M3 13.2 Configuration Guide for Infor ION

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Version Log

The version log describes the changes between versions of this document.

Part Number	Release Date	Description
1.0	2014-05	First version of this document, including installation instructions for installation and configuration of M3 BE BODs.
2.0	2014-10	Updated in support of additional and updated product-specific integrations and content.

Contents

About this guide

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Contents

This guide provides information on installing, configuring and customizing M3 BE Business Object Documents (M3 BE BODs) for the BOD-based integration between M3 and Infor applications using ION.

It also describes the integration requirements and provides setup instructions specific to M3, including configuration guidelines for incoming and outgoing partner agreements.

M3 13.2 BOD deliverables for ION

In the product offering M3 13.2, the BODs delivered in M3 BE BODs version 15.3.0.0 enables integrating M3 Business Engine version 15.1.2 with Infor ION version 11.x.

Knowledge Prerequisites

Installing and configuring M3 BE BODs should be performed by consultants who have previous experience in the following products (listed in the order of priority):

- configuring messages in M3 Enterprise Collaborator (MEC)
- using MEC Partner Administration Tool
- installing and configuring applications in the Infor ION Grid
- installing and configuring the M3 Business Engine and M3 Foundation

Overview

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What is M3 BE BODs?

M3 Business Engine Business Object Documents (M3 BE BODs) is a solution that is designed to achieve a standardized interoperability between systems within a company's infrastructure. M3 BE BODs are based on an Infor standardized subset of the architecture set by Open Application Group Integration Specification (OAGIS). A BOD contains a pre-defined business message structure as well as information to tell the receiver what data that is included. The BOD structure also allows for a standardized two-way communication between sender and receiver to be able to communicate status and error conditions. Thanks to the use of this global architecture, Infor achieves a common understanding of both usage and content of the created BODs. Systems that has adopted the standard can easily be integrated to each other without the need for the, otherwise normally needed, modifications and projects to create the technical integration.

An Infor system, that has adopted this standard, uses Infor ION as the common mechanism to transport BODs throughout the company infrastructure. This means that any system connected to ION can listen to BODs sent by any other system, and in this way it can be synchronized easily with the item information which is controlled by another system (that is the System Of Record (SOR)). Thanks to the use of the standardized transportation, none of the systems that consume or create BODs need to be aware of the other participants of the infrastructure. This none-awareness not only eliminates a large hurdle in achieving an integration that otherwise requires a large project to solve, but also simplifies the effort to integrate systems.

M3 BE BODs use Event Hub to trigger and receive data from M3 Business Engine to M3 Enterprise Collaborator (MEC). MEC uses the event data to create BODs that are sent to ION. BODs sent from ION are detected in MEC and sent to M3 BE via API transactions.

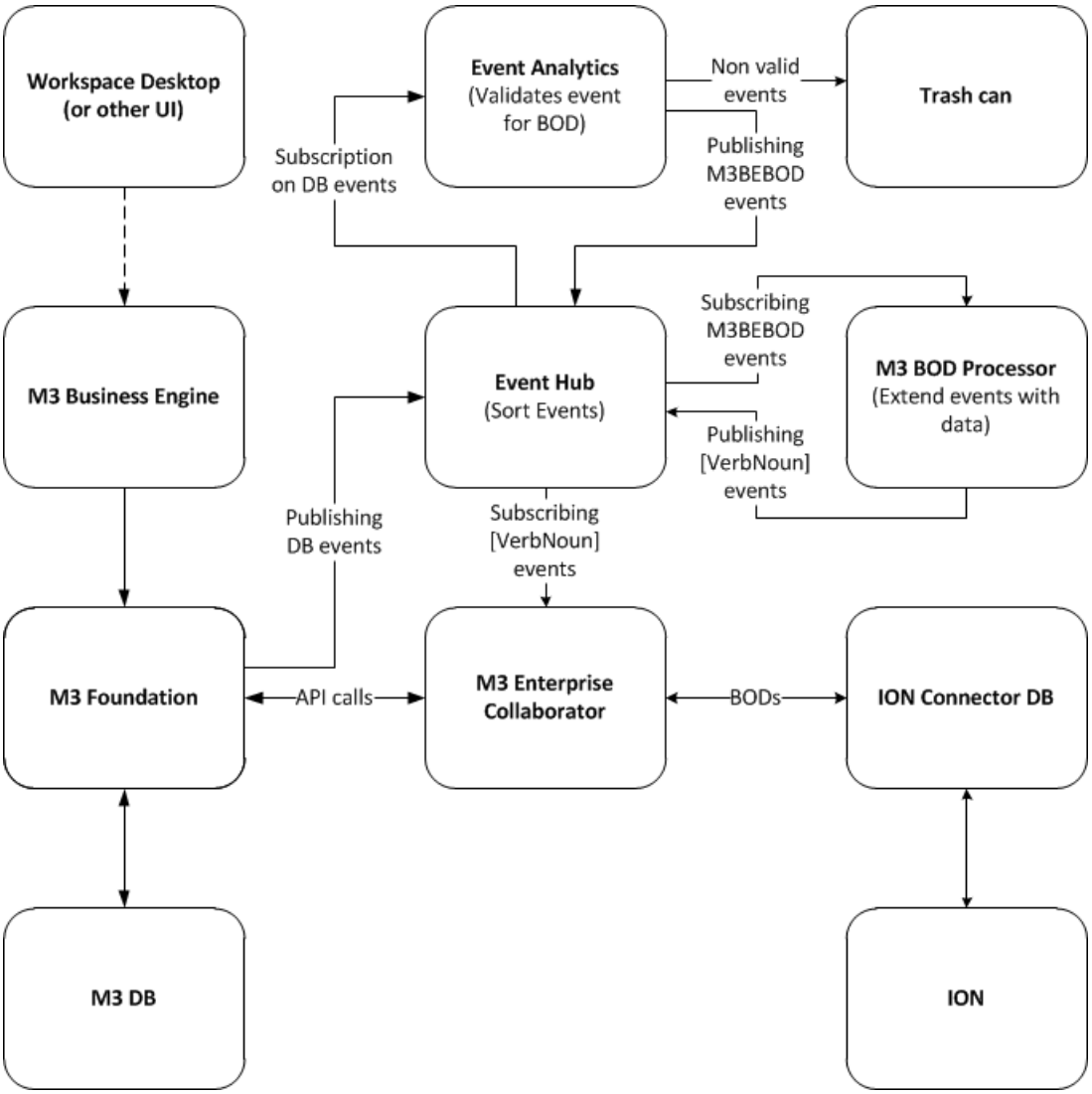
System requirements

The following software components must be installed before installing this product. For the complete list of required software components and fixes, refer to the *M3 Business Engine BODs Release Notes*.

Component	Notes
M3 Business Engine	For detailed information, refer to *M3 Business Engine and M3 Foundation Installation Guide*.
M3 Foundation	For detailed information, refer to *M3 Business Engine and M3 Foundation Installation Guide*.
Infor ION Grid	For detailed information, refer to *Infor ION Grid Installation Guide*.
Event Hub	For detailed information, refer to *Infor ION Grid Extensions Installation Guide*.
M3 Enterprise Collaborator	For detailed information, refer to *M3 Enterprise Collaborator Server and Client Tools Installation Guide*.

Architectural overview and data flow

The flow diagram below shows the different application components that are involved in handling BODs from M3 Business Engine to ION and back.



The BOD outbound data flow is based on events. An event represents predefined data. The Event Hub is the central place where all events are directed to its subscribers. The events from M3 Foundation can be based on program or table operators (Start, Exit, Fail, Create, Update, Delete, Request or Response), while M3 BE BODs are based on table changes.

To trigger events from a specific database table a rule in Event Analytics is created. A rule is always placed in a rules session. When the rule is activated and the rule session started, events get published by M3 Foundation and are subscribed by Event Analytics. If the criteria (such as a specific status or a field with matching value) in the rule are valid, a new event called M3BEBODs is published. Non-valid events are deleted.

The M3BEBOD event contains data from the M3 DB event and the following additional fields:

- BODNoun - including the name of the noun
- BODVerb - including the verb name
- findDIVI - including information for the M3BODProcessor how to handle the event.

The available values are NOLOOKUP, ALL, FACI and WHLO.

The M3BODProcessor is the subscriber of all M3BEBOD events. All events will be re-published where M3BODProcessor will be the publisher and the event document name will be the verb in BODVerb combined with the noun in BODNoun. Based on the value in findDIVI, the M3BODProcessor will perform one of the following steps:

- NOLOOKUP – do nothing
- ALL – one event per DIVI for the CONO in the event will be created
- FACI – based on FACI value in the event the DIVI value will be added
- WHLO – based on WHLO value in the event the DIVI value will be added.

The subscriber of the VerbNoun events from M3BODProcessor is MEC. Detection in MEC is based on the target group AnalyticsHubValue01 that contain targets (publisher, event document name, element name 01 and element value 01) for the event. To trigger a specific M3 BE BOD Partner Agreement in MEC, the following requirements must be met:

- the publisher has to be M3BODProcessor
- the event document name has to match the specific BOD name in the agreement
- the element name 01 has to be CONO
- the element value 01 has to match the CONO that is BOD enabled.

After subscribing to the VerbNoun events, several process steps needs to be performed in the agreement. There are different process steps available for BOD Verbs as described in "Managing partner agreements when M3 BE is SOR" on page 46, but the following common steps are available for all outbound BODs:

- XML transform

  Data is fetched from M3 BE via API:s and compiled to a XML file.

