

Specialty Planning and Specialty Compliance Guide

PV620 SV103

Copyright © 2023 OneStream Software LLC. All rights reserved.

Any warranty with respect to the software or its functionality will be expressly given in the Subscription License Agreement or Software License and Services Agreement between OneStream and the warrantee. This document does not itself constitute a representation or warranty with respect to the software or any related matter.

OneStream Software, OneStream, Extensible Dimensionality and the OneStream logo are trademarks of OneStream Software LLC in the United States and other countries. Microsoft, Microsoft Azure, Microsoft Office, Windows, Windows Server, Excel, .NET Framework, Internet Information Services, Windows Communication Foundation and SQL Server are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. DevExpress is a registered trademark of Developer Express, Inc. Cisco is a registered trademark of Cisco Systems, Inc. Intel is a trademark of Intel Corporation. AMD64 is a trademark of Advanced Micro Devices, Inc. Other names may be trademarks of their respective owners.

Table of Contents

Overview	1
OneStream Planning Solutions	1
Relational Blending Engine and Planning	1
Traditional Planning Approaches and Problems	2
OneStream Planning with Data Blending	2
Installation and Setup	3
Dependencies	3
Select the Planning Development Location	3
Use the Production Application	4
Use the Development Application	4
Configure Application Server Settings	4
Configure the OneStream Application Server	5
Install Planning	7
Set up Planning	7
Create the Tables	8
Review the Package Contents	8
Home	13
People Register	14
Calculate a Plan	14

Delete a Plan	15
Complete a Workflow	15
Revert a Workflow	15
People Register Taskbar	15
Calculation Definition	18
Global Drivers	18
Allocation Methods	19
Allocation Method Detail	20
Calculation Plans	21
Execution List	23
Import Calculation Definitions with an Excel Template	24
Audit	26
Audit Logs	26
Audit Report	27
Audit Files	28
Settings	29
Global Options	29
Security Group [View Employee Name]	29
Security Group [Manage Calculation Definition]	30
Default Plan Start Period	30

Default Plan End Period	30
Calculate Before Complete Workflow	30
Workflow Profile Suffix [Auto Load]	30
Workflow Profile [Central Register Mgmt]	30
Workflow Profile [Source Connector Criteria]	30
Scenario [Source Connector Criteria]	31
Time [Source Connector Criteria]	31
Parallel Batch Size [Lower = More Parallelism]	31
Use Parallel Save	31
Global Options for Reporting	31
Enable Journal Loading (only Reporting Compliance)	31
Top Entity for Journals	32
Journal Cons Member	32
Activity Types	32
Accounts	33
Control Lists	34
Code Fields	35
Status List	35
Register Field Types	36
Register Field Order	37
Register Field List	38

Plan Periods	39
Mass Update	40
Uninstall	41
Import Register Data	42
Create Data Source	42
Transformation Rules	43
Workflow Profile	44
Help and Miscellaneous Information	45
Display Settings	45
Package Contents and Naming Conventions	45
Solution Database Migration Advice	46
MarketPlace Solution Modification Considerations	46
Appendix A: Expressions	48
Appendix B: Substitution Variables	50
Appendix C: Calculations (Allocation Methods)	52
Appendix D: Custom Event Model	55
Set up the Custom Event Model	55
Available Events	56
Before / After Selection Changed Events	56
Before / After Save Data Events	57

Table of Contents

Register Restriction on Calculation Event	58
Appendix E: Solution Audit BR Functions	59
Overview	60
TCR_SolutionHelper Code and Sample Calls	61
Appendix F: Excel Templates	62
Load Excel Templates to Custom Tables	62
Appendix G: People Planning	66
Replace and Merge Functionality	66
Replace Copy Method	66
Merge Copy Method	67
Calculate and Update Functionality	68
Select Criteria for Excel Template Import	69

Overview

The following topics describe the OneStream Planning offerings:

- OneStream Planning Solutions
- Relational Blending Engine and Planning

OneStream Planning Solutions

The OneStream Planning Solutions are a group of similar applications created around a common OneStream Relational Blending framework. Each focuses on a single Planning subject.

OneStream Planning Solutions include:

- People Planning
- Thing Planning
- · Capital Planning
- Cash Planning
- Sales Planning

Relational Blending Engine and Planning

Planning refers to the process required to plan domain specific segments of a broad financial planning trial balance. For example, planning for the fixed asset range of accounts is very different from planning for staffing changes. These Planning areas involve different groups of users, process timing, calculations, and reporting needs.

Traditional Planning Approaches and Problems

All Planning tasks share a common challenge. Creating an analytic model to represent a planning process is very difficult without knowing how many items will be planned. The nature of analytic planning requires building a Cube and defining its Dimensions with the appropriate Dimension members (Products, Employees, Assets, etc.). This is where the problems begin. How many assets should be added to the Asset Dimension in the Capital Planning Cube? How many new hire employees should be added to the Employee Dimension in the Workforce Planning Cube? These questions are impossible to answer, and nobody can predict how many items someone intends to add to a plan. Consequently, it is impossible to build Dimensions in advance of the planning process which leads to intensive Cube and Dimension maintenance activities. In addition, adding each asset or employee to an analytic planning model can create Dimensions with many members which can lead to processing performance problems.

OneStream Planning with Data Blending

The OneStream Planning Engine blends the relational data and analytic model capabilities of the OneStream Platform. This creates a completely different way to approach the unknown nature of the Planning process. The Planning solution uses a relational table (Register) to collect the items intended for planning (e.g. People, Assets, Projects, etc.) or compliance (e.g. Contracts). It then applies calculations to the register items, which results in an output table that consists of an accounting distribution (like an Accounts Payable or Receivable Sub-System Distribution). The resulting distribution is then mapped and automatically loaded into the analytic model at a summary level. By loading summary data into the analytic model, the metadata maintenance and performance burden associated with the traditional analytic-only approach is virtually eliminated.

Using the relational blending approach eliminates having to know in advance how many items a user will plan. A user can add as many register items as he/she needs without the system administrator having to change the planning model's metadata. The reason for this is that a relational table is used to hold the register and derive the calculations. The analytic model is only loaded with summary data, which in turn keeps calculation performance optimal. Even better, the relational detail register information is still accessible from the analytic model via OneStream's built in drill-down capabilities.

The Planning Engine allows more efficient planning models to be built and rapidly deployed. The following sections provide an overview of the People Planning implementation which is a part of the Planning Engine. The same concepts defined for People Planning span all applications in the Planning solutions. The only differences between the applications are the fields defined in the Register table (i.e. what is being planned) and the types of prebuilt calculations required to support the application (e.g. Double Declining Balance Depreciation, Interest Expense, etc.).

Installation and Setup

This guide describes the necessary steps to set up and use the People Planning solution as an example since many of these concepts are the same across these solutions. Knowledge of these common steps can be used to set up any of the Planning solutions. Differences between solutions will be noted where needed.

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

- "Dependencies" below
- Select the Planning Development Location
- "Configure Application Server Settings" on the next page
- "Install Planning" on page 7
- "Set up Planning" on page 7

Dependencies

You must install the following components before installing Planning:

Component	Description
OneStream 6.2 or later	Minimum OneStream Platform version required to install this version of Planning.

Select the Planning Development Location

Before installing, decide if you will build Planning directly in the Production OneStream application or in a separate Development OneStream application. This section provides some key considerations for each option.

Use the Production Application

The primary advantage of building Planning in a Production application is that you do not have to migrate the resulting work from a Development application. However, we do not recommend this location because making application design changes in production is risky.

NOTE: We strongly recommend that you implement Planning in the Development environment with a fresh copy of the Production application before starting work.

Use the Development Application

As a best practice, build your Planning solutions in the Development OneStream application using the following procedure:

- 1. Ensure all the OneStream artifacts relating to Planning such as **Workflow Profiles** and **Entities** are in the Production application.
- 2. Copy your Production OneStream application to your Development environment and rename it. This Development version will be used for your Planning project.

Configure Application Server Settings

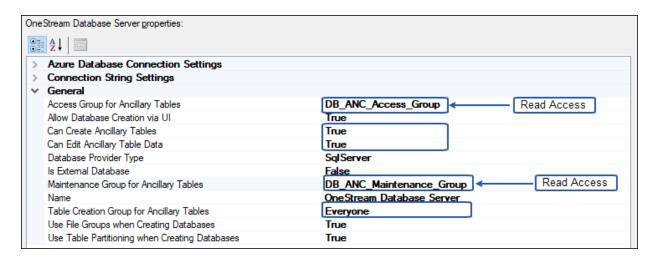
You may need to edit the OneStream Application Server Configuration so users can create and change data in the additional database tables used by Planning solutions. If other MarketPlace Solutions are in the application, these adjustments may already exist. See "Solution Database Migration Advice" on page 46

Before you begin, make sure these security group settings include the users who work on and set up Planning solutions.

NOTE: Group settings are applicable to all MarketPlace solutions, so keep the group names generic.

- 1. Start the OneStream Server Configuration Utility as an Administrator.
- 2. Select Open Application Server Configuration File > Database.
- 3. Edit the following OneStream Database Server properties:

- Access Group for Ancillary Tables: Select a group that includes those who will access records.
- Can Create Ancillary Tables: True
- Can Edit Ancillary Table Data: True
- Maintenance Group for Ancillary Tables: Select a group who will edit and maintain tables.
- Table Creation Group for Ancillary Tables: Select a group who can create tables.



