



# Infor PLM for Process (Optiva) Configuration Guide for Infor Operating Service - Cloud Edition

Release 2022.x

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## About this guide

This guide provides information for the configuration and implementation of Optiva with the Infor OS Platform.

Use this guide when Optiva and Infor OSPlatform are both installed on-premises.

## Intended audience

This guide is intended for the system administrator or consultant who configures Optiva for use with Infor OS Platform.

## Contacting Infor

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

The latest documentation is available from [docs.infor.com](https://docs.infor.com) or from the Infor Support Portal. To access documentation on the Infor Support Portal, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact [documentation@infor.com](mailto:documentation@infor.com).

# Chapter 1: Requirements

Ensure that all requirements are met.

## Required applications

Ensure that you have installed and configured these products:

- Infor Optiva 12.1.5
  - See the *Infor PLM for Process Installation Guide*.
- Infor Optiva Listener
- Infor Operating Service applications

## Required information

Obtain this information before you begin the integration:

- Administrator account and access information for your hosted Infor environment.
- Name of the Optiva instance or logical ID that is used to connect with Infor ION.
- Tenant ID that is used to connect the product to Infor OS Platform in Infor ION.
- Enterprise organization structure, that is, accounting entities.
- Location of content source files to be imported into ION and Infor Ming.le.

See [Setting up logical IDs, tenants, accounting entities, and locations](#) on page 26.



## Chapter 2: Configuration checklist

Follow this checklist to integrate this product with Infor ION:

Complete	Task	Reference
<input type="checkbox"/>	Understand the applications in the CloudSuite and some related concepts.	<a href="#">Integration with other products through ION</a> on page 11 <i>Optiva Solutions Overview</i>
<input type="checkbox"/>	Configure security.	<a href="#">Configuring security</a> on page 19
<input type="checkbox"/>	Configure user access and roles: <ul style="list-style-type: none"> <li>Configure user access to your application in Infor Ming.le.</li> <li>Configure additional system administration access to your application through Infor Ming.le.</li> <li>Set up roles in Infor Ming.le.</li> <li>Associate Infor Ming.le users and roles with users in other applications in the CloudSuite</li> <li>Optionally, set up distribution groups</li> </ul>	<a href="#">Configuring access to applications through Infor Ming.le</a> on page 20
<input type="checkbox"/>	Configure Optiva.	<a href="#">Configuring Optiva</a> on page 24
<input type="checkbox"/>	Configure your product and ION to send and receive BODs: <ul style="list-style-type: none"> <li>Configure Optiva to send and receive BODs</li> <li>Verify that BODs are generated</li> <li>Verify that ION receives data</li> </ul>	<a href="#">Configuring Optiva to send and receive BODs in ION</a> on page 25 <a href="#">Verifying that BODs are generated</a> on page 32 <a href="#">Verifying that ION receives data</a> on page 32
<input type="checkbox"/>	Optionally, configure workflows and ION messages for your application.	<a href="#">Configuring workflows and ION messages for Optiva</a> on page 34
<input type="checkbox"/>	Set up ION APIs for your application.	<a href="#">Setting up ION APIs for Optiva</a> on page 36
<input type="checkbox"/>	Configure drillbacks to your product.	<a href="#">Configuring drillbacks to Optiva</a> on page 37
<input type="checkbox"/>	Configure context and utility apps that are used with your product.	<a href="#">Configuring context apps and utility apps that are used with Optiva</a> on page 38

Complete	Task	Reference
<input type="checkbox"/>	Configure your product to work with Infor Document Management.	<a href="#">Configuring Infor Document Management with Optiva</a> on page 40

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## Chapter 3: Configuration Overview

Before you complete the configuration tasks, you must understand what is provided in the CloudSuite and how the components of the CloudSuite communicate. You should also be familiar with the list of related concepts and definitions.

Before you complete the configuration tasks, you must understand how this product communicates with other products in a CloudSuite. You should also be familiar with a list of related concepts and definitions.

### About this CloudSuite

The solution overview document for this CloudSuite provides a high-level explanation of this CloudSuite and a summary of the applications that are included. It also includes information about configuration, personalization, extension, and integration options.

### Integration with other products through ION

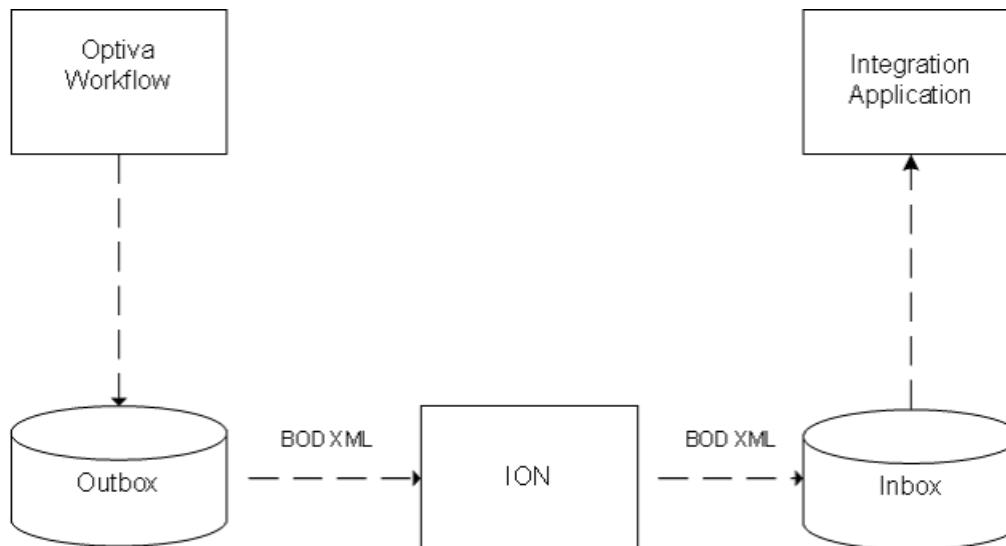
An outbound operation typically begins in Optiva when a workflow is initiated that requires a data exchange with another ION-enabled product. A Business Object Document (BOD) XML message is generated by Optiva and placed in an area designated as the Optiva message outbox. At scheduled intervals, ION connects to the outbox and retrieves the BODs from it.

In ION, you create application connection points. These points define the connections between ION and a product that can send and receive BODs. ION Connect routes BODs according to the document flows between Optiva and other ION-enabled products.

The document flows between Optiva and other products represent the business relationship between the databases. You use the **ION Document Flow Modeler** page to define these document flows.

A document flow can be defined from Optiva to another product for a particular BOD. At specified intervals, ION places the outbound BOD from Optiva in the other product's designated message in-box. Products are responsible for validating and incorporating the data in inbound BODs according to their rules.

The receiving application sends an Acknowledgement, (for example `AcknowledgeItemMaster`) back to Optiva. Optiva Inbox Listener processes the `Acknowledge` BOD XML.



A flow can be defined from another product to Optiva. ION retrieves BODs from the sending product's message outbox and delivers them to Optiva's message in-box for processing. Optiva retrieves, validates, and processes the BODs.

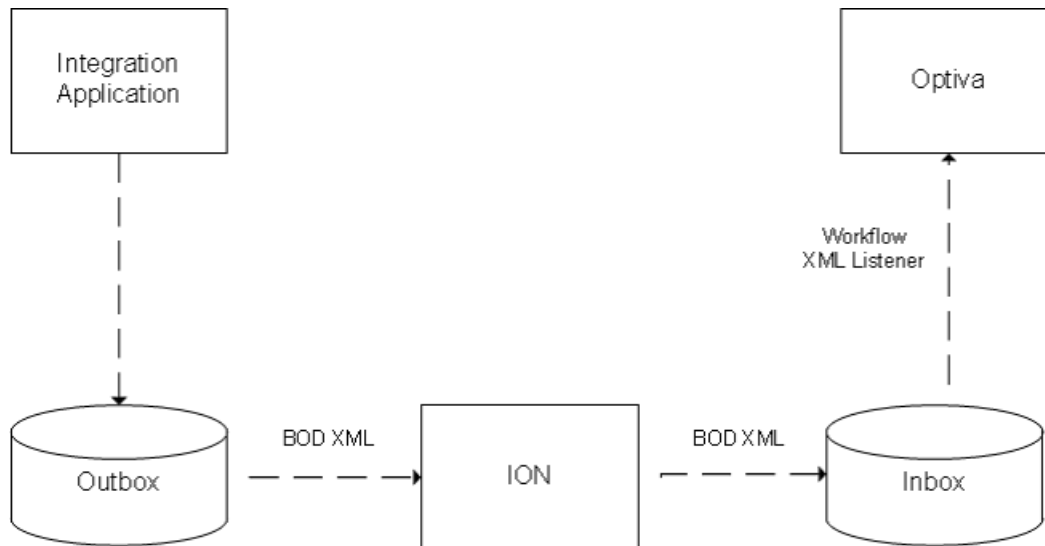
ION Connect transforms the iDoc to BOD XML and uses the defined BOD routings for the specific BOD type.

The Listener monitors the in-box tables within the Optiva database, retrieves the XML from the in-box tables, and launches an Optiva workflow script using `ACTIONSETSTART`.

The workflow script retrieves the data from the BOD XML. Then, the workflow uses the standard script functions (`ObjPropertySet`) to update or create the Optiva business objects in the Optiva database.

The receiving application successfully processes the BOD that was inserted into its in-box tables by ION Connect. Then, the receiving application flags the in-box entry as processed and the document is removed.

Optiva Application Server commits the object updates to the Optiva database. The XML is archived as a text file. XML Listener Pass/Fail is used and the tables are cleaned out.



Optiva uses different integration methods to communicate with other applications in the suite.

## BOD integrations

An outbound operation typically begins when a user performs an action in Optiva that requires a data exchange with another ION-enabled product. A Business Object Document (BOD) XML message is generated by Optiva and placed in an area designated as the Optiva message outbox. At scheduled intervals, ION connects to the outbox and retrieves the BODs from it.

In ION Desk, a connection point is set up for each product or site in the CloudSuite that can send or receive BODs. If you add products later, the Infor Cloud team adds connection points for them, as needed. The connection point defines the information needed to connect to the application database. It also holds a list of all the BOD documents that the application can send or receive.

You define document flows between the connection points to represent the business flows between the products. For example, the Infor Cloud team sets up a document flow between Optiva and Infor Ming.le to pass BODs that contain user and role information. Use the Modeler in ION Desk to define these document flows.

ION routes BODs according to the document flows between BOD-enabled products. If a document flow is defined from Optiva to another product for a particular BOD, then at specified intervals, ION places the outbound BOD from Optiva in the other product's designated message in-box. Products are responsible for validating and incorporating the data in inbound BODs according to their rules.

## Concepts and definitions specific to this configuration

To configure the tenant, logical ID, accounting entity and location correctly, you must understand these terms and how they are defined in this product. Together, these terms determine where inbound BOD

information is processed, or the outbound instance and location to which the BOD information should be associated.

In Optiva, profile attributes are used to specify the logical ID, tenant ID, accounting entity. For more information, see the *Infor PLM for Process Application Configuration Guide*.

## Tenant ID

The tenant is a container for accounting entities and locations and is required in each BOD. The value of the tenant must be the same in all of the products that exchange BODs. Data is not shared or accessible between tenants.

See the information about Using Tenants in the *Infor ION Desk User Guide*.

## Accounting entity

An accounting entity usually represents a legal or business entity that owns its general ledger. Every transaction belongs to only one accounting entity. Accounting entity can also be defined as the owner of certain master data among the enterprise.

## Location

A location is the physical location that is associated with data or transactions. The location can be, for example, a warehouse, a manufacturing location, a project location, or an office. Locations are published in the Location BOD. A location is required for all transactional BODs and is usually the location from which a transaction or record is generated.

Item BODs have costs delineated by location. In Optiva, you can specify Cost parameters for each location. The **ION.CostMap.Loc1** and the **ION.CostMap.Loc2** profile attributes map the two together. An incoming ION *ItemMaster* BOD can update multiple Optiva cost parameters with a single BOD document.

The default values are **COST\_LOC1** and **COST\_LOC2** respectively.

## Logical ID

The logical ID is a unique identifier used in the communication of data between the products in the tenant's environment. Each instance of a product, for example, a site, is assigned one logical ID. In ION, the logical ID is used to properly route BODs. Infor Ming.le uses the logical ID to determine which application to start when you click a drillback.

