All Employees"/>	<input type="text" value="Periodic"/>
Account	Scenario Type	Periods	
<input type="text" value="50000 - FUTA"/>	<input type="text" value="All Scenario Types"/>	<input type="text" value="Period(s) Selected"/>	

**IIF(A#50201<=Federal Tax Limit,Federal Tax Rate\*A#50299,IIF(A#50203<0,0,A#50203\*Federal Tax Rate))**

There are two different options for creating this formula:

## Workforce Planning FUTA Formula Use Case

---

- Option 1: Select each formula block.
- Option 2: Type the formula in the text field of the Text tab.

### Option 1

Follow these instructions to create this formula using example data and dependency formulas:

1. Populate the formula criteria:
  - Formula Name: FUTA
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50000 - FUTA
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Functions tab and select the **IIF** block.
3. Click the Accounts tab, select **50201** from the Account Name drop-down menu, select the **YTD Salary** formula and click the **Add Block** button.
4. Click the **<=** operator.
5. Click the Globals tab, select **Federal Tax Limit** from the drop-down menu and click the **Add To Formula** button.
6. Click the **,** operator block.
7. Click the Globals tab, select **Federal Tax Rate** from the drop-down menu and click the **Add To Formula** button.
8. Click the **\*** operator block.

## Workforce Planning FUTA Formula Use Case

---

9. Click the Accounts tab, select **50299** from the Account Name drop-down menu, select the **Total Monthly Salary** formula and click the **Add Block** button.
10. Select the vertical ellipses after the next comma block.
11. Click the Functions tab and select the **IIF** block.
12. Click the Accounts tab, select **50203** from the Account Name drop-down menu, select the **Periodic-(YTD-FUTA Limit)** formula and click the **Add Block** button.
13. Click the **<** operator block.
14. Click the Text tab, and type **0** in the text field and click the **Add To Formula** button.
15. Select the vertical ellipses after the next comma block.
16. Click the **,** operator block.
17. Click the Accounts tab, select **50203** from the Account Name drop-down menu, select the **Periodic-(YTD-FUTA Limit)** formula and click the **Add Block** button.
18. Click the **\*** operator block.
19. Click the Globals tab, select **Federal Tax Rate** from the drop-down menu and click the **Add To Formula** button.
20. Click the **)** operator block.
21. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

### Option 2

Follow these instructions to create this formula by typing the formula in the Text tab:

## Workforce Planning FUTA Formula Use Case

---

1. Populate the formula criteria:
  - Formula Name: FUTA
  - (Optional) Formula Description
  - Register Group: All Employees
  - Value Type: Periodic
  - Account: 50000 - FUTA
  - Scenario Type: All Scenarios
  - Periods: All periods selected
2. Click the Text tab, and type **IIF(A#50201<=Federal Tax Limit,Federal Tax Rate\*A#50299,IIF(A#50203<0,0,A#50203\*Federal Tax Rate))** in the text field and click the **Add To Formula** button.
3. Click the **Save** button. You will receive a confirmation message with the option to create another formula or return to the formula library.

# Help and Miscellaneous Information



Access the help documentation.

## Display Settings

OneStream Solutions frequently display multiple elements for data entry and analysis. We recommend you set your screen resolution to a minimum of 1920 x 1080 for optimal form and report rendering. Adjust the Windows System Display text setting to 100% and do not apply Custom Scaling options.

## Package Contents and Naming Conventions

The package file name contains multiple identifiers that correspond with the platform. Renaming any of the elements contained in a package is discouraged in order to preserve the integrity of the naming conventions.

**Example Package Name:** `LIM_PV9.0.0_SV200_PackageContents.zip`

Identifier	Description
LIM	Solution ID
PV9.0.0	Minimum Platform version required to run solution
SV2.0.0	Solution version
PackageContents	File name

# OneStream Solution Modification Considerations

A few cautions and considerations regarding the modification of OneStream Solutions:

- Major changes to business rules or custom tables within a OneStream Solution will not be supported through normal channels as the resulting solution is significantly different from the core solution.
- If changes are made to any dashboard object or business rule, consider renaming it or copying it to a new object first. This is important because if there is an upgrade to the OneStream Solution in the future and the customer applies the upgrade, this will overlay and wipe out the changes. This also applies when updating any of the standard reports and dashboards.

