

# SPECIALTY PLANNING / SPECIALTY COMPLIANCE SETUP INSTRUCTIONS

PV 620 SV 103

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# **OVERVIEW**

The Specialty Planning / Specialty Compliance are a group of similar applications created around a common OneStream Relational Blending framework. Each has been configured to focus on a single Specialty Planning / Specialty Compliance subject. This guide applies to:

- Specialty Planning
  - People Planning
  - o Thing Planning
  - o Capital Planning
  - Cash Planning
  - Sales Planning
- Specialty Compliance
  - Reporting Compliance
  - Contract Compliance
  - Thing Compliance

# Relational Blending Engine and Specialty Planning / Specialty Compliance

**Specialty 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 Specialty Planning areas involve different groups of users, process timing, calculations, and reporting needs.

*Specialty Compliance* relates to the Financial Close process and is used to generate the appropriate adjustments to an existing financial model for use cases such as adjustments needed for leasing compliance, revenue recognition compliance, or adjustments for local GAAP or other statutory reasons.

# **Traditional Specialty Planning & Compliance Approaches and Problems**

All Specialty Planning / Specialty Compliance 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 his/her 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.

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# OneStream Specialty Planning & Compliance with Data Blending

The OneStream Specialty Planning / Specialty Compliance Engine blends the relational data and analytic model capabilities of the OneStream XF Platform. This creates a completely different way to approach the unknown nature of the Specialty Planning / Specialty Compliance process. The Specialty Planning / Specialty Compliance 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 XF's built in drill-down capabilities.

The Specialty Planning / Specialty Compliance 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 Specialty Planning / Specialty Compliance Engine. The same concepts defined for People Planning span all applications in the Specialty Planning / Specialty Compliance 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.).

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# INSTALLATION & 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 Specialty Planning / Specialty Compliance 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 Specialty Planning / Specialty Compliance, familiarize yourself with these details.

# **Dependencies**

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

# Select the Specialty Planning / Specialty Compliance Development Location

Before beginning installation, decide whether to build Specialty Planning / Specialty Compliance directly in the Production OneStream XF application or in a separate Development OneStream XF application. This section provides some key considerations for each option.

# **Production OneStream XF Application**

The primary advantage of building Specialty Planning / Specialty Compliance in a Production application is that you will not have to migrate the resulting work from a Development application. However, there are intrinsic risks when making design changes to an application that is being used in a Production capacity and this is seldom advised.



**Note**: It is strongly recommended that you implement **Specialty Planning / Specialty Compliance** in the Development environment with a fresh copy of the Production application before starting work.

# **Development OneStream XF Application**

As a Best Practice, build your Specialty Planning / Specialty Compliance solutions in the Development OneStream XF application using the following procedure:

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

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# **Application Server Settings**

You may need to edit the OneStream XF Application Server Configuration so users can create and change data in the additional database tables used by Specialty Planning / Specialty Compliance. If other MarketPlace Solutions are already in the application, these adjustments may already exist.

See also: Solution Database Migration Advice

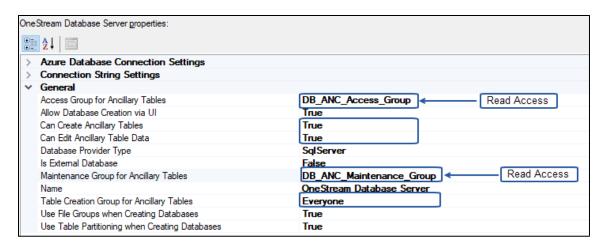
# Configure the OneStream XF Application Server

Before you begin, make sure these security group settings include the users who will be working on and setting up Specialty Planning / Specialty Compliance Instructions.



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

- 1. Start the OneStream XF 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.



Restart Internet Information Server.

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# **Install Specialty Planning / Specialty Compliance**

1. On the OneStream XF MarketPlace Dashboard, click MarketPlace > People Planning<sup>1</sup>.



- On the Specialty Planning / Specialty Compliance Solution page, select the appropriate OneStream XF 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 XF.
- 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 Specialty Planning / Specialty Compliance

The first time Specialty Planning / Specialty Compliance runs, you are guided through the table setup process.

In OneStream XF, click OnePlace > Dashboards > Specialty Planning / Specialty Compliance >
 Specialty Planning / Specialty Compliance.





**Note**: Prior to running the setup, confirm that the account used to access SQL server has table creation rights on the SQL database to create the custom tables.

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<sup>&</sup>lt;sup>1</sup> The People Planning solution demonstrates all procedures in this document. Any solution in the Specialty Planning / Specialty Compliance collection will follow the same procedure unless otherwise noted.

