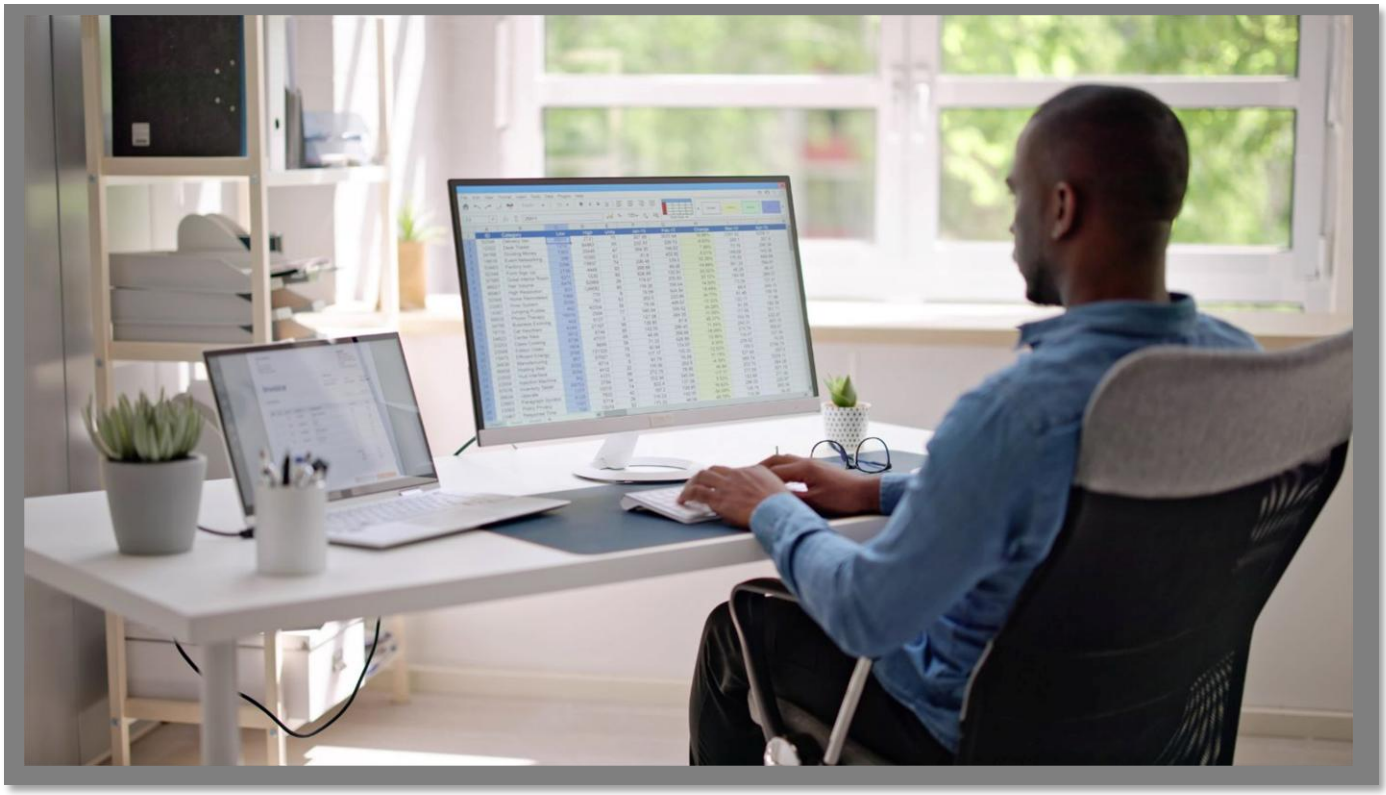
Arbutus Connectors

SAP Concur
CONFIGURATION GUIDE



ARBUTUS
Powerful Analytics Simplified

Contents

Arbutus Connector – SAP Concur

A. Introduction

The purpose of this Guide is to provide assistance with configuring the Arbutus SAP Concur Connector using the ODBC Data Source Administrator. The configuration process can involve several technical steps that require a good understanding of IT systems and database management.