- Apply Envelope

  This process packages the XML-data in a BOD format.

- Send

  This process sends the BOD to the ION Connector DB. ION will fetch the data from the ION Connector DB and will process it on.

Inbound BODs are sent from ION to ION Connector DB where MEC fetches BODs from. Each inbound noun has its own target and target group which detects on the tenantID in the BOD xml. The value in the detection has to match the tenant value. After detection is completed, there are some process steps to follow (for an inbound ProcessBOD there is additional steps that send an AcknowledgeBOD back to ION) but the most common is the XML transform which uses APIs to add data to M3 BE.

Process Overview

Use this check-list as a guide to the required steps for installing M3 BE BODs.

1. Go through the Pre-installation checklist
2. Download the software package as described in Downloading M3 BE BODs
3. Install the M3 BE BODs as described in "Installing M3 BE BODs in LifeCycle Manager " on page 14
4. Install rulespack archive as described in Installing the rulespack archive
5. Import M3 BE BODs in the MEC Partner Administration Tool as described in Importing M3 BE BODs
6. Complete the additional settings in M3 BE as described in "Post Installation" on page 25.

Configuring M3 BE BODs

The following list includes the possible configuration options for M3 BE BODs:

- For creating XML targets and XML target groups, see the following sections:

  "Creating XML Targets for Outbound Messages" on page 35.

  "Creating XML Target Groups for Outbound Messages" on page 36.

  "Creating XML Targets and Target Groups for Inbound Messages" on page 37.
- To set up MECEventHubSubscriber channels for sending and receiving messages, see the following sections:

  "Set up new receive channels" on page 39.

  "Set up New Send Channels" on page 42.
- To set up EventHub Subscriptions and define the process order for incoming BODs, see "Creating EventHub subscriptions " on page 43
- To create folder structure, see .
- To set up Partner Agreements that you are planning to use in your integration scenario, see the following sections:

  "Managing partner agreements when M3 BE is SOR" on page 46.

  "Managing partner agreements when M3 BE is not SOR" on page 52.
- To set up data translation in CRS882 in M3 BE, see "Entering or editing translation data" on page 30.

  Note: Data translation is not needed when the M3 BE data is entered according to internationally acknowledged standards (ISO, X-12 EDI, etc.).

- If you need to populate data for another system connected to ION, you will need to set up initial load for M3BE_Out_Show BODs. For instructions, see "Data Export via M3 BE BODs: Initial Load Scenario" on page 59.

Installing M3 Business Engine BODs

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Pre-installation checklist

Use the following verification checklist before start installing M3 BE BODs in the M3 Enterprise Collaborator (MEC) Mapping Manager.

- Verify your Partner Administration Tool. For further information, refer to the *M3 Enterprise Collaborator Server and Client Tools Installation Guide*.
- Verify that you have EventHub 2.x installed.

  For further information on EventHub installation, refer to the Grid Extensions Installation and Administration Guide, available on InforXtreme.
- Verify that the M3 user **SVCM3BOD** is created and has user access to all M3 BE Company, Division, Warehouse and Facilities information. To add user access to **SVCM3BOD**, choose Related Options > Update user in M3 BE.
- It is required that M3 BE, MEC, EventHub are installed on the same Grid Instance and are in status Started.

Downloading M3 BE BODs

The following components available on the download page will be required for your installation.

Important: All content files in current version will be removed during the installation.

Download page	Product name	Contains
M3 Business Engine BODs	M3BE_BODs_Content_[ver].zip	M3BE_BODs_rulespack_archive_[ver].zip M3BE_BODs_MEC_data_[ver].agr overrides.xml
	M3BE_BODs_[ver].zip	LCM package including M3BODProcessor

Note: You need to unzip the Content file before proceeding with the installation.

Installing M3 BE BODs in LifeCycle Manager

Use these instructions to install the M3 BE BODs package created for LCM 10.x.

The M3 BE BODs package contains the Grid application M3BODProcessor and enables the installation of rulespack archive into Event Analytics. The M3BODProcessor subscribes on events from Event Analytics, enhances and publishes them via Event Hub to MEC. The rulespack archive (part of the M3BE_BODs_Content file) filters events that are valid as BODs.

For a complete description of data flow, refer to "Architectural overview and data flow" on page 9.

Before you start To use the installation wizards, the user running LifeCycle Manager Client must be a member of the LifeCycle Manager administrator's group.

❑ Upload the installation file to LifeCycle Manager

___1 Log on to LifeCycle Manager as administrator.

___2 On the LifeCycle Manager menu, click Admin > Upload Products.

___3 On the Manage Products page, click Upload.

___4 Locate the folder containing the downloaded product package and select the installation zip.

___5 Click Open. A dialog box appears showing the progress.

___6 On the Verifying package window, click Yes to accept to register the packages on the LifeCycle Manager Server.

___7 When the task is finished, a dialog box appears. Click OK.

___8 When prompted, click Yes to update your client.

___9 When the update is done, click OK to restart the client.

__10 Log on again.

❑ Install the file

___1 In LifeCycle Manager, locate the Grid instance where you want to install the product.

___2 Right-click the Grid instance > Install Product.

___3 On the Install window, select the product version and click Next.

___4 On the **Location** window:

- Select the Grid instance where you want to install M3 BE BODs.

  Important: It is recommended to install the product on the same Grid instance as M3 Business Engine, MEC, and EventHub.

- Select an unoccupied **HTTPS port** number on the host.
- Select **Validate SVCM3BOD user**, and specify the name and the password for any MNS150 user to complete the validation.
- If the M3 BE is not started, select the "Start M3 BE Environment" check box.

Click **Next**.

Once installation is done, the product should appear in status Started in the list of Grid applications.

Installing the rulespack archive

Proceed with the following steps to install rules packages in Event Analytics.

Important: Already existing rules will be overwritten by this process.

1. Log on to LifeCycle Manager as administrator.
2. Locate the Grid instance where EventAnalytics is installed.
3. Right click the EventAnalytics installation and select **Install Rules Packages**.
4. In the **Tasks** dialog, select **Upload a rules pack archive to the LifeCycle Manager Server** and click **Next**.
5. On the **Local rules pack archive** dialog, click **Select** and browse to the M3BE_BODs_rulespack_archive_[ver].zip file to upload it to the LifeCycle Manager Server. Click **Open** and click **Next**.
6. On the **Verifying package** dialog, choose **Yes** to register the rules pack archive file on the LifeCycle Manager Server.
7. Click **OK** when the **Registration successful** dialog appears.
8. On the **Rules pack archive information** dialog, select the M3BE_BODs_rulespack_archive_[ver] rules pack archive from the drop down list. Click **Next**.

9 On the Summary page, review the information and click **Finish**.

10 When the installation is successfully completed, click **OK** or click **View log**.

Important: The rules sessions are stopped by default. You need to start the rules session when you want to use it.

Importing M3 BE BODs

You can export and import partner agreements and components related to the agreements from MEC. The M3 BE BODs use export to create a MEC data file that can be imported into the MEC Partner Administration Tool.

Important: Infor recommends that you import the M3 BE BODs MEC data files into a clean MEC database, created according to *M3 Enterprise Collaborator Server and Client Tools Install Guide*.

❑ Before you start

___1 In MEC Partner Administration Tool, go to **Manage > Communication > M3 API** and create a valid M3 API reference to the M3 BE environment to get metadata from M3 Business Engine.

Name this M3 API reference as 'Import Use'. This instance will be used only during the import.

___2 The import file contains detections when CONO = 001. To detect BODs from another company number, you can

- make edits manually after import is completed for all agreements, or
- edit the overrides.xml and change **<value>replace me</value>** to the desired CONO value in the following line:

  <name>hub:5_elementvalue01</name>

  <value>replace me</value>

  <mandatory>true</mandatory>

  Important: CONO value for noun Person must be 0 and should not be changed.

❑ Importing M3 BE BODs

The M3 BE BODs agreement file, that includes for example mappings and channels, can be imported to the root or to any available folder in the Agreement View of the MEC Partner Administration Tool.

___1 From the Agreement View in MEC Partner Administration Tool, select or create the folder where you want to import the M3 BE BODs

___2 Right-click the folder and select **Import agreement/group**.

___3 Browse to the M3BE_BODs_MEC_data_[ver].agr file in the M3BE_BODs_Content file and click **Open**.

___4 When the question 'Apply Agreement Overrides' is prompted, select **Yes**.

___5 Browse for the overrides.xml file. Click **Open**.

___6 In the **Import Agreement** dialog, review the information and click **Ok**.

❑ Update and validate after import

Proceed with the following steps in the MEC Partner Administration Tool when importing M3 BE BODs are completed:

RemoveAfterImport

___1 Remove the agreements in the folder **removeAfterImport**, and the folder itself.

Update and validate receive channels for IONDbIn and EventHub Subscriber

___2 Go to **Manage > Communications > Receive tab** and select the receive channel to be modified for

- ION_In_<m3be_env_name>_NonOrdered
- ION_In_<m3be_env_name>_Ordered
- M3_In_<m3be_env_name>_NonOrdered
- M3_In_<m3be_env_name>_Ordered

___3
- For channel type **Event Hub Subscriber** only the name should be updated.
- For channel type **IONDbIn** the following properties should be updated

Name	Replace <m3be_env_name> with a name for your environment.
ConnectionUri	Replace <host:port> and <ion_connector_db_name> with applicable values for connecting to the ION inbox/outbox database.
Password	Replace <ion_connector_db_pwd> with the password for the user connecting to the ION inbox/outbox database.
Username	Replace <ion_connector_db_user> with the applicable username for connecting to the ION inbox/outbox database

Update and validate send channel for IONDbOut

___4 Go to **Manage > Communications > Send tab** and select the send channel to be used for the ION outbox configuration *(ION_Out_<m3be_env_name>)*

___5 Update Name, Description, Connection URI, Username, Password, From Logical Id and Tenant Id.

Update and validate the M3 API reference used in the XML transform process

___6 Go to **Manage > Communications > M3 API tab** and select the M3 API reference used in M3 BE BODs agreements *(M3BE_<m3be_env_name>)*.

