onestream

Upgrade Guide

9.2.0 Release

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Scheduling the Upgrade

This section provides details related to scheduling Platform upgrades for OneStream.

Upgrading from Platform Versions Earlier than 8.0.0

When upgrading from a Platform Version earlier than 8.0.0 to Platform Version 8.0.0 or later, OneStream encourages customers to prepare for their upgrade by referencing content in the OneStream Community. See Platform v8+ Upgrade Resource.

OneStream cloud customers may initiate Platform Version 8.0.0 or later upgrade interest by submitting a Software Upgrade request through the Service Catalog. A Cloud Migration ticket will be opened and available to track upgrade activities.

OneStream self-hosted customers may download Platform Version 8.0.0 or later from Solution Exchange.

Upgrading from Platform Version 8.0.0 or Later

Upgrades from Platform Version 8.0.0 or later follow traditional OneStream best practices. Cloud customers can initiate and schedule upgrades through the Software Upgrade request on the Service Catalog.

OneStream self-hosted customers may download the latest platform version directly from Solution Exchange and proceed with their upgrade.

Requirements

Information Technology professionals responsible for installing, maintaining, and supporting OneStream must satisfy the following requirements to best support an upgrade. They must also review the requirements and special notes in the *Installation and Configuration Guide* and *Release Notes*.

> **IMPORTANT:** Platform Version 8.2.0 and later was developed using Microsoft .NET 8. As a result, all Business Rules must be tailored for .NET 8. For more information, see Platform Version 8.0.0 or Later Readiness.

- OneStream Platform Version 8.2.0 or later requires Microsoft .NET 8.
    - App Server and Web Servers
        - Install the latest version of ASP.NET Core Runtime (Hosting Bundle) (v8.0.x).
        - Install the latest version of .NET Desktop Runtime (x64) (v8.0.x).
    - Client
        - Install the latest version of .NET Desktop Runtime (x64) (v8.0.x).

    > **IMPORTANT:** Do not install the .NET SDK package. You may run into errors while upgrading if this is installed.

- OneStream Servers requires IIS 7 or later.
- In each application, complete the Compile all Business Rules and Formulas to verify that business rules use the proper syntax.

- If your applications are referencing any 3rd party DLLs that are not provided by OneStream, verify these DLLs are .NET 8 compatible. Contact OneStream Support (https://www.onestream.com/support/) to discuss available upgrade options.
- When upgrading OneStream, update the database schema to the most recent version.

  > **IMPORTANT:** All database upgrade steps must be taken sequentially. Users cannot skip steps or stop updates once started.

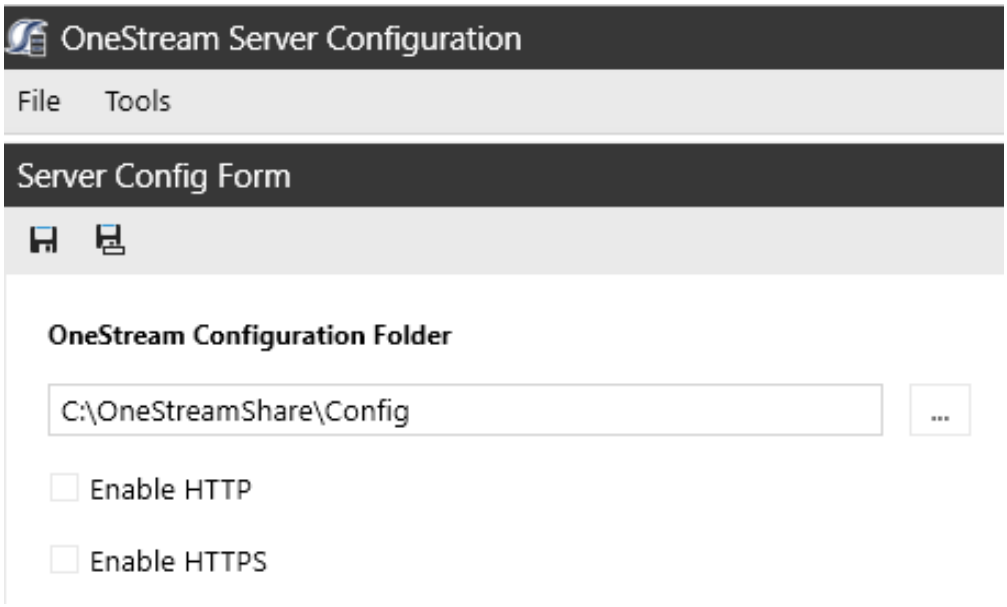
- Back up the Configuration files in your OneStream Share directory.
- For additional minimum system requirements, see "Hardware and Software Requirements" in the *Installation and Configuration Guide*.
- When implementing Smart Integration Connector with the OneStream application, see "Requirements" in the *Smart Integration Connector Guide*.

