

## FOLDERS

**Folders** are used to organize and classify base and custom templates into groups for greater agility and efficiency. Over time, as more templates are created, finding a specific one becomes easier when they are organized and filtered by the **Folder** field. This can be done directly from the template lists by clicking on the values in the **'Templates'** or **'Customs'** columns or by accessing the **Folder List** in the **Manager Control Panel** actions.

The image shows two parts of the software interface. On the left is the 'Dashboard Manager' with a sidebar menu. The 'Folders' option is highlighted, and a sub-menu is open showing 'Folders List' as the selected item. On the right is a detailed view of the 'Folders List' table.

User ↑	Folder ↑	Description	Templates	Customs
→ TOLO.SASTRE	⋮ COPYPASTE	Templates dedicated to copy-paste acti...	2	1
TOLO.SASTRE	DEMO	Demos	4	0
TOLO.SASTRE	EXCEL	Templates 4 Excel	0	0
TOLO.SASTRE	EXPORTS	Templates for Export Data	0	5
TOLO.SASTRE	EXTERNAL APP	Templates 4 Connectivity	5	0
TOLO.SASTRE	HODGEPODGE	A mess of Templates	1	0
TOLO.SASTRE	PROCESSES	Templates for Execute Processes	0	3
TOLO.SASTRE	REPLICATION	Templates for Replicate Data	1	0
TOLO.SASTRE	REQUESTS	Templates for Request Info	0	2
TOLO.SASTRE	WEBHOOKS	Base Template 4 Webhooks	1	0

To create a new folder, click on the **NEW** or **Edit List** action and fill in the **'User,' 'Folder'** (folder code), and **'Description'** fields.

The **'Templates'** and **'Customs'** columns are non-editable and display the number of Base and Custom Templates "within the folder." Clicking on these columns will show which templates have the folder code, and you can access the templates by clicking on the **Code** field.

OE Folders List

Code	Type	Description	Transform at	Order ↑	Ena...	Tem... Use	Folder ▼
<u>COPYSALESORDERS</u>	Base	Copy-Paste Sales Orders	Both	0	<input checked="" type="checkbox"/>	1	COPYPASTE
CP-COPYSALESOR...	Base	Copy-Paste Sales Orders	Target	0	<input checked="" type="checkbox"/>	1	COPYPASTE

OE Template Base - COPYSALESORDERS

Manage Copy-Paste Export Data Excel Run Process Save File Archive Copy Template Permissions Vars & Formulas Get and Enable All Fields Delete Obsolete/Unexistent Fields Get Related Tables

### General

Code	COPYSALESORDERS	Permissions	0
Source Table ID	36	Allow Requests	<input type="checkbox"/>
Source Name	Sales Header	Enabled	<input checked="" type="checkbox"/>
Description	Copy-Paste Sales Orders	Use-Create Equivalence	<input type="checkbox"/>
Operation	Insert-Modify	Folder	COPYPASTE
Table Trigger	<input type="checkbox"/>	Template Use	1

Lines New Line Delete Line Use Key Clear Key Excel Header Excel Line Indent

Target Table ID	Target Table Name	Indentation	Related Table ID	Tag	Operation	Table Trig...	Key	Fields	Formul...	Filters	Fusion	Excel	Enab...	Force
→ 36	Sales Header	0	36		Insert-Modify	<input type="checkbox"/>		4	No	2	No	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
37	Sales Line	2	36		Insert-Modify	<input type="checkbox"/>		6	No	2	No	0	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## WEBHOOKS