### **Create Tables**

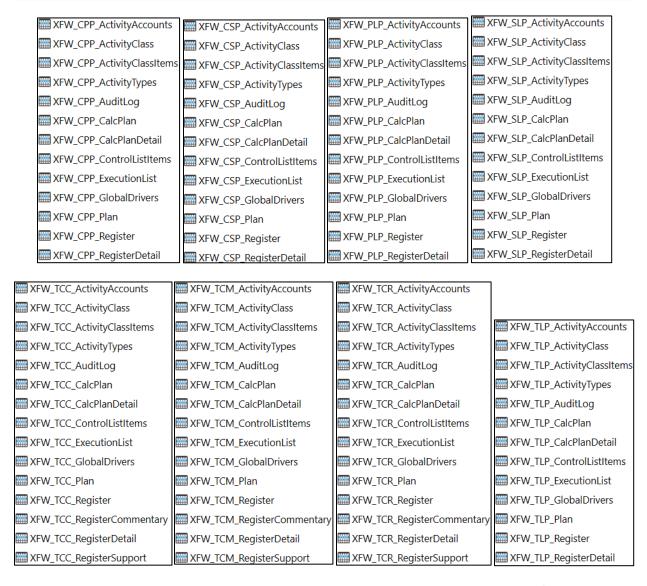
### 1. Click Step 1: Create Tables

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

This step may be necessary when upgrading even if tables are already present. Specialty Planning / Specialty Compliance will not drop any tables that already exist but will modify table structures and add any new ones if necessary. Each Specialty Planning / Specialty Compliance 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 Specialty Planning and Compliance solutions.



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

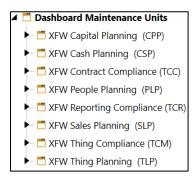
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# **Package Contents**

Each Specialty Planning / Specialty Compliance 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.



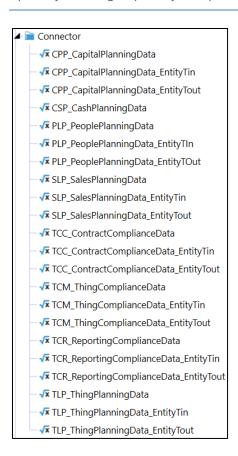
Note: The naming convention used to identify solution components is XFW <Solution Name> (Abbv). For example, People Planning becomes XFW People Planning (PLP).



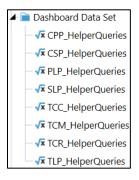
Do not rename or modify any Component included in the package unless specifically instructed to do so in that project documentation for the purposes of reference information when performing upgrades.

Connector Business Rules define the connection, data result sets, and drill-back option capabilities of an external data connection. See the OneStream XF Design and Reference Guide Chapter 11: Application Tools for an example of this rule type.

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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 the OneStream XF Design and Reference Guide Chapter 11: Application Tools for an example of this rule type.

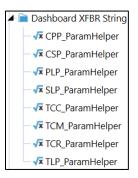


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Dashboard Extender Business Rules are used to perform a variety of tasks associated with XF Dashboards and XF MarketPlace solutions. These Business Rules can be thought of as multi-purpose rules that make up the majority of the code written in a XF MarketPlace solution. They provide the core functionality and features of a XF 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 the OneStream XF Design and Reference Guide Chapter 11: Application Tools for an example of this rule type.



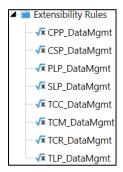
**Dashboard XFBR String Business Rules** are used to process conditional Dashboard Parameters. These rules inspect and alter a Dashboard Parameter. See the *OneStream XF Design and Reference Guide Chapter 11: Application Tools* for an example of this rule type.



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### Extensibility Rules include two types of Business Rules:

- 1. *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 XF. See the *OneStream XF Design and Reference Guide Chapter 11: Application Tools* for an example of this rule type.



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



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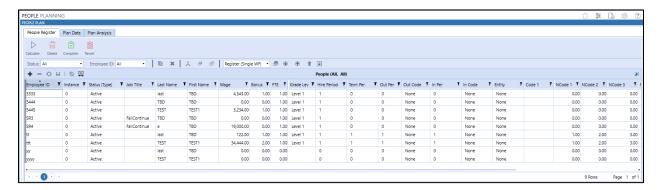
# HOME



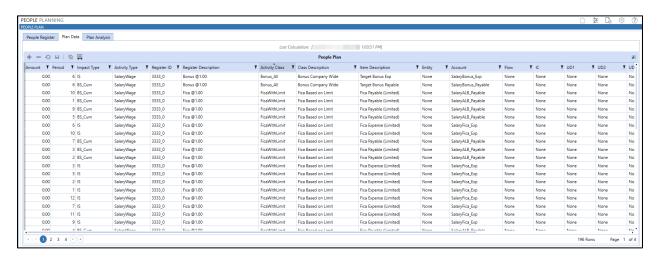
The **People Plan** page contains the People Register, Plan Data, and Plan Analysis tabs.