> **IMPORTANT:** Self-hosted customers must have a successful database connection before the Database Upgrade. See Enable the Trust Server Certificate.

Before Upgrading

Perform these tasks before upgrading:

1. Perform a full backup of all OneStream databases.
2. Download Client Software and Self-Hosted Server (for on-premises installations) from Solution Exchange for the appropriate setup files:
    a. Log in to Solution Exchange, and select **Platform** to get the latest version of OneStream.
    b. Download Client Software and Self-Hosted Server (for on-premises installations) for the appropriate setup files for the server installation.
3. Confirm the location of the OneStream configuration files:
    a. On a OneStream server, select **Start** > **Programs** > **OneStream Software** > **OneStream Server Configuration Utility**.
    b. Right-click the utility and select **Run as Administrator**.
    c. Select **File** > **Open ASP.NET Configuration File** and open the **appsettings.json** file from the following locations.
        - **Web servers**: `C:\Program Files\OneStream Software\OneStream WebRoot\OneStreamWeb`
        - **Application servers**: `C:\Program Files\OneStream Software\OneStreamAppRoot\OneStreamApp`
    d. The file opens and displays the path to the **XFAppServerConfig.xml** and **XFWebServerConfig.xml** configuration files.



e. Take note of the path to the configuration files. You will specify this location during the upgrade.

> **NOTE:** This path is commonly set to C:\OneStreamShare\Config

4. Make a copy of the configuration files contained in this folder, and save them to a backup folder of your choice.
5. Close the file without saving and exit the utility.
6. Obtain the OneStream service account in Internet Information Services Manager. Note the Windows account and password because you will enter them in IIS after the upgrade.

> **NOTE:** The service account must be an Admin ID or in the IIS_IUSRS Group, Performance Log User, and Performance Monitor Users group. The ID is required for queuing and CPU monitoring.

a. On each OneStream server, select **Start** > **Control Panel** > **Administrative Tools** > **Internet Information Services (IIS) Manager**.

b. Expand the server and select **Application Pools**. This displays application pools to the right. The OneStreamAppAppPool and OneStreamWebAppPool service accounts display in the Identity column.

7. Confirm the IIS OneStream App Server Site and OneStream Web Server Site Binding Information. If they are not kept as default and the type was http or https, the port number (and certificate if used for https) can be restored. This information will not be available if OneStream is uninstalled.
8. Confirm that the OneStream Database Configuration Utility is installed on each OneStream application server. Click **Start** > **Programs** > **OneStream Software**.
9. Confirm that OneStream is installed on each OneStream application server. Click **Start** > **Programs** > **OneStream Software**.
10. Install the following:
    - **App Server and Web Servers**
        - Install the latest version of ASP.NET Core Runtime (Hosting Bundle) (v8.0.x).
        - Install the latest version of .NET Desktop Runtime (x64) (v8.0.x).
    - **Client**
        - Install the latest version of .NET Desktop Runtime (x64) (v8.0.x).
11. On-premises customers must enable the Trust Server Certificate for the OneStream Database Server using the OneStream Server Configuration Utility:

a. Select **File** > **Open Application Server Configuration File**.