___7 Update Name, Host, Port, User and Password

Update the Control Properties on folder level

___8

Applicable for Folders	Control Properties Name	Value
InitialLoad Application	ionToLogicalId	Change Value to the lid for the receiving application. Value is according to ION Connection Point lid://infor.[application name].[environment name] **Important:** This value is case sensitive and must exactly match the Logical ID value in ION Connect.
M3BE	ionFromLogicalid	lid://infor.m3be.[BE environment name]

Update detection on all inbound partner agreements

___9 In the folders Application and ION, update all agreements for incoming BODs (which starts with M3BE_In) with correct tenantID on Target Value for Detection.

To update a detection, select a partner agreement and go to the **Detection** tab.

❑ Review detection order

When importing M3 BE BODs is finished, the detections are added to the bottom of the detection order. To make sure the agreements are detected in the required order, go to **Manage > Detection > Detection Order** in MEC Partner Administration Tool and rearrange the detections.

Enabling the agreement changes in the MEC server

The imported channels and mappings must be enabled in the MEC server.

❑ Activate the mappings

___1 Navigate to MEC Server > Management Pages > Server > Mappings.

___2 Locate the imported maps.

___3 Under the Action column, click Activate.

Note: You can activate multiple mappings at the same time by clicking "Activate All Inactive" in the top menu.

❑ Restart the MEC server application

Restart the MEC server application after modifying an agreement or communication channel for changes to take effect.

Upgrading M3 Business Engine BODs

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Infor primarily recommends that you import the M3 BE BODs MEC data files into a clean MEC database, created according to *M3 Enterprise Collaborator Server and Client Tools Install Guide*.

The reason for recommending a clean installation is that there might have been changes in both mappings and agreements between versions. M3 APIs metadata may also be updated.

Using new M3 BE BODs on earlier MEC agreements requires careful review on agreement level.

This chapter describes how to install the new version of M3BE BOD in parallel to an older version.

Installing the new version

Follow these instructions:

- "Pre-installation checklist " on page 13
- "Downloading M3 BE BODs" on page 13

After downloading the deliverables, return to this chapter for further upgrade instructions.

Upgrading Event Analytics rules

Upgrade the rules in Event Analytics by installing the new versions of the applicable packages in the same location as the existing rules packages. Already existing rules will be overwritten by this process.

Proceed with the following steps to upgrade each applicable rules package in Event Analytics:

1 Extract "M3BE_BODs_Content_15.3.0.zip" to a temporary folder.

2 Extract "M3BE_BODs_rulespack_archive_15.3.0.zip" to a temporary folder. All individual rules session (files with .rulespack extension) are extracted.

3 In the Infor ION Grid, open the Grid management pages and click the link to EventAnalytics management pages.

4 Open the Management Pages for Event Analytics and click the link Rules Package.

5 Browse to the folder where the extracted Rules Packages are located. Select the rules package (with extension name of .rulespack) to install, and click Install selected file.

After the installation is complete, the installation results are shown

6 To install additional rules packages, navigate to Event Analytics Management pages and repeat the installation process.

7 To verify the installation, navigate to the Event Analytics application. The installed rules packages are displayed as individual sessions.

Importing M3 BE BODs for upgrade

You can export and import partner agreements and components related to the agreements from MEC. The M3 BE BODs use export to create a MEC data file that can be imported into the MEC Partner Administration Tool.

❑ Before you start

___1 In MEC Partner Administration Tool, go to **Manage > Communication > M3 API** and create a valid M3 API reference to the M3 BE environment to get metadata from M3 Business Engine.

Name this M3 API reference as 'Import Use'. This instance will be used only during the import.

___2 The import file contains detections when CONO = 001. To detect BODs from another company number, you can

- make edits manually after import is completed for all agreements, or
- edit the overrides.xml and change **`<value>replace me</value>`** to the desired CONO value in the following line:

  `<name>hub:5_elementvalue01</name>`

  `<value>replace me</value>`

  `<mandatory>true</mandatory>`

  Important: CONO value for noun Person must be 0 and should not be changed.

Important: To utilize the new agreements in a upgrade scenario, the CONO stated for detection must be unique as compared to existing agreements. Agreements that are imported with the same CONO as an existing agreement are broken.

❑ Importing M3 BE BODs for upgrade

The M3 BE BODs agreement file, that includes for example mappings and channels, can be imported to the root or to any available folder in the Agreement View of the MEC Partner Administration Tool.

___1 From the Agreement View in MEC Partner Administration Tool, select or create the folder where you want to import the M3 BE BODs.

Important: The default name of the imported top folder is M3BE. If there already is a folder with this name on the level where you are importing the BEBODs, rename the existing folder before you proceed with the import.

___2 Right-click the folder and select **Import agreement/group**.

___3 Browse to the M3BE_BODs_MEC_data_[ver].agr file in the M3BE_BODs_Content file and click **Open**.

___4 When the question 'Apply Agreement Overrides' is prompted, select **Yes**.

___5 Browse for the overrides.xml file. Click **Open**.

___6 In the **Import Agreement** dialog, review the information and click **Ok**.

❑ Update and validate after import for upgrade

Importing M3 BE BODs agreement file a second time or more to the same MEC database creates duplicates of some entities. It is important that these are removed, or renamed, depending on the entity, to ensure a working environment.

Remove After Import

___1 Remove the agreements in the folder **removeAfterImport**, and the folder itself.

Update and validate receive channels for IONDbIn and EventHub Subscriber

Importing the M3 BE BODs agreement file a second time or more in same MEC database creates new Receive communication channels for EventHub Subscriber (one ordered and one non-ordered). Any duplicate receive channels of the type EventHub Subscriber must be removed, otherwise MEC will subscribe to the same M3 event multiple times and generate unnecessary multiple BODs.

___2 Go to **Manage > Communications > Receive tab**.

___3 Remove duplicate EventHub Subscriber channels:

- MEC-M3_In_<m3be_env_name>_Ordered
- MEC-M3_In_<m3be_env_name>_NonOrdered

___4 Update these properties for the IONDbIn channels:

- ION_In_<m3be_env_name>_NonOrdered
- ION_In_<m3be_env_name>_Ordered

Name	Replace <m3be_env_name> with a name for your environment.
ConnectionUri	Replace <host:port> and <ion_connector_db_name> with applicable values for connecting to the ION inbox/outbox database.
Password	Replace <ion_connector_db_pwd> with the password for the user connecting to the ION inbox/outbox database.
Username	Replace <ion_connector_db_user> with the applicable username for connecting to the ION inbox/outbox database

Update and validate send channel for IONDbOut

___5 Go to Manage > Communications > Send tab and select the send channel to be used for the ION outbox configuration (ION_Out_<m3be_env_name>)

___6 Update Name, Description, Connection URI, Username, Password, From Logical Id and Tenant Id.

Update and validate the M3 API reference used in the XML transform process

___7 Go to Manage > Communications > M3 API tab and select the M3 API reference used in M3 BE BODs agreements (M3BE_<m3be_env_name>).

___8 Verify Name, Host, Port, User and Password.

Update the Control Properties on folder level

___9

Applicable for Folders	Control Properties Name	Value
InitialLoad Application	ionToLogicalId	Change Value to the lid for the receiving application. Value is according to ION Connection Point lid://infor.[application name].[environment name] **Important:** This value is case sensitive and must exactly match the Logical ID value in ION Connect.
M3BE	ionFromLogicalid	lid://infor.m3be.[BE environment name]

Update detection on all inbound partner agreements

__10 In the folders Application and ION, update all agreements for incoming BODs (which starts with M3BE_In) with correct tenantID on Target Value for Detection.

To update a detection, select a partner agreement and go to the **Detection** tab.

❑ Review detection order

When importing M3 BE BODs is finished, the detections are added to the bottom of the detection order. To make sure the agreements are detected in the required order, go to **Manage > Detection > Detection Order** in MEC Partner Administration Tool and rearrange the detections.

❑ Review broken agreements

If there are broken agreements after import, this usually means that the detection was incorrect for the agreement.

___ Manually correct detection for the relevant agreements.

Connecting new mappings to existing agreements

You can use new mappings in combination with the existing agreements.

Important: Using new M3 BE BODs on earlier MEC agreements requires careful review on agreement level.

If you want to use the existing agreements and update them with the new imported mappings, you must manually compare and consider any differences between the existing agreements and the new version of the agreements from for example these aspects:

- Processes
- Process steps
- Control properties

Post Installation

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Additional M3 Business Engine Settings

❑ Additional settings for Customer master data BODs

Complete the following steps in order to receive and process the following partner agreements:

- M3BE_In_ProcessCustomerPartyMaster
- M3BE_In_ShipToPartyMaster
- M3BE_In_BillToPartyMaster
- M3BE_In_PayFromPartyMaster

___1 In M3 BE, create the new customer IONCUST in **CRS610** with the following settings:

Customer Type = 0

___2 Fill in all mandatory fields and make sure that status is set to 20.

Important: Do not add an Invoice recipient (INRC) or Payer (PYNO) in CRS610/J-panel.