In Infor Ming.le, each application is assigned only a logical ID regardless of the number of instances of the application.

Because Optiva supports multiple instances, you must use the Logical ID Fallback table in Infor Ming.le to associate additional instances of Optiva with instance 01. Then, for example, when a drillback is sent to Infor Ming.le for instance 02, Infor Ming.le uses the information in the Logical ID Fallback table to determine that instance 02 is related to 01. Infor Ming.le passes the drillback information to Optiva instance 01 and the request is handled by Optiva.

For more information, see the online help.

Because Optiva supports multiple instances, you must use the Logical ID Fallback table in Infor Ming.le to set up the relationship between the instances.

The recommended value of the logical ID for Optiva is: `lid://infor.plmprocess.optiva01`. If you have more than one instance of Optiva, the suffix must be unique for each instance.

- Use `infor.plmprocess.optiva01` for the first instance.
- Use `infor.plmprocess.optiva02` for the second instance.

When a drillback is sent to Infor Ming.le for `lid://infor.plmprocess.optiva02`, Infor Ming.le uses the information in the Logical ID Fallback table. This information is used to pass the drillback information to the correct Optiva instance.

For more information, see the *Infor OS Platform Administration Guide* and the *Infor Optiva Installation Guide*.

## Chapter 4: Getting Started

Ensure that all of these requirements are met before you start the configuration.

### Determining the bootstrap administrator

Your tenant is delivered with a bootstrap administrator already assigned. The bootstrap administrator is the only person who can initially access the tenant. This administrator performs the initial setup of the tenant, including setting up access for other users.

Customers must designate one person as the bootstrap administrator. During the planning process, they must provide the email address of the designated person to their Infor representative.

For business partners who are configuring an Infor hosted CloudSuite demo environment, the bootstrap administrator is typically the person who made the initial request for the demo environment.

### Accessing your cloud environment (tenant)

After the environment has been provisioned, Infor sends the bootstrap administrator an email that has this text in the subject line: `!SECURE! Infor Provisioning Notification`. This email contains instructions for activating your Infor Ming.le user. It also includes the URLs to access the environments.

Follow the instructions in this email to complete these tasks:

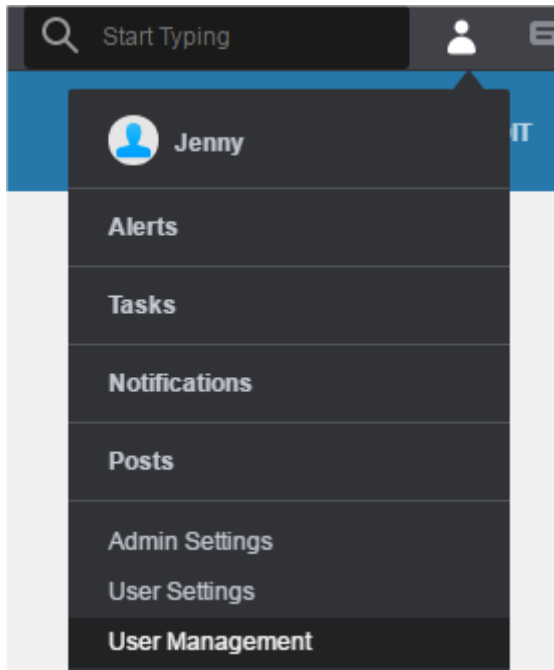
- Activate and validate your access to Infor Ming.le using the instructions provided.
- Validate access via the provided URLs and verify that you are able to log in to all environments.



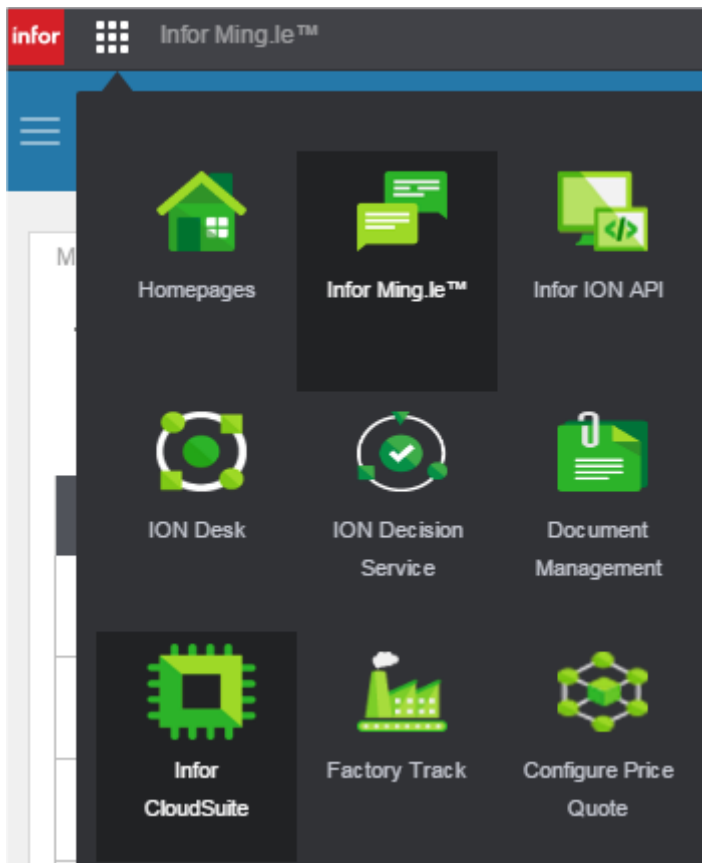
## Verifying access to your applications within Infor Ming.le

After you sign in to the Infor Ming.le portal for the first time, ensure that you have system administrator access to these applications in the cloud.

- 1 Under the **User** menu, verify that you can access the **Admin Settings** and **User Management** menu options.



- 2 Under the App menu, verify that you can access Optiva and Infor Operating Service applications such as Infor Ming.le, ION Desk, and Infor Document Management.



## Chapter 5: Configuring security

Single sign on allows users to use one set of credentials to log into all Infor applications.

Optiva is set up for Single Sign On in Infor Ming.le. In an Infor Ming.le environment, Optiva can be configured for these authentication choices:

- Active Directory/Active Directory Federation Services (AD FS)
- `PingFederate` for IFS CE

Integrated Windows Authentication (IWA) is not used by Optiva in an Infor Ming.le environment.

WS-Federation is used for authentication of AD FS and `PingFederate`. Optiva does not use SAML for authentication.

For more information about these authentication choices, see the *Infor PLM for Process Installation Guide*.

## Chapter 6: Configuring access to applications through Infor Ming.le

Users, roles, and person IDs are defined and shared between Infor Ming.le and all of the other applications that run through the Infor Ming.le portal.

### Users and roles

Because Infor Ming.le is the system of record for users, you must set up users in Infor Ming.le. Then, synchronize the users through BODs to other applications in the Infor Ming.le portal.

What if your product requires additional user setup beyond the configuration that is done in Infor Ming.le? Then after the users are synchronized to your product, you can continue the user setup in your product.

You can perform these user management tasks in Infor Ming.le:

- Create users, including manual import of users
- Update users
- Delete or deactivate users
- Reset passwords
- Monitor recent user activity and mobile sessions
- Manage sessions

What happens when you create or update a user in Infor Ming.le? The information that is associated with that user is used to automatically set up some user information in Optiva. This association is handled through `Sync SecurityUserMaster` BODs that are passed through Infor ION.

Optiva is the system of record for user roles; this is because the types of roles and the names of roles are dependent on the requirements of Optiva.

After the roles are set up in Optiva, they are synchronized to Infor Ming.le through the `Sync SecurityRoleMaster` BOD. That way, Infor Ming.le is aware of all possible roles.

The ability of security roles to perform specific operations and access specific data is enforced by Optiva not Infor Ming.le.

## Configuring user access to Optiva through Infor Ming.le

**Note:** The Infor Cloud team configures the initial Infor Ming.le system administration user and its roles, as well as several other required accounts. We recommend that you do not change the configuration of this initial system administrator or the other required accounts.

You must add other users in Infor Ming.le before they can access your product through Infor Ming.le.

- 1 In Infor Ming.le, select **User Menu > User Management**.
- 2 Select **Security Administration > General Settings**.
- 3 Configure these general properties to ensure that new or changed user information is synchronized with other applications:

### **Publish Security User Master BOD**

Select this option to publish the `SecurityUserMaster` BOD when a user's details are changed in Infor Ming.le. This synchronizes the user details with other products that subscribe to the BOD.

### **User Synchronization Interval (min)**

If you selected the **Publish Security User Master BOD** option, specify an interval. This is the interval, in minutes, at which you want to publish the updated BODs to synchronize users.

### **Enable SCIM Parameter configuration**

Select either **Get Users** or **Publish Users**. This option allows you to add users in Infor Ming.le through a System for Cross-domain Identity Management (SCIM) based REST interface. The SCIM agent can upload user definitions from either on-premises or cloud applications into Infor Ming.le.

### **SCIM-Publish/Get Users Interval**

If you selected the **Enable SCIM Parameter configuration**, specify an interval. This is the interval, in minutes, at which the users are retrieved or published.

- 4 Set up system administrator access between the Infor Ming.le portal and Optiva.
- 5 Add users in the Infor Ming.le portal.
  - a Add users through OS Platform User Management.
  - b If your product already has legacy users set up, you can import the users into the OS Platform from a .CSV formatted file.
  - c To temporarily disable user synchronization before the import, clear the **Publish Security User Master BOD** option. Select **Do not enable** for the **Enable SCIM Parameter configuration** option. Then select **Allow Import**. The **Import** option is then enabled on the **Manage > Users** page.
  - d Add users to the OS Platform through a SCIM based REST interface. The SCIM agent can upload user definitions from either on-premises or cloud applications into the OS Platform.
  - e Set up the OS Platform to retrieve new users and updated user details at periodic intervals from Active Directory.
  - f Your application can send a `Process SecurityUserMaster` BOD to Infor Ming.le to add users.
- 6 Set up automatic login.
- 7 Log in to Optiva and update the user information in your product. Specify the additional required or optional fields that are not shared with the OS Platform.

- 8 In Infor Ming.le, specify the Person ID that is used to synchronize personnel records with Optiva.

## Configuring system administrator access to Optiva through Infor Ming.le

Infor Ming.le provides a default `Infor-SystemAdministrator` role that allows for full access to all products that are linked to Infor Ming.le.

Optiva has an `Infor-SystemAdministrator` group or role that allows access to all Optiva screens.

When a user who has the `Infor-SystemAdministrator` role in Infor Ming.le is synchronized to Optiva, that user automatically has access to all Optiva forms.

- 1 Send the `Sync SecurityRoleMaster` BOD from Optiva to synchronize the `Infor-SystemAdministrator` group or role in your product with the `Infor-SystemAdministrator` role in Infor Ming.le.
- 2 Add the `Infor-SystemAdministrator` role to the appropriate users in Infor Ming.le.  
After you update the user information, the `Sync SecurityUserMaster` BOD is sent from Infor Ming.le to your product. This BOD synchronizes the system administrator users with this role.
- 3 Assign additional system administration roles that are required by your product to the appropriate users.

## Setting up roles

Optiva has configurable security roles that are set up in the product and then sent to Infor Ming.le through the `SecurityRoleMaster` BOD. This BOD is defined at the tenant level.

- 1 In Optiva, use the **Roles** form to create roles that can access specific forms.  
A `Sync SecurityRoleMaster` BOD is generated by Optiva. The information from this BOD is used in Infor Ming.le to automatically create a matching security role.
- 2 Associate the roles with users. This can be done in either Infor Ming.le or Optiva:
  - a To associate roles with users in Infor Ming.le, see the *OS Platform Administration Guide*.  
Infor Ming.le generates a `Sync SecurityUserMaster` BOD and sends it to all applications that run in the Infor Ming.le portal.  
Optiva uses the information from this BOD to associate the role or group with the Optiva user record. This is the recommended method. Each application in the tenant should subscribe to the `Sync SecurityUserMaster` BOD.
  - b To associate roles with users in Optiva, use the **Users** form. In this form, associate each user with the appropriate groups.  
Optiva generates a `Process SecurityUserMaster` BOD which is sent to Infor Ming.le.

Infor Ming.le then sends a `Sync SecurityUserMaster` to all applications that run in the Infor Ming.le portal, to update the user records in all applications.