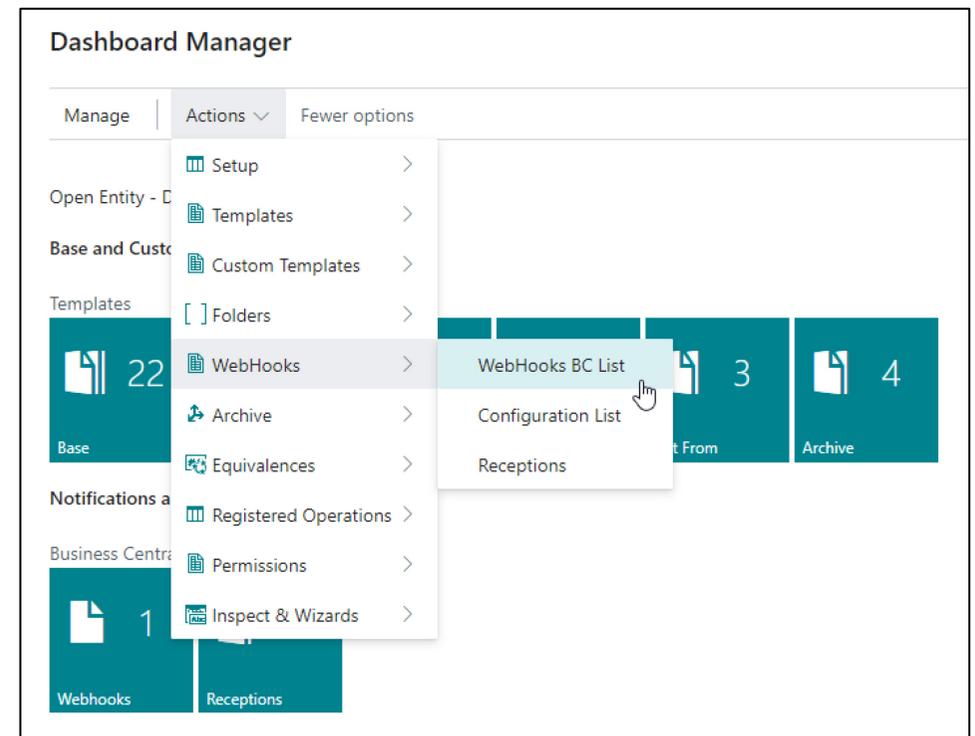
**Webhook Services** are notification services in Microsoft Business Central that track changes in data—whether from the insertion of a new item or record, its deletion, or modifications to any fields.

Currently, Business Central cannot receive these notifications internally; they only function externally, such as towards an Azure function or external applications. To enable the use of webhooks, we offer C# code for an Azure function that redirects these notifications back to Business Central. This function must be installed in the client's Azure environment. Since installation details are beyond the scope of this manual, we recommend consulting Microsoft's documentation on Azure functions and installation.

**NOTE:** If using an Azure function for webhooks, it's generally advisable to have an active ping test, as Azure functions can sometimes have a delayed startup (cold start) if not frequently used. This can lead to lost notifications if the function is not ready to receive Business Central's data in time. Currently, this ping test service is free and helps prevent cold starts, but Microsoft has announced that it will end this service by September 30, 2026, after which it will transition to standard tests.

Business Central also provides the necessary mechanism to start subscriptions to these services, either towards the previously mentioned Azure function or third-party applications (using the **URL Endpoint** field). Additionally, notifications from the Azure function can be received to manage or execute a configured template group.

Access webhook service settings via the **Control Panel** or **Dashboard Manager**.



The first option, '**WebHooks BC List**,' will display an empty list the first time. Click on the '**Get WebHooks**' action to populate it. The inserted records are the various change notification services that Microsoft offers. Typically, this action to retrieve services is performed only occasionally—when we want to update the list, or when Microsoft has created a new service or released a new version

Element Name	Path Name ↑
→ <a href="#">customerFinancialDetails</a>	beta/customerFinancialDetails
supportContactInformation	microsoft/admin/beta/supportContactInformation
postedPurchaseInvoices	microsoft/automate/v1.0/postedPurchaseInvoices
postedSalesInvoices	microsoft/automate/v1.0/postedSalesInvoices
configurationPackages	microsoft/automation/v1.0/configurationPackages

Once we have a list of available services, we can configure the necessary webhooks.

