# 4.5.3. How to Import Data from Dynamics 365 Business Central

In this article we describe:

- correspondence between key terms in Business Central and Streamline,
- imported data, and
- the data import workflow.

# **Key Terms**

The key entities that Business Central handles are items and warehouses. Business Central *items* have the same meaning as items in Streamline; Business Central *warehouses* are locations in Streamline.

### **Imported data**

Data imported into Streamline is described in the Inventory Management Systems article.

# **Data Import Workflow**

Streamline uses an API extension for Business Central to import and export data. It should be

#### downloaded

, unzipped and installed before using this connection.

The mentioned above extension uses Business Central OData Services and API Services. If you use the Cloud version, these services are typically enabled. In the case of the On-Premises version, they might be disabled. Thus, check if they are enabled, and if they are not, enable them, using the following steps:

1. Open Business Central Administration tool (see figure below).



2. Expand the root node and select your Business Central instance ('BC170' in our example).

3. Expand the **OData Services** section on the right and check out if **Enable API Services** and **Enable OData Services** settings have checkmarks (see figure below).

3/14

| Console Root                   | BC170 - (Running)                                   |              |                                            |              |     |   |
|--------------------------------|-----------------------------------------------------|--------------|--------------------------------------------|--------------|-----|---|
| > 🛟 DynamicsNAV80<br>> 😂 BC170 | General                                             |              |                                            | BC170        | *   | ^ |
|                                | Database                                            |              |                                            |              | ۲   |   |
|                                | Client Services                                     |              |                                            | 7056         | ~   |   |
|                                | SOAP Services                                       |              |                                            | 7057         | *   |   |
|                                | OData Services                                      |              |                                            |              | ^   |   |
|                                | API Maximum Number of Notificatio                   | 100          | Enable SSL:                                |              |     |   |
|                                | API Maximum Number of Subscripti                    | 200          | Enable V3 Endpoint:<br>Enable V4 Endpoint: | $\checkmark$ |     |   |
|                                | API Subscription Delay Time:                        | 30000        | Max Connections:                           | 0            |     |   |
|                                | API Subscription Expiration:                        | 3            | Max Connections Per Tena                   |              | -   |   |
|                                | API Subscription NotificationUrl Time               | 5000         | Max Page Size:                             | 20000        | -   |   |
|                                | API Subscription Sending Notificatio                | 30000        | OData Base URL:                            | 20000        | -   |   |
|                                | DeltaServiceClientTimeout:                          | 00:02:00     | Port:                                      | 7058         | -   |   |
|                                | Enable Add-in Annotations:                          |              | Timeout:                                   | 00:08:00     |     |   |
|                                | Enable API Services:                                | $\checkmark$ | V4 Max Concurrent Reque                    |              | -   |   |
|                                | Enable API Subscriptions:<br>Enable OData Services: |              | V4 Max Queued Requests:                    | 95           | -   |   |
|                                | Enable Obata Services.                              | V            | v4 max Queueu nequesis.                    | 33           |     |   |
|                                | NAS Services                                        |              |                                            |              | *   |   |
|                                | Management Services                                 |              |                                            | 7055         | *   | ~ |
| < >                            |                                                     |              |                                            | E            | dit |   |

If they are not enabled, enable them using the steps below.

4. Click the **Edit** button at the bottom of the page, set the checkboxes, and then click the **Save** button.

5. After that, select the root node in the tree, right-click on the Business Central instance, and select the **Restart** command from the context menu (see figure below).

| Console Root  Console Root  Microsoft Dynamics 365  DynamicsNAV80 | Microsoft Dynamics 365 Business Central Server Instance |        | Status<br>Running |
|-------------------------------------------------------------------|---------------------------------------------------------|--------|-------------------|
| > 🍝 BC170                                                         | BC170                                                   | Remove |                   |
|                                                                   |                                                         | Rest   | art               |
|                                                                   |                                                         | Stop   | )                 |
|                                                                   |                                                         | Help   | )                 |
|                                                                   |                                                         |        |                   |

#### **Installing API Extension in Cloud Version**

To install an extension in the Cloud version, do the following:

- 1. Log in to your Business Central.
- 2. Click on the **Setup & Extensions** in the top menu.
- 3. Then, click on the **Extensions** in the popup menu (see figure below).



