Administrator Solution Tools

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Administrator Solution Tools Overview

Administrator Solution Tools provides a single dashboard to access multiple solutions, each enabling OneStream XF administrators to perform their role effectively and efficiently. An overview of all functionality within Administrator Solution Tools is described below.

Home Page Manager

Administrators can easily assign users or user groups to a default OneStream Home Page that is displayed at login to OneStream XF Application.

Log Cleaner

Provides administrators with a simple interface to manage log files by allowing them to delete any log type (*Error, Logon or TaskLogs*) in increments of 30 days up to 810 days.

Member Formula Builder

The Member Formula Builder Solution allows users to easily create and maintain dynamic and stored calculations with step by step directions in a user-friendly interface that allows the user to avoid writing code. This also provides the ability to quickly see all existing formulas for a member in one place, including the scenario and time-varying formulas.

Administrator Solution Tools Setup

Prerequisite: Considerations for Location of Administrator Solution Tools Development Work

There are two schools of thought for where to build out your Administrator Solution Tools solution:

1. Build in a Production OneStream XF application.
2. Build in a separate Development OneStream XF application.

Below are considerations for each approach:

When Doing an Administrator Solution Tools Build in a Production OneStream XF Application

An advantage of building your Administrator Solution Tools solution in your 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 a OneStream XF application that is being used in a Production capacity and this is seldom advised. Since the Administrator Solution Tools solution controls the ability to create member formulas, it is strongly recommended that this solution be implemented in the Development environment with a fresh copy of the Production application before starting work.

When Doing an Administrator Solution Tools Build in a Development OneStream XF Application

A Development OneStream XF application is the safest method for building out your Administrator Solution Tools. We recommend following this procedure in the creation of your OneStream XF Development application:

1. Ensure that all the OneStream XF artifacts (e.g. Workflow Profiles, Entities, etc.) you wish to relate to within the Administrator Solution Tools, are set up in the Production application.
2. Copy your Production OneStream XF application to your Development environment and rename it. This Development version will be used for your AST project.

See *Solution Migration Advice* below for more details.

Database Server Connections Settings

Changes need to be made to the *OneStream XF Application Server Configuration* in order for users to create and change data in the additional database tables used by this solution.

To edit these settings:

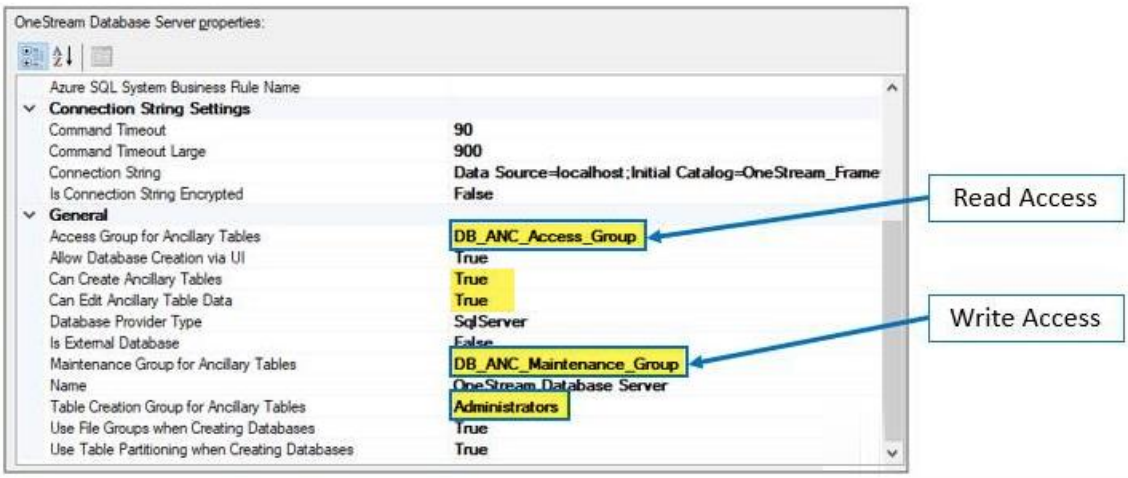
1. Start *OneStream XF Server Configuration Utility* as an Administrator.
2. Select *Open Application Server Configuration File*.
3. Select Database

Note: If other MarketPlace Solutions such as Account Reconciliations are already in the application, these settings might already be in place.

If a change is necessary, Internet Information Server must be restarted.

Make the following changes:

- *Access Group for Ancillary Tables* should be a group that includes those that will read the records.
- *Maintenance Group for Ancillary Tables* should include an edit and maintain the tables. This is typically set to Administrators or a group that contains a limited number of users.
- *Table Creation Group for Ancillary Tables* should be a group who will create the tables. This is typically set to Administrators.
- Other settings highlighted need to be set as noted below in order to execute table creation via the User Management Console Dashboards.



Ensure these user group settings include the people who will be working on and setting up Administrator Solution Tools tables.

How to Install Administrator Solution Tools

First, check the related *Release Notes* to determine if an *Uninstall of the User Interface* or a *Full Uninstall* is necessary and then see that chapter for instructions. If the *Release Notes* say that an over install is allowed, then proceed with these instructions from here:

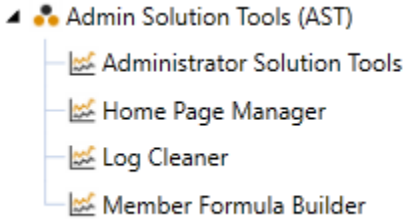
Download the Solution from the XF MarketPlace. The package is a zip file named *AST_PVxxx_SVzzz_PackageContents.zip* where xxx and zzz represent version numbers for OneStream XF and the solution. The *PVxxx* number (e.g. 430) represents the minimum XF Platform Version (e.g. 4.3.0) required in order to implement this Solution Version (i.e. *SVzzz*).

Log into OneStream XF, navigate to Application Tab | Tools | Load/Extract.

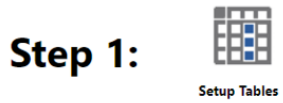
Click *Select File,* navigate to the zip file, and click *Load* .

Create *Administrator Solution Tools* Tables

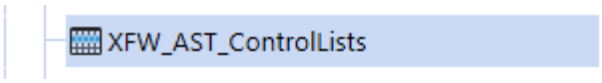
1.) Go to OnePlace | Dashboards and select the Administrator Solution Tools Dashboard.



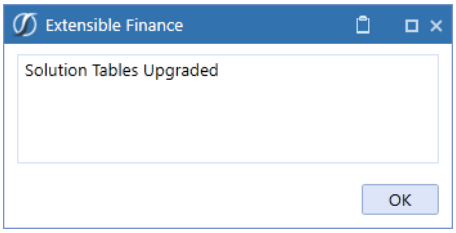
2.) Select Step 1: Setup Tables
This step may be necessary when upgrading even if tables are already present. Click the button if prompted. Administrator Solution Tools will not drop any tables that already exist but will modify table structures and add any new ones if necessary.



Note: This table is now created in the OneStream application database:



Note: A message that "Solution Tables Created" is received if this is a new implementation of Administrator Solution Tools. If this was an update where tables were modified, the message would read "Solution Tables Upgraded."



2.) Select Step 2: Launch Solution
You should see the *Administrator Solution Tools* Dashboard.

Package Contents

It is not recommended to rename any included Dashboard, dimension, member, etc. unless specified.

Dashboard Maintenance Units

XFW Administrator Solution Tools
This is the Dashboard Maintenance Unit that provides the user interface for the Administrator Solution Tools solution. It includes the Dashboard Groups, Components, Data Adapters, Parameters and Files used to build the solution.

Business Rules

AST_ClearLogsForThreshold
This is an Extensibility Business Rule for the Log Cleaner Solution. This rule provides low impact of clearing functions for all three major log types (Combined Error, User Logon, and Task Activity) within OneStream XF.

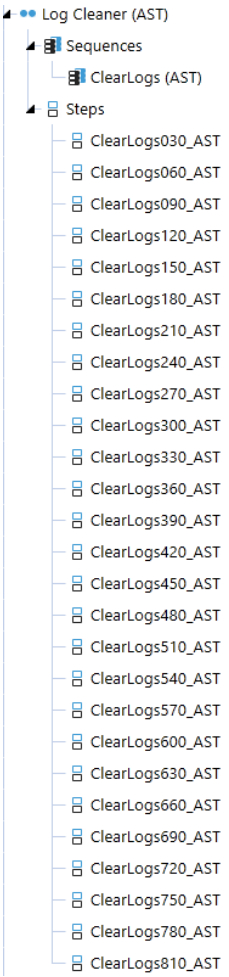
AST_HelperQueries
This is a Dashboard Data Set Business Rule. This rule can look up lists of User Groups and Dashboards.

AST_SolutionHelper
This is a Dashboard Extender Business Rule that provides various helper functions for the AST solution. These helper functions include set home page for all users in a group and remove solution user interface.