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:

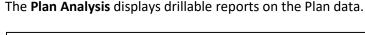
The **People Register** is where register items (*for example, Employees*) are imported, entered, and maintained. This concept of a Register carries over into the other Specialty Planning / Specialty Compliance solutions, though the columns displayed, and data gathered as an input to the Plan Data will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

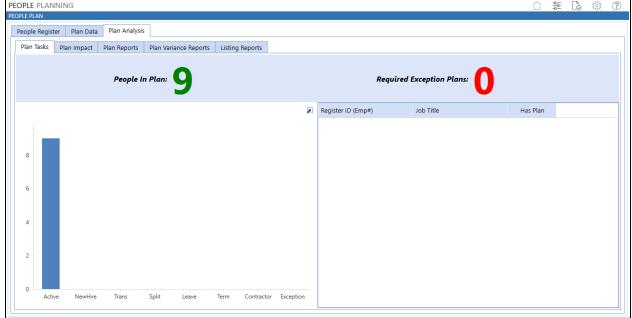


The **Plan Data** displays the results of the Plan calculations.



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**Note**: People Register, Plan Data, and Plan Analysis are called **Register**, **Data**, and **Analysis** tabs in other **Specialty Planning / Specialty Compliance** 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 & not on the Data Management server as the call to start the job is not coming from the web interface.

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### Delete a Plan



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

# Complete a Workflow



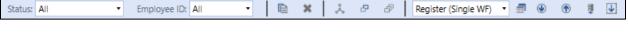
**Complete** attempts to calculate the People Plan (*if the Global Option is enabled*) and autoload the assigned Workflows. If the Workflow load is successful, then the Workflow running the People Plan Dashboard is marked as complete.

### 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 selected in the combo box to the register currently specified in the POV ( <i>Time/Scenario</i> ).
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.

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Field	Description
Export Register	Exports Register data out to a CSV file to be edited in Excel and then
	re-imported. 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.
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	Calls a customer-specific Connector to pull data into the People
Connector	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.
<b>Export Entire Register</b>	Downloads Registers for all Workflows into one file. This only displays
	for Administrators and users in the Manage Calculation Definition
	Security Group.



**Note**: In Reporting Compliance, there is an option to copy a single Register instance.

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# **CALCULATION DEFINITION**

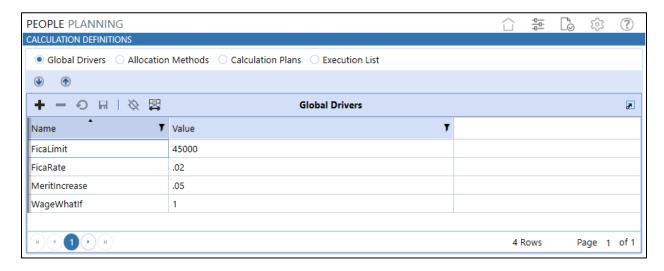
The Calculation Definitions page contains Global Drivers, Allocation Methods, Calculation Plans, and Execution Lists.

The Calculation Definition page is the interface for defining the calculations against the Register. The OneStream Specialty Planning / Specialty Compliance 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|



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# **Allocation Methods**

Allocation Methods are pre-defined 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, the variable is added to the selection box on the right-hand side. Copy the variable by highlighting it and pressing *Ctrl+C*. These variables can then be used in expression fields. See <u>Appendix B: Substitution Variables</u> for a detailed list of Substitution Variables. Each Allocation Method contains the following 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.
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	Specifies that the value for the allocation account will be calculated by
Value Percentage in all	multiplying the person's wage by the value entered in the
other solutions)	Weight/Val/Exp field.



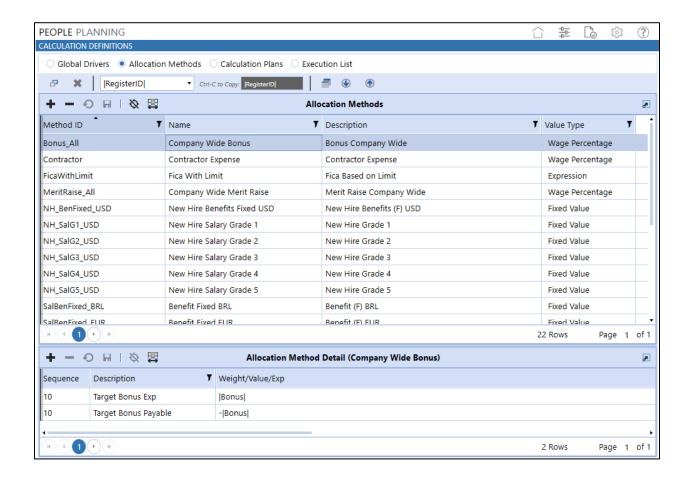
**Note**: For additional Value Types that are available for other Specialty Planning & Compliance solutions, see *Appendix C: Specialty Calculations (Allocation Methods)*.

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### **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.