To make the most of this guide, it is advisable to have a good understanding of database connectivity, driver installation, and system settings. The ODBC Data Source Administrator, which is used as part of the configuration process, allows for the setup and management of data sources, enabling applications to access data from various database systems.

Due to the complexity and potential impact of these configurations, it is recommended that only those individuals with IT or database expertise undertake this task. In addition, it should also be understood that each client's network environment is different. A one-size-fits-all approach is rarely effective, as what works well in one environment may not be suitable in another.

B. About SAP Concur System

SAP Concur is a cloud-based software that helps businesses manage travel, expenses, and invoices. It automates and streamlines these processes, providing better visibility and control over spending. This makes it easier for companies to track expenses, book travel, and process invoices efficiently. It is different from SAP ERP (Enterprise Resource Planning), which is a comprehensive system that integrates various business functions like finance, supply chain, manufacturing, and human resources into a single platform.

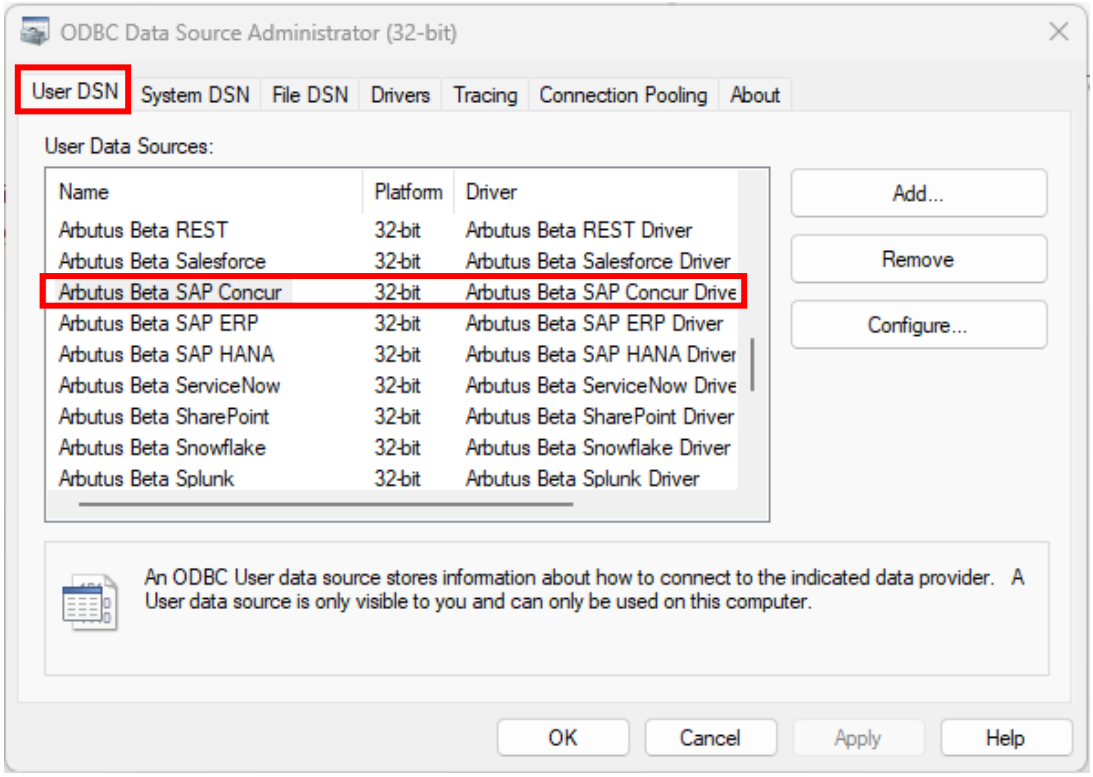
SAP Concur stores structured financial data in SAP HANA, an in-memory relational database.

C. Determining if the Connector exists prior to configuring

Installation of the Arbutus SAP Concur Connector is done at the time of installing the Arbutus software. For more information on this, please see the **Overview Guide Document**.

Once the Connector has been installed, the next step is to configure it.

Prior to configuring it, you can check to see if the Connector has been installed by opening the **32-bit ODBC Data Source Administrator**, pictured below, and clicking the **User DSN** tab. Included below is information on how you can access the **ODBC Data Source Administrator**.