4. Restart Internet Information Server.

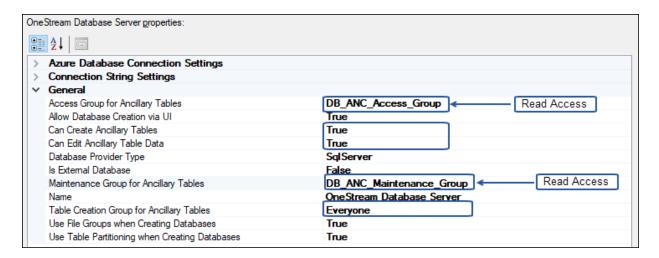
Configure the OneStream Application Server

You may need to edit the OneStream Application Server Configuration so users can create and change data in the additional database tables used by Planning solutions. If other MarketPlace Solutions are already in the application, these adjustments may already exist. See "Solution Database Migration Advice" on page 46

Before you begin, make sure these security group settings include the users who work on and set up Planning solutions.

NOTE: Group settings are applicable to all MarketPlace solutions; it is important to keep the group names generic.

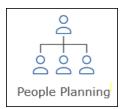
- 1. Start the OneStream Server Configuration Utility as an Administrator.
- 2. Select Open Application Server Configuration File > Database.
- 3. Edit the following OneStream Database Server properties:
- Access Group for Ancillary Tables: Select a group that includes those who will access records.
- Can Create Ancillary Tables: True
- Can Edit Ancillary Table Data: True
- Maintenance Group for Ancillary Tables: Select a group who will edit and maintain tables.
- Table Creation Group for Ancillary Tables: Select a group who can create tables.



4. Restart Internet Information Server.

Install Planning

1. On the OneStream MarketPlace Dashboard, click MarketPlace > People Planning.



- On the Planning Solution page, select the appropriate OneStream platform version from the Minimum Platform Version drop-down list.
- 3. Select the most recent version from the **Solution Version** drop-down list and then click **Download**.
- 4. Log in to OneStream.
- 5. On the **Application** tab, click **Tools > Load/Extract**.
- 6. On the **Load** tab, locate the solution package using the **Select File** icons and click **Open**.
- 7. When the solution's file name appears, click **Load**.
- 8. Click **Close** to complete the installation.

Set up Planning

The first time Planning runs, you are guided through the table setup process. Click **OnePlace** > **Dashboards** > **People Planning** / **People Planning**.



NOTE: Before running the set up, confirm that the account used to access SQL server has table creation rights on the SQL database to create the custom tables.

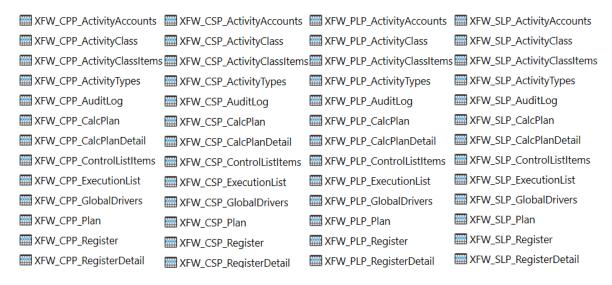
Create the Tables

1. Click Step 1: Create Tables

The first step of the setup creates all the tables and Cubes required for the Planning solution being installed.

This step may be necessary when upgrading even if tables are already present. Planning will not drop any tables that already exist but will modify table structures and add any new ones if necessary. Each Planning solution includes its own set of database tables that are added to the application database when they are installed.

NOTE: These tables are the tables that are created in the OneStream application database for the installed Planning solutions.

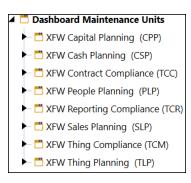


2. When setup is complete, click **Step 2: Launch Solution** to open Planning.

Review the Package Contents

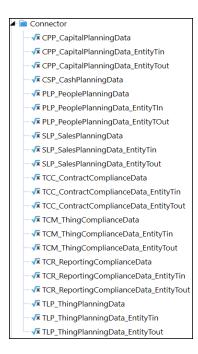
Each Planning solution has its own Dashboard Maintenance Unit containing all of the Components solution's user interface, required Dashboard Groups, Components, Data Adapters, Parameters and Files.

NOTE: The naming convention used to identify solution components is **XFW** <**Solution Name>** (**Abbv**). For example, People Planning becomes **XFW People Planning (PLP)**.

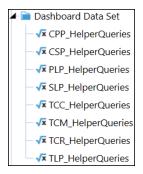


Do not rename or modify any Component included in the package unless specifically instructed to do so in that project documentation for the purposes of reference information when performing upgrades.

Connector Business Rules define the connection, data result sets, and drill-back option capabilities of an external data connection. See *Application Tools* in the *Design and Reference Guide* for an example of this rule type.



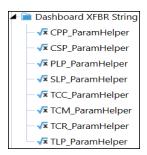
Dashboard Data Set Business Rules are used to create programmatic query results. These may be used to combine different types of data for a report, build other data queries, conditionally build data query reports or parameters, and create data series to be displayed in a Chart (Advanced) Parameter Component in a Dashboard. See *Application Tools* in the *Design and Reference Guide* for an example of this rule type.



Dashboard Extender Business Rules are used to perform a variety of tasks associated with Dashboards and MarketPlace solutions. These Business Rules can be thought of as multipurpose rules that make up the majority of the code written in a MarketPlace solution. They provide the core functionality and features of a MarketPlace solution. They can execute tasks when GUI components are activated, perform tasks, display result messages, upload files, automate/build custom Workflows and more. See *Application Tools* in the *Design and Reference Guide*for an example of this rule type.

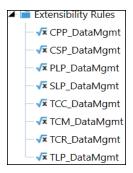


Dashboard XFBR String Business Rules are used to process conditional Dashboard Parameters. These rules inspect and alter a Dashboard Parameter. See *Application Tools* in the *Design and Reference* for an example of this rule type.



Extensibility Rules include two types of Business Rules:

- Extender Rules provide simple utility functions or helper functions called as part of a Data Management Job.
- 2. **Event Handler Rules** are called before or after a certain operation type occurs within OneStream. See *Application Tools* in the *Design and Reference Guide*for an example of this rule type.



Each Planning solution contains a unique **Data Management** job to execute the *Calculate Plan* functions.

Installation and Setup

Data Management Groups

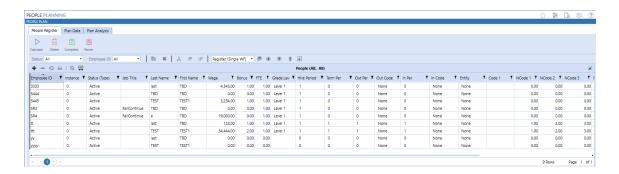
- Capital Planning (CPP)
- Cash Planning (CSP)
- Contract Compliance (TCC)
- People Planning (PLP)
- ► Reporting Compliance (TCR)
- Sales Planning (SLP)
- Thing Compliance (TCM)
- Thing Planning (TLP)

Home

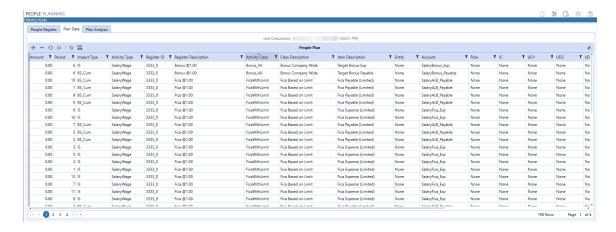
The **People Plan** page contains the People Register, Plan Data, and Plan Analysis tabs.

People Planning enables detailed, complex, driver-based workforce planning integration with OneStream. It binds the power and flexibility of tailored relational database tables, OneStream dashboards, workflow, integration with drill back, financial modeling, and reporting. The **Home** page contains three tabs:

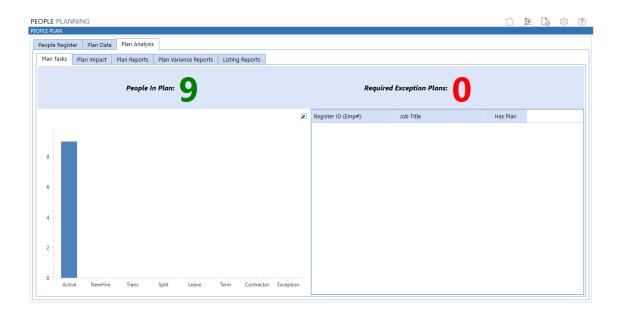
The **People Register** is where register items (for example, Employees) are imported, entered, and maintained. This concept of a Register carries over into the other Planning solutions, though the columns displayed, and data gathered as an input to the Plan Data will vary.



The Plan Data displays the results of the Plan calculations.



The **Plan Analysis** displays drillable reports on the Plan data.



NOTE: People Register, Plan Data, and Plan Analysis are called **Register**, **Data**, and **Analysis** in other Planning solutions.

People Register

The **People Register** is integrated into the end user Workflow process. End users will use this page to input new employee information (for example, New Hires) and to maintain existing employee information (for example, Transfers / Leave). In addition, this page provides users with the ability to run plan calculations, review calculation results, and then complete the planning Workflow. Upon completion, this will load summarized plan data in to the analytic planning model.

Calculate a Plan



Calculate runs items marked as Enabled in the Execution List and then runs the related Calculation Plans and Allocation Methods. Results are displayed in **Plan Data** tab. Only one user can initiate a Calculation Plan at a time within the same workflow profile.

NOTE: When running the Calculate Plan from this button, the calculations are run as a Data Management job. This Data Management job is run on the general server and not on the Data Management server because the call to start the job is not coming from the web interface.

NOTE: For more information about calculating updated register records only, see "Calculate and Update Functionality" on page 68.

Delete a Plan



Delete removes the results from the **Plan Data** tab.

Complete a Workflow



Complete attempts to calculate the People Plan (if the Global Option is enabled) and autoload the assigned Workflows. If the Workflow load is successful, then the Workflow running the People Plan Dashboard is marked as complete.

Revert a Workflow



Revert reopens the Workflow running the People Plan Dashboard and resets the import Workflows assigned to auto load.

