

# Administrator Solution Tools Guide

PV740 SV100

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# Overview

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

## **Business Rule Viewer**

Allows Administrators to view current and historical business rules and member formulas. It also provides a historical audit trail of all rules that have been added, edited or deleted.

### Member Formula Builder

The Member Formula Builder lets you 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. It also provides the ability to see all formulas for a member in one place, including the scenario and time-varying formulas.

### Home Page Manager

Administrators can easily assign a default Home Page to a user or user group to display when logging into OneStream.

## 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.

# **Setup and Installation**

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

See also: "MarketPlace Solution Modification Considerations" on page 47

# Dependencies

Component	Description
OneStream 6.2.0 or later	Minimum OneStream Platform version required to install this version of Administrator Solution Tools.

# Select the Administrator Solution Tools Development Location

Before beginning installation, decide whether to build Administrator Solution Tools directly in the Production OneStream application or in a separate Development OneStream application. This section provides some key considerations for each option.

**Production OneStream Application:** The primary advantage of building Administrator Solution Tools 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 used in a Production capacity and not advised.

**NOTE:** OneStream strongly recommends that you implement Administrator Solution Tools in the Development environment with a fresh copy of the Production application before starting work.

**Development OneStream Application**: As a best practice, use the Development OneStream application to build Administrator Solution Tools.

# **Create the OneStream Development Application**

- 1. Ensure all the OneStream artifacts relating to Administrator Solution Tools such as workflow profiles and entities are in the production application.
- 2. Copy your production OneStream application to your Development environment and rename it. This development version is used for your Administrator Solution Tools project.

# **Application Server Settings**

You may need to edit the OneStream Application Server Configuration so users can create and change data in the additional database tables. If other MarketPlace solutions (such as Specialty Planning) are already in the application, these adjustments may already exist.

See also: "Solution Database Migration Advice" on page 46

### **Configure the OneStream Application Server**

Ensure that the security group settings include the users who will be working on and setting up Administrator Solution Tools before proceeding.

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

- 1. Start the OneStream Server Configuration Utility as an Administrator.
- 2. Click 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.

One	Stream Database Server properties:	
•	2↓ 🖻	
>	Azure Database Connection Settings	
>	Connection String Settings	
$\sim$	General	
	Access Group for Ancillary Tables	DB_ANC_Access_Group  Read Access
	Allow Database Creation via UI	Тгие
	Can Create Ancillary Tables	Тгие
	Can Edit Ancillary Table Data	True
	Database Provider Type	SqlServer
	Is External Database	False
	Maintenance Group for Ancillary Tables	DB_ANC_Maintenance_Group < Read Access
	Name	OneStream Database Server
	Table Creation Group for Ancillary Tables	Everyone
	Use File Groups when Creating Databases	Тгие
	Use Table Partitioning when Creating Databases	Тгие

4. Restart Internet Information Server.

# **Install Administrator Solution Tools**

1. On the OneStream MarketPlace Dashboard, click **MarketPlace > Administrator Solution Tools**.



- 2. On the Administrator Solution Tools Solution page, select the appropriate OneStream platform version from the **Minimum Platform Version** drop-down list.
- 3. Select the most recent version from the **Solution Version** drop-down list and then click **Download**.
- 4. Log in to OneStream.
- 5. On the **Application** tab, click **Tools > Load/Extract**.
- 6. On the Load tab, locate the solution package using the Select File icons and click Open.

- 7. When the solution's file name appears, click Load.
- 8. Click Close to complete the installation.

# **Set Up Administrator Solution Tools**

The first time you run Administrator Solution Tools, a guided table setup process begins.

In OneStream, click **OnePlace > Dashboards > Administrator Solution Tools > Administrator Solution Tools**.

OnePlace	Application	System	*	
→ Workflo	w		•	
🛅 Cube Vi	ews		•	
📕 Dashbo	ards		•	
Administrator Solution Tools     Administrator Solution Tools				

### **Create Tables**

1. Click Step 1: Create Tables.

This step may be necessary when upgrading even if tables are already present. Administrator Solution Tools will not drop any tables that already exist but will modify table structures and add any new ones if necessary.

W XFW\_AST\_ControlLists

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

### **Package Contents**

The Dashboard Maintenance Unit provides the user interface for Administrator Solution Tools and includes the required dashboard groups, components, data adapters, parameters and files.

#### **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**

The following business rules are included:

#### AST\_ClearLogsForThreshold

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

#### **AST\_HelperQueries**

This is a Dashboard Data Set business rule. This rule can look up lists of user groups and dashboards.

#### AST\_ParamHelper

This is a conditional parameter helper functions Dashboard XFBR String business rule. This rule provides conditional parameter processing functions that allow a parameter value to be interpreted and substituted with a different string.

#### **AST\_SolutionHelper**

This is a Dashboard Extender business rule that provides various helper functions for the Administrator Solution Tools solution.

#### AST\_SolutionHelperBRV

Contains all code logic and change events for the Business Rule Viewer and Member Formula Viewer.

#### **AST\_SolutionHelperCommon**

Contains common code shared by all business rules, such as working with session state and sorting functions.

#### **AST\_SolutionHelperHOM**

Contains all code logic and change events for the Home Page Manager.

#### AST\_SolutionHelperLCR

Contains all code logic and change events for the Log Cleaner, including functions that generate log analysis charts.

#### **AST\_SolutionHelperMFB**

Contains all code logic and change events for the Member Formula Builder.

# **Settings**



The **Settings** page contains the **Global Options** tab where you define options for administration, member formulas and uninstalling.

Only an Administrator Solutions Tools Administrator can access the Settings page. Configure the Administrator 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."

# **Global Options**

The **Global Options** page contains key properties that guide global Administrator Solution Tools administration. Use this page to start configuring Administrator Solution Tools.

Only an Administrator Solution Tools administrator can access the Administrator Solution Tools Settings page. Set the Administrator in **Global Options**. The Administrator can see and make changes to any Settings page and any solution configuration.

NOTE: Global option settings are retained during upgrades.

	OR SOLUTION TOOLS		द्रि	?
Global Options Uninstall	Security Roles			
	Manage Administrator Solution Tools:	Administrators •		
	Access Administrator Solution Tools:	Everyone 👻		
	Access Home Page Manager:	Administrators		
	Access Business Rule Viewer:	Administrators		
	Access Log Cleaner:	Administrators •		
	Access Member Formula Builder:	Administrators •		
	Member Formula Builder S	ettings		
	Preview Non-MFB Formulas:			
		Save		

**NOTE:** These same rights apply to any OneStream System Administrator, referred to in this document as the "OneStream Admin." See the *Design and Reference Guide* section on Security for more information.

### **Security Roles**

Since security is governed at the global level, it is the assignment of the user group to the Security Role that determines who will be Administrator Solution Tools Administrators globally.

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. Anyone in the Administrators User Group is a System Administrator and, by default, can perform any of the same duties as any of the individual solution admins. Therefore, System Administrators can always see and access all solutions within Administrator Solution Tools.

#### Manage Administrator Solution Tools

Anyone assigned to this User Group is considered a super-user who can configure any aspect of Administrator Solution Tools and are referred to as the Solution Administrator. This user will have access to the Settings page to manage security set up for all tools 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 administrator may have access to **Manage Administrator Solution Tools** however they do not have access to **Access Home Page Manager**. This was done to allow Administrators to hide unwanted solutions from their Administrator Solution Tools Home Page. If allowing Administrator access to all Administrator Solution Tools is desired, create an Administrator Solution Tool Administrator security group located in **System > Security > System Security Roles**, and add each solution's security access to the Group Membership.

#### **Access Administrator Solution Tools**

This group can access the **Administrator 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 also be included in this security group first to gain access.

#### Access Home Page Manager

This group can access the Home Page Manager solution and assign home pages to users. The Administrator role is required to access and use the Home Page Manager solution. This includes any user included in the Administrators User Group.

#### **Access Business Rule Viewer**

This group can access the Business Rule Viewer and can view Business Rules or Member Formulas. The Administrator role is required to access and use the Business Rule Viewer. The Administrator role includes any user included in the Administrators User Group.