- If the Arbutus SAP Concur Connector appears in the list, it can be considered as installed.
- If it is not listed, it is likely that you did not select it during the installation or modification of the Arbutus software. In this case, it is recommended to reinstall the Arbutus software and choose the **Modify** option when prompted. For more details, please refer to the **Overview Guide Document**.

Below is the file path to access and run the **ODBC Data Source Administrator** application:

C:\Windows\SysWOW64\odbcad32.exe

Alternative, you can also try locating and opening the **ODBC Data Source Administrator** application by doing a search on your desktop application.

D. Configuring the Connector after it has been installed

Once you have verified that the Arbutus Connector has been installed, it is time to configure it.

This process is done using the **ODBC Data Source Administrator**. It can be described as **"editing the DSN configuration"**.

DSN, Drivers, and Data Sources
What is a DSN? DSN stands for Data Source Name, and is a unique name used to create a data connection to a database using open database connectivity (ODBC). A DSN is a data structure that contains the information required to connect to a database. It is essentially a string that identifies the source database, including the driver details, the database name, and often authentication credentials and other necessary connection parameters. DSNs facilitate a standardized method for applications to access databases without needing hard-coded connection details, enhancing flexibility and scalability in database management.

Arbutus Connectors

- ***Drivers*** are the components that process ODBC requests and return data to the application. If necessary, drivers modify an application's request into a form that is understood by the data source. The **Drivers** tab in the **ODBC Data Source Administrator** dialog box lists all drivers installed on your computer, including the name, version, company, file name, and file creation date of each driver.

- ***Data sources*** are the databases of files accessed by a driver and are identified by a data source name (DSN). You use the ODBC Data Source Administrator to add, configure, and delete data sources from your system.

All ODBC connections require that a DSN be configured to support the connection. When a client application wants to access an ODBC-compliant database, it references the database using the DSN.

The types of DSNs are:

- **User DSN** – User DSNs are local to a computer and can be used only by the current user. They are registered in the HKEY_Current_USER registry subtree.

- **System DSN** – System DSNs are local to a computer rather than dedicated to a user. The system or any user with privileges can use a data source set up with a system DSN. System DSNs are registered in the HKEY_LOCAL_MACHINE registry subtree.

- **File DSN** – File DSNs are file-based sources that can be shared among all users who have the same drivers installed and therefore have access to the database. These data sources need not be dedicated to a user nor be local to a computer. File data source names are identified by a file name with a .dsn extension.

User and system data sources are collectively known as *machine* data sources because they are local to a computer.

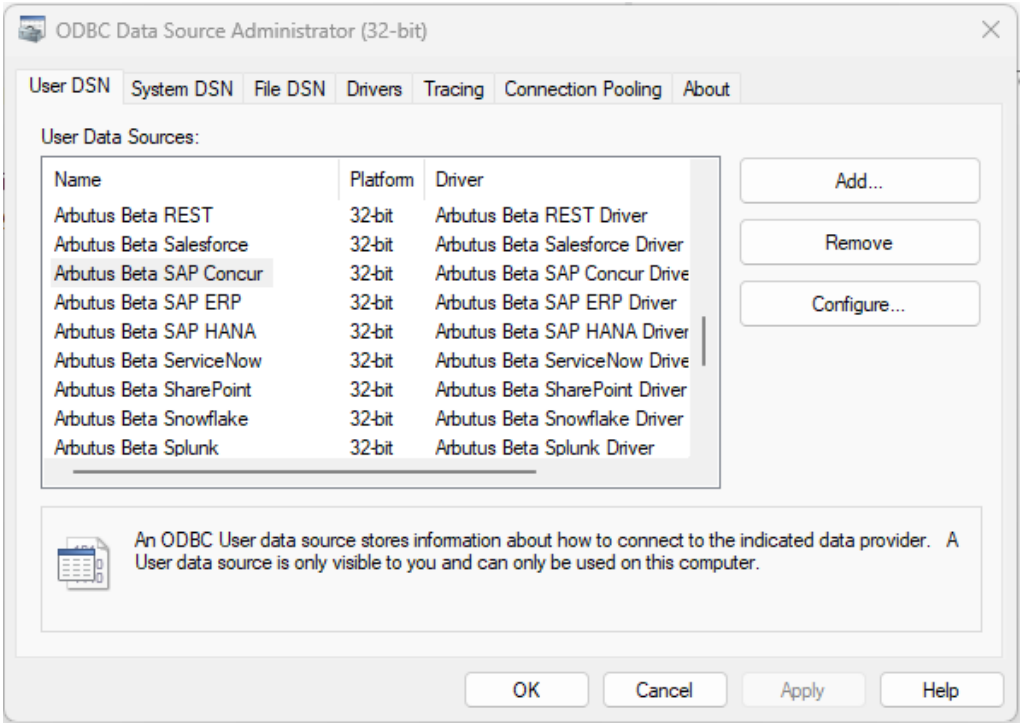
Each of these DSNs has a tab in the **ODBC Data Source Administrator** dialog.