People Register Taskbar



Field	Description
Status	Displays only the selected Status (Type).
Employee ID	Displays only the selected Employee ID. When this filter is used, additional instances of the same Employee ID can be entered. This is useful for entering multiple transfers for the same employee.
Open Copy Register (All)	Copies the entire register plan for criteria selected within the Central Register Workflow or Workflow POV, Source Time, and Source Scenario using two copy methods: Replace or Merge.

Field	Description
	For more information about these methods, see "Replace and Merge Functionality" on page 66.
Open Delete Register Plan	Deletes the exception plan for the current record in the grid or the entire register.
Open Exception Calc Plan	Allows users to enter an exception plan for the selected register. Exception plans are for people that have an Exception Status (Type) and act as additional plan items for people that have an assigned Status.
Open Copy Exception Calc Plan	Copies an existing exception plan to the selected register item in the grid.
Open Copy Exception Calc Plan (One-To- Many)	Copies an existing exception plan to multiple plans based on specified criteria.
Excel Template Selector	Downloads the Excel template selected in the combo box to the left (Single WF, Multi WF, Exception Plan).
Download Register XLXS Import Template	This downloads the Excel Template selected in the Excel Template Selector. For additional information about this field, see "Appendix F: Excel Templates" on page 62.
Export Register	Exports Register data out to a CSV file to be edited in Excel and then reimported. Note that before saving as an Excel file to be re-imported, an Excel Named Range that starts with the letters "xft" must be added to this file for the range of cells that start with the word "Application" (usually in the A5 cell) and all the way right to cover relevant columns and down to cover the relevant rows.

Home

Field	Description
Import Register Items	Allows the user to browse to and upload a register template. Note that this template must include an Excel Named Range.
Import Register Data Using A Connector	Calls a customer-specific Connector to pull data into the People Register. Update the ImportRegisterConnector Function in the PLP_SolutionHelper Dashboard Extender Business Rule in order to import the register. By default, this button will not process anything until the function is updated. Contact OneStream Support if assistance is needed and arrangements can be made.
Export Entire Register	Downloads Registers for all Workflows into one file. This only displays for Administrators and users in the Manage Calculation Definition Security Group.

Calculation Definition



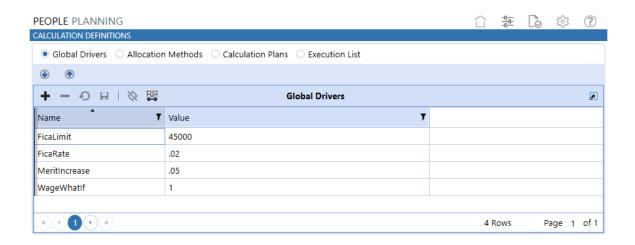
The **Calculation Definitions** page contains Global Drivers, Allocation Methods, Calculation Plans, and Execution Lists.

The Calculation Definition page is the interface for defining the calculations against the Register. The OneStream Planning Engine uses a methodology similar to a general ledger sub-system distribution (for example, Accounts Payable):

- It generates accounting distribution based on the line item calculations defined in the
 Allocation Methods page. Think of these as adjustments that can be made to the target
 financial model. Allocation Methods are not executed directly. One or more Allocation
 Methods are assigned to a Calculation Plan first, which defines whether the calculation
 should be executed.
- A Calculation Plan provides the ability to limit the execution of an Allocation Plan to specific time periods within the plan, specific items in the registers (such as Employees, Assets, and Contracts) and by any field value defined in the register table.
- Data calculation is ultimately controlled by an Execution List which simply contains the list
 of defined Calculation Plans and the set of filters that link the plans to specific Workflows,
 Scenarios, and register status values. For example, a Calculation Plan created for new
 hires should only be applied to employees with a status of New Hires. Execution Plans
 provide the mechanism to implement this restriction.
- In essence, an Execution List runs Calculation Plans conditionally against Register items for various time periods and generates adjustment data based on the related Allocation Methods.

Global Drivers

Global Drivers are customizable variables used in People Planning. Variables entered into this grid appear as options in the Substitution Variable combo boxes on the Allocation Methods and Calculation Plans pages. These values can be text, numbers, XFBR String, or XFGetCells and can be replaced in expressions by referring to the Global Driver name similar to this: |Overtime|



Allocation Methods

Allocation methods are predefined calculated accounting distributions. The lower part of the grid is where allocation details (*accounting distributions*) are added. The Weight/Value/Exp field allows the entry of anything from simple values to complex expressions based on the values in the register. Substitution variables can be selected from the drop-down box as well.

Once selected, variables are added to the selection box to the right. Copy a variable by highlighting it and pressing *Ctrl+C*. You can use these variables in expression fields. See "Appendix B: Substitution Variables" on page 50 for a list of substitution variables. Each allocation method contains these fields:

Field	Description
Method ID	A unique identifier for the Allocation.
Name	This contains the Allocation name. This field is linked to the detail grid on the Calculation Plans page.
Description	This contains the Allocation description. This field is displayed as the Plan Data page's Class Description.
Value Type	Select the calculation method that the allocation will use.
Fixed Value	Uses a static amount for the Allocation accounts.

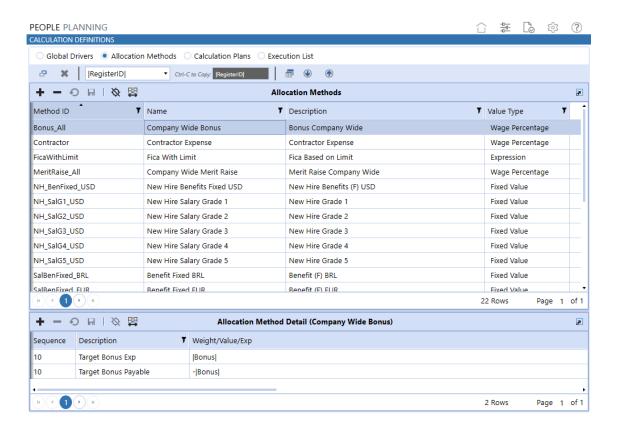
Field	Description
Expression	Specifies that the value for the allocation account will be calculated using an expression defined in the in the Weight/Val/Exp field.
Expression (ZP)	This method will suppress zeroes for Activity (non-Cumulative) type accounts during Expression calculation.
Wage Percentage (called Value Percentage in all other solutions)	Specifies that the value for the allocation account will be calculated by multiplying the person's wage by the value entered in the Weight/Val/Exp field.

NOTE: For additional value types that are available for other Planning solutions, see "Appendix C: Calculations (Allocation Methods)" on page 52.

Allocation Method Detail

Each allocation method contains the following fields:

Field	Description
Sequence	Numeric field that orders the allocation accounts.
Description	Text field that holds text description. This description is displayed on the People Plan's Item Description field.
Weight/Value/Exp	This field contains the amount or method used to calculate the allocation amount. When using Wage Percentage, enter a decimal value to multiply by each person's wages. If a Fixed Value is used, enter the full amount for the allocation in each account. If an Expression is used, enter the expression in this field.
Dimensions (Account - UD8)	These fields hold the POV for the allocation / journal. Populate each Dimension field with a valid member.

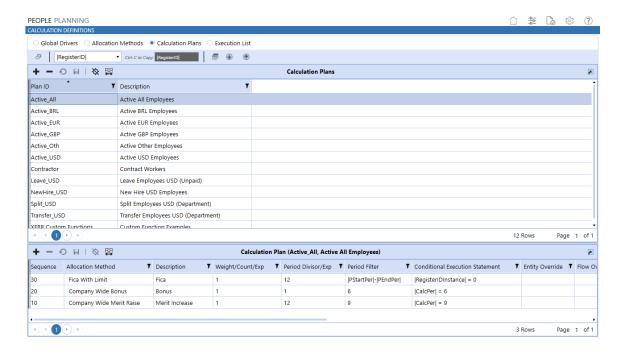


Calculation Plans

Use **Calculation Plans** Allocation Method groups and conditional execution statements to define when to run Allocation Methods. Each Calculation Plan contains the following fields:

Field	Description
Sequence	Numeric value for ordering items in the Calculation Plan.
Allocation Method	This lists all available Allocation Methods. Allocations are journal templates and are created/defined on the Allocation Methods page.
Description	The value entered in this field is displayed on the People Plan's Register Description field.

Field	Description
Weight/Count/Exp	Enter the value by which to multiply by. This can be a percentage, expression, number, etc.
Period Divisor/Exp	This defines the number of periods over which the allocation results should spread. For example, adding a merit increase of 5% on current wages means the resulting value is applied to each month in the plan and needs to be divided by 12.
Period Filter	This defines the periods for which the calculation plan will execute. Valid entries include a static list of periods (3,6,9,12), a range of periods (1-7), or an expression (1- PPerCount).
Conditional Execution Statement	This controls under what conditions the plan executes. For example, if the conditional field contains Code1 = 'EUR' then for the person being processed, the rule would only run if the value in Code1 was equal to EUR. Full expressions can be processed (IF, IIF, and, or, etc).
Override Fields	The Dimension Override Fields are optional and override the default allocation POV defined in the Allocation Method.