4. Click **Manage** in the second-line menu, then select the **Upload Extension** command (see figure below).

| < Ca     | sh Manage                                                             | ment $\vee$                                                                                                                                                                             | Sales           | V Purcha                                                                                                                                                                                                                                                                                                              |
|----------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓ Search | Manage $\smallsetminus$                                               | Page $\smallsetminus$                                                                                                                                                                   | N               | lore options                                                                                                                                                                                                                                                                                                          |
|          | 🗿 Extensio                                                            | n Marketpla                                                                                                                                                                             | ice             |                                                                                                                                                                                                                                                                                                                       |
| Na       | 🔓 Upload B                                                            | xtension                                                                                                                                                                                |                 |                                                                                                                                                                                                                                                                                                                       |
| : Al     | -                                                                     |                                                                                                                                                                                         | _               |                                                                                                                                                                                                                                                                                                                       |
| Aı       | C Deploym                                                             | ient Status                                                                                                                                                                             |                 |                                                                                                                                                                                                                                                                                                                       |
| Ba       | 🖹 Uninstall                                                           |                                                                                                                                                                                         |                 |                                                                                                                                                                                                                                                                                                                       |
| Bu       | 🔆 Unpublis                                                            | h                                                                                                                                                                                       |                 |                                                                                                                                                                                                                                                                                                                       |
| Bu       | 📌 Configur                                                            | e                                                                                                                                                                                       |                 |                                                                                                                                                                                                                                                                                                                       |
| Bu       | 🗋 Downloa                                                             | d Source                                                                                                                                                                                |                 |                                                                                                                                                                                                                                                                                                                       |
| Ce       | 1 Learn M                                                             | ore                                                                                                                                                                                     |                 |                                                                                                                                                                                                                                                                                                                       |
| Co       | 🗒 Refresh                                                             |                                                                                                                                                                                         |                 |                                                                                                                                                                                                                                                                                                                       |
|          | Search     Na     Al     Al     Al     Ba     Ba     Ba     Ba     Ce | ✓ Search Manage ✓   ✓ Search Manage ✓   ✓ Extension   Na ↓ Upload B   ▲ ↓ Upload B   ▲ ↓ Deploym   Ar ↓ Uninstall   Bu ↓ Unpublis   Bu ↓ Configur   Bu ↓ Download   Ce ↓ Learn Material | Search Manage < | <ul> <li>Extension Marketplace</li> <li>Na</li> <li>Upload Extension</li> <li>Ai</li> <li>Deployment Status</li> <li>Ar</li> <li>Deployment Status</li> <li>W Uninstall</li> <li>Bu</li> <li>Unpublish</li> <li>Bu</li> <li>Configure</li> <li>Bu</li> <li>Download Source</li> <li>Ce</li> <li>Learn More</li> </ul> |

5. Click on the bar icon next to the **Select .app file** setting in the **Upload And Deploy Extension** window appeared (see figure below).

| Upload And Deploy Exten                        | 2 X                                    |   |
|------------------------------------------------|----------------------------------------|---|
| Upload Extension                               |                                        |   |
| Select .app file                               |                                        |   |
| Deploy Extension                               |                                        |   |
| Deploy to                                      | Current version                        | ~ |
| Language · · · · · · · · · · · · · · · · · · · | English (United States)                |   |
| Disclaimer                                     |                                        |   |
| Accept                                         |                                        |   |
| Read more about the best practices fo          | r installing and publishing extensions |   |

6. In the appeared dialog click the **Choose...** button and select the extension file.

7. Set the option **Accept** enabled and click the **Deploy** button (see figure below).

| Upload And Deploy Extension                            |                                          |  |
|--------------------------------------------------------|------------------------------------------|--|
| Upload Extension                                       |                                          |  |
| Select .app file · · · · · · · · · · · · · · · · · · · | GMDH IncStreamline_1.0.2.1.app ····      |  |
| Deploy Extension                                       |                                          |  |
| Deploy to                                              | Current version 🗸                        |  |
| Language                                               | English (United States) ····             |  |
| Disclaimer                                             |                                          |  |
| Accept                                                 |                                          |  |
| Read more about the best practices                     | for installing and publishing extensions |  |
|                                                        |                                          |  |
|                                                        |                                          |  |
|                                                        | Deploy Cancel                            |  |

7. Deploying of an extension typically takes several minutes. You can track the deployment status of the extension by going to the menu **Manage** > **Deployment status** of the extensions page. The **Extension Deployment Status** window appears. If the **Status** is **Completed** for the extension, you can start using this connection (see figure below).