The Arbutus ODBC Driver for SAP Concur enables real-time access to SAP Concur data, directly from any applications that support ODBC connectivity, the most widely supported interface for connecting applications with data.

Arbutus Connectors

Follow these steps to edit the DSN configuration and configure the Connector.

1. First open the **ODBC Data Source Administrator**.



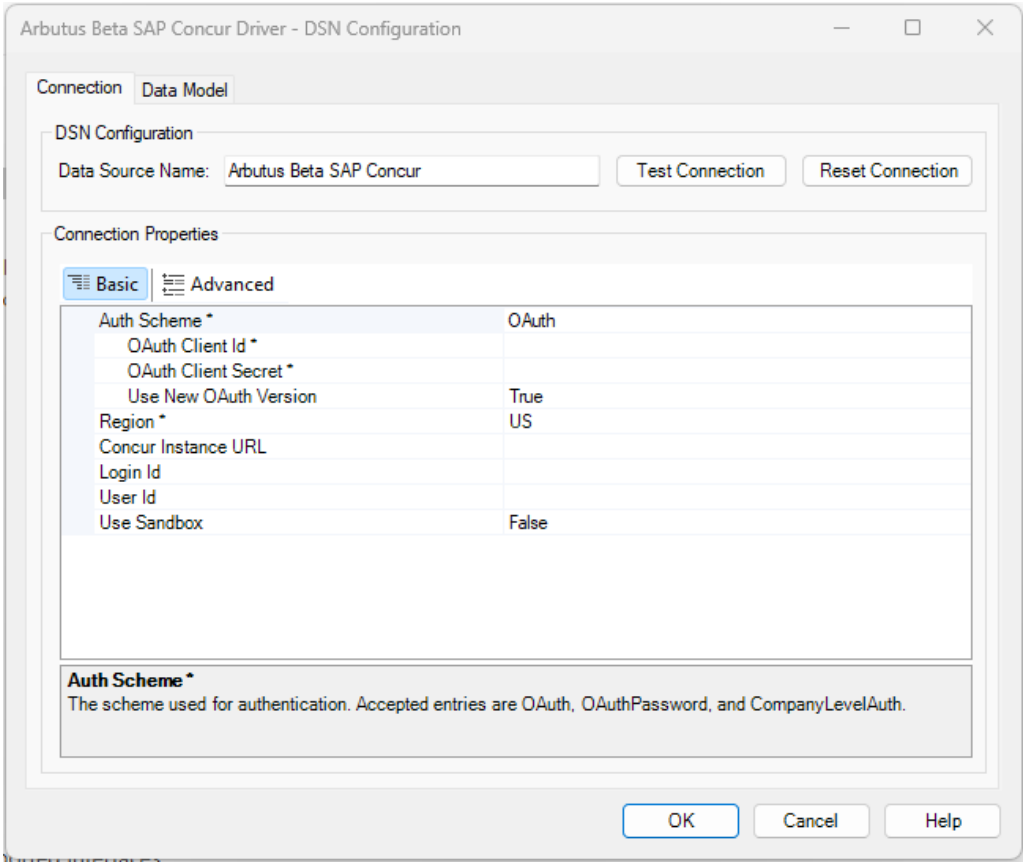
2. Click the **User DSN** tab.