## Help and Miscellaneous Information

---

- If modifications are made to a OneStream Solution, upgrading to later versions will be more complex depending on the degree of customization. Simple changes such as changing a logo or colors on a dashboard do not impact upgrades significantly. Making changes to the custom database tables and business rules, which should be avoided, will make an upgrade even more complicated.

# Appendix A: Workforce Planning Formulas

The following table is a detailed list of some Workforce Planning sample formulas.

Formula	Description	Calculation Logic	Calculation Definition
Monthly Salary	This is the amount of money an employee earns in a month.	$FTE * Salary / 12$	$FTE * Salary / 12$
Bonus	This is an extra payment given to an employee on top of their regular salary.	IIF (CurrentPeriod=Bonus Per,Salary* Bonus,0)	IIF(CurrentPeriod=Bonus Per,Salary* Bonus,0)

## Appendix A: Workforce Planning Formulas

Formula	Description	Calculation Logic	Calculation Definition
Merit	This often refers to a system where pay increases are based on employee performance.	IIF (CurrentPeriod>=Merit Incr Per, Monthly Salary*Merit Rate Ex,0)	IIF(CurrentPeriod>=Merit Incr Per,A#50200*Merit Rate Ex,0)
Medical Benefits	These are health-related benefits provided by an employer.	FTE*Health Ins Rate/12	FTE*Health Ins Rate/12
Workers Comp	This insurance type pays for medical care and physical rehabilitation of employees injured on the job.	Workers Comp Rate*Monthly Salary	IIF(A#50200>0,Workers Comp Rate*A#50200,0)

**Appendix A: Workforce Planning Formulas**

---

Formula	Description	Calculation Logic	Calculation Definition
Disability	This insurance type pays a portion of an employee's salary for a period of time if they are unable to work due to injury or illness.	Disb Ins Rate*Monthly Salary	A#50200*Disb Ins Rate

**Appendix A: Workforce Planning Formulas**

Formula	Description	Calculation Logic	Calculation Definition
FUTA	<p>This is short for Federal Unemployment Tax Act, which is a tax that employers pay to the federal government to fund state workforce agencies. These agencies provide unemployment benefits to people who have lost their jobs.</p>	<p>IIF(Total YTD Salary&lt;=Federal Tax Limit,Federal Tax Rate*Total Monthly Salary,IIF (PartialLimitCalc&lt;0,0, PartialLimitCalc*Federal Tax Rate))</p>	<p>IIF(A#50201&lt;=Federal Tax Limit,Federal Tax Rate*A#50299,IIF (A#50203&lt;0,0,A#50203*Federal Tax Rate))</p>

## Appendix A: Workforce Planning Formulas

---

Formula	Description	Calculation Logic	Calculation Definition
SUTA	This is short for State Unemployment Tax Act, which is a tax that funds programs and benefits for unemployed citizens.	$SUTA\ rate * Monthly\ Salary$	$A\#50200 * SUTA\ rate$
PTO Vacation	This is short for paid time off, which is a policy that allows employees to take time off from work while still being paid.	$Vacation\ Factor * Monthly\ Salary$	$A\#50200 * Vacation\ Factor$

**Appendix A: Workforce Planning Formulas**

---

Formula	Description	Calculation Logic	Calculation Definition
PTO Sick	This is short for paid time off, which is a policy that allows employees to take time off from work due to illness, while still being paid.	Sick Pay Factor*Monthly Salary	A#50200*Sick Pay Factor

# Appendix B: Custom Service Factory

The purpose of the Custom Service Factory is to provide a method in which you can add customizations to the solution. You can add custom events for components, Dynamic Grid, and the SQL.

