



Infor M3 Core Integration Guide for HxGN EAM

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About this guide

This document describes the integration of Infor M3 and HxGN EAM.

It explains the integration requirements, configuration tasks, and troubleshooting information. This document also describes how to publish Business Object Documents (BODs), load your data, and verify that the integration is set up correctly.

Intended audience

This guide is intended for the system administrator or consultant who configures the integration between Infor M3 and HxGN EAM. Before you read this guide, ensure that you are familiar with the other guides listed in [Related documents](#) on page 6.

Required knowledge

To integrate Infor M3 and HxGN EAM, you must have this knowledge:

- You must understand the concepts behind Infor ION and BODs and how the concepts relate to each of the applications in this integration. For more information about Infor ION and BODs see these topics:
 - "Overview" in the *Infor M3 Core Administration Guide*
 - "Overview" in the *HxGN EAM Configuration Guide* for Infor ION
- You must understand the concepts of the Infor Enterprise Collaborator tools and be qualified to install and configure M3 Business Engine BODs.
- You must have experience in these areas, which are listed in order of priority:
 - Use of Enterprise Collaborator
 - Use of Event Hub
 - Configuration of the BOD processor

Related documents

This table shows the types of documents that are related to ION integrations and their purpose.

Document type	Purpose
<i>Infor M3 Core Administration Guide</i> <i>HxGN EAM Configuration Guide for Infor ION</i>	These guides provide product-specific configuration information that is required to use Infor Document Management and M3 Analytics. They provide information about how to include the content for product-specific workflow and event examples.
<i>Infor M3 Outbound BOD Mapping and Descriptions</i>	For each BOD that the product has certified, this document provides the source and definition of the data in each BOD element that is sent from the product through ION. This document also provides details about the data that is published.
<i>Infor M3 Inbound BOD Mapping and Descriptions</i>	For each BOD that the product has certified, this document provides the details about how the product receives information or processes information from the inbound BOD. For example, the source might be an extension product, a result of a workflow, or a drill back function from Infor OS Portal or Infor Ming.le. If a BOD updates a source table, the exceptions and handling are described.
<i>Infor M3 to HxGN EAM Cross BOD Mapping and Descriptions</i>	This document provides end-to-end integrated BOD mapping details for BODs that are exchanged between Infor M3 and HxGN EAM. It describes the exceptions and handling requirements by element.
<i>Infor ION Desk User Guide</i>	This document provides information on how to use ION. It provides specific information about the connection of a local ERP system to the ION Cloud Edition.

Not all of these documents are required to set up this integration. For a list of documents that are required for this integration, see the integration checklist within this document.

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at <https://concierge.infor.com/> and create a support incident.

For the latest documentation, go to Documentation Central at docs.infor.com. We recommend that you check this website periodically for updated documentation. If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1: Requirements

Ensure that all requirements and prerequisites are met.

Required products

The Infor Cloud team installs all of the required products.

Chapter 2: Integration checklist

Follow this checklist to integrate the products.

Com- plete?	Task	Reference
<input type="checkbox"/>	Collect these documents from the Infor Customer Portal. They are required for this integration.	<ul style="list-style-type: none"> <i>Infor M3 Core Administration Guide</i> <i>HxGN EAM Configuration Guide for Infor ION</i> <i>Infor M3 to HxGN EAM Cross BOD Mapping and Descriptions</i>
<input type="checkbox"/>	Ensure that all requirements and prerequisites are met.	Requirements on page 7.
<input type="checkbox"/>	Review the description of this integration.	Overview on page 9. Features not included in this integration on page 12.
<input type="checkbox"/>	Perform additional configuration of Infor M3 specific to this integration.	Configuring Infor M3 on page 14
<input type="checkbox"/>	Perform additional configuration of HxGN EAM specific to this integration.	Configuring HxGN EAM on page 25
<input type="checkbox"/>	Configure and activate the ION data flows between these products.	See Activating the data flow on page 33
<input type="checkbox"/>	Publish BODs.	Publishing BODs on page 35
<input type="checkbox"/>	Verify the integration.	Verifying the integration on page 37

Chapter 3: Overview

This section describes the integration between Infor M3 and HxGN EAM.

Terminology

The terminology between M3 and HxGN EAM differs in some areas. To explain the process and communicate steps clearly, BOD terminology is used. This table shows an overview of the M3, HxGN EAM, and BOD terminology:

Infor M3 term	HxGN EAM term	BOD term
Item	Part	ItemMaster
MRO Service	Trade	Service
Warehouse	Store	Location
Cost Center	Cost Code	CodeDefinition for Cost Centers
PO Receipt	PO Receipt	ReceiveDelivery
Shipment	Issue Parts	Shipment
Stock Location	Bin	CodeDefinition for StockLocations
Project Element	Project Budget	Not used in standard BOD terminology

See the appropriate configuration guide for Infor ION to review definitions of ION and BOD terms.

Process overview

This integration supports cross-over sales activities. It provides M3 customers in the non-equipment industry with a solution for enterprise asset maintenance and financial control over their repair and maintenance expenditure.

Master data

Items, suppliers, units of measure, cost centers, freight terms, stock locations, and currency exchange rates are maintained in M3.

In HxGN EAM, the available stock of an item can be adjusted either by manually changing the on-hand quantity on the **Parts** page or by creating an adjustment on the **Physical Inventory** page.