   Selected data connectors are installed as **User DSN's** in Window's 32 Bit **ODBC Data Source Administrator**.

   Also, each of the data connector's names is prefaced with Arbutus, for example, **Arbutus SAP Concur.**

3. Select the Arbutus Connector, in this case it is **Arbutus SAP Concur**.
4. Click **Configure**.

This opens the **Arbutus SAP Concur Driver – DSN Configuration** dialog.



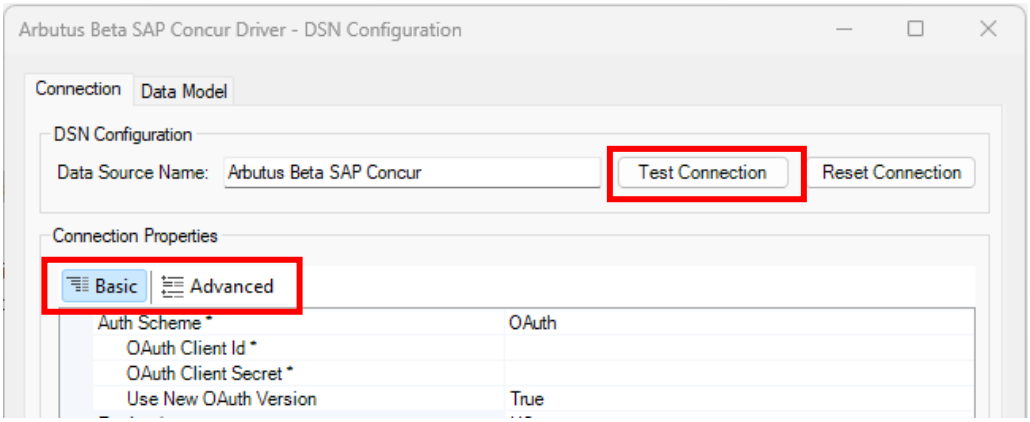
E. Editing the DSN properties – the Basic and Advanced tabs

With the DSN Configuration dialog open, the next step is to edit the DSN properties, where necessary, in the **Basic** and **Advanced** tabs. For example, editing the **Region** property to the region where the server is located.

E1. Editing the DSN properties in the Basic tab

The properties listed in the **Basic** tab are typically the ones that are most commonly used, and as such are designed to be more user-friendly and straightforward, allowing you to quickly make changes without needing in-depth technical knowledge.

Once you have completed editing the properties in the **Basic** tab, you can go ahead and try testing the connection to the SAP Concur system by clicking the **Test Connection** button, as highlighted in the screenshot below.



In the **Basic** tab, there are **six** main properties to review:

1. **Auth Scheme** – click the dropdown to select from the list the appropriate scheme used for authentication. The options available for selection are as follows:
   - OAuth – Set this to perform OAuth authentication with the code grant type.

     Selecting **OAuth** requires you to specify the following:
     - OAuth Client ID – this is the client Id assigned when you register your application with an OAuth authorization server.

       As part of registering an OAuth application, you will receive the **OAuth Client Id** (see below) value, sometimes also called a consumer key, and a client secret, the **OAuth Client Secret** (see below).

     - OAuth Client Secret – this is the client secret assigned when you register your application with an OAuth authorization server.

       As part of registering an OAuth application, you will receive the **OAuth Client Id** (see below), also called a consumer key. You will also receive a client secret, also called a

consumer secret. Set the client secret in the **OAuth Client Secret** property.

- Use New OAuth Version – this is a True/False selection. Select the appropriate value, based on following determination:
  - This is a Boolean indicating whether the new authentication should be used.

  The default value is **True**.

The default is **OAuth**.

- OAuthPassword – Set this to perform OAuth with the password grant type.

  Selecting **OAuthPassword** requires you to specify the following:
  - Username – this is the user account used to authenticate to SAP Concur. Together with **Password** (see below), this field is used to authenticate to SAP Concur.

  - Password - this is the password used to authenticate the user.

  - OAuth Client Id – this is the client Id assigned when you register your application with an OAuth authorization server.

    As part of registering an OAuth application, you will receive the **OAuth Client Id** (see below) value, sometimes also called a consumer key, and a client secret, the **OAuth Client Secret** (see below).