❑ Additional settings for incoming Sync BODs

Complete the following steps in order to receive and process M3BE_In_SyncBODs

Important: These settings are only valid for the following BODs:

- M3BE_In_SyncReceiveDelivery
- M3BE_In_SyncShipment
- M3BE_In_SyncInventoryHold
- M3BE_In_SyncInventoryAdjustment

___1 In M3 BE, create a message partner in **MMS865/B**.

Whs	Leave blank
Msg	Set to I
Partner	Set to the application id of the system that sends the BOD, e.g. WM
Msg type	BOD

Select **Options > Create**.

___2 In **MMS865/E**, populate **300 Partner manager** with a valid user entry.

___3 In MEC Partner Admin Tool, go to partner agreement for the specific M3BE_In_Sync BODs.

In **Basic tab > Control Properties**, verify that the control property **m3beWarehouseInterfaceProcessFlag** has one of the following values:

Value	Description
*AUT	Message is executed in an asynchronous mode via a batch job. This setting is recommended for high volume environments. Users can find, correct and re-execute failed messages in MHS850 and can also use the mailbox functionality in M3 BE to be notified when a message fails. **Note:** Error messages are not be returned by the API.
*EXE	Message is executed interactively in M3 BE.

Important: Control properties enable messages to be executed online or via batch jobs in M3 BE. Leaving the control properties value blank means that the user must manually execute the messages via option 21 in MHS850/MMS850.

___4 Click **Save**.

❑ Additional settings for LoadAdvanceShipNotice

Complete the following steps in order to receive and process M3BE_In_LoadAdvanceShipNotice.

Important: These settings only valid for M3BE_In_ LoadAdvanceShipNotice.

___1 In M3 BE, create a message partner in **MMS865/B**.

Whs	Leave blank

Msg	Set to I
Partner	Set to the name of the system that sends the LoadAdvanceShipNotice. Currently, only SW is valid.
Msg type	BOD

Select **Options > Create**.

___2 In **MMS865/E**, populate **300 Partner manager** with a valid user entry and verify the following values:

Msg direction	I-Input
Partner	SW
Msg type	BOD

___3 In MEC Partner Admin Tool, go to partner agreement for M3BE_In_LoadAdvanceShipNotice.

In **Basic tab > Control Properties**, verify that the control property **m3beWarehouseInterfaceProcessFlag** has one of the following values:

Value	Description
*AUT	AdvanceShipNotice is created in an asynchronous mode via a batch job. This setting is recommended for high volume environments. Users can find, correct and re-execute failed messages in MHS850 and can also use the mailbox functionality in M3 BE to be notified when a message fails. **Note:** Error messages are not be returned by the API.
*EXE	MHS850MI is executed and the AdvanceShipNotice is created in M3 BE.

Important: Control properties enable messages to be executed online or via batch jobs in M3 BE. Leaving the control properties value blank means that the user must manually execute the messages via option 21 in MHS850.

___4 Click **Save**.

❑ Additional settings for ProcessItemMaster

Complete the following steps in order to receive and process M3BE_In_ProcessItemMaster.

Important: These steps are only valid for M3BE_In_ProcessItemMaster.

___1 In M3 BE, create an item type in CRS040.

Create Template Item (MMS001/MMS002/MMS003) and Item Numbering rule (MWS050 and MWS051) with valid data. The item type should be set with status 10 in CRS040/E

Important: The field **Item interface controlled** has to be enabled in CRS040/E.

___2 In **MMS865/B**, use the following settings:

Whs	Leave blank
Msg	Set to I
Partner	The value should be set to the Infor application id (retrieved from the logical id) in upper case. For example if the Logical id is: infor.plmprocess.sestw481, the application id will be plmprocess in upper case (PLMPROCESS).
Msg type	Set to BOD

Select **Options > Create**.

___3 In **MMS865/E**, use the following settings:

Partner manager	Set to the M3 user that is managing the partner settings for this record
Default Item type	Set to the item type that will control which data is the default per item and how the item numbering is done.

___4 In MEC Partner Admin Tool, go to partner agreement M3BE_In_ProcessItemMaster.

In **Basic tab > Control Properties**, verify the following Control Properties

- **m3beItemInterfaceProcessFlag**

  This Control Property enables messages to be executed online or via batch jobs in M3 BE.

  The available values for **m3beItemInterfaceProcessFlag** are the following:

Value	Description
blank	Data is only added. Validation and import to M3 is done manually.
*VAL	Data is added and validated. Import to M3 is done manually.
*IMP	Data is validated and, if there are no validation errors, imported to M3.
*AUT	Same as *IMP, but the processing is done via auto job MHS250.

- **m3beLotControlMethod**

  This optional control property can be used to set the M3 BE field Lot control method (MITMAS.MMINDI) when creating new items using ProcessItemMaster.

  The control property is only considered if the incoming ProcessItemMaster BOD has either the element <SerialControlIndicator> or the element <LotControlIndicator> set to true.

  - If the control property is missing, M3 BE field Lot control method is set according to these rules:
    - If <SerialControlIndicator> element is true - M3 BE Lot control is set to 2.
    - If <SerialControlIndicator> element is false or missing, and <LotControlIndicator> element is true - M3 BE Lot control is set to 3.
  - If the control property is set, M3 BE field Lot control method is set according to these rules:
    - If m3beLotControlMethod is 1 or 3 AND <LotControlIndicator> element is true AND <SerialControlIndicator> is set to false or missing - M3 BE Lot control is set to 1 or 3 respectively
    - If m3beLotControlMethod is 2 or 5 AND <SerialControlIndicator> is set to true - M3 BE Lot control is set to 2 or 5 respectively

___5 Click **Save**.

❑ Additional settings for ProcessPulse BODs

It is possible to publish the M3 Business Engine application messages to ION Pulse. Currently, enabled application messages can be published either as a ProcessPulseAlert or as a ProcessPulseNotification.
Complete the following steps for each application message you want to publish as a ProcessPulse BOD.

___1 In M3 Business Engine, open 'M3 Settings - application messages' (CRS424), select the application message, select Change, and click Next.

___2 In CRS424/E, select the check box "Activity code" to enable the application message within M3 BE.

___3 Select the check box "BOD enabled" to enable the application message to be published as a ProcessPulse BOD.

___4 In BOD msg type, select if the application message should be published as Alert or Notification, and click Next.

Note: Publishing application messages as tasks is currently not supported.

___5 Log on to Infor Federation Services on Infor ION, go to **Manage > Users > View User Details**, and verify that the field **Person** is populated with the M3 Business Engine user ID from MNS 150.

M3 Business Message Data Translations Settings

M3 Business Message Data Translations is a function that translates soft coded M3 BE data to standards that can be understood by external systems, such as ION.

Note: Data translation is not needed when the M3 BE data is entered according to internationally acknowledged standards (ISO, X-12 EDI, etc.).

You can set M3 Business Message Data Translations in CRS881 and CRS882 in M3 BE.

- CRS881 stores the header data for information that should be translated. This is generated via MBMTRNUpdate in MEC Utilities client, available from your MEC installation.
- CRS882 stores the actual translation data. The date must be manually entered into M3 BE.

Entering or editing translation data

Follow these steps below to set up data translation in CRS882 in M3 BE.

For data that is valid for the entire M3 BE company, data must be entered in company / *blank division. If data is different per division, enter data for specific company / division.

Important: The translation data information must be entered for the correct company/division.

Before you start Set up the ecUtilClient.properties with the connection details towards the MEC DB. For further instructions, refer to the *M3 Enterprise Collaborator Administration Guide*.

1 Run the MEC client tool MBMTrnUpdate.cmd for the valid API reference to generate CRS881 with correct header data.

2 Open CRS881 and filter on **Msg standard** ION to show all possible records generated from the delivered BODs.

Message	I/O	Parent element	Data element
AdvanceShipNotice	I	AdvanceShipNoticeHeader	TransportationMethodCode
AdvanceShipNotice	I	ShippingMaterial	ID
AdvanceShipNotice	O	AdvanceShipNoticeHeader	TransportationMethodCode
BillofMaterials	I	BillOfMaterialsHeader/ status	Code
ChartOfAccounts	O	ChartOfAccounts	DebitCreditFlag
Generic	O	Generic	companyBankAccountFieldType
Generic	I	Generic	UOMCode
Generic	I	Generic	CountryCode
Generic	I	Generic	accountingEntity
Generic	O	Generic	CountryCode
Generic	O	Generic	Currency
Generic	O	Generic	IncotermsCode
Generic	O	Generic	TenantID
Generic	O	Generic	UOMCode
Generic	O	Generic	accountingEntity
Generic	O	Generic	languageCode

3 Select and right-click a business message and choose Related Options > Translate CTRL+11.

CRS882 opens.

4 In CRS882/B1, enter the M3 BE data and Message Data

5 Click "Create" or select Options > Create

- For **Translation of Accounting Entity**, you can add one record for each of the divisions you want to translate in CRS882-panel for Company / *blank division.
    - The M3 BE data field should contain the M3 division.

- The Message data field should contain the accounting entity.