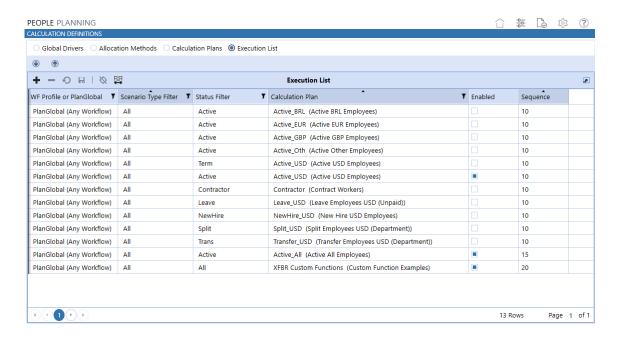


Execution List

Use the **Execution List** page to assign Calculation Plans to Status Filters. This determines with what Scenario / Workflow combinations the Calculation Plans are used. Each Execution List contains the following fields:

Field	Description
WF Profile of PlanGlobal	Select a single Workflow or <i>PlanGlobal</i> . If <i>PlanGlobal</i> is selected, then the Calculation Plan runs for all Workflows, otherwise it only runs for the specified Workflow Profile.
Scenario Type Filter	Select a specific Scenario Type (Actual, Budget, Flash, etc.) or All. If All is selected, then the Calculation Plan runs for all Scenarios, otherwise it only runs for the specified Scenario Type.
Status Filter	Select the Status (types). The list of available types is defined on the Global Options page. Status Types filter the people configured in the register. The specified Calculation Plan will only execute for people in the register with the selected Status Type.

Field	Description
Calculation Plan	Select a Calculation Plan from the existing plans configured on the Calculation Definition page.
Enabled	A True / False flag identifying whether the Calculation Plan is turned on or off.



Import Calculation Definitions with an Excel Template

- 1. Click to download the Excel template.
- 2. Click to import the file.

IMPORTANT: Before importing, you must add a Named Range beginning with XFT.

NOTE: For more information about selecting criteria in the Excel Template Import dialog box, see "Select Criteria for Excel Template Import" on page 69.

Audit



The **Audit** page is a 3-tabbed Dashboard that reports audited activity through the Audit Logs, Audit Report, and Audit Files tabs. This section is available only to members of the **Manage Calculation Definition** Security Group.

The Planning Audit feature includes:

- XFW_TCR_AuditLog database table (Audit Log database tables will include the solution's unique three letter identifier in the name) to track all Solution Audit Logs.
- Business Rule functions record Solution Audit Log activities for Register data modifications (inserts, deletes and modifications), Excel data file imports, modifications to Allocations, modifications to Calculation Plans and a defined set of other changes.
- Source Excel data files are archived in the XFW_TCR_AuditLog database table upon upload for detailed review of the Imports. This helps streamline Audit Log activities by showing a file as a single import entry in the log while still providing the whole file for review of all imported data. The audit reporting will reference the user's Point of View at the time spreadsheet data is imported and include a copy of the spreadsheet in the audit log. It is important to remember that spreadsheets can import data for multiple Points of View. Therefore, the attached spreadsheet file should be reviewed to analyze the detailed Points of View that may have been impacted by a spreadsheet import.
- Audit Dashboard provides analysis and reporting to review Solution Audit Log activities.
 The Dashboard reporting runs for the specified range of dates. The default range of dates is 30 days.



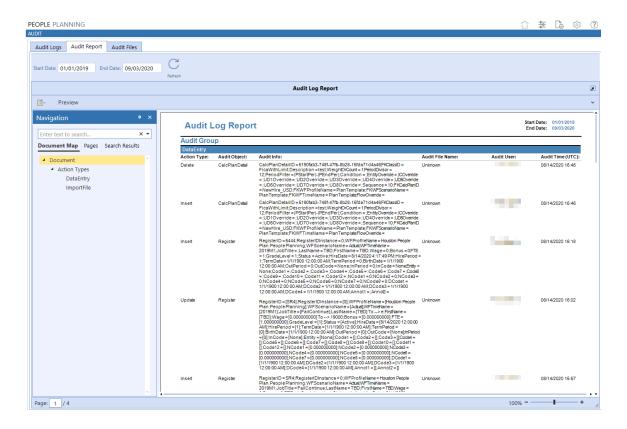
Audit Logs

Audit Logs displays a grid view for filtered analysis the audited Register activities for the selected range of dates.



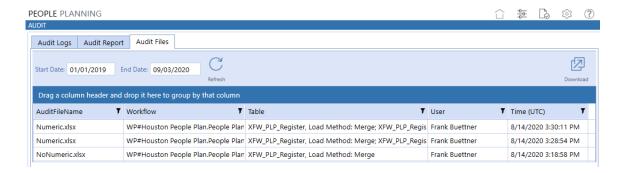
Audit Report

Audit Report provides a formatted report to review the selected range of dates.



Audit Files

Audit Files contains a grid view of imported Excel files for the selected range of dates. View imported files in Excel by selecting the file entry and clicking **View**.



Settings

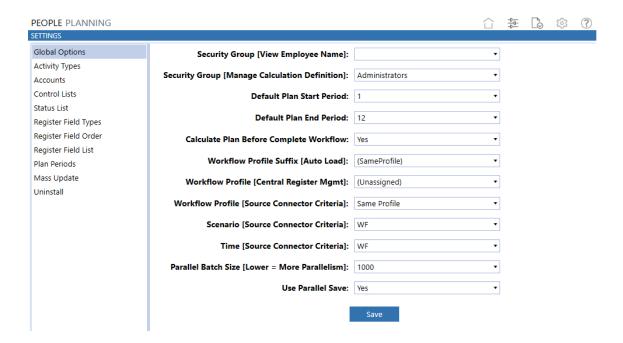


The **Settings** page is an Administrator-only page containing Global Options, Activity Type, Account, Control List, Status List, Register Field, Plan Period, and Mass Update tabs as well as Uninstall options to specify key properties for Planning administration.

Global Options

The **Global Options** page should be the first page accessed during the initial setup and configuration of Planning.

NOTE: All global option settings are retained during solution upgrades.



Security Group [View Employee Name]

This group is granted access to the names listed in the Employee Register.

Security Group [Manage Calculation Definition]

This group is granted access to the Calculation Definitions page and are the only users who can see the Calculation Definitions button.

NOTE: Employee Name and Calculation Definitions are only visible to users in the specified Security Group.

Default Plan Start Period

The starting period included in the Plan Calculation (1-120).

Default Plan End Period

The last period in the Plan Calculation. The maximum number of periods is different by solution but can be modified. Contact OneStream Support for assistance.

Calculate Before Complete Workflow

Select **Yes** if the plan is automatically calculated before the Workflow is complete.

NOTE: When using Parallel processing in Planning solutions, turn off this setting if the calculations are long running/intensive. With the multi-threading option, this can be a problem as the calculation in this case is serial and not a Data Management job.

Workflow Profile Suffix [Auto Load]

The name of the Import Base Input.

Workflow Profile [Central Register Mgmt]

The Workflow with central control.

Workflow Profile [Source Connector Criteria]

Determines which Workflow Profile Base Input is used for loading Plan Data to Cube.

Scenario [Source Connector Criteria]

Contains all Scenarios used in the source Connector to pull data from the calculated People Plan.

Time [Source Connector Criteria]

Contains all time periods used in the source Connector to pull data from the calculated People Plan.

Parallel Batch Size [Lower = More Parallelism]

This is the number of records to be processed in each parallel batch. The calculation takes the total number of records to be processed and puts them into batches based on the Parallel Batch Size. Smaller numbers selected in this option increase the number of calculations that are run in parallel as there are more batches that can be processed.

Use Parallel Save

Select **Yes** to direct **Calculate Plan** to process the People Plan calculations in batches. This option improves the calculation process.

Global Options for Reporting

The following options apply only to Planning Reporting.

Enable Journal Loading (only Reporting Compliance)

- Select Yes to create unposted Journals in the current Workflow for every row in resulting Data tab on the Data page.
- Select No to follow the default setup.

NOTE: If creating journals for these adjustments instead of through the OneStream Stage as imported data, there is no opportunity to drill back to Reporting Compliance from Cube-based reporting as is available otherwise.

Top Entity for Journals

Enter the name for the Top Parent Entity to be used by the Journal creation process if Enable Journal Loading is set to Yes. Knowing a Parent Entity is necessary if posting Journals to Consolidation members other than Local or a specific currency. This process will look at the child Entity being referenced in the Data tab and based on the Top Entity for Journals, get its Parent and see if they are a descendent of this noted Entity.

In Text1 for the Workflow Profile being executed is where the Administrator can specify an override to this Parent Entity.

Journal Cons Member

Text box is used to enter the default Consolidation member to post journals to, including currencies (typically Local).

If posting to Consolidation members of Translated, OwnerPreAdj or OwnerPostAdj, the posting process needs a Parent Entity to be entered.

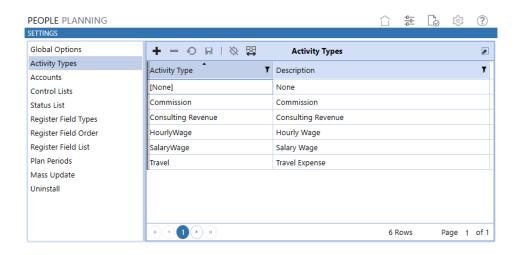
Administrators can enter an override "Consolidation Member for Journals" in a Workflow Profile Member Property in the *Text2* field. This will be used to override the main global option here in *Journal Cons Member*.

NOTE: This journal process cannot be used with extended Entity dimensions if posting to Consolidation members other than Local or a specified currency since Parent Entity is requied. At this time, this configuration is not supported.

Activity Types

Activity Types are mostly for report grouping and can be mapped to the Stage for Transformation Rule purposes The Activity Types list displays the following information for each Activity:

- Activity Type: Freeform text field to give the type a short name.
- Description: Optional freeform text field containing additional activity information.



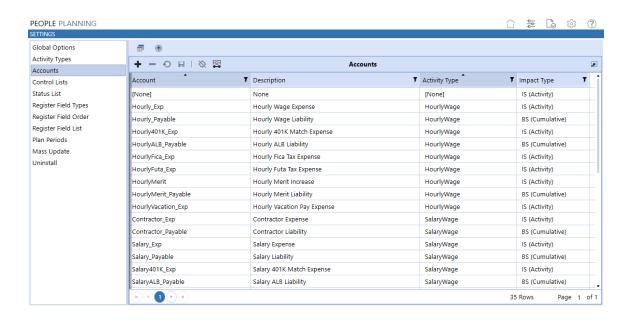
TIP: Click T to filter and sort a column.