AST_ParamHelper
This is a Conditional Parameter helper functions XFBR String Business Rule. This rule is used to provide conditional parameter processing functions that allow a parameter value to be interpreted and substituted with a different string.

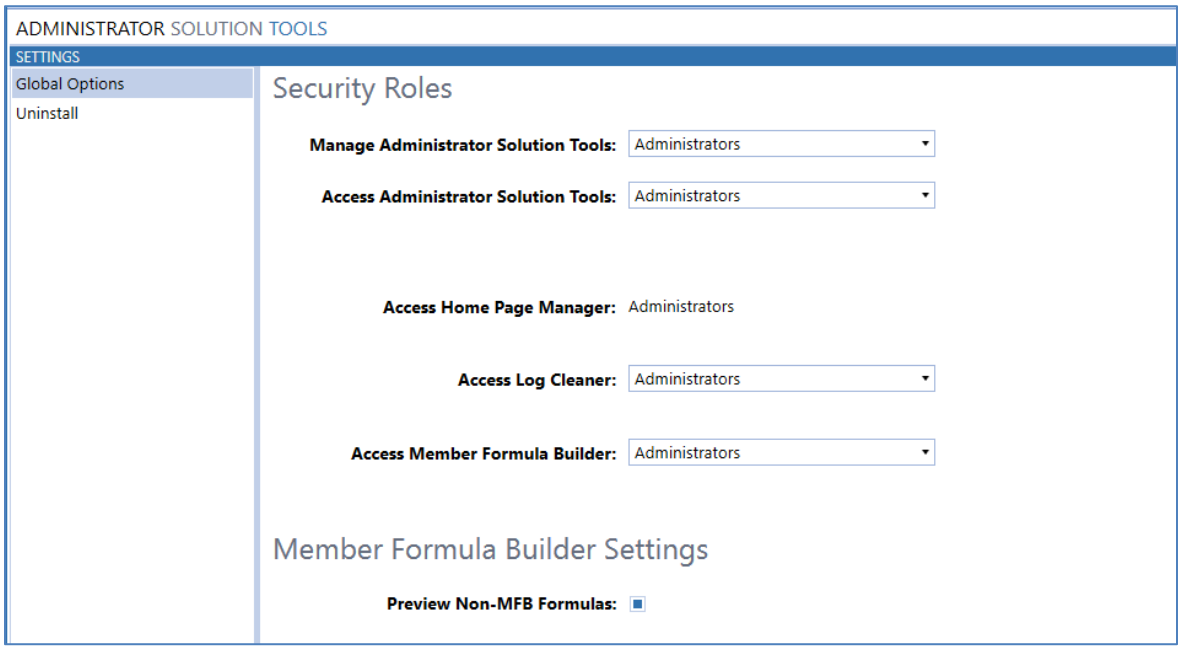
Data Management

Log Cleaner (AST)
The following Data Management Sequences and Steps are created to be used with their related Business Rules (as described above). The benefit of running these processes through a Data Management Sequence is that they can run in the background while the user continues their work.



Administrator Solution Tools Settings

Only an Administrator Solutions Tools Admin can reach the Administrator Solution Tools Settings page. This administrator is configured in *Global Options*, mentioned in this section and can see and make changes to any Settings page and any solution configuration. They are referenced in this document as "**AST Solution Admin**."



Note: These same rights apply to any OneStream XF System Administrator, referred to in this document as the "OneStream XF Admin." See the *OneStream XF Design and Reference Guide* section on *Security* for more detail plus a description of the *Local Admin* concept.

Global Options

This should be the first page visited when configuring Administrator Solution Tools.

Security Roles

This tool kit is designed with administrators in mind. The default setting for all solutions is the standard *Administrators* User Group, but this can be changed. It is important to note that anyone in the *Administrators* User Group is a OneStream XF System Administrator and, by default, can perform any of the same duties as any of the individual solution admins. Therefore, OneStream XF System Administrators will always be able to see and access all solutions within Administrator Solution Tools.

Manage Administrator Solution Tools

Anyone assigned to this OneStream XF User Group is considered a super-user who can configure any aspect of Administrator Solution Tools and are referred to as the Administrator Solution Admin. This user will have access to the Settings page to manage security set up for all solutions within Administrator Solution Tools. This user will not have access to any of the individual solutions unless they are part of that solution's access group. Example: The Administrator Solution Tools admin may have access to 'Manage Admin Solution Tools' however they do not have access to 'Access Home Page Manager'. This was done to allow Administrator Solution Tool Admins the ability to hide unwanted solutions from their Administrator Solution Tools Home Page. If allowing Administrator Solution Tool

Admins access to all Administrator Solution Tools is desired, create an Administrator Solution Tool Admin security group located in system/security/system security roles, and add each solution's security access to the Administrator Solution Tool Admin Group Membership.

Access Administrator Solution Tools

This group can access the Administration Solution Tools *Home Page.* This security group supersedes any of the ensuing security groups. Therefore, any user who needs to access individual solutions within AST and is part of one, or many, of the groups below, must be included in this security group first to gain access.

Access Home Page Manager

This group will be able to access the Home Page Manager solution and will be able to assign home pages to users. The OneStream XF Administrators role is required to access and use the Home Page Manager solution, i.e. any user included in the *Administrators* User Group.

Access Log Cleaner

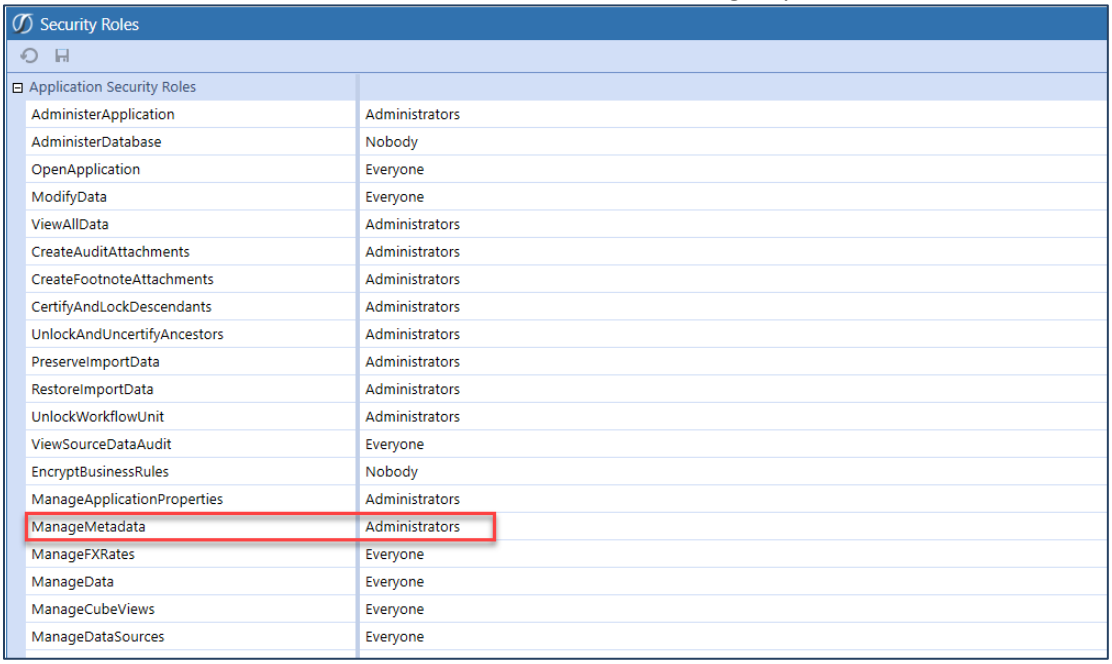
This group will be able to access the Log Cleaner solution and will be able to execute the clear logs process.

Access Member Formula Builder

This group will be able to access the Member Formula Builder solution.