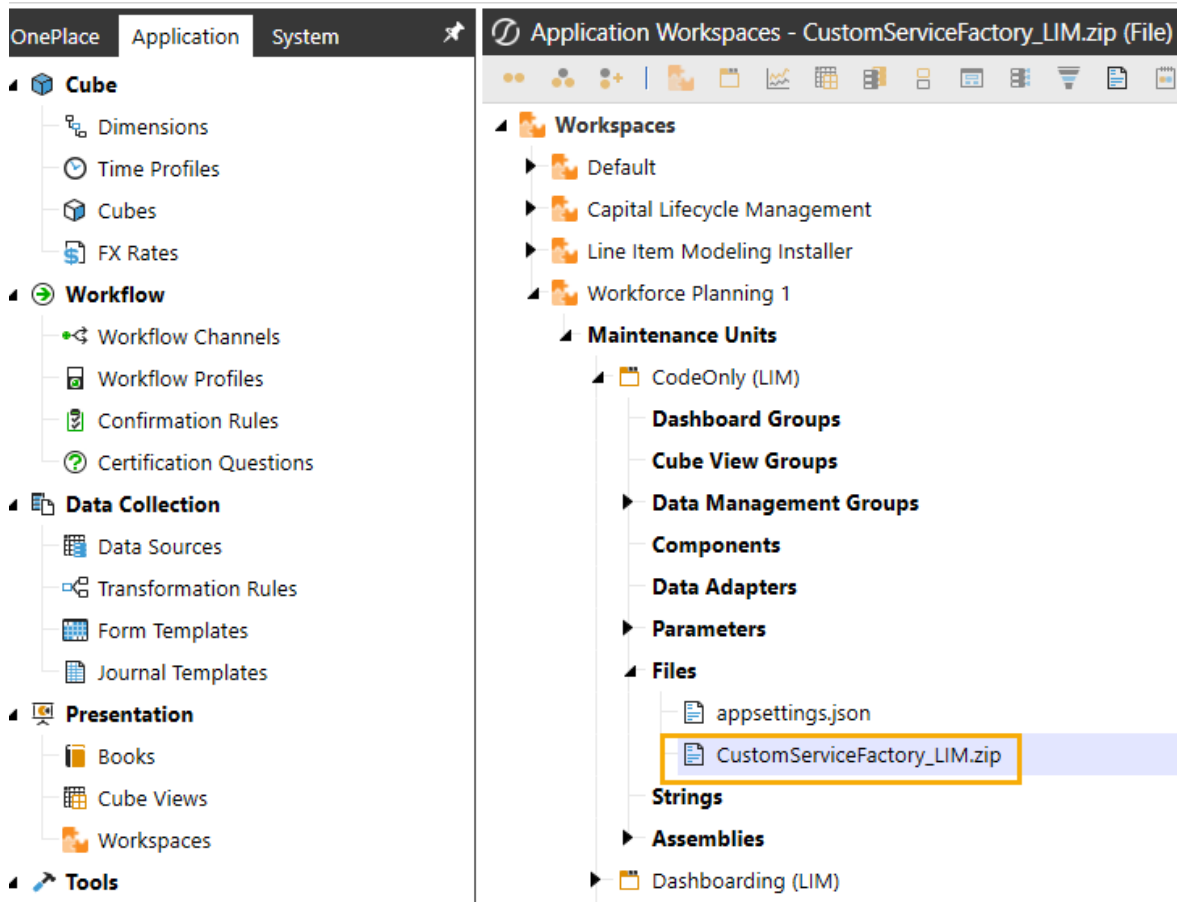
**IMPORTANT:** Maintain your assembly as customizations will NOT remain in place during a solution upgrade.

**NOTE:** The Custom Service Factory includes the ability to modify the table view service for the register editor. The table name for the register editor is already present in the custom service factory code and does not need to be changed. Other areas of the Custom Service Factory have placeholders such as my component or my grid name.

