Infor CloudSuite Industrial Configuration Guide - Cloud Edition

Release 9.01.x

DRAFT

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Contents

About this guide

This guide provides information for the configuration and implementation of Infor CloudSuite Industrial in a multi-tenant cloud environment.

Intended audience

This guide is intended for the system administrator, consultant, or business partner who configures CloudSuite Industrial for use with Infor Operating Service (OS) in the cloud.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal.

If we update this document after the product release, we will post the new version on this website. We recommend that you check this website periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1: Configuration checklist

Contact Infor Consulting Services for a checklist to complete the integration of the components in this CloudSuite.

Chapter 2: 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 a list of related concepts and definitions.

About the CloudSuite

See the *Infor CloudSuite Industrial Solution Overview - Cloud Edition* for information about the applications that are included or optional with this CloudSuite, and the applications that can be integrated with the CloudSuite.

Be aware that in the cloud, all of your sites are defined in a single database, and only named user licensing is allowed.

CloudSuite tenants

Each CloudSuite Industrial customer is set up with three tenants:

- Demo, which includes a CloudSuite Industrial application database that contains demo data and multiple demo sites
- Training, which includes a CloudSuite Industrial application database that contains only initialized data. The sites that you designed with the Infor Cloud team are included. This database is intended for training.
- Production, which includes a CloudSuite Industrial application database that contains only initialized data. The sites that you designed with the Infor Cloud team are included. This is the go-live database.

Each tenant has a separate application database, with separate logins and passwords. Nothing is shared between the databases. If you set up data in your Production database and then want to copy it to your Training database, or vice versa, you have two options:

- Use the **To Excel** option (on grid forms) to save data from a form to a spreadsheet and then import it into the same form in the other tenant.

- Ask the Infor Cloud team to refresh one tenant from the other tenant, which clears out the data in the other tenant and replaces it with the data from the first tenant. To request this, create an incident in Infor Xtreme.

Integration with other products in the CloudSuite

The CloudSuite Industrial ERP application uses different integration methods to communicate with other products in the suite.

Draft Comments Could include technical architecture diagram here?.

Draft Comments Add section on web services after I get info from Suresh. Use CRM and Rhythm as examples... for v10 ONLY!

Point to point integrations

Point to point integrations, for example with Infor Configure Price Quote (CPQ) or Factory Track, use direct database connections that are set up by the Infor Cloud team. You might need to configure additional parameters or master data in each of the applications to complete the integration. See the appropriate integration guides.

BOD integrations

An outbound operation typically begins when a user performs an action in CloudSuite Industrial that requires a data exchange with another ION-enabled application. A Business Object Document (BOD) XML message is generated by CloudSuite Industrial and placed in an area designated as the CloudSuite Industrial 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 application or site in the CloudSuite that can send or receive BODs. (If you add applications 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 applications. For example, the Infor Cloud team sets up a document flow between CloudSuite Industrial 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 applications. If a document flow is defined fromCloudSuite Industrial to another application for a particular BOD, then at specified intervals, ION places the outbound BOD from CloudSuite Industrial in the other application's designated

message inbox. Products are responsible for validating and incorporating the data in inbound BODs according to their rules.

If a flow is defined from another application to CloudSuite Industrial, ION retrieves BODs from the sending application's message outbox and delivers them to CloudSuite Industrial's message inbox for processing. CloudSuite Industrial retrieves, validates, and processes the BODs.

Concepts and definitions specific to this configuration

You must understand the tenant, logical ID, accounting entity and location, and how they are defined in this application. Together, these terms determine where inbound BOD information is processed, or the outbound instance and location to which the BOD information should be associated.

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.

The tenant ID is specified by the Infor Cloud team. You can view it in the **Sites/Entities** form. This value should not be changed.

Infor provides you with three tenants. See About the CloudSuite on page 11.

See the information about using tenants in the *Infor ION Desk User Guide - Cloud Edition*.

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. An accounting entity can also be defined as the owner of certain master data among the enterprise. CloudSuite Industrial is the system of record for accounting entities.

For CloudSuite Industrial, the site is used as the accounting entity.

Do not confuse this Infor definition of "accounting entity" with the CloudSuite Industrial definition of "entity," which is a type of site that is used only for financial consolidation.

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. CloudSuite Industrial is the system of record for locations.

Logical ID

The logical ID is a unique identifier used in the communication of data between the applications in the tenant's environment. Each instance of an application, 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.

This logical ID is defined in CloudSuite Industrial **Sites/Entities** form and should not be changed. For cloud applications, the logical ID is defined by the Infor Cloud team and is retrieved automatically when the application connection point is created in ION.

In Infor Ming.le, each application is assigned a logical ID. Infor Ming.le supports only one logical ID per application.

For more information, see the CloudSuite Industrial online help.

Chapter 3: Getting started

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

Determining your ERP application site names

If you are configuring a system with multiple sites, you must provide Infor with the names and descriptions of all of the CloudSuite Industrial sites (also known as accounting entities) that you require.

Discuss your company's site requirements with the Infor Cloud team. See the Infor CloudSuite Industrial Multi-Site Planning Guide – Cloud Edition.

Be aware that in the cloud, all of your sites are defined in a single database, and only named user licensing is allowed.

Determining the bootstrap administrator

You must designate one person as the bootstrap administrator, who will perform the initial setup of the tenant for other users. Provide this person's email address to Infor.

The bootstrap administrator, who could be an Infor consultant, a business partner, or an administrator at your company, will receive an email from Infor with the initial URL to establish an Infor Ming.le user name and login. This person also receives the Application Access email with the URLs to the applications. The bootstrap administrator is the only person who can initially access the tenant.

Accessing your cloud environment (tenant)

1. After you register the bootstrap administrator's email address, Infor sends an email to the bootstrap administrator that asks to verify the Infor Ming.le account.
2. Click the link in the email.
3. 3 Specify your first name, last name, title, email address, and a password.

4 Click **Create Account**.

Note: The link in the email expires in 48 hours. If you are past that time, please reset your password with these steps:

a Remove everything after the **Tenant ID** in the original URL that was sent in the registration email. For example, in https://mingle-portal.inforcloudsuite.com/ITSGENXXXA03/xxxxxxx/xxxxx, ITSGENXXXA03 is the tenant ID, so you would delete everything after that.

b Copy the remaining URL and paste it into a web browser. A login dialog box should be displayed.

c Click the Forgot Password link.

d Infor sends a new Infor Ming.le Activation email to you.

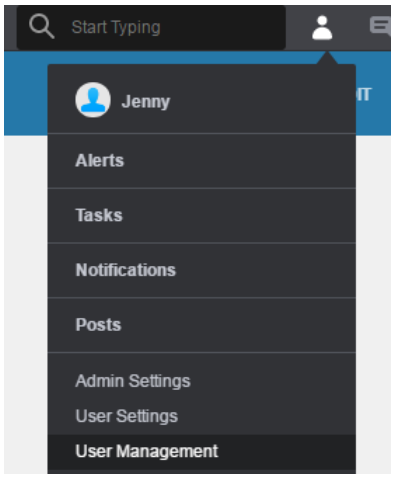
e After Infor processes your account information, Infor sends you a second email with the actual URL to sign in to your tenant.

Note: At this point, Infor provisioning is not yet complete. Do not sign into your tenant until you receive another “welcome” email from Infor that contains a list of useful URLs for your tenant.

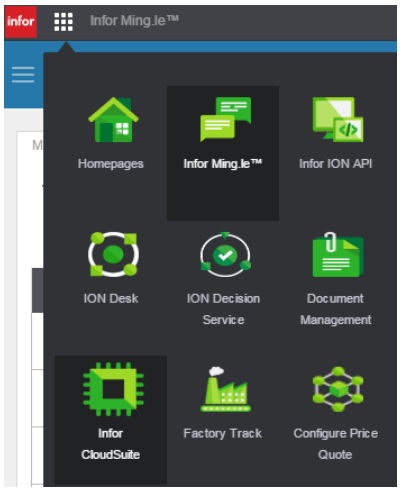
Verifying access to your applications

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 menu options **Admin Settings** and **User Management**.



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



3 Verify that you can access any optional applications that you have licensed, such as Infor Factory Track or Infor Configure Price Quote.

Chapter 4: Post provisioning steps

These are the initial steps that must be done after your tenant is provisioned by Infor.

If you engage Infor Consulting Services to perform post provisioning, they will perform the steps in this chapter for you.

Note: The Post Provisioning steps are often performed by the Bootstrap Administrator. At a minimum, the person performing these steps must have IONDeskAdmin, IONDeskSecurityAdmin, and IDM-Administrator roles assigned in Infor Ming.le, as well as the System Administrator group assigned in CloudSuite Industrial. See Configuring user access to the ERP through Infor Ming.le on page 96 for information about how to set up users and roles/groups.

Configuring BODs for ERP connection points

Connection points provide the information that ION uses to connect to an application's message inbox and outbox. At least one connection point is defined for each application instance that integrates to ION. If you have a multi-site system, one connection point is defined for each CloudSuite Industrial site.

Update the CloudSuite Industrial connection points to include the BODs that can be sent from, or received into, CloudSuite Industrial:

1 In ION Desk, select **Connect > Connection Points**.

2 Select one of the predefined CloudSuite Industrial connection points. The **Documents** tab lists all documents (BODs) that can be sent or received by this application instance for any integration. For each document, the list must indicate whether the document can be sent, received, or both.

3 Click **Add** to set up a list of the documents that can be sent or received by this CloudSuite Industrial connection point (site).

ION uses this list to determine which BODs can be routed to or from the application when this connection point is used in document flows. However, a BOD can be published by CloudSuite Industrial to ION even if it is not listed in a connection point, as long as the BOD's outbound setup is configured properly on the Replication Document forms.

Note: One of your CloudSuite Industrial connection points will already have some BODs listed, because the Cloud team set it up for the Infor Ming.le document flow.

Add all of the documents listed here, or just add the documents for the integrations with products that you plan to use:

Document	Receive in application	Send from application	Used in integration with
Process.BillToPartyMaster	X		CRM
Process.ContactMaster	X		CRM
Process.CustomerPartyMaster	X		CRM
Process.PulseAlert		X	ION (for alerts)
Process.Quote	X		CRM
Process.Requisition	X		EAM
Process.SalesOrder	X		CRM
Process.SecurityUserMaster		X	Infor Ming.le
Process.ShipToPartyMaster	X		CRM
Sync.BillToPartyMaster		X	CRM
Sync.CodeDefinition		X	CRM, XM
Sync.ContactMaster		X	CRM
Sync.CurrencyExchangeRateMaster		X	XM
Sync.CustomerPartyMaster		X	CRM
Sync.CustomerReturn		X	CRM
Sync.EmployeeTimesheet	X		XM
Sync.ExpenseReport	X		XM
Sync.Invoice		X	CRM
Sync.ItemMaster		X	CRM
Sync.Location		X	CRM
Sync.PayFromPartyMaster		X	CRM
Sync.Person		X	CRM
Sync.Personnel		X	XM
Sync.ProductionOrder		X	XM

Document	Receive in application	Send from application	Used in integration with
Sync.ProjectMaster		X	XM
Sync.PurchaseOrder		X	EAM
Sync.Quote		X	CRM
Sync.ReceivableTransaction		X	CRM
Sync.ReceiveDelivery		X	EAM
Sync.RemittanceAdvice		X	XM
Sync.SalesOrder		X	CRM
Sync.SecurityRoleMaster		X	Infor Ming.le
Sync.SecurityUserMaster	X		Infor Ming.le
Sync.ServiceOrder		X	XM
Sync.Shipment		X	CRM
Sync.ShipToPartyMaster		X	CRM
Sync.SupplierPartyMaster		X	EAM

You might add other documents to the list later, for additional integrations.

4 Open each of the other predefined CloudSuite Industrial connection points. Add the BODs from step 3.

Verifying BODs for the Infor Ming.le connection point

The Infor Cloud team has already set up the Infor Ming.le connection point. Verify that it contains the correct documents.

1 In ION Desk, select **Connect > Connection Points**.

2 Find and select the Infor Ming.le connection point. In its **Documents** tab, verify that these documents are listed:

Document	Receive in Application	Send from Application
Process.SecurityUserMaster	X	
Sync.SecurityRoleMaster	X	
Sync.SecurityUserMaster		X

Verifying the security document flow between the ERP and Infor Ming.le

The Infor Cloud team has already set up a document flow between CloudSuite Industrial and Infor Ming.le to pass user account and role (group) information. Verify that the flow is activated and that it contains the correct connection points and documents.

Draft Comments If the Cloud team later starts to use Scott T's erp_mingle doc flow instead of the MingleToCSI one, then change these steps to match. use the erp_mingle_document_lfow image and change the "CSI" app box to "ERP."

1. In ION Desk, select **Connect > Document Flows**.
2. Find the document flow **MingletoCSI** and verify that it is marked as **`Active`**.
3. Select the document flow to open it.

Note:

The CSI application box contains only one CloudSuite Industrial connection point (site). Because the sites are all in one database, basic user data is shared between all sites. However, if you want to ensure that updates to roles (groups) are also shared between all sites, you must set up a master site and shared user tables in CloudSuite Industrial. (See the *Infor CloudSuite Industrial Multi-Site Planning Guide – Cloud Edition*.) If you don't want to use a master site and shared user tables, then you must include all of the CloudSuite Industrial site connection points in this document flow

4. Select the document icon between Mingle1 and CSI and verify that it lists these documents:
   - Sync.SecurityUserMaster
5. Select the document icon between CSI and Mingle_2 and verify that it lists these documents:
   - Sync.SecurityRoleMaster
   - Process.SecurityUserMaster
6. Make any needed corrections and save your changes.

Configuring EAM

If the CloudSuite includes EAM, use these post-provisioning steps to configure EAM for use with CloudSuite Industrial.

Draft Comments This section needs to be tested with the latest EAM version in the cloud.

Configuring the Databridge

Note: The Infor Cloud team enables the Databridge partner, sets the connection information for the shared ION I/O box, activates the partner record with partner code * (asterisk), and activates the INFOR-ONRAMP partner. You must perform these additional configuration steps.

Draft Comments I combined steps from the CSI-EAM Integration Guide and the QA Central wiki EAM Post-Provisioning section. If we keep this here, remove the steps from the integration guide.

1. In the Infor EAM application, select **Administration > Databridge > Databridge Partners**.
2. Select the **INFOR-ONRAMP** partner, and click the **Subscriptions** tab. Select **Enabled** for these events:
   - ADDREQUISTN/ProcessRequisition
   - CHANGEREQUISTN/ProcessRequisition

   For all other values, leave the current settings as-is or use the settings that are specified in the *Infor EAM Configuration Guide for Infor ION*

   Draft Comments Title is valid for current EAM version, but might change for next version. Verify after that version is released.
3. Select **Administration > Databridge > Databridge Setup**.
4. On the **Databridge Setup** page, **Options** tab, **Materials** section, specify these values:

Field	Setting
Enable Add Requisition Outbound	Yes
Enable Change Requisition Outbound	All
Enable Cancel Requisition Outbound	No

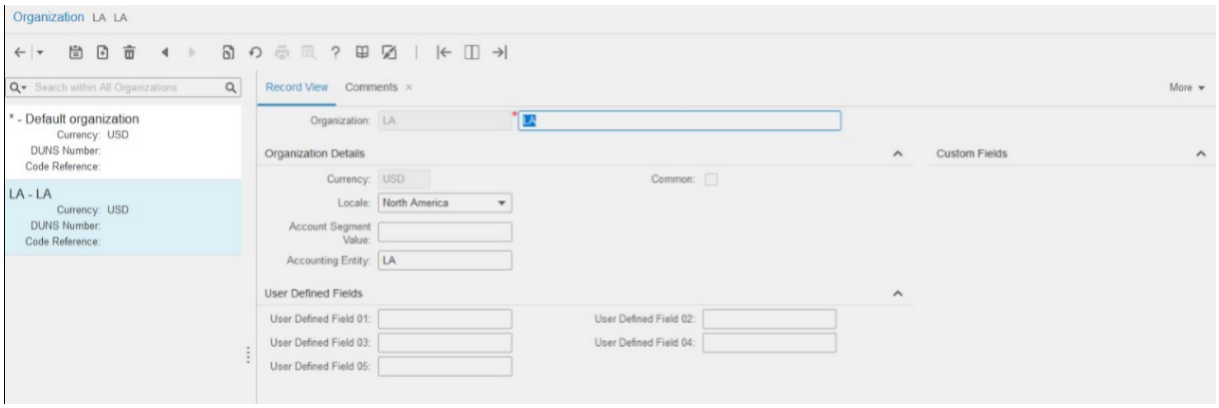
   For all other values, leave the current settings as-is or use the settings that are specified in the *Infor EAM Configuration Guide for Infor ION*.

   Draft Comments Title is valid for current EAM version, but might change for next version. Verify after that version is released.

Mapping an EAM organization to the ERP site

Draft Comments This section is also currently in the CSI-CRM integration guide. If we keep it here, remove it from there.

1. Select **Administration > Security > Organizations**.
2. On the **Organization** page, click the **Record View** tab and create a new organization that will be linked to a CloudSuite Industrial site:

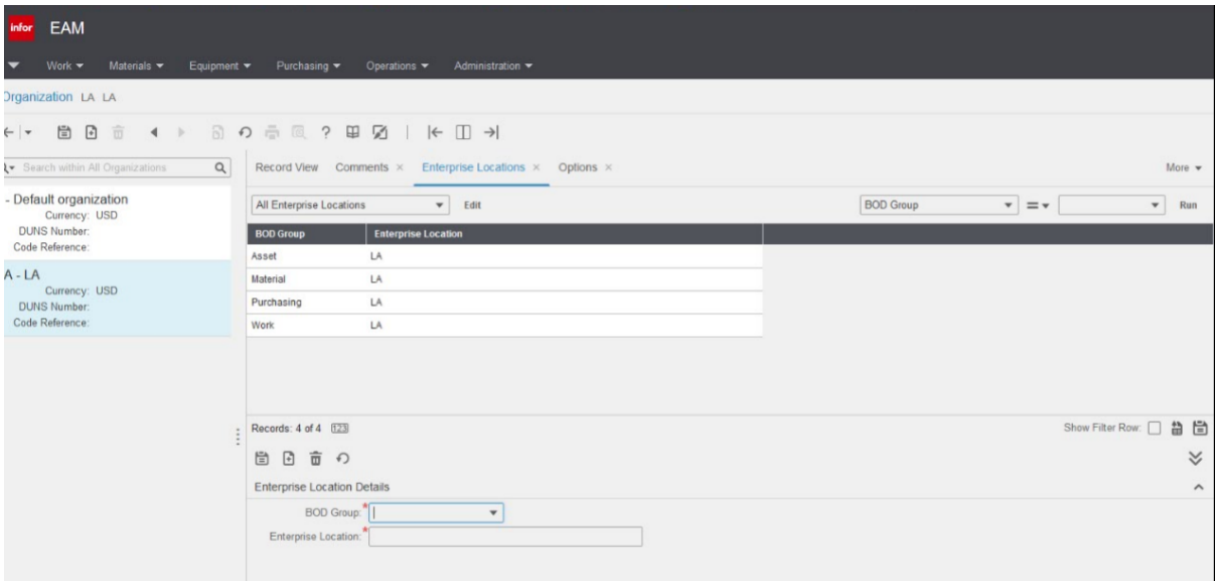


3 Specify this information:

Accounting Entity
Set the **Accounting Entity** to the CloudSuite Industrial site/configuration name, for example, **LA**.

Currency
Ensure that the currency you set here matches the domestic currency of the CloudSuite Industrial site.

4 Click **More** and select **Enterprise Locations**.

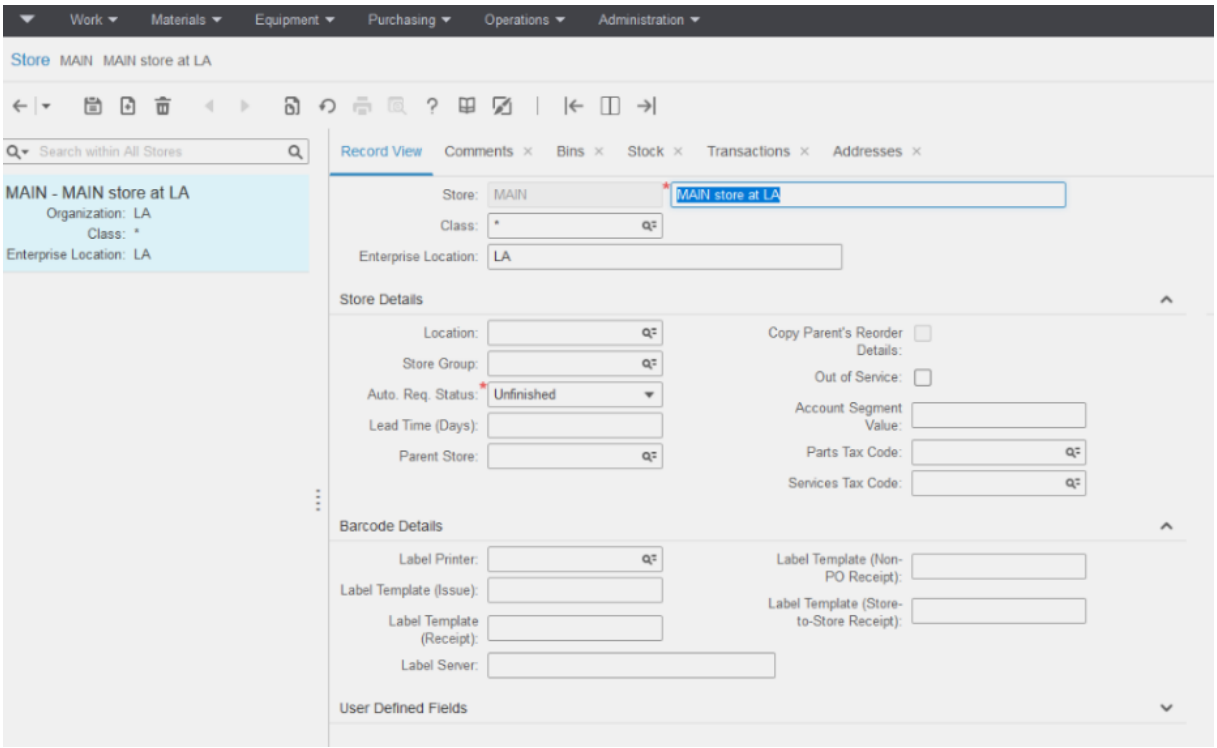


5 Specify a location for this organization on the **Enterprise Locations** tab. Link this Enterprise Location to each of the listed BOD groups. Otherwise, the EAM organization is used as the location for BODs.

Later, when you add a store, you will specify this organization and enterprise location, and link it to a CloudSuite Industrial warehouse.

Mapping an EAM store to the ERP warehouse

1 Select **Materials > Setup > Store**.



2 Add a new store. Set the store name to a warehouse in the CloudSuite Industrial site, for example, **`MAIN`**.

3 Specify this information:

Organization
Specify the organization that you added for the ERP site.

Enterprise Location
Specify the location that you added for the organization.

4 In the **Bins** tab, define bins for the store.

Draft Comments This step is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs.

5 Optionally, use the **Address** tab to include an address for the store.

Draft Comments This step is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs.

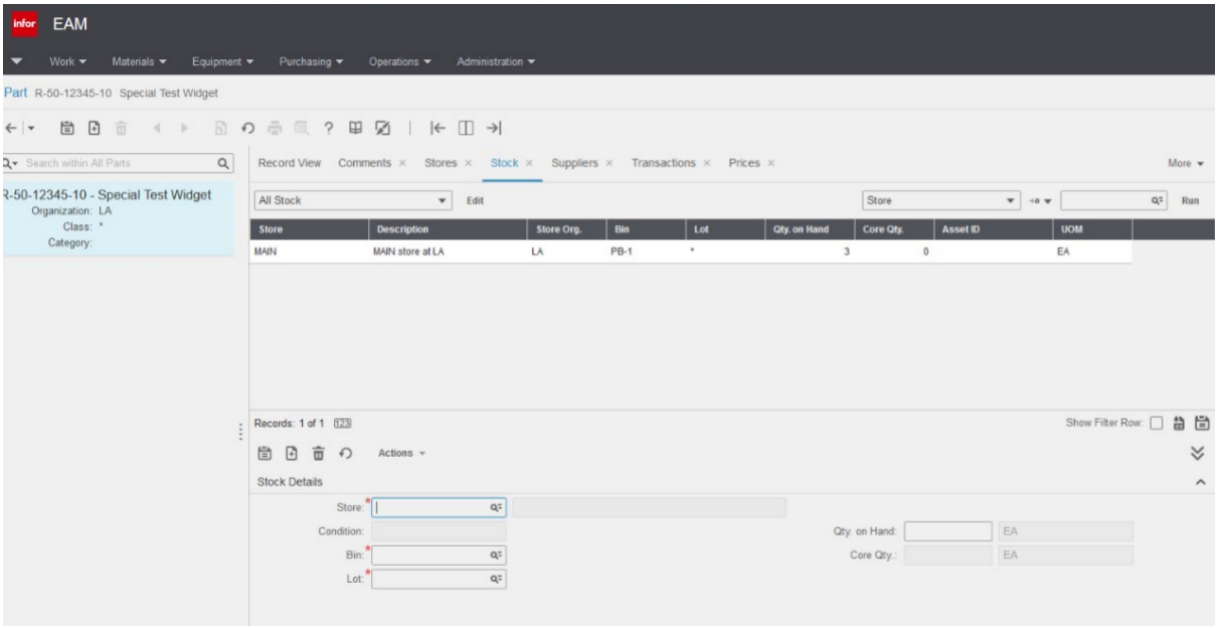
Draft Comments The QA Central wiki steps also indicate that you should add stock here. Bill Hinkle (CSI QA) says that should be done in a different area of EAM. (See the section "Adding MRO parts")

Adding MRO parts in EAM

Draft Comments This topic is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs. This is a replacement of the QA Central wiki step where they added parts as part of the EAM Store setup.

Add MRO parts, which cannot exist in CloudSuite Industrial.

1 Select **Materials > Parts > Stock**.



2 Add the part.

3 Assign the store, the default bin, which is needed for receiving, and prices for the part.

Adding suppliers

Draft Comments This topic is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs.

You can either add suppliers manually in EAM, as described here, or you can perform an initial load of vendor master data from CloudSuite Industrial through the Sync.SupplierPartyMaster BOD.

1 Optionally, select **Materials > Setup > Suppliers**

2 Specify the required information about each supplier.

Adding a user for the organization

Draft Comments This topic is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs.

Select **Administration > Security > Users**. Add at least one user and assign them to the organization that you added.

Adding employees

Draft Comments This topic is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs.

1. Select **Work > Setup > Employees**.
2. Add at least one employee. An employee is required in order to validate requisitions.
3. Associate the employee with a user record.

Verifying ISO units of measure and currency

Verify that you are using ISO standard currency codes and units of measure in both applications.

Draft Comments This topic is not required in order for BODs to be sent and received, but it is needed for testing and verification of Requisition BODs.

If you are not using ISO standard U/M (materials) codes in EAM, select **Materials > Setup > Units of Measure** to set up units of measure that match the ISO units of measure that are defined in CloudSuite Industrial.

If you are not using ISO standard currencies in EAM, select **Materials > Setup > Currencies** to set up currencies that match the ISO currency codes that are defined in CloudSuite Industrial.

Configuring CRM

Draft Comments This section needs to be tested with the latest CRM version in the cloud.

Draft Comments I have verified with CRM support that all of the steps in this section are currently required to configure CRM in a ST environment. However, I think some/most of the topics are generic to any CRM integration with Ming.le/Infor OS and could be removed from this guide when CRM is MT.

Use these post-provisioning steps to configure Infor CRM for use with CloudSuite Industrial.

Prerequisites

Ensure that you have this information before you perform the steps in this section:

- Infor Ming.le URL with administrator credentials.
- CRM URL with administrator credentials. This information should be provided in an email from the CRM cloud team.
- RDP details for the server in which the CRM application is deployed. This server is both the IOBOX server and the web server for CRM. This information should be provided in an email from the CRM cloud team.
- The IDP properties file, which is provided by the Infor Ming.le cloud support team.
- Infor Ming.le Homepages URL, which is provided by Infor Ming.le cloud support team.

Setting the Enterprise Location for CRM

Note: If Java 1.8 JDK is not already installed on the CRM IOBOX server, install it before performing these steps. Use the CRM IOBOX login credentials that were provided by Infor.