Accounts

The **Accounts** list displays the list of accounts calculated in People Planning and contains the following information for each account:

- Name: Freeform text field to give account a name.
- **Description**: Optional freeform text field containing additional information.
- **Activity Type**: Drop-down list containing the Activity types (Commission, Consulting Revenue, Hourly Wage, Salary Wage, Travel).
- Impact Type: Drop-down list containing the impact types [IS (Activity), IS (Cumulative), BS (Activity), BS (Cumulative), Stat (Activity), Stat (Cumulative)]. Impact Types have a direct impact on how Plan Data is calculated over time.

Accounts can be entered manually or imported using an Excel template. Click to download the Excel template. Once the template is updated, click • to import the file.

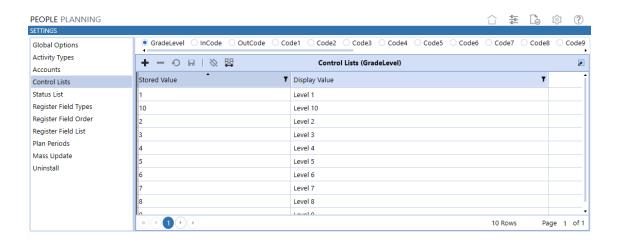


Control Lists

Control Lists maintain the content for grid drop-down lists in the People Register. If there are no entries in any specific Control List, then the related field on the People Register can have text entered.



If there are values entered, then the associated field can only select from the values in the Control List. The only member of the Control List selection not part of the People Register is $Reg\ XL$ Tmplt. This field controls the list of Excel Register Templates available for download on the People Register Screen.



Code Fields

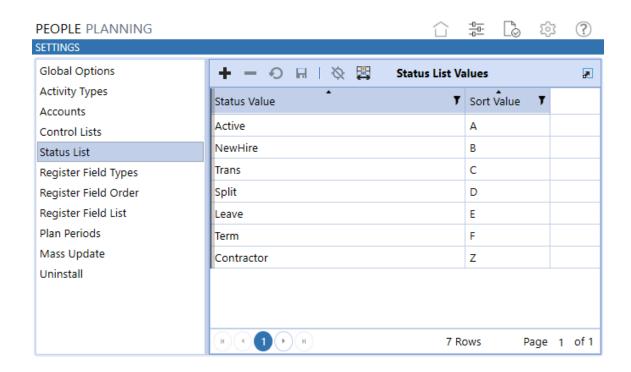
There are 26 Code fields that refine what is captured in the Register (such as People, Contracts, or Assets) in order to calculate the necessary planning/adjustment data or adjustments.

- 12 Text code fields that can transition from text to date or numeric.
 - See also: "Register Field Types" on the next page
- 8 N (Numeric) fields
- 4 D (Data) fields
- 2 Annotation (Text max data type, approximately 2 GB of text)

Status List

The Status List maintains the content for Status drop-down lists on the People Register and the Register Field List.

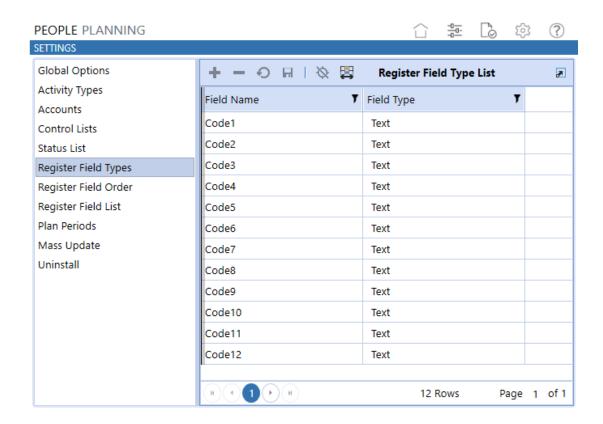
- Status Value: Drop-down list of Status Values.
- **Sort Value**: The order in which the status list values are displayed.



Register Field Types

This page allows data types for Codes 1-12 to be modified to be properly entered and stored. Options are *Text* (default), *Numeric*, or *Date*. Changes to these Field Types will change the column data type in the database tables after saving. For these flexible Code fields, if using Code1 as a numeric value, it is not necessary to refer to |Code1| as !|Code1| to return a number instead of a string if stored as a string (text), though that syntax is still supported.

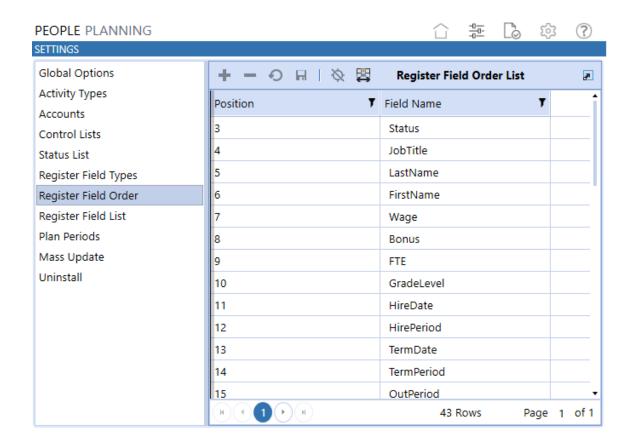
The Administrator can only change the data type before data is stored.



NOTE: If an Administrator changes the data type on this screen so it differs from Text, they must change the default Excel load templates in the header tokens to reference the proper data type, since Text is the default. Otherwise, loads from these template fail.

Register Field Order

Controls the left-to-right order of how the Register will display properties. Assign a Register or Code field to a position to reflect the order in which these columns will be presented. Can only have a Code field listed once in this screen or an error will result.



Register Field List

The Register Field List controls the fields on the People Register for each Status type. Fields can be visible or hidden, assign parameters, number formats, default values, etc.

Register Field Name: A static list of register items from the register table.

Alias: The name to display in the People Register grid header for the selected register field.

Visible: True / False setting indicating if the field should be visible on the register for the selected Status Type.

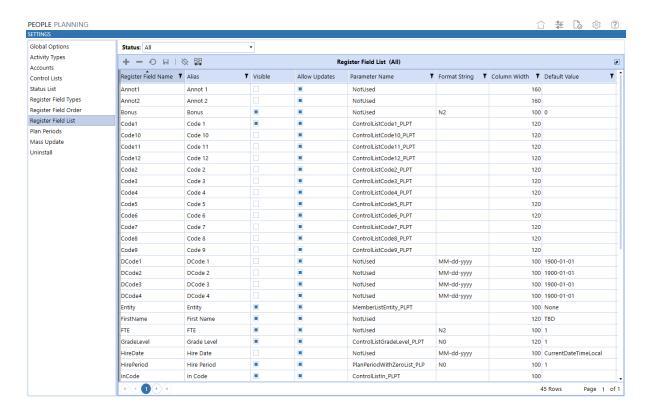
Allow Updates: True / False setting indicating if the register field allows updates.

Parameter Name: This field contains a drop-down list of all Parameters in the People Planning solutions. If a Parameter is assigned to a register field in this grid, then the field on the People Register is limited to the values defined in the Parameter. If a Parameter is not selected, then the People Register field is entered normally.

Format String: The number format applied to the selected register field. Available number formats are the same formats used in OneStream Cube Views. A list of valid formats can be found in the OneStream Object Lookup.

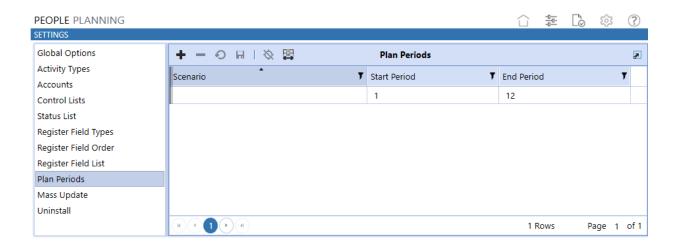
Column Width: A display setting specifying how wide the column should appear in the People Register (in pixels).

Default Value: The default value for the field when a new row is added.



Plan Periods

Global Options contains a *Default Start Period* and *Default End Period* for Plan Data. If an entry is made here for a given Scenario, it takes precedent over what is in Global Options.



Mass Update

NOTE: Mass Update has restricted access.

The Planning solutions store the loaded data and related solution objects using a text string reference to the Workflow Profile name that loaded the data into the Solution Data Register. The Workflow Profile name is stored as a text string rather than using the Workflow Profile's GUID identifier to provide optimum performance for the Calculate Plan function.

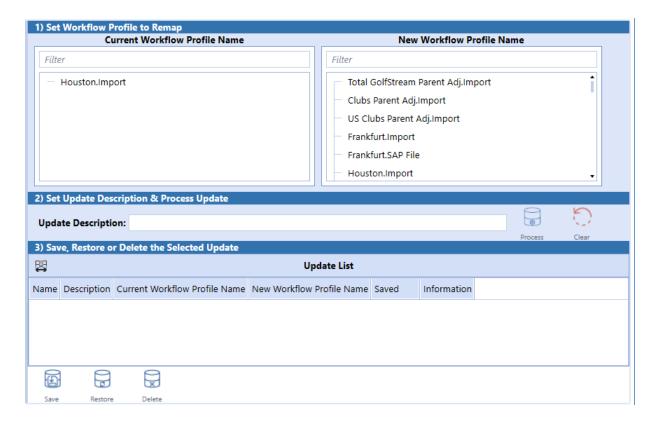
An issue may arise if the Workflow Profile that loaded data is renamed in OneStream. This will break the link between the Workflow Profile and the stored text string name in the Solution Data Register. The users in the renamed Workflow Profile will not see the data that was previously loaded into the Solution Data Register because the new Workflow Profile name does not match the previously stored text string.

