# S onestream

# Snippet Editor Setup Guide

PV6.2.0 SV100

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# **Overview**

The Snippet Editor solution lets you create and edit sample OneStream snippets. Snippets provide pre-tested code samples, making it easier to write high quality scripts in OneStream in a shorter amount of time.

Hundreds of sample snippets are included and ready to be imported into any OneStream server instance. There are several categories of snippet samples, including:

- Formulas
- Calculations
- Lists
- Data flows
- Rules
- Helpers
- Mappings

# **Setup & 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: OneStream Solution Modification Considerations

# Dependencies

Component	Description
OneStream 6.2.0 or later	Minimum OneStream Platform version required to install this version of Snippet Editor.

Experience is required to write VB.NET code snippets in OneStream and in the Snippet Editor. Refer to Microsoft VB.NET reference documentation for more information on writing snippets.

# Select the Snippet Editor Development

# Location

Before installation, decide whether to build the solution 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 the solution 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 it is not advised.

**NOTE:** OneStream strongly recommends that you implement the solution 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 the solution.

# Create the OneStream Development Application

- 1. Ensure all OneStream artifacts relating to Snippet Editor 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 Snippet Editor 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 OneStream Solutions (such as Specialty Planning) are already in the application, these adjustments may already exist.

See also: Solution Database Migration Advice

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

Be sure that the security group settings include the users who work on and set up the solution before proceeding.

**NOTE:** Group settings are applicable to all OneStream Solutions; it is important to 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 to 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	
~	General	
	Access Group for Ancillary Tables	DB_ANC_Access_Group < Read Access
	Allow Database Creation via UI	True
	Can Create Ancillary Tables	True
	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	True
	Use Table Partitioning when Creating Databases	True

4. Restart Internet Information Server.

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	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 Snippet Editor**

1. In the OneStream Solution Exchange, go to **OneStream Solution > Snippet Editor**.



- 2. On the Snippet Editor Solution page, select the appropriate OneStreamplatform version from the **Minimum Platform Version** drop-down list.
- 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 Snippet Editor**

The first time you run Snippet Editor, you are guided through the table setup process.

In OneStream, click Community Solution> Dashboards > Snippet Editor > Snippet
 Editor.

OnePlace	Application	System	*				
→ Workflo	w		•				
Eube Views							
🕍 Dashbo	ards		•				
🖌 💑 Snipp	et Editor						
Sr	nippet Editor						

#### **Create Tables and Launch Solution**

#### 1. Click Step 1: Create Tables.

This step may be necessary when upgrading even if tables already exist. Snippet Editor does not drop existing tables but modifies table structures and will add new ones if necessary.

BRSnippet

2. When setup is complete, click Step 2: Launch Solution to open Snippet Editor.

#### **Package Contents**

The Dashboard Maintenance Unit provides the user interface for Snippet Editor and includes the required Dashboard Groups, Components, Data Adapters, Parameters, and files.

Business Rules: The following Business Rules are included:

#### SNE\_HelperQueries

Dashboard dataset Business Rule that can look up lists of snippets and snippet categories.

#### SNE\_SolutionHelper

Dashboard extender Business Rule that allows for the addition, maintenance and navigation of snippets on the main dashboard.

#### SNE\_ParamHelper

Dashboard XFBR string Business Rule provides conditional parameter processing functions that allow a parameter value to be interpreted and substituted with a different string.

# Settings



The **Settings** page contains the **Global Options** tab in which key properties that guide administration are set as well as **Categories** and **Uninstall** options.

# **Global Options**

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

NOTE: All global option settings are retained during solution upgrades

SNIPPET EDITOR SETTINGS			() (‡ (‡ (?
Global Options	Default Author:	[Enter Default Author]	
Categories Uninstall		Save	

#### **Default Author**

The Default Author is automatically assigned to a new snippet. This freeform text field displays in the Author field of Snippet Editor grids.

You can change an individual snippet author's name on the Editor page.

# Categories

Organize your snippets by creating categories and sub-categories. Categories and subcategories align your snippets into logical groups for the current module type and let you customize their display in Snippet Editor.

SNIPPET EDITOR					· · · · · · · · · · · · · · · · · · ·
ETTINGS Global Options	Module Type:				
Categories	Finance •				
Jninstall	<b>+ –</b> ० स।	Finance Categories		+ - O H	Common Accounts SubCategories 🛛 🖉
	Category T		i	SubCategory T	
	Business Rules				
	Calculate			DynamicCalc	
	Common Accounts			Efficiency Measures	
	Common Financial Logic			Fundamental Indicator	
	Confirmation Rules			Liabilities and Equity	
	Custom Consolidation			Liquidity Ratios	
	FinJas				
	Member Lists				
	Metadata Helpers				
	Presentation Helpers				
		12 Rows Pag	e 1 of 1		5 Rows Page 1 of 1

The **Module Type** drop down contains a list of predefined snippet modules. Each module type is only available in specific areas of OneStream. Module types include:

- General
- Finance
- Stage
- CubeView
- Dashboard
- Extender
- Event Handler

The following grid shows each module's availability in the Business Rules and other areas of OneStream.