Note: Creating formulas is a metadata change. Inherently, belonging to this access group does not inherently allow users to change metadata, such as the Formula property on an Account. Users in this group must also be included in one of these other User Groups:

1. Included in the *ManageMetadata* security role, found under *Application*|*Security Roles* (shown below). Giving access to manage metadata has other system implications, and therefore, it is recommended to limit the number of uses within this access group:



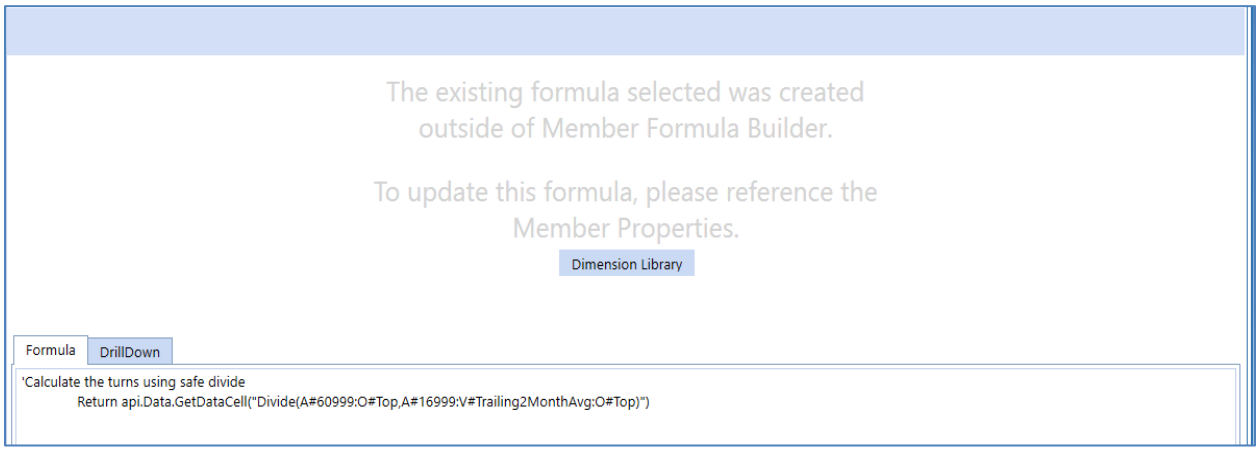
2. If this User Group is not included in the group for *ManageMetadata,* select the dimension in Dimension Library where edits are desired, select the *Dimension Properties* tab and ensure that this group is included in the *Maintenance Group* for that individual dimension.

Member Formula Builder Settings

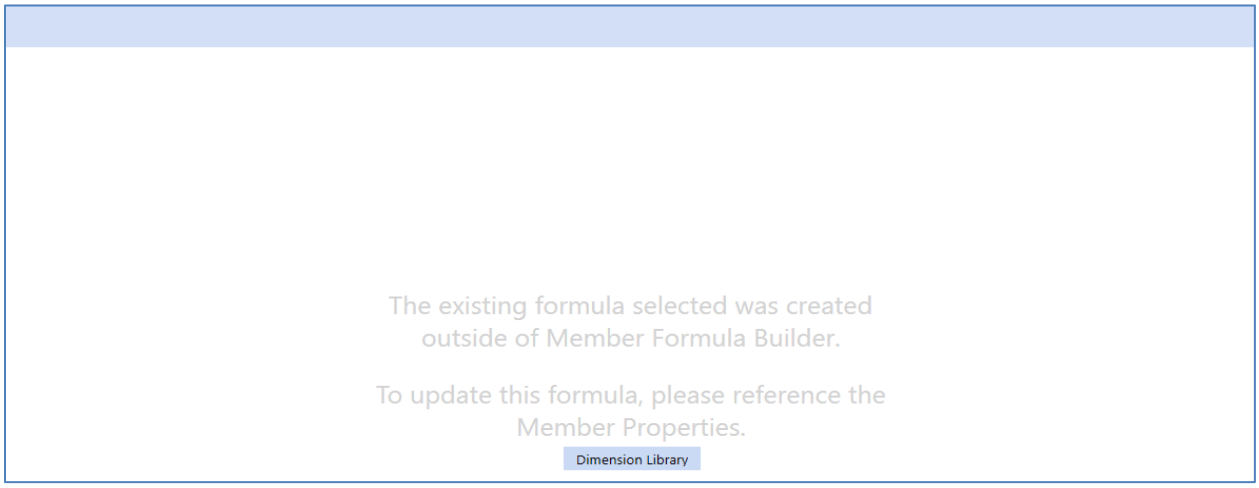
Preview Non-Member Formula Builder Formulas

The Preview Non- Member Formula Builder Formulas button is automatically enabled by default. When enabled it allows the user to see the formula and drilldown tabs which displays the member formula that was created outside of Member Formula Builder.

Note: This interface is read-only. A user may type within these sections, however, no information will be saved. Users will need to visit Dimension Library to alter the formula.



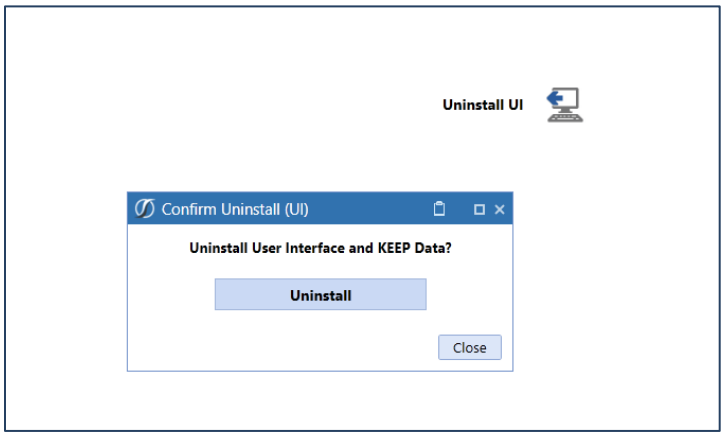
When the *Preview Non-Member Formula Builder Formulas* button is not enabled, the formula and drilldown tabs will not appear. Users will need to navigate to the Dimension Library to edit the formula.



Uninstall

The uninstall screen enables the removal of the Administrator Solution Tools application UI (user interface) and custom tables.

Uninstall UI The Uninstall UI button opens a dialog box to confirm removal of the Administrator Solution Tools solution UI.



Uninstall Full

The Uninstall Full button opens a dialog to confirm removal of the Administrator Solution Tools solution UI and deletion of all Administrator Solution Tools custom tables. Use caution, as this action is not reversible.

Uninstalling Earlier Versions of Home Page Manager or Log Cleaner

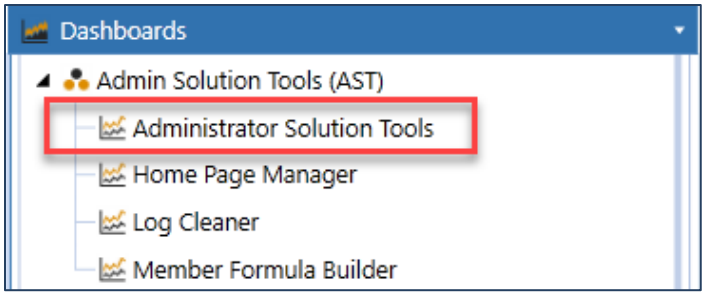
To uninstall the individual Home Page Manager or Log Cleaner Solutions go to the Global Options settings page and click uninstall to remove the Home Page Manager or Log Cleaner UI.

Help Page

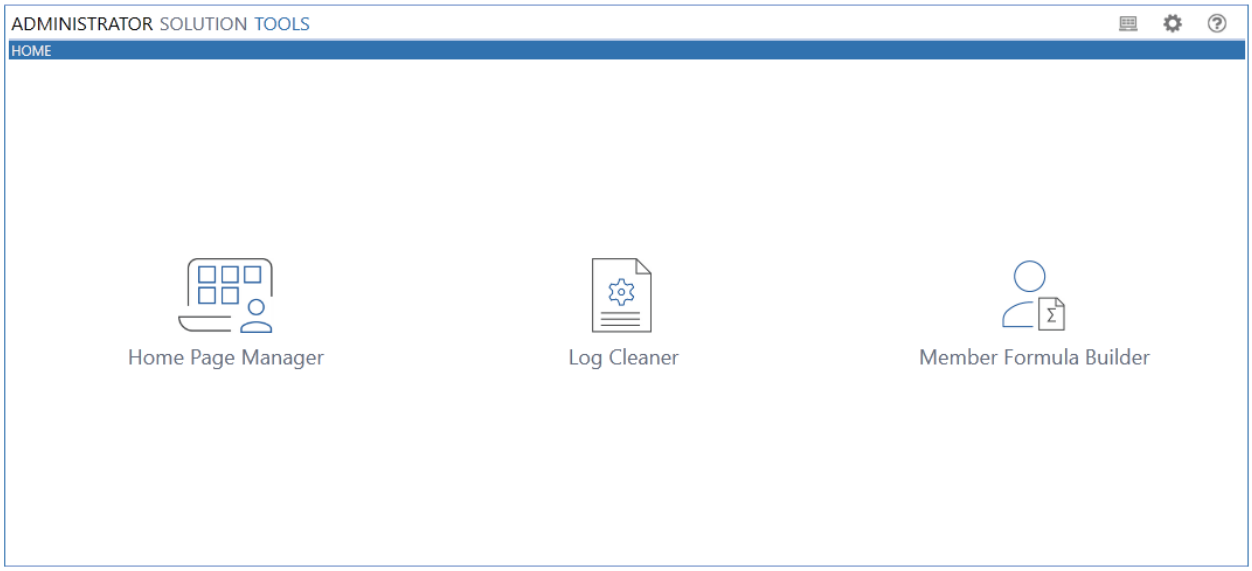
This page contains instruction documentation of the solution.

Using Administrator Solution Tools

The Administrator Solution Tools Dashboard can be accessed by navigating to OnePlace | Dashboards | *Admin Solution Tools* | *Administrator Solution Tools* dashboard. Note that each solution can also be accessed by selecting the applicable OnePlace dashboard, but the *Administrator Solution Tools Homepage* was created for ease of use and solution access.