**Note:** If you manually create a security role in Infor Ming.le that does not exist in Optiva, you must manually create a matching role in Optiva. If you delete a role in either product, you must also delete the corresponding role in the other product.

## Verifying user access

- 1 Log into Infor Ming.le portal as a user. The user must belong to a role that is defined in Infor Ming.le for this product.
- 2 From the **App** menu, click the icon for this product. The user must have the appropriate permission to access Optiva.
- 3 If Single Sign On is configured, select the appropriate configuration and click **OK**. The product session is opened.

## Setting up distribution groups

Optionally, you can set up distribution groups in Infor Ming.le for CloudSuite users who require access to ION in order to view or update information or to troubleshoot errors. See the online help.

## Service accounts

The **Infor Ming.le Service Accounts** page shows accounts that have resource owner grants. If your application makes API requests, you must have a resource owner grant in order to contact the Infor Authorization Service. This service provides a token for API requests.

## Chapter 7: Configuring Optiva

You must set up this product so that it can generate BODs and place them in a message outbox. From there, CloudSuite can retrieve them.

You must also set up the inbound message configuration, so that BODs sent to this application can process those messages.



## Chapter 8: Configuring Optiva to send and receive BODs in ION

This section describes how to configure your product to communicate with ION. Integrations between this product and other products use ION to send and receive BODs. For details about a specific integration, see the appropriate integration guide.

### Tasks completed by the Infor Cloud team

The Infor Cloud team has already set up Optiva so that it can generate BODs and place them in a message outbox from which Infor ION Connect can retrieve them. The team also has set up the inbound message configuration, so that BODs sent to this application can process those messages.

### Using the Infor Optiva Inbox Listener

You can use the Infor PLM for Process Inbox Listener, instead of Optiva XML Listener, to import ION BODs to Optiva. The Infor PLM for Process Inbox Listener must be used for the cloud.

Using the Infor PLM for Process Inbox Listener, you can import XML data to a single database or to multiple Optiva databases. The Optiva Inbox Listener uses UTC datetime. For more information on scheduling workflows, see the *Infor PLM for Process Scripting Guide*.

Using the Optiva Configuration application, specify the connection strings for each Optiva database.

- 1 Verify the @DFLT profile configuration for each Optiva database. The default values are shown in this table. If an Optiva database is missing any of the profile attributes, the database is not processed by the Inbox Listener. Unprocessed databases are listed in the trace logs.

Profile Attribute	Description	Default Value
ION.INBOX.GROUPCODE	Specifies the group code.	ADMIN
ION.INBOX.IMPORTDEF	Specifies the import definition.	AUTOIMPORT
ION.INBOX.LABCODE	Specifies the lab code.	GLOBAL

Profile Attribute	Description	Default Value
DEFAULTLANGUAGE	Specifies the language code and region.	

- 2 Create a stored procedure to add the native XML files to the in-box tables.
- 3 Select **Computer Management > Services and Applications > Services** and verify that the Infor Optiva ION Listener service is running.

## Setting up logical IDs, tenants, accounting entities, and locations

Profile attributes are used to configure the logical IDs, tenants, and accounting entities.

- 1 Open the **Profile** form.
- 2 Configure the profile attributes that are used for Optiva integrations with ION.

Profile Attribute	Description
<b>ION.ACCTINGENTITY</b>	Specifies the Accounting Entity for each Optiva database. This profile attribute is used only for Infor ION integrations. For many ERP systems, the Accounting Entity is a critical component of the BOD. The default value is <i>your company name</i> .
<b>ION.COSTMAP.LOC1</b> <b>ION.COSTMAP.LOC2</b>	Item BODs have costs delineated by location. In Optiva, you can specify Cost parameters for each location. These profile attributes map the two together. An incoming ION <code>ItemMaster</code> BOD can update multiple Optiva cost parameters with a single BOD document. The default values are <code>COST_LOC1</code> and <code>COST_LOC2</code> respectively. <code>COST_LOC1</code> and <code>COST_LOC2</code> are examples only. Replace these values with the ones that are appropriate for your business environment.
<b>ION.FROMLOGICALID</b>	Specifies the logical ID. This ID is used for the Infor Ming.le Plug-in application, Context Messaging in Optiva, the connection points in the ION desk, and the drill backs in Infor Ming.le. The default value is <code>infor.plmprocess.optiva01</code> . This profile attribute is defined for each instance (database) of Optiva. If you install more than one instance, then the Logical ID must be unique for each instance.
<b>ION.INBOX.GROUP-CODE</b>	Specifies the group code that is used by the Infor CloudSuite PLM for Process Inbox Listener. This code is used to log into Optiva and import native XML files and BODs to Optiva. The default value is <code>ADMIN</code> .

Profile Attribute	Description
<b>ION.INBOX.IMPORT-DEF</b>	Specifies the import definition code that is used by the Infor CloudSuite PLM for Process Inbox Listener. This code is used to log into Optiva and import native XML files and BODs to Optiva. The default value is <b>AUTOIMPORT</b> .
<b>ION.INBOX.LABCODE</b>	Specifies the lab code that is used by the Infor CloudSuite PLM for Process Inbox Listener. This code is used to log into Optiva and import native XML files and BODs to Optiva. The default value is <b>GLOBAL</b> .
<b>ION.LANGCONST</b>	Specifies the language constant that is used to export data from Optiva to ION. The default value is <b>en-us</b> .
<b>ION.STATUSMAP.FORMULA.100</b>	Specifies how to translate the Optiva status codes into values that are recognized by ION. The default value is <b>Pending</b> .
<b>ION.STATUSMAP.FORMULA.200</b>	Specifies how to translate the Optiva status codes into values that are recognized by ION. The default value is <b>Open</b> .
<b>ION.TENANT</b>	Specifies the Tenant ID that is used for ION. The value that you specify here is shown in the <b>Application Connection Point</b> screen. The default value is <b>infor</b> .
<b>ION.UOMMAP.&lt;Symbol&gt;</b>	Specifies how to map Optiva units of measure into units of measure that are recognized by ION. Special characters are supported in Optiva, but only ASCII characters are supported in ION. For example, the dollar sign symbol (\$) is the default value for USD. The percent sign (%) is the default value for P1.

## Configuring the import codes

AUTOIMPORT is the default import definition for Optiva. In the Optiva **XML Import** form, you specify the symbols, detail codes, and the option method for the AUTOIMPORT import definition. For the option method, specify whether to replace the existing data or merge the changes.

The `ActionSetStart` symbol is required for ION integrations. `ActionSetStart` is used by the Listener to start the workflow for XML coming in from a BOD.

If desired, you can create your own import definitions using the **XML Import** form. These definitions can be used to import BOD data for Formulas, Items, and Companies. For more information about the **XML Import** form, see the *Infor PLM for Process Application Configuration Guide*.

## Configuring Workflow scripts

Optiva workflow action scripts are used to manage the outgoing BODs and the incoming BODs.

The publish workflows have the ability to filter (reduce) the parameters and other data. The workflow inserts the BOD XML into ION outbox tables in the Optiva database. The BODs are retrieved by ION and routed according to the ION setup.

When ION places an Infor BOD into the Optiva in-box table, the Listener calls a workflow script to import the data to Optiva.

The Optiva workflow scripts are stored in a Scripting Library. This library is installed when you execute the `OptivaIONapp_db_date.sql` script.

Because all workflow actions depend upon this library, you should not change the name of the Script Library.

## Configuring Optiva Action and Action Sets

The Action Sets provide the interaction between Optiva and ION.

### Outbound Action Sets

This table shows the action sets that are used to publish data to the Optiva outbox tables.

Action Set	BOD Description
PUB_PROCITEMMASTER	Process Item Master
PUB_ACKBOM	Acknowledge Bill of Materials Do not execute this action set. This BOD is run by the product automatically.
PUB_SYNCBOM	Sync Bill of Materials

## Inbound Action Sets

You must have an action set that maps to the incoming BOD. This relationship is stored in the `FSBODACTIONSETCONFIG` table.

The workflow that corresponds to the BOD is launched by XML Listener when the BOD type is added to the `COR_INBOX_ENTRY` tables.

This table shows the action sets that are used to retrieve (consume) data from the Optiva in-box tables.

Action Set	BOD Description
<code>IMP_SYNCITEMMASTER</code>	Sync Item Master
<code>IMP_ACKITEMMASTER</code>	Acknowledge Item Master
<code>IMP_SYNCCUSTOMERPM</code>	Sync Customer Party Master
<code>IMP_SYNCSUPPLIERPM</code>	Sync Supplier Party Master

For the information from an incoming BOD to get from the XML Listener to the workflow, it must be passed into the workflow. A workflow parameter passes the information. The parameter is configured on the Action Set.

Any Action Set that is associated with an incoming BOD in the `FSBODACTIONSETCONFIG` table must be configured to take an input string called `XMLSTRING`. That name is essential.

## IMP\_SYNCITEMMASTER Example

In the **Action Set** form, the **Target Data Symbol** is defined in the **Main** tab. The rest of the columns that are shown in this tab are defined in the **Input** tab.

Column Names	Value
Target Data Symbol	<code>IMPORTXMLREQ=XML Data Import</code>
Input Code	<code>XMLSTRING</code>
DB Name	<code>C_XMLSTRING</code>
Data Type	<code>string</code>
Read	<code>false</code>
Required	<code>Not required</code>
Case Force	<code>No forcing</code>
Set Ind, Call Ind, Enum Ind, Enum Style	<code>none</code>
Char Check, Enum Label	

For imports, you must specify `IMPORTXMLREQ` as the Target Data Symbol on the Action Set and the Action. Do not specify the Optiva symbol such as customer.

## Events

In Optiva, an Action Set is composed of at least one Action. Each Action can be configured to have more than one event. These events are supported for Actions that pertain to ION integrations:

- Start
- View
- Complete

The View and Complete events are enabled on any Action definition that uses the sample workflow scripts. Any errors are saved in a list as a WIP Parameter. These errors are retrievable through the View action.

The actual import ends with a code of 1. The data resulting from the import is displayed on the **Pending Task** grid. There, users can complete their tasks using the Complete Event.

Debugging information is written to the `FsActionWipResults` table.

## Editing Action scripts

The ION actions are self-documenting. If you are familiar with Optiva creation actions, you can edit the scripts without difficulty.

The comments in the workflow scripts are used to clarify the purpose of each section. Look in each script for instructions for settings.

Add parameters, classification sets, and status codes. Here is an example of each.

```
_ExportParams.Add["DENSITY"]
_SETCODES.Add["C_ENDUSE"]
_ActiveStatus.Add["100"]
```

Constants can be mapped to BODs. For example:

```
_ERPBESTBYShelfLifeDur As String = "BESTBYSHELFLIFE"
_ERPSELLBYShelfLifeDur As String = "SELLBYSHELFLIFE"
_ERPLEADTIME As String = "LEADTIME"
```

## Importing Costs from M3 to Optiva

There is some configuration needed on the Optiva side before you can start importing M3 costs to Optiva. First, you must set up a Location in Optiva.

```
<ItemLocation>
  <LeadTimeDuration>P7D</LeadTimeDuration>
  <ItemValue>
    <UnitValue>
```

```

        <Amount currencyID="USD">0.2000</Amount>
        <PerQuantity unitCode="LB">1</PerQuantity>
    </UnitValue>
    <CostingMethodCode listID="Costing Methods">Standard</CostingMethodCode>
</ItemValue>
<WarehouseLocation>
    <ID accountingEntity="733" location="N00">N00</ID>
    <Name>Taylorsville</Name>
</WarehouseLocation>
<ProcurementParameters>
    <ProcurementMethodCode>Purchase</ProcurementMethodCode>
</ProcurementParameters>
</ItemLocation>

```

The `<WarehouseLocation>` is used by Optiva to determine the location. In this example, the location in Optiva must be called **N00**; that location should be marked as a Mfg Location.

Then, a standard Cost parameter, such as `COST_N00`, must be configured to store the cost information. The `<CostingMethodCode>` must be defined in Optiva, too. Typically, it is **standard**. So, on the parameter `COST_N00`, specify `ATTRIBUTE3` as "**STANDARD**".

If `Attribute3` is already used, you must configure the code to use something else, but that is a code level customization.

## Understanding connection points and document flows

You create connection points in ION Desk. Connection points provide the information that ION uses to connect to a product's message in-box and outbox. At least one connection point must be defined for each product instance that integrates to ION.