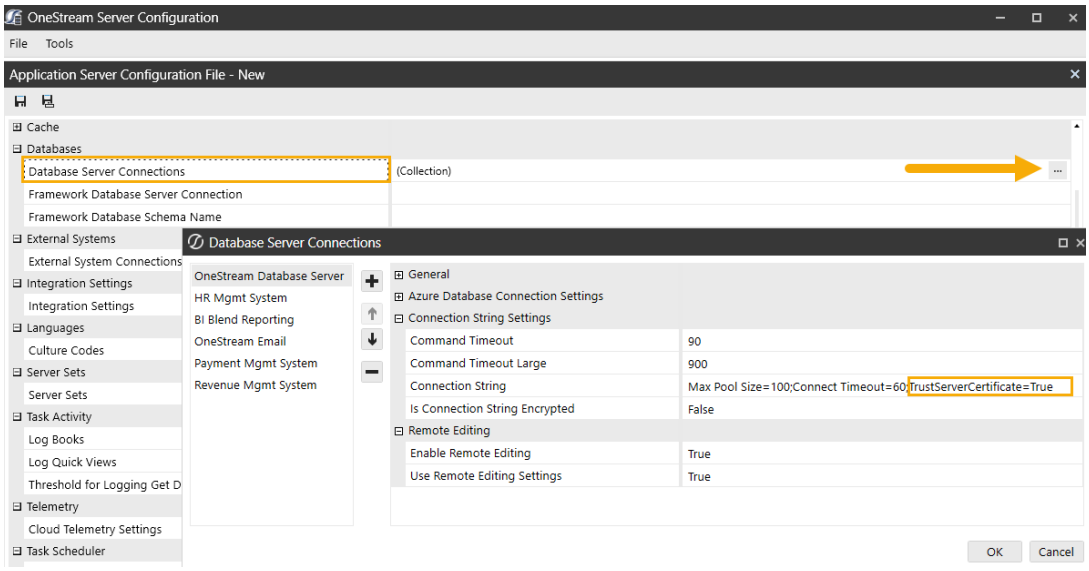
b. Navigate to C:\OneStreamShare\Config or the location of configuration files from step 3e.

c. Open the App Server Config file.

d. Locate **Database Server Connections**.

e. Click ... to open the Database Server Connections.

f. At the end of the **Connection String**, add TrustServerCertificate=True.



g. Click the **OK** button.

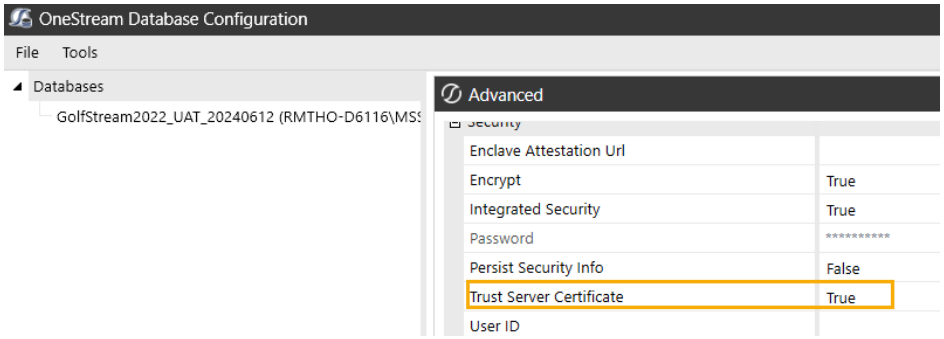
All Application Databases

From the OneStream Database Configuration Utility:

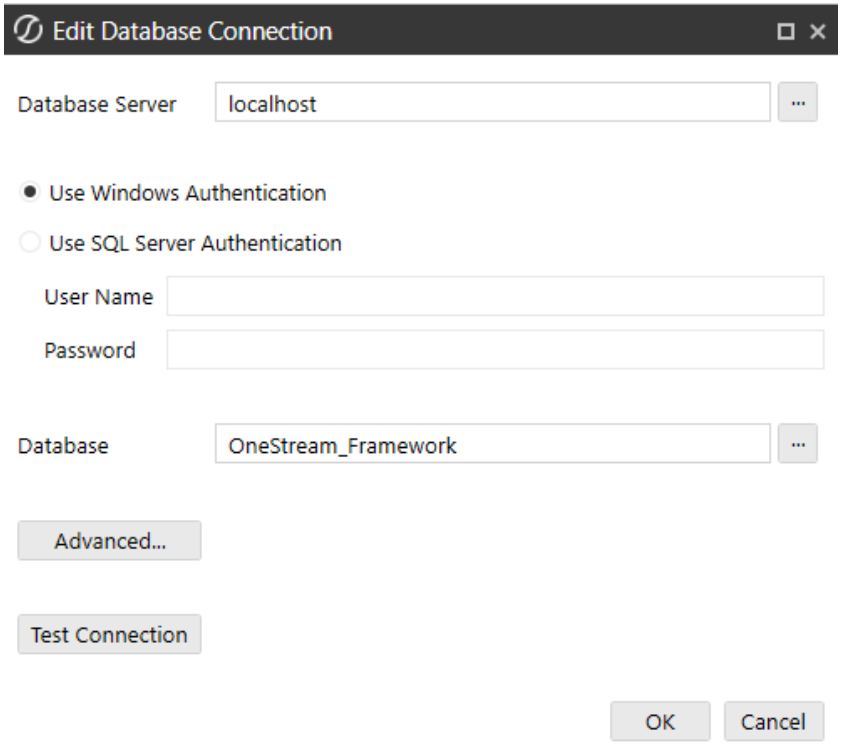
a. Right-click on a database, click **Edit the Database Connection**.

b. Select **Advanced**.

c. Set **Trust Server Certificate** to **True**, then click the **OK** button.



d. Select **Test Connection** to ensure a successful connection.