| Extension Deployment Status   Work Date: 5/13/2021 |   |           |                   |           |           | ď              | 2      |
|----------------------------------------------------|---|-----------|-------------------|-----------|-----------|----------------|--------|
| 🔎 Search Page                                      |   |           |                   |           |           | V              |        |
| Name                                               |   | Publisher | Operation<br>Type | Status    | Schedule  | App<br>Version | Starte |
| Streamline                                         | ÷ | GMDH_Inc. | Upload            | Completed | Immediate | 1.0.2.2        | 5/28   |

#### Installing API Extension in On-Premises Version

To install an extention for On-Premises version, do the following:

1. Start the **Business Central Administration Shell** as administrator (see figure below).



2. Go to the folder with the unzipped extension using the command line. In our example, the extension file is on disk drive D, in the **sl** folder (see figure below)

| Administrator: Business Central Administration Shell |                    |  |  |  |  |  |
|------------------------------------------------------|--------------------|--|--|--|--|--|
| Cmdlet                                               | Set-NAVAddIn       |  |  |  |  |  |
| Cmdlet                                               | Set-NAVApplication |  |  |  |  |  |
| Cmdlet                                               | Set-NAVCompany     |  |  |  |  |  |
|                                                      |                    |  |  |  |  |  |
| PS C:\WINDOWS\s                                      |                    |  |  |  |  |  |
| PS C:\WINDOWS>                                       | cd                 |  |  |  |  |  |
| PS C:\> cd d:                                        |                    |  |  |  |  |  |
| PS D:\> cd sl                                        |                    |  |  |  |  |  |
| PS D:\sl>                                            |                    |  |  |  |  |  |

3. Publish the extension by running the following command:

```
Publish-NAVApp -ServerInstance YourDynamicsNAVServer -Path
".\MyExtension.app"
```

where:

- YourDynamicsNAVServer is the name of the Business Central instance.
- MyExtension.app is the file name of the extension.

In or example, the command would be:

Publish-NAVApp -ServerInstance BC170 -SkipVerification -Path ".\GMDH\_Inc.\_Streamline\_1.0.2.1.app"

4. Synchronize the schema of the database to the extension by running the following command:

Sync-NavApp -ServerInstance YourDynamicsNAVServer -Name ExtensionName -Version x.x.x.x

where:

- YourDynamicsNAVServer is the name of the Business Central instance.
- ExtensionName is the extension name, which in our case is 'Streamline'.
- x.x.x.x is the extension version, which is given at the end of the extension file name. In our example, it is **1.0.2.1**.

In or example, the command would be:

```
Sync-NavApp -ServerInstance BC170 -Name Streamline -Version 1.0.2.1
```

5. Install the extension using the command:

Install-NAVApp -ServerInstance YourDynamicsNAVServer -Name "My Extension"

where:

- YourDynamicsNAVServer is the name of the Business Central instance.
- My Extension is the extension name, which in our case is 'Streamline'.

In or example, the command would be:

```
Install-NAVApp -ServerInstance BC170 -Name "Streamline" -Version 1.0.2.1
```

See the result of the executed commands in the figure below.

| 👺 Administra             | tor: Business Central Administration Shell                  |                                                                                        |
|--------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Cmdlet<br>Cmdlet         | Set-NAVServerAppConfiguration<br>Set-NAVServerConfiguration | 17.0.16 Microsoft.Dynamics.Nav.Management<br>17.0.16 Microsoft.Dynamics.Nav.Management |
| Cmdlet                   | Set-NAVServerConfiguration                                  | 17.0.16 Microsoft.Dynamics.Nav.Management<br>17.0.16 Microsoft.Dynamics.Nav.Management |
|                          | WS\system32> cd                                             |                                                                                        |
| S C:\WINDC<br>S C:\> cd  |                                                             |                                                                                        |
| S D:\> cd                |                                                             |                                                                                        |
|                          | Sync-NavApp -ServerInstance BC170 -Skipveri                 | <pre>fication -Path ".\GMDH_IncStreamline_1.0.2.1.app" line -Version 1.0.2.1</pre>     |
| PS D:\sl≻ I<br>PS D:\sl≻ | nstall-NAVApp -ServerInstance BC170 -Name "St               | reamline" -Version 1.0.2.1                                                             |

