



Binary Lab Data Sync Add-on Manual

1. Overview

The **Data Sync Add-on** by **Binary Lab** is designed to automate and simplify data synchronization between companies within Microsoft Dynamics 365 Business Central (BC).

It enables users to configure synchronization profiles, monitor synchronization results, and analyse performance, all through a structured, user-friendly interface.

The add-on consists of three main functional areas:

1. **Data Sync Profile**
2. **Data Sync Log**
3. **Data Sync Cue**

2. Data Sync Profile

2.1 Purpose

The **Data Sync Profile** area is the heart of the Data Sync add-on.

It defines *what* data is synchronized and *from where*.

Each profile consists of one or more **Profile Lines**, which define specific synchronization rules for tables and fields.

2.2 Structure

Component	Description
Profile Header	Defines general information about the synchronization profile (e.g., profile code, description, source and enabled).
Profile Lines	Define which tables and fields to synchronize, along with filters and recorded counters.

2.3 Profile Lines Breakdown



Each **Data Sync Profile Line** contains several subsections:

a. Line Fields

This section defines which fields will be synchronized between companies.

Key Features:

- Fields can be specified manually or selected from a lookup.
 - Option to “Insert Default Fields” that are allowed for synchronization.
 - **Allow Field Triggers** (recommended): enables Business Central field triggers, allowing associated business logic to execute (e.g., validation, events).
 - **Field Status**: indicates if a field is no longer allowed for use (e.g., obsolete or removed in later versions).
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b. Line Filters

This section allows you to define **filters** to narrow down synchronization to specific datasets.

Examples:

- Synchronize only customers in a certain region.
- Synchronize only records updated after a specific date.

Key Features:

- Filters that are configured, require validation to ensure they are in the correct. After creating or modifying any filter, use “Validate Filters” to check the filters and mark them as validated.
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c. Line Counters

This area tracks the progress of synchronization by recording the last counter of the source data synchronized so it can pick up where it left off the last run time.

Key Features:

- **Sync Counter Field No.** – defines which field in the table will track the last record synchronized (e.g., Entry No.).
- Helps ensure that only new or updated records are processed.
- A custom counter field can also be specified for a table that is not yet supported by this Add-on.
- Counters can be preset to only synchronize new changes.
- Deleting existing Counters will force a once-off synchronization of all data

2.4 Profile Line Characteristics

Setting	Description
Table No.	Select the table to synchronize.
Sync Counter Field No.	The numeric field used to track the synchronization point.
Priority	Determines the order of processing between lines (lower number = higher priority). Use “Move Up” or “Move Down” to increase or decrease Priority.
Sync Action	Defines the synchronization behaviour: - <i>Insert and Update</i> : Creates new records and updates existing ones. - <i>Update Only</i> : Updates existing records without inserting new ones.
Allow Table Triggers	Determines whether Business Central’s table triggers should fire during synchronization. Recommended to keep this enabled to ensure data consistency.

3. Data Sync Log

3.1 Purpose

The **Data Sync Log** provides visibility into synchronization operations. It records the success or failure of each **Data Sync Profile** run.

3.2 Structure

Component	Description
Log Header	Displays general run information such as profile name, date/time, and status.



Component	Description
Log Lines	Detail-level results per profile line, listing tables processed, number of records synchronized, and any errors encountered.

3.3 Benefits

- Enables quick identification of failed or incomplete synchronizations.
- Useful for troubleshooting and audit purposes.
- Maintains a historical record of synchronization runs.

4. Data Sync Cue

4.1 Purpose

The **Data Sync Cue** provides managers with quick insight and performance analysis related to synchronization.

4.2 Features

- Available on all **Manager Role Centers** (Enable through personalize).
- Displays key performance indicators such as:
 - Enabled / Disabled Profiles.
 - Current synchronization errors.
 - Number of synchronizations.

These cues serve as an immediate health check for the Data Sync process.