Once the Administrator Solution Tools dashboard is launched, users are taken to the *Administrator Solution Tools Home Page*. The icons that appear on this page are based on security roles specified in *Global Options.* This page is used to launch the different solutions. To go back to the Administrator Solution Tools *Homepage* at any time, select the Show Home page icon in the top toolbar .

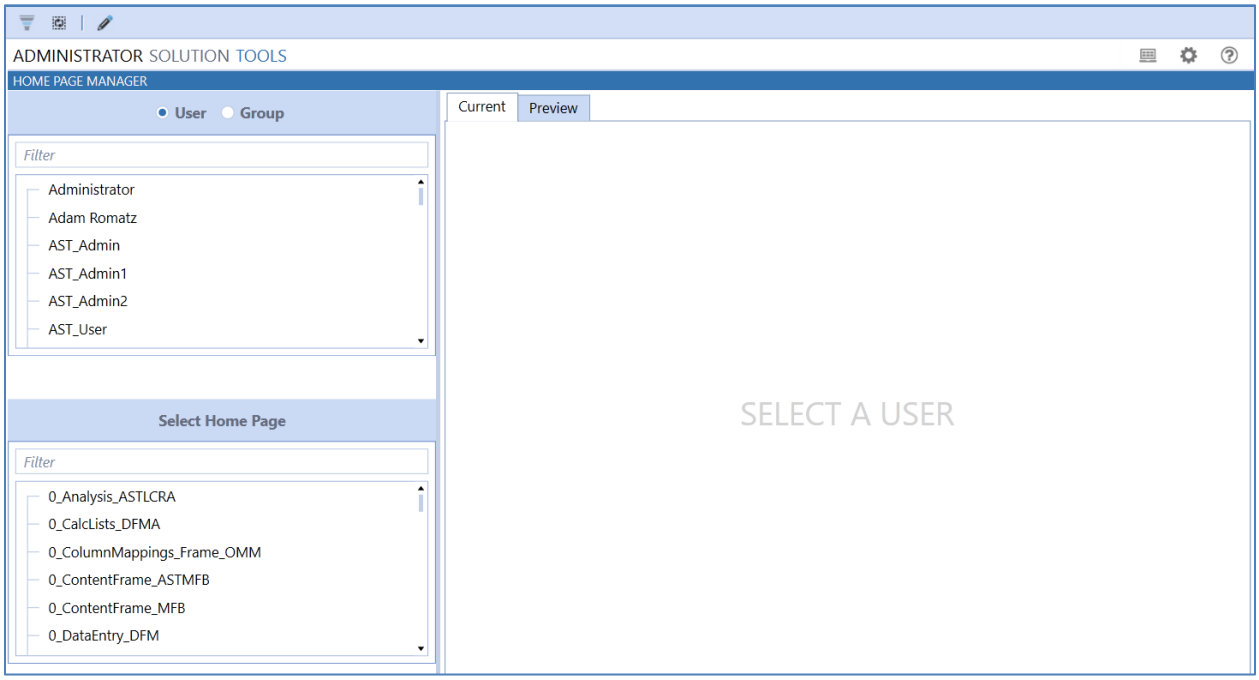


Using Home Page Manager

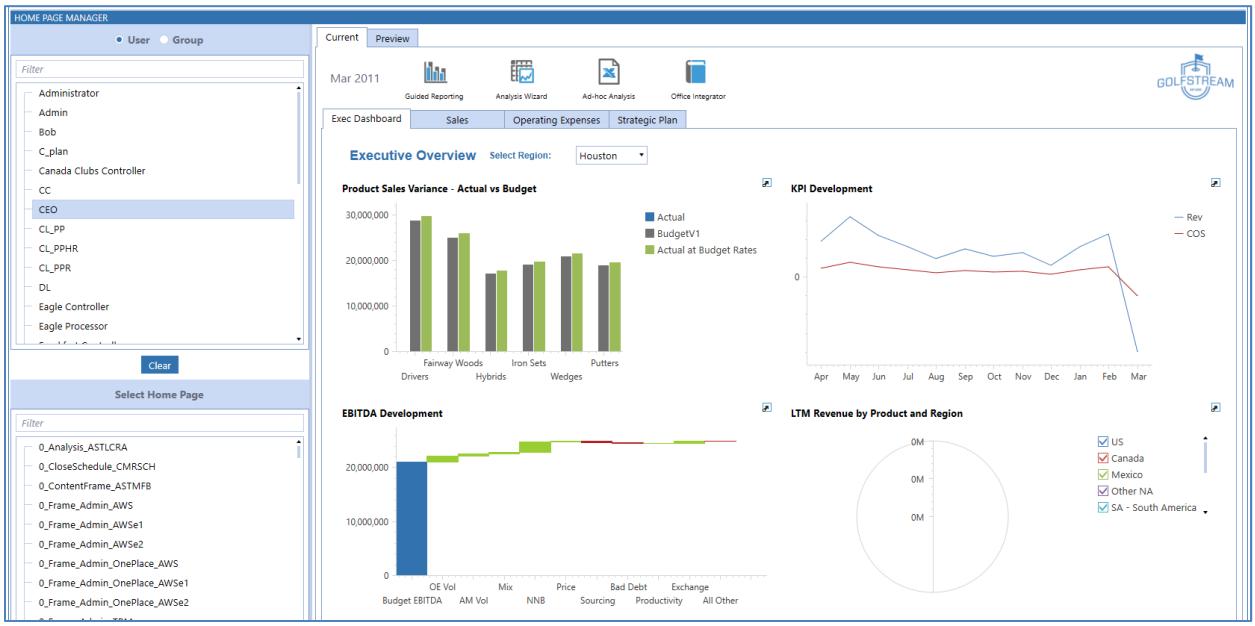
To launch Home Page Manager, select the icon on the Adminstrator Solution Tools Home Page or click directly on Home Page Manager under the Adminstrator Solution Tools dropdown.

The Dashboard has a Radio button to choose User Groups or Users to assign a home page. The text filter box is available for inclusive text filtering of the application User Groups or User's Names. The Administrator simply clicks on the single desired User Group or User they wish to set, and it will be highlighted when selected.

The Home Page selector also has a text filter box for inclusive text filtering of the application Dashboard names.



When User is selected, and the user presently has a home page set up, the administrator can toggle between the Current view as well as the Preview tab allowing the ability to view current and future home page displays.

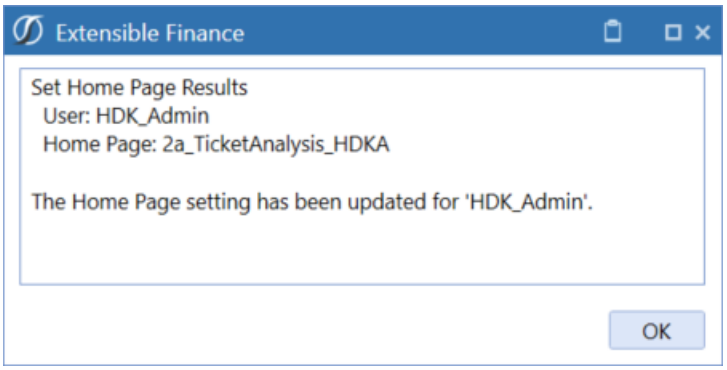


Example of Use

Below is an example of how to set up the Homepage Manager Solution for a group or individual users.
Note: Your Application will have different groups and dashboards since this is based on our example application.

- Select the User Radio button.
- Type in “HDK” in the first Text Filter search box for the User Group/User selection to find all users with HDK in the name. Click on the “HDK_Admin” user to select it.
- Next, enter “HDK” in the Home Page Text Filter search box to find the Dashboards with HDK in the name. Select the 2a_TicketAnalysis_HDKA.
- The selected Dashboard will be displayed in the Home Page Preview panel to show a sample of the selected Dashboard.
- Finally, click on the *Set* button to save the selections for the user HDK_Admin.

- The *Set Home Page Results* of our example will be displayed as follows in the following image.



We can confirm the settings have been completed when we login with the HDK_Admin user to confirm that the user is able to log into the selected Dashboard.

Processing Errors

The Home Page Manager *Set Home Page Results* message will provide error information when an administrator attempts to assign a Dashboard to users that do not have security access to the group/individual. In the event that some changes can be processed and some cannot, Home Page Manager processes the changes that are valid and notes the ones that could not be processed in the *Set Home Page Results*. Home Page Manager provides additional details for any other assignment errors in the Error Log for review and resolution.

Note: When selecting a preview in Home Page Manager and using Internet Explorer, solutions that contain multiple embedded dashboards may not display. This issue only occurs in the OneStream XF browser version. The OneStream Windows App version will display all preview pages as normal.

Using Member Formula Builder

To launch Member Formula Builder, select the icon on the Adminstrator Solution Home Page or click Member Formula Builder under the Adminstrator Solution Tools dropdown.