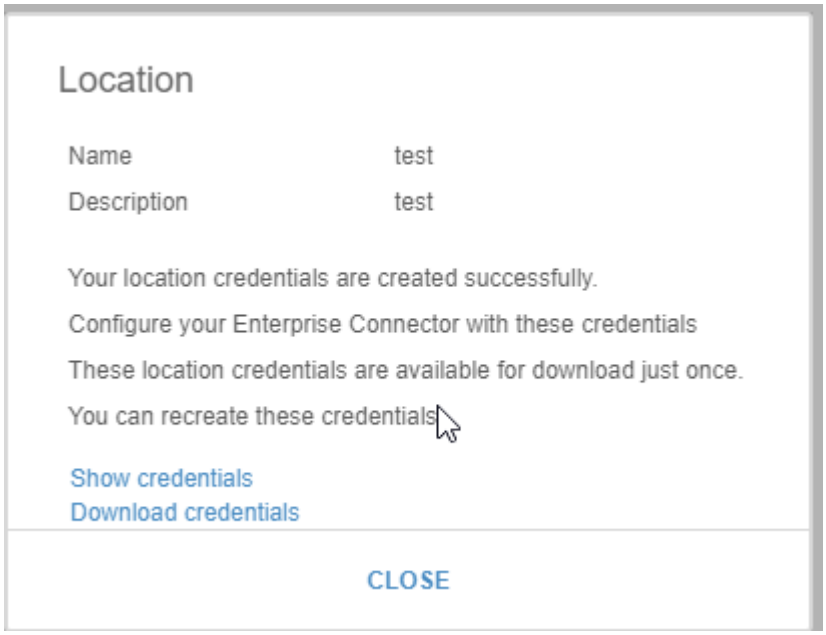
1 From the Infor Ming.le App Menu, select **ION Desk**.

2 Select **Connect > Enterprise Locations**.

3 Click **+** to add a location named **CRM** that will be used later for the CRM connection point.

4 Click **OK**.

This screen is displayed:



5 Click **Download credentials** to save the **Access Key ID** and **Secret Access Key** credentials for this location.

You will need them in a later step.

6 Select **Connect > Enterprise Locations** again.

7 Click **Download Enterprise Connector**.

8 Download the .jar file to a local folder.

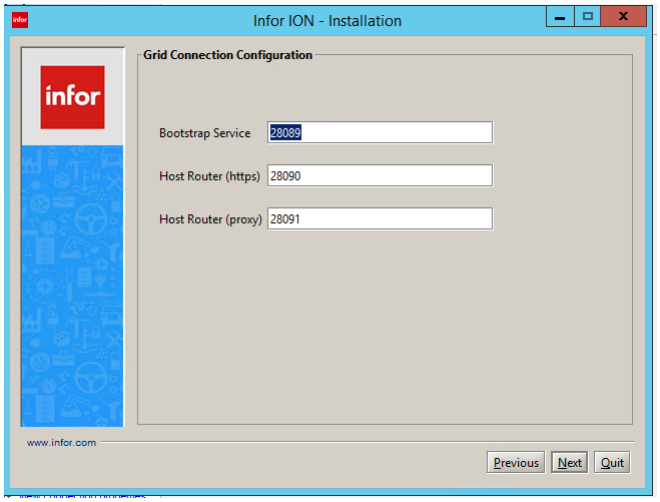
9 Use RDP to log in to the CRM IOBOX server, using the Infor-provided credentials.

10 Copy the .jar file to the CRM IOBOX server.

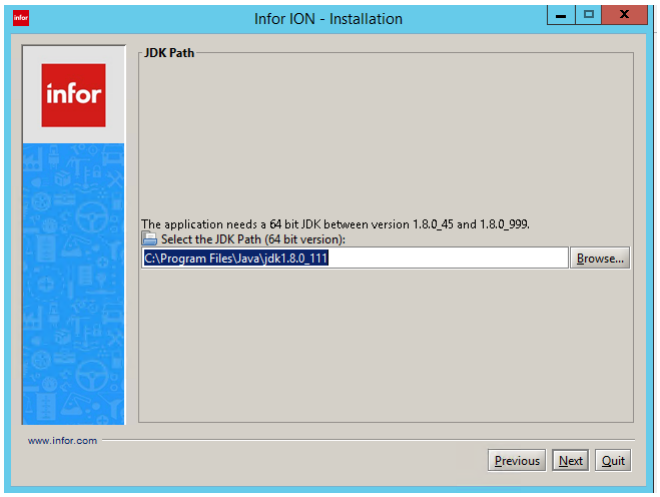
11 Double-click the .jar file to install the ION Enterprise Connector and ION Grid.

12 When prompted during the installation process, use defaults where possible.

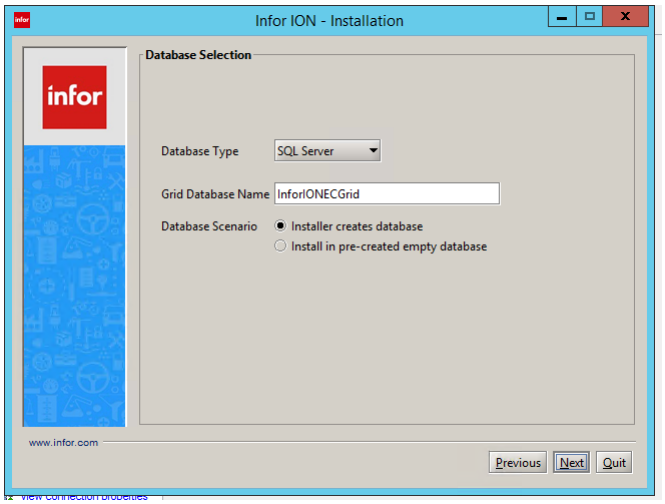
13 Specify **Grid Connection Configuration** values or accept the default values.



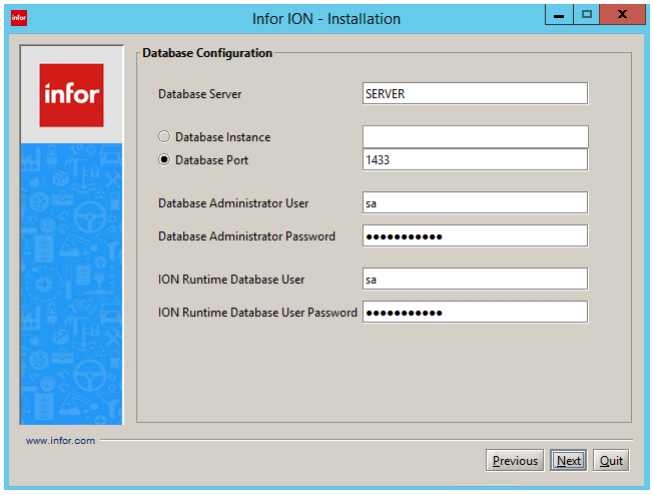
14 Specify the **JDK Path** or accept the default values.



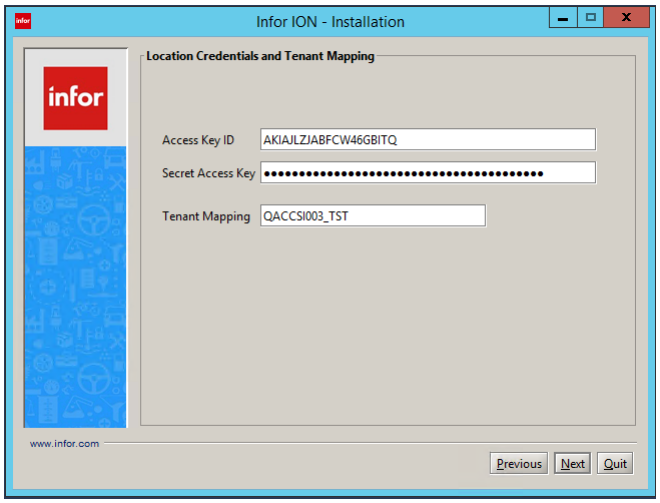
15 Specify the **Grid Database Name** or accept the default values.



16 On the **Database Configuration** step, specify the sa login and the password that was provided by Infor.



17 On the **Location Credentials and Tenant Mapping** step, specify the **Access Key ID** and **Secret Access Key** that were provided in step 5.



18 When prompted, click **Install** and then **Done**.

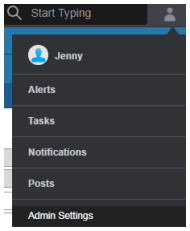
Configuring Infor Ming.le for CRM

In the tenant that includes Infor Ming.le and CloudSuite Industrial, sign into Infor Ming.le as an administrative user.

Use the steps in this section to add CRM as an application in Infor Ming.le.

Adding Infor CRM to Infor Ming.le

1 From the Infor Ming.le User Menu, select **Admin Settings**.



2 Click **+ ADD APPLICATION**.

3 Specify this information about the application:

Application Type
Select **Infor Non-Provisioned**.

Application Name
Select the latest version of Infor CRM.

Display Name
If necessary, specify **`Infor CRM`**.

4 Click **Choose Icon** and select the icon you want to represent the CRM application.

5 Select **Use HTTPS**.

6 Specify this information:

Host Name
Specify the URL that hosts the CRM application.

Port
Specify the port number. Leave this blank if there is no port number or if the port number is the default, 443.

Context
Specify **`SlxClient/SetMingleContext.aspx`**.

Default Tenant
Specify your Infor Ming.le tenant ID.

7 Click **Save** and **OK**.

Adding Infor CRM as an authorized application

1 From the Infor Ming.le App Menu, select **Infor ON API**.

2 Select **Authorized Apps**.

3 Click **+** to add a new app.

4 Specify this information to define the app:

Name
Specify **`Infor CRM`**.

Type
Select **`Web`**.

Description
Specify a meaningful description.

Redirect URL
Specify **`https://Hostname/SlxClient`**, where *Hostname* is the domain name that holds the CRM app, for example *host.subdomain*.infor.com.

Authorized Javascript Origins
Specify **`https://Hostname`**, where *Hostname* is the server that holds the CRM app, for example *host.subdomain*.infor.com.

5 Click **Save** and OK.

Configuring the CRM SDATA API

Draft Comments These steps are newer than the ones in the QA Central wiki, and should be tested by ICS.

1. From the Infor Ming.le App Menu, select **Infor ON API**.
2. Select **Available APIs**.
3. Click **+** and select the **Infor CRM** template.
4. Under **Deployment Information**, click **+** to add a new deployment.
5. Specify this information:

   Use HTTPS
   Enable this option.

   Ignore Certificate Errors
   Disable this option.

   Host Name
   Specify the URL for the CRM host.

   Port
   Leave this field blank.

   Context
   Leave this field blank.

   Default Tenant ID
   Leave this field blank.

   Use Mutual SSL
   Disable this option.

   Authentication Type
   Select **Basic**.

   User ID
   Specify the user ID, for example, **`IonApi`**.Make a note of this ID, because you will need it when you run the WebProvisionUI.exe tool.

   Password
   Specify a password. The password cannot be blank. Make a note of this password, because you will need it when you run the WebProvisionUI.exe tool.

6. Click **Save** and OK.

Creating a service provider in Infor Ming.le

1. From the Infor Ming.le User Menu, select **User Management**.
2. Select **Security Administration > Service Provider**.
3. Click **+** to add a service provider.

4 Specify this information:

Application Type
Select **`DEFAULT_WSFED`**.

Display Name
Specify **`Infor CRM`**.

Entity ID

Specify **`https://Hostname/WS-FED`**, where *Hostname* is the domain name that holds the CRM app, for example *host.subdomain*.infor.com.

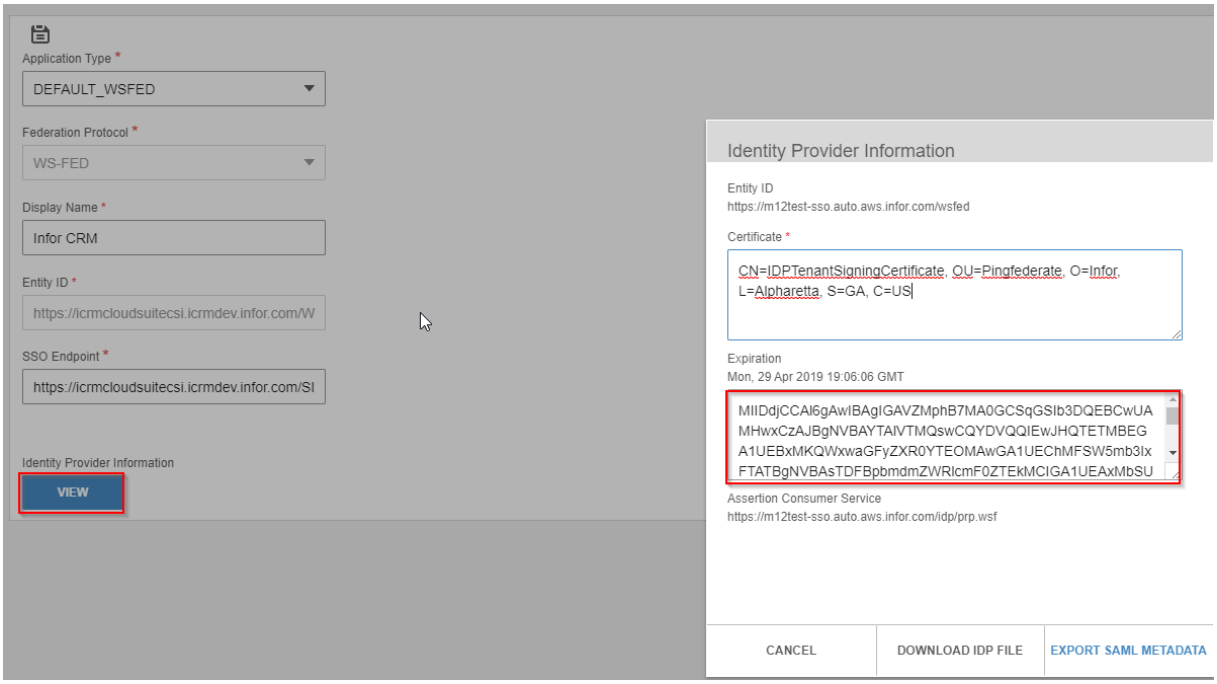
SSO Endpoint
Specify **`https://Hostname/SlxClient/default.aspx`**, where *Hostname* is the domain name that holds the CRM app, for example *host.subdomain*.infor.com.

5 Click **Save** and **OK**.

Getting the fingerprint of SAML metadata

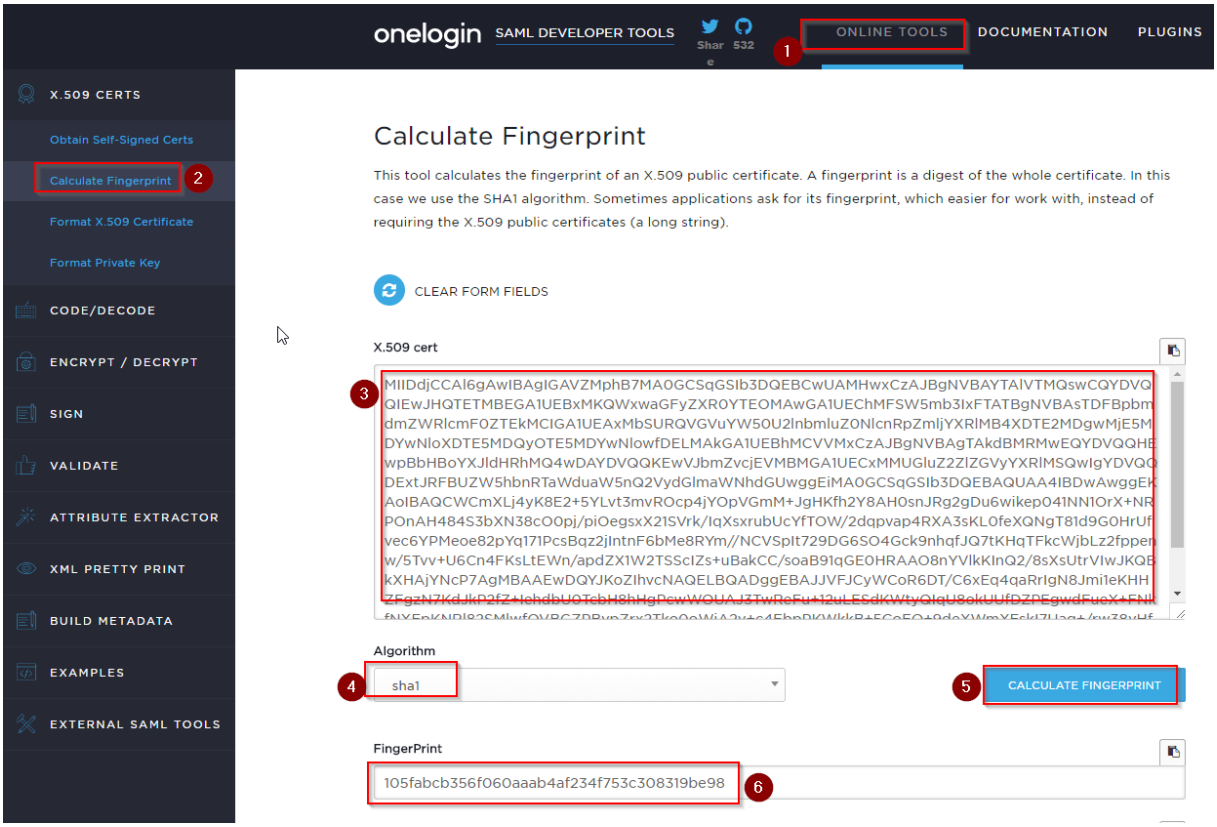
The fingerprint that you create here is used later.

1 From the Infor Ming.le User Menu, select **User Management**.
2 Select **Security Administration > Service Provider**.
3 Select the service provider you created earlier, and click the **Edit** icon next to it.
4 In the **Identity Provider** Information page, click **View**.



5 Copy the SAML metadata from the text box.

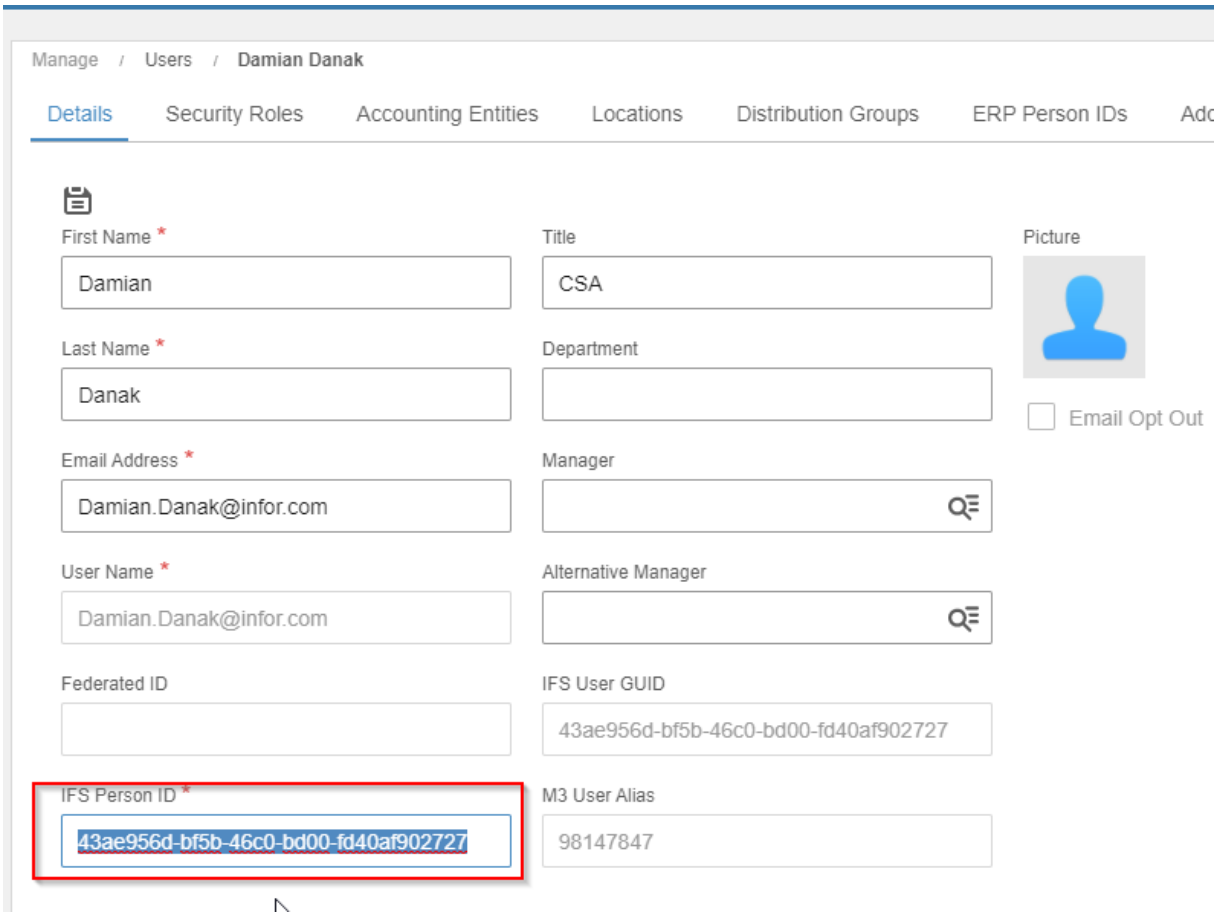
6 Open a browser and go to **www.samltool.com**.
7 Click **Online Tools**.
8 Click **X.509 Certificates**.
9 From the left menu, select **Calculate Fingerprint**.
10 Paste the copied SAML metadata into the **X.509 cert** field.
11 In the **Algorithm** field, select **`sha1`**.
12 Click **CALCULATE FINGERPRINT**.



13 Copy the FingerPrint value to a text file and save it for a later step.
See Running the WebProvisionUI.exe tool on page 36.

Enabling the CRM Administrator to sign in to Infor Ming.le

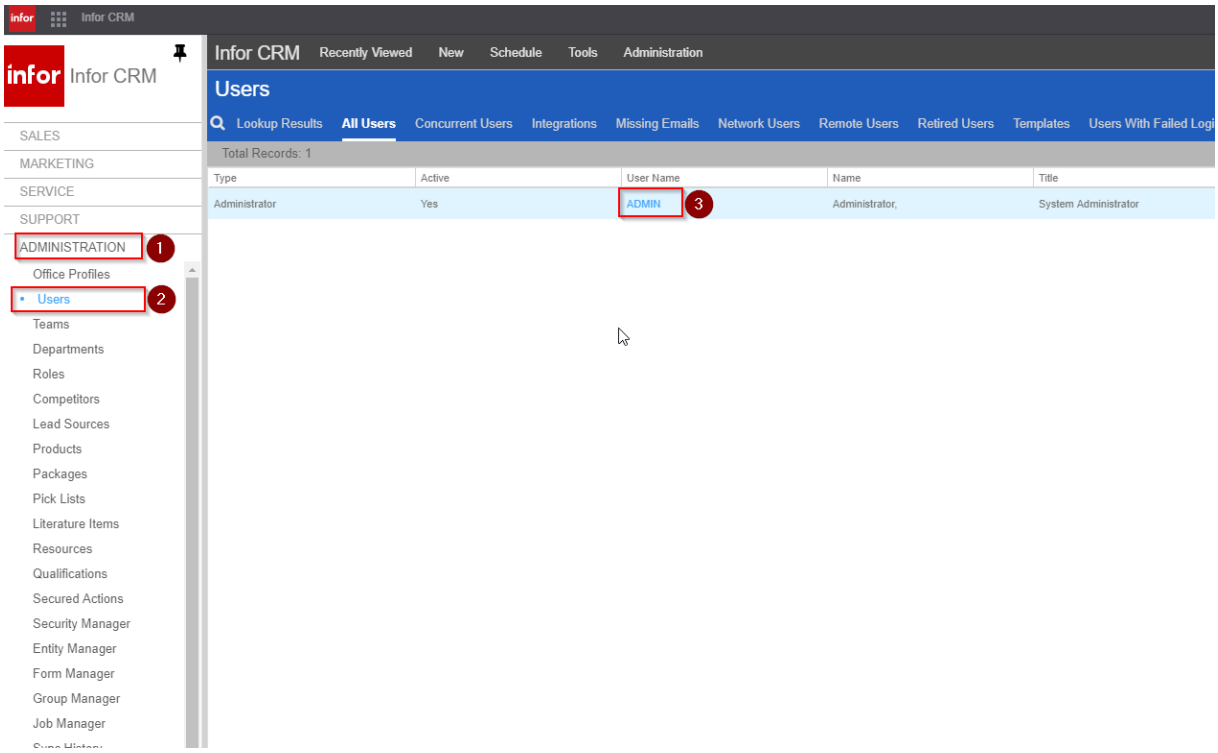
1 In the CloudSuite Industrial tenant, sign into Infor Ming.le as an administrative user.
2 From the Infor Ming.le User Menu, select **User Management.**
3 Click the Details icon next to the user who you want to be the CRM administrator.
4 Click **Additional Properties** and copy the **IFS Person ID** value.



You can add administrative roles for this user in a later step.

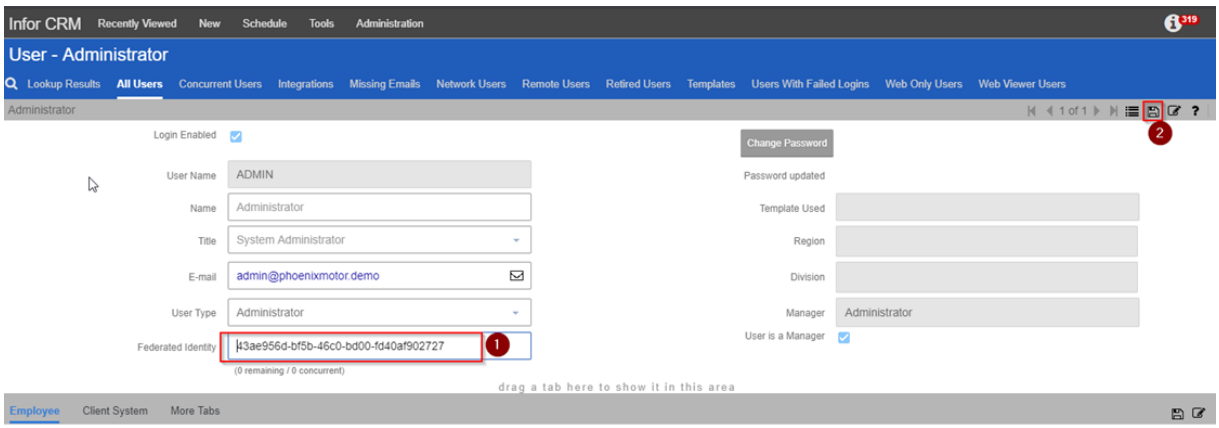
5 In the Infor Ming.le App Menu (on the CloudSuite Industrial tenant) select **Infor CRM** and sign into the CRM web client as an administrator, using the login and password that were provided by Infor.

6 In the Navigation menu, select **ADMINISTRATION > Users**.



7 In the **Users** page, click ADMIN.

8 In the **User – Administrator** page, **Federated Identity** field, paste the Infor Ming.le IFS Person ID that you copied in Step 4.



9 Save your changes.

Running the WebProvisionUI.exe tool

1 Request the Infor Ming.le `IDP.properties` file from Infor Ming.le support.

2 Sign in to the CRM server, using the credentials provided by Infor.

3 Place the `IDP.properties` file in the `c:\Temp` folder of the CRM server.

4 Go to `C:\Program Files (x86)\Saleslogix` and run `WebProvisionUI.exe`. Specify this information:

WebProvision Type
Specify **`Cloud`**.

Mingle Portal URL
Specify the URL used to access your Infor Ming.le portal.

CRM URL
Specify `https://`*`Hostname`*`/SlxClient/default.aspx`, where *Hostname* is the domain name that holds the CRM app, for example *host.subdomain*.infor.com.

IDP Property File:
Specify **`C:\temp\IDP.Properties`**.

Deployment Path for SlxClient
Specify the drive and path to an IIS logical folder, for example: `F:\inetpub\wwwroot\SlxClient`

Deployment Path for SlxData:
Specify the drive and path to an IIS logical folder, for example: `F:\inetpub\wwwroot\SlxData`.

Default Tenant ID
Specify the Infor Ming.le tenant ID, as specified in the Infor Ming.le URL.

Certificate Thumb impression
Specify the thumbprint value that was calculated with the SAML tool.

See Getting the fingerprint of SAML metadata on page 33.

Mingle Logical ID
Specify the logical ID that was assigned to CRM when you added the application to Infor Ming.le.

Entity ID
Specify `https://`*`Hostname`*`/WS-FED`, where *Hostname* is the domain name that holds the CRM app, for example *host.subdomain*.infor.com.

ION API Username
Specify the user ID that you provided when you configured the SDATA API, for example, **`IonAPI`**.

See Configuring the CRM SDATA API on page 32.

ION API Password
Specify the password that you provided when you configured the SDATA API.