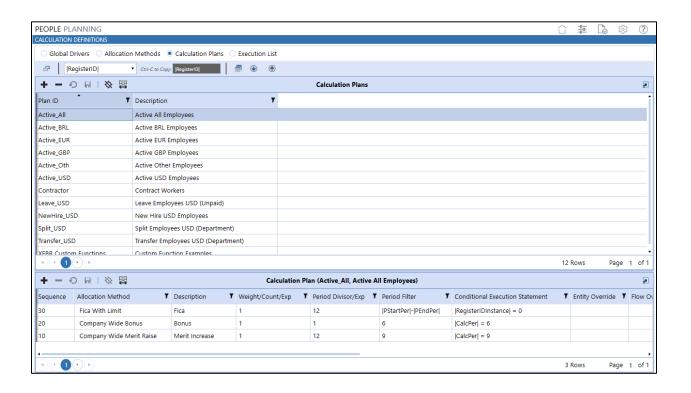


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# **Calculation Plans**

*Calculation Plans* Allocation Method groups and conditional execution statements used to define when the Allocation Methods should run. 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.
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.

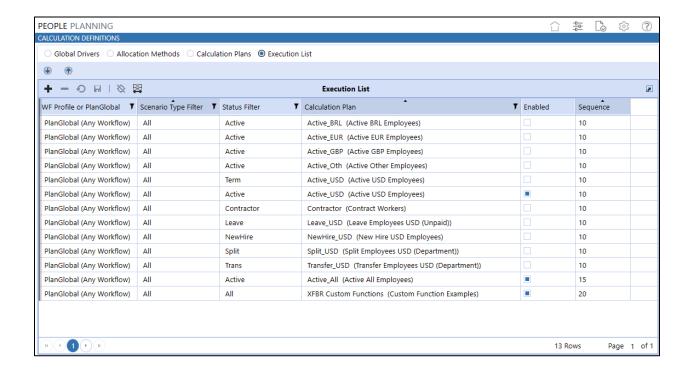


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# **Execution List**

The *Execution List* page is used 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.
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.



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# Import Calculation Definitions with an Excel Template

- 1. Click ito download the Excel template.
- 2. Click to import the file.
- 3. Click  $\P$  to download related existing data to a CSV file format for editing in Excel.
  - **Important!** Before importing, you must add a Named Range beginning with XFT. See *Export Register to CSV File* for example.

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# **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 Specialty Planning / Specialty Compliance Audit feature includes:

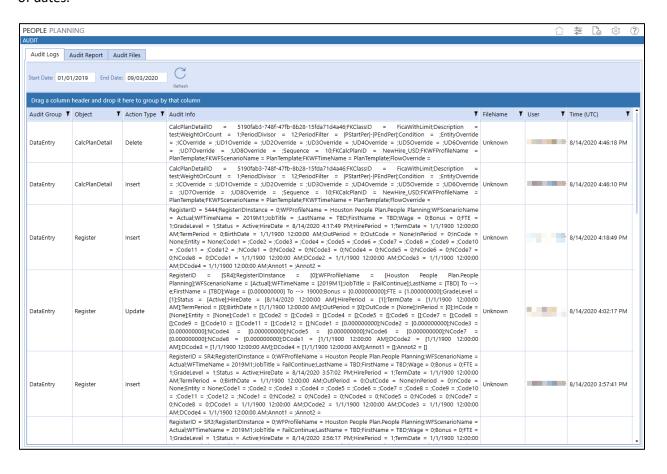
- XFW\_TCR\_AuditLog database table (Audit Log database tables will include the solution's unique three letter identifier in the name) to track all Solution Audit Logs.
- Business Rule functions record Solution Audit Log activities for Register data modifications (inserts, deletes & modifications), Excel 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 Page 24 of 55

# **Audit Logs**

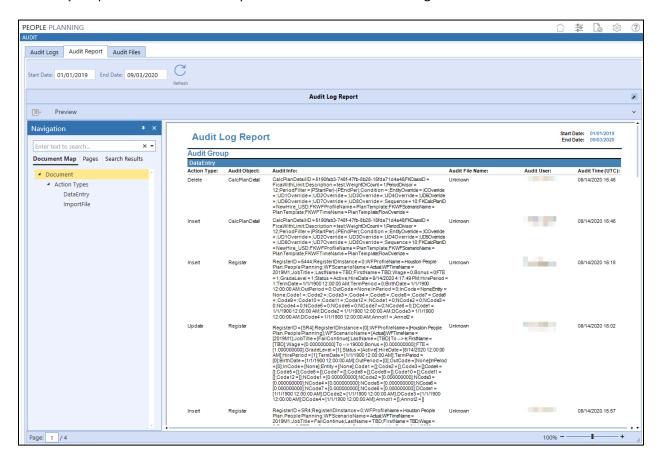
**Audit Logs** displays a grid view for filtered analysis the audited Register activities for the selected range of dates.



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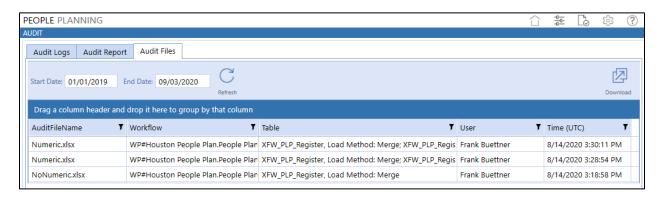
# **Audit Report**

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**.