Requisition process

This requisition flow is used to replenish the maintenance, repair, and operating (MRO) inventory warehouse and to order materials, services, or both for a maintenance job:

Note: The employee in HxGN EAM who is specified in the **Requested by** field must also exist as an M3 user. The user identities must be the same.

- 1 A requisition is created and approved in HxGN EAM.
- 2 The requisition is created in M3. It can be viewed in (PPS180) or in (PPS170), or it is directly transformed into a purchase order depending on how the requisition partner agreement is configured.
- 3 The requisition is released to a purchase order in M3 by the user.
- 4 The purchase order is synced to HxGN EAM when printed.
- 5 The purchase order is created in HxGN EAM.

Limitations:

The requisition cannot be changed after it has been transferred to M3. If changes are required in HxGN EAM, the requisition must be canceled in both systems and a new requisition must be created in HxGN EAM.

The requisition can be changed in M3, but then the change is not reflected in HxGN EAM. The changes are transferred to HxGN EAM through the PurchaseOrder BOD.

Purchase order receiving process

Parts

- Purchase order receipt transaction of items or parts is performed in M3.
- When the receipt is registered, it is synced to HxGN EAM.
- HxGN EAM records the receipts of the MRO parts.

Services

- MRO services are received by HxGN EAM through a work order (Book PO labour).
- When the receipt is registered, it is synced to M3 through the SyncServiceConsumption BOD.
- M3 records the receipt of the service.

The reversal of the purchase order receipt can be done by deleting the record in 'Purchase Order. Display Line Trans' (PPS330). A SyncReceiveDelivery BOD with actionCode **Repl**ace and Status/Code **De**leted is generated and the Receipt Qty in HxGN EAM is cleared.

Inventory transaction process

Inventory transactions occur when parts are issued or returned to a work order in HxGN EAM. Issue transactions initiate a ProcessShipment BOD to M3, and return transactions initiate a ProcessReceiveDelivery BOD. Inventory transactions are transferred with the ProcessInventoryAdjustment BOD. They are created when the stock quantity or bin of a part is changed on the **Stock** tab and when a physical inventory count is performed.

Quality inspection

If a part is marked as **Inspection Required** in HxGN EAM, the requisition and purchase order created will carry this flag. The **PO Receipt Active Lines** tab in HxGN EAM does not have this flag, but will still require inspection based on the receipt association to the purchase order.

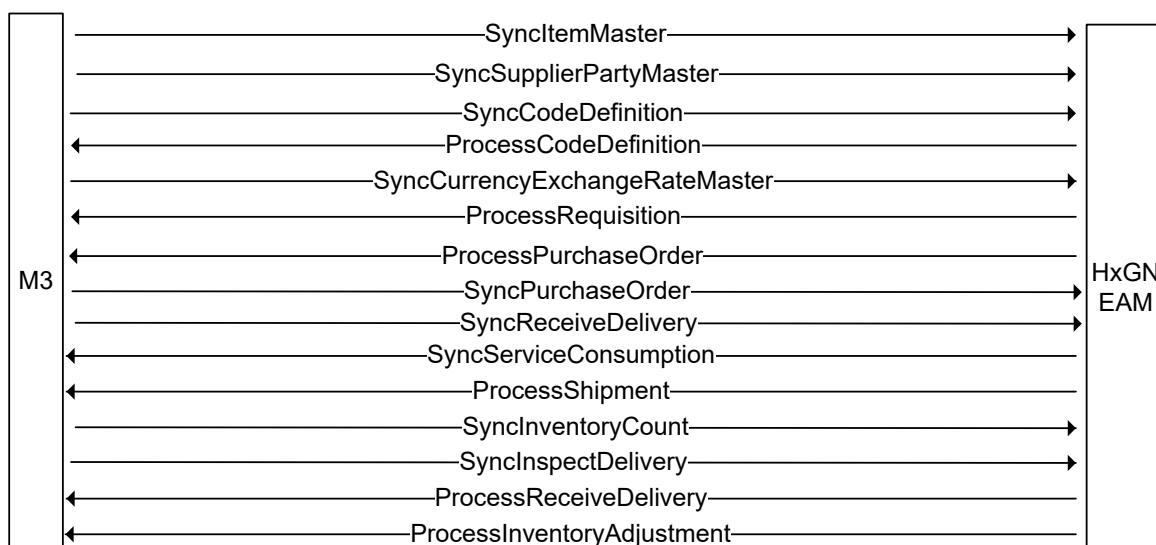
Quality inspection of goods from the purchase order is performed in 'Purchase Order. Inspect Goods' (PPS310). Approved quantity and rejected quantity are specified depending on the QI result. If there is a rejected quantity, a rejection reason is required. This QI transaction generates the SyncInspectDelivery BOD.

Work order issuing or return

- 1** A work order (WO) is created in HxGN EAM.
- 2** One or more activities are added to the work order.
- 3** Parts are issued or returned to the work order:
 - On the **Parts** tab, one or more parts are issued to the work order.
The ProcessShipment BOD is sent to update the M3 stock to the HxGN EAM level.
 - On the **Parts** tab, one or more parts are returned to the work order.
The ProcessReceiveDelivery BOD is sent to update the M3 stock to the HxGN EAM level.

Integration of solution components

This diagram shows the flow of BODs between the products:



See the appropriate configuration guide for the complete list of BODs that are available for each product and for a list of the events that generate each BOD.