4.5.3. How to Import Data from Dynamics 365 Business Central

#### Importing the Data into Streamline

9/14

2024/11/01 16:26

To create a new Streamline project based on Business Central data:

1. Go to the menu **File** > **New** > **Dynamics BC**. The **Dynamics 365 Business Central** dialog appears (see figure below).

| Dynamics 365 Business Central cor | nection            | × |
|-----------------------------------|--------------------|---|
| Base URL                          |                    |   |
| Company name                      |                    |   |
| User name                         |                    |   |
| User password                     |                    |   |
| Starting date 1/1/2000            | ✓ Group by Month ✓ |   |
|                                   | OK Save Cancel     |   |

2. Enter the base URL of the Business Central API services into the **Base URL** field.

If Business Central is installed on-premises, the base URL looks like:

http(s)://<host>:<port>/<server\_instance>

where:

- <host> is the LAN name or IP address of the machine running the Business Central instance.
- <port> is the OData port specified during the installation of Business Central.
- <server\_instance> is the name of the Business Central instance.

If Streamline is opened on the same machine where Business Central is installed having the default OData port, no SSL enabled, and its instance name is 'BC170', the base URL will look like:

http://localhost:7048/BC170

If you use the Cloud version of Business Central, the base URL looks like:

https://api.businesscentral.dynamics.com/v2.0/<tenant\_id>/Production

where <tenant\_id> is an identifier of the Business Central instance in the cloud. To figure out your tenant ID, do the following:

- 2.1. Log in into your Azure portal.
- 2.2. Click the **View** within the **Manage Azure Active Directory** section.
- 2.3. Click on the **Properites** in the left-side bar.
- 2.4. **Tenant ID** field shows your tenant ID (see figure below).

| ← → C                         | ade/Microsoft_AAD_IAM/ActiveDirectoryMen | uBlade/Properties                         |
|-------------------------------|------------------------------------------|-------------------------------------------|
| ≡ Microsoft Azure             |                                          | ${\cal P}$ Search resources, services, an |
| Home >                        |                                          |                                           |
| Azure Active Directory        | operties                                 |                                           |
| *                             | 🖫 Save 🗙 Discard                         |                                           |
| Overview                      |                                          |                                           |
| 🌱 Getting started             | Tenant properties                        |                                           |
| Preview features              | Name                                     |                                           |
| 🗙 Diagnose and solve problems |                                          |                                           |
| Manage                        | Country or region<br>United States       |                                           |
| 🚨 Users                       | Location                                 |                                           |
| 🐣 Groups                      | United States datacenters                |                                           |
| 🌓 External Identities         | Notification language                    |                                           |
| 🚨 Roles and administrators    |                                          |                                           |
| Administrative units          | Tenant ID                                |                                           |
| Enterprise applications       | 9748 ae8                                 |                                           |
| Devices                       | Technical contact                        |                                           |
| App registrations             |                                          |                                           |

3. Enter the name of your company into the **Company name** field.

To find out the company name, do the following:

#### 3.1. Log in to your Business Central.

3.2. Click on the search icon in the right-top corner and type 'company' in the search bar. Then, select the **Company information** option from the search results (see figure below).

| Tell | me what you want to do                                                                      | 2                                                                                                      | × |
|------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---|
| col  | mpany                                                                                       |                                                                                                        |   |
| On   | current page (Sales Order Processor)                                                        |                                                                                                        |   |
| ū    | Customer - Order Summary                                                                    |                                                                                                        |   |
|      | view the quantity not yet shipped for e                                                     | each customer in three periods of 30 days each, s.                                                     |   |
| E.   | Customer/Item Statistics                                                                    | each customer in three periods of 30 days each, s.<br>mer during a selected time period. The report co |   |
|      | Customer/Item Statistics                                                                    |                                                                                                        |   |
|      | Customer/Item Statistics<br>View a list of item sales for each custor                       | mer during a selected time period. The report co                                                       |   |
|      | Customer/Item Statistics<br>View a list of item sales for each custor<br>to Pages and Tasks | mer during a selected time period. The report co<br>Show a                                             |   |