Audit Page 26 of 55

# **S**ETTINGS



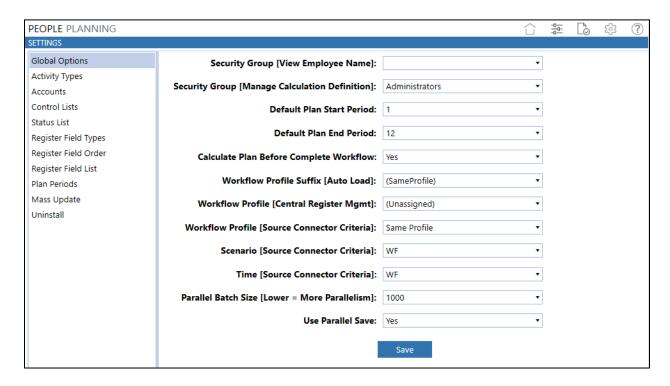
The **Settings** page is an Administrator-only page containing Global Options, Activity Type, Account, Control List, Status List, Register Field, Plan Period, and Mass Update tabs as well as Uninstall options to specify key properties for Specialty Planning / Specialty Compliance administration.

# **Global Options**

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



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.

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### **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. <u>Contact OneStream Support</u> 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 Specialty Planning / Specialty Compliance 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 & 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.

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# **Global Options for Reporting Compliance**

The following Global Options apply only to Reporting Compliance.

# **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 Cubebased 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*.



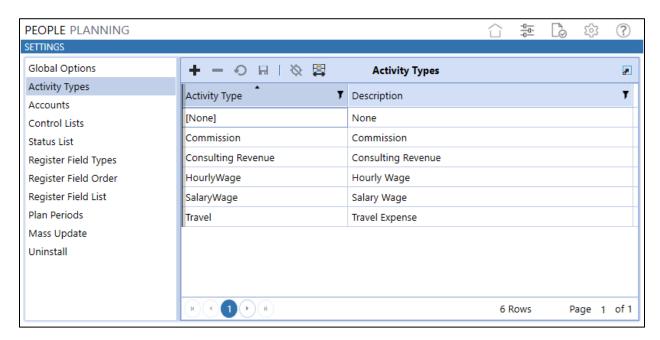
**Note**: This journal process cannot be used with extended Entity dimensions if posting to Consolidation members other than Local or a specific currency since Parent Entity is required. At this time, this configuration is not supported.

Settings Page 29 of 55

# **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**: Any column that displays **Y** can be clicked to filter as well as sort.

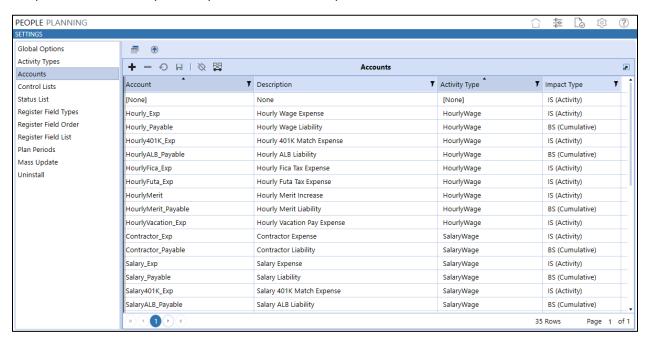
# Accounts

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.

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Accounts can be entered manually or imported using an Excel template. Click to download the Excel template. Once the template is updated, click ① to import the file.

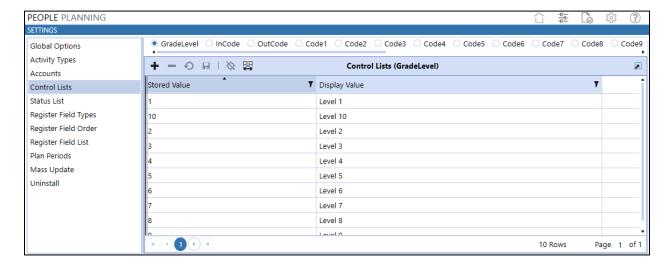


# **Control Lists**

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.



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### **Code Fields**

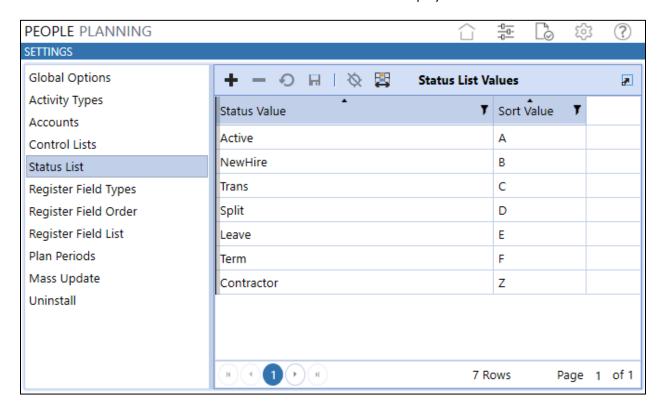
There are 26 Code fields that refine what is captured in the Register (such as People, Contracts, or Assets) in order to calculate the necessary planning/adjustment data or adjustments.