## CONFIGURATION LIST

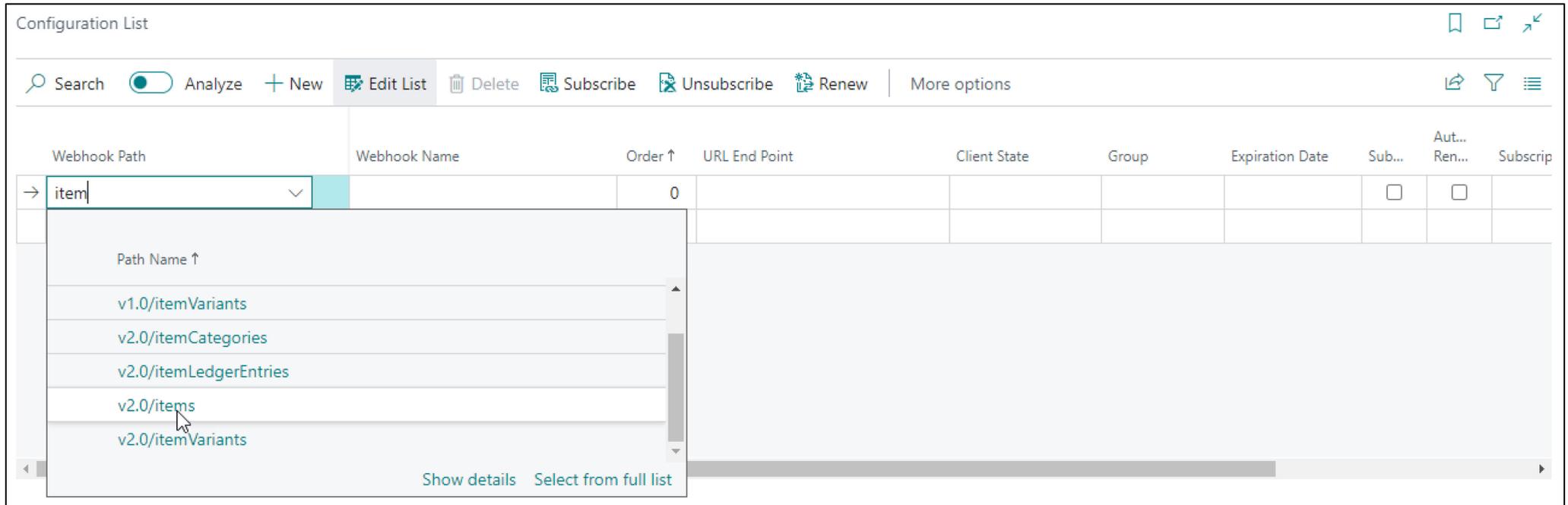
Access this from the **Control Panel** by selecting **Webhooks -> Configuration List** or from the **Webhooks** cue.

This is the page where we'll create subscriptions to these services and link them to our Azure function or other external applications.

The page is divided into two sections: '**Configuration List**' and '**Webhooks Subscribed to BC.**'

- In '**OE Webhooks Configuration List**,' we create our subscription by selecting the service of interest from the list we downloaded in '**WebHooks BC List.**'
- The second section, '**Webhooks Subscribed to BC,**' displays the services we are already subscribed to. This section is purely informational, showing if the subscription was successfully created and additional details like the expiration date. Currently, these services expire after 3 days, so they need to be renewed in some way if we want them to remain active over time.

To create a new subscription, click on the **NEW** action, and in the '**Webhook Path**' column, select the service you're interested in.



The screenshot shows the 'Configuration List' interface. At the top, there is a search bar and a toolbar with buttons for 'Analyze', 'New', 'Edit List', 'Delete', 'Subscribe', 'Unsubscribe', and 'Renew'. Below the toolbar is a table with columns: 'Webhook Path', 'Webhook Name', 'Order ↑', 'URL End Point', 'Client State', 'Group', 'Expiration Date', 'Sub...', 'Aut... Ren...', and 'Subscrip'. The 'Webhook Path' column has a dropdown menu open, showing a list of path names: 'v1.0/itemVariants', 'v2.0/itemCategories', 'v2.0/itemLedgerEntries', 'v2.0/items', and 'v2.0/itemVariants'. The 'v2.0/items' option is highlighted. At the bottom of the dropdown, there are links for 'Show details' and 'Select from full list'.

The '**Webhook Name**' field is auto-filled and cannot be edited.

**Order:** This allows us to organize configured webhooks according to our preferences; it has no additional function.

**'URL End Point':** This field is crucial as it represents the destination for both validating the subscription (a one-time check to ensure the destination is correct and ready to receive notifications) and for sending the actual notifications. For our **OEWbhookReceiver** function, copy the link to your Azure function here. You may remove the final question mark if it appears when pasting into the column.

**'Client State':** This is a special field used by developers of the Azure or external function. For our function, it doesn't need to be filled. It's important when external app developers request it, as they likely use this field for their own specific purposes.

**Group:** In this column, enter the template group you want to execute when a notification is received from the service.