The Mass Update feature has been added to the Planning solutions to resolve this issue when a Workflow Profile is renamed in the application. This feature allows the "orphaned" text string with the old Workflow Profile name to be selected and changed to a new Workflow Profile name. The solution presents the current list of application Workflow Profiles to select the new Workflow Profile name to update the solution text string name. This will establish the link to access the previously loaded Solution Data Register and related plan components with the new Workflow Profile name.

Step 1 in the Mass Update process requires the selection of the "orphaned" text string for the renamed Workflow Profile in area 1 of the *Mass Update* Dashboard. Then point it to the new Workflow Profile name from the application Workflow Profiles.

Step 2 requires entering an Update Description name for this change to be entered in area 2 of the *Mass Update* Dashboard. Click on the *Process* button to prepare the Mass Update changes. This will prepare the changes and store them in the *Mass Update* queue table. Notice that the change will now be listed in area 3 of the *Mass Update* Dashboard.

Step 3 is to select the change from the list in area 3 to be applied to the Solution Data Register and related components. Click on the Save button to commit these changes to the solution. If a change needs to be reversed for any reason, select the change from the list and click on the Restore button to revert the change back to the old text string name. Changes can be selected and deleted with the Delete button to remove them from section 3 but great care should be taken when doing this as this will remove the ability to Restore any changes that have been committed.



Uninstall

Use the Uninstall feature to uninstall the Planning or just the user interface. If this is performed as part of an upgrade, changes to standard Planning objects are removed. There are two uninstall options:

- Uninstall UI removes Planning, including related dashboards and business rules but leaves the database and related tables in place. For some releases, this step should be performed before accepting any new version of Planning since some of the dashboards or other objects may have been modified.
 - Choose this option to accept a Planning update without removing the data tables.
 - The Planning Release Notes indicate if an overinstall is supported.

IMPORTANT: This procedure resets the Workspace Dashboard Name to (Unassigned). An Administrator must manually reassign the Workspace Dashboard Name after uninstalling the UI.

2. **Uninstall Full** removes all the related data tables, all data, Planning dashboards, and business rules. Choose this option to completely remove Planning or to perform an upgrade that significantly changes the data tables.

CAUTION: Uninstall procedures are irreversible.

Import Register Data

Once Planning is set up, create a Data Source and attach it to the included Connector Business Rule in order to pull the People Plan data from the People Planning custom tables and load it into the OneStream Stage. Planning tables are part of application database, so connection information is not required in the Connector Business Rule.

Create Data Source

- 1. Create a OneStream Connector Data Source
- 2. Select the PLP PeoplePlanningData Connector
- 3. Assign Connector dimensionality as set below:
 - a. ScenariosAssign to WFScenarioName
 - b. Time

Assign to WFTimeName

c. Entity Dim

Assign to Entity

d. Account Dim

Assign to Account

e. Flow Dim

Assign to Flow

f. IC

Assign to IC

g. UD1 – UDx

Assign appropriate UD from Connector Fields

h. Label

WFProfileName (used in Drill Back)

i. SourceID

Assign to WFScenarioName (used in Drill Back)

j. Amount

Assign to Amt

k. View

Set Static Value to Periodic

Transformation Rules

The *external* members created in the People Planning application need to be mapped to the OneStream Cube members. Follow the process defined in OneStream to create a Transformation Rule Profile to map this data.

Workflow Profile

Once a Data Source and Transformation Rules are created, they need to be assigned to the Workflow Profile(s) importing the data into the Cube.

Workspace, Journal Input, Process, Confirm

If *Enable Journal Loading* is set to Yes in Global Options, the recommended Workflow Profile setup is to have a Workflow Name of *Workspace, Journal Input, Process, Certify* or a variation where Workspace comes before Journal Input. This Base Input type of *Journal (Adj)* Workflow Profile should also grant Workflow Execution Group access and Journal Process Group access and Read and Write Entity Group to the Entities posted. The same concept should apply to Parent Adjust Workflow Profiles.

IMPORTANT: You must reassign the Workspace Dashboard Name in the Workflow Profile after performing an Uninstall UI.

Help and Miscellaneous Information

This page contains solution documentation.

See these topics for miscellaneous best practices and considerations:

- Display Settings
- Package Contents and Naming Conventions
- Considerations for Modifying MarketPlace Solutions
- Considerations for Migrating Solution Databases

Display Settings

OneStream and MarketPlace 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 for and report rendering. Alos, 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: SPC PV6.2.0 SV100 PackageContents.zip

Field	Description
SPC	Solution ID

PV6.2.0	Minimum Platform version required to run solution	
SV100	Solution version	
PackageContents	File name	

Solution Database Migration Advice

A Development OneStream Application is the safest method for building out a solution with custom tables such as this one. The relationship between OneStream objects such as Workflow Profiles and custom solution tables is that they point to the underlying identifier numbers and not the object names as seen in the user interface. Prior to the solution configuration and to ensure the identifiers match within the Development and Production Applications, the Development Application should be a recent copy of the Production Application. Once the Development Application is created, install the solution and begin design. The following process below will help migrate the solution tables properly.

See also: Managing a OneStream Environment in the Design and Reference Guide

- In the Production OneStream application, install the solution and create the data tables.
 See <u>Configure the OneStream Application Server</u> for Database Server Connection settings and installation details.
- Data tables are created in the OneStream Development application during the solution installation. Using the <u>Microsoft Data Migration Assistant</u>, copy the data from the tables to the Production Microsoft SQL Server Database. Only the Microsoft SQL Administrator should run the migration assistant.

IMPORTANT: This process has the potential to overwrite existing table data in the Production application database if data already exists.

MarketPlace Solution Modification Considerations

Consider the following before modifying MarketPlace Solutions:

Help and Miscellaneous Information

- Major changes to business rules or custom tables within a MarketPlace Solution will not be supported through normal channels as the resulting solution is significantly different from the core solution.
- If you change a 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 MarketPlace
 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.
- If you modify a MarketPlace 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. Avoid changing custom database tables and business rules, as this complicates upgrades.

Appendix A: Expressions

Expressions are used in multiple areas of the Planning solutions.

- OneStream uses ADO.NET engine to interpret expressions; there is no parser involved.
- The expression evaluator supports these operators:
 - Open bracket '(' and close bracket ')'
 - Addition '+', subtraction '-', multiplication '*', division '/'
 - o Modulo '%'
 - Equality '=', inequality '!='
 - Bigger than '>', bigger than or equal '>=', smaller than '<', smaller than or equal '<='
 - Logical and '&&', logical or '||'
 - Conditional 'IIF'
- Can use any Substitution Variable or Global Driver.
 - (0.80*|Wage|)+(0.20*|Wage|*|Overtime|)
- XFBR String
 - Calls and passes arguments to a Business Rule that can look up a value in a Cube or process conditions to return a value or string.
 - (XFBR(PLP_ParamHelper, GetDriverValue, ud2Member=|Code2|, entityMember=|Entity|, accountMember=[Wage Increase Pct])) / 100 * |FTE|
- XFCell (may perform better than XFBR String)
 - Queries Cube data cell value and can pass Substitution Variables and even XFBR's
 - Missing members are retrieved from the POV

((XFCell(E#|Entity|:C#Local:S#BudgetV1: T#2017M1:V#Periodic:A#[Wage Increase Pct]:F#None:O#Forms:I#None:U1#None: U2#|Code2|:U3#None:U4#None:U5# None:U6#None:U7#None:U8#None)) * |Wage|) / 12

Appendix B: Substitution Variables

Substitution variables are used to exchange values at calculation time enabling building or more dynamic formulas and expressions.

Register Variables

- |RegisterID|
- |JobTitle|
- |JobTitle|
- |LastName|
- |FirstName|
- |Wage|
- |Bonus|
- |FTE| (Full Time Employee %)
- |GradeLevel|
- |Status|
- |HirePer| (period hired)
- |TermPer| (period terminated)
- |OutPer| (for example, period transferred out, on leave, etc.)
- |OutCode| (for example, department transferred from)
- |InPer| (for example, period transferred in)
- |InCode| (for example, department transferred into)
- |Entity| (if known)
- |Code1| to |Code8|

Calculations

Appendix B: Substitution Variables

- |CalcPer| (Period calculated)
- |CalcPerMth| (Calculation period month)
- |CalPerDays| Number of days in calculation period)

Global Options (Defined on Settings Page)

- |PStartPer| (Plan start period)
- |PEndPer| (Plan end period)
- |PPerCount| (Number of Plan periods)

Workflow

- |WFProfileName|
- |WFScenarioName|
- |WFTimeName|

Appendix C: Calculations (Allocation Methods)

Certain solutions contain additional Value Types for expressions that are focused on these particular use cases:

Data Caching Examples (For example, People Planning)

- After Plan Data rows are added during Calculate Plan Data, this data can also be added to
 an in-memory Cache that's available during processing for later querying via sample
 Allocation Methods which call a XFBR String to pass over this data and return results that
 were added, min, max, added across periods, return number of days between Code1 &
 Code2 (for example), etc. In sample Allocation Methods provided with solutions such as
 People Planning, refer to Custom Functions (XFBR) and its equivalent Calculation Plan
 for several examples. More than likely the returned value will be an input into another
 function.
- Designed for when you have multiple Registers across multiple Instances of same Register item (e.g. Employee). Keeps an individual cache for each Register item across Instances. Designers will want these to be the highest Sequence in the Execution Plan. Order matters. These cross-Register Calculation Plans need to run late in the Execution Plan. An example is FICA (Social Security tax calculation) is one of the reasons but multiple instances of the same Register item makes this necessary. For example, caching would calculate all Salary Expense first and then apply a FICA calculation later in the Sequence for the Execution Plan. This is for calculations that cross Register Instances.
- There are Single Register Instance calculation reasons to use these caching examples.
 Caching could occur for a single Register Instance by using a later Sequence within a single Allocation Method. Example is adding up records from multiple Allocation Plan details within one Allocation Plan. Again, order matters.
- Think of these examples provided as Excel Sum/Min/Max etc. as a sample formula that can be copied, pasted and modified to the user's liking to fit their use case. Examples:
 - Timespan Day: Number of days between date fields.
 - Sum Account Period: adds up an account value over a single period.