Features not included in this integration

This table shows the features that are not included in this integration:

Area	Restriction
Items	Non-stock items must be connected to a warehouse to be transferred to HxGN EAM.
Items - parts	Purchase order lines with parts must be received from M3.
Items - services	Purchase order lines with services (HxGN EAM trades) must be received from HxGN EAM.
Warehouses	Use dedicated warehouses in M3 for this integration. Issues and receipts for these warehouses should only be made from HxGN EAM, otherwise the inventory figures are not synchronous.
Item-warehouse status	In M3, you can set a status for an item-warehouse combination. HxGN EAM does not, though, have a status field or an active flag to reflect this.
Item and warehouse connection	The deletion of a warehouse that is connected to an item using the SyncItemMaster BOD is not reflected in HxGN EAM. This must be deleted manually in HxGN EAM after all dependencies have been resolved.
Kit	Kit functionality is not supported by the integration.

Data mapping

Use the Infor M3 to the *HxGN EAM Cross BOD Mapping and Descriptions Guide* to determine the source location and target location of the integrated data and the conversions that are possibly performed between the source and target.

Chapter 4: Configuring Infor M3

In Infor M3, you must complete configuration tasks that are specific to this integration.

M3 Business Engine settings

Partner for stock transactions

Configure HxGN EAM as a partner in 'M3 Stock Msg Partner.Open' (MMS865).

This table shows the required setup in MMS865:

Field	Value
Partner	EAM
Message Type	BOD
Message Direction	I

Users

Ensure that 'Users.Open' (MNS150) has data corresponding to the employees in HxGN EAM that are going to request parts or services through HxGN EAM requisitions.

Warehouses

Use dedicated warehouses in M3 for the HxGN EAM integration. These warehouses should have corresponding records in **EAM Materials > Setup > Stores**. Issues and receipts for these warehouses should only be made from HxGN EAM, otherwise the inventory figures are not synchronous.

In the 'Warehouse. Open' (MMS005/H) integration parameters section:

- Select the **Rcpt/Pick lists** check box.
- Select the **Stock trans** check box.

Units of Measure

Ensure that the units of measure to be used in the integration exist in 'Unit of Measure. Open' (CRS050) and have similar records in HxGN EAM.

Suppliers

Supplier contacts can be synced to HxGN EAM by adding references to suppliers with reference type 10 in 'M3 Supplier. Connect Reference' (CRS623).

To sync supplier addresses with HxGN EAM, an address with address type 01 or 02 must be available in 'M3 Supplier. Connect Address' (CRS622).

Note: Only the first address that is specified is transferred through the BOD. It is added to HxGN EAM as mail address, delivery address, and invoice address.

Transaction reason

A transaction reason is required for HxGN EAM transactions. Create a STT (stock transactions) transaction reason in 'Transaction Reason. Open' (CRS103).

Rejection reason

Create RR in 'Rejection Reason. Open' (CRS090). The same data should also be created in HxGN EAM.

Purchasing

In 'Settings - Purchasing' (CRS780), set the **11 QI result - Auto Claim** parameter to **3 - Results 2, 3 and 4**. Set the **40 Accounting dimension for cost center** parameter to the dimension that is used for the cost center.

In 'Purchase Order Type. Open' (PPS095), set the **170 Deletion method - PO** parameter to **2-Set status to 99**.

Create the **DPO** purchase order type in (PPS095) with the **150 Material plan update** parameter set to **0-No** for the direct purchase scenario.

Internal Stock Transaction Qualifier

In 'Internal Stock Trans Qualif. Open' (MMS860), specify this information:

Qualifier

Specify **90A**.

Qualifier type

Specify **4-Date-Qty-Price**.

Sequence no

Specify **1**.

Qualif name

Specify **Variance** as qualifier name.

Qualif descr

Specify Stock variance +/- as qualifier description.

Connected func

Specify **MMMNGTRA** as connected function.

Feature Toggle

Ensure that **NCR number** 10464 (Accounting control support in MHS850MI.AddDO - Qualifier 51CR) is activated in 'Feature List. Open' (CMS975).

Stock Transactions

In 'Req/Distr Order Type. Open' (CRS200), set up this data:

- Order type **R01** with **Transaction type 41-Requisition order issue**, and **Next manual function 6-None, flow completed since picking lists created**.
- Order type **R03**, **Transaction type 40-Requisition order return**, and **Next manual function 6-None, flow completed since picking lists created**.

Accounting Dimension

Configure 'Accounting Dimension. Enter Names' (CRS012) as follows:

Details			
Accounting dim 2	Cost Center	Cost Centr	Cst
Accounting dim 3	Project Number	Project	Prj
Accounting dim 4	Project Element	Element	Elm
Accounting dim 5	Department	Department	Dpt

Accounting Rule

In 'Accounting Rule. Set' (CRS395), configure the Accounting event **MM20** and Accounting type **907** (Internal stock issues) as well as the Accounting event **MM10** and Accounting type **907** (Internal stock receipts) as follows:

Accounting dimension	Object
2	MRACC2
3	MRPROJ
4	MRELNO
5	MRDEPT

Note:

Accounting object 2 refers to Cost Center.

Project

Project number and **Project element** with status **20** must exist in 'Project. Open' (POS100). The same record should also exist in HxGN EAM as Project and Project budget.

Cost Center

The **Cost Center** must exist in 'Accounting Identity. Open' (CRS630) as **Accounting ID**. The same data should be created in HxGN EAM as Cost Code.

Department

The department should be created in 'Department. Open' (CRS080) and must also exist in HxGN EAM.

Fixed asset

In 'Company. Connect Division' (MNS100), ensure that parameter **307 Maintenance Integration** is activated for the accounting and division used.