5. Job Queue Setup

5.1 Purpose

The synchronization process is performed automatically via **Business Central Job Queues** using a dedicated codeunit.

5.2 Configuration Steps

- **Navigate to:**
Business Central → Job Queue Entries
 - **Create a New Job Queue Entry:**
 - **Codeunit ID:** 73045577
 - **Codeunit Name:** Data Sync Processing
 - **Description:** (optional) e.g., "Data Sync for Profile X"
 - **Set Parameters:**
 - **Parameter Field:** Enter the **Profile Code** that should run.
 - **⚠ Important:** The parameter value **must match the case** of the profile code exactly.
 - **Set Recurrence:**
 - Define how often the synchronization should occur (e.g., every 5 minutes, hourly, or daily).
 - Consider running times, recommended to run at times with the least number of users in the system or after hours.
 - **Multiple Job Queues:**
 - You can set up **multiple Job Queues** for different profiles.
 - Each queue can handle synchronization for a specific profile independently.
 - Consider the number of jobs required, the more you have, the more chance of table locking.
 - Group certain tables together into a job, preventing the same tables from overlapping and running on many jobs. (e.g., Vendor Profile = Vendor tables, Customer Profile = Customer tables etc.)
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6. Supported Tables

6.1 Purpose

A counter field is used on tables by Business Central so that the system knows where to pick up where it left off at the last synchronization and which data entries have been updated since and requires to be synchronized. The list of tables below is hand selected and are fully supported for data synchronization, this means that there is no additional effort required when setting these tables up for synchronization, as the necessary fields and logic is already present to just work seamlessly.



6.2 Table List

Table Name
Customer
Customer Posting Group
Customer Price Group
G/L Account
Item
Stockkeeping Unit
Vendor
Vendor Posting Group
Location
Resource
Unit Of Measure
VAT Business Posting Setup
VAT Product Posting Setup
VAT Posting Setup
Dimension
Dimension Value
Item Variant
Item Unit of Measure
Gen. Product Posting Group
Gen. Business Posting Group
Inventory Posting Group
Tariff Number

7. Supported Role Centers

7.1 Purpose

The Data Sync Cue is a tool used on all manager role centers to provide detailed information about what is happening during data synchronization. The Data Sync Cue is available on the below list below and can be enabled by personalizing the user's role center and activating the Data Sync cue by setting it to show.

7.2 Role Center List

Role Center Name
Accounting Manager Role Center
Administrator Main Role Center

Administrator Role Center
Business Manager Role Center
Finance Manager Role Center
Project Manager Role Center
Purchasing Manager Role Center
Resource Manager Role Center
Sales Manager Role Center
Security Admin Role Center
Service Manager Role Center
Warehouse Manager Role Center

6. Best Practices

- **Test Before Going Live:** Always test synchronization in a sandbox environment first.
- **Enable Field and Table Triggers:** Recommended for maintaining Business Central's built-in data integrity and logic.
- **Monitor Logs Regularly:** Use Data Sync Logs and Cues to ensure smooth operation.
- **Limit Data Volume:** Use Line Filters to optimize performance and avoid overloading the system.
- **Backup Regularly:** Maintain data backups before running large synchronizations in case of misconfiguration.

7. Troubleshooting

Issue	Possible Cause	Recommended Action
No data synchronized	Profile not Enabled Possible errors from misconfiguration	Enable Profile Check Logs for errors, rectify the issue.
Job queue not processing	Incorrect codeunit ID or disabled queue	Check job queue setup and ensure status is <i>Ready</i> .
Field error on synchronization	Obsolete or restricted field	Review the Field Status and remove or update fields.
Slow synchronization	Too many records or no filters applied	Apply data filters or increase job queue frequency.



8. Version Information

Detail	Information
Add-on Name	Data Sync
Publisher	Binary Lab (Pty) Ltd
Supported Product	Microsoft Dynamics 365 Business Central
Release Date	October 2025

9. Support

For assistance or custom configuration, contact:

Binary Lab (Pty) Ltd

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