Configuration List ✓ Saved   

Search   Analyze + New ⌘ Edit List  Delete  Subscribe  Unsubscribe  Renew | More options   

Webhook Path	Webhook Name	Order ↑	URL End Point	Client State	Group	Expiration Date	Sub...	Aut... Ren...	Subscription Id	O
→ v2.0/items	⋮ items	0	https://nomadawar...		▼		<input type="checkbox"/>	<input type="checkbox"/>		

Code ↑      Description

JOB-ITEMS      Group of actions to run when trigger

+ New [Show details](#) [Select from full list](#)

That's all we need to subscribe to the service. Just note that the '**Auto Renew**' field can be checked if we want the service's expiration date to renew every three days (this requires the renewal Job to be in a **Ready** state).

Job Queue Entries 

Search   Analyze + New ⌘ Edit List  Delete  Edit  View ⋮ 

Status	User ID	Object Type to Run	Object ID to Run	Object Caption to Run
On Hold	TOLO.SASTRE	Codeunit		NOW Entity Programmed (Job)
→ Ready	⋮ TOLO.SASTRE	Codeunit		NOW AutoRenew Webhooks
On Hold	TOLO.SASTRE	Codeunit		NOW Delete-Clear Entities
On Hold	TOLO.SASTRE	Codeunit		NOW Export Replication (Job)
On Hold	TOLO.SASTRE	Codeunit		NOW Template Group (Job)

The remaining fields are informational:

- **Expiration Date:** The date when the service will stop functioning.
- **Subscribed:** If the subscription was successful, this field will be checked.
- **Subscription Id** and **OData Etag:** Internal subscription data. These also appear in the lower section and should match.

Click on the **Subscribe** action, and if everything went correctly, the following information will appear on the page.

The screenshot shows the 'Configuration List' interface. At the top, a teal notification bar states 'The action was executed correctly!'. Below this is a toolbar with search, analyze, and various action buttons: '+ New', 'Edit List', 'Delete', 'Subscribe', 'Unsubscribe', 'Renew', and 'More options'. The main table displays the following data:

Webhook Path	Webhook Name	Order ↑	URL End Point	Client State	Group	Expiration Date	Subsc...	Auto... Renew	Subscription Id	OData Etag
→ v2.0/items	⋮ items	0	https://nomadaware.		JOB-ITEMS	06/01/2024 19:19	☑	☑	a9101bbf6be14...	W/"JzlwOzEwMzQ3MjQ3MzY2OTQx...

Below the table is a section titled 'Webhooks Subscribed to BC' with buttons for 'New Line', 'Delete Line', and 'Get Subscribed'. A second table shows the details of the subscribed webhook:

Subscription Id ↑	Etag	Notification Url	Resource	Client State	Expiration Date Time	Last Modified Date Time	User Id
→ a9101bbf6be14bf890bac0a8b8...	⋮ W/"JzlwOzEwMzQ3MjQ3MzY2...	https://nomadaware.a	https://api.businesscentral.dyn...		06/01/24 19:19:48	03/01/24 19:19:48	5a9c9ad1-be9b-4a7a-87da-

We can see that the webhook automatically appears in the lower section, indicating that we are now subscribed to the service and it is active. Now, whenever we interact with the products (items), a notification will be received in the **Receptions** section, and if we have a configured group, it will execute.

We can set up as many available webhook subscriptions as desired.

## Unsubscribe

This action removes the current subscription, meaning it will no longer “listen” to the table affected by the webhook service, and you will no longer receive change notifications for it.

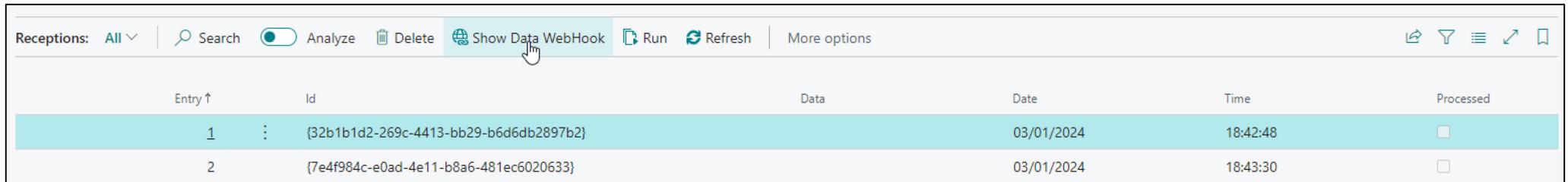
## Renew

Manually renews the subscription; if successful, you’ll see that the expiration date has been updated.