  Warning: Infor does not recommend translating accounting entity. By default, accounting entity is set to CONO_DIVI (for example 780_AAA). This is required for drillback links in Ming.le Alerts and Tasks. Translating an accounting entity to anything else will corrupt the drillback links.

- For **Translation of Language Codes**, add one record for each of the languages you want to translate in CRS882-panel for Company / *blank division.
  - The M3 BE data field should contain the M3 language code.
  - The Message data field should contain the corresponding language code according to RFC 1766 standard (for example en-US).
- For **Translation of Unit Of Measures**, add one record for each of Unit of Measures you want to translate in CRS882-panel for Company / *blank division.
  - The M3 BE data field should contain the M3 BE Unit of Measure.
  - The Message data field should contain the corresponding Unit Of Measure Code according to X-12 EDI standard.

  Note: Unless all applicable integrated systems are set up to use the same set of Unit Of Measures, data translation settings must be performed for both incoming and outgoing messages
- For **Translation of Country Codes**, add one record for each country code you want to translate in CRS882-panel for Company / *blank division.
  - The M3 BE data field should contain the M3 BE Unit of Measure.
  - The Message data field should contain the corresponding Country Code according to ISO 3166-1 standard.

  Note: Unless all applicable integrated systems are set up to use the same set of Country Codes, data translation settings must be performed for both incoming and outgoing messages
- For **Translation of Currency**, add one record for each Currency you want to translate in CRS882-panel for Company / *blank division.
  - The M3 BE data field should contain the M3 BE Currency.
  - The Message data field should contain the corresponding Currency code according to ISO 4217 standard.
- For **Translation of Transportation Method**, add one record for each of the Transportation Methods you want to translate in CRS882-panel for Company / *blank division.

- The M3 BE data field should contain the M3 BE Delivery Term (defined in CRS065).
- The Message data field should contain the corresponding Transportation Method according to Incoterm standard.

  Note: It's recommended to set up the delivery terms according to Incoterms in M3. In that case, no translation is needed. Otherwise data translation settings must be performed for both incoming and outgoing messages.

- For **Translation of Shipping material**, add one record for each of the Shipping Materials you want to translate in CRS882-panel for Company / *blank division.
  - The M3 BE data field should contain the M3 BE Packaging type (defined in MMS050).
  - The Message data field should contain the corresponding Packaging type that should be used when communicating with integrated systems.

  Note: Unless all applicable integrated systems are set up to use the same set of Shipping material, data translation settings must be performed for both incoming and outgoing messages

6 In CRS882/E, enter the Name and Description. Press Next.

Repeat these steps for each M3 BE BOD where data translation is applicable.

Settings to Enable Credit and Debit Flag in Outbound Mappings

Complete the following steps to add a credit or debit code (required by ION) in the outbound mapping in M3 Business Engine.

1 Open CRS881 and use the following message:

Msg std	Vers	Message	I/O	Parent element	Data element
ION	270	ChartOfAccounts	O	ChartOfAccounts	DebitCreditFlag

2 For each account group at level 5 in M3 (both on blank and on DIVI level), add a value for ASSET, LIABILITY, COST, and REVENUE.

Asset and Cost will create DEBIT as value, and Liability and Revenue as CREDIT.

3 Select Related options 'Translate' in CRS881 to get to CRS882 to enter the translation.

4 To enter field values in CRS882, use the following settings

Sorting order	4-M3 data
M3 data	Enter the account group number
Message data	Enter the translation in capital letters ASSET, LIABILITY, REVENUE, or COST.

Repeat these steps for each account groups where Credit and Debit Flag should be enabled.

Creating XML targets

6

A target is a unique path to a single XML element, a single XML attribute, or a single position-based field in a flat file that is used for message detection. The XML element and XML attribute is defined by its absolute XPath.

The XML targets included in the target group define all elements and attributes in the XML envelope that are used for detection.

Creating XML Targets for Outbound Messages

Follow these steps to add new XML targets in Partner Admin Tool for M3 BE Outbound Messages.

1 In Partner Admin Tool, click **Manage > Detections**.

2 Navigate to **Targets tab > XML tab > New** and create the following XML targets for outbound messages. Use the same name and path information as specified below.

Important: The field **Default Namespace URI** should be left blank for all targets.

The **Path** for the XML element should start with a slash ("/").

- ***hub:1_publisher***

Name	hub:1_publisher
Description	Event Hub event publisher
Path	/EventData/Publisher
Default Namespace URI	

- ***hub:2_documentname***

Name	hub:2_documentname
Description	Event Hub event document name
Path	/EventData/DocumentName
Default Namespace URI	

- ***hub:4_elementname01***

  Note: hub:3_ is saved for future use. Default Namespace URI should be left blank.

Name	hub:4_elementname01
Description	Event Hub event document element name #01
Path	/EventData/Document/ElementData/Name[1]
Default Namespace URI	

- ***hub:5_elementvalue01***

Name	hub:5_elementvalue01
Description	Event Hub event document element value #01
Path	/EventData/Document/ElementData/Value[1]
Default Namespace URI	

When a target is created, click **OK** to save your new XML target. The new XML target is now listed in the XML tab contents.

Creating XML Target Groups for Outbound Messages

Use this procedure to create and arrange XML target groups.

❑ Create Target Groups

__1 In Partner Admin Tool, click **File > Manage > Detections**.

___2 Navigate to **Target Groups tab > XML tab > Create group**.

___3 Create the following Target Groups and click **Create** to store the new XML target groups in the MEC database.

AnalyticsHubValue01

___4 Click **Save**.

❑ Add Targets to Target Groups

___1 Go to **Target Groups > XML tab** and select a Target Group from the Available Target Groups panel.

For target group **AnalyticsHubValue01**, add the following targets from the Unused Targets pane to the Targets for Selected group pane.

Target	Path
hub:1_publisher	/EventData/Publisher
hub:2_documentname	/EventData/DocumentName
hub:4_elementname01	/EventData/Document/ElementData/Name[1]
hub:5_elementvalue01	/EventData/Document/ElementData/Value[1]

___2 Click **Save**.

❑ Create Detection Order

___1 On Partner Admin Tool menu, click **File > Manage > Detection**.

___2 Click on **Detection Order** tab.

___3 With the help of the directional buttons, move the target groups **AnalyticsHubValue01** from the **Unused** panel to the **Used** panel.

___4 Click **Save**.

Creating XML Targets and Target Groups for Inbound Messages

Follow these steps to add new XML targets in Partner Admin Tool for M3 BE Inbound Messages.

1 In Partner Admin Tool, go to **Manage > Detections > Targets tab > XML tab**

2 Click **New** and specify the following targets for all inbound BODs as listed in "List of available noun mappings" on page 60.

	General	Examples
Name	ION:[Verb][Noun]TenantID	ION:ProcessCustomerPartyMasterTenantID ION:SyncBillOfMaterialsTenantID
Description	ION BOD [Verb][Noun] TenantID	ION BOD ProcessCustomerPartyMaster TenantID ION BOD SyncBillOfMaterials TenantID
Path	/[Verb][Noun]/DataArea/[Verb]/ TenantID	/ProcessCustomerPartyMaster/DataArea/ Process/TenantID /SyncBillOfMaterials/DataArea/Sync/TenantID
Default Namespace URI	http://schema.infor.com/ InforOAGIS/2	http://schema.infor.com/InforOAGIS/2

3 For nouns with data on different Divisions set the AccountingEntity target as well.

	General	Examples
Name	ION:[Verb][Noun] AccountingEntity	ION:ProcessCustomerPartyMasterAccountingEntity
Description	ION BOD [Verb][Noun] AccountingEntity	ION BOD ProcessCustomerPartyMaster AccountingEntity
Path	/[Verb][Noun]/DataArea/ Process/ AccountingEntity	/ProcessCustomerPartyMaster/DataArea/Process/ AccountingEntityID
Default Namespace URI	http://schema.infor.com/ InforOAGIS/2	http://schema.infor.com/InforOAGIS/2

Note: AccountingEntity can be targeted on the ID tag as well.

4 Go to Target Groups tab and create the *ION[Verb][Noun]* Target Group. Add the previously created targets to this group.

5 Add Target Group *ION[Verb][Noun]* to the list of used detections under **Detection Order** tab.

Managing EventHub subscriptions for M3 BE BOD

7

The MECEventHubSubscriber channel is used to receive events (messages) that are published by other application through the Event Hub application. To be able to use this channel, you need to add subscriptions and define the order M3 Enterprise Collaborator should handle the incoming events (messages).

Important: MEC and EventHub must be running on the same Grid.

For more information, see the *EventHub* topic in *Infor ION Grid Administration Guide.*

- "Set up new receive channels" on page 39
- "Set up New Send Channels" on page 42
- "Creating EventHub subscriptions " on page 43

Set up new receive channels

1 To set up new receive channels, navigate to **Manage > Communication > Receive tab** in Partner Admin Tool.

2 Click **New** and set up the following **EventHub Subscriber channels**:

Important: The name of the receive channel is used later in partner agreement set up. Add a unique, descriptive name to the receive channel.