- OAuth Client Secret – this is the client secret assigned when you register your application with an OAuth authorization server.

  As part of registering an OAuth application, you will receive the **OAuth Client Id** (see above), also called a consumer key. You will also receive a client secret, also called a consumer secret. Set the client secret in the **OAuth Client Secret** property.

- CompanyLevelAuth- Set to this to perform Company Level Authentication with password grant type OAuth.

  Selecting **CompanyLevelAuth** requires you to specify the following:

  - Company Id – this is the unique identifier of your company. This is required for Company Level Authentication.

  - Company Request Token – this is the Company Request Token generated from the Company Request Token tool or retrieved from SAP Concur support.

    Admins with the required permissions will have a link to the Company Request Token tool on the Administration > Company > Authentication Administration page.

  - OAuth Client Id – this is the client Id assigned when you register your application with an OAuth authorization server.

    As part of registering an OAuth application, you will receive the **OAuth Client Id** value, sometimes also called a consumer key, and a client secret, the **OAuth Client Secret** (see below).

- OAuth Client Secret – this is the client secret assigned when you register your application with an OAuth authorization server.

  As part of registering an OAuth application, you will receive the **OAuth Client Id** (see above), also called a consumer key. You will also receive a client secret, also called a consumer secret. Set the client secret in the **OAuth Client Secret** property.

2. **Region** – select from the dropdown list the region where the server is located. The options available are:
   - US
   - EU
   - CN

   The default is **US**.

3. **Concur Instance URL** – specify the server URL to user. The new server URLs are backwards compatible with the legacy authentication methods, so set this only if necessary. For example, *https://concursolutions.com* for some production accounts and *https://us-impl.api.concursolutions.com* for sandbox accounts. Set this connection property if you are using API versions V1-V3 and the server does not accept the Base URL with region information.

4. **Login Id** – this is the Login ID of the user. Can be used if the user account associated with the OAuth 2.0 access token has a Concur account with one of these roles: Web Services Administrator for Professional or Can Administer for Standard.

5. **User Id** – this is the unique identifier of the SAP Concur user. Used only for tables that expose V4 endpoints of the SAP Concur API.

Query the Identity table to retrieve this value. Some V4 tables allow **User Id** to be set as query parameter. If not set in either the query or in the connection string, the driver tries to automatically get the user id either by parsing the authentication info or by making an extra request. In case of **Company Level OAuth**, only user input is considered.

6. **Use Sandbox** – this is a True/False selection. Select the appropriate value, based on following determination:
   - A boolean indicating if you are using a Sandbox account. The provider makes requests to the production environment by default.

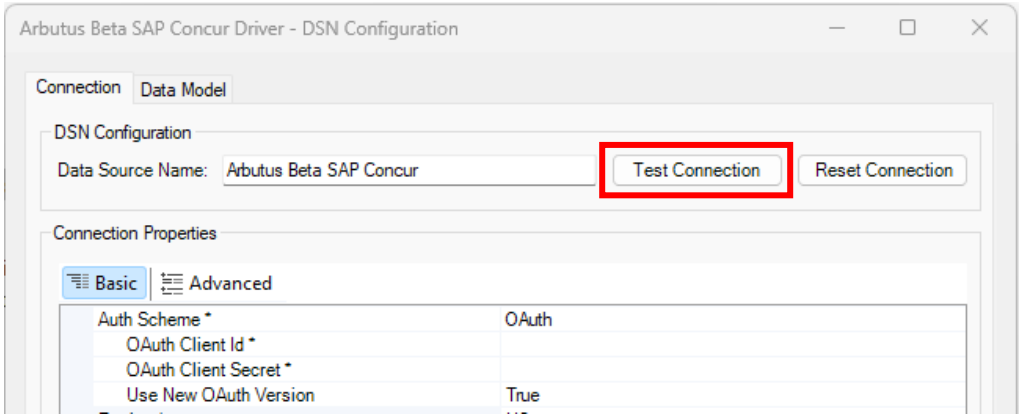
   The SAP Concur API to be used to process transactions. If you are using a production account, this property can be left blank. If you are using an implementation server, set this to 'TRUE'.