	Business Rule Availability									Other			
				Conditional	Derivative	Cube View					Member		
Module	Finance	Parser	Connector	Rule	Rule	Extender	DB Data Set	DB Extender	XFBRString	Extensibility	Script	Cube Views	<b>Conf Rules</b>
Finance	Y										Y		Y
General	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Stage		Y	Y	Y	Y								
CubeView						Y						Y	
Dashboard							Y	Y	Y				
Extender										Y			
EventHandler										Y			

#### **Categories and SubCategories Button Bar**

Use buttons in the Categories and SubCategories panes to add, delete, and save category and sub-category entries. All created categories and sub-categories appear in the Category and SubCategory drop-downs on the **Editor** page, which lets you filter the list of snippets on that page.



#### See also: Editor

Insert Row - Add a new category or sub-category.

**Delete Row(s)** - Select a category or sub-category in the Category or SubCategory pane, then click Delete in that pane to delete the item.

Cancel - removes changes made to categories and sub-categories since the last save.

Save - Saves updated task groups.

#### **Create Categories and SubCategories**

The **Categories** page includes a **Categories** pane and a **SubCategories** pane, where you can build out the category and sub-category relationships for the current module type:

- 1. In the **Module Type** drop-down, select the module type for which you want to create categories and sub-categories.
- 2. Click the **Add** button in the **Categories** pane to create a new row, then click the Category column in the new row to edit its contents.
- 3. Enter the name of the category you want to add and click **Save**.
- 4. Click **Add** in the **SubCategories** pane to create a new sub-category row, then click the SubCategory column in the new row to edit its contents.
- 5. Enter the name of the sub-category you want to add and click **Save**.
- 6. Repeat steps 2 through 5 to add additional categories and sub-categories.

# Uninstall

The Uninstall feature allows the Snippet Editor User Interface or the entire solution to be uninstalled.

Note that if part of an upgrade, any modifications performed on standard Snippet Editor objects will be removed. There are two Uninstall options:

- Uninstall UI removes Snippet Editor, including related dashboards and Rules but leaves the database and related tables in place. For some releases, this step should be performed before accepting any new version of Snippet Editor since some of the Dashboards or other objects may have been modified.
  - **Choose this option** if you want to accept a Snippet Editor update without removing the data tables.
  - The Snippet Editor Release Notes will indicate if an overinstall is supported.
- 2. **Uninstall Full** removes all the related data tables, all data, Snippet Editor Dashboards, and Business Rules.
  - **Choose this option** to completely remove Snippet Editor or to perform an upgrade that is so significant in its changes to the data tables that this method is required.

# Editor

Once you create categories and sub-categories, use the Editor page to create and edit snippets. You also use this page to download a Microsoft Excel template and create snippet information to import back into the Snippet Editor.