The purpose of Member Formula Builder is for users to be able to create basic member formulas. If a complex formula is needed, it is recommended that the user creates their formula in the Dimension Library.

Before beginning the formula build process, the member must exist already and the *Formula Type*, either stored or dynamic, must be established as part of the Member Properties Settings. To select the *Formula Type,* go to *Application*, *Cube*, *Dimensions*, find and select the member, select the *Member Properties* tab, and then select the *Formula Type* under *Settings*.

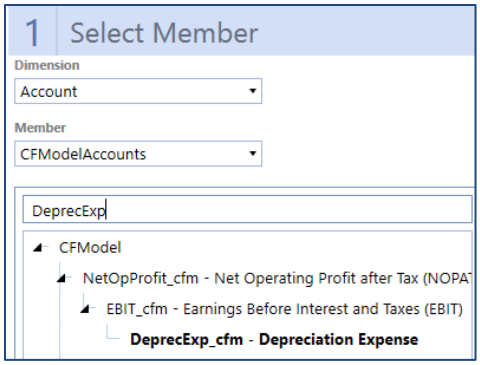
FormulaPass1 – FormulaPass16 are appropriate for a stored formula while DynamicCalc and DynamicCalcTextInput are appropriate for a dynamic formula.

Formula Build Process

Step 1 – Select Member

Select the *Dimension* from the drop down and then the *Member*.

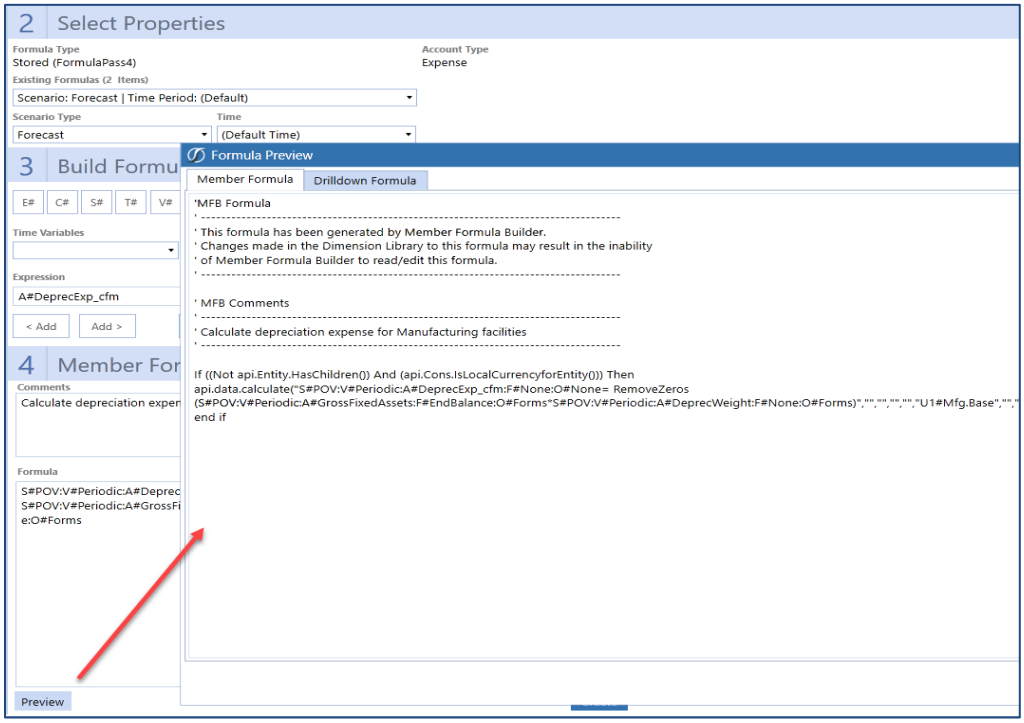
Note: To easily access a known member, use the search bar at the top of Step 1 to look up the member.

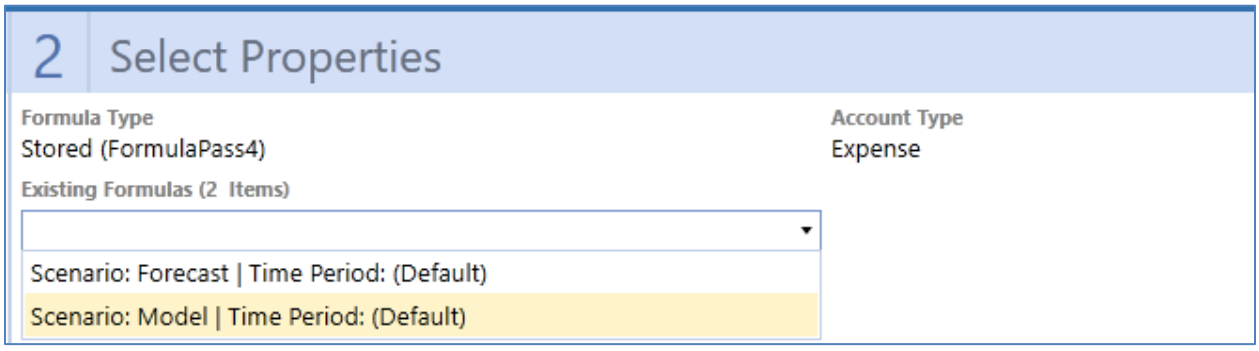


Once a Dimension, Member and the account member have been chosen for your formula, steps 2-4 will appear, enabling the user to continue the formula build process.

Step 2 – Select Properties

The Formula Type and Account Type labels display the formula or account type currently assigned to the member that has been chosen. The Existing Formulas dropdown will automatically default to show Scenario: (Default)|Time Period: (Default) as well as any other existing formulas on the selected member. If the default Scenario and Time formula is chosen, the Scenario Type and Time will also display as Default.

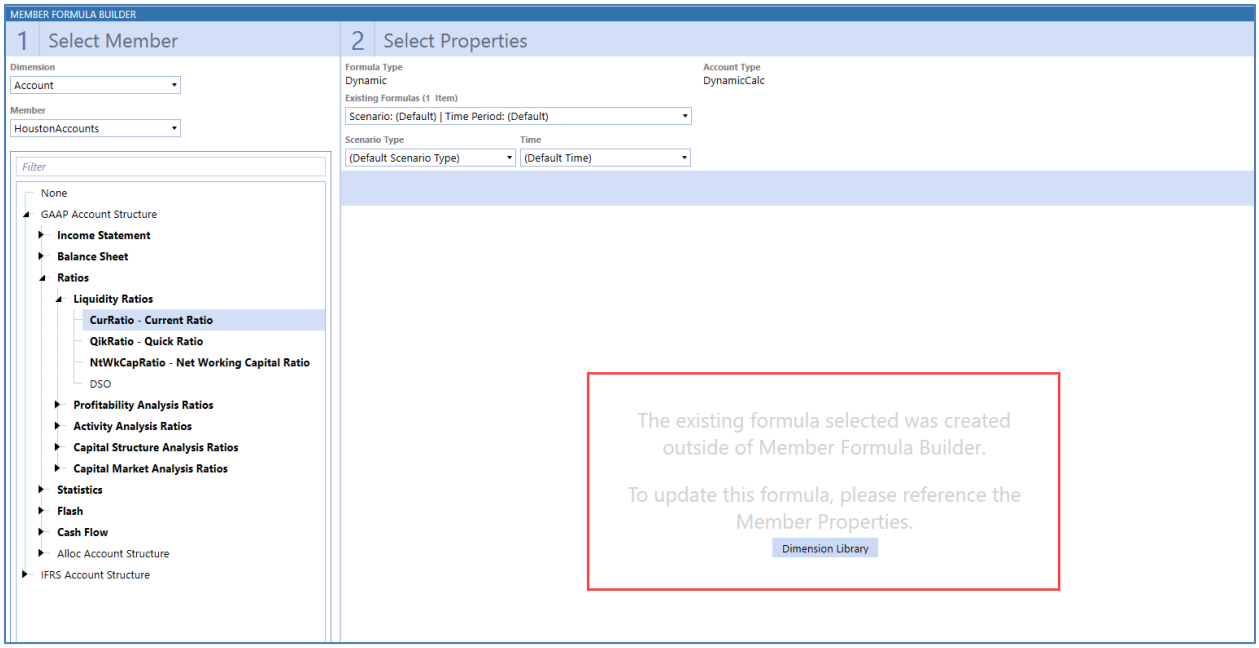




To create a new formula, select the *Scenario* and *Time* to be applied to the formula.