Home Page URL
Specify the URL to access your Infor Ming.le Homepages, for example: https://*tenant*-homepages.*domain*.infor.com.

This URL is provided by the Infor Ming.le Cloud team.

Mingle API Endpoint
Specify the endpoint, for example: `https://`*`Hostname`*`/`*`tenant`*`/Mingle/SocialService.Svc`.

The endpoint is retrieved from the Infor Ming.le ION API.

5 Click **Execute**.
6 Restart IIS.

Adding a CRM connection point in ION

1 From the Infor Ming.le App Menu, select **ION Desk**.
2 Select **Connect > Connection Points**.
3 Click **+** and select **Infor Application**.
4 Specify this information for the connection point:

Name
Specify **`CRM`**.

Location
Specify **`CRM`**.
Note: This must match the enterprise location that you set up earlier. See Setting the Enterprise Location for CRM on page 27.

Logical ID Type
Specify **`crm`**.

5 In the **Connection** tab, specify this information:

Database Driver
Select **`SQL Server (Microsoft)`**

Host Name
Specify the Infor CRM hostname that was provided by Infor.

Port Number
Specify the port name that was provided by Infor.

Schema Name
Specify **`IOBOX`**.

User Name
Specify the Infor CRM administrative user that was provided by Infor.

Password
Specify the Infor CRM administrative user password that was provided by Infor.

6 Click **Test** to test your configuration.
7 Save your changes.

Configuring BODs for the Infor CRM integration with Infor Ming.le

1 In ION Desk, select **Connect > Connection Points**

2 Select the CRM connection point.

3 In the CRM connection point's **Documents** tab, click **+** and add these documents for the CRM integration with Infor Ming.le:

Document	Receive in Application	Send from Application
Process.SecurityUserMaster		X
Sync.SecurityRoleMaster		X
Sync.SecurityUserMaster	X	

4 Additional BODs for integration with the ERP will be added later.

Draft Comments We discuss the CRM BODs used for integration with CSI in a separate section - because the sections about configuring CRM for Ming.le might move out of this guide when CRM is MT.

Creating the Infor Ming.le > CRM document flow

Draft Comments We discuss the CSI>CRM>CSI document flow in a separate section - because the CRM-Ming.le sections might move out of this guide when CRM is MT.

1 In ION Desk, select **Connect > Document Flows**.

2 Click **+** and add a new document flow called crm_mingle with three application boxes.

3 In the properties pane for each of the application boxes, click **Add** and add the appropriate connection points.

4 Click the document icon between **CRM Sender** and **Mingle** and include these documents:

- Sync SecurityRoleMaster
- Process SecurityUserMaster

5 Save the document flow.

6 Click the document icon between **Mingle** and **CRM Receiver** and include this document:

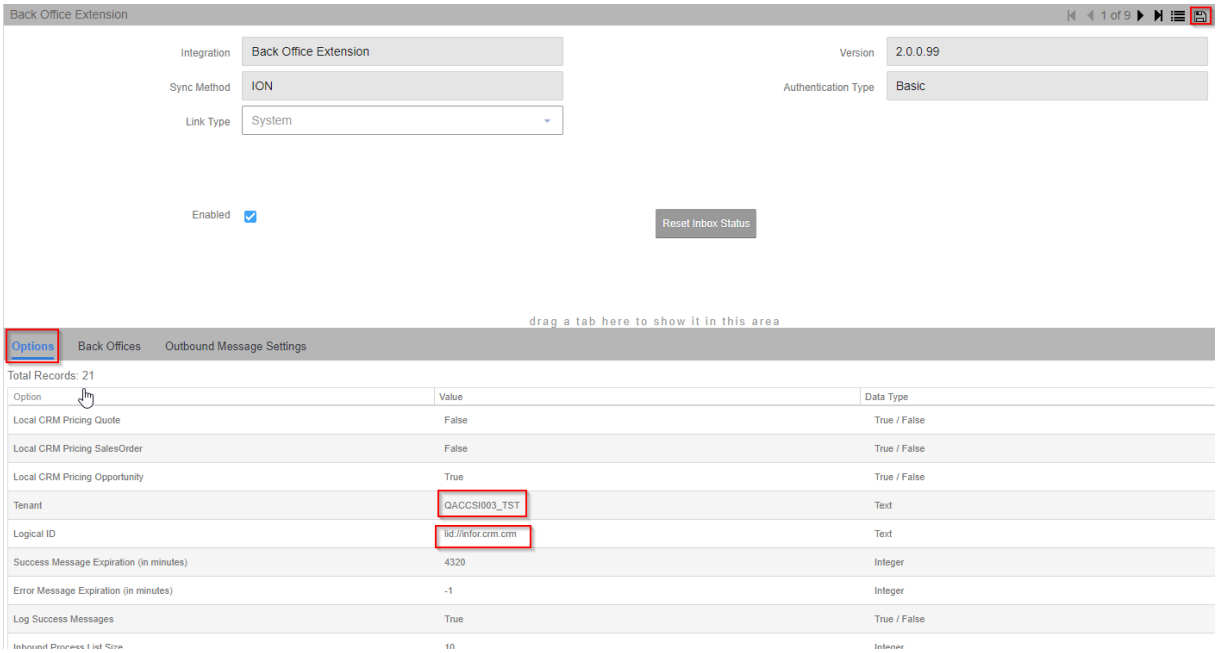
- Sync SecurityUserMaster

  Draft Comments QA Central wiki also lists ProcessSecurityRoleMaster BOD but doesn't show it being selected. CRM support verified that ProcessSecurityRoleMaster is not supported. So I removed it.

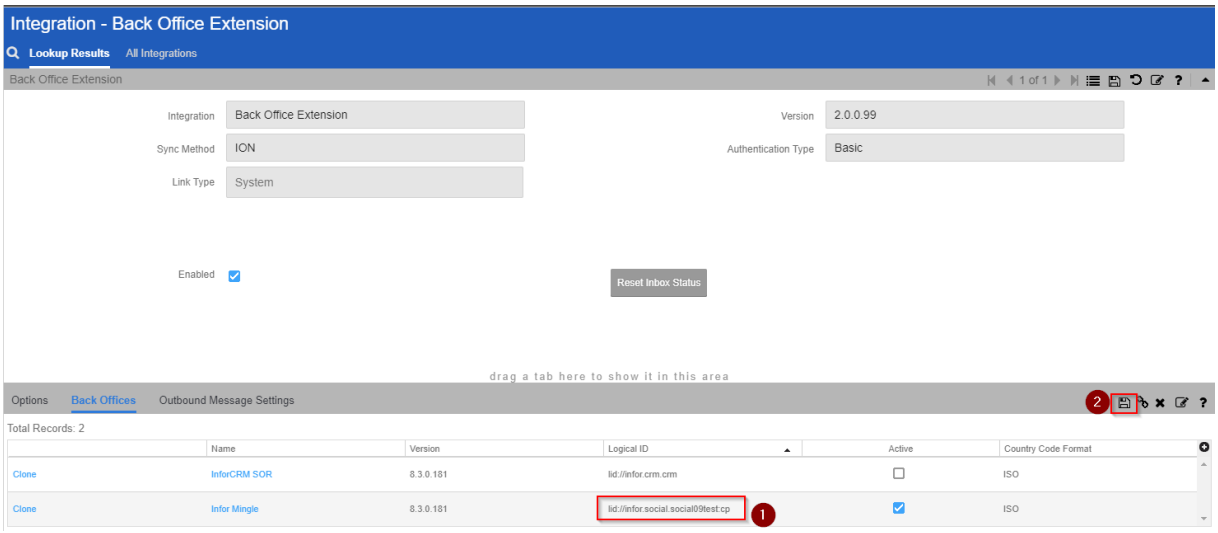
7 Save your changes and activate the document flow.

Setting up Back Office integration between CRM and Infor Ming.le

1. In the Infor Ming.le App Menu (on the CloudSuite Industrial tenant) select **Infor CRM** and sign into the CRM web client as an administrator, using the login and password that were provided by Infor.
2. In the Navigation menu, select **INTEGRATION > Integrations**.
3. Click Back Office Extension.
4. Select **Enabled**.
5. Click **Save**.
6. Click the **Options** tab.



7. In the **Tenant** row, **Value** column, specify your tenant ID.
8. In the **Logical ID** row, **Value** column, specify the CRM logical ID, for example, **`lid://infor.crm.crm`**.
9. Save your changes.
10. Click the **Back Office** tab.



11 In the **Infor Ming.le** row, **Logical ID** column, specify the Infor Ming.le IOBOX Logical ID.

12 Select **Active**.

13 Save your changes.

Installing and activating the ERP bundle for the CRM Back Office

1 Install the bundle on the CRM instance:

a Using RDP and the credentials and URL that were provided by Infor, log into the CRM IOBOX.

b Open the Saleslogix Administrator and log in using the provided credentials.

c Click **Bundles** and check the version of your CRM deployment, including all updates.

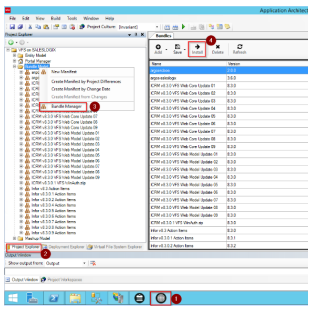
d Contact Infor Support and request the `Infor CRM VFS BOE BOD Pack` for your CRM version that enables CloudSuite Industrial (SyteLine) Back Office integration. Save the file to a local drive on the IOBOX.

e Open the Infor Application Architect and log in using the provided credentials.

Draft Comments How do we open this app? Are the credentials the same as for the IOBOX login? CRM SME?

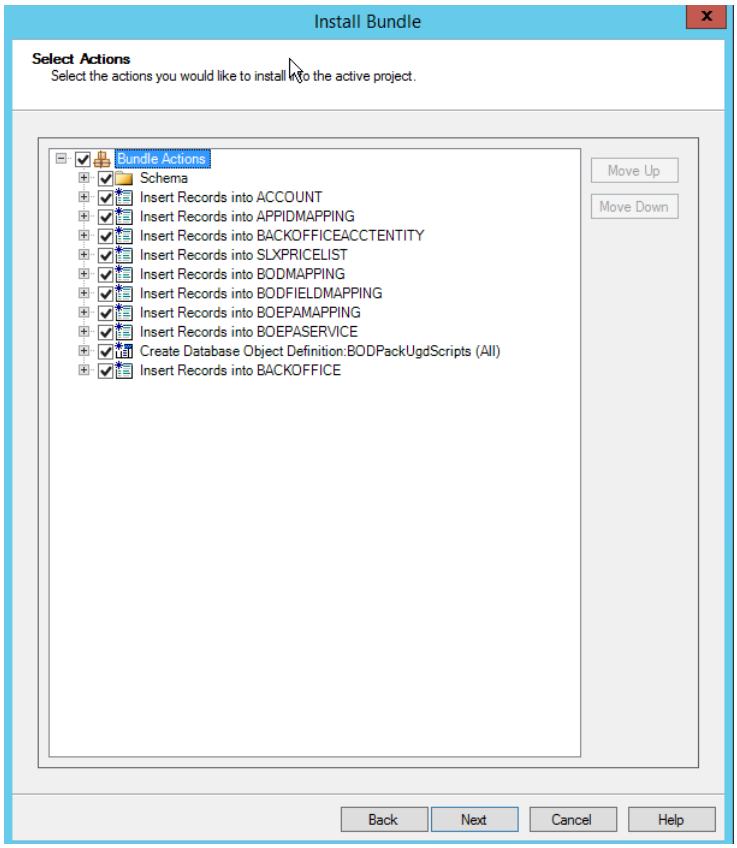
f Select **Project Explorer**.

g Right-click **Bundle Model**, select **Bundle**, and click **Install**.



h Select the downloaded `Infor CRM VFS BOD BOD Pack` and click **Next**.

i In the **Select Actions** window, ensure that all components are selected.



j Click **Finish**.

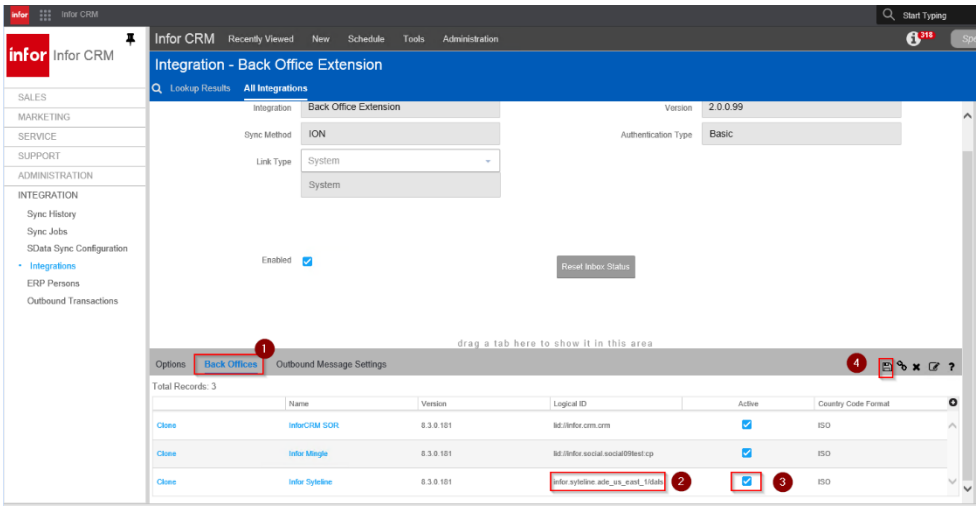
2 In the Infor Ming.le App Menu (on the CloudSuite Industrial tenant) select **Infor CRM** and sign into the CRM web client as an administrator, using the login and password that were provided by Infor.

3 From the Navigation menu, select **INTEGRATION > Integrations**.

4 Click Back Office Extension.

5 Click the **Back Offices** tab. Verify that you see **`Infor SyteLine`** on the list.

6 In the **Infor SyteLine** row, **Logical ID** column, specify the CloudSuite Industrial logical ID.



7 Select **Active** for the row.

8 Save your changes.

9 If there are synchronization errors, you might need to ask the Infor Cloud team might need to restart the CRM instance.

Testing the CRM to Infor Ming.le integration

In this step, you add roles to the CRM administrator user in Infor Ming.le, which verifies that the integration between CRM and Infor Ming.le is working properly.

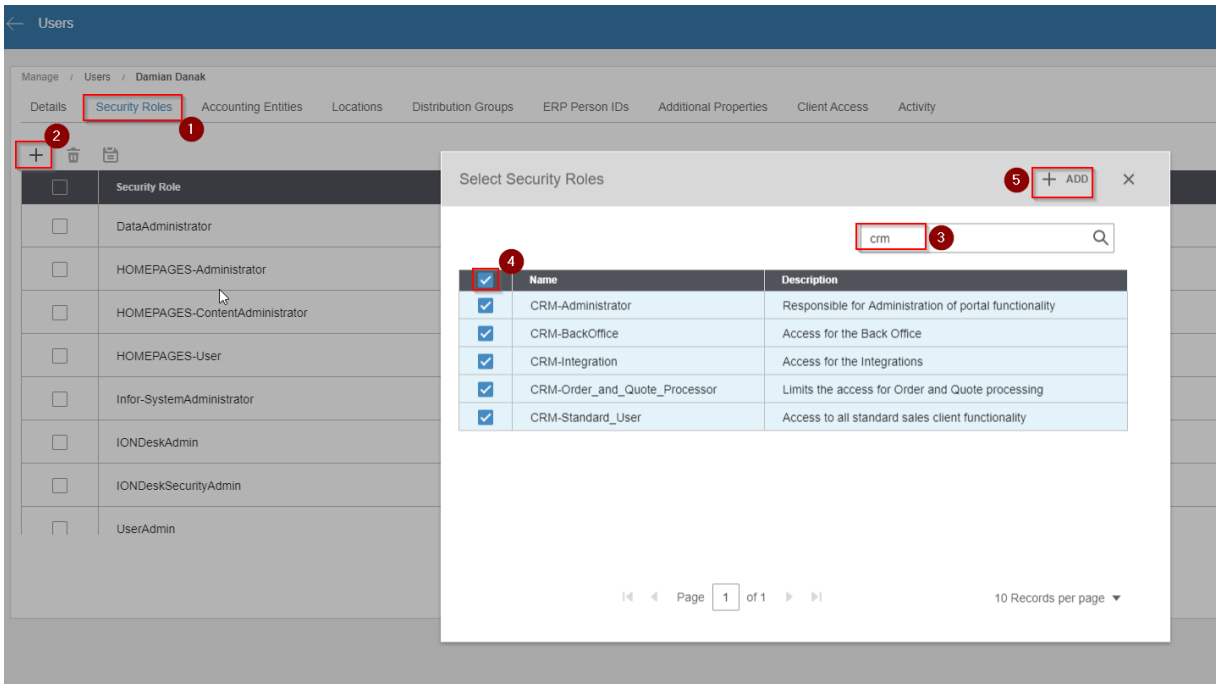
1 Sign into Infor Ming.le on the CloudSuite Industrial tenant as an administrative user.

2 From the User Menu, select **User Management**.

3 Click the Details icon next to the user of your choice.

4 In the **Security Roles** tab, click **+** to add a new role for that user.

5 Search for the CRM role and select all CRM-related roles.



6 Save your changes.

7 In the App Menu, select **Infor CRM**.

8 Select **ADMINISTRATION > Users**.

9 Click the **All Users** tab.

10 Verify whether the user to whom you assigned CRM security roles is listed.

Configuring Birst

This section describes tasks you must perform to integrate Birst with Infor Ming.le for single sign-on. The tasks must be performed before Birst users can be added.

Prerequisites:

- The customer-administrator who performs the tasks in this section must have the access rights described here.
- In Birst, the user who performs SAML configuration must be a Birst account administrator.
- To configure service providers, the administrator must belong to the IFSApplicationAdmin role, and be assigned to the Birst SAML Signing Certificate.

Configuring a placeholder service provider in Infor Ming.le

This task creates a placeholder service provider that will be deleted at the end of the overall procedure.

During this procedure, you are instructed to upload the Birst Trusted Developer Certificate. Instructions for doing this are in the Infor KB article 1988091 for these instructions. Infor recommends that you have this article available before you perform this procedure.

1. As an administrator, log into Infor Ming.le for the tenant you want to configure.
2. Click the account name at the top-right corner of the page to expand the user menu.
3. Select **User Management**.
4. Select **Security Administration > Service Provider**.
5. From the **Service Provider** page, click the Add icon (**+**) to add the placeholder service provider.
6. For **Application type**, select **`Birst`** and specify a **Display Name**, for example, **`Placeholder Configuration`**.
7. For **Entity ID**, specify a temporary name, for example, **`https://www.birst.com`**.

   If you see an error message that this Entity ID already exists, you can use an alternate value or change the value in some way to make it unique. The value of the placeholder service provider does not matter but it must be unique from all other service providers.
8. For **SSO Endpoint**, select **`HTTP URL Redirect`** and specify a placeholder URL, such as **`https://www.birst.com`**.
9. For **SLO Endpoint**, select **`HTTP URL Redirect`** and specify a placeholder URL, such as **`https://www.birst.com`**.
10. For **Birst SAML Signing Certificate**, upload the Birst Trusted Developer Certificate.

    See Infor KB article 1988091 for instructions to download the certificate.
11. Click **Save**.
12. You are redirected to the main Service Provider settings page in Infor Ming.le. From here navigate to the configuration that you saved in the previous step and click **Edit** to open the configuration.
13. Click **View**.
14. On the page that pops up, click **Export SAML Metadata** and save the file as `SAMLMetadata.xml`.

Setting up the SAML configuration in Birst

1. As a Birst account administrator, log in to the Birst server that you want to configure.
2. Navigate to the account home page. Select **Account Settings > SAML Configuration**
3. Click the Add icon (**+**) to add a new configuration. Specify a name for the new configuration and click the green checkmark to save it.
4. Locate the file `SAMLMetadata.xml` that was saved when you set up the placeholder service provider. Use the file to specify this information:
   a. Copy the entityID field value and paste the URL into the **Identity Provider Issuer** field.
   b. Locate the <X509Certificate> section. Copy the certificate and paste it into the **Certificate** field on the Birst configuration page. Copy everything between the <X509Certificate> and</X509Certificate> delimiters.
   c. Find the <SingleLogoutService> for the HTTP-Redirect method in the XML file, and copy the URL value from in the Location service field into the **Identity Provider Single Logout URL** field in Birst.

d Select the **SP-Initiated** checkbox.

e Find the <SingleSignOnService> for the HTTP-Redirect method in the SAMLMetadata xml file, and copy the URL from the Location service field into the **Identity Provider Single Sign-On URL** field in Birst. (You might have to scroll down the configuration page to see that field.)

5 Retain the default values for all other fields.

6 Click **Save**.

7 Make note of the value in the **Service Provider Entity ID** field in the saved page in Birst.

The unique **Service Provider Entity ID** that is required to register Birst in the Infor Ming.le Service Provider configuration is generated when you save the Birst SAML configuration file. Copy this unique value for use in a later step.

Also provided are the Birst SSO and SLO endpoint values, which are required for the Infor Ming.le Service Provider configuration file.

8 Enable the newly created SAML configuration by toggling the slider in the **SAML Configurations** panel.

Configuring the Birst service provider in Infor Ming.le

Locate the information from Birst that is required to set up the service provider in Infor Ming.le:

- The Entity ID, which is the **Service Provider Entity ID** field in Birst.
- The SSO Endpoint, in the form https://*ServerName*:443/SAMLSSO/Services.aspx. For example: https://stage.sde.birst.com:443/SAMLSSO/Services.aspx
  - *ServerName* is the Birst server you are using as an endpoint
  - 443 is the port number that we will want to use for all https connections.
- The SLO Endpoint, which is the **Service Provider Single Logout URL** in Birst.
- The Birst SAML Signing Certificate, as noted in the prerequisites earlier.

To set up the service provider:

1 Launch a browser and sign in to Infor Ming.le as an administrator.

2 Click on the account name at the top right corner of the page to access the User Menu.

3 Select **User Management**.

4 Click the Users tile in the upper left portion of the screen to expand the navigation pane.

5 Expand **Security Administration** and select **`Service Provider`**.

6 From the Service Provider page, find the placeholder service provider that you set up in Infor Ming.le earlier, for example, **`Placeholder configuration`**, and delete it.

7 Click **+** to add the new Birst application.

8 For **Application type**, specify **`Birst`** and specify the Entity ID, SSO Endpoint, SLO Endpoint and the Birst SAML Signing Certificate information.

9 Save the configuration.

Adding Birst as an application in Infor Ming.le

1. Launch a browser and sign to Infor Ming.le with an administrator account.
2. From the User Menu, select **Admin Settings**.
3. Click **+ ADD APPLICATION**.
4. Select **`Infor Non-Provisioned`** as the application type.
5. Specify this information:

   Application Name
   Select the Birst application.

   Display Name
   Specify **`Birst`**.

   Icon
   Select the application icon and color.

   Logical ID
   The logical ID is displayed.

   Use HTTPS
   Select this field.

   Hostname
   Specify the URL of the Birst server, for example, `sde.birst.com`

   To find the correct server, see URLs used either in your Birst SAML configuration (**Service Provider Single Logout URL**), or your Infor Ming.le service provider configuration for Birst (**SSO/SLO Endpoint**s).

6. Leave the **Port**, **Context**, and **Default Tenant** fields empty.
7. Save the configuration.
8. In the **Custom Parameters** tab, specify the **Identity Provider ID** (idpid). You can find this ID using either of these methods:
   - In Birst, from the **SAML Configurations** page, it is the value of the birst.idpid= portion of the SP-initiated Single Sign-On URL.
   - In Ming.le, it is the GUID portion of the **Entity ID** for the Service Provider
9. Specify the **Birst Space ID**, which is available in the Modify Properties page of the Birst Admin module for the space.
10. Save the information.

You can now access the Birst application from the Mingle App Menu. The Birst application gives users direct access to the Birst dashboards in Infor Ming.le, as well as access the rest of the Birst app (for example, Visualizer).
Note: The access a user is given to the Birst application in Infor Ming.le is governed by the rights his user has been granted within the Birst application.

Adding Birst report widgets to an Infor Ming.le homepage (Visualizer reports only)

Draft Comments I'm not sure if this applies to CSI with Birst ?

Prerequisites: Users will need to have Visualizer Access privileges in Birst to render Visualizer reports in the Birst Report widget on an Infor Ming.le homepage.

1. Open your homepage in Infor Ming.le.
2. Click **Edit**.
3. Click **Add Widget** or **+**.
4. Select the Birst Report widget.
5. Click **Add Widget**.
6. Exit the configuration page.
7. Position or dimension this widget on your homepage.
8. Click **Save**.
9. Click**…** to configure the widget.
10. Specify the path to your Birst report in the **Report** field, for example, **`shared/My Report`**.
11. If multiple Birst applications are defined in Infor Ming.le, an **Application** field is displayed. Select the application that shows the logical ID you set up when the Birst application was created.

    Note: It can take up to 30 minutes for your Birst application settings to be refreshed in your homepage. If you do not see the appropriate logical ID displayed as an option, please allow time for the applications to synchronize. Then try signing out and back in to finish your configuration.

If you encounter a configuration issue, you might need to refresh your web page to see the changes take effect in the widget.

Using the web widget to add reports or dashboards to an Infor Ming.le homepage

Prerequisites: Users must have the corresponding report privileges in Birst to render reports on an Infor Ming.le homepage.

1. Open your homepage.
2. Click **Edit**.
3. Click **Add Widget** or **+**.
4. Select or search for the web widget.
5. Position or dimension this widget on your homepage.
6. Click **Save**.
7. Click **…** to configure the widget.
8. Specify your report URL in the **URL** field. The URL should be constructed as highlighted in the SSO Parameters help page.

   Draft Comments what help system is this in? Mingle or Birst?

Birst URLs for use with the Infor Ming.le web widget

Embed a report:

```
https://stage.sde.birst.com/SAMLSSO/Services.aspx?birst.idpid=618441d2-
7e5e-4673-81df-32ad82d7b9fb&birst.spaceId=a8095f22-3c26-4a03-94bf-
8eb1cde3ff37&birst.module=visualizer&birst.embedded=true&embedded▶
View=true&reportname=shared%2Fdonut.viz.dashlet
```

Embed a dashboard:

```
https://stage.sde.birst.com/SAMLSSO/Services.aspx?birst.idpid=12ed85ee-
2361-4745-88df-c6c85d08a62b&birst.spaceId=f0387f38-be16-441e-a7a9-
2d5c489cb198&birst.module=newDashboards&birst.dashboard=Collec▶
tion&birst.page=Test&birst.embedded=true&hideHeader=true&hideSubHeader=true
```

Configuring Expense Management

Draft Comments This section needs to be tested with the latest XM version in the cloud.

Use these post-provisioning steps to configure Infor Expense Management for use with CloudSuite Industrial.

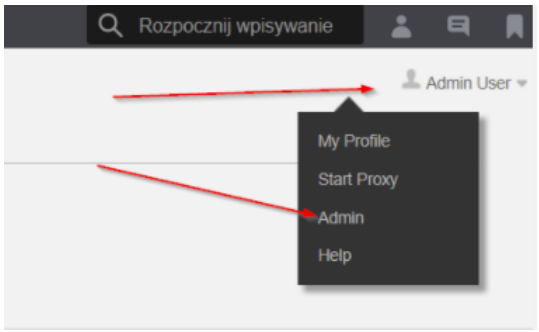
Downloading and configuring the System Administration Tool (SAT)

Java version 1.8 or above (JDK 1.8) is a prerequisite for running this software.

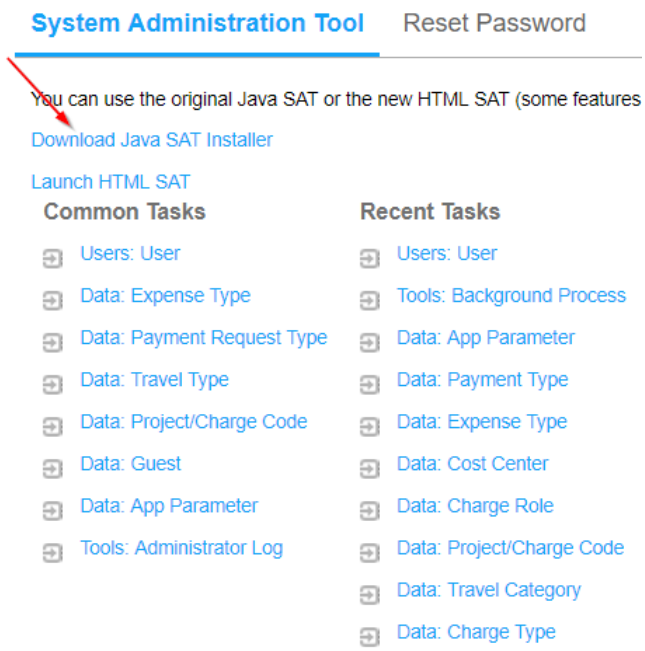
Draft Comments This topic is already covered to some extent in the *Infor Expense Management SATClient Installer Guide*, which is on Xtreme. Should we also include the steps here, for convenience? The only CSI-specific information is in the last 2 steps.