- 12 Text code fields that can transition from text to date or numeric.
  - See also: Register Field Types
- 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.

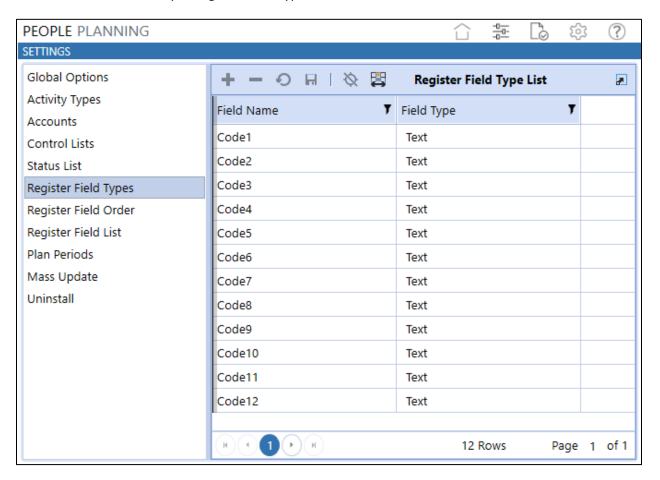


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# **Register Field Types**

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.



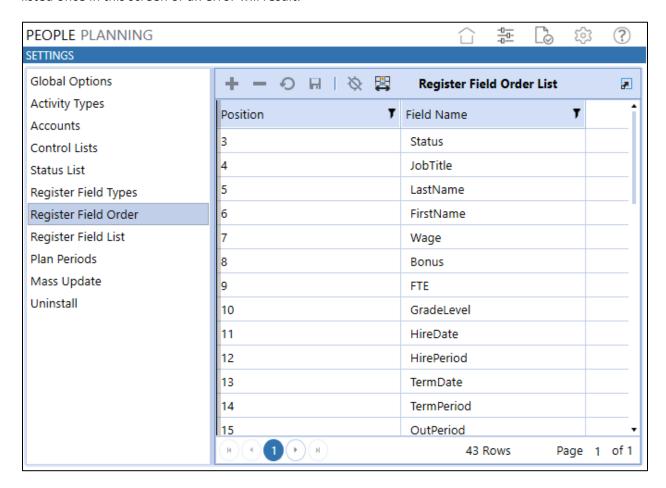


**Note**: If Administrator changes the data type in this screen to be different from Text, they need to change the default Excel load templates in the header tokens to reference the proper data type since Text is the default. Otherwise, loads from these templates will fail.

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# 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.

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### **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**

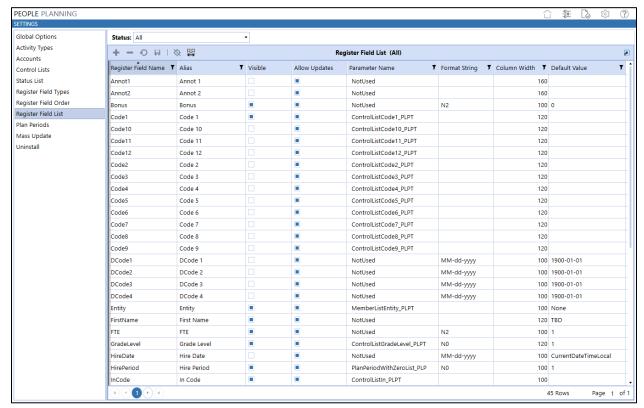
The number format applied to the selected register field. Available number formats are the same formats used in OneStream Cube Views. A list of valid formats can be found in the OneStream Object Lookup.

### **Column Width**

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

### **Default Value**

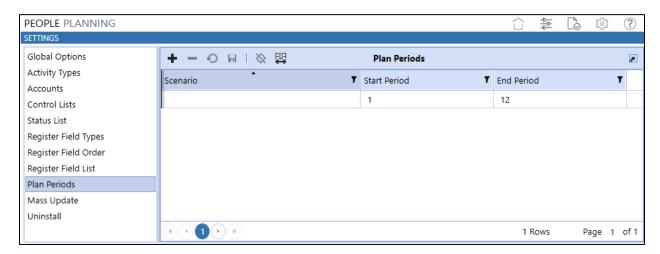
The default value for the field when a new row is added.



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### **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 Specialty Planning / Specialty Compliance 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 XF. 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.