For each connection point, you select the BOD documents that can be sent or received by the product instance. These correspond to the BODs that are listed in [BODs used in integrations with Optiva](#) on page 58.

In an integration between two BOD-enabled products, document flows are set up to define the BODs that flow between the application connection points.

A connection point can be reused multiple times in one or more document flows. You can also create connection points during the modeling of a document flow in the details section of the document flow elements. The connection points that are created during the modeling of a flow are added to the shared list of connection points, and they can be reused.

Some integrations with Optiva use a solution XML file to set up sample connection points and document flows. This file can be imported to ION to provide the basis for connection points and document flows.

See the section on ION Connect Modeling in the *Infor ION Desk User Guide - Cloud Edition* for additional information about connection points and document flows.

## Publishing BODs

You publish BODs so that ION can retrieve them from your message outbox. You can publish BODs for general use by any product that subscribes to the BODs through Infor ION. After you perform an initial data load from your application, you verify that data is flowing out of the application into ION. For details about a specific integration, see the appropriate integration guide.

For an ION-based integration between this application and another application, see the appropriate integration guide for these instructions:

- Setting up the document flows
- Performing any additional configuration of the applications that is required for that integration

You can then use the steps in the integration guide to publish the BODs.

## BOD dependencies

In Optiva, you can import an item and a formula in any sequence.

For the participating ERP system, the ingredients must be sent in advance of the formula. The `Item Master` must be sent to the ERP system before the `BillOfMaterials`.

## Verifying that BODs are generated

- 1 Determine what user actions generate certain BODs. See [Business events that generate outbound BODs](#) on page 55.
- 2 Perform those user actions in Optiva.
- 3 In ION Desk use **OneView** or other ION Desk functions to review the messages.  
If messages are not displayed in ION Desk, check the message outbox in the application to see if BODs were generated but were not retrieved by ION.
- 4 If messages are not flowing, review the XML data for the BOD.

## Verifying that ION receives data

To verify that ION is receiving BODs from Optiva, perform these actions in Infor ION Desk:

- Select **Connect > Active Connection Points** to show the message queue counts.
- Select **OneView** to show individual messages, if they are enabled.
- Select **Connect > Error BODs** to see if any errors were reported.

If you encounter problems, see [Data is not flowing properly](#) on page 53.



## Verifying the data flow between applications

After you create and activate document flows to other applications, you can check the message inbox area of the other applications, to ensure that data is flowing between the applications.

## Verifying the ION configuration

Verify that the connections are set up correctly.

## Chapter 9: Configuring workflows and ION messages for Optiva

You can configure workflows and ION messages for your application. Example workflows are provided.

### ION messages

This table shows the types of ION messages:

Type	Description
Alert	Alerts are generated by Event Management in Infor OS or by a PulseAlert BOD. An alert is a business notification or exception indicating that something out of the ordinary has happened in the flow of application documents.
Task	Tasks are generated by Workflow or by a PulseTask BOD. A task is an activity that must be completed within a defined period of time. When the task is generated by Workflow, it suspends the execution of the workflow until the task is completed. When a task is completed, the user's response is sent back to Workflow to resume execution of the workflow.
Notification	Notifications are generated by Workflow or by a PulseNotification BOD. A notification is similar to a task, but does not require immediate user action. A notification does not suspend the execution of the workflow.
Alarm	<p>The ION Alarms mobile application for Android devices is available to create monitors, called alarms.</p> <p>In ION Desk, the business administrator can create alarm templates. After the templates are activated, mobile users can use the templates to create alarms in the ION Alarms mobile application. The alarm creator can specify the distribution list for the resulting alert. See the <i>Infor ION Alarms Mobile Application User Guide</i>.</p> <p>Users receive the alert on their Infor Ming.le page, in the Infor Ming.le mobile application, or by email.</p>

## Configuring applications to process alerts

- 1 Configure this application to send alerts.
- 2 Configure ION to process alerts from this application.  
See the *Infor ION Desk User Guide – Cloud Edition*.
- 3 Configure Infor Ming.le to display alerts for this application.
- 4 Set up Infor Ming.le users with the appropriate roles to access tasks and alerts.  
See information about configuring user access for tasks and alerts in the *Infor ION Desk User Guide – Cloud Edition*.  
After the templates are activated, mobile users can use the templates to create alarms in the ION Alarms mobile application.

## Requirements

To use the Optiva ION workflow example content, at least one document flow must be activated for the Optiva connection point. The solution XMLs that are provided for specific integrations of other products with Optiva contain a document flow with a single application for the Optiva connection point.

You can select multiple connection points in the document flow, if required. If a monitor or activation policy is activated, subscriptions are created for each active Optiva connection point. See the *Infor ION Desk User Guide* for more information.

## Chapter 10: Setting up ION APIs for Optiva

This section explains how to setup the ION APIs for your product.

### Obtaining the IDM ION API user credentials

The IDM ION API user credentials are a pre-requisite for integrating Optiva with Infor Document Management. These credentials are used to configure some of the IDM profile attributes in Optiva.

You must complete several steps in the Infor OS Platform. For more information, see the *Infor PLM for Process Application Configuration Guide*.

## Chapter 11: Configuring drillbacks to Optiva

You must configure drillbacks to your product.

### About drillbacks

Infor Ming.le users can share screens and business data in some applications that are integrated with Optiva. There are two types of drillbacks:

- Context-sensitive embedded drillbacks: The screens and business data can include embedded drill-back links to Optiva.

## Chapter 12: Configuring context apps and utility apps that are used with Optiva

On the right side of the Infor Ming.le page is a collapsible panel that hosts several Infor Ming.le context and utility applications.

Context apps are lightweight applications that communicate with the application frame to present contextual information to the user. These applications subscribe to information published by the application frame and display relevant content only when it is available. The values and content of the application depend on the current context that is shown in the product application panel in Infor Ming.le.

Utility apps are lightweight applications that show information unrelated to content in the application. They do not communicate with the application frame and, if activated, are shown when the application is open.

### Context and utility applications that work with Optiva

These standard context and utility apps are available:

- Alerts
- Context Viewer
- Documentation
- In-Context URL Viewer
- Paparazzi
- Posts
- Tasks
- Task Viewer
- Tasks utility application and homepages widget
- Alerts utility application and homepages widget
- Share from the Infor Ming.le shell
- Social objects
- Drillbacks
- Infor Federation Services – Single Sign On
- In-Context Business Intelligence
- Related Information

For information about how to use the standard apps, see the *Infor Ming.le online help*.

## Enabling a context or utility app for Optiva

You can add a context or utility app to your product if it is not set up as a default. See the information about adding context apps or utility apps in the *Infor OS Platform Administration Guide*.

Either select **Grant access to all users** or click **Add new users and/or IFS security roles** to specify certain users or roles in the system that can access this context app.

## Chapter 13: Configuring Infor Document Management with Optiva

Infor Document Management and Optiva are integrated through these methods:

- ION API (rest-enabled)
- Context Business Messages
- BOD nouns

The CaptureDocument BOD is an outbound BOD that is sent by IDM when capturing different types of document, for example, scanned documents.

The ContentDocument BOD is both an outbound BOD and inbound BOD. Optiva creates documents in IDM by sending a Process ContentDocument BOD. Optiva receives updates to documents within IDM by receiving Sync ContentDocument BODs.

Optiva delivers its own document models and set of links to the UI applications (if applicable).

Document models and links can be configured for a tenant.

### Importing configurations and types

You can import the configuration and document types by using the Infor Document Management Control Center:

- To import document types, use the Configuration Importer.
- To enable the Related Information context app to show Infor Document Management documents, import the Optiva Business Context Model configurations. See the information about the business context model in the *Infor Document Management Administration Guide –Cloud Edition*.
- To import the ION configuration, use the ION option. The ION configuration enables communication between IDM and ION. You can also configure a specific ION workflow for a particular document type.

See the instructions in the *Infor Document Management Administration Guide – Cloud Edition*.



## Enabling the Related Information context app for your product

When you set up the Related Information context app in Infor Ming.le, use the **Applications** tab to add the Optiva application and set it to **Enabled**.

## Chapter 14: Configuring Infor Data Lake with Optiva

Data Lake is only available for multi-tenant installations.

For objects to be sent to the Data Lake, some set up is necessary in ION Desk. This involves setting up a connection point and data flow. The section gives details on how this is done. The other important step before data can be sent is setting up the Data Catalog. The Data Catalog is a list of documents (tables) that the Data Lake can accept. It has details about the columns, keys, variations (change count), modified date and deletion information. Sending over table schema to the Data Catalog is done on a symbol by symbol basis. Once the table schema is sent to the Data Catalog, then all existing data (that meet the detail code, status and class criteria) can be sent to the Data Lake. Once this is done, all edits to objects for this symbol will be sent to the Data Lake automatically.

You must configure the Data Lake attributes before sending the initial data load. See the *Infor PLM for Process Application Configuration Guide*.

### Useful terms for Data Lake

#### **Payload**

A grouping of data sent to the Data Lake. A payload is in NDJSON (non-delimited JSON) and is always for the same table (schema).

#### **Data Lake Outbox**

A database table that will store the objects (symbol/code) to be sent to the Data Lake.

### Configuring ION API profile attributes

If you do not have the ION API file, you must generate a new `IMS.ION.ionapi` and run the IMPORT ION CONFIG wizard and use the text from ION API file to create two new profile attributes needed for Data Lake. To generate an IONAPI file to obtain the workflow user credentials, see Obtaining the IDM ION API user credentials for Optiva in the *Infor PLM for Process Application Configuration Guide*.

Once you have the ION API file, you can run the IMPORT ION CONFIG wizard and use the text from ION API file to create the two new profile values:

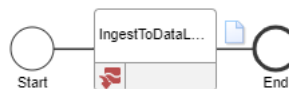
- `IONAPI.ROOT`

- IONAPI.TENANTID

**Note:** If there are any issues running the wizard, please contact support. Do not proceed with setting up Data Lake until the wizard is run successfully.

## Creating the Data Lake flow

- 1 From Infor Ming.le, navigate to ION Desk.
- 2 Click **Connection > Connection Point**.
- 3 Click **Add** to create a new Connection Point. The recommended name is OptivaIMS.  
The Logical ID Type must be plmprocess.  
The Logical ID must be infor.plmprocess.optivaims.  
The ION API Client ID must be set the value for ci in the ION API file.
- 4 Select **Connect > Data Flows**.
- 5 Click **Add** and select the Data Lake flow.
- 6 In the **Name** field, specify **Optiva2DataLake**.



The data flow should look like this:

- 7 In the flow window select the Application icon and drag it into position to the left of the Data Lake icon that is already there.
- 8 In **Application Activity Properties**, specify the name: **OptivaIMS**.



- 9 Click the plus sign to add a connection point for this application.
- 10 Select your **OptivaIMS** connection point and click **OK**.
- 11 In the data lake flow window, select the paper icon. The OptivaIMS application is displayed.
- 12 Select the + sign from the Documents section below the flow.
- 13 Select the check box in the top title bar of the table to select all documents and click **OK**.
- 14 Click **Save**.

## Verifying the connection point

The connection point should already be set up. Verify that the connection point exists and contains the documents needed for this integration.

## Adding the Data Lake Sync Status page to the Optiva UI

- 1 Open the **Role** form.
- 2 Select the role to add the **Data Lake Sync Status** page to.
- 3 Click **Add** in the **Form Security** tab.
- 4 Select the **FRMDATALAKEVIEWER** form and specify the Security Level for the form.
- 5 Click **Save**.
- 6 Open the **Menu** form.
- 7 Select the lab to add the **Data Lake Sync Status** page to.
- 8 Drag and drop the **Data Lake Sync Status** page from the **Available Forms** pane to an existing menu.
- 9 Click **Save**.

## Restoring databases from one MT environment to another and the implications on Data Lake

If the schema has been sent to the data catalog and data to the data lake in one environment, there are tables in PLM for Process that reflect this, `FSDATALAKESENTLOG`, `FSDATALAKETABLESCHEMA` and `FSDATALAKEPAYLOAD`. These tables match up with the data catalog and data lake in ION Desk for that environment.

If a backup of the PLM for Process database for this environment is used to populate a new environment that is moving test data into production, then the PLM for Process tables contain information from the old environment that do not reflect what is in the data catalog and data lake for the new environment. To correct this, schema and data must be sent again from this new environment.

If a backup is used to populate a new, clean environment, three things need to happen to set things up correctly.