> **NOTE:** Alternatively, set the TrustServerCertificate to True directly in the XML.
>
> 
>

Repeat these steps for all Application Databases.

Upgrade System Components

Perform the tasks in the following sections to upgrade the complete OneStream system.

Uninstall OneStream Software

Uninstall the OneStream Server and, if installed, Client API.

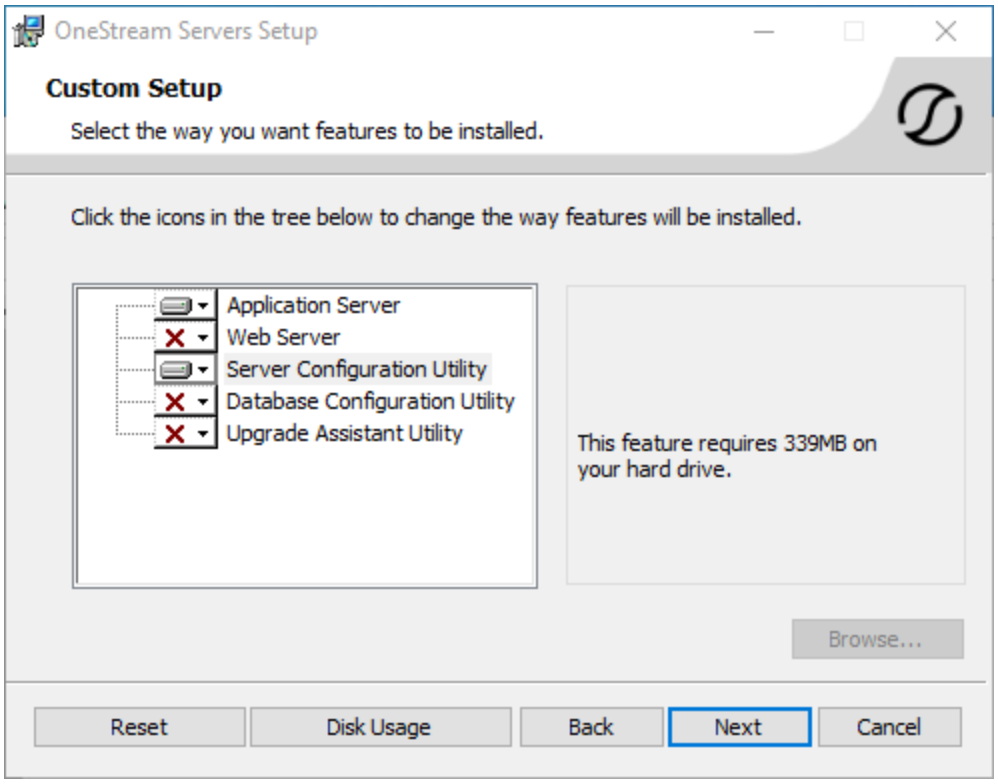
1. Select **Control Panel** > **Programs and Features** > **Uninstall a Program**.
2. Locate the OneStream Servers component.
3. Right-click **OneStream Servers** and select **Uninstall**.
4. If installed, locate the OneStream Client API component.
5. Right-click **OneStream Client API** and select **Uninstall**.

Reinstall OneStream Servers

Install the OneStream Servers on the Application Server and Web Server.