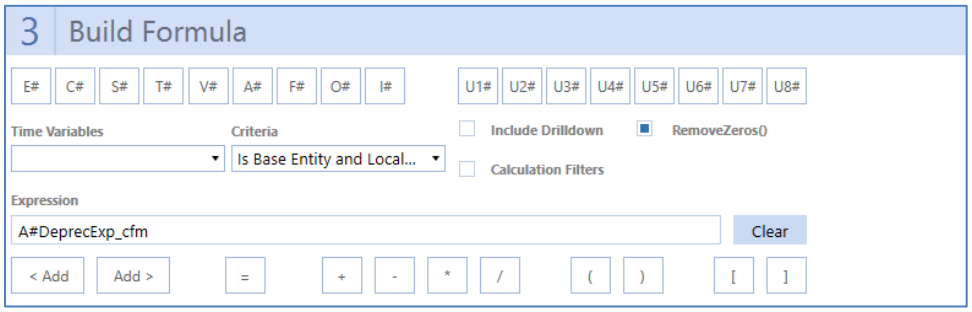
If there is already a formula associated with the member, the user can preview the formula before making any changes. Selecting the *Preview* button will open a dashboard displaying the existing formula.

If a formula is selected that was created outside of Member Formula Builder, edits are not possible. If an administrator selects a formula created outside of this form, the user can choose the Dimension Library button and will be directed to the *Member Properties* where the formula can be edited.

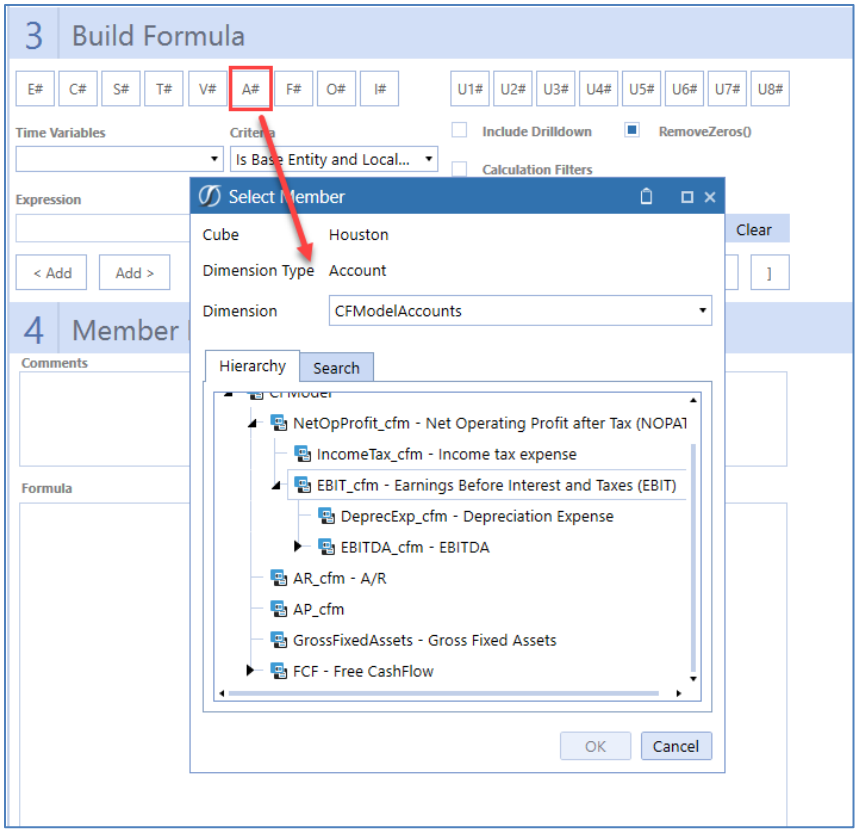


Step 3 – Build Formula

The Build Formula section can be used to help create a member formula.



Dimension Icons – When a user selects any of the dimension icons, the Select Member dialog box will appear so the appropriate member may be selected from the hierarchy.

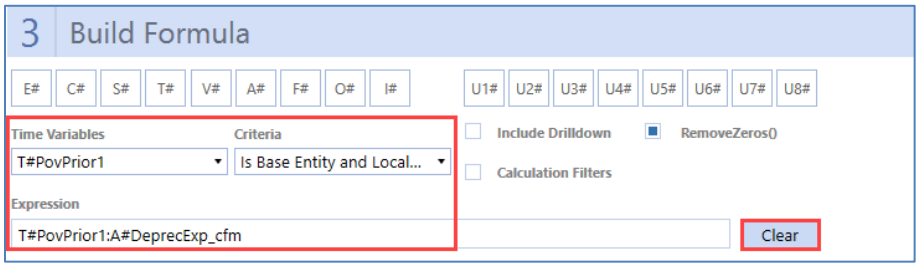


Time Variables – These are sample Time Functions that can be used to create a formula and were included for ease of formula creation. If an item is selected from this dropdown, it will be added to the *Expression*. For more on Time Functions and their use, refer to the *OneStream XF Design and Reference Guide*.

Criteria - Defines the dimension to which the formula is applicable. If a *Criteria* is selected from the dropdown, it will not show in the Member Formula Text Box but can be seen in the *Preview* dialog.

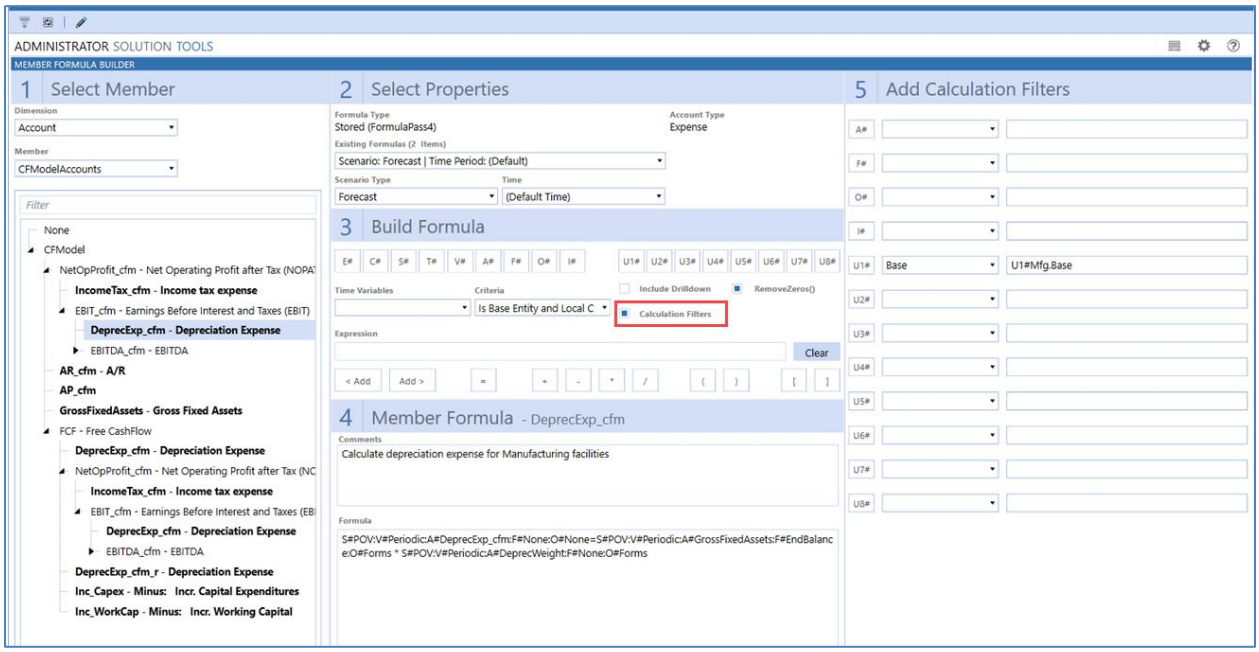
Expression – This text box is used to show the Dimensions or Time Functions selected. For stored formulas, the *Expression* will automatically populate for the member selected in Step 1 to help start the stored formula creation. Any text that is entered here can be cleared using the *Clear* button.

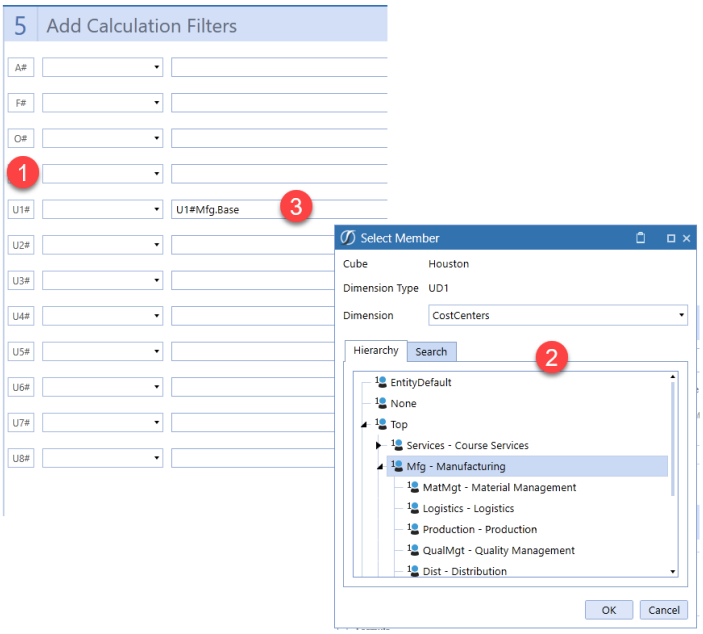
Clear – The *Clear* button is used to clear the *Expression* text box.