SNIPPET EDITOR				7 日 章 7
DITOR Module Type: Finance	Category: SubCategory:  Common Accounts  Efficiency Measures	▼ C Refresh		imoor Downla
+ - O R I			Snippets	9
Name <b>T</b>	Description	Author <b>T</b>	Search Terms	Content
Asset Turnover	Efficiency Measure: The Asset Turnover ratio is an indicator of the e	oneStream	Account, Asset Turnover	'Calculate Asset Turnover 'Formula: Sales / Inventory Return api Data GetDataCell("Divide(A#[YourSaleAccount], A#[YourInventoryAccount])")
Average Collection Period	Efficiency Measure: The approximate amount of time it takes for a 365/ Receivables Turnover	l OneStream	Account, Average Collectio	Calculate Average Collection Period "Formula: Accounts Receivable/ (Annual Credit Sales/ 365) or 365/ Receivables Turnover Return api Data GetData Gell("Divide(365, A#[YourReceivablesTurnoverAccount])")
Effective Tax Rate Percentage	Efficiency Measure: The net rate a taxpayer pays if all forms oftaxes	OneStream	Account, Effective Tax Rate	Calculate Effective Tax Rate (ETR) Percentage Formula: Income Tax Percent / Pretax Income Return api Data GetDataCell("Divide(A#[YourIncomeTaxPercentAccount], A#[YourPretaxIncomeAccount])")
Gross Margin	Efficiency Measure: The gross margin represents the percent of tot	OneStream	Account, Gross Margin	Calculate Gross Margin Formula: Gross Margin Pct = Gross Profit / Net Sales Return api Data GetDataCell("Divide/A#(YourGrossProfitAccount], A#(YourNetSalesAccount])")
Inventory Period	Efficiency Measure: Inventory period is a measure of the average n 365/ Inventory Turnover	OneStream	Account, Inventory Period	Calculate Inventory Period 'Formula: Average Inventory/ (Annual COG5/365) or 365/ Inventory Turnover
nventory Turnover	Efficiency Measure: The Inventory turnover is a measure of the num	r OneStream	Account, Inventory Turnov	Return api Data GetDataGell("Divide(365, A#[YourInventoryTurnoverAccount())") Calculate Inventory Turnover Formula: Cost of Goods Sold / Average Inventory Return api Data GetDataCell("Divide(A#[YourCOGSAccount], A#[YourInventoryAccount].V#YearAvgToDate)")
Net Profit Percent	Efficiency Measure: It reveals the remaining profit after all costs of	) OneStream	Account, Net Profit Percen	'Calculate Net Profit Percent
Operating Margin	Efficiency Measure: Operating margin is a measurement of what pr	OneStream	Account, Operating Margir	'Calculate Operating Margin 'Formula: Net Income / Net Sales Return api Data GetDataCell("Divide/A#[YourNetIncomeAccount], A#[YourNetSalesAccount])")
Profit Margin	Efficiency Measure: The percentage of revenue remaining after all o	OneStream	Account, Net Profit Margin	'Calculate Net Profit Margin
Receivables Turnover	Efficiency Measure: The receivables turnover ratio is an activity ratio	OneStream	Account, Receivables Turno	Taiculate Receivables Turnover Formula: Net Credit Sales/ Average Accounts Receivable Return api Data GetDataCell("Divide(A#)YourNetCreditSalesAccount], A#)YourAccountReceivableAccount].V#YearAvg
	!		!	

Select the grouping (Module|Category|SubCategory) using the drop down lists. Once selected, click **Refresh** to display the snippets for the selected grouping. You can also add additional snippets directly in the snippet grid, or edit existing snippets.

#### **Snippet Editor Filters**

Snippet Editor filters display on the **Snippet Editor** page. Use the drop-down lists to apply filters to see only specific snippets.

Module Type:		Category:		SubCategory:		C	R1	
Finance	•	Common Accounts	•	Liabilities and Equity	٠	Refresh	Import	Download

#### Module Type

These are the pre-defined module types in the system that categories and sub-categories are based. Select one of the module types from the list to display snippets created for that type. Module types are defined when Business Rules are created in OneStream.

#### See also: Categories

#### Category

These are the categories for the selected module using the Categories page of the Snippet Editor settings. Use the list to select the category for which you want to view and create snippets.

#### See also: Categories

#### SubCategory

These are the sub-categories you created for the selected module and category using the Categories page of the Snippet Editor settings. Use the list to select the sub-category within the selected category for which you want to view and edit snippets.

#### See also: Categories

#### **Snippet Editor Buttons**

#### Refresh

Refreshes the grid that displays snippet data. Click Refresh after selecting display criteria in the Module Type, Category, and SubCategory dropdowns to display snippet content matching the selection criteria.

#### Import

Allows you to navigate to and select a Microsoft Excel file containing snippet data you want to import into OneStream Snippet Editor.

#### See also: Import Snippet Data

#### Download

Allows you to download a Microsoft Excel template you can use to create or load snippet data from an external source.

See also: Download Template

## **Import Snippet Data**

OneStream provides a Microsoft Excel template you can use to create snippet data or load it from an external source, then import data back into OneStream. In the template on the **Snippet Template** tab, enter updates to or add new snippet data in the ranges between the blue lines. Insert additional rows within this range to allow for more snippet data.

The Module Type field in the template lets you select a predefined module type . When loading snippet data, each snippet's module type must match the module types in the list, otherwise an error occurs during import.

To manually enter snippet data in the template, start by selecting a valid module type from the dropdown. Then you can enter data in the rest of the fields to complete a snippet data record.