Use these steps to download and configure the Infor XM SAT, which is used to configure information such as users, groups, corporate data, and work items. For details about using SAT, see the *Infor Expense Management System Administration Tool User Guide*.

1. Log into the Expense Management application with the admin (admin) account.
2. .Select **Admin** from the User menu.



3 In the **System Administration Tool** tab, click Download Java SAT Installer.



4 Click **Save File** and save the `sat.exe` file to a local folder.

The sat.exe file is a self-extracting archive.

5 Go to the local folder and double-click on the `sat.exe` file. Specify the location to extract the files.

After extraction, these folders are created under the `sat` folder:

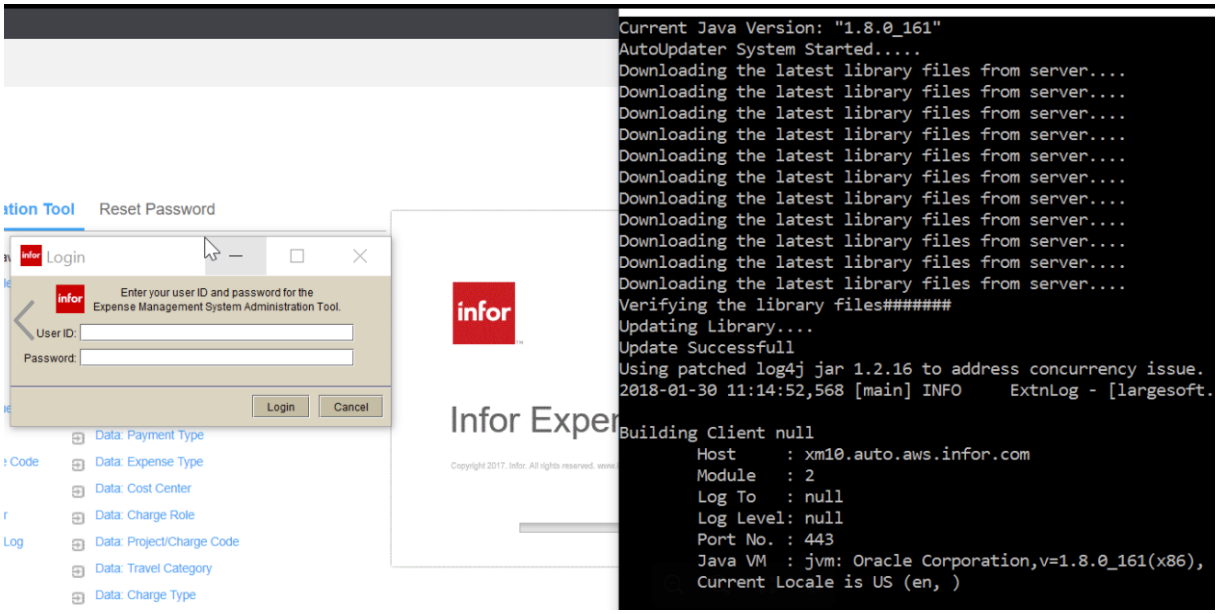
- bin: This folder contains the batch files `sat.bat` and `startsat.bat`. The `sat.bat` file downloads the latest lib files required by SAT from the server, and the startsat.bat launches SAT.
- conf: This folder contains the `sat.properties` file, which contains configuration settings for SAT.
- lib: The lib folder contains all the library files required by SAT. Initially this folder is blank.

6 Edit the `sat.properties` file in the `conf` subfolder. Verify that the server, servername and tenant values are set correctly.

By default, the server and servername should be set to the Cloud URL for this instance of Infor XM. Ensure that the tenant is correct for this customer.

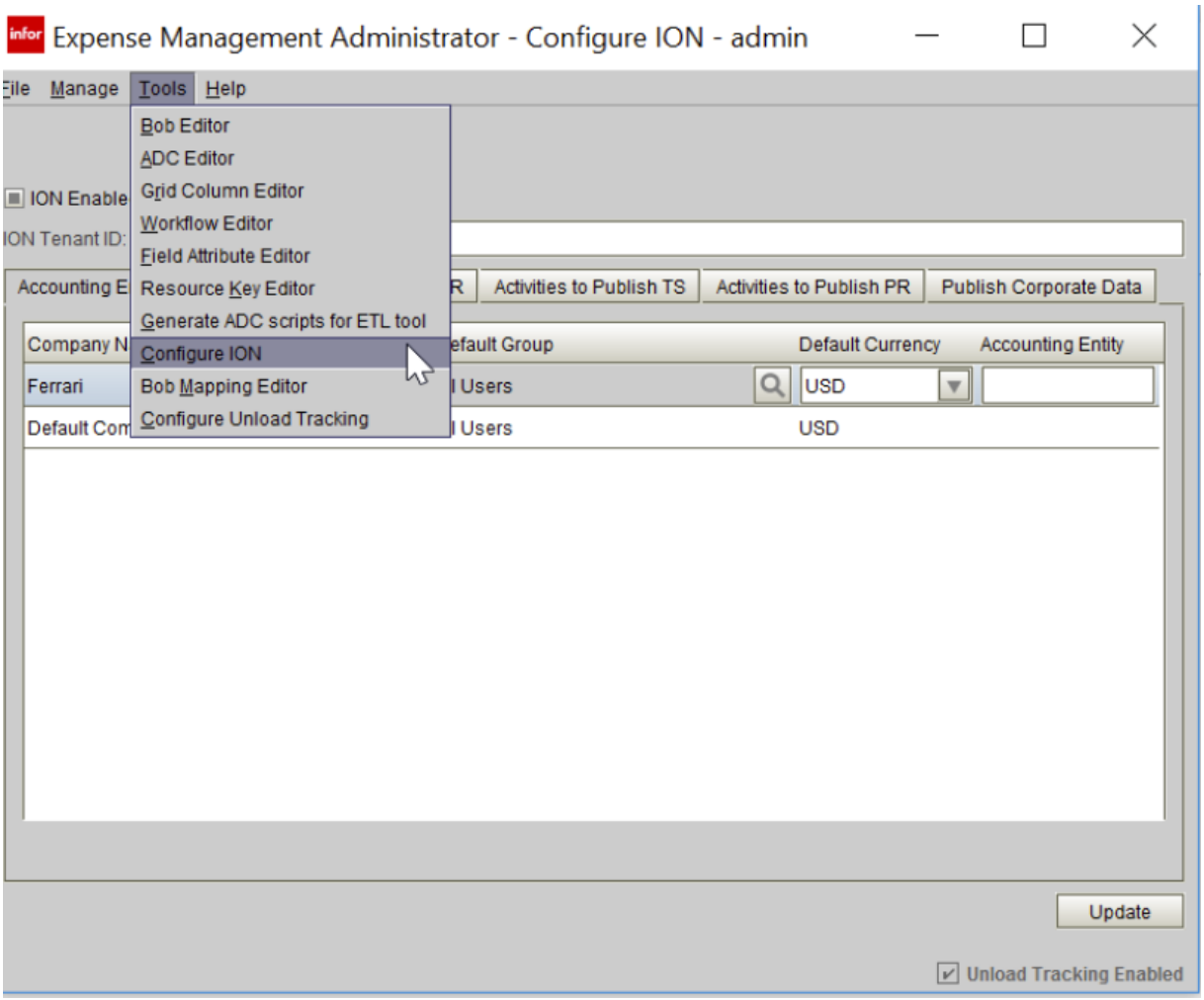
7 In the `bin` subfolder, run `sat.bat`.

8 If the properties file was configured properly, you should see the batch commands run, and then a login window is displayed.



9 Log into SAT using the admin (admin) account.

10 Select **Tools > Configure ION**.



11 Select **ION Enabled**.

12 In the **Accounting Entity Mapping** tab, specify the CloudSuite Industrial site as the **Accounting Entity** for the default company, and for any other companies that are defined.

13 Click **Update**.

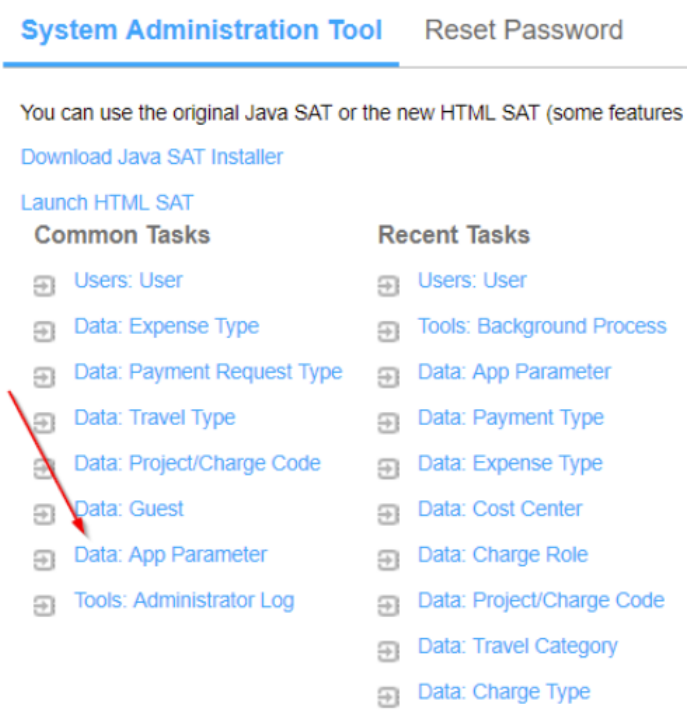
Enabling ION in Expense Management

Draft Comments These are generic XM steps that do not reference CSI at all.

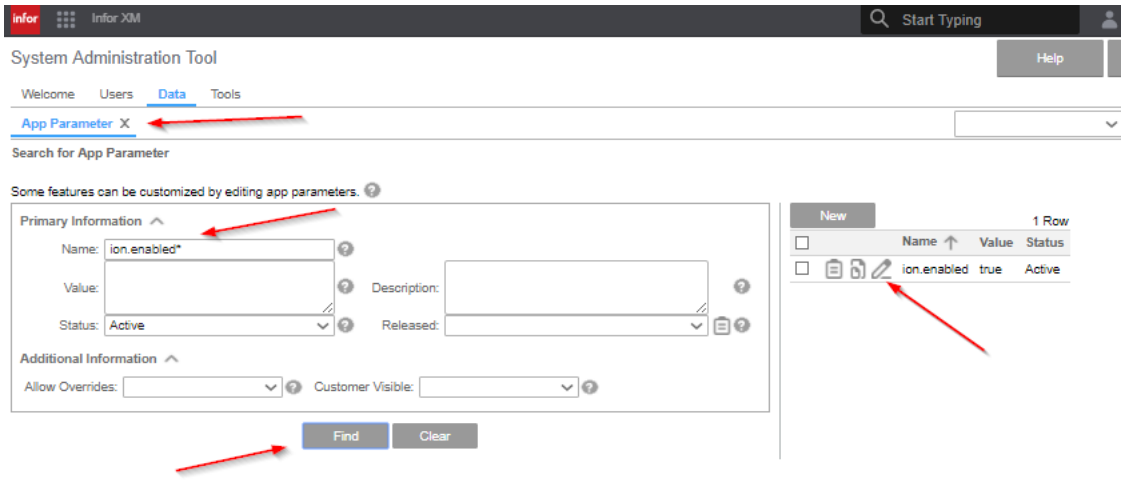
1 Log into the Infor Expense Management application again, using the admin (admin) account.

2 Select **Admin** from the User menu.

3 In the **System Administration Tool** tab, click Data: App Parameter.

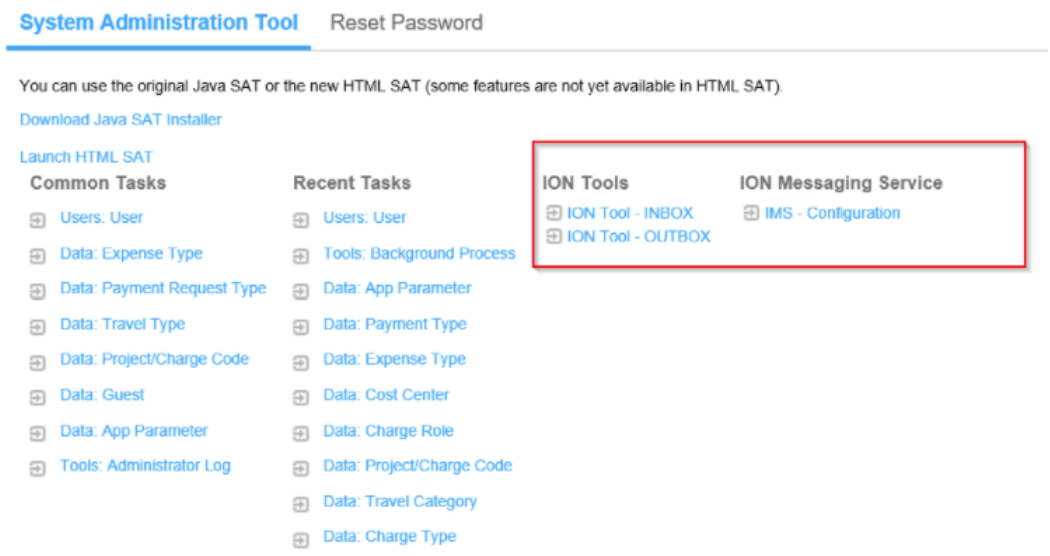


4 In the **Name** field, specify `ion.enabled*` and click **Find**.



5 When the **ion_enabled** parameter is displayed, set the value to `true` and save your changes.

6 Log out of the Expense Management application and log back in. Verify whether you can now see the ION options in the **System Administration Tool** tab.

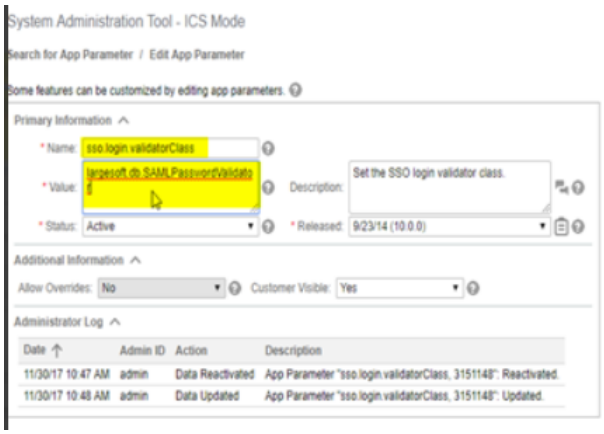


Adding SSO through SAT

Draft Comments These are generic EAM steps that do not reference CSI at all.

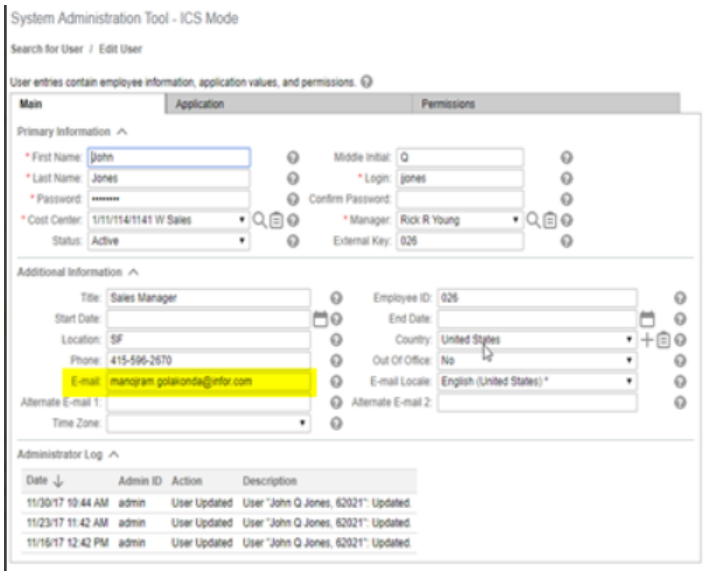
1 In the Infor Expense Management **System Administration Tool** tab, again click Data: App Parameter.

2 Search for the **`sso.login.validatorClass`** parameter. Ensure that it contains the value **`largesoft.db.SAMLPasswordValidator.`** Set the parameter's **Status** to **`Active`** and save your changes.



Draft Comments screen shot too fuzzy?

3 Navigate to the Users screen and search for the user that you plan to use. In the **Email** field, specify the SSO Login Email ID. This should be the administrator email address that you use to sign into Infor Ming.le. A random password can be used, which you can change later.



Draft Comments screen shot too fuzzy?

4 Save your changes.

Restart the server/tenant

Draft Comments These are generic EAM steps that do not reference CSI at all. Also - can an ICS/Business Partner really do this to a tenant in the MT cloud?

1 Go to Infor Xtreme, search for KB article 594391, and download the XMDBTOOL.

Use the file version number or most recent upload date to determine which zip file to download.

2 Go to the local folder where you downloaded the tool, and edit the `xmdbtool.properties` file. Update the credentials and the Tenant ID in this file.

3 In the bin subfolder, double-click on `Tenant_Restart.bat` to run it.

Configuring IPF licensing

For Infor Portals Foundation (IPF), the PortalPreLogin user was created by the Infor Cloud team. Licensing for the user is performed during automation. Verify that this user exists and is set up as a multi-session user:

1. In CloudSuite Industrial, open the **Users** form.
2. Verify that the PortalPreLogin user exists. Select that user.
3. Click **User Modules**.
4. In the **User Modules** form, assign the **Portals** license for the PortalPreLogin user.
5. Save your changes.
6. In the **License Management** form, select the **Multi-Session Users** tab.
7. Verify that the PortalPreLogin user is listed in the grid.

For more information about setting up the portals, see *Infor CloudSuite Industrial Portal Administration Guide - Cloud Edition*.

Configuring CPQ

If the CloudSuite includes Infor Configure Price Quote, use these post-provisioning steps to configure Infor CPQ for use with CloudSuite Industrial.

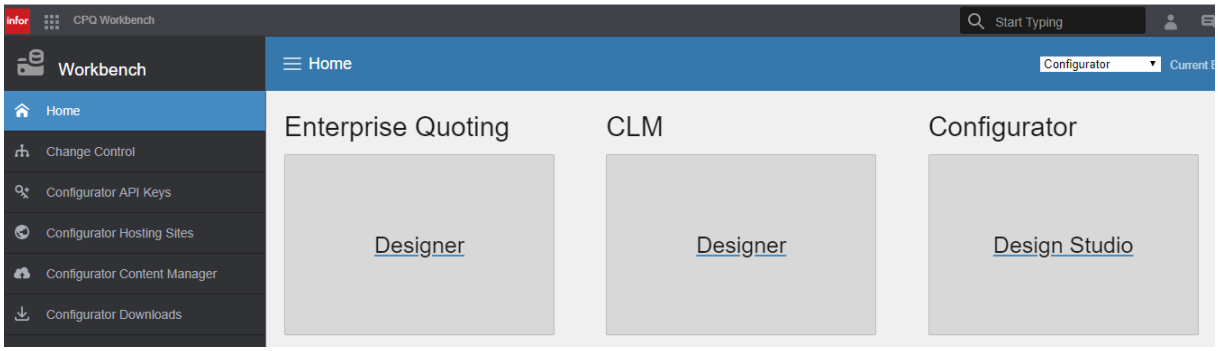
Draft Comments This section needs to be tested with the latest CPQ version in the cloud.

Installing Design Studio

Design Studio must be downloaded, installed and used locally for any Infor CPQ user who needs to configure rulesets.

For now, install it for the bootstrap administrator.

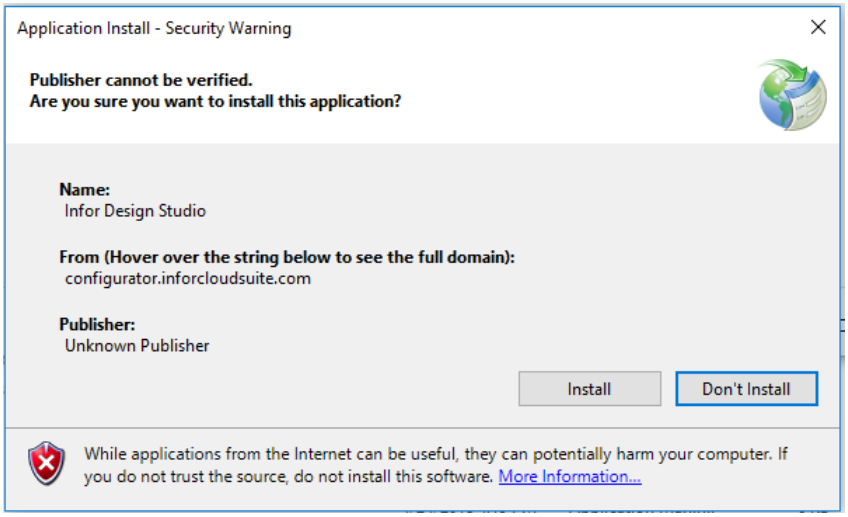
1. From the Infor Ming.le App Menu, select **CPQ Workbench**.
2. On the workbench Home page, click **Design Studio**.



If a warning message is displayed by your browser, click **Keep**. The `DesignStudio.application` file is downloaded to the designated download area on your local drive.

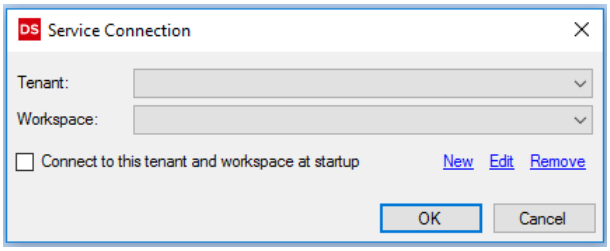
3 Go to the download area and open the downloaded file.

4 Click **Install**.

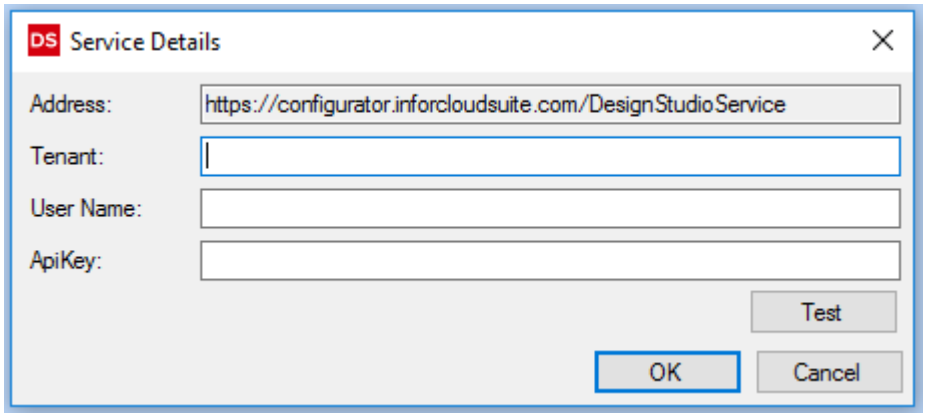


This might take several minutes.

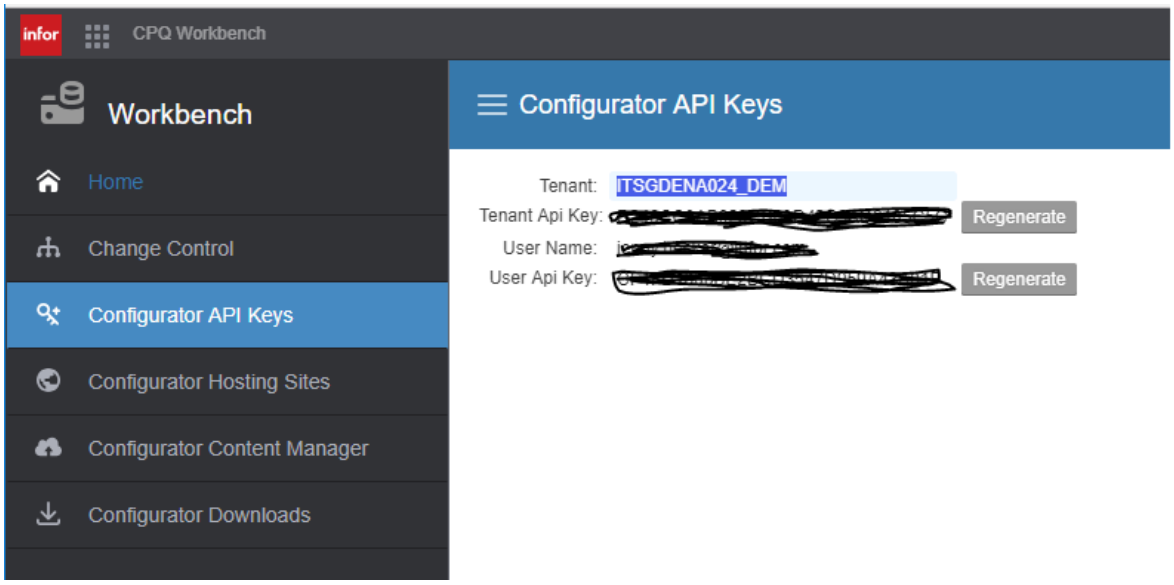
5 When the **Service Connection** dialog box is displayed, configure the connections:



a Click New. The **Service Details** dialog box is displayed



b To find the information you need, leave this dialog box open and return to the CPQ Workbench app. Select **Configurator API Keys** from the menu. The information you need to supply is provided here.

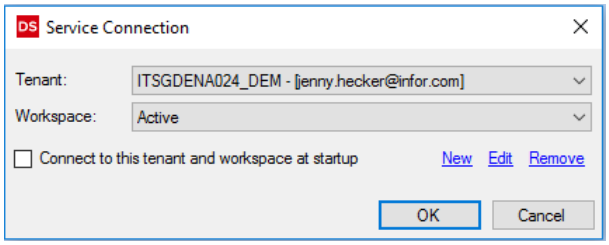


c Copy and paste the values from the **Tenant**, **User name**, and **User Api Key** fields into the **Service Details** dialog box.

d Click **Test** and verify that a Success message is displayed. Click **OK**.

e In the **Service Connections** dialog box, select a workspace and click **OK**.

Draft Comments ? I just had one workspace option available (Active). Are there other choices? Also, should we select the check box?



Importing sample ruleset data to Design Studio

Infor provides some sample ruleset data and content to help you understand how to use Design Studio and CPQ Workbench. In this step, you import the ruleset data (including rulesets, matrices, and option lists) from a ZIP file, extract the XMLs, and import them into Design Studio.

Draft Comments This step could potentially be avoided if the CPQ team adds the demo data to the database as an automated step during provisioning.

1 Go to http://gde.infor.com/SitePages/default.aspx and select **Demo Environment Supporting Information > Demo Environment Resources > Product Demo Information > Infor CloudSuite Industrial (CSI) > Active Version(s) > Infor Hosted CloudSuite > CPQ-CPQEQ > ..**

Draft Comments Can/should we put this in a more accessible place?

2 Click 2a-XMLs to Import to Design Studio to download the ZIP file to your local download area.

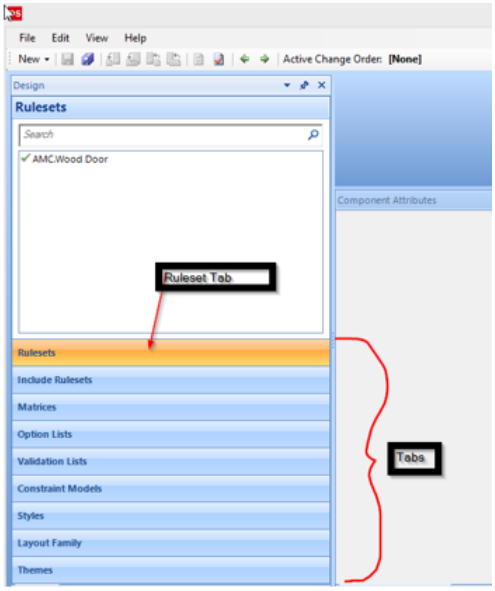
3 In your local download area, extract the XML files from the ZIP file.

4 If Design Studio is closed on your local computer, open it and connect to the environment you configured in Installing Design Studio on page 56.

5 Right-click in the white space under the **Rulesets** tab and select **Import**.

6 Browse to the local download folder that contains the XMLs. Select one XML and click **Open**. When a success message is displayed, click **OK**. Repeat this step for each XML in the folder.

Note: The XML files include sample Rulesets, Include Rulesets, Matrices, and Option Lists. You can import all of these under the **Rulesets** tab, and they will be displayed under the appropriate tab. You can click in the different tabs to see the imported information.