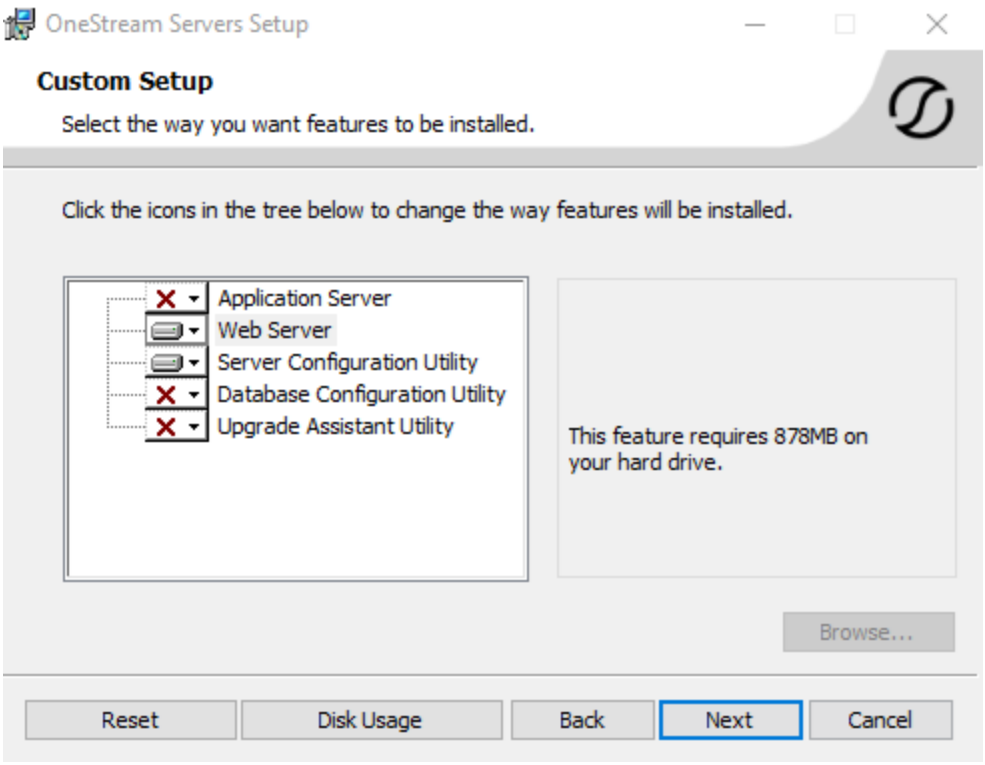
1. Browse to the OneStream Servers package, right-click **OneStreamServers-#.msi** and select **Install** to run the server installation.
2. On the landing page, click the **Next** button and accept the License Agreement.
3. Specify the directory where the software was previously installed and click the **Next** button.
4. Select **Custom**.
5. On **Select Features**, select the features to install.

- **Application Server**: Select **Application Server** and **Server Configuration Utility**.



> **NOTE:** Choose the Database Configuration Utility and Upgrade Assistant Utility if the application server is the server where the Database Configuration Utility was previously installed.

- **Web Server**: Select **Web Server** and **Server Configuration Utility**.



6. Click the **Next** button.
7. Click **Install** then **Finish**.

Reinstall OneStream for Desktop

1. Browse to the OneStream package, right-click **OneStreamDesktop-#.msi** and select **Install**.
2. Click the **Next** button and accept the License Agreement.
3. Select **Custom**.
4. Select the directory where the software was previously installed and click the **Next** button.

5. On **Select Features**, select all options and click the **Next** button.
6. Click **Install** then **Finish**.

Upgrade the Framework and Application Databases

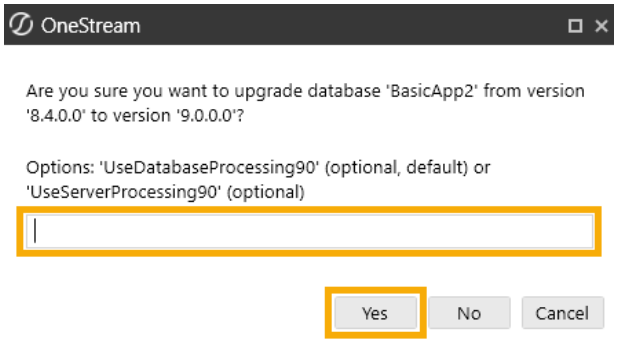
> **IMPORTANT:** When updating OneStream, update the database schema to the most recent version. All database upgrade steps must be completed sequentially. Users cannot skip steps or stop updates once started.

Changes are made to stage tables for this release, so the database update may take time.

1. Before performing these steps, have a database administrator back up all OneStream databases.
2. On the OneStream application server with the OneStream Database Configuration Utility installed, select **Start** > **Programs** > **OneStream Software** > **OneStream Database Configuration Utility**.
3. Right-click the utility and select **Run as Administrator**.
4. Right-click **OneStream Framework Database** and select **Upgrade Database Version**. If disabled, an upgrade is not required.