- 1 New ION API credentials must be generated and entered using the **IMPORT ION CONFIG** wizard. This will set the correct the profile values for this environment.

- 2 Run a `ResetDataLake.sql` script that will clear out the PLM for Process data lake tables and reset the fields on the symbol related to data lake.

```
--RESET SYMBOLS TO ZERO AND CLEAR OUT SCHEMA (Execute these in update/deletes below)
UPDATE FSOBJECTSYMBOL SET DATALAKE_SCHEMA_SENT_IND=0, DATALAKE_SCHEMA_SENT_DATE=NULL, DATALAKE_DATA_SENT_IND=0, DATALAKE_DATA_SENT_DATE=NULL
FROM FSOBJECTSYMBOL WHERE DATALAKE_IND=1;

DELETE FROM FSDATALAKETABLESCHEMA;
DELETE FROM FSDATALAKEPAYLOAD;
DELETE FROM FSDATALAKEOUTBOX;
DELETE FROM FSDATALAKESENTLOG;
```

- 3 Use the **Symbol** page to setup data lake and then send data to data lake for the new environment for each symbol.

These steps are important and if they are not followed will lead to inconsistent data in the data lake.

## Data Lake information differing in two environments

Another situation may occur if you do a backup of a production environment into some other environment, such as test. In this case, there may already be data in the data lake for the test environment, but the data will not match the data sent from production.

For this case, follow the steps below:

- 1 New ION API credentials must be generated and entered using the **IMPORT ION CONFIG** wizard. This will set the correct the profile values for this environment.
- 2 Use Compass in Data Lake to clear out all data for all the PLM for Process tables. Click an object and select **Generate > Exec > Clear Table > Remove Formatted Data**.
- 3 In PLM for Process, open each symbol that supports data lake and use the **DATALAKE SEND DATA** button to send all the data over.

**Note:** If it is not necessary for the data lake on the test environment to be 100% accurate, then you may want to avoid doing these steps since it will be time consuming. If the test environment is for testing only, it may not be necessary to have the data lake be 100% accurate.

## Data Lake Setup in Optiva

In this section, you will use criteria to limit which tables will be sent to the Data Lake for the symbol using detail codes.

At least 1 Detail Code, 1 Status, and 1 Class must be selected in **Symbol** form > **Data Lake** tab in order to send over Table Schema and Data to the Data Lake.

**Note:** For a Label Content object, you can retrieve the parameter values for all row tags from the `TP` detail code, as the `TPVAL` detail code will not be used to send parameter values for row tags to the Data Lake.

A primary key is required for all tables sent to the Data Lake which means all extended tables must have a primary key if the `MATRIX` (Extension Tables) detail code is selected. If there is an extension table without a key, an error will be generated when you click the **Setup Data Lake** button. To fix this, edit the extension table and add a primary key. See the *Infor PLM for Process Application Configuration Guide* for more on extension tables.

You can also limit which objects are sent by selecting statuses and classes (where they apply).

Data Lake integration is supported by the following symbols: Workflows in Progress, Enumerated List, Formula, Item, Project, Specification, Symbol, Company, Ingredient Statement, Label Content, Test, Sample, and Test Order.

For the **Company** symbol, you can select the class **None** when companies with no class selected must be sent to the Data Lake. This is for both the initial data load and when data is edited.

- 1 Select the **Data Lake** tab for a symbol.
- 2 Select detail codes, statuses and classes to send to Data Lake. Click **Save**.
- 3 Click **Setup Data Lake** to send the table schema for this symbol to the Data Catalog without using the Inbox Listener. Now if a schema changes (for example, new columns, extension fields, extension table, fields in validation codes), the Data Catalog is automatically updated.
- 4 The **Setup Data Lake** button transforms into the **Data Lake Send Data** button once the table schema is successfully sent to the catalog. Click **Data Lake Send Data** to send the objects that meet the Data Lake criteria for the symbol to the Data Lake outbox.

**Note:** Once the initial data load is completed, an object of this symbol type is saved or deleted and it meets the Data Lake criteria, the complete set of all detail codes for the object will be sent to the Data Lake. It is important that the choices made for limiting criteria, detail, status and class, are chosen carefully. They can be edited after the initial data push but will only affect data sent in the future. For example, if the `ITEM` symbol was set up with statuses `300=Mfg Approved` for Data Lake criteria, then all items are pushed to the Data Lake and then the `ITEM` symbol is edited again and `200=Pilot Approved` is added to the Data Lake criteria, the all pilot approved `ITEMS` are not sent to the Data Lake, only the ones that are saved going forward.

- 5 It may be necessary to resend all the initial data for a symbol if there are any issues with the initial send, or if there is a reason to change the criteria for the data. To do this, use the **Data Lake Resend Data** button.

**Note:** This must only be done after the same data is purged from the Data Lake to avoid duplicate data. See the *Infor ION Desk Data Lake Purge* documentation for more information.

## Limiting Workflows in Progress that are sent to the Data Lake

Workflow in Progress, ActionWIP, is one of the Data Lake enabled symbols. The **WIP to Data Lake** check box was added to **Action Set** form. This check box is not selected by default. In order to send any particular Workflow in Progress to the Data Lake, you must select the **WIP to Data Lake** check box and edit your **Action Set** form before sending the Workflow in Progress object to the Data Lake.

For example, if you want all Workflows in Progress for the FORMULA APPROVAL workflow to be sent to the Data Lake, edit the FORMULA APPROVAL action set and select the **WIP to Data Lake** check box.

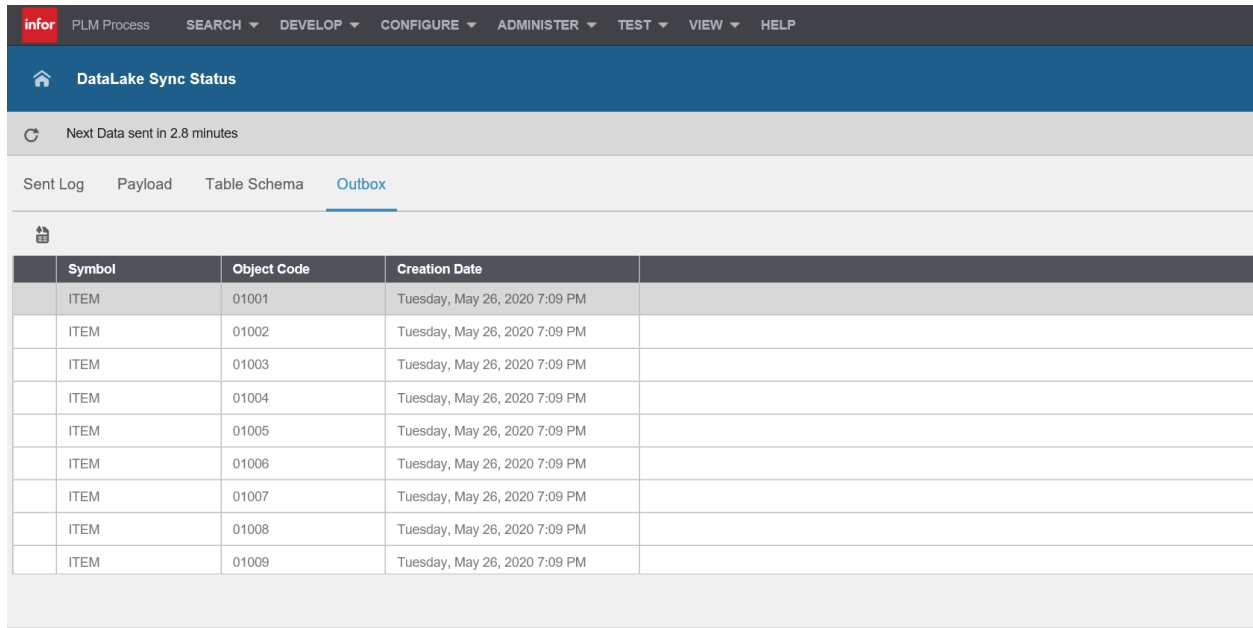
## Configuring the Data Push interval

As changes are made to Data Lake enabled objects in Optiva, they are put into the Data Lake outbox table which is displayed in the **Data Lake Sync Status > Outbox** tab. You can change the `DATA LAKE . PUSH . SPAN . MINUTES` profile value to change the interval.

As data is sent over to the Data Lake, they get removed from the **Data Lake Sync Status > Outbox** tab.

## Navigating the Data Lake Sync Status page

This page displays information related to Data Lake.



Symbol	Object Code	Creation Date
ITEM	01001	Tuesday, May 26, 2020 7:09 PM
ITEM	01002	Tuesday, May 26, 2020 7:09 PM
ITEM	01003	Tuesday, May 26, 2020 7:09 PM
ITEM	01004	Tuesday, May 26, 2020 7:09 PM
ITEM	01005	Tuesday, May 26, 2020 7:09 PM
ITEM	01006	Tuesday, May 26, 2020 7:09 PM
ITEM	01007	Tuesday, May 26, 2020 7:09 PM
ITEM	01008	Tuesday, May 26, 2020 7:09 PM
ITEM	01009	Tuesday, May 26, 2020 7:09 PM

The page toolbar displays the time left before data in the Outbox is moved to the Data Lake. Also, there is a refresh button in the toolbar that will refresh the data in all the tabs.

## Working in the Sent Log tab

The **Sent Log** tab has a grid with the following columns: **Symbol**, **Object Code** and **Sent Date**. This contains a list of objects that were sent to the Data Lake.

The query that loads records for the sent log is called `DATALAKEGETQUEUEEDATA`. It loads the latest 1000 rows from the sent log into the grid. This query can be customized to see more or less rows.

## Working in the Payload tab

The **Payload** tab has a grid with the following columns: **Table Name**, **Message ID**, **Creation Date**, **Response Status** and **Payload**. By default, records are kept in this tab for 7 days, but is configurable via the `DATALAKE . SAVE . PAYLOAD . DAYS` profile attribute. The data sent to Data Lake is in payload groupings. The Message ID is a unique ID that can be used in Data Lake to find a payload record. The **Payload** column has links that open to a **Payload Viewer** page showing the JSON code for the data



associated with the Payload

**Payload Viewer**

```

1 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":3,"CALC_LEVEL":0,"PARAM_CODE":"ASH","DESCRIPTION":"Ash","UOM_CODE":"%", "SRVROW_ID":3
2   ,"DELETE_STATUS":0,"CHANGE_CNT":10}
3 [{"ITEM_CODE":"BAKE","LINE_TYPE":3,"LINE_ID":2,"CALC_LEVEL":0,"PARAM_CODE":"ASSYCOST","DESCRIPTION":"Assembly cost","UOM_CODE":""
4   ,"SRVROW_ID":95,"DELETE_STATUS":0,"CHANGE_CNT":10}
5 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":5,"CALC_LEVEL":0,"PARAM_CODE":"CA","DESCRIPTION":"Calcium (Ca)","UOM_CODE":"MG/100G"
6   ,"SRVROW_ID":5,"DELETE_STATUS":0,"CHANGE_CNT":10}
7 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":4,"CALC_LEVEL":0,"PARAM_CODE":"CAFFEINE","DESCRIPTION":"Caffeine","UOM_CODE":"MG/100G"
8   ,"SRVROW_ID":4,"DELETE_STATUS":0,"CHANGE_CNT":10}
9 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":6,"CALC_LEVEL":0,"PARAM_CODE":"CARBOHYDRATES","DESCRIPTION":"Carbohydrates, total","UOM_CODE
10  ":"G/100G","SRVROW_ID":6,"DELETE_STATUS":0,"CHANGE_CNT":10}
11 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":8,"CALC_LEVEL":0,"PARAM_CODE":"CHOLESTEROL","DESCRIPTION":"Cholesterol","UOM_CODE":"MG/100G"
12  ,"SRVROW_ID":8,"DELETE_STATUS":0,"CHANGE_CNT":10}
13 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":9,"CALC_LEVEL":0,"PARAM_CODE":"CU","DESCRIPTION":"Copper (Cu)","UOM_CODE":"MG/100G"
14  ,"SRVROW_ID":9,"DELETE_STATUS":0,"CHANGE_CNT":10}
15 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":10,"CALC_LEVEL":0,"PARAM_CODE":"DAIRY_ALLERGEN","DESCRIPTION":"Dairy products present"
16  ,"UOM_CODE":"","SRVROW_ID":10,"DELETE_STATUS":0,"CHANGE_CNT":10}
17 [{"ITEM_CODE":"BAKE","LINE_TYPE":1,"LINE_ID":2,"CALC_LEVEL":0,"PARAM_CODE":"DAIRYRESTRICTION","DESCRIPTION":"Dairy products prohibited?"
18  ,"UOM_CODE":"","SRVROW_ID":63,"DELETE_STATUS":0,"CHANGE_CNT":10}
19 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":1,"CALC_LEVEL":0,"PARAM_CODE":"DENSITY","DESCRIPTION":"Density","UOM_CODE":"KG/L","SRVROW_ID
20  ":1,"DELETE_STATUS":0,"CHANGE_CNT":10}
21 [{"ITEM_CODE":"BAKE","LINE_TYPE":1,"LINE_ID":23,"CALC_LEVEL":0,"PARAM_CODE":"DIAMETER","DESCRIPTION":"Diameter","UOM_CODE":"IN"
22  ,"SRVROW_ID":84,"DELETE_STATUS":0,"CHANGE_CNT":10}
23 [{"ITEM_CODE":"BAKE","LINE_TYPE":0,"LINE_ID":7,"CALC_LEVEL":0,"PARAM_CODE":"EGG_ALLERGEN","DESCRIPTION":"Egg products present","UOM_CODE"
24  ":"", "SRVROW_ID":7,"DELETE_STATUS":0,"CHANGE_CNT":10}
25 [{"ITEM_CODE":"BAKE","LINE_TYPE":1,"LINE_ID":3,"CALC_LEVEL":0,"PARAM_CODE":"EGGRESTRICTION","DESCRIPTION":"Egg products prohibited?"