If you mistakenly import the same XML twice, it creates a second copy and does not cause problems.

Importing sample content to CPQ Workbench

Infor provides some sample ruleset data and content to help you understand how to use Design Studio and CPQ Workbench. In this step, you import the sample content from a ZIP file, extract XMLs, and import them into CPQ Workbench.

Draft Comments This step could potentially be avoided if the CPQ team adds the demo data to the database as an automated step during provisioning.

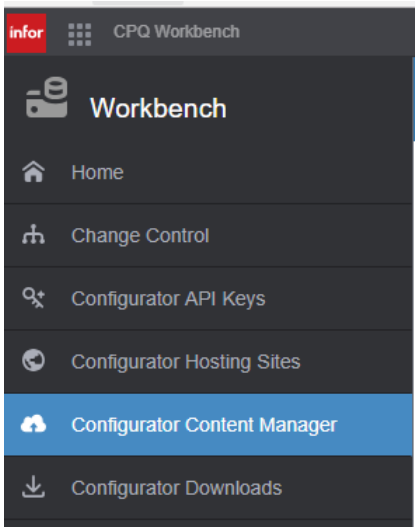
Note:

Before you start this step, you must import all of the sample XML ruleset data. See Importing sample ruleset data to Design Studio on page 58.

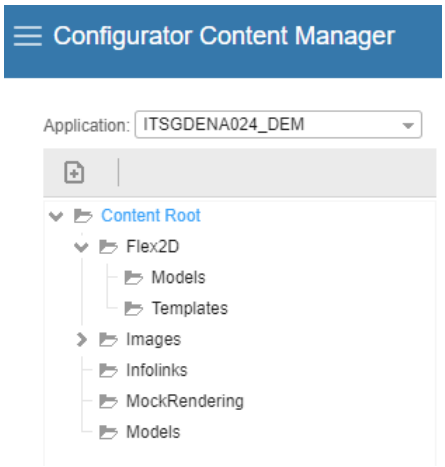
1. Go to http://gde.infor.com/SitePages/default.aspx and select **Demo Environment Supporting Information > Demo Environment Resources > Product Demo Information > Infor CloudSuite Industrial (CSI) > Active Version(s) > Infor Hosted CloudSuite > CPQ-CPQEQ > ..**

   Draft Comments Can/should we put this in a more accessible place?
2. Click 2b-Content to Upload to Content Manager to download the ZIP file to your local download area.
3. In your local download area, extract the XML files from the ZIP file.

   A folder named Content to Upload to Content Manager is created, with subfolders that contain the sample images, Infolinks, and Flex2D files to upload.
4. From the Infor Ming.le App Menu, select **CPQ Workbench**.
5. In CPQ Workbench, select **Configurator Content Manager**.

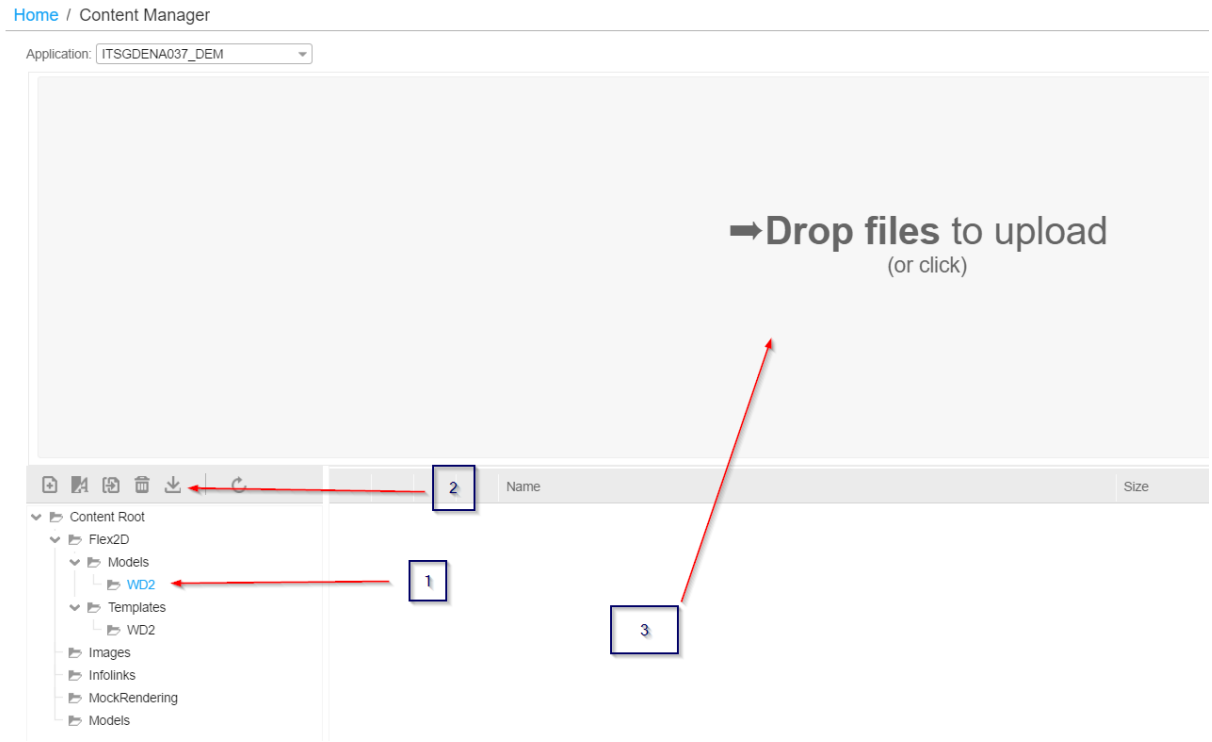


6. Expand the Flex2D folder. If the Models and Templates subfolders do not exist, click **+** and add them.



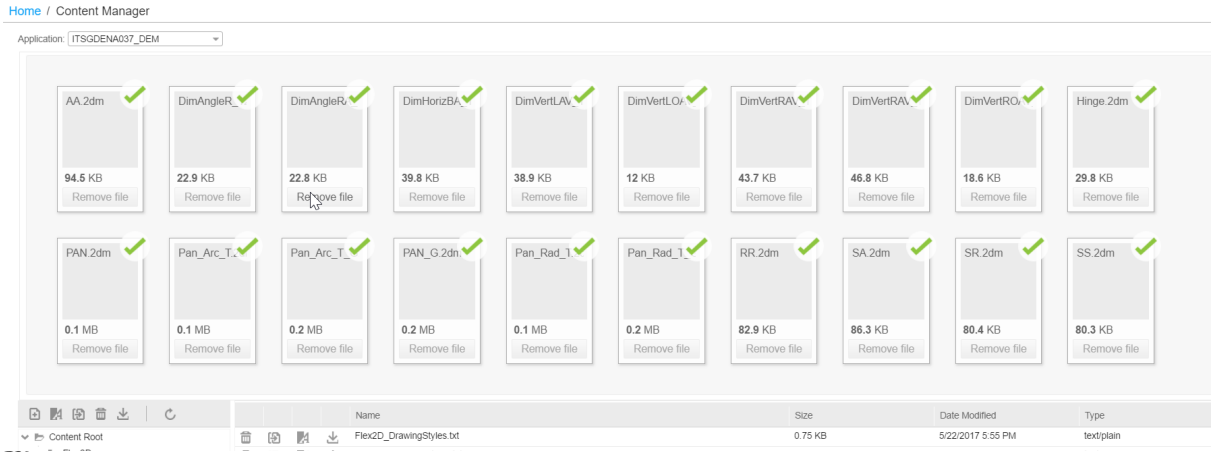
7 Under both the `Models` and `Templates` folders, click **+** and add a subfolder called `WD2`.

8 Select the `Models/WD2` folder, click the Upload icon, and then click in the **Drop files** arearea.



9 In the dialog box, browse to your download area and find the `Content to Upload to Content Manager` folder where you extracted the content. In that folder, browse to the `Flex2D\Models\WD2` folder, and open that folder. Select all of the files in that folder and click **Open**.

After the files are uploaded, they are listed with

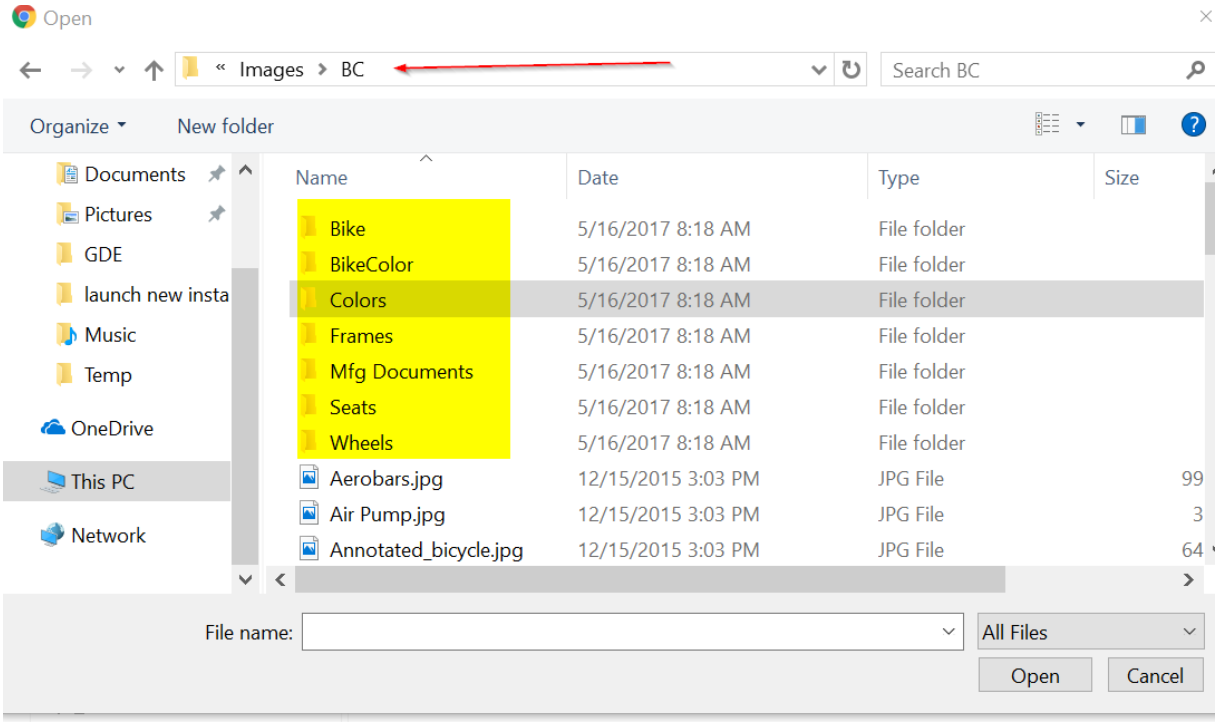


10 In the **Configurator Content Manager** page, select the `Templates\WD2` folder and upload the content from the `Content to Upload to Content Manager\Flex2D\Models\WD2` folder.

11 In the **Configurator Content Manager** page, you can now open the `WD2` subfolders and see content in each of them.

12 Under both the `Images` and `Infolinks` folders, click **+** and add these subfolders: `BC`, `FKL` and `WD`.

13 In the extracted local folders, you will notice that in `Content to Upload to Content Manager\Images\BC`, there are additional subfolders. Create matching subfolders in the Configurator Content Manager under the Images\BC folder.



14 Select each of these new subfolders in the **Configurator Content Manager** and import the content from the matching subfolders in the local download area.

15 Follow a similar procedure to import the remaining subfolders in the Images area.

16 Follow a similar procedure to import the subfolders in the Infolinks area.

After all of the sample content has been uploaded to the **Configurator Content Manager**, then when the rules are run, images and Flex2D graphics are displayed.

Verifying and updating Configuration Parameters in CloudSuite Industrial

Use these steps to verify that the integration with CPQ was successful.

Draft Comments Brief overview of task

Draft Comments Introduction to the steps

1 From the Infor Ming.le App Menu, select **Infor CloudSuite**.

2 In CloudSuite Industrial, open the **Inventory Parameters** form.

3 In the Product Configuration tab, click **Initialize Configuration** and verify that a success message is displayed, indicating that a connection between CloudSuite Industrial and Infor CPQ has been established.

4 Verify that the Configurator Service fields are all populated, and the Application ID and Namespace under Document Automation are populated. (The default ruleset can be specified later.)

5 If you will be using Infor CPQ with the CloudSuite Industrial portals, ensure that the **Configurator Web Service URL** is populated. If not, contact the Infor Cloud team (Infor CPQ) for the correct value.

Draft Comments verify whether this information is provided by an automated provisioning step?

6 Specify this additional information for the CloudSuite Industrial portals, if needed:

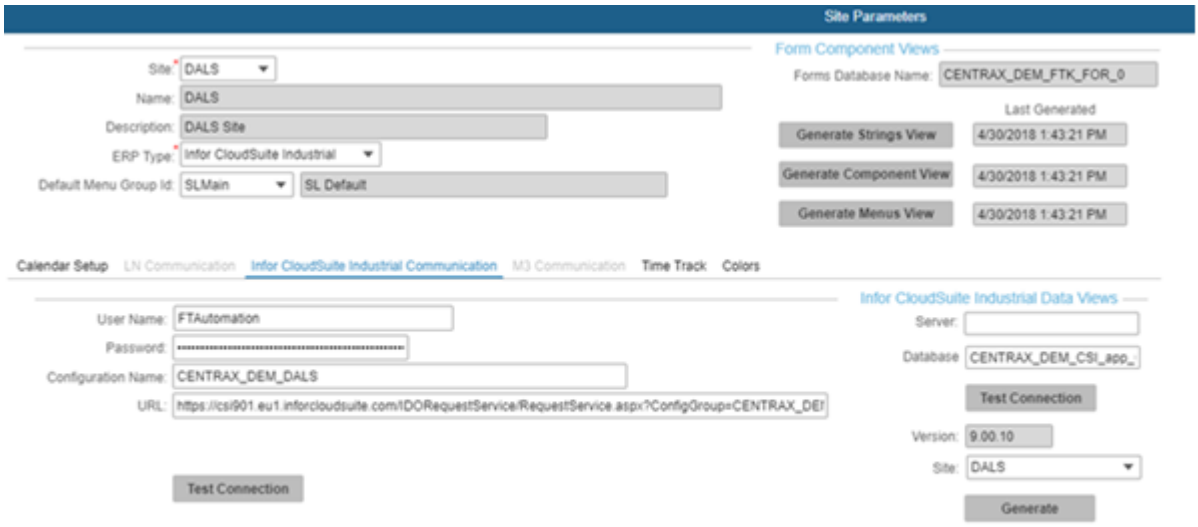
Default Profile
Specify **`Default`**.

Enable Configurator for Portal
Specify whether to use the Portal Configurator UI or the CPQ Configurator UI.

Configuring Factory Track

After provisioning, the **Site Parameters** form includes ERP-specific connection information. During post-provisioning, perform these tasks to ensure that the CloudSuite Industrial data is available to Factory Track:

1 In Factory Track, open the **Site Parameters** form.

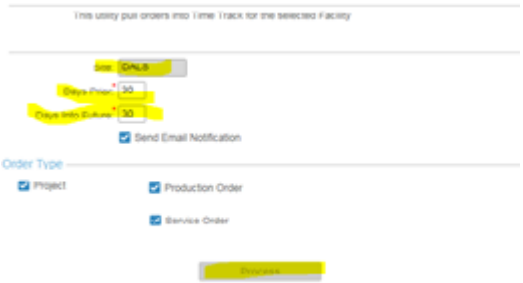


2 In the **CloudSuite Industrial Communication** tab, click **Test Communications** to verify that the applications are communicating.

3 Click **Generate**.

4 Open the **Jobs List** form, and make a note of how many jobs are currently listed there, for later reference.

5 Open the **Load Orders from ERP** form. Specify the CloudSuite Industrial site from which you want to import, and the number of days prior and into the future to import data. Select the types of orders to import, and click **Process**.



6 Reopen the **Jobs List** form and filter to show all jobs. If there are more jobs than were shown in step 4, then Factory Track is communicating with the ERP site and is pulling data properly.

Note: Optionally, you can set up a background task to run the import from the ERP on a regular basis.

Configuring IDM

The Infor Cloud team imported the CloudSuite Industrial document types, Business Context Model, and Access Control List (ACL) into the Infor Document Management (IDM) application as part of the provisioning process.

About the IDM integration

Infor Document Management (IDM) and CloudSuite Industrial are integrated through these methods:

- ION API (REST-enabled)
- Context Business Messages
- **Draft Comments** add this (BOD nouns and Capturedocument) when IDM Capture is supported.
  BOD nouns

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

CloudSuite Industrial delivers application-specific document models for use with IDM.

Some reports and documents that are generated in CloudSuite Industrial can be automatically sent to Infor Document Management (IDM) for storage. You can then view the documents in IDM or in the context of a CloudSuite Industrial form, through the Related Information context app. You can search the IDM repository for documents by filename, originating user, and date. You can also search for some documents using other meaningful attributes such as purchase order number or invoice number, if those attributes are set up for the document type in IDM.

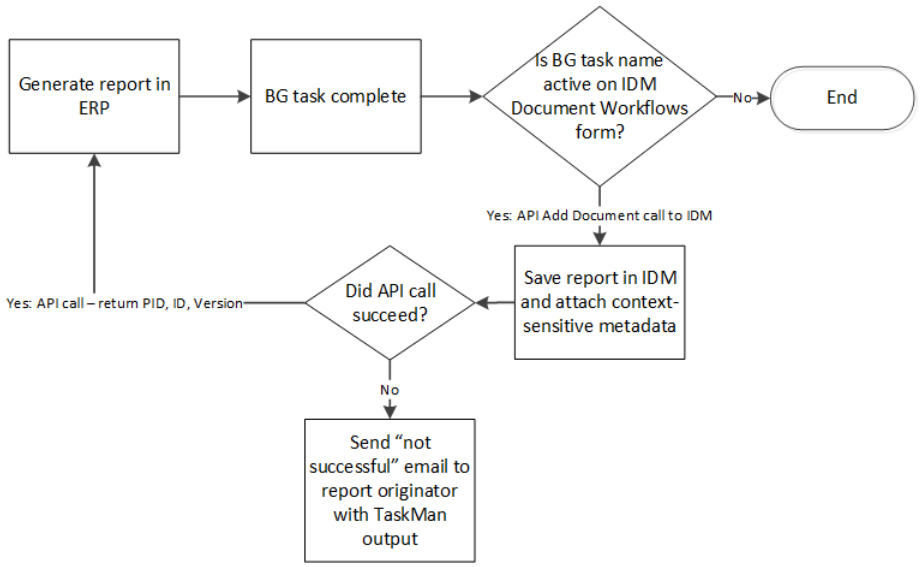
This integration uses CloudSuite Industrial document workflows, APIs that transmit the data from CloudSuite Industrial to IDM, and a business context model, document types, and an access control list that are imported into IDM.

Initially, only CloudSuite Industrial invoice and purchase order reports have predefined document workflows. You can customize the integration to include additional document workflows, or to modify the existing workflows.

These attribute values are assigned as metadata that accompanies the documents, and can be used for filtering within IDM:

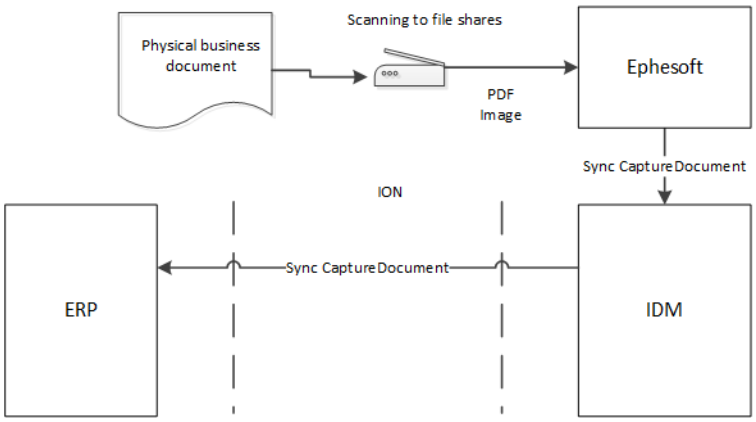
- For an invoice, the metadata includes the invoice number, the number of the customer being invoiced, and the number of the customer order associated with the invoice.
- For a purchase order, the metadata includes the PO number and the number of the vendor to whom the PO is assigned.

The API integration has this high-level flow:



In the case of failure, a notification is sent to the email address that is assigned on the CloudSuite Industrial **Users** form to the user who originated the report. The PDF file that could not be stored in IDM is included as an attachment in the email.

CloudSuite Industrial also supports a BOD-based integration with IDM Capture (using Ephesoft), as shown in this diagram:



Currently, the BOD-based integration is only used for supplier invoices. When you receive an invoice from a supplier, it is either a paper document or an electronic file. You can perform an OCR scan of the paper document into IDM Capture, or you can load the electronic file into IDM Capture.

In IDM Capture, the parts of the invoice are segmented into fields. IDM Capture sends the invoice information in a Sync CaptureDocument BOD to IDM, where the invoice information is validated and the invoice document is stored. The invoice information is then sent through another Sync CaptureDocument BOD to CloudSuite Industrial, where vouchering against the invoice is performed automatically or through the Voucher Builder. The quantities on the vendor invoice must already have been received in CloudSuite Industrial; otherwise, the invoice is rejected. Also, if the vendor invoice quantity is greater than the PO line received quantity, the invoice is rejected.

You can view the supplier invoice documents in IDM.

You can also find the supplier invoice document in the Related Information context app when associated CloudSuite Industrial forms are displayed. For example, when you view the voucher record in the **A/P Posted Transactions Detail** form, you can see the associated supplier invoice document in the Related Information widget.

IDM-related forms in the ERP

The IDM connection information is preset on the **External App Parameters** form. You should not change these settings.

The API call to IDM impersonates the user who is actually creating the documents in CloudSuite Industriall. CloudSuite Industrial users are matched to IDM users through the Infor Ming.le (IFS) GUID value, which is shown in the **Workstation/Domain ID** field of the **Users** form.

Look at the **IDM Document Workflows** form to understand which document workflows are predefined. The predefined workflows are activated as part of the Post Provisioning steps. However, you can deactivate any workflows that you do not plan to use.

Later, you could use the advanced features on this form, along with the Application Event System, to customize the integration. See the online help for assistance with the advanced fields.

Document types and their assigned roles

This table shows the predefined CloudSuite Industrial document types, the ACL that is used with each document type, and the IFS roles that are assigned to each document type. The IFS roles are synchronized with CloudSuite Industrial and IDM through BODs. See User and role BOD usage on page 137.

If you are not using the standard CloudSuite Industrial groups, you will need to modify this list in IDM.

Access to read, update or delete the documents in IDM is only allowed for users who belong to at least one of these roles (groups). You can modify the ACL list in IDM.

Document type	ACL name	Security roles	Permissions
CS_PurchaseOrder	InforPurchaseOrder	Accounts Payable, Purchase Reqs, Purchasing, Purchasing Costs	Read, Update, Create, CheckIn, CheckOut
CS_SalesInvoice	InforSalesInvoice	Accounts Receivable, Field Service, Order Entry, Order Entry Invoicing Reprint, Projects, Service	Read, Update, Create, CheckIn, CheckOut
CS_ServiceInvoice	InforSalesInvoice	Accounts Receivable, Field Service, Service	Read, Update, Create, CheckIn, CheckOut
CS_SupplierInvoice	SyteLineVoucher	Accounts Payable	Read, Update, Create, CheckIn, CheckOut

Document types and their assigned attributes

This table shows the predefined CloudSuite Industrial document types in IDM, the entity name associated with the document type, and the attributes that can be used to search and filter within each document type.

Because a service invoice is a type of sales invoice, it uses the InforSalesInvoice entity name. However, the context is slightly different: service invoices have the SRO number attribute, while sales invoices have the customer order number attribute.

If you add attributes to a document type, be aware that the attribute ID in IDM must exactly match the IDO property name that is sent from CloudSuite Industrial. This is true for CS_PurchaseOrder, CS_SalesInvoice, and CS_ServiceInvoice. However, for CS_SupplierInvoice, the attribute ID and IDO property name need not match. If the optional attributes are included for a supplier invoice, CloudSuite Industrial can use them.

Document type	Entity name	Additional attribute IDs *
CS_PurchaseOrder	InforPurchaseOrder	PoNum, VendNum
CS_SalesInvoice	InforSalesInvoice	InvNum, CustNum, CoNum
CS_ServiceInvoice	InforSalesInvoice	CustNum, SroNum
CS_SupplierInvoice	InforSalesInvoice	PoNumber, VendorNumber, InvoiceNumber (Optional: InvoiceDate, VendorOrder, Freight, MiscCharges)

* These attributes are common to all document types, so are not listed in the table: Description, AccountingEntity, BOD Reference Accounting Entity, BOD Reference Document ID, BOD Reference Noun, BOD Reference Revision ID, EntityType, and Location.

Other document management options

In addition to the features of the IDM application, there are document management features built into CloudSuite Industrial. The CloudSuite Industrial built-in feature can associate documents with IDO rows and IDOs. There might be times when you need to use these features instead of, or in combination with, the IDM features.

See the CloudSuite Industrial help topic about working with document (file) attachments.

Tasks performed by the Infor Cloud team

The Infor Cloud team performed these tasks related to IDM:

- In CloudSuite Industrial, the Infor Cloud team set up the IDM connection information on the External App Parameters form

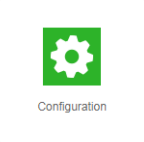
- In IDM, the team imported these CloudSuite Industrial-specific objects:
  - The predefined document types CS_SalesInvoice, CS_ServiceInvoice, CS_PurchaseOrder, and CS_SupplierInvoice
  - A predefined Business Context Model (BCM) for each document type. The BCM is used to map the document type to the entity type. It also maps the web container ID variables that are sent in JSON messages from the CloudSuite Industrial forms. For example, for the CS_SalesOrder document type, the CustNum value is always stored in {id1}, even if the form's JSON message sent CustNum as the second or third variable. See the information about business context models in the *Infor Document ManagementAdministration Guide - Cloud Edition*.
  - An Access Control List (ACL) that defines the IFS security roles that can access each document type.

Disabling the Document Type filter

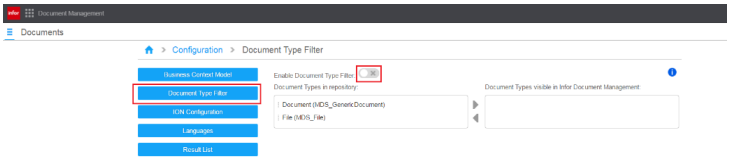
To ensure that all of the document types will be visible in IDM and the Related Information app:

1 In the Infor Document Management application, click the **Administration** menu.

2 Click **Configuration**.



3 Select **Document Type Filter** and disable the filter.

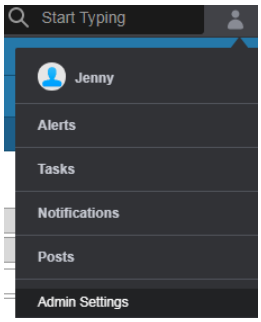


4 Save your changes.

Activating the Related information context app

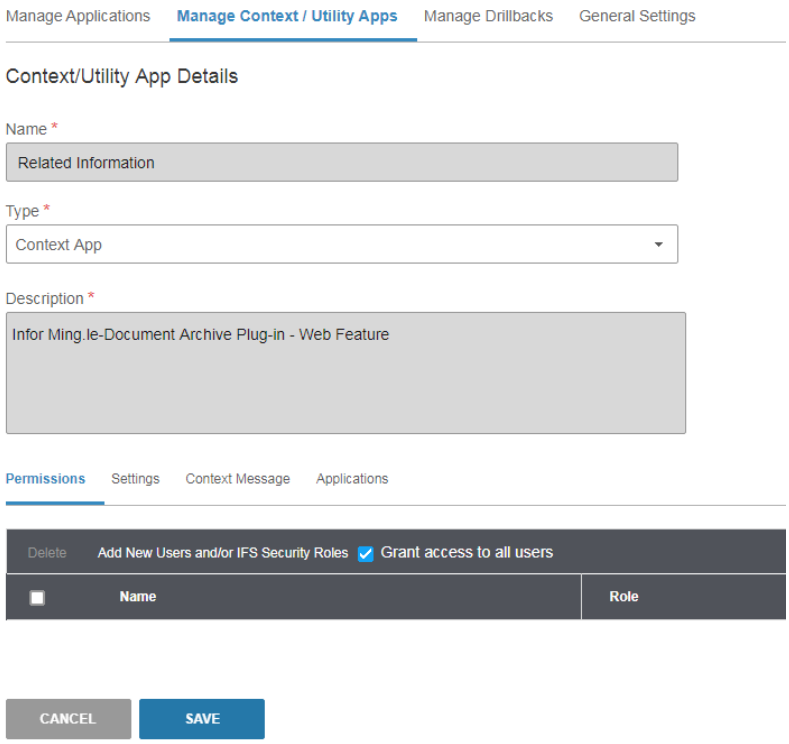
You must activate the Related information context app, so that it is displayed next to the CloudSuite Industrial form. This app shows documents from IDM that are related to the current CloudSuite Industrial record.