#### **Access Log Cleaner**

This group can access the Log Cleaner solution and execute the clear logs process.

#### **Access Member Formula Builder**

This group can access the Member Formula Builder.

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 the ManageMetadata security role, found under **Application**> **Security Roles**. Giving access to manage metadata has other system implications. Therefore it is recommended to limit the number of uses within this access group:

#### Settings

Security Roles		<u> </u>	<b>a</b>	×
H C				
Application Security Roles				î
AdministerApplication	Administrators			
AdministerDatabase	Nobody			
OpenApplication	Everyone			
ModifyData	Everyone			
ViewAllData	Administrators			1
CreateAuditAttachments	Administrators			
CreateFootnoteAttachments	Administrators			
CertifyAndLockDescendants	Administrators			
UnlockAndUncertifyAncestors	Administrators			
PreserveImportData	Administrators			
RestoreImportData	Administrators			
UnlockWorkflowUnit	Administrators			
ViewSourceDataAudit	Everyone			
EncryptBusinessRules	Administrators			
ManageApplicationProperties	Administrators			1
ManageMetadata	Everyone			
Dashboard - Adn Cubes - CashFlov	Database	Security R	oles	۲

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 Formula

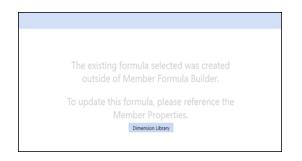
The **Preview Non- Member Formula Builder Formula** check box is enabled by default, allowing a user to see the formula and drill down tabs that indicate a member formula was created outside of Member Formula Builder.

**NOTE:** This interface is read-only. You can enter data on the page, but it is not save. Edit formulas in the Dimension Library.

	The existing formula selected was created outside of Member Formula Builder.						
	To update this formula, please reference the Member Properties. Dimension Library						
Formula DrilDown "Calculate the turns using safe divide Return api.Data.GetDataCell("Divide(A#60999:O#Top,A#16999:V#Trailing2MonthAvg:O#Top)")							

**See also:** The *Member Formulas* section in the *Foundation Guides* chapter of the *Design and Reference Guide*.

If the **Preview Non-Member Formula Builder Formulas** check box in the Administrator Solution Tools Global Settings is cleared, the formula and drill-down tabs do not display. Edit formulas in the Dimension Library.



# Uninstall

The Uninstall feature allows the Administrator Solution Tools User Interface or the entire solution to be uninstalled. Note that if part of an upgrade, any modifications performed on standard Administrator Solution Tools objects will be removed. There are two Uninstall options:

• Uninstall UI removes Administrator Solution Tools, 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 Administrator Solution Tools since some of the Dashboards or other objects may have been modified.

Choose this option to update without removing the data tables. Check the Release Notes to see if an overinstall is supported.

• **Uninstall Full** removes all the related data tables, all data, Administrator Solution Tools Dashboards, and Business Rules.

Choose this option to remove Administrator Solution Tools or to perform an upgrade that is so significant in its changes to the data tables that this method is required.

CAUTION: Uninstall procedures are irreversible

# Administrator Solution Tools Dashboard

Access the Administrator Solution Tools dashboard by clicking **OnePlace > Dashboards > Administrator Solution Tools**. Starting Administrator Solution Tools opens the Home page. The icons that display are based on security roles specified in **Global Options**. Use this page to use the Administrator Solution tools that you have permission to access. To return to the Home page, select the **Show Home Page** icon in the top toolbar.

ADMINISTRATOR SOLUTION TOOLS			合命。
Business Rule Viewer	Home Page Manager	Log Cleaner	ر المعالمة Member Formula Builder

# View Business Rules and Member Formulas



The Business Rule Viewer lets you view any business rule or member formula created in OneStream. To launch the Business Rule Viewer, click the Business Rule Viewer icon on the Administrator Solution Tools Home page.

# **Business Rules**

A business rule is a VB.Net class that performs a function or set of functions in OneStream. Each business rule is an independent object encapsulating VB.Net code. Business rules are created using the Business Rule Editor in Application Tools. Any business rule created in OneStream can be viewed in the Business Rule Viewer.

#### See also:

- The *Business Rules* section in the *Foundation Guides* chapter of the *Design and Reference Guide* for information on business rule fundamentals, organization, framework, and other details.
- The Business Rules section in the Application Tools chapter of the Design and Reference Guide for details on using OneStream to design Business Rules.
- The OneStream API Overview Guide, OneStream API Details, and database documentation from MarketPlace for business rule engine details.

# **Member Formulas**

A member formula is assigned to a dimension members and runs in the Finance Engine during cube processing.

Member formulas are created directly on a member in the Dimension Library or with the Administration Solution Tools Member Formula Builder. Member formulas created in the Formula Editor in the Dimension Library must be edited in the Dimension Library.

#### See also:

- Build Simple Member Formulas in OneStream
- The *Member Formulas* section of the *Foundation Guides* chapter of the *Design and Reference Guide* for information on Member Formula fundamentals and using OneStream to design Member Formulas.

# Select a Business Rule or Member Formula to View

The Business Rule Viewer lets you view business rules or member formulas side-by-side. It's most useful for viewing two versions of the same business rule, member formula, or similar rules or formulas.

Use the drop-down lists in the Business Rule Viewer's Business Rules and Member Formulas pages to select the rules or formulas to view. The drop-downs lists are filters to help organize and quickly search. Selecting a value in a drop-down list filter determines the available values in the next drop-down list. For example, if you are searching for a member formula to view and select **Flow** as the dimension type, only the dimensions belonging to Flow display in the Dimensions drop-down lists.

The following shows the Business Rule Viewer drop-down list boxes for business rules and member formulas.



The left and right areas are connected, so when you select a value on the left, the Business Rule Viewer automatically populates the same field on the right with the same value.

**See also:** <u>Connected and Disconnected Viewing Panes</u> for more information on how the viewing area works.

When you select a value for **Modified Date (UTC)** on the left, the Business Rule Viewer displays the rule or formula you want to view in the left textbox. It also selects and displays the next most recent version (if one exists) in the right text box. If the next most recent version of the rule of formula shows as deleted, the next most recent version displays on the right. The Business Rule Viewer assumes that you want to view a selected rule's most recent version and the next most recent version in the side-by-side viewing areas.

**NOTE:** If a business rule or member formula does not have an earlier version, **No previous business rule to display** is dipslayed in the viewing area.

### **Connected and Disconnected Viewing Panes**

When you select a business rule or formula to view, the left side shows the selected version and the right side shows the next most recent version. The views are connected, so the left and right side scroll together.

If you change a drop-down list value on either side, the sides are no longer connected and work independently. When the left and right sides are disconnected, you can use the filters independently to view different business rules or member formulas.

**NOTE:** The sides scroll together even when viewing different business rules or formulas.

The following image shows different business rules displayed in the left and right views of the Business Rule Viewer.