- Sum Account Period Cumulative: adds across previous periods, etc.
- Sum Account Custom: pass it criteria from any field in the Plan Data (also in the cache).
- More advanced example is GetLimitResidual (FICA example). This one is different since you pass in RegisterID, Account, Period, Field to Sum (or other math) on (such as Amount, NCode5, etc.). Any math performed must be on a numeric field in Plan Data. Note that this will not work against text-based Code1-12 since those are stored in Plan Data (and resulting Cache) but would work against fields like Amount, NCode1-8 and any other that is inherently stored as a decimal value.

Capital Planning

- (1DB)Declining Balance: Depreciation-calculation system that involves applying the depreciation rate against the non-depreciated balance. Instead of spreading the cost of the asset evenly over its life, this system expenses the asset at a constant rate, which results in declining depreciation charges each successive period.
 - The declining balance formula is: 1 × Straight-line depreciation rate × Book value at the beginning of the year.
- (1.5DB) Declining Balance: Accelerated form of depreciation under which the vast
 majority of the depreciation associated with a fixed asset is recognized during the first few
 years of its useful life.
 - The 1.5 declining balance formula is: 1.5 × Straight-line depreciation rate × Book value at the beginning of the year.
- (2DB)Declining Balance: Accelerated form of depreciation under which the vast majority
 of the depreciation associated with a fixed asset is recognized during the first few years of
 its useful life.
 - The double declining balance formula is: 2 × Straight-line depreciation rate × Book value at the beginning of the year.
- (SL)Straight Line: Straight line depreciation method charges cost evenly throughout the
 useful life of a fixed asset.
 - The Straight Line formula is: (Cost Residual Value) x Rate of depreciation.

- (SYD)Sum Years Digits: Sum of the years' digits method of depreciation is one of the
 accelerated depreciation techniques which are based on the assumption that assets are
 generally more productive when they are new, and their productivity decreases as they
 become old.
 - The Sum of Years Digits formula is: (Cost Residual Value) x (Remaining Useful Life / Sum of Years Digits)

Cash Planning

- Interest Daily
- Interest Monthly
- Interest Annual
- Cash Term Impact

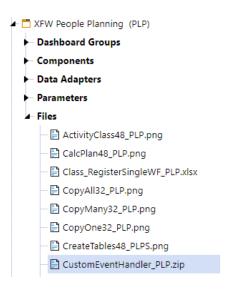
Appendix D: Custom Event Model

Planning solutions support custom event models using business rules. This topic describes how event modeling works with People Planning.

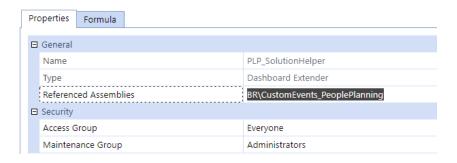
Set up the Custom Event Model

The steps to set up custom events are detailed below:

1. Download CustomEventHandler PLP.zip from the Application Dashboard screen.



- 2. Import the downloaded file from the Application Load/Extract screen.
- 3. Update the *PLP_SolutionHelper* script to integrate with the CustomEvents scripts:
 - a. Add *BR\CustomEvents_PeoplePlanning* in the Referenced Assemblies section of the *PLP_SolutionHelper* script.



b. Find the declaration of the variable m_CustomEvents and change as shown in the following example.

c. After the custom event integration is set up, event actions can be defined in the CustomEvents_PeoplePlanning script.

NOTE: These events are not deleted or overridden when upgrading to new versions of the Planning solutions but the setup steps musts be repeated with every installation.

Available Events

Available custom events are listed in this section.

Before / After Selection Changed Events

These events run before / after a custom control is clicked.

Example: *Delete Plan* will run any defined code in the *DeletePlan* section before/after the actual deletion of the plan data.

- · SaveSettings
- · CreateSolutionTables
- ValidateSetupStepsExecuted

- Uninstall
- CopyActivityClassToOne
- CopyRegisterPlanToOne
- CopyCalcPlanToOne
- CopyRegisterPlanToMany
- CopyRegisterAndDetail
- DeleteActivityClassDetail
- DeleteRegisterOrRegisterPlan
- CalculatePlan
- DeletePlan
- WorkflowComplete
- WorkflowRevert
- ImportXLSXFile
- ImportRegisterConnector

Before / After Save Data Events

These events run before / after the save event for the listed grid types.

Example: Use to test grid data prior to saving and potentially not allowing the data to be saved if a check is failed.

- SaveRegisterRows
- SaveCalcPlanDetailRows
- SaveStatusRows
- SaveAccountRows
- SaveActivityTypeRows

Register Restriction on Calculation Event

This event allows the tailoring of the SQL WHERE clause against Register Items before applying Calculations, eliminating unnecessary application of calculations.

Example: Applying all calculations against all register items may not be necessary and consume resources unnecessarily. Use to limit the number or register items before being applied against the calculations.

• SetCustomWhereClause

Appendix E: Solution Audit BR Functions

The following topics describe how to use the *TCR_SolutionHelper* business rule provided with the Solution Audit feature. See:

- Overview
- TCR Solution Helper Code Sample

Overview

The following functions in the *TCR_SolutionHelper* business rule provide the Solution Audit feature:

```
6846 ⊟#Region "Audit Log Helpers"
6847
6848 🗷
          Public Sub LogTableEditorSave(ByVal si As SessionInfo, By\
6891
          Public Sub WriteTableEditLog(ByVal si As SessionInfo, ByVa
6892
6911
6912
          Public Sub WriteFileArchiveLog(ByVal si As SessionInfo, By
6950
          Private Function GetAuditLogTableForAppend(ByVal si As Ses
6951 😟
6963
6964 🛨
          Private Function CreateCopyRegisterAuditInfo(ByVal si As 5
6991
          Private Function CreateCopyExceptionPlanAuditInfo(ByVal si
6992 🖹
7023
          Private Function CreateCopyCalcPlanAuditInfo(ByVal si As 5
7024 H
7050
7051
      #End Region
7052
7053 ⊟#Region "Audit Log Analysis Helpers"
7054
          Public Function GetAuditLog(ByVal si As SessionInfo, ByVal
7055 🗷
7095
7096 🛨
          Public Function GetAuditLogFiles(ByVal si As SessionInfo,
7146
7147 😟
          Public Function OnShowAuditPage(ByVal si As SessionInfo) /
7164
          Public Function RefreshAuditLogDashboard(ByVal si As Sessi
7165 🕀
7186
7187 🛨
          Public Function CopyAuditFileToUserTempFolder(ByVal si As
7220
7221
      #End Region
```

These Business Rule functions are available for review as example code and to be called from other custom Business Rules. The Solution Audit functionality has been tagged with "#AuditLog" comments to make easier to locate the functions and example of calls to use these functions. This will assist administrators and implementors in reviewing the related code to extend the functions to other custom Business Rules or Dashboards/Data Entry Forms with activities that are triggered by buttons that may need to be included in the Solution Audit Logging.

TCR_SolutionHelper Code and Sample Calls

Access the TCR_SolutionHelper business rule by clicking Application > Tool > Business Rules > Dashboard Extender > TCR_SolutionHelper. Search for the code sections tagged with "#AuditLog" comments to review the Solution Audit code and calls to use this code.

Here is one example of a call in the TCR_SolutionHelper code that calls the Solution Audit functions to handle archiving an import Excel file:

```
'Archive the file
'SAMB 'ARMIGLOR

DIm UrDesc As String = "Mookflow: " & BRApj.Norkflow.General.GetWorkflowUnitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & BRApj.Norkflow.General.GetWorkflowUnitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & Brange.GetWorkflow.General.GetWorkflowUnitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & Brange.GetWorkflow.General.GetWorkflowInitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & Brange.GetWorkflow.General.GetWorkflowInitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & BRApj.Norkflow: " & BRApj.Norkflow.General.GetWorkflowInitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & BRApj.Norkflow: " & BRApj.Norkflow.General.GetWorkflowInitClusterPkOescription(si, si.WorkflowClusterPk)

Dim UrDesc As String = "Mookflow: " & Frange.TableName)

Dim UrDescage Append("; table: " & Frange.TableName)

Dim UrDe
```

The sample code text for the screen shot above is:

'Archive the file

'#AuditLog

Dim wfDesc As String ="Workflow: " &

BRApi.Workflow.General.GetWorkflowUnitClusterPkDescription(si, si.WorkflowClusterPk)

Dim logMessage As New Text.StringBuilder

logMessage.Append(wfDesc)

For Each range As TableRangeContent In loadResults

logMessage.Append("; Table: " & range.TableName logMessage.Append(", Load Method: " & range.LoadMethod)

Next

'logMessage.Remove(logmessage.Length-2, 2)

Me.WriteFileArchiveLog(si, AuditLogGroupTypes.ImportFile.ToString,

AuditLogObjectTypes.File.ToString, AuditLogActionTypes.Import.ToString,

logMessage.ToString, DateTime.UtcNow, filePath)

Appendix F: Excel Templates

For more information about Excel templates, see *About Collecting Data* in the *Design and Reference Guide*.

Load Excel Templates to Custom Tables

OneStream MarketPlace solutions typically have related SQL Server tables. Other custom solutions may support adding custom SQL Server tables as well. This lets you load data to custom tables using an Excel template from a MarketPlace Solution or using OneStream Extensibility Rules. For information about Excel templates, see *About Collecting Data* in the *Design and Reference Guide*.