1 From the **User** Menu, select **Admin Settings.**

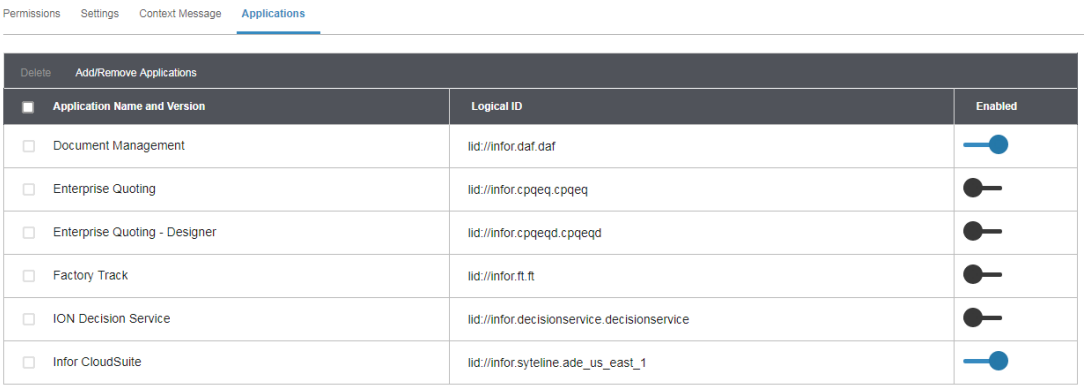


2 In the **Manage Context/Utility Apps** tab, select **Related Information**.

3 In the **Permissions** tab for that app, select **Grant access to all users** and click **Save**.



4 In the **Applications** tab, set **Document Management** and **Infor CloudSuite** to be **`Enabled`** for the Related information app.

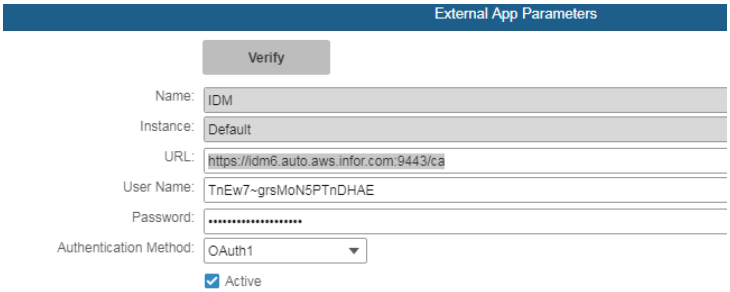


5 Click **Save**. In order to see the changes, you might need to sign out of the application and Infor Ming.le. Close your browser and reopen it.

Verifying the IDM connection in the ERP

1 Open the CloudSuite Industrial app.

2 Select **Form > Open** and open the **External App Parameters** form. The connection information should already be entered by the Infor Cloud team.



3 Click **Verify**. A green check mark is displayed next to the button if the connection was successful.

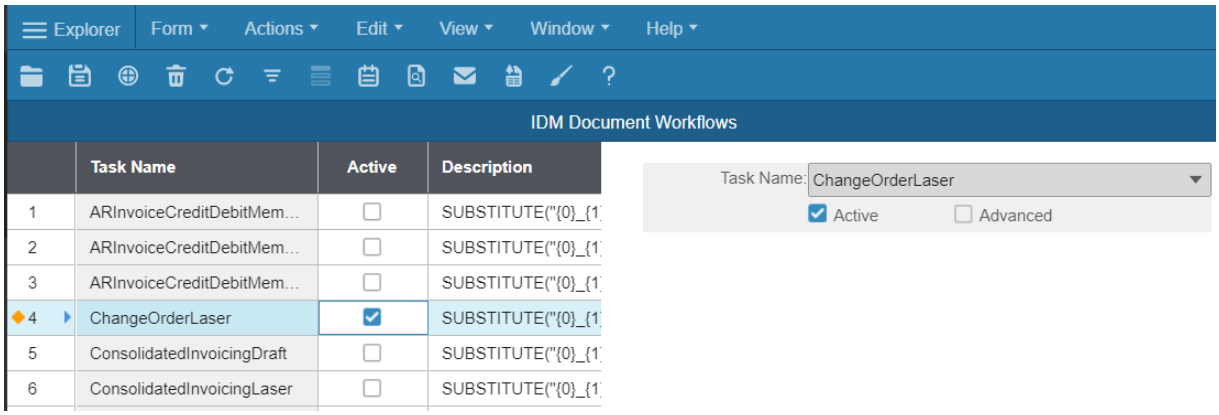
If the connection was not successful, a red X is displayed, and you should contact your Infor representative.

Activating the IDM workflows in the ERP

When CloudSuite Industrial users generate a document that has an active workflow, the document is sent to IDM. To activate the workflows:

1 In CloudSuite Industrial, open the **IDM Document Workflows** form.

2 Select **Active** for each predefined workflow if you want that type of document to be sent to IDM. Your choices should be based on business decisions for the company.



3 Save your changes.

Later, you could use the advanced features on this form, along with the Application Event System, to customize the integration. See the online help for assistance with the advanced fields.

Verifying the configuration for workflows

After the configuration is set up in all applications, use these steps to generate a document in CloudSuite Industrial and verify that the document is available, with the appropriate attributes, in IDM.

Currently the invoice and purchase order reports are predefined for this process, but we will just verify the PO report.

1 In CloudSuite Industrial, open the **Purchase Order Report** form and print a purchase order.

2 Open the **IDM Workflow Logs** form and verify that a record exists for the new PO.

See the online help for an explanation of the fields on this form.

3 In the Infor Document Management application, verify that you can find and preview the document using these options:

Document Type
Specify **`CS_PurchaseOrder`**.

Select Attribute
Verify that these attributes are in the list: **`PO Number`** and **`Vendor Number`**. Select **`PO Number`**.

Operation
Select **`Like`**.

Value
Specify the PO number. Use the % wildcard character to allow for leading and trailing spaces.

4 In CloudSuite Industrial, open the **Vendors** form.

5 Select the vendor associated with the purchase order number that you printed.

In the Related Information context app, the document should be displayed automatically. The default entity type is **`All`**, which displays any document that matches the current record.

6 Verify that you can preview the purchase order.

Troubleshooting:

- If a document cannot be inserted into IDM, an error message is sent to the user who generated the document in CloudSuite Industrial. The user can then attempt to manually attach the document into IDM, using the appropriate document type and attributes. However, if the error occurred because the user does not have the appropriate role assigned in IDM, then the user cannot insert the document into IDM. In that case, you must ensure that the ACL in IDM has the appropriate roles assigned to the document type, and that the user is a member of one of those roles in CloudSuite Industrial and Infor Ming.le (IFS).
- If a user prints a range of purchase orders or invoices, the documents will be generated either in one PDF or in individual PDFs, depending on how the user's **Document Profile** is set up in CloudSuite Industrial. If all of the documents are in a single PDF, the PDF is attached in IDM to the first record in the range. We recommend that users set their Document Profiles to generate individual PDFs for a range of documents.

Configuring IDM Capture with Infor OS

Infor Document Management Capture enables you to convert a high volume of unstructured document data from multiple formats into structured information by using machine learning and analytics. The automated conversion of document data categorizes each document by type and captures and stores relevant data for each document, providing greater efficiency, productivity, and a more detailed analysis of your business processes within the ERP.

When you purchase IDM Capture as part of your CloudSuite, you receive an email with important information about accessing Ephesoft from your tenant. Use this information to configure Ephesoft in Infor Ming.le.

Draft Comments Who will actually do this – Steve Leitz's Services team or Business Partner? Setting Cloud paragraph below to WIP temporarily, per Suresh.

Information received from Ephesoft

When you purchase Infor Document Management Capture as part of your cloud package, Infor notifies the Ephesoft Cloud Ops team about your environment and products. Ephesoft sends an email to Infor with the following prerequisite information and files, which are specific to your environment. Infor forwards this email to you. You will use the information and files when you add and configure Infor Document Management Capture in Infor Ming.le. You must do this for every tenant.

Prerequisite	Example
IDM Capture application URL	https://*server*/dcma/home.html
Single Sign On endpoint for IDM Capture	Link provided
Single Logout endpoint for IDM Capture	Link provided
Ephesoft certificate file attached to the email	ephesoft.abc

1 Create a folder on your local drive called ephesoft_files. Download the certificate file to the local folder and change the filetype from .abc to .cer. You use this file later..
2 Save the email so you can refer to it later in this guide.

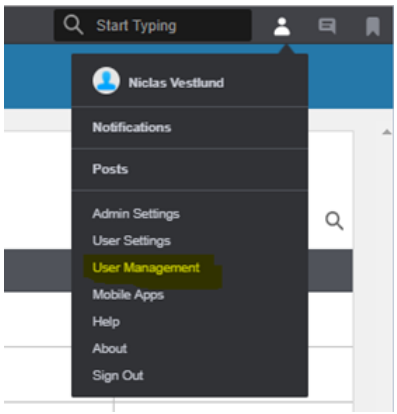
Configuration of IDM Capture in Infor Ming.le

If you plan to use IDM capture with CloudSuite Industrial as part of an IDM solution, follow the steps in this section to add the app, roles, service provider, and ION API file in Infor Ming.le.

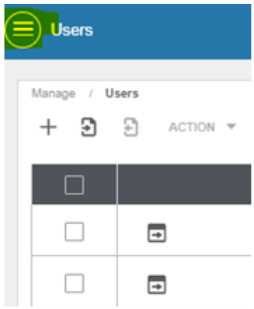
Note: You must have Infor-SystemAdministrator access in order to perform these steps.

Adding security roles (if necessary)

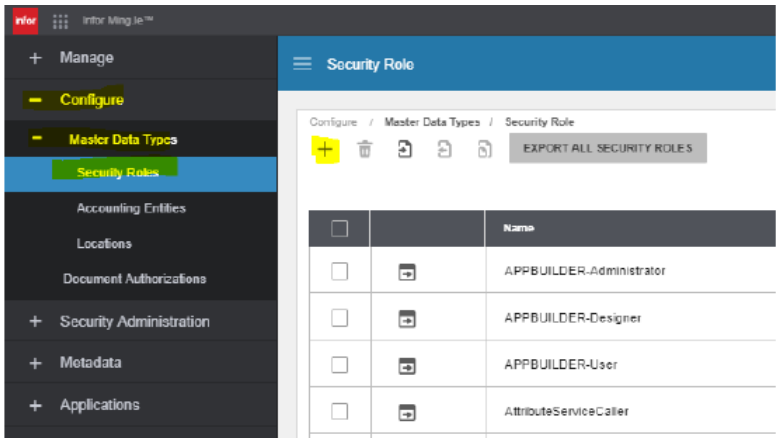
1 From the User Menu, select **User Management**.



2 Click the menu in the upper left corner.



3 Select **Configure > Master Data Types > Security Roles**.



4 Check for these security roles. If not already present, add them. Click + to add a new security role.
- EPHESOFT-USER
- EPHESOFT-Administrator
- EPHESOFT-SystemAdministrator

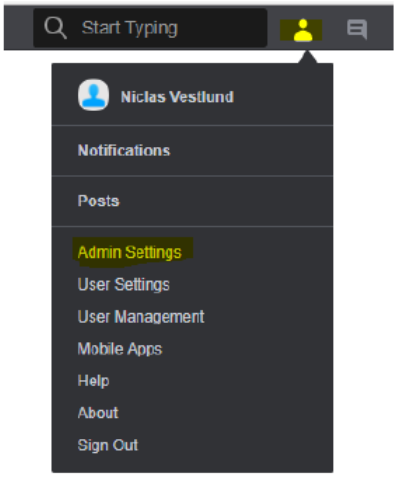
5 Fill in this information for each security role:

Name	Description
EPHESOFT-User	Access to activities under Operator (view my batches, open next batch, scan new documents, and upload new documents)
EPHESOFT-Administrator	Same security as Ephesoft User with additional access to Administrator activities (batch class management, batch instance management, folder management, and reports)
EPHESOFT-SystemAdministrator	Same security as Ephesoft Administrator with additional access to System Configuration (where an administrator can add and remove access on roles)

6 Click **Save** after you add each role.

Adding the Capture application in Infor Ming.le

1 From the User Menu, select **Admin Settings**.



2 Click + ADD APPLICATION.

3 Specify this information:

Application Type

Select **`Non-Infor`**.

Display Name

Specify **`Capture`**.

Application URL

This URL is provided in the email from the Ephesoft Cloud Ops team. Verify that this URL follows the format in Information received from Ephesoft on page 73.

Icon

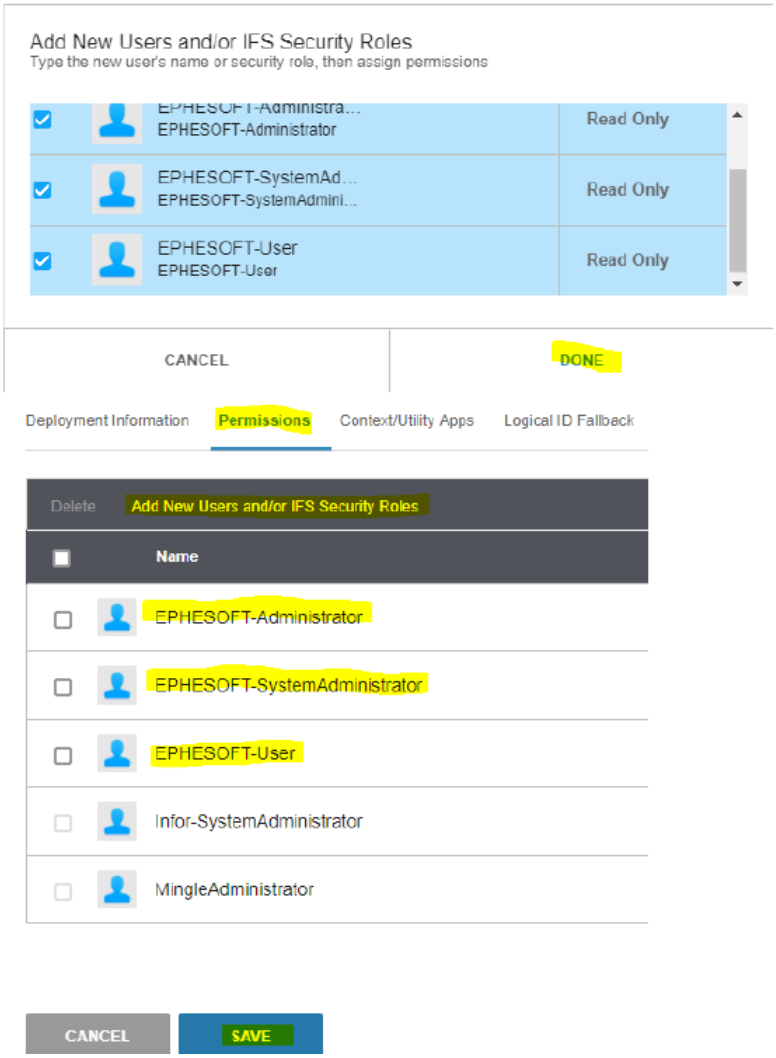
Choose the IDM capture icon in any color.

4 Click **Save**.

5 In the **Permissions** tab, click A**dd New Users and/or IFS Security Roles**.

6 Search for and select the check boxes for these security roles:

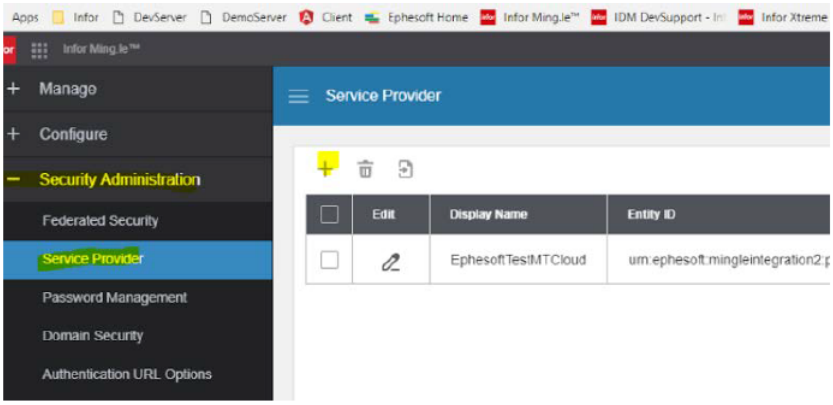
- EPHESOFT-User
- EPHESOFT-Administrator
- EPHESOFT-SystemAdministrator



7 Click **Done** and then **Save**.

Adding Infor Document Management Capture as a service provider in Infor Ming.le

1 From the User Menu, select **User Management**.
2 Click the **Users** menu in the upper left corner.
3 Select Security Administration Service Provider.
4 Click **+** to add a new provider.
Note: If this button is not enabled, contact Infor CloudOps.



5 Specify this information:

Application Type
Select **`DEFAULT_SAML`**.

Federation Protocol
`SAML` is selected automatically.

Display Name
Specify **`IDM Capture`**.

Entity ID
Specify the URN in this format:

Urn:Ephesoft:*customer-prefix*:portal

Create this URN based on the suggested format, and send it to the Ephesoft Cloud Ops team. See Sending information to Ephesoft Cloud Ops on page 81.

SSO Endpoint
Select **`HTTP Post`** and specify the Single Sign On endpoint, which is supplied by the Ephesoft Cloud Ops team. See Information received from Ephesoft on page 73

SLO Endpoint
Select **`HTTP POST`** and specify the Single Logout endpoint, which is supplied by the Ephesoft Cloud Ops team.See Information received from Ephesoft on page 73

Signing Certificate

Click the browse icon and browse to the ephesoft_files folder where you stored the Ephesoft certificate file. Select the **`ephesoft.cer`** certificate file.

6 Click **Save** and then edit the IDM Capture provider that you just added.

7 Click **View**.

8 In the dialog box, click Export SAML Metadata. Save the IDP file (ServiceProviderSAMLMetadata_*date*.xml) to the `ephesoft_files` folder. You will send this file to Ephesoft later. See Sending information to Ephesoft Cloud Ops on page 81.

9 Click **Cancel** to close the dialog box.

10 Click Save at the top of the IDM Capture service provider dialog box .

Setting up the ION API file in Infor Ming.le

To create the ION API file, you must create a service user, register the user in IFS, and create the ION API file.

Creating the service user

1 From the User Menu, select **User Management**.

2 Click **+** to add a new user.

3 Specify this information:

First Name
Specify **`IDM-CaptureUser`**.

Last Name
Specify **`Capture`**.

Email Address
Specify the email address of your administrator

4 Click **Save**.

Registering the user

1 From the User Menu, select **User Management**.

2 On the right side, search for the user IDM-CaptureUser that you made earlier.

3 Click the Details icon for that user.

4 On the **Security Roles** tab, click **+** to add a role.

5 Search for and add these security roles:

- IDM-AdvancedUser
- Infor-SuiteUser
- Mingle-Enterprise

6 Click **Add & Close**.

Creating the ION API file

1 Open Infor ION API in the Infor Ming.le portal

2 Click the **Available APIs**menu. Ensure that Infor Document Management is among the options. If not, Infor CloudOps must register IDM with ION API via CSP. Contact Infor CloudOps to do this. Then, continue with these steps.

3 Select **Authorized Apps**.

4 Click **+** to add a new application. Specify this information:

Name
Specify **`IDM-Capture`**.

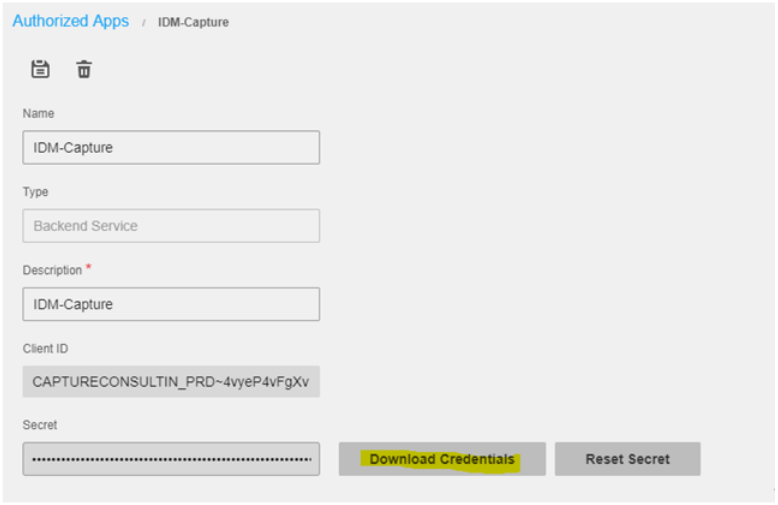
Type
Specify **`Backend Service`**. If you do not see this option, see Enabling a back-end service on page 81.

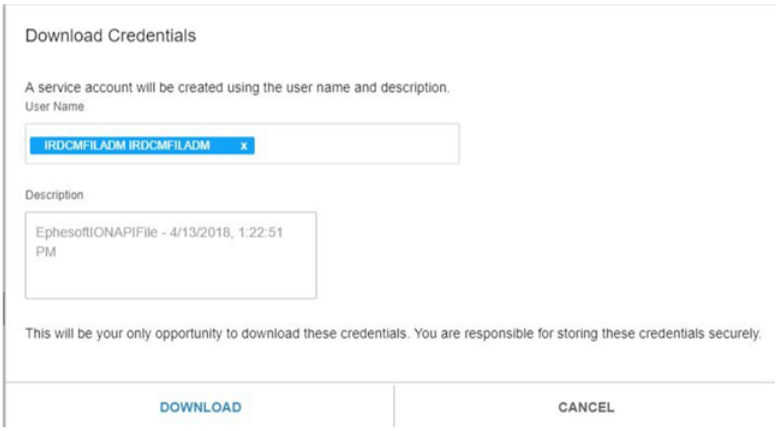
Description
Specify **`IDM Capture`**.

5 Use the default values for the rest of the fields and click **Save**.

6 Reopen the newly added application.

7 Click **Download Credentials**.





8 Under **User Name**, search for and select **`IDM-CaptureUser`**. The user name must be blue to be a valid user name

9 Click **Download**.

Note: You can download this file only once. Do not perform this step again.

10 Save the file to your ephesoft_files folder. You will need it when verifying the integration.

Sending information to Ephesoft Cloud Ops

Send an email to Cloud.Operations@Ephesoft.com. Set the subject of your email as the Entity ID as shown below. Make sure that your email has the following files and information:

Output	Description
IDP Metadata	This file was generated in Adding Infor Document Management Capture as a service provider in Infor Ming.le on page 77.
Entity ID	This URN was specified in Adding Infor Document Management Capture as a service provider in Infor Ming.le on page 77.

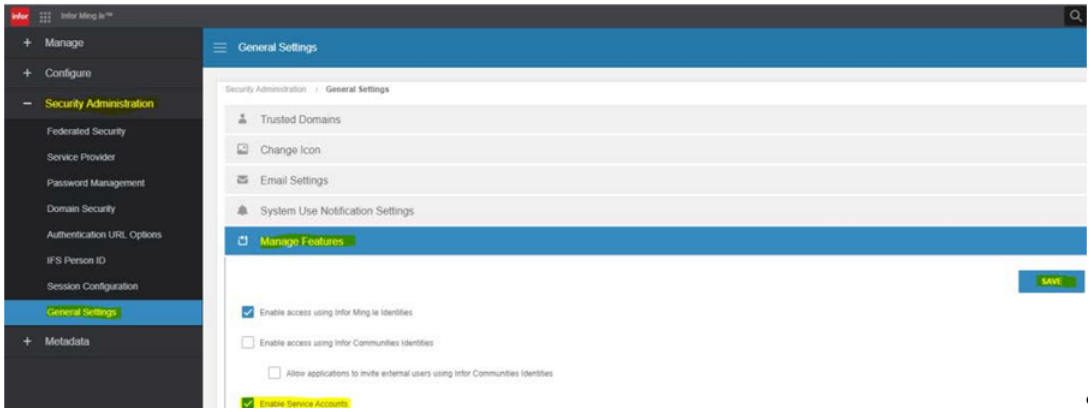
Ephesoft Cloud Ops will complete the setup on their end and send you a confirmation email when you can start testing the application in your environment.

Enabling a back-end service

1 In the User Menu, select **User Management**.

2 Select **Security Administration > General Settings** and click **Manage Features**.

3 Select **Enable Service Accounts**.



4 Sign out and sign back in.

5 Add the IDM-Capture authorized app again. The Backend Service should now be available.

Verifying the configuration for BODs

Draft Comments When IDM Capture is supported, get the latest steps from ICS or from the IDM Capture Config Guide.

Use these steps to load a supplier invoice document, generate a related voucher, and verify that the document is available, with the appropriate attributes, in IDM.

1. In CloudSuite Industrial, use the Purchase Order Receiving form to receive the purchase order that is associated with the supplier invoice.
2. In IDM Capture (using Ephesoft), either scan the paper document or load the electronic file.
3. In IDM, verify that the document exists and is tied to the CS_SupplierInvoice document type.
4. In CloudSuite Industrial, open the **A/P Posted Transactions Detail** form and verify that a voucher has been created for the supplier invoice.
5. Select the voucher associated with the supplier invoice number that you printed.

   In the Related Information context app, the document should be displayed automatically. The default entity type is **`All`**, which displays any document that matches the current record.
6. Use the Related Information context app to search for the related supplier invoice document.

Configuring the OCR BOD integration

Draft Comments When IDM Capture is supported, get the latest steps from ICS. Rachel Paek provided a sample document from M3 that tells what each thing is the batch class does. We should create a similar doc and refer to it here (or include it in this guide as an appendix?). Also, we will need to have a sample batch class file for Vendor Invoices that can be imported into Ephesoft. Check what CSD doc team is doing.

Note: These steps might require assistance from an Infor consultant or Ephesoft support. See the Ephesoft wiki pages (http://www.wiki.ephesoft.com) for more information about batch class configuration.

1. In IDM Capture (using Ephesoft), create a Batch Class that corresponds to the supplier invoice documents that you plan to scan. In the Batch Class index fields, describe the fields from the invoice that should be captured, for both the header and line sections of the invoice.

   A sample of each supplier invoice is needed to ensure that the field names, positions and formats are set up so that capturing can occur.

   See the Ephesoft wiki pages for more information.

   Draft Comments Verify where information is provided? . Might be in our appendix?
2. When you set up the integration of IDM Capture with IDM, map these Batch Class index fields for each supplier invoice to the XML paths in the Sync CaptureDocument BOD.

   Note: Mapped fields must be spelled exactly as they will be validated in CloudSuite Industrial. The invoice amount is not validated.

   In order for CloudSuite Industrial to correctly read the Sync CaptureDocument BOD, these CaptureDocument/DocumentField/Name values must be used:

   - VendorNumber: The CloudSuite Industrial vendor number. This field must exist in the file. The vendor number is validated when the inbound BOD is processed. Leading spaces can be omitted, because they are added during processing.

Note: Some supplier invoices do not include the vendor number. In that case, you must manually add the vendor number here.

- InvoiceNumber: The vendor's invoice number. This value can be omitted, but if it exists, it is used as a reference number on the voucher transaction.
- InvoiceDate: The date when the vendor invoiced the purchase order. This field is used if it exists. Otherwise, the invoice date is set to the current date.
- PONumber: The CloudSuite Industrial purchase order number. This field is used if it exists. Otherwise, the purchase order number is found by using the VendorOrder number.
- VendorOrder: The vendor's purchase order number. If this field exists and the PONumber is not provided, this field is used to find the PO. If both fields exist, this field is not used.
- Freight: The freight charges for the order. If no value is provided, the value is set to zero.
- MiscCharges: The miscellaneous charges for the order. If no value is provided, the value is set to zero.

In order for line level information to be correctly read, these CaptureDocument/DocumentTable/Row/Column/Name values must be used:

- Item: The CloudSuite Industrial item from the purchase order that is being vouchered. This field is used if it exists. Otherwise, the item number is found by using the VendorItem number.
- Quantity: The quantity of the item that is being vouchered. This value must be provided. The value is expected to be in the same unit of measure that was used for the item on the PO line.
- UnitPrice: The unit price of the item. If this value exists, it is used. Otherwise, the unit price from the PO line is used.
- VendorItem: The vendor's item number. If this field exists and the Item is not provided, this field is used to find the item number. If both fields exist, this field is not used.

For more information, go to the **IDM Home Page** in the IDM application and click How to Capture a Document.

Draft Comments Verify that this is still true ?