## Set Up the Custom Service Factory

1. On the **Application** tab click **Workspaces > Line Item Modeling > Maintenance Units > CodeOnly (LIM) > Files**.
2. In the **Files** folder, click **CustomServiceFactory\_LIM.zip**.

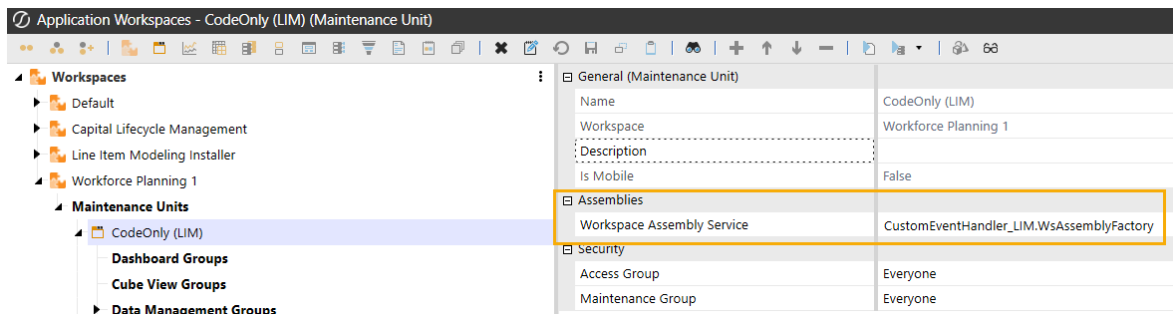
## Appendix B: Custom Service Factory



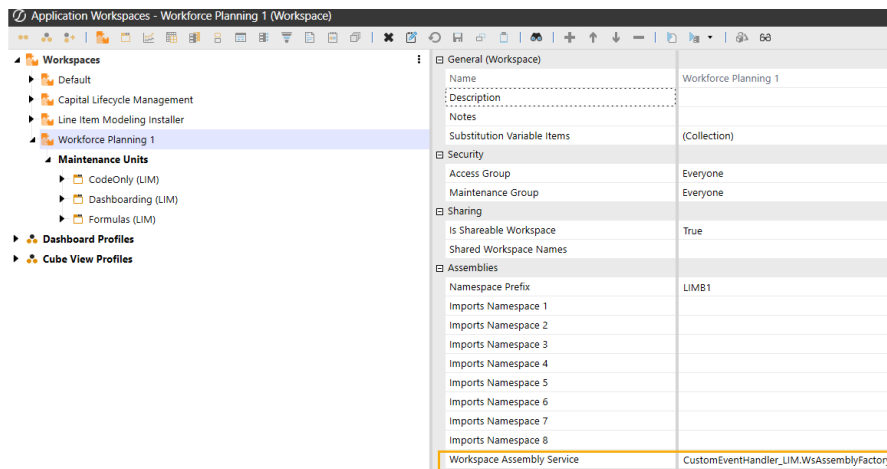
3. In the **General (File)** pane, click **Download File** and save the file to an appropriate location.
4. On the **Application** tab, click **Tools > Load/Extract**.
5. On the **Load** tab, locate `CustomServiceFactory_LIM.zip` using the **Select File** icons and click **Open**.

# Change Assemblies Setting upon Install


1. On the **Application** tab click **Workspaces** > **Line Item Modeling** > **Maintenance Units** > **CodeOnly (LIM)**.
2. Update the **Workspace Assembly Service: CustomEventHandler\_LIM.WsAssemblyFactory**



3. On the **Application** tab go to **Workspaces** and then your solution configuration Workspace. For example, Workforce Planning 1.
4. Update the **Workspace Assembly Service: CustomEventHandler\_LIM.WsAssemblyFactory**



# Maintain Assembly

1. On the **Application** tab, click **Tools > Load/Extract > Extract**.
2. In the File Type drop-down menu, select **Application Workspaces**.
3. In the Items to Extract drop-down menu, unselect **All**.
4. Click **Workspaces > Line Item Modeling > Maintenance Units > Workspace Assemblies**.
5. Select **CustomEventHandler\_LIM**.
6. Click the extract button  .