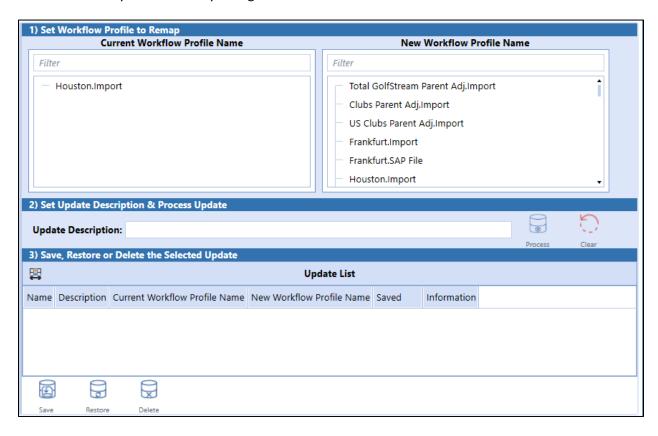
The Mass Update feature has been added to the Specialty Planning / Specialty Compliance solutions to resolve this issue when a Workflow Profile is renamed in the application. This feature allows the "orphaned" text string with the old Workflow Profile name to be selected and changed to a new Workflow Profile name. The solution presents the current list of XF 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 XF application Workflow Profiles.

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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.



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### Uninstall

The Uninstall feature allows the Specialty Planning / Specialty Compliance User Interface or the entire solution to be uninstalled. Note that if this is performed as part of an upgrade, any modifications that were performed on standard Specialty Planning / Specialty Compliance objects will be removed. There are two Uninstall options:

- 1. **Uninstall UI** removes Specialty Planning / Specialty Compliance, 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 Specialty Planning / Specialty Compliance since some of the Dashboards or other objects may have been modified.
  - Choose this option if you want to accept a Specialty Planning / Specialty Compliance
    update without removing the data tables.
  - The Specialty Planning / Specialty Compliance Release Notes will indicate if an overinstall is supported.



**Important!** This procedure will reset the Workspace Dashboard Name to (Unassigned). An Administrator must manually reassign the Workspace Dashboard Name after performing an Uninstall UI.

- 2. **Uninstall Full** removes all the related data tables, all data, Specialty Planning / Specialty Compliance Dashboards, and Business Rules.
  - Choose this option to completely remove Specialty Planning / Specialty Compliance or to perform an upgrade that is so significant in its changes to the data tables that this method is required.



Warning! Uninstall procedures are irreversible.

# **Import Register Data**

Once Specialty Planning / Specialty Compliance is set up, one of the first steps is to 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. Specialty Planning / Specialty Compliance 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.) Scenarios
    Assign to WFScenarioName

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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.

Workflow Name	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.

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# HELP & MISCELLANEOUS INFORMATION



This page contains solution documentation.

# **Display Settings**

OneStream XF and XF MarketPlace solutions frequently require the display of multiple data elements for proper data entry and analysis. Therefore, the recommended screen resolution is a minimum of 1920 x 1080 for optimal rendering of forms and reports.

Additionally, OneStream recommends that you adjust the Windows System Display text setting to 100% and do not apply any Custom Scaling options.

# **Package Contents & 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

<u>Identifier</u>	Description
SPC	Solution ID
PV6.2.0	Minimum XF Platform version required to run solution
SV100	Solution version
PackageContents	File name

# **Solution Database Migration Advice**

A Development OneStream XF 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 OneStream XF Design and Reference Guide

- In the Production OneStream XF application, install the solution and create the data tables. See
   <u>Configure the OneStream XF Application Server</u> for Database Server Connection settings and
   installation details.
- Data tables were created in the OneStream XF Development Application during the solution installation. Copy the data from the tables to the Production Microsoft SQL Server Database using the Microsoft SQL Migration Utility. This utility should only be run by the Microsoft SQL Administrator.

The Microsoft SQL Migration Utility and instructions on its use can be downloaded online from: <a href="https://sqlazuremw.codeplex.com">https://sqlazuremw.codeplex.com</a>



**Important!** This process has the potential to overwrite existing table data in the Production Application database if data already exists.

# MarketPlace Solution Modification Considerations

A few cautions and considerations regarding modification of MarketPlace Solutions:

- 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 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 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 modifications are made to 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. Making changes to the custom
  database tables and Business Rules, which should be avoided, will make an upgrade even more
  complicated.

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# **APPENDIX A: EXPRESSIONS**

Expressions are used in multiple areas of the Specialty Planning / Specialty Compliance solutions.

- OneStream uses ADO.NET engine to interpret expressions; there is no parser involved.
- The expression evaluator supports the following 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 '<='</li>
  - Logical and '&&', logical or '||'
  - Conditional 'IIF'
- Can use any Substitution Variable or Global Driver.
  - 0 (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)
  - o 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**

- |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: SPECIALTY 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 inmemory 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:
  - o *Timespan Day*: Number of days between date fields.
  - o Sum Account Period: adds up an account value over a single period.
  - o 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

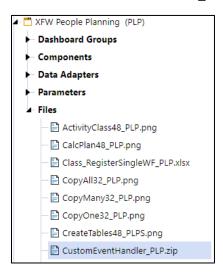
# APPENDIX D: CUSTOM EVENT MODEL

Specialty Planning / Specialty Compliance solutions support custom event models using Business Rules. The feature will be demonstrated in this document with the People Planning solution.