## RECEPTIONS

When a user makes a change to one of the subscribed Business Central tables, the action is sent to the Azure function, which returns it to our Business Central. You can view the messages returned from the Azure function in **Receptions**.

Access **Receptions** through either **Actions** or the **Control Panel Cue** to see a list of notifications received by our Azure function (originating from our Business Central). For example, you might see several product modifications, the creation of two new products, and the deletion of one.



Entry ↑	Id	Data	Date	Time	Processed
1	{32b1b1d2-269c-4413-bb29-b6d6db2897b2}		03/01/2024	18:42:48	<input type="checkbox"/>
2	{7e4f984c-e0ad-4e11-b8a6-481ec6020633}		03/01/2024	18:43:30	<input type="checkbox"/>

With the 'Show Data WebHook' action, we can examine the webhook's internal data.

OE Card Viewer ↗ ✕

🔍 | 📄

⌵ Tag	Value
⋮	
subscriptionId	d5203f3f1aa44afe97d3d6b8a6111a06
expirationDateTime	2024-06-03T22:00:10Z
resource	https://api.businesscentral.dynamics.com/v2.0/t ...
changeType	created
lastModifiedDateTime	2024-06-01T16:52:57.58Z
subscriptionId	d5203f3f1aa44afe97d3d6b8a6111a06
expirationDateTime	2024-06-03T22:00:10Z
resource	https://api.businesscentral.dynamics.com/v2.0/t ...
changeType	updated
lastModifiedDateTime	2024-06-01T16:52:57.797Z
subscriptionId	d5203f3f1aa44afe97d3d6b8a6111a06
expirationDateTime	2024-06-03T22:00:10Z
resource	https://api.businesscentral.dynamics.com/v2.0/t ...
changeType	created
lastModifiedDateTime	2024-06-01T16:52:57.877Z
subscriptionId	d5203f3f1aa44afe97d3d6b8a6111a06

Close

If the configured group (e.g., **JOB-ITEMS** in this example) executed successfully, we should see something similar in the **Outbox**:

**Outbound Folder:** All ▾ | Search 🔍 | Analyze 🔄 | + New | 🗑️ Delete | 💾 Save to File | 🗑️ Delete All | 🗑️ Clear Out All | 📄 Card | 📊 Grid | 📁 Archive | 📄 Manual Export | 🔄 Refresh | ⋮

Template Source	Template Target	Date	Time	Perspective	Tenant Code Source	Tenant Code Target	Use-Make Equi...	Table Trig...	Run	Pro...	Suc...	Errors	Read	Inse...	Mo...	Del...	Track	Is Res...
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:19:46	Source	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	0	0	0	3	0	{243eff56-ac0d-4e09-b3fb-102...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:19:15	Source	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3	0	0	2	1	0	{5ad7c1ff-edf9-4fc9-8ab4-3cc4...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:17:37	Target	SANDBOXDEV3	SANDBOXDEV2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	9	0	0	8	1	0	{034ea472-4989-4635-9b07-4...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:19:10	Target	SANDBOXDEV3	SANDBOXDEV2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	9	0	0	8	1	0	{8c4a0bd3-6cfc-43a7-90e9-6a...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:17:44	Source	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8	0	0	0	8	0	{23a8905a-7b9e-4a44-8a69-94...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:19:14	Target	SANDBOXDEV3	SANDBOXDEV2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6	0	0	5	1	0	{6f79ab04-13f1-4688-9a0d-94...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:19:12	Source	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8	0	0	0	8	0	{26ba5ac3-e126-451d-8917-d5...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	04/01/2024	9:19:45	Target	SANDBOXDEV3	SANDBOXDEV2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6	0	0	5	1	0	{015b01ff-4fc8-4348-a978-f00...	<input type="checkbox"/>

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**Log** ▾

Record ID	Action	Success	Error Code	Error Description
Item: 1896-S	⋮ Modify	<input checked="" type="checkbox"/>		
Item Variant: 1896-S,METALLIC	Modify	<input checked="" type="checkbox"/>		
Item Variant: 1896-S,WOOD	Modify	<input checked="" type="checkbox"/>		
Item Reference: 1896-S,"",UDS,Customer,10000,REFIT-0001	Modify	<input checked="" type="checkbox"/>		
Item Reference: 1896-S,"",UDS,Vendor,10000,REFIT-0001	Modify	<input checked="" type="checkbox"/>		
Item Reference: 1896-S,"",UDS,Vendor,30000,456	Modify	<input checked="" type="checkbox"/>		
Item Unit of Measure: 1896-S,UDS	Modify	<input checked="" type="checkbox"/>		
NOW Log_Operations: {26BA5AC3-E126-451D-8917-D56B626C0DZ...	⋮ Modify	<input checked="" type="checkbox"/>		

The **'Track'** field in the inbox and outbox allows us to identify or link an action initiated at the source with its reception and processing at the destination.