Name	**MEC-M3_In_[BE Env Name]_ Ordered**	**MEC-M3_In_[BE Env Name]_ NonOrdered**
Protocols	EventHub Subscriber	EventHub Subscriber

Name	MEC-M3_In_[BE Env Name]_ Ordered	MEC-M3_In_[BE Env Name]_ NonOrdered
DetectionOverride Indicates if a channel is fixed to a particular detection group.	Default value: 0	Default value: 0
Ordered Activates message ordering.	Change the value to 1	Default value: 0
PersistFlag Activates persistence.	Default value: 1	Default value: 1
Priority Sets the Prioritization of messages received into this channel (1-3)	3	3
RunOnHost Set to which host to run the channel.	Default value: any	Default value: any
SetVariationId Set a variation id on all incoming messages	Change the value to 1	Default value: 0
StopTimeOut Number of milliseconds MEC waits during a stop before terminating the channel	Default value: 0 (disables this feature)	Default value: 0 (disables this feature)

Click **OK**.

3 Click **New** and set up the following **IONDbIn channels**:

Important: The name of the receive channel is used later in partner agreement set up. Add a unique, descriptive name to the receive channel.

Name	ION_In_[BE Env Name]_ Ordered	ION_In_[BE Env Name]_ NonOrdered
Protocols	IONDbIn	IONDbIn
BatchSize The maximum number of messages to process at each run Default value: 50	10	Default value: 50
BODTypes A comma separated list of Bod types to handle in this instance	All inbound BODs with variation ID *Sync.BillOfMaterials* *Sync.InventoryAdjustment* *Sync.InventoryHold* *Sync.ReceiveDelivery* *Sync.Shipment* *Sync. SourceSystemGLMovement*	All inbound NonSync BODs *LoadAdvanceShipNotice*, *Process.AdvanceShipNotice* *Process.BillToPartyMaster*, *Process.CustomerPartyMaster*, *Process.ItemMaster*, *Process.PayFromPartyMaster*, *ProcessPurchaseOrder*, *Process.SalesOrder*, *Process.ShipToPartyMaster* *Process.SupplierPartyMaster*
ConnectionUri	The JDBC connection uri *Example:* **jdbc:sqlserver://host:port; databaseName=DB_name**	The JDBC connection uri *Example:* **jdbc:sqlserver://host:port; databaseName=DB_name**
DelayTime Default value: 10000	5000	5000
DelayTimeConnectionProblemFactor	Default value: 3	
DetectionOverride	Default value: 0	

Name	ION_In_[BE Env Name]_ Ordered	ION_In_[BE Env Name]_ NonOrdered
DriverClass	The JDBC driver class *Example:* **com.microsoft.sqlserver.jdbc.SQLServerDriver**	The JDBC driver class *Example:* **com.microsoft.sqlserver.jdbc.SQLServerDriver**
Ordered Indicates if a channel processes messages in an ordered way (0 or 1)	1	0
Password for ION in/out DB	Database password	Database password
Username for ION in/out DB	Database user	Database user
Priority	Default value: 3	

Click **OK**.

4 When created, select the **Enabled** check box to make the channels available for further edit.

Important: The **Enabled** check box must be selected to make the channels available for further edit.

Set up New Send Channels

1 To set up new IONDBOut send channels, navigate to **Manage > Communication > Send tab** in Partner Admin Tool.

2 Click **New** and set up the following properties for each agreement group.

Property groups	Description
Channel Configuration	Type the name, description, and then select **IONDbOut** protocol.

Property groups	Description
Basic Configuration	Define the JDBC driver class and Connection URI. • For an example of JDBC driver class: **`com.microsoft.sqlserver.jsdb.SQLServerDriver`** • For an example of Connection URI: **`jdbc:sqlserver://localhost:1433;databaseName=<value>`** Type the database username and password. Click Test Connection to test the basic configuration parameters.
ION Outbox Configuration	Configure the source logical and tenant identification as defined in ION, for example: • From Logical Id: **`lid://infor.m3be.<value>`** where value is the name of the environment, e.g. M3354_750. 750 is the company to be used by the BODs. • TenantID: **`infor`** Type the message priority order, for example **`4`**.

Click **OK**.

Creating EventHub subscriptions

Use this procedure to set up EventHub subscriptions and to define the order M3 Enterprise Collaborator should handle the incoming BODs.

For detailed instructions about EventHub subscription channel set up, refer to the *M3 Enterprise Collaborator Partner Admin Tool User Guide*.

1 In Partner Admin Tool, navigate to **Manage > EventHub Subscriptions**.

2 Click **New** and set up the following EventHub Subscriptions for M3 BE BODs.

Important: The name of a subscription must match the name in the rule.

Example: In case:

```
Event event_OOHEAD_Create_SalesOrder = new Event("M3BEBOD", EventOperation.CREATE);
```

the name of the subscription should be M3BODProcessor:SyncSalesOrder.

Name	M3 [Noun Mapping].Show
Description	M3 Show[Noun Mapping]
Subscription	M3BODProcessor:Show[Noun Mapping]

Name	M3 [Noun Mapping].Sync
Description	M3 Sync[Noun Mapping]
Subscription	M3BODProcessor:Sync[Noun Mapping]

Name	M3 [Noun Mapping].Acknowledge
Description	M3 Acknowledge[Noun Mapping]
Subscription	M3BODProcessor:Acknowledge[Noun Mapping]

Name	M3 [Noun Mapping].Process
Description	M3 Process[Noun Mapping]
Subscription	M3BODProcessor:Process[Noun Mapping]

Click **OK**.

Note: For complete list of M3 BE BODs with Noun mapping names, see "List of available noun mappings" on page 60 as a reference.

3 After creating each subscription, assign the subscriptions to the MECEventHubSubcriber channel by editing the subscription. Double-click on the EventHub subscriptions to assign them to the correct receive channel.

Important: Each subscription should be associated with only one subscriber channel. See recommended settings below.

Table 30. Default channel assignments for M3 BE BODs per verb

EventHub subscription	Channel assignment
M3 [Noun Mapping].Sync	MEC-M3_In_[BE environment name]_Ordered

EventHub subscription	Channel assignment
M3 [Noun Mapping].Acknowledge	MEC-M3_In_[BE environment name]_ NonOrdered
M3 [Noun Mapping].Process	
M3 [Noun Mapping].Show **Note:** Most M3 [Noun Mapping].Show BODs are assigned to the channel MEC-M3_In_[BE environment name]_NonOrdered, because M3 [Noun Mapping]. Show BODs are normally sequence independent. The exceptions are specified in the table " Sequence-dependent M3 [Noun Mapping].Show BODs" below.	

Table 31. Sequence-dependent M3 [Noun Mapping].Show BODs

EventHub subscription	Channel assignment
M3 ShipToPartyMaster.Show	MEC-M3_In_[BE environment name]_Ordered
M3 CustomerPartyMaster.Show	
M3 BillToPartyMaster.Show	
M3 PayFromPartyMaster.Show	

Click **OK**.

Note: For [BE environment name], use the name of the corresponding M3 BE environment.

For complete list of M3 BE BODs with Noun mapping names, see "List of available noun mappings" on page 60 as a reference.

Managing partner agreements when M3 BE is SOR

8

Use the settings below as a reference to configure those partner agreements where the System of Records(SOR) is M3 BE.

- "Partner agreement settings when M3 BE is SOR" on page 46
- "Available Processes when M3 BE is SOR" on page 50

Partner agreement settings when M3 BE is SOR

This topic describes how to manually set up the partner agreements imported in chapter "Installing M3 Business Engine BODs".

Important: You need to setup only those partner agreements that you are planning to use in your integration scenario.

For complete list of available M3 BE BODs with Noun mapping names, see "List of available noun mappings" on page 60 as a reference.

Before you start Complete the steps for "Creating XML Targets and Target Groups for Inbound Messages" on page 37.

1 Select an Agreement in Partner Admin Tool > Agreement View tab.

2 On the **Basic** tab, enter the following information:

Name	Name of the noun mapping, see "List of available noun mappings" on page 60.
Description	Description for the agreement (Optional)
Creator	Creator of the agreement (Optional)
Email	Email address

3 On the **Detection** tab, choose Target Group *AnalyticsHubValue01* and specify the following values:

Important: If you leave an empty target value, the agreement will not be detected.

Target Name	Target XPath	Target Value
hub:1_publisher	/EventData/Publisher	M3BODProcessor
hub:2_documentname	/EventData/DocumentName	[Verb][Noun Mapping]
hub:4_elementname01	/EventData/Document/ ElementData/Name[1]	CONO
hub:5_elementvalue01	/EventData/Document/ ElementData/Value[1]	[M3 BE Company number] **Important:** For M3BE_Out_ SyncPerson and M3BE_Out_ ShowPerson set CONO = 0

For M3BE_In_Process[Noun], set up the following detection:

Choose Target Group *ION Process[Noun]* and specify the following values:

Target Name	ION:Process[Noun Mapping]TenantID
Target XPath	/Process[Noun Mapping]/DataArea/Process/TenantID
Target Value	M3 BE Company number

4 On the **Applicable Processes** tab, add processes to the agreement as described in the table below.

BODs are based on different schema versions; 2.7.0, 2.8.0, 2.9.0, 2.9.1 or 2.10.0. Make sure to use the correct schema version. (The schema version is part of the mapping file name)

See "Available Processes when M3 BE is SOR" on page 50 for detailed information on the listed processes.