ADMINISTRATOR SOLU	JTION TOOLS							, <b>1</b>		
BUSINESS RULE VIEWER - BUSI	INESS RULES									
Busine	ess Rule Type:	Business Rule:	Modified I	Date (UTC):		Business Rule Type:	Business Rule:	Modified Date (U	JTC):	C
Show XML Dashb	oardExtender •	AST_SolutionHelperB	RV • 12 May 20	21 18:33:07:693 ( 🔹		DashboardExtender	<ul> <li>AST_SolutionHelper</li> </ul>	• 29 Apr 2021 19:4	0:33:797 🔹	$\bigcirc$
Imports System Text					_					Reset
Public Class Bus	BusinessRule.DashboardE sinessRuleViewer		lelperBRV			Namespace OneStream.BusinessRule	e.DashboardExtender.AST_S	SolutionHelper		
Dim OneStream.BusinessRule ''' <sur< td=""><td>te instance of AST_Solutio ReadOnly DashboardExtender.AST_ mmary&gt;</td><td>_astHel _SolutionHelperComm</td><td></td><td>As</td><td>New</td><td>"' <summary> "' Provides functions for co "' </summary> "' <remarks></remarks> Public Class MainClass</td><td>de operations from dashbc</td><td>bard components</td><td></td><td></td></sur<>	te instance of AST_Solutio ReadOnly DashboardExtender.AST_ mmary>	_astHel _SolutionHelperComm		As	New	"' <summary> "' Provides functions for co "' </summary> "' <remarks></remarks> Public Class MainClass	de operations from dashbc	bard components		
''' ''' <pai< td=""><td>ction handles all on chang ummary&gt; ram name="si"&gt;Session ram name="args"&gt;Args p</td><td>Information </td><td></td><td>hanges.</td><td></td><td>' Create the class &amp; Dim OneStream.BusinessRule.Dashboardl</td><td>evel readonly instance field ReadOnly</td><td>_astHelperCommon</td><td>As</td><td>New</td></pai<>	ction handles all on chang ummary> ram name="si">Session ram name="args">Args p	Information		hanges.		' Create the class & Dim OneStream.BusinessRule.Dashboardl	evel readonly instance field ReadOnly	_astHelperCommon	As	New
''' <ret< td=""><td>turns&gt;XFSelectionChange Function Business</td><td>edTaskResult object<td>eturns&gt;</td><td>oninfo, ByVal arc</td><td>15 As</td><td>OneStream.BusinessRule.Dashboardi Dim OneStream.BusinessRule.Dashboardi</td><td>ReadOnly</td><td>_astHelperBrv</td><td>As</td><td>New</td></td></ret<>	turns>XFSelectionChange Function Business	edTaskResult object <td>eturns&gt;</td> <td>oninfo, ByVal arc</td> <td>15 As</td> <td>OneStream.BusinessRule.Dashboardi Dim OneStream.BusinessRule.Dashboardi</td> <td>ReadOnly</td> <td>_astHelperBrv</td> <td>As</td> <td>New</td>	eturns>	oninfo, ByVal arc	15 As	OneStream.BusinessRule.Dashboardi Dim OneStream.BusinessRule.Dashboardi	ReadOnly	_astHelperBrv	As	New
	) As XFSelectionChanged Try		Vui 31 /13 30331	onnino, byvar arg	p (3	Dim OneStream.BusinessRule.Dashboard	ReadOnly	_astHelperMfb	As	New
	Dim selection	nChangedTaskResult As dVars As New Dictionar	New XFSelectionChan v(Of String, String)	gedTaskResult()		Dim OneStream.BusinessRule.Dashboard	ReadOnly	_astHelperHom	As	New
			ValuePairs.XFGetValue( an = _astHelperCorr			Dim OneStream.BusinessRule.Dashboard	ReadOnly Extender.AST_SolutionHelp	_astHelperLcr erLCR.LogCleaner	As	New
"DuplicateFilters", "False" "IsEncryptedLeft", "False	Dim brvFilter Dim brvfilter If Not String. Sele	er being changed r As String = args.Name Value As String = args.I .lsNullOrWhiteSpace(br ect Case True Case brvFilter.XFE	2ValuePairs.XFGetValue( NameValuePairs.XFGetV vFilter) Then iqualsIgnoreCase("BRTy n.XFContainsIgnoreCa: _astHelperCommon.Se	/alue("Value", String.En pe") se("left") Then	npty)	"' This function is o "' "' <param '="" <param="" name="&lt;/td&gt;&lt;td&gt;t for the AST_SolutionHelp&lt;br&gt;called when calling function&lt;br&gt;" si"=""/> Session Information <br "globals"> "api">	er business rule. ns from the Server Task propert			
	, mon.AddOrUpdateDictio	narv(modifiedVars. *bl	If duplicateFilters Ther		ue)	(Parameters). ''' <returns>Return</returns>	ns the base Object as a das	hboard task result object. <td>urns&gt;</td> <td></td>	urns>	
	RuleTextLeft_ASTBRV", St		End If _astHelperCommon.Ad			code.	Iain(ByVal si As SessionInfo	), ByVal globals As BRGlobals, B		
"IsEncryptedRight", "False	e")	EISE	_astHelperCommon.Se If duplicateFilters Ther				Select Case args.FunctionT Case DashboardE	Dictionary(Of String, String) ype xtenderFunctionType.LoadDash solution code from the param		
_astHelperCom	mon.AddOrUpdateDictio	onary(modifiedVars, *bl_	End If			("Solution", "Nothing")	Dim so	lutionCode As String = ar	gs.NameValuePairs.	
(modifiedVars, "Business	RuleTextRight_ASTBRV", 5		_astHelperCommon.A	ddOrUpdateDictionary		("OnLoadMainDashboard")) Then	If		tionName.XFEquals	IgnoreCase
		End If			1	1		If aros.LoadDashboa	ra iaskinto.Reason	=

Click **Reset Filters** to reconnect the left and right views. This clears the drop-down filters on both sides, initiating the connection of the left and right views.

ADMINISTRATO	R SOLUTION TOOLS							彩 ?
BUSINESS RULE VIEW	VER - BUSINESS RULES							
	Business Rule Type:	Business Rule:	Modified Date (UTC):	Business Rule Type:	Business Rule:	Modified Date (UTC):		C
Show XML		•	•	•	-	•	-	
								Reset Filt

## **View a Business Rule**

- 1. In the Business Rule Type drop-down list to the left, select the type of the business rule to view.
- 2. In the left Business Rule drop-down, select the business rule to view. Only rules belonging to the specified rule type display..
- 3. In Modified Date (UTC), select the version of the business rule to view.

**NOTE:** Business rules that are encrypted include the text **(encrypted)** in the Modified Date (UTC) value. Encrypted business rules do not display in the Business Rule Viewer. When you select an encrypted business rule, the text **Selected business rule is encrypted** displays in the viewing area.

**See also:** Business Rule Encryption (Decryption) in the Application Tools section of the Design and Reference Guide for more information.

In the following example, the most recent version of the AST\_SolutionHelperBRV business Rrle displays on the left, with the next most recent version of the same rule on the right.

#### **View Business Rules and Member Formulas**

	R SOLUTION TOOLS						s e	E III	合命
SINESS RULE VIEW	VER - BUSINESS RULES								
	Business Rule Type:	Business Rule:	Modified Date (UTC):		Business Rule Type:	Business Rule:	Modified Date (UTC)		C
now XML	DashboardExtender	<ul> <li>AST_SolutionHelperBRV</li> </ul>	• 30 Apr 2021 15:15:32:770 ( •		DashboardExtender	AST_SolutionHelperBRV	<ul> <li>23 Apr 2021 14:20:29</li> </ul>	9:113 •	Reset
ow Fullscreen					Show Fullscreen				
nports System mports System. mports System. mports System. mports OneStre mports OneStre mports OneStre mports OneStre mports System. iamespace One Public O	Data Collections Collections Generic Globalization am Shared Common am Shared Common am Shared Common am Shared Common Feat Stream BusinessRule Dashbo Create instance of AST 5 Create instance of A	Only	mon As New ommon 'Sever filter changes. L As SessionInfo, ByVal args A SelectionChangedTaskResult() ng. String I:sXFGetValue("Folition", String Empty) .astHelperCommon.GetSessionStateValue(s irs.XFGetValue("Value", String Empty) uePains.XFGetValue("Value", String Empty) hen	5	Imports System Imports System.Data Imports System.Data Imports System.Data Imports OneStream Shared Commor Imports OneStream Shared Database Imports System Shared Database Imports System Reat Namespace OneStream Businessfull Public Class Businessfull OneStream.Businessfull OneStream.Businessfull OneStream.Businessfull " summarys OneStream.Businessfull " summarys " Function handle " system name " sparam name The System System Public Function DashboardExtenderArs) System Ty	2 DashboardExtender AST_Solution ever 14 AST_SolutionHelper.Main.Class ReadOnly sature and the second second second sature and second second second sature and second second second sature and second second second sature and second	s tHelperCommon mmonASTCommon usiness Rule Viewer filter char m> function call.  e(byVal si As Sessioni It As New XFSelectionChange onay(Of String, String) ameValuePairs,XFGetValue("Fi rgs.NameValuePairs,XFGetValue", Fi	dTaskResult() osition", String.Em on.GetSessionSta ilter", String.Empt ue("Value", String. ") ")	steValue(si, ty) .Empty)
lsEncryptedLeft	t", "False")	_	perCommon.SetSessionStateValue(si, cateFilters Then		artHelperCommon AddOr	UpdateDictionary(modifiedVars,	If duplicateFilters Then	STRR\/" bryfilter)	(aula)
		ii dupii	aternets men		_astreperconmon.Addor	opuaceorcionary(modified vars,	End If	STORY, DIVINERY	value)
_astHel	lperCommon.AddOrUpdate[	Dictionary(modifiedVars, "bl_Busines	sRuleTypeRight_ASTBRV", brvfilterValue)				_astHelperCommon.Add	OrUpdateDiction	ary
		End If			(modifiedVars, "BusinessRuleTextLeft				
	D	_astHel	perCommon.AddOrUpdateDictionary			Else			

The left and right sides are connected and scroll together, making it easy to view them.