In 'Purchase Order Type. Open' (PPS095), create the **Order type FAS**. Define the **Fixed asset type** in (PPS095/G). The fixed asset type should exist in 'FA Type. Open' (FAS075).

Return to supplier

Create the order type **CLM** in 'Return Order Type. Open' (PPS399).

Defining part items

Part items must be connected to an integration-specific warehouse.

To define part items:

- 1 Open 'Item. Open' (MMS001/B).
- 2 Specify this information:
 - Name**
Specify a descriptive name.
 - Make/buy code**
Specify **2**.
- 3 Connect the item to an integration-specific warehouse.

Defining a custom field for service items

M3 items that are used as trades in HxGN EAM must have a custom field that is connected in 'Custom Field.Update' (CMS474) to identify them as MRO service items. To assign a custom field to an item, the item

must belong to an item group that is connected to a user-defined field group, which in turn is connected to the custom field.

Custom field, custom field group and item groups are one-time configurations, and each service item must be connected to an item group that includes the custom field.

1 Create the **MROSERV** custom field:

- a Open 'Custom Field. Open' (CMS470).
- b Specify **MROSERV** as the custom field name and select **Options > Create**.
- c Specify this information:

Description

Specify **Service indicator for MRO**.

Name

Specify **MROSERV**.

Heading

Specify **MRO Service**.

Field type

Specify **A-Alphanumeric**.

Field length

Specify **1**

No. of dec places

Specify **0**

2 Create a custom field group:

- a Open 'Custom Field Group. Open' (CMS471).
- b Specify **BOB** as the name for the **Custom fld grp**.
- c Select **Options > Create**.
- d Specify **Description** and **Name**.

3 Connect the field to the custom field group:

- a Open 'Custom Field Grp. Connect Field' (CMS472).
- b Select the **BOB Custom fld grp** and specify **10** in the **Seqno** field.
- c Click **Create**.
- d Select the **MROSERV Custom field**.
- e Press **Enter**.

4 Connect the custom field group to an item group:

- a Open 'Item Group. Open' (CRS025).
- b Create an item group for service or use an existing applicable item group.
- c Right-click the item group and select **Related > Conn u-d fld gr**.
- d In 'Connect Custom Field Group. Open' (CMS473/B), specify **10** in the **Seqno** field and click **Create**.
- e Select **BOB** in the **Custom fld grp** field. Press **Enter**.

5 Connect the item group to items:

- a Open 'Item. Open' (MMS001/B).

- b Select your item and select **Options > Change**.
 - c In 'Item. Open' (MMS001/E), connect the item to the applicable item group.
- 6** Define an item as an MRO service:
- a Open 'Item. Open' (MMS001/B).
 - b Select the item and select **Related > Custom Field**.
 - c In 'Custom Field. Update' (CMS474), set MRO SERVICE to Y.

Defining service items

Service items must be connected to an integration-specific warehouse and have the **MROSERV** custom field set to Y.

To define service items:

- 1** Open 'Item. Open' (MMS001/B).
- 2** Select **CREATE (CTRL + 1)**.
- 3** Specify this information:

Name	Specify a descriptive name.
Inv accounting	0
Make/buy code	2
Basic U/M	HRS
Number of decimal places	2
- 4** Connect the item to an integration-specific warehouse.
 - a Open 'Item. Connect Warehouse' (MMS002/B). Specify a warehouse in the **Whs** field and click **Create**.
 - b In (MMS002), specify the data in the required fields.
 - c Click **Close** and open (MMS001).
 - d Right-click the item and select **Related > Item/Facility**.
 - e In 'Item. Connect Facility' (MMS003/E), specify 0 – **Zero cost** in the **Inv acc method** field.
- 5** A service item must have the **MROSERV** custom field set to Y.
 To define the item as an MRO service:
 - a In 'Item. Open' (MMS001/B), select **Related > Custom field**.
 - b In 'Custom Field. Update' (CMS474), set **MRO Service** to Y.
 If the **MRO Service** field is missing, see [Defining a custom field for service items](#) on page 17.

Defining a custom field for HxGN EAM items

For HxGN EAM to consume items from M3 with an item category other than **04-Tool**, **05-Fixed machine** and **07-Repairable item**, the **EAMITEM** custom field must be set up.

1 Create the **EAMITEM** custom field:

- a Open 'Custom Field. Open' (CMS470).
- b Specify **EAMITEM** as the custom field name and select **Options > Create**.
- c Specify this information:

Description

Specify the service indicator for MRO.

Name

Specify **EAMITEM**.

Heading

Specify **EAM Item**.

Field type

Specify **A-Alphanumeric**.

Field length

Specify **1**.

No. of dec places

Specify **0**.

2 Connect the custom field to the custom field group:

- a Open 'Custom Field Grp. Connect Field' (CMS472).
- b Select the **000 Cus fld gr** and specify **20** in the **Seqno** field.
- c Click **Create**.
- d Select the **EAMITEM Custom field**.
- e Press **Enter**.

3 Connect the custom field group to an item group:

- a Open 'Item Group. Open' (CRS025).
- b Use an existing applicable item group.
- c Right-click the item group and select **Related > Connected fld gr**.
- d In 'Connect Custom Field Group. Open' (CMS473/B), specify **20** in the **Seqno** field and click **Create**.
- e Select **000** in the **Custom fld grp** field. Press **Enter**.

4 Connect the item group to items:

- a Open 'Item. Open' (MMS001/B).
- b Select your item and select **Options > Change**.
- c In 'Item. Open' (MMS001/E), connect the item to the applicable item group.