Agreement Name	Content	Applicable processes in order
M3BE_Out_Sync[Noun]	Schema Location: http://schema.infor.com/[ver]/InforOAGIS/BODs/Developer/Sync[Noun].xsd Example for Schema Location: http://schema.infor.com/2.7.0/InforOAGIS/BODs/Developer/SyncItemMaster.xsd Mapping name: M3BE15_[M3 BE Suite name]_Out_ION_Sync[Noun]_[ver nr separated by underscore]	1. Check Order 2. Archive 3. XML transform 4. Apply Envelope 5. Archive 6. Validate (optional) 7. Send
M3BE_Out_Show[Noun] **Note:** These process steps are applicable for any sequence-independent Show BOD agreement. The exceptions are specified below.	Schema Location: http://schema.infor.com/[ver]/InforOAGIS/BODs/Developer/Show[Noun].xsd Example for Schema Location: http://schema.infor.com/2.7.0/InforOAGIS/BODs/Developer/ShowItemMaster.xsd Mapping name: M3BE15_[M3 BE Suite name]_Out_ION_Show[Noun]_[ver nr separated by underscore]	1. XML transform 2. Apply Envelope 3. Send
M3BE_Out_ShowBillToPartyMaster M3BE_Out_ShowCustomerPartyMaster M3BE_Out_ShowPayFromPartyMaster M3BE_Out_ShowShipToPartyMaster	Schema Location: http://schema.infor.com/[ver]/InforOAGIS/BODs/Developer/Show[Noun].xsd Example for Schema Location: http://schema.infor.com/2.7.0/InforOAGIS/BODs/Developer/ShowCustomerPartyMaster.xsd Mapping name: M3BE15_[M3 BE Suite name]_Out_ION_Show[Noun]_[ver nr separated by underscore]	1.Check Order 2. XML transform 3. Apply Envelope 4. Send

Agreement Name	Content	Applicable processes in order
M3BE_In_Load[Noun]	Schema Location: not applicable Mapping name: M3BE15_[M3 BE Suite name]_In_ION_ Load[Noun]_[ver nr separated by underscore]	1. Archive 2. XML transform
M3BE_In_Process[Noun]	Schema Location: http://schema.infor.com/[ver]/InforOAGIS/ BODs/Developer/Acknowledge[Noun].xsd Example for Schema Location: http://schema.infor.com/2.7.0/InforOAGIS/ BODs/Developer/AcknowledgeSalesOrder.xsd Mapping name: M3BE15_[M3 BE Suite name]_In_ION_ Process[Noun]_[ver nr separated by underscore]	1. Archive 2. XML transform 3. Apply Envelope 4. Archive 5. Send **Note:** For M3BE_In_ ProcessItemMaster, use only the following processes: 1. Archive 2. XML transform
M3BE_Out_ Acknowledge[Noun] **Important:** Valid only for nouns using batch entry in M3 BE.	Schema Location: http://schema.infor.com/[ver]/InforOAGIS/ BODs/Developer/Acknowledge[Noun].xsd Example for Schema Location: http://schema.infor.com/2.7.0/InforOAGIS/ BODs/Developer/AcknowledgeSalesOrder.xsd Mapping name: M3BE15_[M3 BE Suite name]_Out_ION_ Acknowledge[Noun]_[ver nr separated by underscore]	1. Archive 2. XML transform 3. Apply Envelope 4. Archive 5. Validate (optional) 6. Send

5 For incoming partner agreements (M3BE_In_Load[Noun] and M3BE_In_Process[Noun]), set up Error Handling events on the **Error Handling** tab.

Important: Error Handling is only applicable for incoming partner agreements.

Order	Process Name	Notes
1	Crt ConfirmBOD	
2	Send	Choose the ION_Out channel (with IONDbOut protocol) for M3 BE environment. Encoding: UTF-8
3	XML transform	**API Reference:** set to API reference for M3 BE environment **Schema Location:** not specified **Mapping:** M3BE15_[M3 BE Suite name]_Error_Out_ Acknowledge[Noun]_[ver nr separated by underscore] **Important:** The check box "Delete empty elements during transformation" checkbox must be cleared.
4	Apply Envelope	**Envelope template:** XML Declaration **Envelope encoding:** UTF-8
5	Send	Choose the ION_Out channel (with IONDbOut protocol) for M3 BE environment. Encoding: UTF-8

6 When the partner agreement setup is completed, reload the agreement information for the MEC Server in **Grid > MEC Management Pages > Reload**.

Available Processes when M3 BE is SOR

The table below lists the available processes for Partner Agreement Settings when M3 BE is SOR. To modify a process, right-click the selected process area.

Process Name	Notes
Check Order	To enable MEC to handle several messages parallel, Check Order can be added. If not specified, all messages will be handled in a sequence. • To specify Check Order, click Add and insert the following value for the first Primary Key Xpath: **`/EventData/Document/ElementData[1]/Value`** • To differentiate each agreement (BOD), add as many Primary Key Xpath to the Partner agreement as the number of key fields in the corresponding master table in M3 BE: **`/EventData/Document/ElementData[2]/Value`** **`/EventData/Document/ElementData[3]/Value`** **`/EventData/Document/ElementData[4]/Value`** For the number of Primary Key XPaths, see "List of available noun mappings" on page 60
Archive	Archives a message in the MEC Archive folder (recommended).
XML transform	**API Reference:** set to API reference for M3 BE environment **Schema Location:** enter the schema location for the mapping (see next table) **Note:** For incoming process mappings, use the matching acknowledge schema. **Important:** Mark the Delete empty elements during transformation checkbox **Mapping:** enter the file name for the mapping (see next table)
Apply Envelope	**Envelope template:** XML Declaration **Envelope encoding:** UTF-8
Archive	Archives a message in the MEC Archive folder (recommended).
Validate	This process will validate the outgoing XML-file with the schema in the XML transform step (optional).
Send	Choose the ION_Out channel (with IONDbOut protocol) for M3 BE environment. Encoding: UTF-8

Managing partner agreements when M3 BE is not SOR

9

Use the settings below as a reference to configure those partner agreements where the System of Records(SOR) is **not** M3 BE.

Partner agreement settings when M3 BE is not SOR

This topic describes how to manually set up the partner agreements imported in chapter "Installing M3 Business Engine BODs".

Important: You need to setup only those partner agreements that you are planning to use in your integration scenario.

For complete list of available M3 BE BODs with Noun mapping names, see "List of available noun mappings" on page 60 as a reference.

Before you start Complete the steps for "Creating XML Targets and Target Groups for Inbound Messages" on page 37.

1 Select an Agreement in Partner Admin Tool > Agreement View tab.

2 On the **Basic** tab, enter the following information:

Name	Name of the noun mapping, see "List of available noun mappings" on page 60.
Description	Description for the agreement (Optional)
Creator	Creator of the agreement (Optional)
Email	Email address

3 On the **Detection** tab, choose Target Group *ION[Verb][Noun]* and specify the following values:

Important: If you leave an empty target value, the agreement will not be detected.

Target Name	Target XPath	Target Value
ION:Sync[Noun]TenantID	/[Verb][Noun]/DataArea/Sync/TenantID	[TenantID]

For M3BE_Out_Process[Noun], set up the following detection:

Choose Target Group *AnalyticsHubValue01* and specify the following values:

Target Name	Target XPath	Target Value
hub:1_publisher	/EventData/Publisher	M3BODProcessor
hub:2_documentname	/EventData/DocumentName	Process[Noun]
hub:4_elementname01	/EventData/Document/ElementData/Name[1]	CONO
hub:5_elementvalue01	/EventData/Document/ElementData/Value[1]	M3 BE Company number

4 On the **Applicable Processes** tab, add processes to the agreement as described in the table below.

BODs are based on different schema versions; 2.7.0, 2.8.0, 2.9.0, 2.9.1 or 2.10.0. Make sure to use the correct schema version. (The schema version is part of the mapping file name)

See "Available Processes when M3 BE is not SOR" on page 55 for detailed information on the listed processes.

Name	Content	Applicable processes in order
M3BE_In_Sync[Noun]	Schema Location: not applicable Mapping name M3BE15_[M3 BE Suite name]_In_ION_Sync[Noun]_[ver nr separated by underscore]	1. Check Order 2. Archive 3. XML transform

Name	Content	Applicable processes in order
M3BE_Out_Process[Noun]	Schema Location http://schema.infor.com/[ver]/InforOAGIS/BODs/Developer/Process[Noun].xsd Example for Schema Location: http://schema.infor.com/2.7.0/InforOAGIS/BODs/Developer/ProcessBillOfMaterials.xsd Mapping name M3BE15_[M3 BE Suite name]_Out_ION_Process[Noun]_[ver nr separated by underscore]	1. Archive 2. XML transform 3. Apply Envelope 4. Archive 5. Send
M3BE_In_Acknowledge[Noun]	Schema Location: not applicable Mapping name M3BE15_[M3 BE Suite name]_In_ION_Acknowledge[Noun]_[ver nr separated by underscore]	1. Archive 2. XML transform

5 For incoming partner agreements, set up Error Handling events on the **Error Handling** tab.

Important: Error Handling is only applicable for incoming partner agreements.

Order	Process Name	Notes
1	Crt ConfirmBOD	
2	Send	Choose the ION_Out channel (with IONDbOut protocol) for M3 BE environment. Encoding: UTF-8

6 When the partner agreement setup is completed, reload the agreement information for the MEC Server in Grid > MEC Management Pages > Reload.

Available Processes when M3 BE is not SOR

The table below lists the available processes for Partner Agreement Settings when M3 BE is **not** SOR. To modify a process, right-click the selected process area.