3 In IDM, ensure that the IDM_Configuration.xml has been imported and the CS_SupplierInvoice document type is available.

4 Configure the IDM Capture plug-ins for each Batch Class that is set up within IDM Capture.

Draft Comments Verify where information about confguring the plug-ins for the bach class is provided? . Might be in the doc/appendix that I am adding? I do not think it's covered in the docs listed below.

See the *Infor Document Management Capture Configuration Guide for Infor Operating Service*.

5 Configure IDM Capture to publish BODs to IDM.

See the Ephesoft documentation for more information.

Draft Comments Where should I refer them for this information? I don't see information about configuring IDM Capture (Ephesoft) to publish BODs in the IDM Capture docs. I also don't see anything very definitive in the M3 doc that I'm supposed to mimic.

Configuring BODs for optional products in the CloudSuite

Additional connection points for optional ION-enabled applications are set up by the Infor Cloud team in your CloudSuite, if your license includes them. The Infor Cloud team configures the other applications to work with ION.

You must set up the documents (BODs) that can be sent and received by each application connection point, and then configure and activate document flows between CloudSuite Industrial and that application.

Adding BODS to the Infor CRM connection point

If CRM is included in the CloudSuite, the CRM connection point was set up in Configuring BODs for the Infor CRM integration with Infor Ming.le on page 39, and some BODs were added for integration with Infor Ming.le. You must add more BODs for the integration between CRM and Infor CloudSuite Industrial.

Draft Comments This paragraph will change when CRM is included in MT, to match the EAM and XM topics.

1. If a CRM connection point exists in ION Desk, select the connection point.
2. In the CRM connection point's **Documents** tab, click **+** and add these documents for the integration with CloudSuite Industrial:

Document	Receive in Application	Send from Application
Process.BillToPartyMaster		X
Process.ContactMaster		X
Process.CustomerPartyMaster		X
Process.Quote		X
Process.SalesOrder		X
Process.ShipToPartyMaster		X
Sync.BillToPartyMaster	X	
Sync.CodeDefinition	X	
Sync.ContactMaster	X	
Sync.CustomerPartyMaster	X	
Sync.CustomerReturn	X	
Sync.Invoice	X	
Sync.ItemMaster	X	
Sync.Location	X	
Sync.PayFromPartyMaster	X	

Document	Receive in Application	Send from Application
Sync.Person	X	
Sync.Quote	X	
Sync.ReceivableTransaction	X	
Sync.SalesOrder	X	
Sync.Shipment	X	
Sync.ShipToPartyMaster	X	

Configuring BODs for the Infor EAM connection point

1 If an EAM connection point exists in ION Desk, select the connection point.
2 In its **Documents** tab, add these documents, if they don't already exist:

Document	Receive in Application	Send from Application
Process.Requisition		X
Sync.CodeDefinition	X	
Sync.PurchaseOrder	X	
Sync.ReceiveDelivery	X	
Sync.SupplierPartyMaster	X	

Configuring BODs for the Infor Expense Management connection point

1 If an Infor Expense Management connection point exists in ION Desk, select the connection point.
2 In its **Documents** tab, add these documents, if they don't already exist:

Document	Receive in Application	Send from Application
Sync.CodeDefinition	X	
Sync.CurrencyExchangeRateMaster	X	
Sync.EmployeeTimesheet		X

Document	Receive in Application	Send from Application
Sync.ExpenseReport		X
Sync.Personnel	X	
Sync.ProductionOrder	X	
Sync.ProjectMaster	X	
Sync.RemittanceAdvice	X	
Sync.ServiceOrder	X	

Configuring BODs for the IDM connection point

Update the Infor Document Managementt connection point:

1. In ION Desk, select **Connect > Connection Points**.
2. Select the IDM connection point.
3. In its **Documents** tab, add this document, if is doesn't already exist:

Document	Receive in Application	Send from Application
Sync.CaptureDocument	X	

4. Save your changes.

Setting up document flows between the ERP and optional BOD-enabled products in the CloudSuite

After the documents are associated with each of the connection points, set up or complete the document flows in ION Desk between CloudSuite Industrial and the other application.

Note: The document flow is only one part of the integration setup. See the appropriate integration guide for the rest of the setup steps.

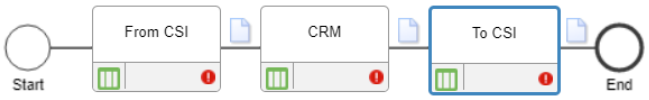
Creating the CSI > CRM > CSI document flow

Draft Comments When Scott T's XMLs are included in the Cloud provisioning, remove the "CSI > CRM > CSI document flow" and use this one instead. For now, that one is marked as "WIP."

Note: You must read the *Infor CloudSuite Industrial Integration for Infor CRM* to understand the integration and to follow any additional configuration steps in the applications, before you activate this document flow.

1 In ION Desk, select **Connect > Document Flows**.

2 Create one document flow for each site that is connected to CRM. Name it CSI_*site*_CRM_CSI.



3 In the properties pane for each of the application boxes, click **Add** and add the appropriate connection points.

Draft Comments Some of this will probably change.

4 Click the document icon between **From CSI** and **CRM** and include these documents:

- Sync BillToPartyMaster
- Sync CodeDefinition
- Sync ContactMaster
- Sync CustomerPartyMaster
- Sync CustomerReturn
- Sync Invoice
- Sync ItemMaster
- Sync Location
- Sync PayFromPartyMaster
- Sync Person
- Sync Quote
- Sync ReceivableTransaction
- Sync SalesOrder
- Sync Shipment
- Sync ShipToPartyMaster

5 Save the document flow.

6 Click the document icon between **CRM** and **To CSI** and include these documents:

- Process BillToPartyMaster
- Process ContactMaster
- Process CustomerPartyMaster
- Process Quote
- Process SalesOrder
- Process ShipToPartyMaster

7 Save the document flow.

8 If you plan to send CRM data to more than one CloudSuite Industrial site, follow these additional steps:

a Drag a Parallel object into the flow between **CRM** and **To CSI**. Add one line for each site.

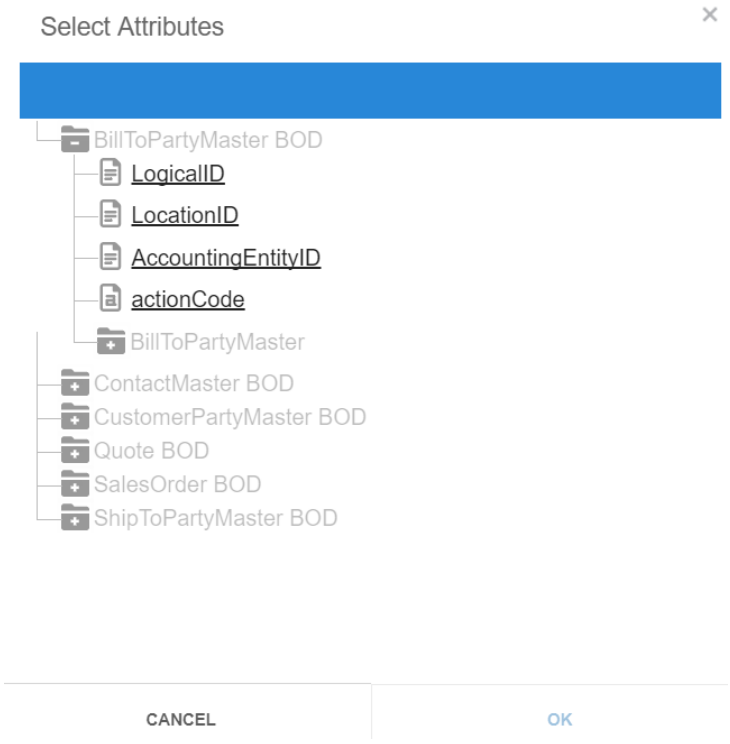
b Drag one application object for each site onto each line. Add the connection point for that site.

c Drag a Filter object on the first line. This filter directs inbound Process BOD documents from **CRM** to the appropriate CloudSuite Industrial accounting entity (site).

d In the Filter Properties area, specify a name for the filter that includes the site name and the BOD attribute, for example, **`LAAcctEntity`**.

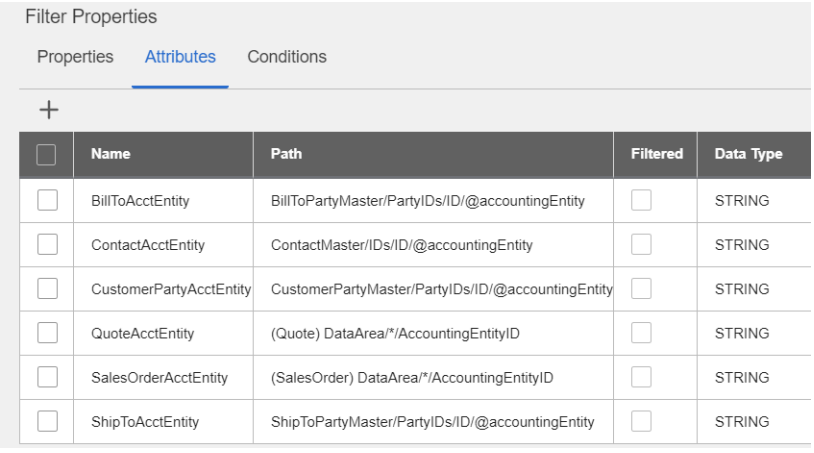
e Click the **Attributes** tab.

f Click **Add** and expand one of the BODs to select its AccountingEntityID attribute. Click **OK**.



g Click in the **Name** column and change the attribute name to describe the BOD and attribute, for example,**`BillToAcctEntity`**. This will make it easier to link the attributes to the conditions.

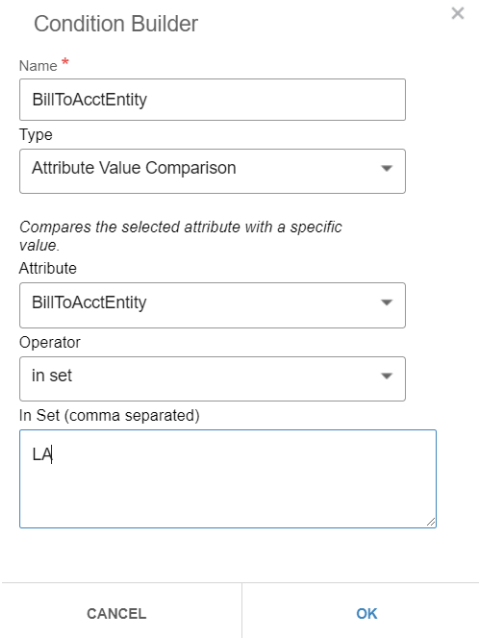
Repeat steps f and g to create attributes for the other BODs in the list. The finished list of attributes should look like this example:



Name	Path	Filtered	Data Type
BillToAcctEntity	BillToPartyMaster/PartyIDs/ID/@accountingEntity		STRING
ContactAcctEntity	ContactMaster/IDs/ID/@accountingEntity		STRING
CustomerPartyAcctEntity	CustomerPartyMaster/PartyIDs/ID/@accountingEntity		STRING
QuoteAcctEntity	(Quote) DataArea/*/AccountingEntityID		STRING
SalesOrderAcctEntity	(SalesOrder) DataArea/*/AccountingEntityID		STRING
ShipToAcctEntity	ShipToPartyMaster/PartyIDs/ID/@accountingEntity		STRING

h In the **Conditions** tab of the filter, select a BOD in the **Document** field. For example, select BillToPartyMaster.

i Click **Add** and create a condition for the BOD attribute, which is used to filter BODs for the specific site.



Specify this information:

Name
For the condition name, specify the filter attribute that you created in the **Attributes** tab for the BOD. For example, for the BillToPartyMaster BOD, specify the **`BillToAcctEntity`** attribute.

Type
Set this to **`Attribute Value Comparison`**.

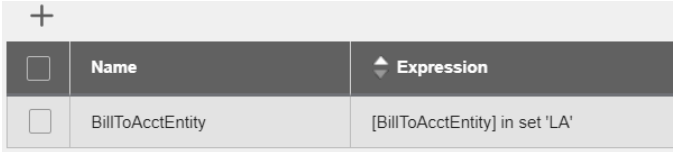
Attribute
Select the filter attribute, for example **`BillToAcctEntity`**.

Operator
Select **`in set`**.

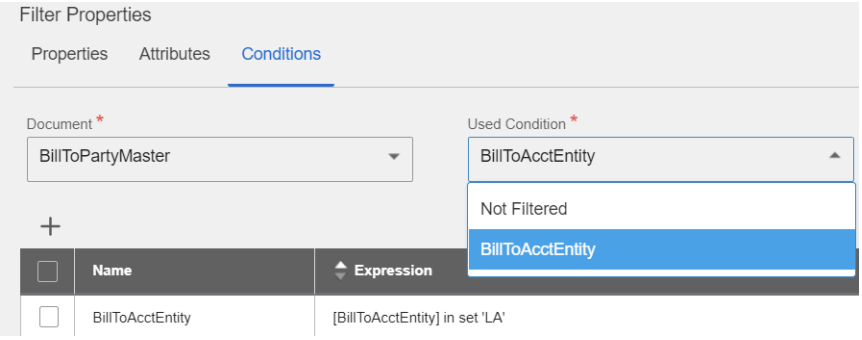
In Set
Specify the site name, for example, **`LA`**.

j Click **OK**.

The finished condition should look like this example:



k Select the same BOD in the **Document** field and select the matching condition in the **Used Condition** field. For example, select **`BillToAcctEntity`**.



l Save your changes to the filter.

m Copy the filter, place it on each of the branches, and then rename and edit the filter to apply to each site.

Delete any empty branches.

9 Save your changes.

Do not activate the document flow until you complete the steps in the integration guide.

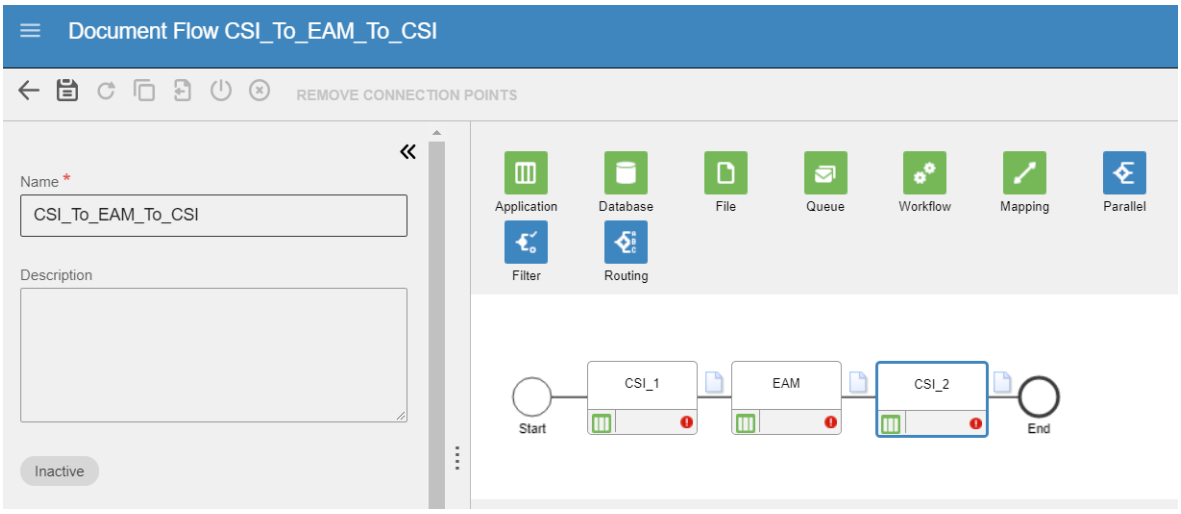
Creating the CSI > EAM > CSI document flow

Draft Comments For CSI 10, this topic will be replaced by "Completing the erp_eam document flow" after RS 7988 (ION Content Automation) is completed.

Note: You must read the *Infor CloudSuite Industrial Integration for Infor EAM* to understand the integration and to follow any additional configuration steps in the applications, before you activate this document flow.

1 In ION Desk, select **Connect > Document Flows**.

2 Create a document flow called CSI_To_EAM_To_CSI.



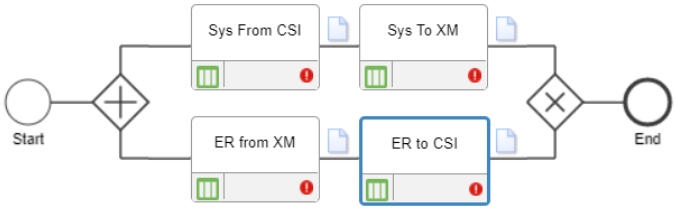
3 In the properties pane for each of the application boxes, click **Add** and add the appropriate connection points.
4 Click the document icon between **CSI_1** and **EAM** and include these documents:
   - Sync PurchaseOrder
   - Sync ReceiveDelivery
   - Sync SupplierPartyMaster
5 Click the document icon between **EAM** and **CSI_2** and include this document:
   - Process Requisition
6 Save the flow but do not activate it until you complete the steps in the integration guide.

Creating the CSI > XM > CSI document flow

Draft Comments For CSI 10, this topic will be replaced by "Completing the erp_eam document flow" after RS 7988 (ION Content Automation) is completed.

Note: You must read the *Infor CloudSuite Industrial Integration for Infor Expense Management* to understand the integration and to follow any additional configuration steps in the applications, before you activate this document flow.

1 In ION Desk, select **Connect > Document Flows**.
2 Create a document flow called CSI_XM_CSI.
3 Drag a parallel item into the document flow and add the four application boxes.



4 In the properties pane for each of the application boxes, click **Add** and add the appropriate connection points:
   - Associate the **Sys From CSI** and **ER to CSI** applications with the CloudSuite Industrial connection point(s).
   - Associate the **Sys To XM** and **ER from XM** applications with the Infor Expense Management (XM) connection point.
5 Save the document flow.
6 Click the document icon between **Sys From CSI** and **Sys To XM** and add these documents:
   - Sync CodeDefinition
   - Sync CurrencyExchangeRateMaster
   - Sync Personnel
   - Sync ProductionOrder
   - Sync ProjectMaster
   - Sync RemittanceAdvice

- Sync ServiceOrder

7 Save the document flow.

8 Click the document icon between **ER From XM** and **ER To CSI** and add these documents:
- Sync EmployeeTimesheet
- Sync ExpenseReport

9 Save the flow but do not activate it until you complete the steps in the integration guide.

Creating the CSI > IDM document flow

Draft Comments For CSI 10, this topic will be replaced by "Activating the erp_idm document flow" after RS 7988 (ION Content Automation) is completed.

Create this document flow only if you are using IDM Capture (using Ephesoft) to send scanned documents as BODs to Infor Document Management. For more information about this integration, see Configuring IDM on page 65.

1 In ION Desk, select **Connect > Document Flows**.

2 Create a document flow called erp_idm.

3 In the properties pane for each of the application boxes, click **Add** and add the appropriate connection points.

4 Click the document icon between **From_IDM** and **To_CSI** and include this document:
- Sync CaptureDocumen

5 Save the flow but do not activate it until you complete the steps in Configuring IDM on page 65.

Importing sample ION workflow content

Optionally, you can import some sample workflow content into ION Desk, to better understand how alerts, workflows, and activation policies are used for communication between ION and CloudSuite Industrial.

Note: These samples are not currently supported by Infor.

1 In the Infor Xtreme Support portal, search for solution **1440389**. Download the `SL_ION_Content.zip` file to a local folder. Unzip the file to extract a set of files that you will import into Infor Ming.le and ION Desk.

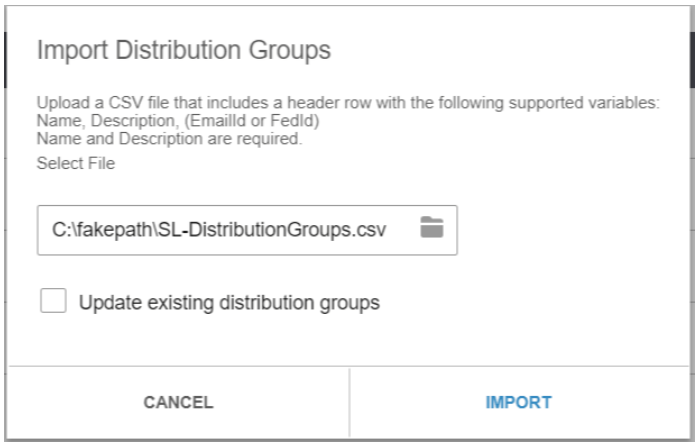
2 Open Infor Ming.le and import the distribution groups:

a From the user menu, select **User Management.**

b From the menu on the **User Management** page, select **Manage > Groups > Distribution Groups**.

c Click the **Import** icon.

d Browse to your local folder, select the `SL-DistributionGroups.csv` file, and click **Import**.



e Verify that the log messages indicate that all rows were added successfully, and click **Close**.

The new distribution groups are displayed on the **Groups** page.

3 Open ION Desk and import the sample monitors:

a Select **Monitors & Workflows > Monitors**.

b Click the **Import** icon.

c Browse to your local folder, select the `SL-Monitors.xml` file, and click **OK**.

d Verify that the list shows successfully imported monitors and click **OK**.

4 In ION Desk, import the sample workflows. Select **Monitors & Workflows > Workflows** and import `SL-Workflows.xml`.

5 In ION Desk, import the sample activation policies. Select **Monitors & Workflows > Activation Policies** and import `SL-ActivationPolicies.xml`.

6 Activate each of the sample monitors, workflows, and activation policies by clicking the **Activate** button.

Chapter 5: Configuring your web browser

Configure your browser for use with Infor Ming.le.

Allowing popups for browsers

Ensure that any browser that is used with CloudSuite Industrial allows pop-ups. If pop-ups are disabled, the help will not work properly.

Avoiding multiple connections in a browser

You can have as many configurations as you want in a single application or server instance.

However, you cannot have multiple concurrent connections to the same CloudSuite Industrial application server in a single browser, even using different configurations. The session connection attributes use the server name as the key and are not differentiated by configuration name.

Setting up compatibility for Internet Explorer browsers

Note: Follow these steps only if you are using Internet Explorer as your browser.

Some Infor Ming.le and CloudSuite Industrial versions of Internet Explorer might be incompatible. If so, a message is displayed to indicate that your browser is not supported. In that case, before you can run CloudSuite Industrial in Infor Ming.le, you must change your compatibility view settings in your browser.

1. In the browser, click **Tools > Compatibility View Settings**.
2. Clear the **Display intranet sites in compatibility view** option.

Chapter 6: Configuring ERP access through Infor Ming.le

Users, roles, and person IDs are initially defined in Infor Ming.le and shared with all of the other applications that run through the Infor Ming.le portal. Roles and some user information can later be modified in CloudSuite Industrial.

Configuring Single Sign On

All applications within the CloudSuite are preconfigured to use Infor Ming.le/IFS to allow a single sign on. No additional configuration is needed.

If you want to integrate your existing on-site identity management (single sign on) system with this CloudSuite, contact Infor Consulting Services or your Infor provider.

Users and roles

Because Infor Ming.le is the system of record for users, you must set up users in Infor Ming.le. The users are then synchronized through BODs to other BOD-enabled applications in the Infor Ming.le portal. After the users are synchronized to your application, you can continue the user setup in your application.

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

How Infor Ming.le users and roles work with ERP users and groups

When you create or update a user in Infor Ming.le, the information associated with that user is used to automatically set up some user information in CloudSuite Industrial. This association is handled through Sync SecurityUserMaster BODs that are passed through ION.

CloudSuite Industrial groups are mapped to security roles in Infor Ming.le. The list of available CloudSuite Industrial groups must be updated and maintained in CloudSuite Industrial – not in Infor Ming.le - because the types of roles and the names of roles are dependent on the requirements of CloudSuite Industrial. After the groups are set up in CloudSuite Industrial, they are synchronized to Infor Ming.le through the Sync SecurityRoleMaster BOD, so that 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 CloudSuite Industrial, not Infor Ming.le.

Infor Ming.le provides a default Infor-SystemAdministrator role that allows for full access to all applications that are linked to Infor Ming.le. CloudSuite Industrial has an Infor-SystemAdministrator group or role that allows access to all CloudSuite Industrial screens. When a user who has the Infor-SystemAdministrator role inInfor Ming.le is synchronized to CloudSuite Industrial, that user automatically has access to all CloudSuite Industrial forms.

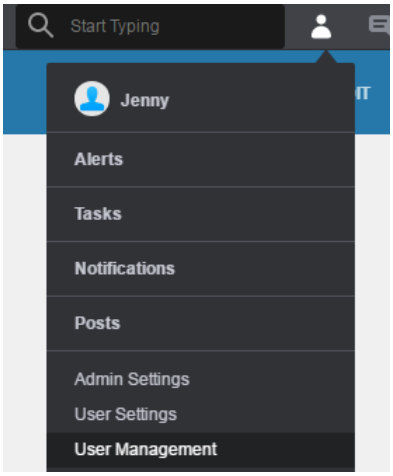
For more information about these BODs, see User and role BOD usage on page 137.

Configuring user access to the ERP through Infor Ming.le

Caution: 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 CloudSuite Industrial through Infor Ming.le.

1 From the Infor Ming.le User Menu, select **User Management**.



2 On the **Users** page, follow these general steps to add users. See the Infor Ming.le online help for more information.

a Click **+** to add a user.

b Clear the **Send Invitation** option so that you can send the invitation later, after you have completed the user setup.

c Save your changes.

d Click the details icon to view details for the user.

Note: The IFS Person ID will be used to synchronize personnel records with CloudSuite Industrial. It is generated automatically and should not be changed.

e In the **Security Roles** tab, assign the user to one or more roles, and click **Add & Close**.

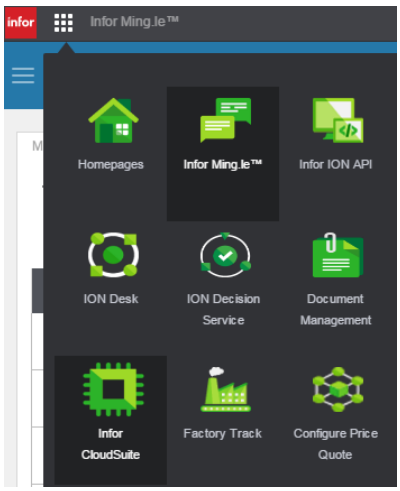
In order for users to access CloudSuite Industrial through Infor Ming.le, they must be assigned at least one CloudSuite Industrial role.

You might not see all of the application-specific roles that you need. If you do not see the roles you need, those roles can be added and assigned later from within CloudSuite Industrial.

f Save your changes.

The information is sent through BODs to CloudSuite Industrial after you save your changes.

3 Open CloudSuite Industrial from the App Menu.



4 If prompted, select a configuration, which is linked to one of your CloudSuite Industrial sites. If you plan to use one site as a master site, select the configuration for the master site.

5 In CloudSuite Industrial, select **Form > Open** and open the **Users** form.

6 In the **Users** form, click the filter toolbar button to see all of the users who were defined in Infor Ming.le.

7 Update the information for each user to specify additional required or optional fields that are not shared with Infor Ming.le. See the CloudSuite Industrial online help for more information.

a After you add your users in Infor Ming.le, verify that the user information has been sent through BODs to CloudSuite Industrial. This information should be shown in the CloudSuite Industrial **Users** form:

- The user name (email address) that you set for each user in Infor Ming.le is shown in the **User Name** field.
- The **IFS Person ID** that was set for each user in Infor Ming.le is shown in the **Workstation Domain/ID** field.

These values should not be changed.

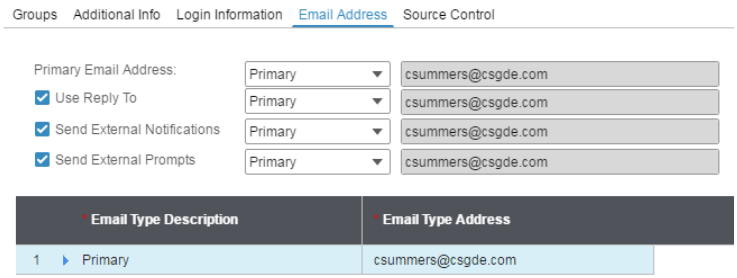
b Assign the user's form editing permission level, PO requisition limit, and multi-site group authorization, as needed. See the online help.

c Set the user's password for the CloudSuite Industrial web client or click once client.