OneStream reads templates using a specific Named Range. You must include the following information in the Named Range. In the first three rows of the Named Range in Column A, specify:

Database Location: Application or System specifies which database contains the custom tables.

Table Name: Custom tables only; enter the Table name

Load Method: The load method determines the action and any additional criteria for the action. The syntax is:

Action:[Where Clause Criteria] (Where Clause Criteria is optional)

Load Method Definitions

IMPORTANT: Import templates do not support changing the Load Method.

Load Method	Description	Example
Merge	If there are no criteria, Merge updates the data if it finds a matching key, otherwise it inserts it	Merge Where Clause Criteria Example First, this will clear the values for emp1 and then Merge Merge:[EmployeeID = 'emp1']

Load Method	Description	Example
		Merge Where Clause Criteria with Substitution Variable Example Substitution Variables can be used in the Where Clause Criteria Merge: [WFProfileName = ' WFProfile ']
Replace	If there are no criteria, <i>Replace</i> clears everything first. By default, instead of merging, it clears the entire table. This will perform better for high volume because it does not try to match rows from the file to the table. An error will occur if it finds a match.	Replace Where Clause Criteria Example This does not try to locate, it only does inserts and appends. Replace: [EmployeeID = 'emp1']
		Replace Where Clause Criteria with Substitution Variable Example Replace: [WFProfileName = ' WFProfile ']

Next, define the Field Types and Field Names beginning in Column A Row 4 and spanning as many columns as necessary.

The column definition syntax is:

FieldType#:[FieldName]:StaticValue(optional):DefaultValue(optional)

Field Type: This relates to the column name in the table.

- **xfGuid**: Unique identifier [SQL = uniqueidentifier]
- xfText: Text defined column in the table [SQL = nvarchar, nchar, ntext]
- xfInt: Short integer (4 byte integer) [SQL = int]

Appendix F: Excel Templates

• xfBit: 0,1 (*True, False*) [SQL = bit]

• xfDec: Decimal [SQL = Decimal (28,9)]

xfDbl: Floating point number (8 byte floating) [SQL = Float]

xfDateTime: Date [SQL = datetime]

Field Name: This is specific to the SQL table to be loaded.

StaticValue: Whatever is specified as the Static Value will override every row for that column regardless if it is blank or not.

Example: This example will override all rows and enter 50,000 as the Static Value.
 xfDec#: [Salary]: 50,000

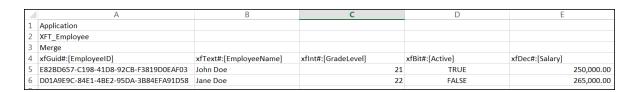
DefaultValue: This only applies to blank rows.

NOTE: If something is specified in the Static Value, it will ignore whatever is in the DefaultValue.

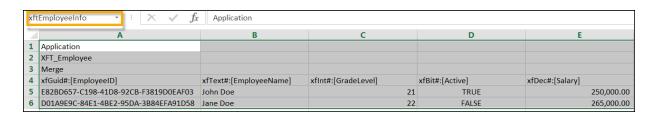
• **Example**: This example will enter a New Guid for all blank rows in the column. xfGuid#:[EmployeeID]::NewGuid

Substitution Variable Example: Substitution Variables can be used in both *StaticValue* and *DefaultValue*.

xfText#:[EmployeeName]::|Username|



Last, create a Named Range beginning with XFT, being sure to include the entire template.



Once the template is complete, you can loaded it to the custom table. If this is being used with a MarketPlace Solution, refer to the solution for further instructions on loading the template to the table.

If you are loading with an Extensibility business rule, use this example:

```
Dim fieldTokens As New List(Of String)
fieldTokens.Add("xfGuid#:[EmployeeID]::NewGuid")
'fieldTokens.Add("xfGuid#:[EmployeeID]")
fieldTokens.Add("xfText#:[EmployeeName]")
'fieldTokens.Add("xfText#:[EmployeeName]::|Username|")
fieldTokens.Add("xfInt#:[GradeLevel]")
fieldTokens.Add("xfBit#:[Active]")
fieldTokens.Add("xfDec#:[Salary]")
fieldTokens.Add("xfDbl#:[VacationDays]")
fieldTokens.Add("xfDateTime#:[HireDate]")
BRApi.Utilities.LoadCustomTableUsing
DelimitedFile(si, SourceDataOriginTypes.FromFileShare, filePath, Nothing,
",", dbLocation, tableName, loadMethod, fieldTokens, True)
```

Appendix G: People Planning

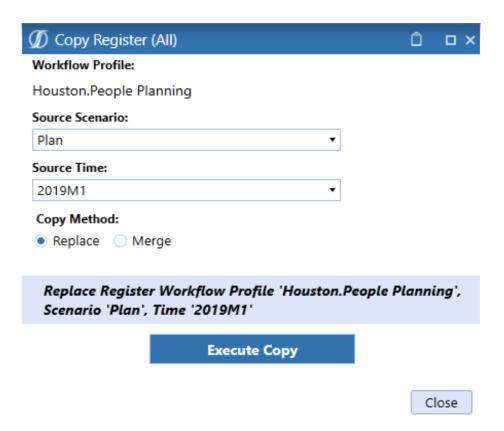
The sections in this appendix refer specifically to People Planning.

Replace and Merge Functionality

The Copy Register dialog box identifies the workflow profile for which you are replacing or merging. The Workflow Profile identified in the dialog box displays based on your Workflow POV selection. The Source Scenario and Source Time default to the Scenario and Time defined in your POV, with the option to update if necessary.

Replace Copy Method

- 1. From the Copy Register (All) dialog box select the source scenario, and source time.
- In Copy Method, select Replace. The blue ribbon displays to identify the criteria that the
 Execute Copy action performs and the workflow profile uses as a default based on the
 settings you chose.

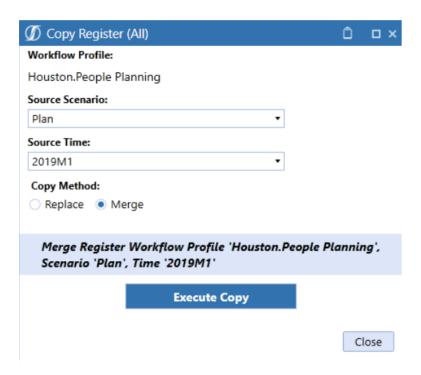


3. Click **Execute Copy**. A validation message displays stating *Data replacement for Workflow Profile X*, *Scenario X*, *and Time X succeeded*.

NOTE: The Replace Copy method deletes the existing target register information based on the single workflow identified in the defined Workflow Profile, along with the selected Source Scenario and Source Time. It replaces the target with the values identified in the source. All other workflow profiles using the same scenario and time remain unchanged.

Merge Copy Method

- 1. From the Copy Register (All) dialog box select the source scenario, and source time.
- In Copy Method, select Merge. The blue ribbon displays to identify the criteria that the Execute Copy action performs and the workflow profile uses as a default based on the settings you chose.



3. Click **Execute Copy**. A validation message displays stating *Data merge for Workflow Profile X, Scenario X, and Time X succeeded*.

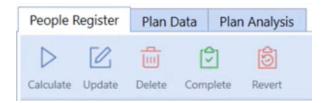
NOTE: The Merge Copy method scans the data in the register to determine if the source data already exists in the single workflow identified. If the data does not exist, the source data is merged and only appends the data that is not currently in the target plan. Similar to the Replace functionality, all other workflow profiles using the same scenario and time remain unchanged.

Calculate and Update Functionality

There are two options for calculating a register: Calculate and Update.

Calculate: All items in the register are calculated and results are placed in the Plan Data tab. Any custom calculations are also processed based on filters established by the custom Where clause functionality.

Update: Only the changes to the register such as adding a new row, modifying an existing row, or deleting a row are recalculated when you click **Update**.

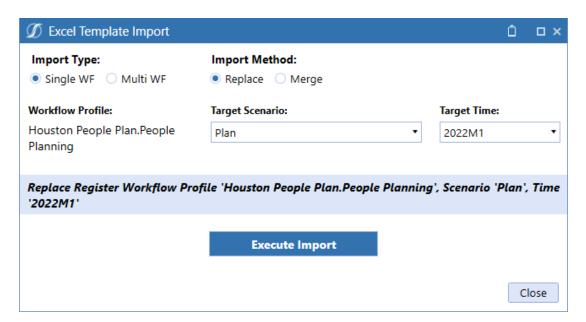


NOTE: The results of the recalculations apply to the Workflow Profile, Scenario, and Time in which the modifications took place.

Select Criteria for Excel Template Import

Use the Excel Template Import dialog box to select criteria for loading your data.

- Click Import Register Items from an Excel File. The Excel Template Import dialog box displays and defaults to Single WF Import Type. The Workflow Profile shown in the dialog box is based on your Workflow POV selection.
- 2. In Import Method select Replace or Merge.
- Select a Target Scenario and Target Time. If one of these criteria are missing, you will
 receive a validation message upon executing the import that states Scenario and Time
 must be populated.



- 4. Click Execute Import.
- 5. Browse to the Excel file and click **Open**. Ensure you select the template that coincides with the Import Type you want. For example, the Import Type of Single WF will use the Single WF Import Template, Import Type of Multi WF will use the Multi WF Import Template, and so on.

NOTE: For the Single WF Import Type, the criteria identified in the Excel Template Import dialog box for Workflow Profile, Target Scenario and Target Time overrides what is identified in the Excel template.

After you select an Import Method of Multi WF, you will notice that the Workflow Profile, Target Scenario and Target Time fields are disabled in the dialog box. This is because the criteria defined may refer to more than one Workflow Profile, Scenario or Time as defined in your Multi WF template.