## Example

Here is an example method that checks the titles of user-entered data in the Dynamic Grid for an empty or Boss value and substitutes them with the Team Leader value.

```
using OneStream.Shared.Common;
using OneStream.Shared.Wcf;
using OneStreamWorkspacesApi.V800;
using System;

namespace Workspace.__WsNamespacePrefix.__WsAssemblyName
{
    public class WsDynamicGridService : IWsasDynamicGridV800
    {
        public XFDynamicGridGetDataResult GetDynamicGridData(SessionInfo si, BRGlobals
brGlobals, DashboardWorkspace workspace, DashboardDynamicGridArgs args)
        {
            try
            {
                if ((brGlobals != null) && (workspace != null) && (args != null))
                {
                    return Workspace.__
WsNamespacePrefix.LIM.WsDynamicGridController.GetDynamicGridData(si, brGlobals, workspace,
args);
                }
            }
        }
    }
}
```

## Appendix B: Custom Service Factory

---

```
        }
        return null;
    }
    catch (Exception ex)
    {
        throw new XFException(si, ex);
    }
}

public XFDynamicGridSaveDataResult SaveDynamicGridData(SessionInfo si, BRGlobals
brGlobals, DashboardWorkspace workspace, DashboardDynamicGridArgs args)
{
    try
    {
        // DO NOT MODIFY THIS METHOD ALL CHANGES SHOULD BE ADDED INSIDE THE
        BEFORE/AFTER EVENT METHODS

        if ((brGlobals != null) && (workspace != null) && (args != null))
        {
            BeforeEvent(si, brGlobals, workspace, args);

            // Insert logic here to save modified rows.
            XFDynamicGridSaveDataResult result = Workspace.__
WsNamespacePrefix.LIM.WsDynamicGridController.SaveDynamicGridData(si, brGlobals, workspace,
args);

            AfterEvent(si, brGlobals, workspace, args, result);

            return result;
        }

        return null;
    }
    catch (Exception ex)
    {
        throw new XFException(si, ex);
    }
}

private static void BeforeEvent(SessionInfo si, BRGlobals brGlobals,
DashboardWorkspace workspace, DashboardDynamicGridArgs args)
{
    // GET FUNCTION NAME FROM COMPONENT SELECTION CHANGED SERVER TASK ARGUMENTS
    if (args.Component.Name.XFEqualsIgnoreCase("dg_Register_Insert_Delete_LIM"))
    {
        MyCustomBeforeEvent(si, args);
    }
}

private static void AfterEvent(SessionInfo si, BRGlobals brGlobals,
DashboardWorkspace workspace, DashboardDynamicGridArgs args, XFDynamicGridSaveDataResult
taskResult)
{
    // GET FUNCTION NAME FROM COMPONENT SELECTION CHANGED SERVER TASK ARGUMENTS
    if (args.Component.Name.XFEqualsIgnoreCase("ComponentName"))
    {
        MyCustomAfterEvent(si);
    }
}
```

## Appendix B: Custom Service Factory

---

```
    }
}

// PUT CUSTOM METHODS HERE
private static void MyCustomBeforeEvent(SessionInfo si, DashboardDynamicGridArgs
args)
{
    if (args.SaveDataArgs != null)
    {
        foreach (XFEditedDataRow row in args.SaveDataArgs.EditedDataRows)
        {
            if (row.InsertUpdateOrDelete == DbInsUpdateDelType.Insert)
            {
                var titleValue = row.ModifiedDataRow.Items.ContainsKey("Title") ?
row.ModifiedDataRow.Items["Title"]?.ToString() : null;

                if (string.IsNullOrEmpty(titleValue) || titleValue == "Boss")
                {
                    row.ModifiedDataRow.Items["Title"] = "Team Leader";
                }
            }
        }
    }
}

private static void MyCustomAfterEvent(SessionInfo si)
{
    // ADD CUSTOM AFTER EVENT CODE HERE
}
}
```