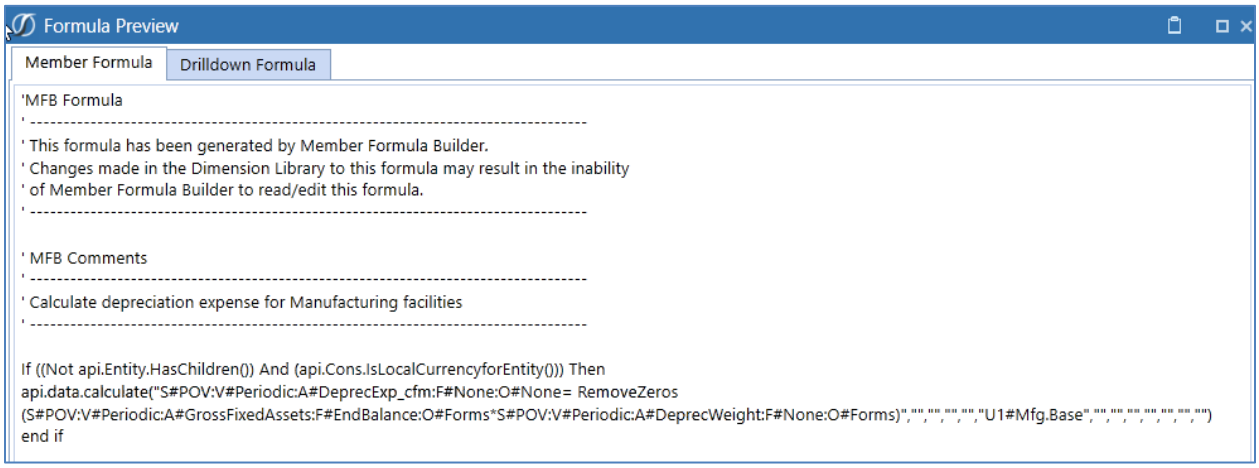


Add (< or >) – There are left and right Add buttons which determine the side of the formula that the expression should be placed. These buttons will add the content currently in the *Expression* text box to the *Member Formula* in Step 4.

Calculation Filters – This checkbox will only appear for stored formulas. If this checkbox is selected the Step 5 dashboard will appear. Allow formulas that will only be calculated if certain criteria are met. For example, the formula above will first run on the UD1 base members under the "U1#Mfg.Base" dimension. To add a Calculation Filter, select the appropriate *Dimension Icon* (1), select the member from the dialog box (2), and then add the appropriate expansion by selecting from the drop-down (3). Once the criteria are defined in the text boxes they do not need to be saved, they will automatically be part of the formula creation. You can preview the *Calculation Filters* as part of your formula by using the Preview button.

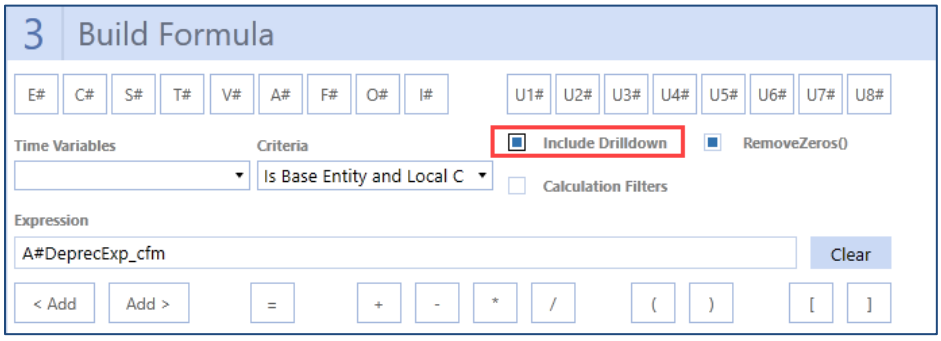




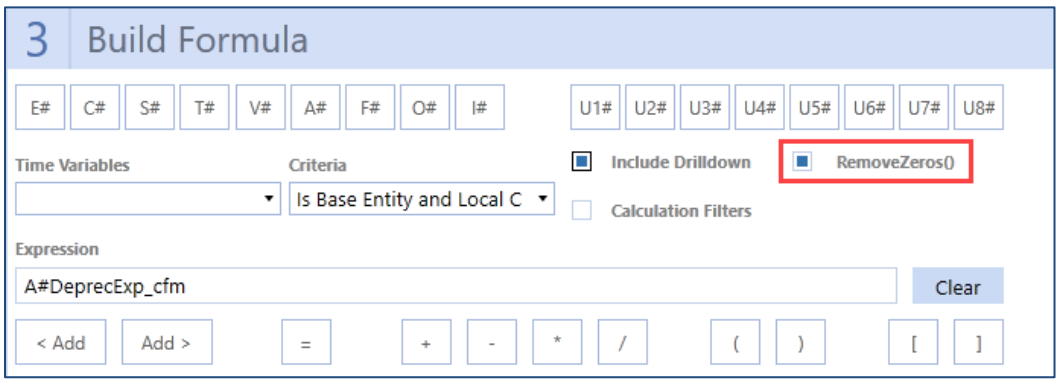


Comments - Allows the user to write an explanation for the formula. If a user is previewing the formula later, they will also be able to review the comments.

Include Drilldown – Allows the user to drilldown on the field for which the formula is being created.

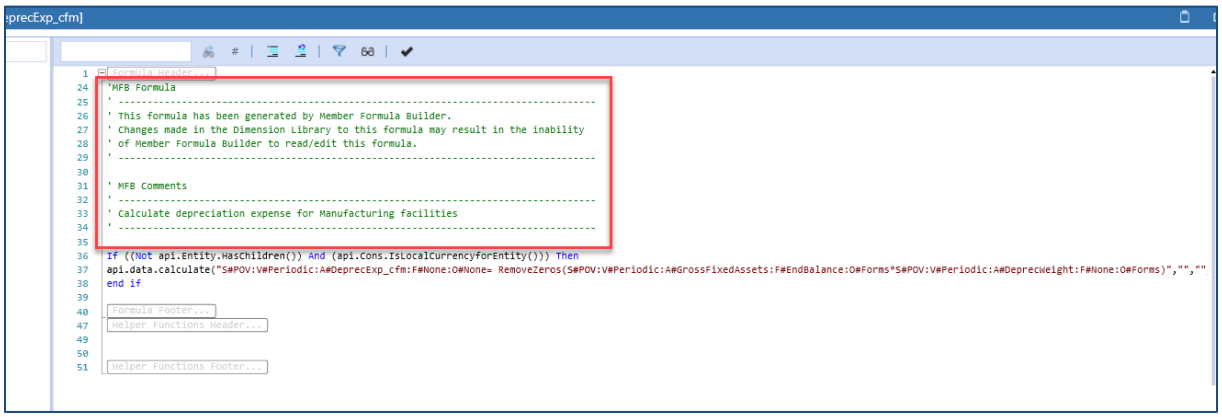


RemoveZeros()
The RemoveZeros() function can be used to evaluate a source data buffer and remove all cells where the amount is zero whether or not it is flagged as a NoData cell. This function is important to use for performance purposes and therefore is enabled by default. For more information on this function refer to the *OneStream XF Design and Reference Guide*.

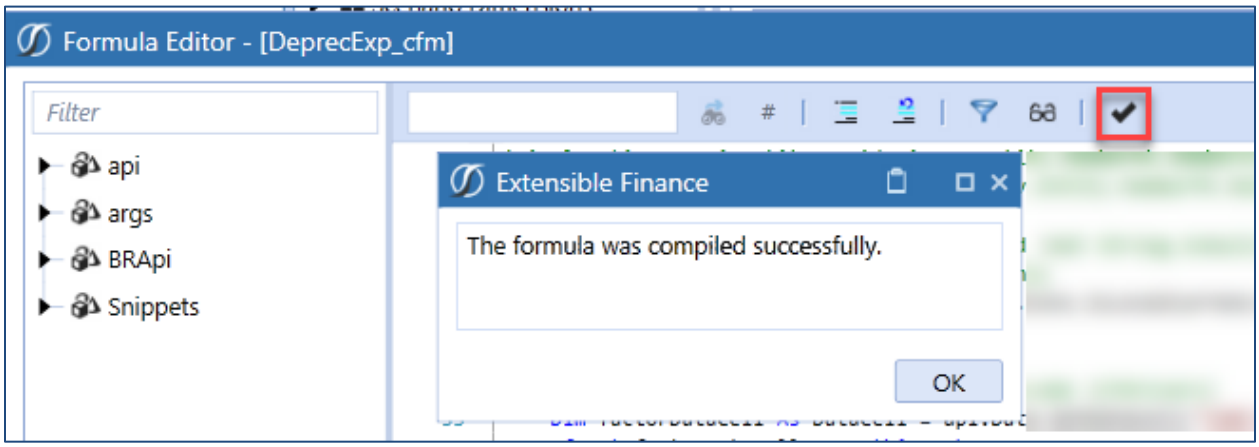


Adding Formula Complexity

If an administrator chooses to add complexity to a formula originally created in Member Formula Builder outside of the solution (i.e. creating multi-line rules), it is recommended that the MFB syntax within the business rule be removed. By doing this, the ability for Formula Creators to see and update complex rules in MFB is removed.