   > **NOTE:** If you get an error, check the log for details: C:\Program Files\OneStream Software\XFDatabaseConfig\Log

5. A dialog box displays giving you the option to process the schema upgrade on the database or the server. Leave the text field blank and click **Yes** to begin the database upgrade using the default setting, which is database.



6. Repeat the upgrade for each Application database and the Framework database until the option is disabled. This indicates the database is up-to-date.

Run the Upgrade Assistant Utility

This is an additional step that must be performed when upgrading from a Platform Version earlier than 8.0.0 to a Platform Version 8.0.0 or later. Specifically, this version of the Upgrade Assistant Utility will convert any legacy reports that were stored in CodeDOM format to now be stored as XML.

1. On the OneStream application server with the OneStream Upgrade Assistant Utility installed, select **Start** > **Programs** > **OneStream Software** > **OneStream Upgrade Assistant Utility**.
2. From the command line enter:
   xfupgradeassistant -c C:\OneStreamShare\Config\XFAppServerConfig.xml -t ReportLayoutBytes -v -update

   > **NOTE:** C:\OneStreamShare\Config is the default path to the configuration file. You must update this path if it has been modified for your environment.

3. Enter exit to close the utility.
4. Restart IIS.

Update the ASP.NET Configuration File

The ASP.NET Configuration file (appsettings.json) must be updated on every server/folder as outlined in the following section:

- Application server
  - C:\Program Files\OneStream Software\OneStreamAppRoot\OneStreamApp\appsettings.json
  - C:\Program Files\OneStream Software\OneStreamAppRoot\OneStreamMgmt\appsettings.json
- Web servers:
  - C:\Program Files\OneStream Software\OneStreamWebRoot\OneStreamWeb\appsettings.json
  - C:\Program Files\OneStream Software\OneStreamWebUIRoot\OneStreamWebUI\appsettings.json

1. On each OneStream server, launch the OneStream Server Configuration Utility by clicking **Start** > **Programs** > **OneStream Software** > **Server Configuration Utility**.
2. Right-click the utility and select **Run as Administrator**.
3. Select **File** > **Open ASP.NET Configuration File** and browse to the appropriate location from the folders above.
4. Select the **appsettings.json** file.
5. When the file opens, copy the directory path of the configuration files.

   > **NOTE:** This path is commonly set to C:\OneStreamShare\Config

6. **Enable HTTP** and **Enable HTTPS** are enabled by default.

When SSL is not enabled, select **Enable HTTP** and deselect **Enable HTTPS**.

> **NOTE:** Only one protocol can be selected: Enable HTTP or Enable HTTPS.

> **NOTE:** For the WebUI server file for the Modern Browser Experience, you are not asked to select a checkbox to enable HTTP or HTTPS.

7. Save and close the file.
8. Repeat these steps on each web and app server in the environment.

Update the Configuration Files

Update the Application and Web Server Configuration files.

Update the Application Server Configuration File

1. Open the OneStream Server Configuration Utility, and select **Run as Administrator**.
2. Select **File** > **Open Application Server Configuration File** and select the Application Server Configuration file from C:\OneStreamShare\Config.
3. In **Database Server Connections**, select the ellipsis and update the command time-outs for the OneStream Database Server connection:
    - **Short** = 90 (required)
    - **Large** = 900
4. Select the **Save** icon and close the file.

Update the Web Server Configuration File

1. Open the OneStream Server Configuration Utility, and select **Run as Administrator**.
2. Select **File** > **Open Web Server Configuration File** and select the Web Server Configuration file from C:\OneStreamShare\Config.
3. To ensure the file version is updated, select the **Save** icon and close the file.

Update and Configure IIS

1. On each OneStream server, open the OneStream Server Configuration Utility by clicking **Start** > **Programs** > **OneStream Software** > **OneStream Server Configuration Utility**.
2. Right-click the utility and select **Run as Administrator**.
3. Choose **Tools** > **Configure IIS**.
4. In **Configure IIS**, specify the following:
    - For Web Site Name, enter the name of the OneStream IIS Website to update.
    - The OneStream App Server and Web Server sites
5. Select **Update IIS Default Settings**.
6. Select options to update IIS for the appropriate websites:
    - **Use Web Server Settings**: Specify the Web Server site.
    - **Use App Server Settings**: Specify the App Server site.
    - **User Account Type**: Specify **Custom Account**, then enter the user name and password of the OneStream Service account.
7. Click **Update IIS Settings** then **OK**.
8. Repeat these steps to set the appropriate IIS settings for the application pools in IIS.