   The default value is **False**.

E2. Editing the DSN properties in the Advanced tab

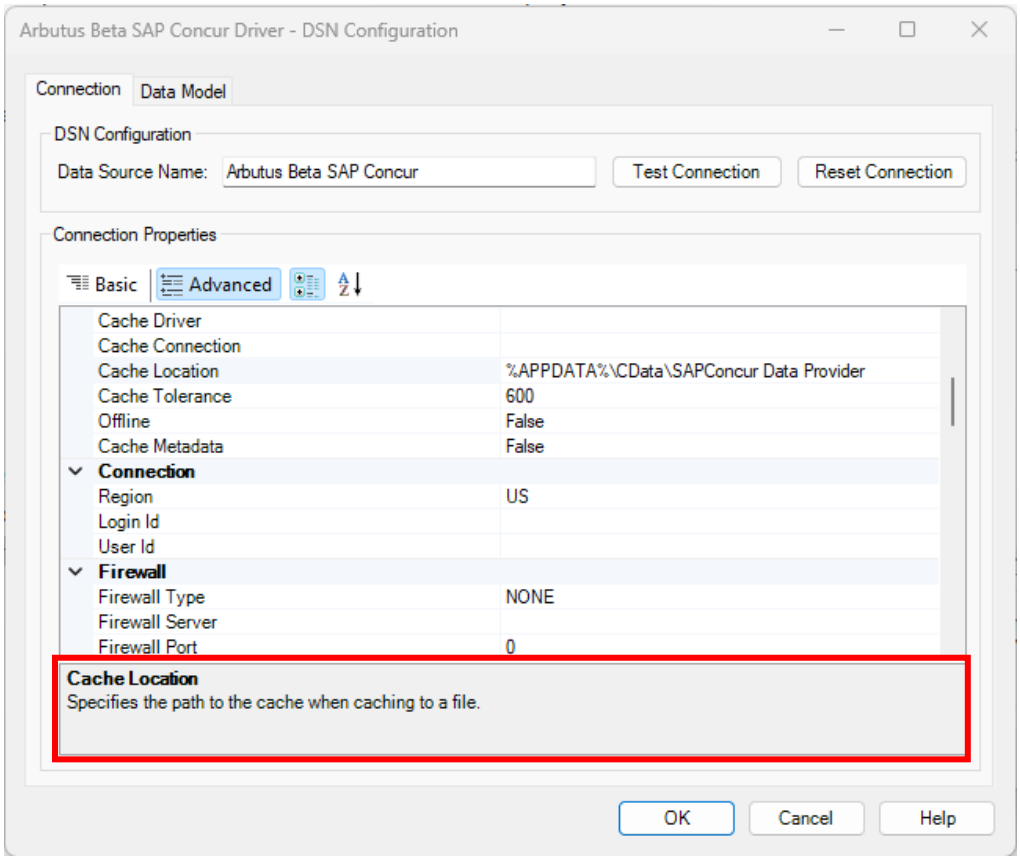
This tab includes more detailed and technical properties. It is intended for those users who need more control over the configuration and are comfortable with more complex options. The **Advanced** tab often includes properties that can fine-tune the behaviour of the system feature.

If you have already completed editing the properties in the **Basic** tab, as required, you do not necessarily need to also complete editing the properties in the **Advanced** tab. Instead, once you have completed editing the properties in the **Basic** tab, you may opt to proceed to testing the connection to the SAP Concur system by clicking the **Test Connection** button.



There are a lot more properties included for editing in the **Advanced** tab.

However, it is useful to know that each property does provide a short description of it and as such serves as a guide in terms of what to edit and/or enter. This short description can be seen at the bottom of the **DSN Configuration** dialog box, as seen in the screenshot below.



If it is deemed necessary to complete some/all the properties in the **Advanced** tab, it is recommended that you refer to the description shown for any of the properties being edited and/or entered.

If required, more information on the properties listed in the **Advanced** tab can also be provided.

F. Other questions and/or request for assistance

There may be times when you need to consult with the technical support team at Arbutus Software. If so, please send an email request to support@ArbutusSoftware.com

For more information, please refer to the **CONTACT US** page on our website.