### **View Business Rule XML**

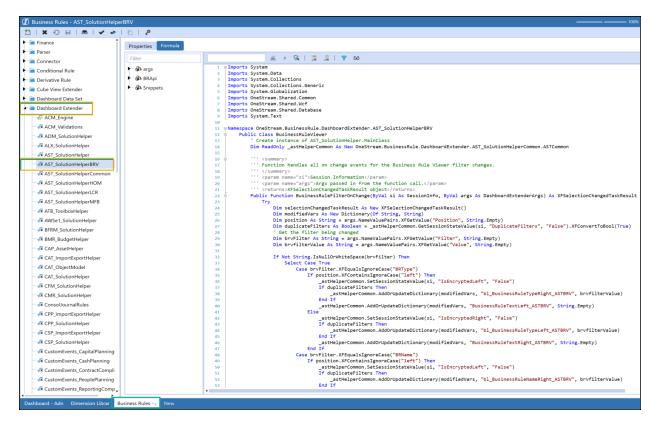
By default, business rules do not show the XML code at the beginning and end of the rule. You can display the XML code for selected rules by clicking **Show XML** in the desired view. The Business Rule Viewer keeps the displayed rules connected if you show the XML code.

#### **View Business Rules and Member Formulas**

ADMINISTRATOR SOLUTION TOOLS	① 竣 ① 田 国 暑 坂
BUSINESS RULE VIEWER - BUSINESS RULES	
Business Rule Type: Business Rule: Modified Date (UTC):	Business Rule Type: Business Rule: Modified Date (UTC):
Show XML  Finance DBP_ToggleOff I1 Feb 2018 16:14:52:770 (	Finance • DBP_ToggleOff • 10 Feb 2018 16:14:52440 •
	Reset
chusinessRule businessRule Type="Finance" name="DBP_ToggleOff"> chusinessRule businessRule Type="Finance" name="DBP_ToggleOff"> cmaintenanceGroup> Everyone  citGlobal / false  Everyone  citGlobal / false <td>ChusinessRule husinessRuleType="Finance" name="DBP_ToggleOff"&gt;       Reet        </td>	ChusinessRule husinessRuleType="Finance" name="DBP_ToggleOff">       Reet

### Access the Business Rule Source

When viewing business rules, you may want to make edits to the rule itself. To do this, click **Show Business Rule Page**  $\checkmark$ . The **Business Rule** page displays in a separate tab. Use CTRL + A to highlight the rule to copy and paste, then navigate to the business rule you want to edit.



See also: Business Rules in the Application Tools chapter of the Design and Reference Guide.

# View a Member Formula

Use the Member Formula viewer to view all member formulas.

To view a formula in the Member Formula Viewer, filter using the drop-down list to the left find formulas.

**IMPORTANT:** You can only access the Member Formula Viewer from the Business Rule Viewer.

- 1. To access the Member Formula Viewer click Show Member Formula Viewer Page 🗈 .
- 2. In Dimension Type, make selections from these options for the member formula you want to view:
  - **Dimension Type:** Select the dimension type for the member whose member formula you want to view.

Dimension Types are used to group dimensions and includes User-Defined dimensions. Only Dimension Types used display in the list.

- **Dimension:** Select the Dimension containing the member whose formula you want to view. Only dimensions belonging to the specified Dimension Type display in the list.
- Member: Select the member of the Member Formula you want to view.
- Scenario Type: Select the Scenario Type associated with the member formula you want to view. Select **Default Scenario** if the Member Formula applies to all scenario types. A scenario type can contain multiple scenarios.
- **Time:** This list contains the Time Profile for the selected Scenario Type. Select the Time for the Scenario Type containing the Member Formula you want to view.
- Modified Date (UTC): Select the version of the Member Formula you want to view.

ADMINISTRATOR S	SOLUTION TOOLS							@ ⊞	$\widehat{\Box}$	\$ \$
BUSINESS RULE VIEWER	- MEMBER FORMULAS									
	Dimension Type:	Dimension:	Member:		Dimension Type:	Dimension:	Member:			
	Account	HoustonAccounts	EndCash	•	Account	HoustonAccounts	<ul> <li>EndCash</li> </ul>	•		C
	Scenario Type:	Time:	Modified Date (UTC):		Scenario Type:	Time:	Modified Date (UTC):			Reset
	Default Scenario	Default Time	03 Oct 2018 16:45:36:807 (Curr	•	Default Scenario 🔹	Default Time	<ul> <li>11 Feb 2018 16:29:57:4</li> </ul>	157 <b>•</b>		neset.
Default Scenario         •         Default Time         •         03 Oct 2018 16:45:36:807 (Curr				+ 'api.Data. + 'api.Data. 'api.Data. 'api.Data. A#CashFl	screen calculate("A#EndCash:U3#WK1 = calculate("A#EndCash:U3#WK2 = calculate("A#Cash:U3#WK2 calculate("A#EndCash:U3#WK4 = calculate("A#EndCash:U3#WK4 calculate("A#EndCash = A#BegCa calculate("A#EndCash = A#BegCa	A#BegCash:U3#Wk2 + A#EndCi A#BegCash:U3#Wk3 + A#EndCi A#BegCash:U3#Wk4 + A#EndCi AmBegCash:U3#Wk4 + A#EndCi Aonth = A#BegCash:U3#	ash:U3#Wk2 + A#CashFl ash:U3#Wk3 + A#CashFl	ow:U3#Wk3")	₹Wk4	+

The left and right sides are still connected, so the left and right sides scroll together, making it easy to compare them.

### Access the Member Formula Source

When viewing member information, you can edit the member formula.

You can access the Dimension Library while working in the Member Formula Viewer. Copy the text using CTRL + A then click the **Show Dimension Library Page** button. The Dimension Library displays in a separate tab, and displays the most recently accessed member properties. In the Members tab of the Dimension Library, navigate to the member formula to edit.