Note: It is recommended after building a formula, to go back to the *Dimension Library* and performing a compile using the *Compile* button on the Formula Editor's toolbar to make sure that the VB.NET syntax is correct.



Using Log Cleaner

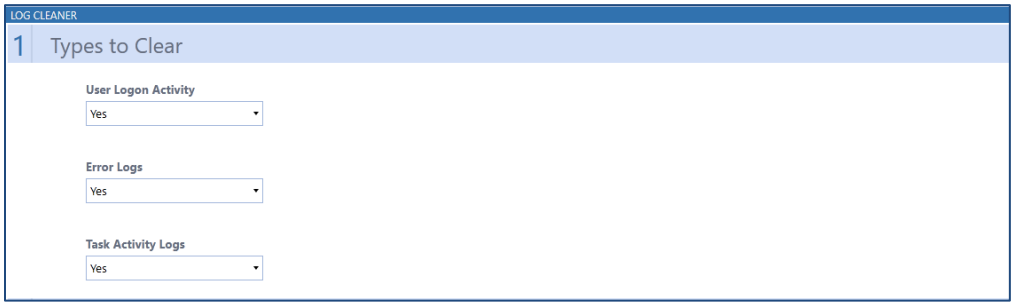
To launch Log Cleaner, select the icon on the Administrator Solution Tools Homepage or click Log Cleaner under the Administrator Solution Tools dropdown.

Select Log Types to Clear

The OneStream Log Cleaner allows administrators to select the OneStream log types to clear.

- **User Logon Activity**
  This displays users who are logged on and when they log off for all applications.

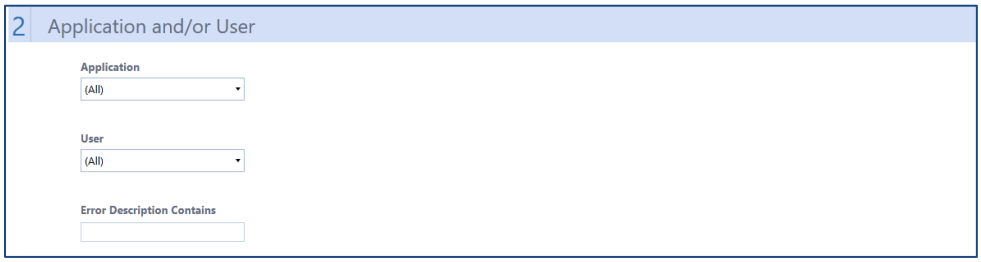
- **Error Logs**
  Logs all the error processes. This may also contain logs written via Business Rules.
- **Task Activity Logs**
  Logs all the tasks currently running as well as completed tasks.



Select Application and/or User

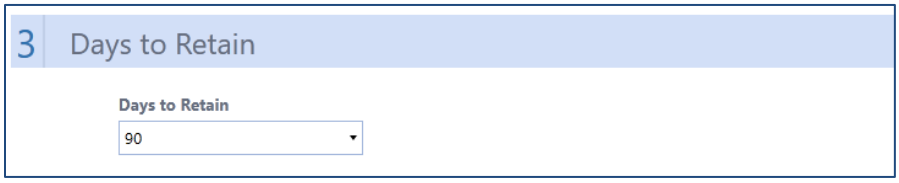
Log Cleaner allows administrators to select custom filtering to clear the Error Log.

- **Application**
  Clear logs for specific applications or All applications.
- **User**
  Clear logs for individual users or all users in the environment.
- **Error Description Contains**
  Clear Error Log entries with specific text in the description.



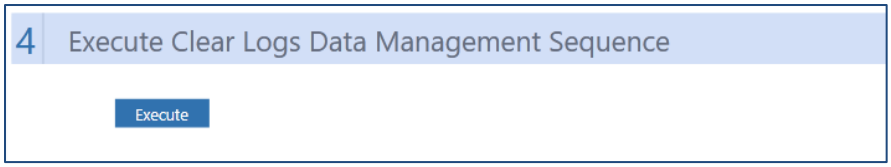
Days to Retain

Days to Retain – User can choose how many days of the logs being cleaned they would like to retain.



Execute Clear Logs Data Management

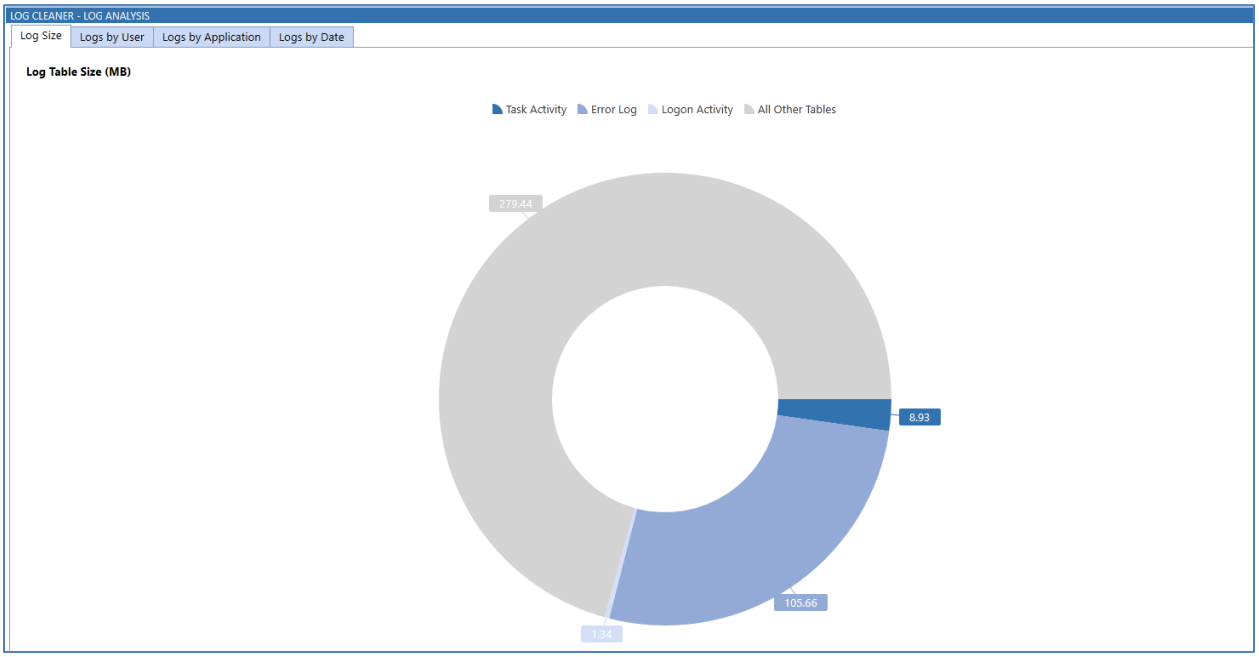
Execute Clear Logs Data Management Sequence – The Execute button will begin the Log Cleaner sequence.



Note: See *Data Management Automation through PowerShell* in the *OneStream XF Design and Reference Guide* for more information on scheduling the clearing of logs.

Log Analysis Dashboard -

The Log Analysis Dashboard provides a graphical user interface to review the OneStream logs. It displays: Logs by Size, Logs by User, Logs by Application and Logs by Date.



Solution Migration Advice

This advice is related to customers who have built out their initial Administrator Solution Tools solution in a Development OneStream XF application and are looking to migrate just these artifacts and tables to Production. For migrating artifacts like Dashboards from the Development application, follow the steps in the *OneStream XF Design and Reference Guide* under the chapter on *Managing a OneStream Environment* to build a Development, Test and Production application as a best practice.

The process below will help you migrate the Administrator Solution Tools tables properly:

1. In the Production OneStream XF application, install the Administrator Solution Tools and create the tables. See the chapter on *Administrator Solution Tools Set up* for Database Server Connection settings and installation details.
2. In the Development OneStream XF application, the tables created in the OneStream XF application during the installation (see table names in the *Create Administrator Tools Set Up Tables* chapter) should be copied via standard SQL Server commands first to a Test SQL Server database (OneStream XF Application). After verifying that this migration was successful, perform the same commands to migrate to the Production SQL Server database. **Note:** this process has the potential to overwrite existing table data in the Production application database if there is any existing data.

Optimal 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.

Modifying MarketPlace Solutions

A few cautions and disclaimers when modifying a MarketPlace Solution:

- 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.