3.3. Your company name is shown in the field Name of the General section (see figure below).

# Company Information

| General                     |                           |                     |                 | Show more |
|-----------------------------|---------------------------|---------------------|-----------------|-----------|
| Name                        | CRONUS USA, Inc.          | Country/Region Code | US              | $\sim$    |
| Address · · · · · · · · · [ | 7122 South Ashford Street | Contact Name        | Adam Matteson   |           |
| Address 2                   | Westminster               | Phone No.           | +1 425 555 0100 |           |
| City                        | Atlanta                   | Federal ID No.      |                 |           |

4. Enter the credentials of a Business Central user into **User name** and **User password** fields.

If Business Central installed on-premises, these credentials depend on the credential type used to access Business Central. The credential type is set up using the **Credential Type** setting on the **General** section of the Business Central Server instance using the **Business Central Server** Administration tool. With the default installation of Business Central, the **Windows** credential type is used, which means that you can use the credentials of your windows account (however, the account must have a password) to access Business Central.

If you use the Cloud version of Business Central, a Web Access Key is used as the password. To generate such a key for a user, do the following:

4.1. Open **User Card** of the user you want to grant access to the Web Services. The value of the **User Name** field is the one you need to provide in the connection dialog (see figure below).

| User Card   Work Date: 5/13/2021       |                                      |                     |  |  |
|----------------------------------------|--------------------------------------|---------------------|--|--|
| Andrew                                 |                                      |                     |  |  |
| imes Web Service Access Key is being d | eprecated on SaaS. Please use OAuth. | Don't show me again |  |  |
| Effective Permissions More options     |                                      |                     |  |  |
| General                                |                                      |                     |  |  |
| General                                |                                      |                     |  |  |
| General                                |                                      |                     |  |  |
| General<br>User Name                   | ANDREW                               | Ē                   |  |  |
|                                        |                                      | <u>ا</u>            |  |  |
| User Name                              | Andrew                               | 1                   |  |  |

4.2. Click on the bar icon with dots next to the **Web Services Access Key** field (see figure below).

| $\leftarrow$ | User Card   Work Date: 5/13/2021                                                             |             | (2) + II                     |           |
|--------------|----------------------------------------------------------------------------------------------|-------------|------------------------------|-----------|
|              | Andrew                                                                                       |             |                              |           |
|              | $\times$ Web Service Access Key is being deprecated on SaaS. Please use OAuth. Don't show me | e again   S | Show more                    |           |
|              | Effective Permissions More options                                                           |             |                              |           |
|              | General                                                                                      |             |                              | Show more |
|              | User Name ANDREW                                                                             | È           | Microsoft 365                |           |
|              | Full Name · · · · · Andrew                                                                   |             | Authentication Email         |           |
|              | Status · · · · · Enabled                                                                     | ~           | Authentication Status Active |           |
|              | Contact Email                                                                                |             | Web Service                  |           |
|              |                                                                                              |             | Web Service Access Key       |           |

#### 4.3. Set the option **Key never Expires** and click **OK** in the appeared dialog.

4.4. Then, a key will be generated in the **Web Service Access Key**. To copy it, click on the field and press **Ctrl+C**. After that, a popup, indicating that the copy operation was successful, arises (see figure below).

| Microsoft 365          |                                        |  |  |  |
|------------------------|----------------------------------------|--|--|--|
| Authentication Email   |                                        |  |  |  |
| Authentication Status  | Active                                 |  |  |  |
| Web Service            |                                        |  |  |  |
| Web Service Access Key | hO6v0PxUCdiG7PjyDRvYz0KQTh3akPzUh+ZOGe |  |  |  |
|                        |                                        |  |  |  |

67

|                     | Company Name ↑   |
|---------------------|------------------|
|                     | CRONUS USA, Inc. |
|                     | CRONUS USA, Inc. |
|                     | CRONUS USA, Inc. |
|                     |                  |
|                     |                  |
| Field value copied. |                  |

5. Enter or choose the date to start the import from in the **Starting date** control.

To get accurate forecasts, we recommend providing Streamline with at least 24 months of sales history.

2019/05/21 13:44

6. Choose the data aggregation period in the **Group by** control. Streamline automatically aggregates your data in the given periods (days, weeks, or months). For example, if you want to see the forecasts, replenishment plans, and other reports in months, group the data by month.

7. Click **OK** to start the import.

Next: Dynamics GP

#### Download PDF

From: https://gmdhsoftware.com/documentation-sl/ - **GMDH Streamline Docs** 

Permanent link: https://gmdhsoftware.com/documentation-sl/bc-connection-guide



Last update: 2024/10/31 10:13