5 Define an item as HxGN EAM item:

- a Open 'Item. Open' (MMS001/B).
- b Select the item and select **Related > Custom Field**.

- c In 'Custom Field. Update' (CMS474), set **EAMITEM** to y.

M3 business message data translations for HxGN EAM

The business message data translation in (CRS881) that are required for this integration are created during the initial M3 configuration for ION.

For more information, see "Specifying or editing translation data" in the *Infor M3 Core Administration Guide*.

The values for data translation are specified in the (CRS881) and (CRS882) functions. (CRS881) is based on the imported translation definitions. The values in (CRS882) may require an update during the ongoing business processes.

Note: Select **Enterprise Collaborator Administration > Utilities > Datatranslator** and click **Reload now** to activate new translation values.

The translations for the different types of data for this integration should be defined on the blank division of the company.

Business message: InventoryAdjustment

Field	Value
Msg standard	ION
Business msg	InventoryAdjustment
Parent elements	Sender
In/Outbound msg	I
Data element	LogicalID
Message data (Value - In)	EAM
M3 data (Value - Out)	Product Specific

Business Message: ReceiveDelivery

Field	Value
Msg standard	ION
Business msg	ReceiveDelivery
Parent elements	Sender
In/Outbound msg	I
Data element	LogicalID
Message data (Value - In)	EAM
M3 data (Value - Out)	Internal Stock Transactions or OrderStockTransactions

Business Message: Shipment

Field	Value
Msg standard	ION
Business msg	Shipment
Parent elements	Sender
In/Outbound msg	I
Data element	LogicalID
Message data (Value - In)	EAM
M3 data (Value - Out)	Internal Stock Transactions or OrderStockTransactions

Note:

- Use Internal Stock Transactions to handle stock adjustment without affecting internal accounting.
- Use OrderStockTransactions to create corresponding requisition orders for issue and return transactions that reflect on the internal accounting record.

Infor Enterprise Collaborator (MEC) settings

For instructions on how to install BODs and applicable software components and on how to set up correct agreements, rules, and translations, see the *Infor M3 Configuration Guide for Infor ION*.

This integration requires an additional configuration in the Infor Enterprise Collaborator Partner Admin tool.

Specifying the process flag

- 1 Select **M3 > Administration Tools > Enterprise Collaboration Administration > Server > Agreement Control Properties** and locate these agreements.

- M3_Shipment_Process_In
- M3_InventoryAdjustment_Process_In
- M3_ReceiveDelivery_Process_In
- M3_ServiceConsumption_Sync_In

- 2 Ensure that the control property is set as follows:

Property

m3beWarehouseInterfaceProcessFlag

Value

*EXE

Specifying the requisition order type

- 1 To configure the issue of requisition orders, select **M3 > Administration Tools > Enterprise Collaboration Administration > Server > Agreement Control Properties** and locate the M3_Shipment_Process_In agreement.
- 2 Ensure that **m3beDefaultRequisitionOrderType** is set to **R01**.
- 3 To configure the return of requisition orders, select **M3 > Administration Tools > Enterprise Collaboration Administration > Server > Agreement Control Properties** and locate the M3_ReceiveDelivery_Process_In agreement.
- 4 Ensure that **m3beDefaultRequisitionOrderType** is set to **R03**.

Enabling the validation of requisitions before creating purchase orders

When requisitions are created in HxGN EAM, they are added to M3 with the status **60** by default because the requisition has been approved in HxGN EAM.

Requisitions in M3 having the status **60** automatically create purchase orders. In many cases, this is not the preferred practice, and changes or additions to the requisition are required before creating the purchase orders.

To demote the requisition status to **20**:

- 1 Select **M3 > Administration Tools > Enterprise Collaboration Administration > Server > Agreement Control Properties** and locate the M3_Requisition_Process_In agreement.
- 2 Set the control property as follows:

Property	Value
m3beStatusOverride	20
m3beDirectPurchaseOrderType	DPO

Specifying the rejection reason

To configure the rejection reason:

- 1 Select **M3 > Administration Tools > Enterprise Collaborator Administration > Server > Agreement Control Properties** and locate these agreements:
 - M3_InspectDelivery_Sync_Out
 - M3_Shipment_Process_In
- 2 Ensure that **m3beRejectionReason** is set to **RR**.

Specifying the return to supplier order type

To configure the **return to supplier** order type:

- 1 Select **M3 > Administration Tools > Enterprise Collaborator Administration > Server > Agreement Control Properties** and locate the M3_ShipmentDelivery_Process_In agreement.
- 2 Ensure that **m3beRTSOrderType** is set to **CLM**.

Specifying the purchase order type for fixed assets

To configure the purchase order type for fixed assets:

- 1 Select **M3 > Administration Tools > Enterprise Collaborator Administration > Server > Agreement Control Properties** and locate the M3_Requisition_Process_In agreement.
- 2 Ensure that **m3beFixedAssetOrderType** is set to **FAS**.

Initial load settings

See the triggering table in [Sending the initial data load from Infor M3](#) on page 35.

Chapter 5: Configuring HxGN EAM

In HxGN EAM, you must complete configuration tasks that are specific to this integration.

See the *HxGN EAM Configuration Guide for Infor ION* for the configuration of the logical ID, tenant, accounting entity, and location setup.