Entity Dimensions Members	Dimension Properties Grid View			
Scenario Dimensions				
Account Dimensions		Member Properties Relationship Properties		
RootAccountDim     Berleine		Enable UD2 Aggregation	True	
ACM_MetadataImport		Enable UD3 Aggregation	True	
- CAPEX		Enable UD4 Aggregation	True	
	AAP Account Structure	Enable UD5 Aggregation	True	
CEDriverr		Enable UD6 Aggregation	True	
- CEModelAccounts	Balance Sheet	Enable UD7 Aggregation	True	
ComAccounts	Ratios	Enable UD8 Aggregation	True	
HoustonAccounts	Statistics	Vary By Cube Type		
A: NVAccounts	- 🔁 Sales Drivers	Flow Constraint	Root	
	- 🎦 Human Capital Drivers	IC Constraint	Тор	
<ul> <li>ExampleAccounts</li> </ul>	- 🖶 Misc Statistical	IC Member Filter		
FactorAccounts	- 🔁 Driver Based Planning	UD1 Constraint	Root	
NewDim	- 🔚 People Planning Drivers	UD2 Constraint	Root	
ProfitabilityAccounts	- 🖶 Capital Planning Drivers	UD3 Constraint	Root	
ProfitabilityDriversAccc	- 🌄 Travel Planning Drivers	UD4 Constraint	Root	
XFW PCM Accounts	- 🖥 Cash Planning Drivers	UD5 Constraint	Root	
XFW_FCM_Accounts	📲 Cash Planning Accounts	UD6 Constraint	Root	
Merged Hierarchy For C	🕨 💀 BegCash - Total Cash - Beg	UD7 Constraint	Root	
	CashFlow - Total Cash Flow	UD8 Constraint	Root	
Flow Dimensions	EndCash - Total Cash - End	Vary By Scenario Type		
	Flash	Workflow Channel	Standard	
JD2 Dimensions	Cash Flow	Vary By Scenario Type And Time		
JD3 Dimensions	Alloc Account Structure	General		
JD4 Dimensions	ElseGAAP	In Use	True	
UD5 Dimensions	RS Account Structure	Formula	If ((Not api.Entity.HasChildre	
JD6 Dimensions	stemAccounts	Formula For Calculation Drill Down	Dim formuala As String = "A#En	
JD7 Dimensions		Adjustment Type	Journals	
JD8 Dimensions		Text		
		Text 1		
		Text 2		
		Text 3		
		Text 4		
		Text 5		
		Text 6		
		Text 7		
		Text 8		

**See Also:** *Member Formulas* in the *Foundation Guides* chapter of the *Design and Reference Guide*.

# View a Single Business Rule or Member Formula

The text box sizes for the side-by-side view in the Business Rule viewer may cause lines in a business rule or formula to display on two or more lines, making it difficult to read. Click **Show Fullscreen** to resolve this issue.

ADMINISTRATOR SOLUTION TOO	DLS			
BUSINESS RULE VIEWER - BUSINESS RULES				
Show XML		Business Rule Type: DashboardExtender	Business Rule: <ul> <li>AST_SolutionHelperBRV</li> </ul>	Modified Date (UTC):  12 May 2021 18:33:07:693 (
Show Fullscreer				
Imports System Imports System.Data Imports System.Collections Imports System.Collections.Generic Imports System.Globalization Imports OneStream.Shared.Commor Imports OneStream.Shared.Wcf Imports OneStream.Shared.Database Imports System.Text				
Public Class BusinessRuleVi ' Create instance o	: DashboardExtender.AST_SolutionHelperBRV ewer f AST_SolutionHelper.MainClass tHelperCommon As New OneStream.Business	Rule.DashboardExtender.AST_So	olutionHelperCommon.ASTComm	non
"'	s all on change events for the Business Rule V	iewer filter changes.		

Toggling between Fullscreen view and the standard view does not disconnect the left and right side filter values. For example, if you reset the filter values and then switch back to the standard view, the left and right sides scroll together.

# Copy a Business Rule or Member Formula

You can copy any text in the left or right view. This is useful when you want to edit or replace a business rule or member formula. Select the text, and then CTRL+C to copy. To select the entire rule use CTRL+A.

UCINIECE DUILE MIE	WER - BUSINESS RULES							1	2	
SINESS KOLE VIE	Business Rule Type:	Business Rule:	Modified Date (UTC):		Business Rule Type:	Business	s Rule:	Modified Date (UTC):		C
Show XML	Finance	DBP_ToggleOff	▼ 11 Feb 2018 16:14:52:770 ( ▼		Finance	<ul> <li>DBP_Toc</li> </ul>		<ul> <li>11 Feb 2018 16:14:52:77</li> </ul>	70 ( 🔻	$\cup$
										Reset
how Fullscreen				Show Fu	ullscreen 🗌					
Imports System Imports System Imports System Imports System Imports OneSts Imports OneSts Imports OneSts Imports OneSts Imports OneSts Imports OneSts Imports OneSts Imports OneSts ByVal args As F Cut Copy DB	Lota Lota Common LO LO LO Collections Generic (Globalization L.Ling dem Shared Common eam Shared Common eam Shared Charlos eam	Al si As SessionInfo, ByVal glo Case api FunctionType Case is = FinanceFunctionTyp BRApi Dashboards F BRApi Dashboards F Return Conditionally lect	arameters SetLiteralParameterValue(si, False, arameters SetLiteralParameterValue(si, False, pputResultType Default	Imports Import	rgs As FinanceRulesArgs) As Try oggleSeedLogic", "False") oggleAllocLogic", "False")	se se le Finance.DBP_ Main(ByVal si At Object Select Case ap Case i End Select Return Nothing Ka Esception	s SessionInfo, By I.FunctionType Is = FinanceFunc BRApi.Dashb BRApi.Dashb Return Condi	Val globals As BRGlobals, ByVa tionType.Calculate oards.Parameters.SetLiteralParai oards.Parameters.SetLiteralParai tionalinputResultType.Default tionalinputResultType.Default	meterValue(si,	RulesApi, False, False,

# Viewing Business Rule and Member Formula Change Histories



Use the Business Rule Viewer - Historical Viewer to determine when business rule or formulas were updated. From the Business Rule Viewer, click **Show History Page** to display the viewer and access the change histories.

Clicking the **Show History Page** icon while viewing business rules displays the Business Rule history. Click **Show History Page** while viewing formulas to display their history. Historical data displays in a grid, allowing you to group records using the grid capabilities.

- 1. From View, select Business Rules or Member Formulas.
- 2. In the **Date Range** field, select the number of days from today to display historical records. For example, to display the last 30 days of changes, select 30 from the list.

TIP: The records listed in the grid change based on your selections.

ADMINISTRATOR SOLUTIO	N TOOLS		@ <b>1</b> û \$ ?
BUSINESS RULE VIEWER - HISTORIC	AL VIEWER		
View:	Date Range:		
Business Rules	▼ 30 Days ▼		View Rule
Drag a column header and drop	it here to group by that column		
Business Rule Type	▼ Business Rule Name	▼ IsGlobal ▼ User	T Modified Date (UTC)
DashboardStringFunction	AST_ParamHelper	False	12 May 2021 18:33:07:787
DashboardExtender	AST_SolutionHelperMFB	False	12 May 2021 18:33:07:770
DashboardExtender	AST_SolutionHelperCommon	False	12 May 2021 18:33:07:723
DashboardExtender	AST_SolutionHelperBRV	False	12 May 2021 18:33:07:693
DashboardExtender	AST_SolutionHelper	False	12 May 2021 18:33:07:660
DashboardDataSet	AST_HelperQueries	False	12 May 2021 18:33:07:630
DashboardStringFunction	TDM_ParamHelper	False	11 May 2021 12:12:10:393
DashboardExtender	TDM_SolutionHelper	False	11 May 2021 12:12:10:313
Extender	OSD ApplicationSnapshot	False	06 May 2021 11:50:17:577

3. To view a business rule or member formula, select it in the grid and click the **View** button. This lets you access details in the appropriate viewer.

# **Build Simple Member Formulas**



The Member Formula Builder lets you create basic member formulas. If you need a complex formula, create it in the Dimension Library.

**See also:** The *Member Formulas* section in the *Foundation Guides* chapter of the *Design and Reference Guide*.

To launch Member Formula Builder, click **Member Formula Builder** on the Administrator Solution Tools **Home** page.

Before building a member formula, ensure the member exists and the Formula Type, either stored or dynamic, is established in the member's properties settings. To select the formula type, click **Application> Dimensions**, select the member, select **Member Properties**, and then select the formula type in **Settings**.

=	Settings	
	Account Type	Asset
	Formula Type	FormulaPass3 🔹
	Allow Input	True
	Is Consolidated	True (regardless of Formula Type)
	Is IC Account	False
	Use Alternate Input Currency In Flow	False
	Plug Account	
	Input View For Adjustments	Use Scenario Setting (Default)
	No Data Zero View For Adjustments	Use Scenario Setting (Default)
	No Data Zero View For NonAdjustments	Use Scenario Setting (Default)

Use FormulaPass1 – FormulaPass16 for stored formulas. Use DynamicCalc and DynamicCalcTextInput for dynamic formulas.