9. Log on to each OneStream Web Server in the environment.
10. Browse to C:\Program Files\OneStream Software\OneStreamWebRoot\OneStreamWeb
11. Locate the OneStreamWeb.runtimeconfig.json file and open this file in a text editor.
12. Update the configProperties section with the following line:

    ```
    "System.Threading.ThreadPool.MinThreads": 128
    ```

    ```
    "configProperties": {
          "System.GC.Server": true,
          "System.Reflection.Metadata.MetadataUpdater.IsSupported": false,
          "System.Runtime.Serialization.EnableUnsafeBinaryFormatterSerialization": false,
          "System.Threading.ThreadPool.MinThreads": 128
        }
    ```

> **NOTE:** Add a comma before the previous line as shown in the previous example.

13. Save the file to apply the change.
14. Click **Reset IIS**.

Test the Windows Client Login Using ClickOnce

1. Using the Microsoft Edge Web Browser, navigate to the OneStream Windows App URL:
   - **On-premises**: http://<webserver>:50001/OneStreamWeb
   - **Cloud**: https://<customer>.onestreamcloud.com/OneStreamWeb
2. Click **Open** to launch the ClickOnce Windows app.
3. Confirm that you can log in.
4. From **Application**, select **System Administration**, then click **Connect**.

5. Select **System** > **Tools** > **Environment** to identify the application servers and their status.
6. Verify that each server is active.

Test the Modern Browser Experience Login

1. Navigate to the OneStream Modern Browser Experience URL:
    - **On-premises for Modern Browser Experience**: http://<webserver>:50001
    - **Cloud for Modern Browser Experience**: https://<customer>.onestreamcloud.com
2. Confirm that you can log in.

Verify the Application

1. Compile all business rules:
    - Right-click the grid and export any errors for analysis using an Excel file format.
    - Apply updates as needed.
2. Download and import the Standard Application and Standard System Reports from the Solution Exchange.

Platform Version 8.0.0 or Later Readiness

Upgrading your OneStream Platform to Version 8.2.0 or later requires .NET 8.

Business Rules

> **NOTE:** Users upgrading from Platform Version 8.0.0 or later are not expected to require Business Rule maintenance.

Users upgrading from a Platform Version earlier than 8.0.0 will require Business Rule maintenance as Platform Version 8.0.0 includes updates and enhancements to the Business Rules compiler to improve syntax detection. Administrators must resolve these errors to compile business rules fully. Warning messages identify line items that will function, but you should update them to support the latest compiler's requirements. Resolving these warnings varies. You may be able to use a provided replacement function or change a function's properties.

System.Data.SqlClient to Microsoft.Data.SqlClient Migration

IMPORTANT:
To maintain consistency with Microsoft's recommendations, in Platform Version 8.1.0, the data access driver for SQL Server will be changed from System.Data.SqlClient to Microsoft.Data.SqlClient. This migration will be automatic and will take place during the database upgrade process. All references to System.Data.SqlClient will automatically be changed to Microsoft.Data.SqlClient in Business Rules, Member Formulas, and the like.

NOTE:
These updates will take place automatically during the database upgrade to Platform Version 8.1.0, and when using the Load function of Application Load/Extract, instances of System.Data.SqlClient will automatically convert to Microsoft.Data.SqlClient.

IMPORTANT:
If an application was migrated after the Platform Version 8.1.0 upgrade from Application Copy (Cloud Administration Tools (CAT)) or a database BACPAC file, then the migration from System.Data.SqlClient to Microsoft.Data.SqlClient will need to be applied directly to that application. On-premises customers can run the Upgrade SqlClient Namespace References from the OneStream Database Configuration utility to replace System.Data.SqlClient references. SaaS customers can request to have this run by contacting OneStream Support (https://www.onestream.com/support/).

See Platform v8+ Upgrade Resource.