```

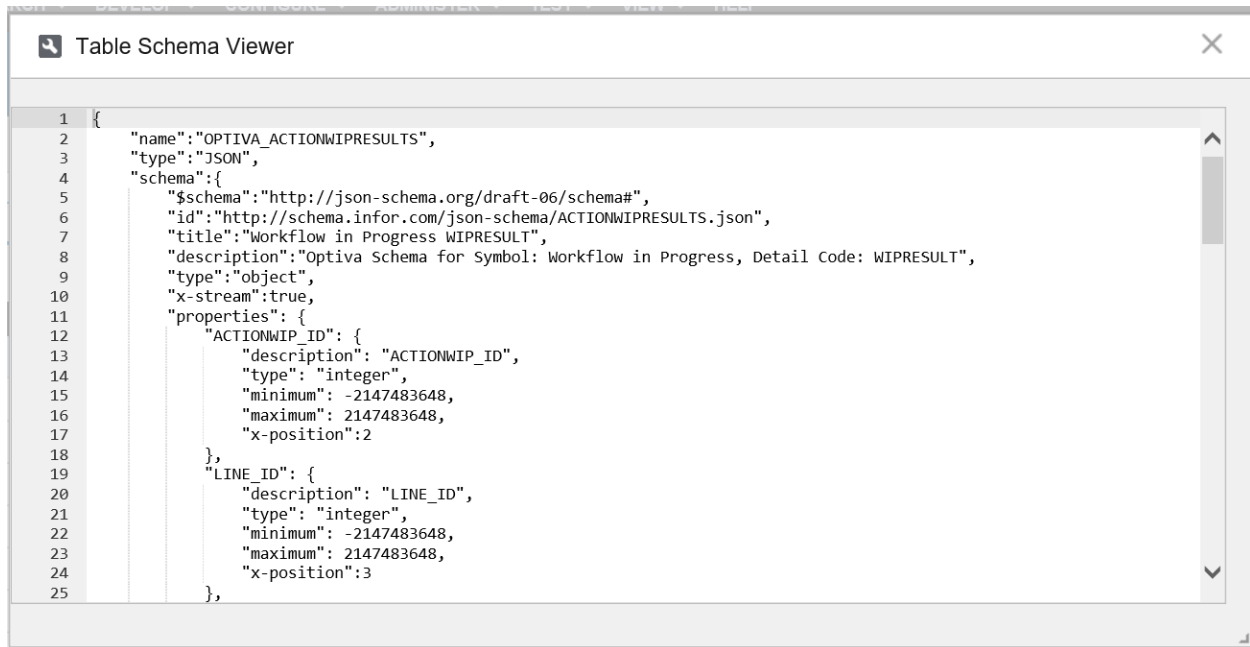
**Note:** The payload table keeps payload records for 7 days. This can be adjusted using the DATA LAKE . SAVE . PAYLOAD . DAYS profile attribute.

## Working in the Table Schema tab

The **Table Schema** tab has a grid with the following columns: **Symbol**, **Table Name**, **Version**, **Database Version**, **Created Data**, **Created By**, **Reason** and **Schema**. The initial version of the schema is 1 and the Reason is Initial Load. If the schema changes, the version will increase by 1.

Table Schema Reasons for schema include:

- New Database Version – A new release of Optiva with a new schema.
- New Custom Field
- New Custom Table
- New Detail Code – When you add a detail code in the Data Lake Detail Code list on the symbol page.
- Updated Custom Table – When you add a new column, delete or update an existing column.
- Updated Fields in Validation Codes – When you change the length or the data type of a field in a validation code.
- The Schema column has links that open to the Table Schema Viewer page.



```

1 {
2   "name": "OPTIVA_ACTIONWIPRESULTS",
3   "type": "JSON",
4   "schema": {
5     "$schema": "http://json-schema.org/draft-06/schema#",
6     "id": "http://schema.infor.com/json-schema/ACTIONWIPRESULTS.json",
7     "title": "Workflow in Progress WIPRESULT",
8     "description": "Optiva Schema for Symbol: Workflow in Progress, Detail Code: WIPRESULT",
9     "type": "object",
10    "x-stream": true,
11    "properties": {
12      "ACTIONWIP_ID": {
13        "description": "ACTIONWIP_ID",
14        "type": "integer",
15        "minimum": -2147483648,
16        "maximum": 2147483648,
17        "x-position": 2
18      },
19      "LINE_ID": {
20        "description": "LINE_ID",
21        "type": "integer",
22        "minimum": -2147483648,
23        "maximum": 2147483648,
24        "x-position": 3
25      },

```

## Working in the Outbox tab

This tab shows what is waiting to be sent to the Data Lake and contains a grid with the following columns: **Symbol**, **Code**, and **Creation Date**. Once a row of data is sent to the Data Lake, this row is removed from this grid.

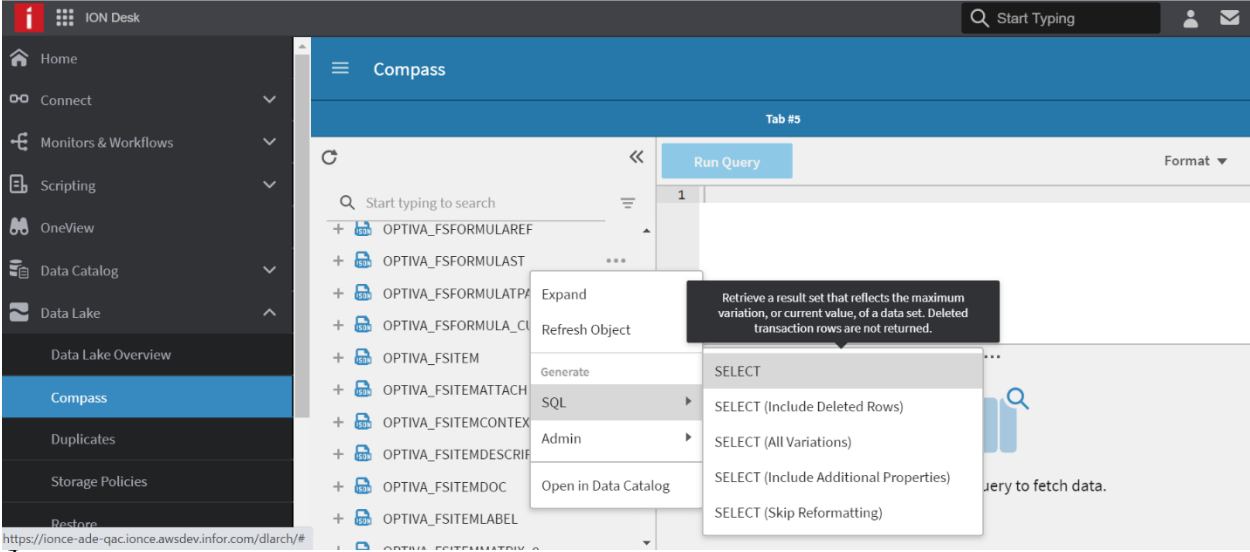
## Verifying the data flow

To verify whether the initial data is flowing between the products, check ION OneView to see if the application data arrives in the Data Lake. If data is not flowing between the systems, see the trouble shooting section.

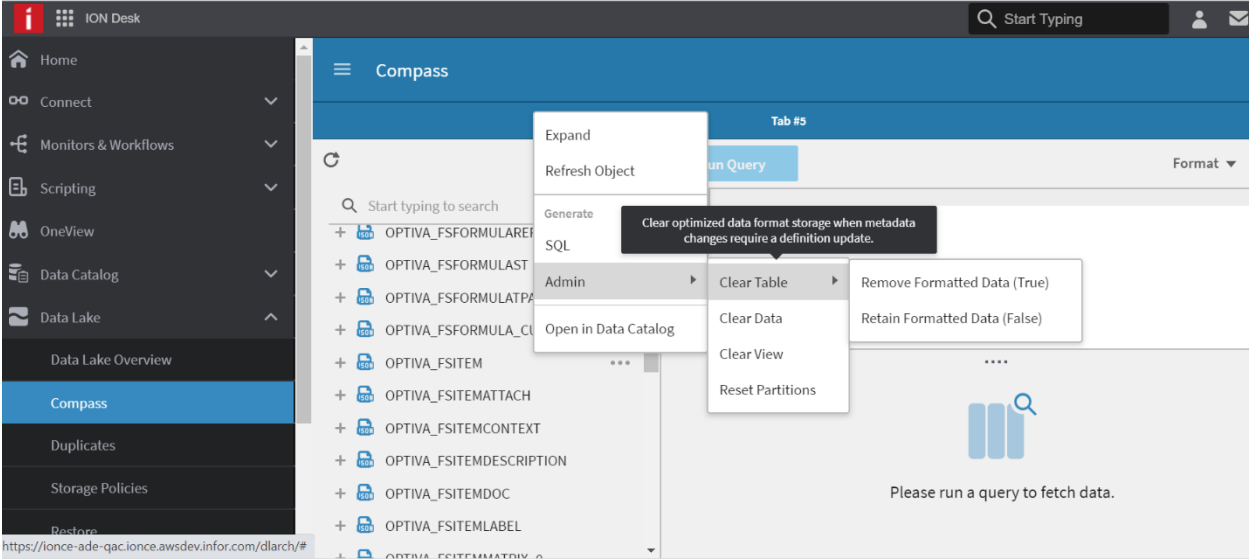
## Accessing Compass

Compass is an editor to query the Data Lake. It is available in ION Desk and can be used to check the Data Lake contents through ad-hoc queries and try queries. Compass contains an edit window where

you can type queries. Also, context menus are available for generating



**Note:** When new columns are added to an existing schema, when a custom field is added or because there is a new release of Optiva with data schema changes, the table must be reformatted in Compass or querying the table will cause an error. To reformat the table in Compass, right-click on the table and select **Admin > Clear Table > Remove Formatted Data (True)**. This action will not remove any data. A command will be added to the edit window (exec infor.clear\_table). Click the **Run Query** button.



## Helpful hints and information

- No “singleton” rows are allowed in the Data Lake which means there cannot be a separate table for status and permission. The fields in these details are part of the header table.

- The FSDOC and FSDESCRIPTION tables are shared between different symbols in an Optiva database. In the Data Lake, they are separate tables by symbol (for example OPTIVA\_FSITEMDOC, OPTIVA\_FSITEMDESCRIPTION).
- The Data Lake functionality uses the Inbox Listener to schedule the workflow that sends data to the Data Lake therefore, the listener must be running for the functionality to work properly.

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## Appendix A: Troubleshooting

This section describes actions that you can perform to solve integration issues with Infor OS.

### Data is not flowing properly

**Cause:** A problem is preventing the flow of BOD data to ION.

**Solution:** After you complete the configuration setup, if BOD data is not flowing to ION, use **ION OneView** to identify the problem.