# **Formula Build Process**

Perform these steps to build a member formula:

- Select the dimension, member, and account you want to create the member formula.
- Select Scenario Type and Time properties.
- Build the formula and add calculation filters.

### **Select the Member**

Select the dimension from the drop-down and then select the member.

**TIP:** To access a known member, use the search bar at the top of the Select Member pane to find the member or you can navigate through the hierarchy to find the appropriate member.

1	Select Member		
Dimen	sion		
Acco	unt 🔹		
Membe	26		
CFMc	odelAccounts 🔹		
Dep	precExp		
	CFModel		
	<ul> <li>NetOpProfit_cfm - Net Operating Profit after Tax (NOPA)</li> </ul>		
<ul> <li>EBIT_cfm - Earnings Before Interest and Taxes (EBIT)</li> </ul>			
DeprecExp_cfm - Depreciation Expense			

After you select a dimension, member, and account member for your formula, the other panes of the Member Formula Builder appear and you can continue the formula build process.

### **Select Properties**

In the Select Properties pane, the Formula Type and Account Type labels show the formula or account type assigned to a selected member. The Existing Formulas drop-down list shows **Scenario: (Default)|Time Period: (Default)** and displays other existing formulas on a selected member. If you select the default Scenario and Time formula, the Scenario Type and Time display as (Default Scenario Type) and (Default Time) respectively.

2	Select Properties		
-	Type FormulaPass4) Formulas (2. Items)	Account Type Expense	
Scenario: Forecast   Time Period: (Default)     Scenario: Model   Time Period: (Default)			

Select the scenario and time to apply to the formula.

If there is already a formula associated with the member, you can preview the formula before making any changes. Click **Preview** to display the existing formula.

2 Select Pr	operties		5	Add Calculation Filters
Formula Type Stored (Not Used)		Account Type Revenue	A#	▼ A#[GAAPAccountStruc
Existing Formulas (2 It Scenario: (Default)   Tin		•	F#	▼ F#[TotalBalance].Child
Scenario Type (Default Scenario Type)	Time (Default Time)	•	O#	O#Elimination.Childre
3 Build For	mula		1#	▼ I#Top.DescendantsInc
E# C# S# T#	💋 Formula Preview			Ô ¤×
E# C# S# T#	Member Formula Drilldown Fo	rmula		
Time Variables	'MFB Formula			
Expression A#Test1a Add > Add > Add > Comments	* of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.     * of Member Formula Builder to read/edit this formula.			
Formula				
A#Test1a= 78*45				Close
				<b>5</b> - 11
Preview			Ireate	Clear All

You cannot edit a formula if it was created outside of the Member Formula Builder. Users with the Administrator role can edit formulas created outside of the Member Formula Builder in the Dimension Library. Click **Dimension Library** to go to Member Properties, where you can edit the formula.

#### **Build Simple Member Formulas**

MEMBER FORMULA BUILDER	
1 Select Member	2 Select Properties
Dimension Account Member HoustonAccounts	Fermula Type Account Type Dynamic Dynamic Calc Extend Tormulas (1 Hem) Scenario: (Default)   Time Period: (Default)  Scenario: Type Time (Default Scenario Type)   (Default Time)
Filter None	
GAAP Account Structure  Income Statement Balance Sheet Ratios Liquidity Ratios CurRatio - Current Ratio QikRatio - Qick Ratio NtWkCapRatio - Net Working Capital Ratio	
DSO     Profitability Analysis Ratios     Activity Analysis Ratios     Capital Structure Analysis Ratios     Statistics     Flash     Cash Flow     Alloc Account Structure     IFRS Account Structure	The existing formula selected was created outside of Member Formula Builder. To update this formula, please reference the Member Properties. Dimension Library

### **Build the Formula**

Use the Build Formula section to create a simple member formula.

3 Build Formu	ıla			
E# C# S# T# V#	A# F# O# I#	U1# U2# U3# U4# U5# U6# U7# U8#		
Time Variables Criteria Include Drilldown RemoveZeros()				
Expression	Is Base Entity and Local •	Calculation Filters		
	Is Base Entity and Local •	Calculation Filters		

#### **Dimension Icons**

When you select a dimension icon, the **Select Member** dialog box appears so you can select the appropriate member from the hierarchy.

3 Build Formula				
E# C# S# T#	V# A# F# O# I# U1# U2# U3# U4# U5# U6# U7# U8#			
Time Variables	Criteria 🗌 Include Drilldown 🔳 RemoveZeros()			
Is Base Entity and Local     Calculation Filters				
Expression	Ø Select Member			
A#QikRatio	Cube Houston Clear			
< Add Add >	Dimension Type Account			
4 Member	Dimension HoustonAccounts			
Comments	Hierarchy Search			
	<ul> <li>Sone</li> <li>GAAP Account Structure</li> <li>Income Statement</li> </ul>			
Formula	Balance Sheet			
A#QikRatio= 42	Ratios  Ratios  Ratios  Ratio  Ratio R			
Preview Create				

#### **Time Variables**

These are sample Time Functions that can be used to create a formula and were included for ease of formula creation. Items selected from this dropdown are added to the Expression. For more information on Time Functions, see the *Design and Reference Guide*.

#### Criteria

Defines the dimension to which the formula is applicable. If a criteria is selected from the dropdown, it does not show in the Member Formula text box but can be seen in the **Preview** dialog box.

#### Expression

This text box shows the selected dimensions or time functions selected. For stored formulas, the expression automatically populates for the member selected in the Select Member pane 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.

3 Build Fo	ormula	
E# C# S# T	# V# A# F# O# I#	U1# U2# U3# U4# U5# U6# U7# U8#
Time Variables T#PovPrior1	Criteria  Is Base Entity and Local	Include Drilldown RemoveZeros() Calculation Filters
Expression T#PovPrior1:A#DeprecExp_cfm		Clear

#### Add

There are left and right **Add** buttons which determine whether to place the expression before or after the Member Formula. Click the appropriate **Add** button to add the content currently in the **Expression** text box to the specified place in the **Member Formula**.

#### **Calculation Filters**

Only appears for stored formulas. This option lets you build calculation filters based on dimensions. Selecting this check box displays the Add Calculation Filters pane that lets you add filters that are calculated only if certain criteria are met.

To add a calculation filter:

- 1. Under **Build Formula**, select the **Calculation Filters** check box to open the **Add Calculation Filters** pane.
- 2. In the Add Calculation Filters pane, click on the desired dimension button. The Select Member dialog box displays.
- 3. Use navigation in the **Hierarchy** and **Search** tabs to select a member to which the calculation filter applies.

**TIP:** You can use the **Select Member** dialog box to select multiple members to which the calculation filter applies.

- 4. Click **OK** to close the **Select Member** dialog box and return to the **Add Calculation Filters** pane. Selected members are added to the calculation filter.
- 5. Select the expansion from the drop-down next to the selected dimension.