To integrate Infor M3 and HxGN EAM, you must set these parameters under **Assets > Administration > Security > Install Parameters**:

Installation parameter	Description	Available Values	Recommended Values
MULTIORG	Indicates whether multi-organization security is set.	YES NO	YES
ASSETASS	Indicates where an asset should be assigned.	R - during receipt P - during creation of PO	R
PDRCPPTO	Indicates where direct material is received.	EVENT - direct material received against Work Order STORE - direct material will first be received in Store	EVENT
PRICELEV	Indicates where price updates should take place.	P - parts level S - stock level	S
EXRTUPDT	Indicates whether exchange rate fields can be updated.	YES NO	NO
IGNLOC	This applies to transactional BOD DocumentIDs and their references in other BODs. If @IGNLOC=Y, the entities (TRANID1, AE1, LOC1) and (TRANID1, AE1, LOC2) are regarded as the same because the location is trivial. If not, they are regarded as two different transaction IDs.	Y N	Y

Installation parameter	Description	Available Values	Recommended Values
HTMLCOMM	ON provides HTML editing capability in the comment fields, while OFF removes HTML editing capability.	ON OFF	OFF
INVYCNT	If set to v , SyncInventoryCount is published whenever the inventory stock is updated. If set to c , only physical inventory (STTK) and stock initialization (RECV with 'Stock initialization' description) trigger the outbound event.	Y C	C

Configuring the user status for the purchase order line

In HxGN EAM, the **Active** check box is cleared, so that no further receipt can be made in the purchase order line. The status of the PO line is set to **Cancelled** if the **Active** check box is cleared, even if the quantity has been partially received.

To set the status to **Inactive** instead of **Cancelled**, follow these steps:

1 Go to **EAM Administration > Setup > System Codes**.

2 Specify this information:

Setup

Specify **Statuses**.

For Entity

Specify **RLST**.

3 In the User Code details, specify this information:

User Code

specify **IA**.

System Code

Specify **c**.

Description

Inactive

System Default

Select the check box. A message is displayed asking if you want to make this code the system default.

4 Click **Yes**.

5 Click **Submit**.

6 Click **Save Record**.

7 Select **EAM Administration > Security > Status Authorizations**.

- 8 Select **Entity** from the dropdown combobox on the right side of the screen. Specify **PORL** in the second field, then click **Run**.
- 9 In the Authorization Details section, add status authorizations for the Databridge **User** or the **User Group** the Databridge user belongs to.
- 10 Specify this information:
Entity
Specify **PORL**.

From Status
Specify **u**.

To Status
Specify **IA**.
- 11 Click **Submit**.
- 12 Specify this information to create another record:
Entity
PORL

From Status
IA

To Status
U
- 13 Click **Submit**.
- 14 Click **Save record**.
- 15 Specify this information for status authorization from **Active** to **Inactive**:
Entity
Specify **PORL**.

From Status
Specify **A**.

To Status
Specify **IA**.
- 16 Click **Submit**.
- 17 Click **Save record**.

Other HxGN EAM configurations

HxGN EAM configurations that are not associated with a particular BOD:

- Verify that INFOR-ONRAMP partner is enabled on the HxGN EAM **Databridge Partners** screen.

- When you create the HxGN EAM organization, set the default currency so that it matches the default currency of the corresponding accounting entity in M3.
Note: You cannot change the organization's default currency after you have created the organization.
- Add the HxGN EAM organization for the user in **Administration > Security > User Setup**. HxGN EAM Organization should be the same as M3 Company_Division.
- In **Administration > Databridge > Databridge Partners**, select INFOR-ONRAMP. Click the **Subscriptions** tab and select **Event** from the drop-down field at the top right of the screen. Type **SYNCITEM** in the search bar then click **Run**. Select **Enabled** for the **Document Type ProcessItemMaster** and click **Submit**. Clear the **Enabled** check box for the **SyncItemMaster** document type and click **Submit**.
- In **Administration > Databridge > Databridge Partners**, select INFOR-ONRAMP. Click the **Subscriptions** tab and select **Event** from the drop-down field at the top right of the screen. Type **INVYCOUNT** in the search bar, then click **Run**. Select **Enabled** for the **Document Type SyncInventoryCount**. Click **Submit**.
- Configure the unit of measure to be used in the integration in both HxGN EAM and M3.
- The requisition line in M3 is limited to 3 characters. To avoid exceeding this limit, set the HxGN EAM install parameter **INCRLINO** accordingly. Note that this **Line Number Increment** parameter is used to preset line numbers not only for the requisition, but also for many screens such as purchase orders, receipts, and work order activities.
- For each HxGN EAM organization, select **Asset > Organizations > Options**. Set the **PDRCPPTO** parameter to **WO** or **HELD**.
- **Originator** is a required field in HxGN EAM purchase orders. When the purchase order is associated with an HxGN EAM requisition, the **Originator** value is taken from the associated requisition. If no HxGN EAM requisition is associated, the value is retrieved from the BOD element **PurchaseOrderHeader/CustomerParty/RequesterContact/ID**. The value for this element should be a valid employee under **Work > Setup > Employees**.
- The buyer in M3 must also exist in HxGN EAM as **User ID** with activated **Buyer** field.
- Create the **RR Reason for Return** in **Materials > Setup > Reasons for Return**.
- If **Part** is intended for fixed assets, set **Category** to **FAS**. The part should be an Item in M3 with **Lot control method 3-In lot master**. **FAS** should exist as category in HxGN EAM in **Equipment > Setup > Categories**.