You can perform these actions in ION OneView:

- Track business documents from a single consolidated view; search for documents using different search criteria.
- View all ION components that were triggered by the incoming document: Connection Points; document flow filters and content-based routing; mappings; ION engines for example, Monitor, Workflow, and Pulse; monitors; activation policies and workflows.
- View more details about these ION components:
  - Detailed properties for each ION component.
  - List of events that were logged by each ION component when processing the message.
  - Drilldown views that are used to display the appropriate management pages for the selected ION component.
  - Visibility of the different messages sent or generated: Original BOD messages that triggered the whole list of components displayed; Confirm BOD messages that were generated due to any error while processing the Original BOD message; Mapped/Updated BOD messages that were created during the processing of the Original BOD message.
  - Content of BOD messages. This information is only available to authorized users, based on the roles and permissions that are configured.

For more information, see the section on ION OneView in the *Infor ION Desk User Guide – Cloud Edition*.

To avoid business discrepancies between this product and integrated products, correct any errors as soon possible.

---

## Workflow errors

Workflow scripts use return codes:

- 111 = Success
- 9111 = Stop workflow processing

The workflow scripts are designed to import as much information as they can. Consequently, the 9111 code is rarely used.

The traditional `MessageList` functionality is not available, because the Inbox Listener is launching workflows without any user interaction. No graphical user interface is available.

If errors are generated during the import process, that information is saved. For **AUTOIMPORT**, you can view errors from the **Pending Task** list.

## Inbox Listener

The same log is used for error handling as for other Inbox Listener messages.

Suppose the ION in-box cannot be queried by the Inbox Listener because of an exception. For example, the Optiva server is not running, or the database connection is lost. In these situations, an event is written to the Windows event log.

Suppose a BOD type is found in the in-box, but that BOD type has not been accounted for in the `FS BODACTIONSETCONFIG` table. In this case, an exception is written to the Windows event log. Processing for that specific document only ends with an error condition. Other documents that are found in the in-box are processed normally.

The Inbox Listener does not attempt to parse the XML that is placed in the ION in-box. Consequently, the Listener does not report XML processing errors. The XML that represents the Infor BOD is passed from the Listener directly to the Optiva Server for processing by a customized workflow script.

## Appendix B: Business events that generate outbound BODs

This table shows the actions that generate an outbound BOD from Optiva:

Verb	Noun	Workflow action to generate the BOD
Sync	BillOfMaterials	A <code>Sync.BillOfMaterials</code> BOD can be generated by Optiva by running the <code>PUB_SYNCBOM</code> ActionSet from the launch workflow button available on the toolbar.
Acknowledge	BillOfMaterials	This scenario occurs only if the participating application sends a <code>Process Bill Of Materials</code> that cannot be processed by Optiva.
Confirm	CustomerPartyMaster	This scenario occurs only if the participating application sends a <code>Sync CustomerPartyMaster</code> that cannot be processed by Optiva.
Process	ItemMaster	A <code>Process.ItemMaster</code> BOD can be generated by Optiva by running the <code>PUB_PROCITEMMASTER</code> ActionSet from the launch workflow button available on the toolbar.
Confirm	ItemMaster	This scenario occurs only if the participating application sends a <code>Sync ItemMaster</code> that cannot be processed by Optiva.
Confirm	SupplierPartyMaster	This scenario occurs only if the participating application sends a <code>Sync SupplierPartyMaster</code> that cannot be processed by Optiva.
Sync	SecurityRoleMaster	A <code>Sync.SecurityRoleMaster</code> BOD can be generated by Optiva by running the <code>PUB_SYNCROLEMASTER</code> action set from the launch workflow button available on the toolbar.

## Appendix C: Inbound BOD usage

This table shows the incoming BODs that Optiva can accept. It also indicates, when possible, what area of Optiva shows the processed inbound data.

Verb	Noun	Destination of processed data in Optiva
Process	BillOfMaterials	Formula object
Acknowledge	BillOfMaterials	This scenario occurs only if data cannot be imported by Optiva.
Sync	CustomerPartyMaster	Company object If the customer does not exist in Optiva, then a Company object is created for that customer. If the customer does exist in Optiva, then the Company object is updated with the most recent address and contact information.
Sync	ItemMaster	Item object
Acknowledge	ItemMaster	This scenario occurs only if data cannot be imported by Optiva.
Sync	SupplierPartyMaster	Company object If the vendor does not exist in Optiva, then a Company object is created for that vendor. If the vendor does exist in Optiva, then the Company object is updated with the most recent address and contact information.
Sync	SecurityUserMaster	User object. If a user does not exist, it is created. Once the user is created, or if it already exists, we then adjust the Roles on the User to match what is sent in the BOD.



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Verb	Noun	Destination of processed data in Optiva
Sync	CodeDefinition	Enumerated list. If an enumerated list does not exist, then the missing enumerated list is created. If the enumerated list does exist, it is updated with the most recent values from the BOD.

---

## Appendix D: BODs used in integrations with Optiva

This section contains the list of BODs that are available with Optiva.

### Outbound BODs from Optiva to integrated applications

This table shows the BODs that are available with Optiva. Where the product is blank, the BOD is generated by Optiva but is not currently used by interfacing products. The BOD is available to be processed through ION and any application that is set up to receive it.

Verb	Noun	To products
Sync	BillOfMaterials	To M3, System 21 and SAP
Acknowledge	BillOfMaterials	To M3, System 21 and SAP
Confirm	CustomerPartyMaster	To ION
Process	ItemMaster	To M3, System 21 and SAP
Confirm	ItemMaster	To ION
Confirm	SupplierPartyMaster	To ION
Sync	SecurityRoleMaster	To Infor Ming.le

### Exporting from Optiva

Optiva workflows are used to publish items and formulas. The `PUB_PROCITEMMASTER` workflow is used to publish items and `PUB_SYNCBOM` is used to publish formulas.

The BODs that Optiva publishes are:

- `Process.ItemMaster`
- `Sync.BillOfMaterials`

The action script provides support for listing the standard fields, custom fields, and technical parameters that are to be included in the published BOD XML. The script inserts the BOD XML into ION outbox tables in the Optiva database.

To add custom fields into standard BODs with the PUB\_PROCITEMMASTER or PUB\_SYNCBOM workflows, you can overwrite the Action scripts:

```
Protected Overrides Sub ParametersToExport()
    'This is a VB.NET List of all the Parameters you want to export
    '_ExportParams.Add("ASH")
    '_ExportParams.Add("DENSITY")
    '_ExportParams.Add("FORMULA COST")
    '_ExportParams.Add("MOISTURE")
End Sub
```

```
Protected Overrides Sub ContextToExport()
    'This is a VB.NET List of all the Set Codes you want to export
    '_Context.Add("SELLOC")
    '_Context.Add("C_ENDUSE")
End Sub
```

```
Protected Overrides Sub CustomFieldsToExport()
    'This is where you will add the custom parameters that you wish to export
    'these custom parameters have no "home" in the BOD structure, so are all
    'exported as specifications, with a type="custom parameter" attribute
    '_CustomFieldExport.Add(New BODNode("DIVISION", "Division",
    DataType.dataString))
    '_CustomFieldExport.Add(New BODNode("FREIGHTITEM", "Freight Item",
    DataType.dataString))
    '_CustomFieldExport.Add(New BODNode("FILLATTRIBUTE", "Fill Attribute",
    DataType.dataString))
```

Changes should not be made directly to the Infor Provided ION Script Libraries, such as IONBASE262.

We recommend making a copy of the Action scripts as well. The original scripts can be overwritten by Optiva during upgrades.

## Inbound BODs to Optiva from integrated products

This table shows the BODs that can be received and processed by Optiva. Where the application is blank, the BOD is not currently used by interfacing application.

Verb	Noun	From products
Process	BillOfMaterials	M3, System 21 and SAP
Acknowledge	BillOfMaterials	M3, System 21 and SAP
Sync	CustomerPartyMaster	M3, System 21 and SAP
Sync	ItemMaster	M3, System 21 and SAP
Acknowledge	ItemMaster	M3, System 21 and SAP
Sync	SupplierPartyMaster	M3, System 21 and SAP

Verb	Noun	From products
Sync	SecurityRoleMaster	Infor Ming.le

## Importing to Optiva

Optiva imports/receives these BODs:

- `Sync.SupplierPartyMaster`
- `Sync.CustomerPartyMaster`
- `Sync.ItemMaster`
- `Sync.CodeDefinition`
- `Sync.OptivaNativeFormat`
- `Process.OptivaNativeFormat`

### Naming File Connector BODs

Any BOD type with the phrase `OptivaNative` will be treated as an `OptivaNativeFormat` BOD by the Infor CloudSuite PLM for Process Inbox Listener. The `OptivaNativeFormat` BOD can be used by any Infor ApplicationConnection point. The `OptivaNativeFormat` BOD must not share its name with the File Connector BOD.

You can create File Connector BODs with the phrase `OptivaNative` in its name.

For example, you can add multiple BODs and name `OptivaNativeFile01`, `OptivaNativeFile02`, etc. These File Connector BODs will be handled by the Infor CloudSuite PLM for Process Inbox Listener as an `OptivaNativeFormat` BOD.

## Appendix E: Optiva tables used for ION integrations

Infor BOD types must be mapped to the appropriate Optiva objects. These tables are created during the Optiva installation to support the ION integration.

Optiva Table	Description
FSBODACTIONSETCONFIG	<p>This table maps the appropriate workflow (Action Set) to each BOD type.</p> <p>This mapping is used by the Optiva Listener to launch the appropriate workflow and process the BOD XML. No user intervention is necessary.</p>
COR_INBOX_ENTRY COR_INBOX_HEADER	<p>These tables store the BOD XML data and header information that is coming from the participating application.</p> <p>The Listener monitors these tables and uses workflows to import the data to Optiva.</p>
COR_OUTBOX_ENTRY COR_OUTBOX_HEADER	<p>These tables are where the Optiva generated BODs are delivered to. They are then read by ION and processed.</p>
COR_PROPERTY	<p>This table is not used. It is intended to store the version of ION.</p>

### Table columns for FSBODACTIONSETCONFIG

This Optiva table maps the appropriate Action Set to each BOD type.

Table column	Description
BOD_ACTIONSET_ID	Auto-generated integer.
BOD_TYPE	BOD that is required by the external application. This contains the data that is being consumed by Optiva. Consumed by is the same as published to.

Table column	Description
OPTIVA_OBJECT	Optiva object that contains the data, such as item, formula or company.
OPTIVA_ACTIONSET	<p>Names of the Optiva Action Set for the scripts that are shipped with the ION interface. This name maps to the Optiva object and BOD type.</p> <p>For example, <code>SyncItemMaster</code> maps to an Optiva ITEM and to the Action Set “IMP_SYNCITEMMASTER.”</p> <p>You should use the same names for your workflow action set as the names of the workflow action files that are shipped.</p>
FROMLOGICALID	<p>All ION documents come with a From Logical ID entry that specifies what system they are from, such as Adage or SAP. This is configured in ION Connect when you set up the routing.</p> <p>@DFLT is the default value for this column. In this case, the <code>SyncItemMaster</code> documents from any source are routed to the same <code>ImportSyncItemMaster</code> Action Set.</p> <p>If you specify another FROMLOGICALID, then documents from that source can be routed to a different Action Set.</p>

## Item example

Table column	Description
BOD_ACTIONSET_ID	1
BOD_TYPE	SyncItemMaster
OPTIVA_OBJECT	ITEM
OPTIVA_ACTIONSET	IMP_SYNCITEMMASTER
FROMLOGICALID	@DFLT

## Company example

Table column	Description
BOD_ACTIONSET_ID	2
BOD_TYPE	SyncCustomerPartyMaster
OPTIVA_OBJECT	COMPANY
OPTIVA_ACTIONSET	IMP_SYNCCUSTOMERPM
FROMLOGICALID	@DFLT