∀ 8   /		
ADMINISTRATOR SOLUTION TOOLS		H 🗘 🗇
MEMBER FORMULA BUILDER		
1 Select Member	2 Select Properties 5 Add Calculation F	ilters
Dimension Account	Formula Type Account Type Stored (Formula State) Depende Account Type Account A	
CFModelAccounts •	Stematy Forecast   Time Period: (Default)	
Filter	Forecast	
- None	3 Build Formula	
CFModel     NetOpProfit_cfm - Net Operating Profit after Tax (NOPA)		#Mfg.Base
IncomeTax_cfm - Income tax expense     EBIT_cfm - Earnings Before Interest and Taxes (EBIT)	Time Variables Griteria Indude Drittoren RemoviZensi) U2#	
DeprecExp_cfm - Depreciation Expense     EBITDA.cfm - EBITDA	Expression U3#	
- AR.cfm - A/R - AP.cfm	<pre></pre>	
GrossFixedAssets - Gross Fixed Assets	4 Member Formula - DeprecExp_cfm	
FCF - Free CashFlow     DeprecExp_cfm - Depreciation Expense	Comments Uda   Calculate depreciation expense for Manufacturing facilities	
<ul> <li>NetOpProfit_cfm - Net Operating Profit after Tax (NC         <ul> <li>IncomeTax_cfm - Income tax expense</li> </ul> </li> </ul>	U7# •	
EBIT_cfm - Earnings Before Interest and Taxes (EB	Formula UD#	
DeprecExp_cfm - Depreclation Expense     EBITDA_cfm - EBITDA	S#POV:V#PeriodicA#DeprecExp_cfmf#None:O#None:S#POV:V#PeriodicA#GrossFixedAssetsF#EndBalanc e:O#Forms * S#POV:V#PeriodicA#DeprecWeight:F#None:O#Forms	
DeprecExp_cfm_r - Depreciation Expense		

In the previous example, the formula first runs on the UD1 base members under the **U1#Mfg.Base** dimension. The calculation filter is added by selecting the U1# icon, then selecting the member from the Select Member dialog. The appropriate expansion is added by selecting from the drop-down.

Criteria defined in the text boxes are automatically saved and are part of the formula creation. You can see the calculation filters as part of your formula by clicking **Preview**.

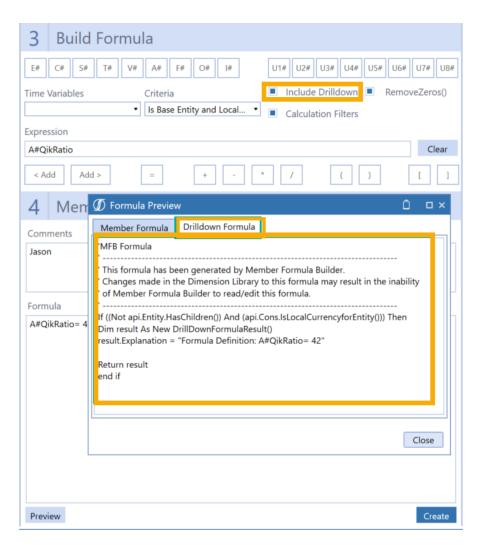
🖉 Formula Previe	w		Ô	ο×
Member Formula	Drilldown Formula			
'MFB Formula				
' This formula has b	een generated by Men	iber Formula Builder.		
	the Dimension Library la Builder to read/edit	o this formula may result in the inability his formula.		
·				
' MFB Comments				
·				
' Calculate deprecia	tion expense for Manu	facturing facilities		
·				
api.data.calculate("	#POV:V#Periodic:A#D	ons.IsLocalCurrencyforEntity())) Then :precExp_cfm:F#None:O#None= RemoveZeros EndBalance:O#Forms*S#POV:V#Periodic:A#DeprecWeight:F#None:O#Forms)","","","","","U1#Mfg.Base","","","","",	-,,-	"

#### Comments

Use this to include a description for the formula. When you preview the formula, you can also review the comments.

#### **Include Drilldown**

Selecting this check box allows drilldowns on the field for which the formula is being created. This also allows you to edit the drilldown formula, which displays in the Drilldown Formula tab of the Formula Preview.



#### RemoveZeros()

The RemoveZeros() function can be used to evaluate a source data buffer and remove all zeros in 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.

See also: The Design and Reference Guide for more information on the RemoveZeros() function.

### **Add Formula Complexity**

You can use the Formula Editor to add complexity to a formula originally created in Member Formula Builder outside of the solution (such as creating multi-line rules). We recommend that you remove the Member Formula Builder syntax from business rule. This prevents formula creators from viewing and updating complex rules in the Member Formula Builder.

precExp_cfm]	0
li =   ⊒ _2   ∀ 60   ✔	
<pre>/ PMF Formula //PMF Formula // PMF Formula // This formula has been generated by Member Formula Builder. // changes made in the Dimension Library to this formula may result in the Inability // of Member Formula Builder to read/edit this formula may result in the Inability // of Member Formula Builder to read/edit this formula may result in the Inability // of Member Formula Builder to read/edit this formula may result in the Inability // of Member Formula Builder to read/edit this formula may result in the Inability // of Calculated depreciation expense for Memufacturing facilities // f((wet api.fortity.waschildren()) and (adi.com.fsuccalcurrencyfortnity())) Then // memory facilities // memory facilities // memory for fortity ()) Then // memory facilities // memory</pre>	#Feriodic:A#GrossFixedAssets:F#EndBalance:O#Forms*S#POv:v#Periodic:A#DeprecWeight:F#None:O#Forms)","","",

**NOTE:** After building a formula, return to the Dimension Library and click **Compile** on the Formula Editor's toolbar to ensure that the VB.NET syntax is correct.

D Formula Editor -	[EndCash]	Ô ¤
Filter ← 🖗 api ← 🖗 args ← 🖗 BRApi ← 🖗 Snippets	Image: state with the sta	
		OK Cancel

# **Manage Home Pages for Users**



The **Home Page Manager** page allows Administrators to assign users or user groups to a default Home Page that displays when you log into OneStream. To launch **Home Page Manager**, select the icon on the **Administrator Solution Tools** home page.

The Home Page Manager lets you assign a default page to any user or user group. By default, only users in the Administrators User Group can access the Home Page Manager, and only Administrators can change this setting.

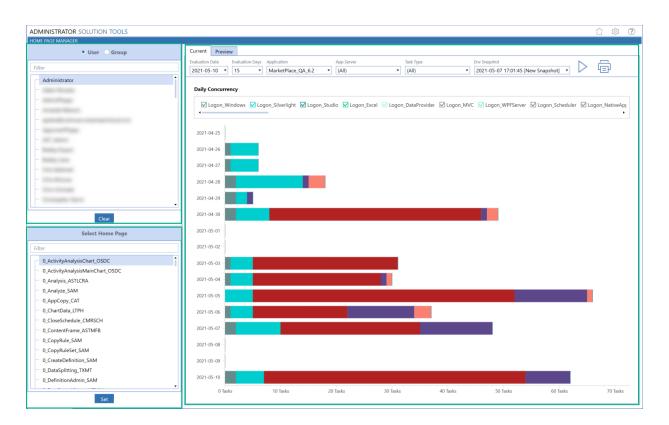
See also: The Access Home Page Manager setting in <u>Settings</u> for more information.

Users and User Groups are part of system security and are defined in OneStream.

**See also:** System Security Users and Groups in the System Administration chapter of the OneStream Design and Reference Guide for more information about creating users and user groups.

The Home Page Manager includes the following:

- A User/User Groups pane where you indicate if you are making an assignment for a single user or all users belonging to a specified user group.
- The **Select Home Page** pane, where you select the home page and assign it to the user or user group.
- The Home Page Viewer pane shows the currently assigned home page for a user (if any) in the **Current** tab, and a **Preview** tab that displays the currently selected home page. You can easily switch between these tabs to see current user home page assignments and preview other home pages to assign.



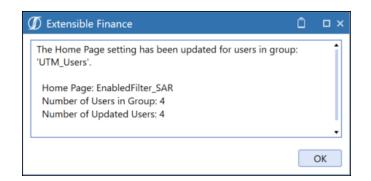
### Assign a Home Page

1. Use the radio buttons on the upper left pane to set whether the home page assignment is for a user or a user group.

If a user already has a home page assigned, the **Current** tab in the **Home Page Viewer** pane shows the page assigned to the user. For both Users and User Groups, if a home page has been previously assigned, use the **Clear** button to unassign the current home page. See <u>Change a Home Page Assignment</u>.

- 2. In the **Select Home Page** pane, select the home page you want to assign from the list. The selected home page displays in the **Home Page Viewer** pane's **Preview** tab.
- 3. Click **Set** to assign the home page to the selected user or user group. A message indicates that the Home Page setting was updated. For user groups, the message also includes the number of users in the group and information about any errors during processing. See

Respond to Processing Errors.