ΑΑ	В	С	D	E	F	G
1 <b>ONE</b> STREAM						44074.63945
2 Snippet Import Template						
3 4 Author:	OneStreamTest					
6 Module Type	Category	SubCategory	Name	Description	SearchTerms	Content
General	Business Rules	Data Helpers	Execute Qu	Execute Query against Application Databas	Data, Query, Application, Database	"Define SQL Query Dim sql As New Text.StringBuilder sql.Aspendlune["Where Firom CustomTableName ") '< Define custom SQl query sql.Aspendlune["Where Field1 = x"] '< Define custom SQl query Sal.Aspendlune["Order By FieldN" '< Define custom SQl query
General	Business Rules	Data Helpers	Execute Qu		Data, Query, External, Database	"Define SQL Query Dim connectionString As String = "Revenue Mgmt System" '<- Enter name of predefined connection string (in App Server Config) Dim sql As New Text.StringBuilder Dim sql As New Text.StringBuilder O (Sol.Appendlume ") '<- Enter your SQL query
General	Business Rules	Data Helpers	Execute Que	Execute Query against Framework Databas	Data, Query,	Jackapenduler Select * From Examination and * / * - Define Guld adder / * Dim sql As New Text.StringBuilder Jim sql As New Text.StringBuilder sql.Appendiler*Select * From FrameworkTable * / * Define custom SQl query sql.Appendilne("Where Field1 = x * / * Define custom SQl query sql.Appendilne("Order By FieldX") * Define custom SQl query
General	Business Rules	Data Helpers	Open Appli	Open a connection to the Application data	Connect, Connection, Data, Open, Application	Open connection to Application database       Using dbConnApp As DBConninfo =       BRApi.Database.CreateApplicationDbConninfo(si)       End Using
Snippet Template	$(\div)$				: 4	Þ

After entering data in the template, save it and close the file before importing.

## **Download Template**

OneStream provides a Microsoft Excel template you can use to define your snippets. Once defined, you can import the snippet data into OneStream, where you can view and further edit them in the Snippet Editor. Use the **Snippet Template** tab in the template to enter updates to or add new snippet entries in the ranges between the blue lines. Insert additional rows within this range to allow for more snippet data.

After entering data in the template, save it and close the file before importing.

## **Pivot**



The Pivot page displays all snippets in a grid and has drag and drop capabilities which allow users to pivot on any field in the grid.

Use the Pivot page to see only the specific existing snippets you want to focus on. Drag a column to the blue row at the top of the grid to pivot on that field.

P	Pivot						
Dr	Drag a column header and drop it here to group by that column						
	Module Type	•	Category <b>T</b>	SubCategory	T	Name <b>Y</b>	Description
•	CubeView		Presentation Helpe	Reporting		Cube View Extender - Header and Footer	Prevent the Center Subtitle from wrapping b
	CubeView		Presentation Helpe	Reporting		Cube View Extender - Change Header Co	Control the header font, color, or background
	CubeView		Presentation Helpe	Reporting		Cube View Extender - Footer style	Control the Footer style

# **Help & Miscellaneous Information**



This page contains additional solution documentation for the Snippet Editor.

# **Display Settings**

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

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

# **Package Contents & Naming Conventions**

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

ldentifier	Description
SNE	Solution ID
PV6.2.0	Minimum Platform version required to run solution

Example Package Name: SNE\_PV6.2.0\_SV100\_PackageContents.zip

Identifier	Description			
SV100	Solution version			
PackageContents	File name			

## **Solution Database Migration Advice**

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

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

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

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

#### **Extract and Reload Table Data**

All updates made in Snippet Editor are stored in the BRSnippet table in the framework. The data for the BRSnippet table can be extracted to an XML file, then loaded back into OneStream after migrating the database.

- 1. In OneStream, click **System > Tools > Load/Extract**.
- 2. Click the **Extract** tab, then select **Snippets** from the File Type drop-down. Snippet items to extract appear in the Items to Extract tree view. All snippets are selected for extraction by default.
- 3. Click **Extract**, then use the Windows Save As dialog box to navigate to and select the location to store the extract XML file.
- 4. Click OK.

Once the framework database is migrated, you can load the XML file back into OneStream.

- 1. In OneStream, click System > Tools > Load/Extract.
- 2. Click the Load tab, then click the ellipsis button in the File Name field.
- 3. Use the Windows **Open** dialog box to navigate to and select the location where you stored the extracted XML file.
- 4. Click Open, then click Load to load the snippet data back into OneStream.

A progress bar indicates when the load completes.

# OneStream SolutionModification Considerations

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

- Major changes to business rules or custom tables within a OneStream Solution will not be supported through normal channels as the resulting solution is significantly different from the core solution.
- If changes are made to any dashboard object or business rule, consider renaming it or copying it to a new object first. This is important because if there is an upgrade to the OneStream Solution in the future and the customer applies the upgrade, this will overlay and wipe out the changes. This also applies when updating any of the standard reports and dashboards.
- If modifications are made to a OneStream Solution, upgrading to later versions will be more complex depending on the degree of customization. Simple changes such as changing a logo or colors on a dashboard do not impact upgrades significantly. Making changes to the custom database tables and business rules, which should be avoided, will make an upgrade even more complicated.