Process Name	Notes
Check Order	**Default Namespace:** http://schema.infor.com/InforOAGIS/2 **Default Namespace Prefix:** dns To enable MEC to handle several messages parallel, Check Order can be added. If not specified, all messages will be handled in a sequence. • To specify Check Order, click Add and insert the following value for the first Primary Key Xpath: **Xpath: `/dns:Sync[Noun]/dns:DataArea/dns:Sync/dns:TenantID`** **No Attribute Existing:** Leave blank **Xpath: `/dns:Sync[Noun]/dns:DataArea/dns:[Noun]/dns:[Noun]Header/dns:DocumentID/dns:ID`** **No Attribute Existing:** schemeName **Xpath: `/dns:Sync[Noun]/dns:DataArea/dns:[Noun]/dns:[Noun]Header/dns:DocumentID/dns:ID[@location]`** **No Attribute Existing:** schemeName **Xpath: `/dns:Sync[Noun]/dns:DataArea/dns:[Noun]/dns:[Noun]Header/dns:DocumentID/dns:ID[@accountingEntity]`** **No Attribute Existing:** schemeName **VID Xpath: `/dns:Sync[Noun]/dns:DataArea/dns:[Noun]/dns:[Noun]Header/dns:DocumentID/dns:ID[@variationID]`** **VID No Attribute Existing:** schemeName
Archive	Archives a message in the MEC Archive folder (recommended).
XML transform	**API Reference:** set to API reference for M3 BE environment **Schema Location:** not specified **Mapping:** enter the file name for the mapping (see table below)
Apply Envelope	**Envelope template:** XML Declaration **Envelope encoding:** UTF-8
Archive	Archives a message in the MEC Archive folder (recommended).

Process Name	Notes
Send	Choose the ION_Out channel (with IONDbOut protocol) for M3 BE environment. Encoding: UTF-8

M3BEBODs Smart Rules

10

Hierarchy

M3BEBOD Smart Rules are uploaded via LifeCycle Manager to Event Analytics. The rules are categorized into rules session where each noun has its own session (e.g. M3BEBODs_ItemMaster, M3BEBODs_CustomerPartMaster). Depending on the integration scenario, the session can include rules for Sync-, Process-, Acknowledge- and Load-BODs.

The specific rules session M3BEBODs_InitialLoad is available for Show-BODs. This session includes all rules for triggering of Show-BODs, which are used for IntitialLoad. The rules session provides an overview of options enabling or disabling rules for IntialLoad. This allows you for example to disable all InitialLoad BODs for M3 BE table CSYTAB table in M3 BE without switching to another rules sessions.

Naming Convention

M3BEBODs Smart Rules are generally named according to M3BETable_EventOperation_Noun.

Example:

MITMAS_UPDATE_ItemMaster, OCUSMA_CREATE_CustomerPartyMaster.

If two different rules are using the same M3BE table and BOD Noun, the rules are differentiated by the verb appended to the rule names and to the rules sessions.

Example:

Rule name	MHEXRD_UPDATE_ProcessAdvanceShipNotice
Rules session name	M3BEBODs_ProcessAdvanceShipNotice

Modifying Rules and Mappings

The delivered rules and mappings package is based on standard M3 Business Engine functionality and tables, therefore it is not allowed to make any changes in standard rules or mappings. Any changes

applied to the delivered rules or mappings will be overwritten without any warnings when an update is installed.

If you need to modify a rule, copy the standard rule and rename it with a CUS suffix in the rule name. After applying the necessary changes, disable the standard rule and enable the customized rule in the EventHub.

If you need to modify a mapping, copy the standard mapping and rename it with a CUS suffix in the mapping name. After applying the necessary changes, save and publish the customized mapping in MEC and modify the partner agreement to use the customized mapping.

Exporting data

11

To populate another system connected to ION, use the non-event driven scenario for initial load for M3BE_Out_Show[Noun Mapping].

Data Export via M3 BE BODs: Initial Load Scenario

To populate data for another system connected to ION, use the non-event driven scenario for initial load for M3BE_Out_Show[Noun Mapping].

1 In M3 BE, BE programs create a request event on the master table for the specific noun (see "List of available noun mappings" on page 60 as a reference). After that, the normal architecture for BODs are used.

2 To initiate an initial load for a noun, use MI-program – EVS002MI in MI-Test or via M3-API-WS http://<serveraddress>:port/m3api-rest/execute/EVS002MI/Initiate?FILE=<file>

Important: Initial Load for large tables (with more than 10.000 records) takes long time. It is recommended to run only one table a time. Ensure to have enough disk space in the MEC DB to expand during initial load

3 To start an export of data, use the MI transaction **`Initiate`** with the following parameters:

`FILE`	Mandatory It is the master table for a specific BOD, see "List of available noun mappings" on page 60 as a reference.
`NOAL`	Number of actions To be used for testing purposes and to limit the number of requests for the FILE.

M3 Business Engine BODs nouns

A

List of available noun mappings

List of available noun mappings where M3 BE is System of Records (SOR)

Name	Noun Mapping	Number of Primary Key XPaths	File (Table) for M3BE_Out_Show[Noun Mapping]
M3BE_In_Load[Noun Mapping]	AdvanceShipNotice	not applicable	not applicable
M3BE_Out_Sync[Noun Mapping] M3BE_Out_Show[Noun Mapping]	AccountingBookDefinition	5	CMNDIV
	AccountingChart	3	CSYTAB
	AccountingEntity	2	CMNDIV
	AccountingJournal	5	CSYTAB
	AdvanceShipNotice	7	MHEXRH
	AssetMaster	4	FFASMA
	BillOfMaterials	4	MPDHED
	BillToPartyMaster	3	OCUSMA
	CarrierParty	3	CIDMAS
	ChartOfAccounts	4	FCHACC
	CodeDefinitionAccountingDimension	4	FCHACC
	CodeDefinitionARPaymentMethods	7	CSYTAB
	CodeDefinitionDeliveryTerms	5	CSYTAB
	CodeDefinitionDynamicDimension	4	FGLEDG
	CodeDefinitionFeatureOptions	3	MPDFHE

Name	Noun Mapping	Number of Primary Key XPaths	File (Table) for M3BE_Out_Show[Noun Mapping]
	CodeDefinitionGeneralCode	5	CSYTAB
	CodeDefinitionHarborAirports	6	CSYTAB
	CodeDefinitionItemTypes	3	MITTTY
	CodeDefinitionPaymentTerms	5	CSYTAB
	CodeDefinitionProductStructureTypes	5	CSYTAB
	CodeDefinitionPurchaseOrderTypes	3	MPORDT
	CodeDefinitionRoutes	5	DROUTE
	CodeDefinitionTransportationMethods	5	CSYTAB
	CodeDefinitionUnitCodes	5	CSYTAB
	ConfiguredAssetMaster	4	MILOIN
	CreditTransferGrouped	4	Not applicable
	CurrencyExchangeRateMaster	5	CSYTAB
	CurrencyRateType	5	CSYTAB
	CustomerReturn	5	OCHEAD
	CustomerPartyMaster	3	OCUSMA
	FinancialCalendar	5	CSYPER
	InventoryAdjustment	6	MITTRA
	InventoryCount	4	MITTKV
	InventoryHold	6	MITTRA
	InvoiceCustomerOrder	5	OINVOH
	ItemMaster	3	MITMAS
	LocationFacility	3	CFACIL
	LocationWarehouse	3	MITWHL
	PayFromPartyMaster	3	OCUSMA

Name	Noun Mapping	Number of Primary Key XPaths	File (Table) for M3BE_Out_Show[Noun Mapping]
	PayableTransaction	5	FPLEDG
	Person	3	CMNUSR
	ProductionOrder	4	MWOHED
	PurchaseOrder	4	MPHEAD
	Quote	6	OOQUOH
	ReceivableTransaction	9	FSLEDG
	ReceiveDelivery	8	MPLIND
	RemitToPartyMaster	3	CIDMAS
	Requisition	4	MPOPLP
	SalesOrder	7	OOHEAD
	ServiceOrder	7	ACUORH
	Shipment	3	DCONSI
	ShipmentDelivery	5	MHDISH
	ShipFromPartyMaster	3	CIDMAS
	ShipToPartyMaster	3	OCUSMA
	SourceSystemGLMovementBudget	13	FBUDET
	SourceSystemGLMovementActual	5	FBAVAL
	SourceSystemJournalEntry	5	FGLHED
	SupplierPartyMaster	3	CIDMAS
	CreditTransfer	4	Not applicable

Name	Noun Mapping	Number of Primary Key XPaths	File (Table) for M3BE_Out_ Show[Noun Mapping]
M3BE_In_ Process[Noun Mapping]	AssetMaster BillToPartyMaster CustomerPartyMaster EmployeeWorkTime ItemMaster PayFromPartyMaster Person PurchaseOrder SalesOrder ServiceOrder ShipToPartyMaster SupplierPartyMaster	not applicable	not applicable
M3BE_Out_ Acknowledge[Noun Mapping] M3BE_Error_Out_ Acknowledge[Noun Mapping]	AssetMaster BillToPartyMaster CustomerPartyMaster EmployeeWorkTime ItemMaster PayFromPartyMaster Person PurchaseOrder SalesOrder ServiceOrder ShipToPartyMaster SupplierPartyMaster	not applicable	not applicable

Table 48. List of Available Noun Mappings where M3 BE is not System of Records

Name	Noun Mapping
M3BE_Out_Process[Noun Mapping]	AdvanceShipNotice BillOfMaterials PulseAlert PulseNotification PulseTask Shipment
M3BE_In_Sync[Noun Mapping]	BillOfMaterials InventoryAdjustment InventoryHold ReceiveDelivery Shipment SourceSystemGLMovementBudget