Configuring Databridge

- 1 For the INFOR-ONRAMP partner, open the Databridge partner screen and click the **Subscription** tab.
- 2 Enable these events by selecting the **Enabled** check box and click **Submit**.
 - ADDREQUISTN/ProcessRequisition
 - CHANGEREQUISTN/ProcessRequisition
 - PORECEIVESERVICE/SyncServiceConsumption
 - UPDINV/ExportInventoryTransactions
- 3 On the **Databridge Setup** page, specify this information:

Enable Add Requisition Outbound
Specify **Yes**.

Enable Change Requisition Outbound
Specify **All**.

Enable PO Receipt Outbound

Specify **Yes**.

Enable Inventory Transactions Outbound

Specify **For Infor ION**.

Chapter 6: Connecting to ION

This integration has a solution .xml file that is used to set up a sample model.

When you import the solution .xml file in ION, the sample connection points and data flows for this integration are defined.

Downloading the solution XML

Download the data flow. To perform this task, you must have the **M3BE-FndAdmin** security role.

- 1 In Infor M3, select **Administration Tools > Cloud File Transfer Agent Administration**.
- 2 Click **Download Contents**.
- 3 Select the **M3-EAM_integration** check box and click **Download Contents**.
- 4 Extract `M3-EAM_integration.xml` from the .zip archive.

Importing the solution XML

- 1 In ION, select **Connect > Data Flows**.
- 2 Click **Import**.
- 3 Browse and select `M3-EAM_integration.xml`.
- 4 Click **Open**. The connections, data flows, and mappings are imported from the file.
 - If the data flow exists or if an activity such as a connection point, a mapping, or the file template already exists in the target environment, select **Rename the imported mappings**. ION renames the model by adding **_1** to the original name. You can specify a different name.
 - If a data flow already exists, the imported flow is renamed. If a connection point or mapping already exists, the imported item is renamed. The corresponding activities in the data flow use the new names.

Updating the Infor M3 connection point

You must update the connection points that were included in the imported solution XML to use the existing Infor M3 connection point. You defined this connection point when you configured Infor M3 to communicate with ION.

See the *Infor M3 Core Administration Guide*.

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, select the sample flow for this integration and click **Details**.
The sample data flow has **Activity** boxes that represent the sample connection points. The document icons between these **Activity** boxes list the documents that flow between the connection points.
- 3 On the **Document Flow Modeler** page, select the sample activity box labeled **M3BE_Outbound**. This box represents your Infor M3 instance connection point in the data flow. This connection point sends documents to the HxGN EAM connection point.
- 4 On the **Application Task** pane, click **Add**.
- 5 Select the Infor M3 connection point that you defined using the *Infor M3 Core Administration Guide*.
- 6 In the **Application Task** pane, click **Details** for the Infor M3 connection point.
 - a Verify that the **Documents** tab includes all the inbound and outbound documents that are required for this integration. Your Infor M3 connection point also includes the documents for other integrations. See the list of inbound and outbound BODs that are required for this integration in [Integration of solution components](#) on page 11.
 - b Optionally, add missing documents to the Infor M3 connection point and specify if the document can be sent, received, or both.
 - c On the **Connection** tab, click **Test** to verify whether the connection is working. A message is displayed to indicate whether the test was successful. If the test was not successful, correct the connection details and try again.
- 7 Save the changes and return to the **Document Flow Modeler** page.
- 8 In the **Application Task** pane, select the sample connection point and click **Remove**.
- 9 Select the M3 Business Engine in-box that represents the Infor M3 connection point for receiving the documents from HxGN EAM.
- 10 Repeat steps 3-9 for the **M3BE_Inbound** activity box.

Updating the HxGN EAM connection point

You must update the connection points that were included in the imported solution XML to use the existing HxGN EAM connection point. You defined this connection point when you configured HxGN EAM to communicate with ION.

See the *HxGN EAM Configuration Guide for Infor ION*.

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, select the sample flow for this integration and click **Details**.

- 3 On the **Document Flow Modeler** page, select the sample activity box labeled **EAM**. This box represents your HxGN EAM instance connection point in the data flow. This connection point sends documents to the Infor M3 connection point.
- 4 In the **Application Task** pane, click **Add**.
- 5 Select the HxGN EAM connection point that you defined using the *HxGN EAM Configuration Guide for Infor ION*.
- 6 On the **Application Task** pane, click **Details** for the HxGN EAM connection point.
 - a Verify that the **Documents** tab includes all the inbound and outbound documents that are required for this integration. Your HxGN EAM connection point also includes the documents for other integrations. See the list of inbound and outbound BODs that are required for this integration in [Integration of solution components](#) on page 11.
 - b Optionally, add missing documents to the HxGN EAM connection point and specify if the document can be sent, received, or both.
- 7 Save the changes and return to the **Document Flow Modeler** page.
- 8 On the **Application Task** pane, select the sample connection point and click **Remove**.
- 9 Save the changes and return to the **Document Flow Modeler** page.
- 10 Repeat steps 3-9 for the **EAM for ProcessRequisition** activity box. For step 6, connect the Process.Requisition document.

Verifying the data flows between M3 and HxGN EAM

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, click the data flow that you want to configure.
- 3 Click the M3 inbound application and ensure that the **Application** column contains the provisioned M3 connection point.
- 4 Click the HxGN EAM application and ensure that the **Application** column contains the provisioned HxGN EAM connection point.
- 5 Click the document icons in the flows and verify that they contain the expected documents as shown in [Integration of solution components](#) on page 11.