# 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.

```
823 D#Region "Constants and Enumerations"

824

825 'Custom Event Handler Declaration

826 'Dim m_CustomEvents As Object = Nothing

827 Dim m_CustomEvents As New OneStream.BusinessRule.DashboardExtender.CustomEvents_PeoplePlanning.MainClass
```

c. Once 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 Specialty Planning / Specialty Compliance solutions but the setup steps must 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 functions in the TCR\_SolutionHelper Business Rule provide the Solution Audit feature:

```
⊟#Region "Audit Log Helpers"
6846
6847
6848
          Public Sub LogTableEditorSave(ByVal si As SessionInfo, By
6891
          Public Sub WriteTableEditLog(ByVal si As SessionInfo, ByV
6892 🗷
6911
6912
          Public Sub WriteFileArchiveLog(ByVal si As SessionInfo, B
6950
          Private Function GetAuditLogTableForAppend(ByVal si As Se
6951
6963
          Private Function CreateCopyRegisterAuditInfo(ByVal si As
6964 H
6991
          Private Function CreateCopyExceptionPlanAuditInfo(ByVal s
6992
7023
          Private Function CreateCopyCalcPlanAuditInfo(ByVal si As
7024 E
7050
      #End Region
7051
7052
7053 = #Region "Audit Log Analysis Helpers"
7054
          Public Function GetAuditLog(ByVal si As SessionInfo, ByVal
7055
7095
          Public Function GetAuditLogFiles(ByVal si As SessionInfo,
7096
7146
          Public Function OnShowAuditPage(ByVal si As SessionInfo)
7147
7164
          Public Function RefreshAuditLogDashboard(ByVal si As Sess:
7165
7186
7187
          Public Function CopyAuditFileToUserTempFolder(ByVal si As
7220
      #End Region
7221
```

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 & Sample Calls

The TCR\_SolutionHelper Business Rule can be reviewed by going to the Application | Tool | Business Rules | Dashboard Extender | TCR\_SolutionHelper tab. 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 Business Rule code that calls the Solution Audit functions to handle archiving an import Excel file:

```
'Archive the file
'#Auditlog
'#Auditlog
Dim Wifber As String = "Morkflow: " & BRApi.Workflow.General.GetWorkflowUnitClusterPkDescription(si, si.WorkflowClusterPk)
Dim UngMessage As New Text.StringBuilder
logMessage.Append("Flex)

For Each range As TableRangeContent In loadResults
logMessage.Append(", Table: " & range.TableName)
l
```

### The sample code text for the screen shot above is:

'Archive the file

'#AuditLog

Dim wfDesc As String ="Workflow: " &

BRApi. Workflow. General. Get Workflow Unit Cluster Pk Description (si, si. Workflow Cluster Pk)

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 additional information regarding Excel templates, see *Data Collection Guides* in the OneStream XF Design and Reference Guide.

# **Loading Excel Templates to Custom Tables**

OneStream MarketPlace Solutions typically have some SQL Server tables related to them. Other custom solutions may include adding custom SQL Server tables as well. This technique allows the user to load data to these custom tables via an Excel template. The mechanism for loading these tables could either be through the user interface of a MarketPlace Solution or through OneStream Extensibility Rules.

OneStream reads this template using a specific Named Range which is explained later in this section. Ensure the following information is included in the Named Range.

In the first three rows of the Named Range in Column A, specify the following:

### **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**

#### 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']

### Merge Where Clause Criteria with Substitution Variable Example

Substitution Variables can be used in the Where Clause Criteria Merge:[WFProfileName = '|WFProfile|']



Important! Import templates do not support changing the Load Method.

### **Replace**

If there are no criteria, *Replace* 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]

#### 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.

### **StaticValueExample**

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.

### **Default Value Example**

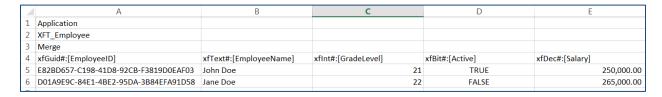
This example will enter a New Guid for all blank rows in the column.

xfGuid#:[EmployeeID]::NewGuid

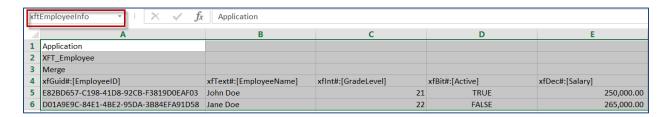
### **Substitution Variable Example**

Substitution Variables can be used in both StaticValue and DefaultValue.

xfText#:[EmployeeName]::|Username|



Finally, create a Named Range beginning with XFT making sure to include the entire template.



Once the template is complete, it is ready to be loaded into the custom table. If this is being used in conjunction with a MarketPlace Solution, refer to the solution for further instructions on how to load the template to the table. If this is being loaded via an Extensibility Business Rule, refer to the following example.

#### **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("xfDec#:[Salary]")
fieldTokens.Add("xfDateTime#:[HireDate]")
BRApi.Utilities.LoadCustomTableUsingDelimitedFile(si, SourceDataOriginTypes.FromFileShare,
filePath, Nothing, ",", dbLocation, tableName, loadMethod, fieldTokens, True)
```