Example

Business Rule Updates: Update Using and Import statements to reference Microsoft.Data.SqlClient using the following code:

C# Before 8.1.0

```
using System.Data.SqlClient;
...
SqlConnection conn1 = new System.Data.SqlClient.SqlConnection();
System.Data.SqlClient.SqlConnection conn2 = (System.Data.SqlClient.SqlConnection)conn1;
```

C# for 8.1.0

```
using Microsoft.Data.SqlClient;
...
SqlConnection conn1 = new Microsoft.Data.SqlClient.SqlConnection();
SqlConnection conn2 = (Microsoft.Data.SqlClient.SqlConnection)conn1;
```

Visual Basic Before 8.1.0

```
Imports System.Data.SqlClient
...
Dim conn1 As New System.Data.SqlClient.SqlConnection()
Dim conn2 As System.Data.SqlClient.SqlConnection = CType(conn1,
System.Data.SqlClient.SqlConnection)
```

Visual Basic for 8.1.0

```
Imports Microsoft.Data.SqlClient
...
Dim conn1 As New Microsoft.Data.SqlClient.SqlConnection()
Dim conn2 As SqlConnection = CType(conn1, Microsoft.Data.SqlClient.SqlConnection)
```

Custom DLLs

If your implementation or business rules reference custom DLLs that are not provided by OneStream, these DLLs must be .NET 8 compatible. Contact OneStream Support (https://www.onestream.com/support/) to discuss available upgrade options.

ERPConnect (SAP)

ERPConnect45.dll enabling connection to SAP systems is no longer available in Platform Versions 8.0.0 and later. A newer version ERPConnectStandard20.dll is available through the download "DLL Packages" from the Platform page of the Solution Exchange.

On-premises Customers:

1. Download ERPConnectStandard20.dll file to your integrations folder.
2. Install the required Microsoft Visual C++ Redistributable latest supported downloads.
3. Download and copy SAP NetWeaver RFC Library DLL (sapnwrfc.dll) to the integrations folder.
   See Theobald Software ERPConnect Requirements.
4. Modify your business rules to use the ERPConnectStandard20.dll.

Cloud/SaaS Customers: ERPConnect is available through Smart Integration Connector. See the *Smart Integration Connector Guide* or contact OneStream Support (https://www.onestream.com/support/) to discuss more upgrade options.

Smart Integration Connector

Smart Integration Connector is required for OneStream Cloud integration with local customer data sources when using OneStream Platform Version 8.0.0 or later. VPN is no longer supported with Platform Version 8.0.0 or later and reached end of service for versions earlier than Platform Version 8.0.0 on August 31, 2024.

See the *Smart Integration Connector Guide*.

Authentication

Cloud Customers: OneStream IdentityServer is required for OneStream Platform Version 8.0.0 or later. See the *Identity and Access Management Guide*.

Self-hosted Customers: No changes necessary. Legacy authentication support is the standard for self-hosted customers.

VBA Changes

ProcessSSOAuthenticationAndCreateToken is no longer supported as an authentication option from VBA scripts. See "Visual Basic for Applications (VBA) Procedures" in the *Design and Reference Guide*.

Client API Changes

Client API is no longer provided with Platform Version 8.0.0 or later. OneStream recommends Task Scheduler or REST API to replace existing Client API use cases.

Tiles Page

The ClickOnce journey is enhanced to launch the application with a single click of the Open button while eliminating the tiles page. See "Deployment using ClickOnce" in the *Installation and Configuration Guide*.

Help Documentation

Help documentation has moved from within the application to https://documentation.onestream.com/docs/. Clicking the in-app help icon routes you to this site.

Business Rule Groups

In Platform Version 8.0.0 the default for new Business Rule Access or Maintenance Groups is the Administrators group. This default can be changed by the Server Configuration Utility.

OneStream Solution Compatibility

Visit OneStream Solution Information on OneStream Community to ensure your OneStream Solutions are ready for your OneStream Platform upgrade.

Help and Miscellaneous

This page contains help and other miscellaneous information related to upgrades.

Upgrade Troubleshooting

Review this section for troubleshooting and installation checks.

Incorrect Installation Order

Follow the steps in order as outlined in the Before Upgrading section. Use the following checks to help determine installation issue resolutions.

To check that you have the latest .NET versions installed, run the following command in the PowerShell:

```
dotnet --info
```

> **NOTE:** The hosting bundle should be Microsoft.AspNetCore.App 8.0.x and the desktop runtime should be Microsoft.WindowsDesktop.App 8.0.x

To check that IIS is properly installed, run the following command in the PowerShell:

```
get-webglobalmodule
```

> **NOTE:** The output must contain AspNetCoreModuleV2.

Resolution: Uninstall the hosting bundle and ensure that IIS is properly installed.

Execution Policy when running PowerShell Script

Resolution: Run the following commands in the PowerShell.

- PS C:\WINDOWS\system32> Set-ExecutionPolicy Unrestricted
- PS C:\WINDOWS\system32> Set-ExecutionPolicy