And in the corresponding **Inbox**, you can see its reception, confirming that the action was received and is ready for further processing or review.

**Inbound Folder:** All Search Analyze + New Delete Save to File Delete All Clear Out All Card Grid Manual Import Archive Refresh ...

Template Source	Template Target	Date ↓	Time	Tenant Code Source	Tenant Code Target	Use-Make Equi...	Table Trig...	Run	Pro...	Suc...	Errors	Read	Inse...	Mo...	Deleted	Track	Is Res...
EXPORTITEMS	EXPORTITEMS	1/4/2024	9:19:11 AM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7	0	0	0	7	0	{26ba5ac3-e126-451d-8917-d5...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	1/4/2024	9:17:40 AM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7	0	0	0	7	0	{23a8905a-7b9e-4a44-8a69-94...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	1/4/2024	9:19:14 AM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	2	0	0	{5ad7c1ff-edf9-4fc9-8ab4-3cc4...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	1/4/2024	9:19:46 AM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	0	2	0	{243eff56-ac0d-4e09-b3fb-102...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	1/3/2024	6:43:32 PM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0	0	0	0	0	{318e4467-f626-4aa6-9120-93...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	1/3/2024	6:43:06 PM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	0	0	2	0	0	{85003297-d0be-4768-be90-8...	<input type="checkbox"/>
EXPORTITEMS	EXPORTITEMS	1/3/2024	6:42:59 PM	SANDBOXDEV3	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7	0	0	1	6	0	{bb673091-853e-4d85-8d1c-1...	<input type="checkbox"/>
EXPORTITEMS		12/31/2...	8:10:45 PM	MY TENANT	SANDBOXDEV	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	0	0	0	0	0	{60ea7828-1188-4c47-9abc-eb...	<input type="checkbox"/>

**Log** ▼

Record ID	Action	Success	Error Code	Error Description
Item: 1896-S	Modify	<input checked="" type="checkbox"/>		
Item Variant: 1896-S,METALLIC	Modify	<input checked="" type="checkbox"/>		
Item Variant: 1896-S,WOOD	Modify	<input checked="" type="checkbox"/>		
Item Reference: 1896-S,"",UDS,Customer,10000,REFIT-0001	Modify	<input checked="" type="checkbox"/>		
Item Reference: 1896-S,"",UDS,Vendor,10000,REFIT-0001	Modify	<input checked="" type="checkbox"/>		
Item Reference: 1896-S,"",UDS,Vendor,30000,456	Modify	<input checked="" type="checkbox"/>		
Item Unit of Measure: 1896-S,UDS	Modify	<input checked="" type="checkbox"/>		

The data sent consists of the records that have undergone changes (insertion, modification), regardless of any fixed filters in the base template. **When a template triggered by a webhook is processed, only the affected records are processed.**

The **Delete** action will only have an effect if the **Custom Template** within the group has the **'Use-Create Equivalences'** field enabled and if there is an existing equivalence between the deleted record at the source and a corresponding record at the destination.

**IMPORTANT:** the target template must grant deletion permission for the user created in the App installation and who will use the webhook (OE MANAGEMENT for example) and the check control 'Allow deletion (from external apps)' must be checked.

**RECOMMENDATION:** it is not recommended to abuse the webhooks to perform operations from Business Central to Business Central especially with some webhooks that involve detail lines (such as an invoice) both for the possible excessive consumption of resources and for some limitations intrinsic to the very nature of the operations (for example if you modify an invoice line and register the invoice immediately almost certainly the last modifications will not be transferred to a destination if so programmed).

For more detailed information, we recommend the video -> [https://youtu.be/VGfOKFDxUZ0?si=8Tv5NXADChMsho\\_c](https://youtu.be/VGfOKFDxUZ0?si=8Tv5NXADChMsho_c)