**TIP:** The **User/User Group Selection** and **Select Home Page** panes include a filter that you can use to search for users, user groups, and home pages.

### **Change a Home Page Assignment**

- 1. Select the user or user group whose home page assignment you want to change. The currently assigned home page displays in the **Current** tab of the **Home Page Viewer** pane.
- 2. Click Clear to clear the current home page assignment for the selected user.
- 3. Use the **Select Home Page** pane to navigate to the home page you want to assign, and then click **Set**.

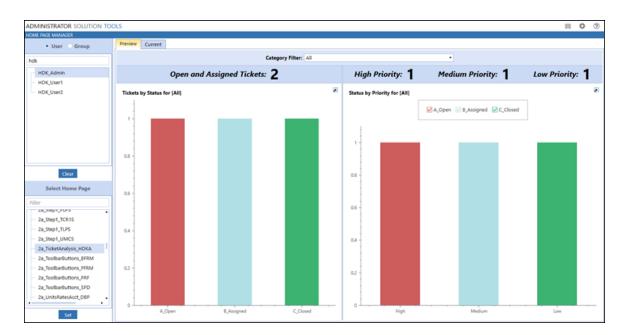
### **Assigning a Home Page: Example**

Below is an example of how to set up Homepage Manager for a group or individual users.

**NOTE:** Your application may have different groups and dashboards since this is based on our example application.

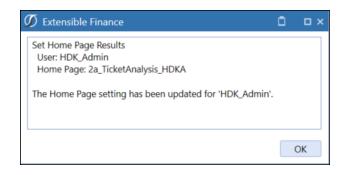
- 1. Click User.
- 2. Type HDK in the first Text Filter search box for the user group/user selection to find all users with HDK in the name. Click on the HDK\_Admin user to select it.
- 3. Enter HDK in the Home Page Text Filter search box to find the dashboards with HDK in the name. Select 2a\_TicketAnalysis\_HDKA.

4. The selected dashboard displays in the **Preview** pane and shows a sample of the selected dashboard.



5. Click **Set** to save the selections for the user HDK\_Admin.

For this example, the Set Home Page results displays as shown in the following image.



6. Log in as HDK\_Admin to confirm that the user can access the selected dashboard.

### **Respond to Processing Errors**

The **Set Home Page Results** message provides error information when an Administrator tries to assign a dashboard to users who do not have access to the dashboard. Home Page Manager processes the changes that are valid and notes those that could not be processed in **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 browser version.

# **Clean Unneeded Log Entries**



To launch Log Cleaner, click **Log Cleaner** on the Administrator Solution Tools home page.

Use the Log Cleaner to delete user log entries, error log entries or task activity log entries. The Access Log Cleaner setting in the Global Options determines which users can access this feature.

**See also:** The security roles section in <u>Settings</u> for more information on the Access Log Cleaner setting.

Perform these steps to delete logs:

- Select the type of logs you want to clear.
- Select the application and user for which you want to delete log records.
- Select the number of days from today you want log records to be retained.
- Select Execute to clear selected logs.

### **Select Log Types to Clear**

The first step to clear log files is to select the types of logs to be cleared. Use the fields in the Types to Clear section of Log Cleaner to do this. Select values from the following:

NOTE: All fields in this section are set to No by default.

#### **User Logon Activity**

Set to **Yes** to clear records of all users when they log on and off OneStream applications. These records show who is logged on and when they log off for all applications.

#### **Error Logs**

Set to **Yes** to clear any logs from error processes, including errors written from business rules.

#### **Task Activity Logs**

Set to Yes to clear logs for all running and completed tasks.

LOG	CLEANER	
1	Types to Clear	
	User Logon Activity	
	No	•
	Error Logs	
	Yes	•
	Task Activity Logs	
	No	•

When you change any of the default settings in the **Types to Clear** section, the **Execute Clear Logs Data Management Sequence** section of the Log Cleaner appears. Click **Execute** to clear logs based on the selected criteria.

### **Select Application and/or User**

The second step in the log clearing process is to select specific users and applications whose log entries you want cleared.

Log Cleaner allows administrators to select custom filtering to clear the Error Log based on specific text.

Use the fields to clear logs based on application, user, and text in the log.

#### Application

Clear logs for a specific application or all applications.

#### User

Clear logs for an individual user or all users in the environment.

#### **Error Description Contains (optional)**

Enter a text string from a log error to clear logs that use the string. The string must match exactly.

2	Application and/or User
	Application
	(All)
	User
	AST_Admin 👻
	Error Description Contains
	ClearLogs810_AST

### **Select Days to Retain**

The third step in the log cleaning process is to determine how many days of error logs should be retained after the current log clearing executes.

#### **Days to Retain**

Use this field to set the number of days error logs are retained after the current log clearing executes.

Select a value between 30 and 810 days. For example, if set to 90, all qualified error records older than 90 days are cleared.

3	Days to Retain	
	Days to Retain	
	90 🗸	
	50	

### **Execute Clear Logs Data Management**

To clear logs, select log clearing criteria and the number of days to retain log records, and then click **Execute**.

The Log Cleaner displays cleaning tasks as they execute. If needed, click **Cancel Task** to stop the log clean process. Click **Close** when cleaning completes.

D Task Progress	Ô	□ ×
Task 26 of 27: ClearLogs060_AST		
99% Complete		
Execute Business Rule 'AST_ClearLogsForThreshold'.		
Cancel Task		
	C	lose

## Log Analysis Page

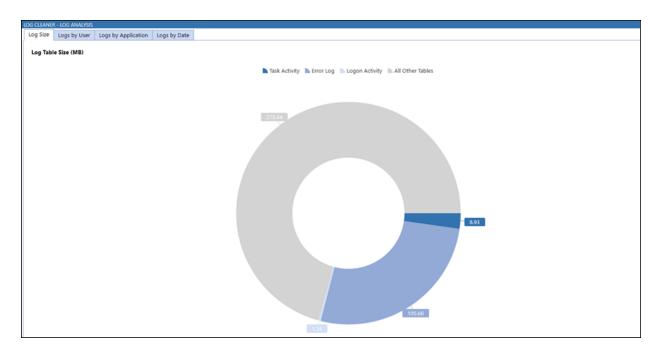
The Log Analysis page provides a graphical user interface to review OneStream logs. The page includes the following tabs that provide details on OneStream logs

#### Log Size

This tab shows the size of each log table by type (in megabytes) in a pie chart. Log types that display are:

- Task Activity
- Error Log
- Logon Activity
- Logs from all other tables

Use the information to help determine which logs you want to clear. In the following graphic, the All Other Tables log table contains the bulk of retained log entries, representing a potential place to focus a log clearing process.



#### Logs by User

This tab contains a bar chart showing the users with the most retained log activity. Bars on the chart are color-coded, so you can see details on the exact number of task activity, error log, and logon records for each user. Use this chart to quickly see which users you may want to focus on for your log clearing process.

#### Logs by Application

This tab contains a bar chart showing log entries by log type for each application. Bars on the chart are color-coded, so you can see details on the exact number of task activity, error log, and logon records for each application. Use this chart to see the applications you may want to focus on for your log clearing process.

#### Logs by Date

This tab contains a bar chart showing the number of log entries by log type based on the amount of time the records have been retained. Bars on the chart are color-coded, so you can see details on the exact number of task activity, error log, and logon records for each.

Use the dropdown to select a monthly, quarterly, semi-annual, or whole year retention period. Use this chart to see retention periods with the most log entries of each type.

# Help and Miscellaneous Information

## **Display Settings**

OneStream and MarketPlace solutions frequently display multiple data elements for proper data entry and analysis. We recommend you set your screen resolution to 1920 x 1080 to best render forms and reports. Also, adjust the Windows System Display Text setting to 100% and do not apply 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.

Identifier	Description
AST	Solution ID
PV6.2.0	Minimum Platform version required to run solution
SV101	Solution version
PackageContents	File name

Example Package Name: AST\_PV6.2.0\_SV101\_PackageContents.zip

### **Solution Database Migration Advice**

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

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

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

**IMPORTANT:** This process may 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.