## Appendix F: Data Lake detail table mapping

Symbol	Detail	Detail Label	Data Lake table name
ACTIONWIP	DOC	Docs	OPTIVA_FS ACTION-WIPDOC
ACTIONWIP	HEADER	Header	OPTIVA_FS ACTION-WIP
ACTIONWIP	LINE	Line	OPTIVA_FS ACTION-WIPSTEPS
ACTIONWIP	MATRIX	Extension Tables	OPTIVA_FS ACTION-WIPMATRIX_*
ACTIONWIP	PARAM	Parameter	OPTIVA_FS ACTION-WIPPARAM
ACTIONWIP	WIPSIGN	WIP Signature	OPTIVA_FSSIGNATURE
FORMULA	ALTINGR	Alternate Ingredients	OPTIVA_FS FORMULA-LAALTINGR
FORMULA	BYPROD	Byproducts	OPTIVA_FS FORMULA-BYPROD
FORMULA	CONTEXT	Context Attributes	OPTIVA_FS FORMULA-CONTEXT
FORMULA	CUSTOM	Extended Attributes	OPTIVA_FS FORMULA-CUSTOMATTRIB
FORMULA	DESCR	Multi-Value Attributes	OPTIVA_FS FORMULA-DESCRIPTION
FORMULA	DOC	Docs	OPTIVA_FS FORMULA-LADOC
FORMULA	HEADER	Header	OPTIVA_FS FORMULA
FORMULA	INGR	Ingredients	OPTIVA_FS FORMULA-LAINGR



Symbol	Detail	Detail Label	Data Lake table name
FORMULA	MATRIX	Extension Tables	OPTIVA_FSFORMULA-MATRIX_*
FORMULA	REF	References	OPTIVA_FSFORMULA-REF
FORMULA	ST	Sets	OPTIVA_FSFORMULA-LAST
FORMULA	TPALL	All Technical Parameters	OPTIVA_FSFORMULA-TPALL
ITEM	CONTEXT	Context Attributes	OPTIVA_FSITEMCONTEXT
ITEM	CUSTOM	Extended Attributes	OPTIVA_FSITEM_CUSTOM-ATTRIB
ITEM	DESCR	Multi-Value Attributes	OPTIVA_FSITEMDESCRIPTION
ITEM	DOC	Docs	OPTIVA_FSITEMDOC
ITEM	HEADER	Header	OPTIVA_FSITEM
ITEM	LABEL	Labels	OPTIVA_FSITEMLABEL
ITEM	MATRIX	Extension Tables	OPTIVA_FSITEMMATRIX_*
ITEM	REF	References	OPTIVA_FSITEMREF
ITEM	ST	Sets	OPTIVA_FSITEMST
ITEM	TPALL	All Technical Parameters	OPTIVA_FSITEMTPALL
PROJECT	CONTEXT	Context Attributes	OPTIVA_FSPROJECTCONTEXT
PROJECT	CUSTOM	Extended Attributes	OPTIVA_FSPROJECT_CUSTOM-ATTRIB
PROJECT	DESCR	Multi-Value Attributes	OPTIVA_FSPROJECTDESCRIPTION
PROJECT	DOC	Docs	OPTIVA_FSPROJECTDOC
PROJECT	HEADER	Header	OPTIVA_FSPROJECT

Symbol	Detail	Detail Label	Data Lake table name
PROJECT	MATRIX	Extension Tables	OPTIVA_FSPROJECT-MATRIX_*
PROJECT	REF	References	OPTIVA_FSPROJECTREF
PROJECT	ST	Sets	OPTIVA_FSPROJECTST
PROJECT	TPALL	All Technical Parameters	OPTIVA_FSPROJECTTPALL
SPECIFICATION	BYPROD	Byproducts	OPTIVA_FSSPECIFICATIONBYPROD
SPECIFICATION	CONTEXT	Context Attributes	OPTIVA_FSSPECIFICATIONCONTEXT
SPECIFICATION	CUSTOM	Extended Attributes	OPTIVA_FSSPECIFICATION_CUSTOMATTRIBUTE
SPECIFICATION	DESCR	Multi-Value Attributes	OPTIVA_FSATTRIBUTE
SPECIFICATION	DOC	Docs	OPTIVA_FSSPECIFICATIONDOC
SPECIFICATION	HEADER	Header	OPTIVA_FSSPECIFICATION
SPECIFICATION	INGR	Ingredients	OPTIVA_FSSPECIFICATIONINGR
SPECIFICATION	MATRIX	Extension Tables	OPTIVA_FSSPECIFICATIONMATRIX_*
SPECIFICATION	REF	References	OPTIVA_FSSPECIFICATIONREF
SPECIFICATION	ST	Sets	OPTIVA_FSSPECIFICATIONST
SPECIFICATION	TP	Technical Parameters	OPTIVA_FSSPECIFICATIONTP

## Appendix G: Examples of alerts and workflow notifications

This section provides examples of alerts and workflow notifications between Optiva and M3. Infor Optiva and M3 are defined as Application Connection Points in ION Desk. The typical connection information of Optiva and M3, such as the hostname, Port Number, Schema Name, username and password, are specified in ION.

Each application (Infor Optiva and Infor M3) configuration is defined as a separate Application Connection Point, with its unique Logical ID. BODs sent by Infor Optiva and M3 contain the Logical ID of the sender, as specified in ION.

### Examples of standard monitors

Monitors create the alerts.

- The naming convention used for standard monitors is *Optiva/M3 noun\_event*.
- ION's event monitoring evaluates BODs with the *Sync* verb.

**Note:** UOM can be configured as per user specifications.

### FormulaCreation\_HighQuantityYield

Monitor	Alert
Purpose	New formula is created in Optiva. High Quantity Alert:Yield exceeds 1000 kg
Monitor	Optiva_FormulaCreation_HighQuantityYield
Application document	SyncBillOfMaterials
Conditions/rule	The [Action Code] is 'Add', Yield is > 1000 and [Yield Unit Code] is 'kg'.
Action	Alert is raised when a new formula is created with a Yield that exceeds 1000 kg.

Monitor	Alert
Start Workflow	None
Distribution	Optiva_Development
Message	New formula [FormulaID] - [FormulaRevisionID] ([Description]) – High Quantity Alert, Yield > 1000 [YieldUnitCode]. Current Yield is [Yield] [YieldUnitCode].

## FormulaCreation\_NotifyM3ManufacturingTeam

Monitor	Alert
Purpose	New formula is created in Optiva. Communicate to manufacturing to set up costs.
Monitor	Optiva_FormulaCreation_NotifyManufacturingTeam
Application document	SyncBillofMaterials
Conditions/rule	The [Action Code] is 'Add'.
Action	Alert is raised when a new formula is created.
Start Workflow	None
Distribution	Finance
Message	New formula [FormulaID] - [FormulaRevisionID]([Description]) created in Optiva. Please setup manufacturing costs.

## SupplierAddition\_NotifyOptivaTeam

Monitor	Alert
Purpose	New supplier is created in M3. Communicate to the Optiva team to review the supplier data.
Monitor	Optiva_FormulaCreation_NotifyManufacturingTeam
Application document	<b>SyncBillofMaterials</b>
Conditions/rule	The [Action Code] is "Add".
Action	Alert is raised when a new Supplier is created.

Monitor	Alert
Start Workflow	None
Distribution	Optiva_Development
Message	New vendor [SupplierID] - [SupplierName] created with address [SupplierAddressLine1], [SupplierCity], [SupplierCountry] and [SupplierPostalCode]. Please review vendor details.

## AllergenInfo\_NotifyM3ProductionTeam

Monitor	Alert
Purpose	Optiva Allergen information. Notify M3 Production Line.
Monitor	Optiva_AllergenInfo_NotifyM3ProductionTeam
Application document	SyncBillofMaterials
Conditions/rule	The [Type] is "attribute", [Name] Contains "ALLERGEN" and [NameValue] is "Yes".
Action	Alert is raised to M3 development whenever Allergen information is present in an Optiva formula.
Start Workflow	None
Distribution	Manufacturing
Message	Formula [FormulaID] - [RevisionID] ([Description]) contains Allergens. Production Team: please take necessary steps.

## CustomerAddition\_NotifyOptivaTeam

Monitor	Alert
Purpose	New customer is added in M3. Communicate to the Optiva team to review the customer data.
Monitor	Optiva_AllergenInfo_NotifyM3ProductionTeam
Application document	SyncCustomerPartyMaster
Conditions/rule	The [Code] is "Open".

Monitor	Alert
Action	Alert is raised to the Optiva team to review the customer data in Optiva when a new customer is added in M3.
Start Workflow	None
Distribution	Optiva_Development
Message	New customer [CustomerID] - [Customer-Name]created with address [AddressLine1],[CustomerCity],[CustomerCountry] and [Customer-PostalCode]. Please review customer details.

## FormulaCreation\_NotifyM3ProductionTeam

Monitor	Alert
Purpose	Optiva Allergen information. Notify M3 Production-Line.
Monitor	Optiva_AllergenInfo_NotifyM3ProductionTeam
Application document	SyncCustomerPartyMaster
Conditions/rule	The [Code] is 'Open'.
Action	Alert is raised to the Optiva team to review the customer data in Optiva when a new customer is added in M3.
Start workflow	None
Distribution	Optiva_Development
Message	New customer [CustomerID] - [Customer-Name]created with address [AddressLine1],[CustomerCity],[CustomerCountry] and [Customer-PostalCode]. Please review customer details.

## FormulaCreation\_NotifyQATeam

Monitor	Alert
Purpose	A new formula is created in Optiva. Notify the QA team of M3 to prepare the quality data.
Monitor	M3_SupplierAddition_NotifyOptivaTeam

Monitor	Alert
Application document	SyncBillofMaterials
Conditions/rule	The [ActionCode] is 'Add'
Action	Alert is raised to the QA team so that they can establish relevant documentation.
Start Workflow	None
Distribution	Quality
Message	New formula [FormulaID] - [RevisionID] ([Description]) created in Optiva. Please maintain relevant QA data.

## SupplierDeleted\_NotifyOptivaTeam

Monitor	Alert
Purpose	A new formula is created in Optiva. Notify the QA team of M3 to prepare the quality data.
Monitor	M3_SupplierDeleted_NotifyOptivaTeam
Application document	SyncSupplierPartyMaster
Conditions/rule	The [Code] changes to 'Hold/Deleted'.
Action	Alert is raised when the Supplier is deleted in M3.
Start Workflow	None
Distribution	Optiva_Development
Message	Supplier [SupplierName] - [ID] has been set to [Code]. Please review impact.

## CustomerClosed\_NotifyOptivaTeam

Monitor	Alert
Purpose	Customer is set to inactive in M3. Notify the Optiva team to review the customer data in Optiva.
Monitor	Optiva.M3_SupplierDeleted_NotifyOptivaTeam
Application document	SyncCustomerPartyMaster
Conditions/rule	The [Code] changes to 'Closed'.

Monitor	Alert
Action	Alert is raised when the customer is closed/terminated in M3.
Start Workflow	None
Distribution	Optiva_Development
Message	Customer [ID] - [CustomerName] has been Terminated. Please review impact.

## Workflow notifications

Workflow models describe when to create notifications or tasks and to whom they should be distributed.

- The naming convention used for standard workflow models is *Optiva\_noun\_event* . Do not use the prefix Optiva for customized, standard content or customer-defined content.
- ION's Workflows content evaluates BODs with the *Process* verb.

### ItemCreation\_NotifyM3CostingTeam

Monitor	Alert
Purpose	New item is created in Optiva. Notify the M3 costing team to set up the standard cost.
Workflow	Optiva_ItemCreation_NotifyM3CostingTeam
Application document	ProcessItemMaster
Conditions/rule	The [ActionCode] is 'Add'.
Action	Alert is raised when a new Item is created.
Distribution	Finance
Message	New Item [Item] - [Name] created in Optiva. This is an advance notification to maintain the costs.

### ItemCreation\_NotifyM3PurchasingTeam

Monitor	Alert
Purpose	A new Item is created in Optiva. Notify the M3 Purchasing team to set up Procurement info.
Workflow	Optiva_ItemCreation_NotifyM3PurchasingTeam



Monitor	Alert
Application document	ProcessItemMaster
Conditions/rule	The [ActionCode] is 'Add'.
Action	Alert is raised when a new Item is created.
Distribution	Procurement
Message	New Item [Item] - [Name] created in Optiva. This is an advance notification to maintain Procurement details.

### ItemCreation\_NotifyM3QATeam

Monitor	Alert
Purpose	A new item is created in Optiva. Notify the QA team so that they can establish the relevant documentation.
Workflow	Optiva_ItemCreation_NotifyM3QATeam
Application document	ProcessItemMaster
Conditions/rule	The [ActionCode] is 'Add'.
Action	Alert is raised whenever a new item is created in Optiva.
Distribution	Quality
Message	New Item [Item] - [Name] created in Optiva. This is an advance notification to maintain QA Data