Approving the ION mapping

The integration between Infor M3 and HxGN EAM requires a special handling of the ProcessRequisition unit code. The ION mapping has been introduced to swap the values of Quantity and UnitPrice/Amount under RequisitionLine if the unitCode attribute of Quantity is **LS**.

ION mapping is also added for the inbound SyncServiceConsumption to set the value of ReceivedQuantity to the decimal equivalent of the percentage specified in HxGN EAM. This ensures that the correct received quantity is sent to M3.

- 1 To approve the ION mapping:

- 2 Select **Connect > Data Flows** in ION.
- 3 Select the sample mapping on the **Data Flows** page.
- 4 Click **Details** in the **Mapping Properties** pane.
- 5 In the **Graphical Mapper** window, click **Approve** for the version to be used.

Activating the data flow

A new or changed data flow can be used in Infor ION after it is activated. This section describes how to activate a data flow.

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, select the data flow between Infor M3 and HxGN EAM.
- 3 Click **Activate**.
 - If you receive a message that the activation was successful, click **OK**. Your changes are effective immediately.
 - If you receive a warning message, the model is activated.
 - If you receive an error message, the model cannot be activated.

Configuring the data flow for InventoryCount BOD

The data flow includes the SyncInventoryCount BOD published from M3 to be received by HxGN EAM. However, if you prefer to perform the stock count from HxGN EAM, you can configure the data flow as follows:

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, select M3-EAM_integration.
- 3 Click the file next to the HxGN EAM application.
- 4 Click **Add**.
- 5 Select **Inventory Count** with **sync Verb**.
- 6 Click **OK**.
- 7 Select the Process.InventoryAdjustment document.
- 8 Click **Remove**.
- 9 Save the data flow.
- 10 Click **Reactivate**.

Configuring the data flow for goods receipt in HxGN EAM

If the reception is to take place in HxGN EAM, remove the SyncReceiveDelivery BOD that is generated from M3 to avoid duplicate receipt.

Follow these steps:

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, select M3-EAM_integration.
- 3 Right-click these applications and select **Delete**.
 - M3BE_Outbound for SyncReceiveDelivery Application
 - FilterReceiveDeliveryHoursUM
 - HandleReceiptReversal Mapping Property
 - EAM_Inbound for SyncReceiveDelivery
- 4 Right-click the **Data Flows** screen and select **Delete Empty Branches**.
- 5 Save the data flow.
- 6 Click **Reactivate**.

Configuring the data flow for stand-alone purchase order from M3

Purchase orders that do not originate from HxGN EAM requisition are ignored by HxGN EAM by default. To allow HxGN EAM to process the stand-alone PO sent by M3, follow these steps:

- 1 In ION, select **Connect > Data Flows**.
- 2 On the **Data Flows** page, select M3-EAM_integration.
- 3 Click the HandleDataBridge mapping.
- 4 Click **Details**.
- 5 On the **Versions** pane, click **Edit**.
- 6 In the XSLT editor, set the value from **false** to **true**.
- 7 Click **Approve** on the **Versions** pane.
- 8 Click **Back**.
- 9 Click **Reactivate**.

Setting up Infor ION business events and workflows

You can set up ION events and workflows for Infor M3, for HxGN EAM, and between Infor M3 and HxGN EAM. See the *Infor ION Desk User Guide - Cloud Edition*.

Chapter 7: Publishing BODs

After the ION connections are configured, BODs must be published for this integration.

Starting applications

Start these products, services, and processes if they are not already running:

- Infor M3
- HxGN EAM

Initial data load

During normal processing, BODs are generated when a user makes a data change or completes a transaction. When you set up a new integration with another product, you must manually generate BODs that pass the current set of Infor M3 data to HxGN EAM and vice versa, so that the base systems are synchronized. The BODs are placed in the message outbox, from which Infor ION retrieves them and passes them to the other product.

Sending the initial data load from Infor M3

Activate each rule for each triggering table before you run the initial data load:

BOD		Triggering table
SupplierPartyMaster		CIDMAS
CodeDefinition	Cost Centers	FCHACC
	Unit Codes	CSYTAB
	FreightTerms	CSYTAB
	StockLocations	MITWHL

BOD		Triggering table
ItemMaster		MITMAS

To perform an initial load of Infor M3 data into BODs that are placed in the message out-box, see "Publishing BODs" in the *Infor M3 Core Administration Guide*.

After the initial data load, Infor M3 sends BOD updates when users change certain data or when certain transactions occur in Infor M3.

For a list of the events that generate BODs, see "Outbound BODs" in the *Infor M3 Core Administration Guide*.

Publishing any additional initialization data

All master and initializing data is included in the initial loads from Infor M3 and HxGN EAM. Additional master data BODs and transaction BODs are generated through Infor M3 and HxGN EAM business events as they occur.

Chapter 8: Verifying the integration

After a successful integration, transactions in Infor M3 and HxGN EAM generate BODs that send data to the integrating product through ION. This section describes how to verify that the integration sends and receives the expected data.

Verifying the data flow

To verify whether the initial data is flowing between the products, check the message in-box and out-box areas in both products to see if the Infor M3 data arrives and if data is retrieved from HxGN EAM.

If data is not flowing between the systems, see the troubleshooting section in the appropriate configuration guide.

Verifying business tasks

If multiple instances of the products are sending BODs, verify that the expected data from each instance is available in the appropriate areas of the other product.

Appendix A: Troubleshooting

If data is not flowing between the systems, an error might exist in your configuration with ION.
See the Infor OS configuration guides for the integrated products.