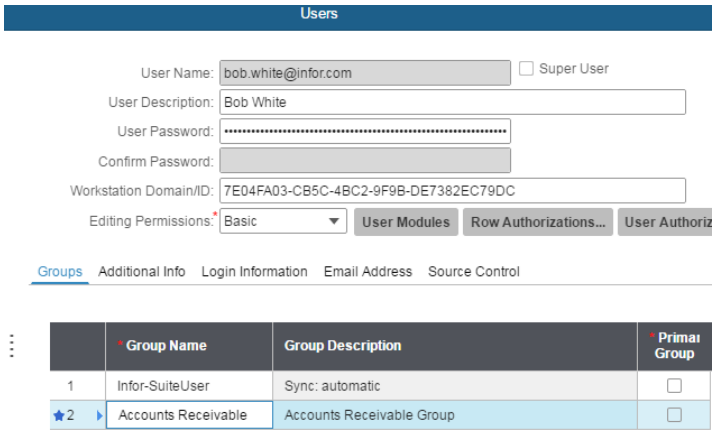
(This is not the same password that is used to log into the Infor Ming.le portal. The Infor Ming.le portal password uses the IFS ID tied to the Workstation ID, so no additional user login is required to access the CloudSuite Industrial application in Infor Ming.le.)

When users access CloudSuite Industrial through the web client or the click once client rather than through Infor Ming.le, they must know this password.

d Ensure that the email address that you set for each user in Infor Ming.le is shown in the **Primary Email Address** on the **Users** form. This value should not be changed. We recommend setting these additional fields for the user:



e In the **Groups** tab, click in the grid and select **Actions > New** to add a new row.



f Click in the **Group Name** field to view the list of groups. Add any groups to which this user should belong. If you were able to assign the groups as security roles for the user in Infor Ming.le, you will see them listed here. Otherwise, you can assign the additional groups here.

g Click **User Modules** and assign the appropriate license modules to the user.

By default, users who are originally created in Infor Ming.le and sent through BODs to CloudSuite Industrial are assigned a Transactional license in CloudSuite Industrial. This is handled through the **Admin License Module Name** setting in the **Process Defaults** form.

Note: Some modules such as Service and QCS are separately licensed. See Configuring users for separately licensed modules on page 99.

h Save your changes.

8 In Infor Ming.le User Management, select the user's record, and then select **Action > Resend Invitation**.

The user receives a notification with a link that provides user-specific access to Infor Ming.le and to CloudSuite Industrial.

Configuring users for separately licensed modules

If your product includes separately licensed modules such as Quality Control (QCS), Service, or Tax Interface, follow these steps to ensure that users have access to those modules.

1 Log into CloudSuite Industrial.

2 In the **Optional Modules** form, ensure that **Enabled** is selected for the modules for which you have purchased licenses.

3 In the **Users** form, click the filter button on the toolbar to show all defined users.

4 In the grid on the left, select a user who needs licensing for an optional module.

5 Click **User Modules** to display the license modules assigned to the current user.

6 To add a license for the user, click the Create button on the toolbar.

7 In the **Module Name** field, select a license module for the user, for example, **`ServiceManagement`** for the Service module or **`QualityControlSolution`** for the QCS module.

Required: For business partners in a demo environment, your administrative user must be licensed for these modules:

- QualityControlSolution
- ServiceManagement
- TaxInterface

8 Click the Create toolbar button again to add another license module for the user, and repeat until all licenses for that user are added.

9 Save your changes.

10 Repeat these steps for any other users that must be licensed for the optional modules.

Configuring additional system administrator access to all tenant applications through Infor Ming.le

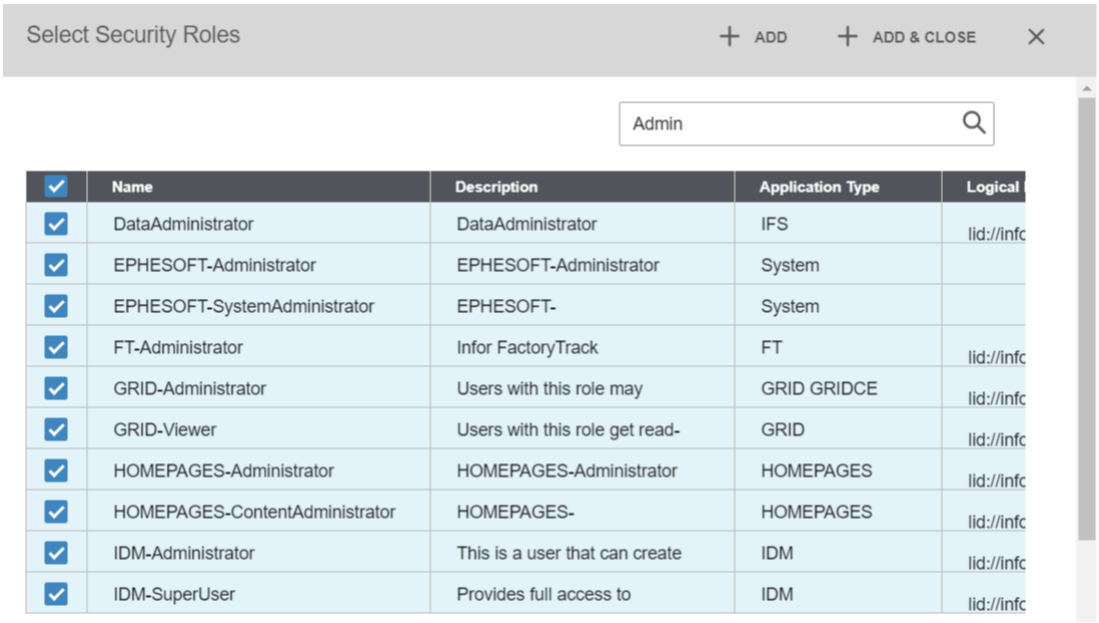
Note: The Infor Cloud team initially configures system administrator access for one user between Infor Ming.le and CloudSuite Industrial.

1 From the Infor Ming.le User Menu, select **User Management**.

2 On the **Users** page, click the Detail icon for one of the users that you want to make an administrator.

3 In the **Security Roles** tab for that user, click **+** to add roles.

4 In the **Search** field, specify **`Admin`** to filter for all administration roles, and click the search icon.



5 Select the check box at the top of the column, to select all admin roles.

6 Click **Add & Close**.

7 Click **+** again and specify **`Mingle`** in the filter field. Add all displayed roles to this user.

8 Click **+** again and specify Homepage in the filter field. Add all displayed roles to this user.

9 Click the Save icon on the **Security Roles** tab to save the roles for this user.

Configuring additional system administrator access to the ERP through Infor Ming.le

Note: The Infor Cloud team initially configures system administrator access for one user between Infor Ming.le and CloudSuite Industrial.

1 In Infor Ming.le, add the Infor-SystemAdministrator role to the appropriate users.

After you update the user information, a BOD is sent from Infor Ming.le to CloudSuite Industrial to synchronize the system administrator users with this role.

2 Assign additional system administration roles, either in Infor Ming.le or in the CloudSuite Industrial **Users** form, to the appropriate users.

Setting up additional roles or groups

Predefined security roles (groups) are used in both the CloudSuite Industrial application and Infor Ming.le. If you need to create security roles groups that are specific to your company for use with CloudSuite Industrial, follow these steps.

1 In CloudSuite Industrial, use the **Groups** form to create any additional groups (security roles) that you need in order to access specific forms, programs, and logical folders.

Your updates to the list of groups/roles are then sent to Infor Ming.le through the Sync.SecurityRoleMaster BOD. The information from this BOD is used in Infor Ming.le to automatically create a matching security role.

2 Associate the security roles with users. This can be done in either Infor Ming.le or CloudSuite Industrial:

- To associate security roles with users in Infor Ming.le:
  a Select **User Management**.
  b Select a user.
  c Click the Details icon.
  d In the **Security Roles** tab, click **+**.
  e Select the roles you want for the user, and click **Add & Close**.

  Infor Ming.le generates a Sync.SecurityUserMaster BOD for each user to which a role was added. It sends the BOD to all applications that run in the Infor Ming.le portal. CloudSuite Industrial uses the information from this BOD to associate the role or group with the CloudSuite Industrial user record.
- To associate groups (roles) with users in CloudSuite Industrial, go to the **Users** form, filter for the user, and use the grid on the **Groups** tab to associate the user with the appropriate groups.

  CloudSuite Industrial generates a Process.SecurityUserMaster BOD which is sent to Infor Ming.le. Infor Ming.le then sends another BOD to all applications that run in the Infor Ming.le portal, to update the user records in all applications.

Note: Do not manually create a security role in Infor Ming.le that does not exist in CloudSuite Industrial.

If you delete a role in either CloudSuite Industrial or Infor Ming.le, you must also delete the corresponding role in the other application.

Automatic login and selecting configurations

When users first access CloudSuite Industrial through Infor Ming.le, they see a dialog box. Because of Single Sign On, the user ID and password are not requested; however, users must select a CloudSuite

Industrial configuration. The **Use Workstation Logon** option on this dialog box is hidden and is automatically selected for the user.

Subsequent logins depend on how the user signs in and out of the application and Infor Ming.le:

- If users sign out of the CloudSuite Industrial application before exiting Infor Ming.le, then the next time they open the CloudSuite Industrial application, they must select a configuration.
- If users close the browser without signing out, or exit Infor Ming.le without signing out of CloudSuite Industrial, then the next time they open the CloudSuite Industrial application, the previous configuration is automatically selected and no dialog box is shown. To switch to a different configuration, the user can select **Form > New Sign In**.

Verifying user access

To verify that users were created properly and can access the appropriate forms in CloudSuite Industrial:

1. Log into Infor Ming.le portal as a user. The user must belong to a role that is defined as an administrator in both Infor Ming.le and CloudSuite Industrial.
2. From the App Menu, open CloudSuite Industrial.
3. If prompted, select the appropriate configuration and click **OK**. The application session is opened.
4. Open the **Users** form and verify this information for several users:
   - **User Name** matches the Email address in Infor Ming.le.
   - **Workstation Domain/ID** matches the IFS Person ID in Infor Ming.le.
   - Groups that you assigned to this user are set as roles in Infor Ming.le.
5. Sign out of the application and Infor Ming.le. Close the browser.
6. Log into Infor Ming.le and CloudSuite Industrial as a non-administrative user who has access.
7. Ensure that you can open any forms that the user has authorization to open, and that you cannot open any forms for which the user is not authorized. as a non-administrative user who has access to both

Setting up distribution groups

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

See the Infor Ming.le online help.

Service accounts

The Infor Ming.le **Service Accounts** page shows accounts that have been created to allow applications a resource owner grant to contact the Infor Authorization Service to obtain a token for use in making API requests.

Chapter 7: Configuring the ERP

Configure the CloudSuite Industrial ERP application using these general steps.

Note: Consider using an Infor Implementation Accelerator to speed up your implementation. Implementation Accelerators provide overviews, key capabilities, definitions, and configuration of codes and parameters for specific business processes. For more information, contact your Infor representative.

This section assumes that you have already set up the users and groups (roles).

1. Open the CloudSuite Industrial application in the Infor Ming.le portal.
2. Set up a file server and logical folders.

   See “Setting up a File Server for ERP in the Cloud” in the online help.
3. Set up the application to send reports by email to users.

   On the **Intranets** form, click the filter button to show the predefined records.

   In the CORP intranet record, select **Send Email Notification**. The Infor Cloud Team has already set up the required fields for SMTP, TaskMan and SSRS for the CORP intranet. These fields should not be changed.
4. Define report options.

   You do not print a report directly from the application in the cloud. When you click **Print** or **Preview**, by default the report is displayed as a PDF in your browser, and you can save or print it from there.

   In the **Report Options** form, the Infor Cloud team has already set default options for all users. Do not modify this default record, which has a blank **User** field value. However, you can add records for individual users or reports, and change some of the settings specifically for that user or report. For example, you can set **Email Notification** to **`Yes`** for some reports. You cannot specify a printer or a different **Output Directory**. See the online help for information about all of the options.
5. If your tenant has multiple sites:
   - On the **Sites/Entities** form, set the **Time Zone** for each site. Do not change any of the other site information on this form.
   - Use the *Multi-Site Planning Guide - Cloud Edition* and the *Multi-Site Implementation Guide - Cloud Edition* to set up replication between the sites and to configure the rest of the financial, parameter and master data for the application.

     Specify a master site for the intranet, in order to maintain customers, vendors, and items for all sites from the master site. You can optionally use the **Intranet Shared User Tables** form to share the Authorizations_mst, UserGroupMap_mst, and/or user_local_mst tables if you want to share users and group authorizations information between sites. Do not use the **Intranet Shared Tables** form; those tables are already shared because the sites are all in one database.
6. If your tenant has a single site, follow these steps, using the online help:

- On the **Sites/Entities** form, set the **Time Zone**. Do not change any of the other site information on this form.
- Set the invoice length on the **Order Entry Parameters** form.
- Set up the chart of accounts and financial information.
- Set up other parameter forms.
- Set up master data such as customers, vendors, and items.

7 Set master data to standardized values.

To ensure consistent master data between integrated applications, use the ISO standard values where applicable. You can map existing non-standard units of measure, currencies and countries to ISO values through these CloudSuite Industrial forms:

- **Currency Codes**
  Note: ISO currency codes are required for some integrations. ISO currencies are not defined as part of an initialized database and must be set manually.
- **Countries**
- **Unit of Measure**

8 The values that you must configure in CloudSuite Industrial for integrations–for example, customer, vendor or item master records, or system parameters–often depend on the application with which CloudSuite Industrial will exchange information. For more information, see the appropriate application integration guide.

Chapter 8: Verifying drillbacks to the ERP

Infor Ming.le users can share screens and business data in some ION-enabled products that are integrated with CloudSuite Industrial. The screens and business data can include embedded drillback links to CloudSuite Industrial. If a screen or business data is associated with a BOD that was sent from CloudSuite Industrial, and the screen or data has an associated drillback link, then users can click the link to view the screen that has the supporting information for the source transactions.

For example, you might have a Homepage widget in Infor Ming.le that draws its data from the CustomerPartyMaster BOD in CloudSuite Industrial. If the user selects the drillback option from that widget, it opens the **Customers** form in CloudSuite Industrial.

A drillback link can be defined for each type of BOD noun, for example, SalesOrder or ItemMaster. The link is configured to open a specific CloudSuite Industrial screen for that noun. Not every BOD noun has an associated drillback view in CloudSuite Industrial.

Available drillbacks

This table lists the views that are currently available and the CloudSuite Industrial form that is launched:

BOD Noun	Drillback view	CloudSuite Industrial form
BillToPartyMaster	BillToPartyView	Customers
ContactMaster	ContactMasterView	CustomerSalesContactCrossReferences
CustomerPartyMaster	CustomerView	Customers
CustomerReturn	CustomerReturnView	RMAs
InventoryAdjustment	AdjustmentOrderView	MaterialTransactions
ItemMaster	ItemView	Items
PayFromPartyMaster	PayFromPartyView	Customers
Person	EmployeeView	Salespersons
PurchaseOrder	PurchaseOrderView	PurchaseOrders
Quote	QuoteView	Estimates
ReceiveDelivery	ReceiptView	MaterialTransactions

BOD Noun	Drillback view	CloudSuite Industrial form
RemitToPartyMaster	RemitToPartyView	Vendors
Requisition	RequisitionView	PurchaseOrderRequisitions
SalesOrder	SalesOrderView	CustomerOrders
ShipFromPartyMaster	ShipFromPartyView	Vendors
Shipment	ShipmentView	MaterialTransactions
SupplierPartyMaster	SupplierView	Vendors

Loading the BODs that are used in drillbacks

In order to use these drillbacks, you must perform an initial load of the BODs listed in “Available drillbacks,” using the **Replication Document Manual Request Utility** in CloudSuite Industrial.

See Publishing initial data on page 111.

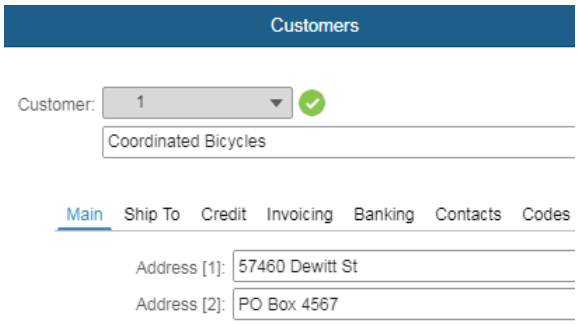
Verifying a drillback

Drillbacks are displayed in the Infor Ming.le user interface as links that open CloudSuite Industrial to a specific screen filtered for specific results. For example, an Infor Ming.le search result, alert, or share can include a link to the form with a reference to specific CloudSuite Industrial data.

To verify that the drillbacks are working:

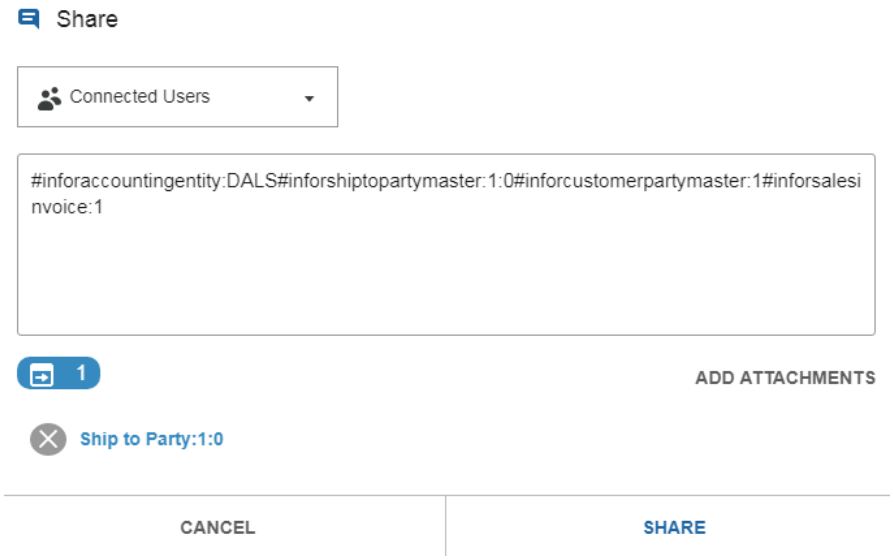
1. From the App menu, open CloudSuite Industrial.
2. Open a form that has a drillback, for example, **Customers**.

   Note: The user interface does not indicate whether a screen has a drillback. In order for a screen to have a drillback, a drillback must be configured and a business context message must also be sent. See Available drillbacks on page 106 and Understanding business context messages on page 121.
3. Display the information that you want to share, for example, the record for a particular customer.

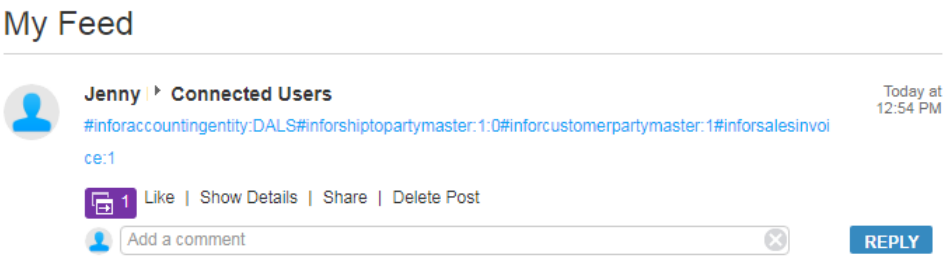


4 Click the Share icon on the Infor Ming.le screen.

5 On the Share overlay, verify that the drillback icon is displayed, add a comment, and click **Share**.



6 In the Infor Ming.le feed, find the message that contains the drillback icon, and click the drillback to verify that it is working.



Chapter 9: Configuring applications to send and receive BODs in ION

This section describes how integrations between this application and other applications use ION to send and receive BODs, and how to set up or modify document flows between applications. For details about a specific integration, see the appropriate integration guide.

Tasks performed by the Infor Cloud team

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

The team pre-configured some initial replication rules, as well as logical IDs, tenants, and accounting entities (sites) in CloudSuite Industrial:

- The team set up a logical intranet called InforESB in CloudSuite Industrial. This intranet is used for ION communications. If the same tenant ID is used for all sites on this intranet, the Infor Cloud team specified in the Intranets form. The tenant ID specified for each site on the **Sites/Entities** form matches the tenant ID used in ION for other connecting products.
- On the **Sites/Entities** form in CloudSuite Industrial, the team set up a record for a logical "site" called InforBUS that is used for communication with ION, as well as records for the other sites in your system.
- On the **Replication Rules** form, the team set up replication rules for category ESB where each of your sites is the Source Site and the InforBUS site is the Target Site.

In ION Desk, the Infor Cloud team preconfigured some connection points and document flows:

- The team set up connection points for all CloudSuite Industrial sites, Infor Ming.le, Infor Document Management and provided the list of documents that can be sent and received by these connection points.
- If your CloudSuite includes Infor CRM, Infor EAM, or Infor Expense Management, the Cloud team set up connection points for these applications, and might (or might not) have set up the list of documents for those connection points.
- The team configured and activated a document flow between CloudSuite Industrial and Infor Ming.le to pass user account and role (group) information.

- The team set up and activated a Listener for Infor Ming.le, which automatically forwards all BODs for specified verbs to Infor Ming.le. It is used to view drillbacks from CloudSuite Industrial in Infor Ming.le. See the *Infor ION Desk User Guide - Cloud Edition* for information about message listeners.

Tasks performed during Post Provisioning

If your CloudSuite includes the optional CRM, EAM, or XM applications, the Post provisioning steps on page 18 completed and activated the document flows, and added any needed BODs to the connection points for these applications.

These tasks were performed by Infor Consulting Services, a Business Partner, or an administrator at your company.

How products connect to ION

The Infor Cloud team set up connection points in ION Desk for each of your Infor cloud applications (and CloudSuite Industrial sites) that use ION. You cannot modify these connection points, but you can add to the list of documents that can be sent or received by the connection point.

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. 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.

If you remove from a connection point a document that is used in a document flow, an error is reported in the document flow messages pane.

Connection points are not activated separately. When you activate a document flow, the associated connection points are activated.

Integrating to BOD-enabled applications that are not in the CloudSuite

Documents and document flows for CloudSuite Industrial, Infor Ming.le, IDM, and optional applications in the CloudSuite (CRM, EAM and Infor Expense Management) were set up as part of the Infor Cloud team provisioning or the Post provisioning steps on page 18.

Draft Comments Add d/EPM to the list of optional applications above when the integration is released.

Optionally, if you want to send and receive BODs to or from another BOD-enabled application that is not part of the CloudSuite, follow these general steps. See the *Infor ION Desk User Guide - Cloud Edition* for detailed information.

Note: If you have an Infor consultant working with you, the consultant might handle these steps.

1. If an integration guide exists between the applications, refer to that guide instead of these steps.
2. Create a connection point for the other application. You must know the application connection information and have the appropriate utilities to connect to Infor ION from the other application if it is not in the Infor Cloud. If the other application is in the Infor Cloud, the Infor Cloud team must add the connection point for you.
3. In the **Documents** tab of the connection points, include the BODs that can flow to and from the applications.
   - See Outbound BODs from the ERP to integrated applications on page 153. Select **Send from Application** for each of these BODs.
   - See Inbound BODs to the ERP from integrated applications on page 156. Select **Receive in Application** for each of these BODs.
4. Optionally, you can also add custom document types. See the *Infor ION Desk User Guide - Cloud Edition*.
5. Define a new document flow that includes connection points for both CloudSuite Industrial and the other application.
6. Define the documents that flow between the applications, and the direction that they flow.
7. Save the document flow.
8. Activate the document flow.

Publishing BODs

This section provides a general description of how to publish, or generate, BODs from CloudSuite Industrial, and how to verify that data is flowing out of your application into ION.

For the steps to publish BODs for a specific integration, see the appropriate integration guide.

When you publish BODs in CloudSuite Industrial, they are placed in the **Replication Document Outbox**, where ION can retrieve them. The published BODs are then available to any application that subscribes to the BODs through ION. Products can subscribe to BODs either through a document flow or through a listener.

Publishing initial data

During normal processing, BODs are automatically generated (published) when a user makes a data change or completes a transaction. However, when you start a new integration with another application, you must manually publish BODs that pass the current set of data from your application to another

application, so that the base systems are synchronized. The BODs are placed in the **Replication Document Outbox**, from which ION retrieves them and passes them to the other application.

To publish initial ERP master and transaction data into BODs that are placed in the **Replication Document Outbox**:

1. In CloudSuite Industrial, open the **Replication Document Manual Request Utility**.
2. Select **Initial Load** so that the data is processed as an insert, that is, as new data.
3. Select the BODs to include in the data load. The BODs you select are different for each integration. See the appropriate integration guide for the BODs to load.

   Note: If you select multiple process BODs at one time, the BODs are processed in alphabetical order. However, you must load certain BODs in a specific order, to prevent errors in the integration due to missing data. See BOD dependencies on page 112.
4. Click **Process** to process the selected BODs.
5. Continue to select and process BODs until all of the BODs are processed that are required for a specific integration.
6. Repeat this process at each CloudSuite Industrial site.

When you use this utility to publish BOD data, the current date is used for all Status/EffectiveDateTime elements.

After the initial data load, CloudSuite Industrial automatically publishes BODs whenever users change certain data or when certain transactions occur in CloudSuite Industrial. For a list of the events that generate BODs, see Business events that generate outbound BODs on page 142.

BOD dependencies

Be aware that you must load these BODs in this order to prevent errors in the integration due to missing data:

- CodeDefinition
- ItemMaster
- Location
- CustomerPartyMaster
- BillToPartyMaster
- ShipToPartyMaster
- SalesOrder
- Shipment
- Invoice

Turning off BOD replication to reduce traffic

Draft Comments This is the Cloud version of this topic.

CloudSuite Industrial can generate hundreds of BODs per day. By default, a BOD is generated whenever the BOD trigger occurs. For example, a BOD is generated every time a user creates a new customer order, or every time an invoice is created.

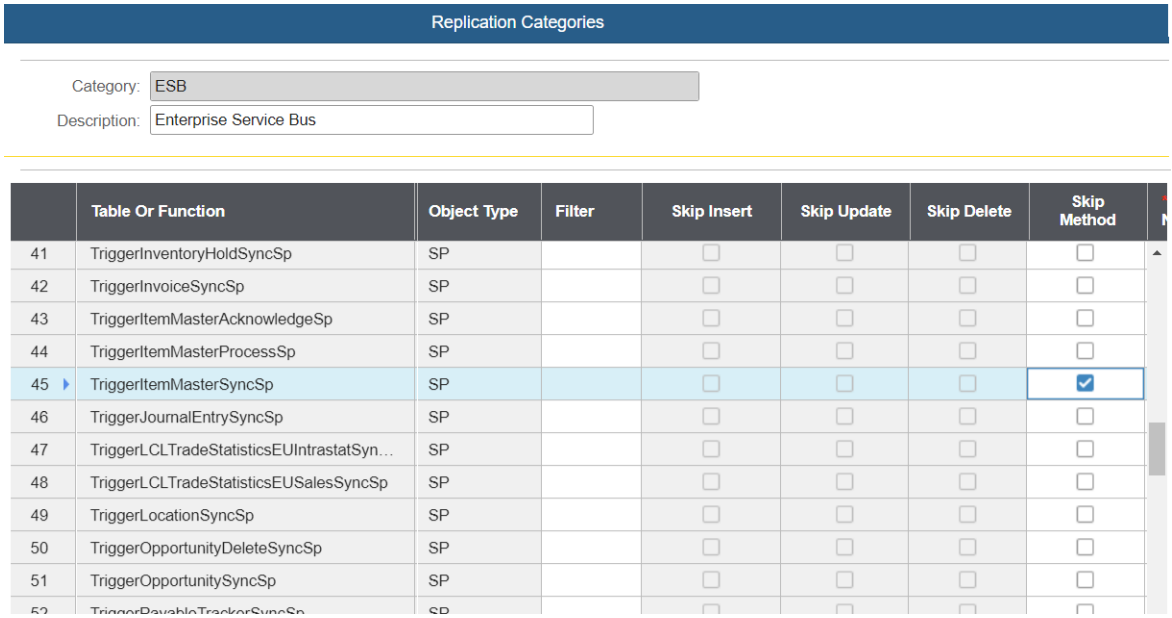
Unless you have integrations set up where other applications will receive the BODs, there is no need to generate most of the BODs. Use these steps to stop publishing all unnecessary BODs.

1 Open the **Replication Categories** form.

2 Specify **`ESB`** as the Category and click the filter.

3 To stop publishing a BOD, update its **`Trigger*`** record in the ESB replication category. Select the appropriate **Skip Method** check box.

This example shows how to turn off the Sync.ItemMaster BOD:



4 We suggest that you turn off all of the triggers except these:

- FlushBusCacheForSiteSp
- FlushBusParmsForSiteSp
- SendEntireBodSp
- TriggerBODConfirmSp
- TriggerPulseNotificationSyncSp
- TriggerSecurityPermissionMasterSyncSp
- TriggerSecurityRoleMasterSyncSp
- TriggerSecurityUserMasterAcknowledgeSp
- TriggerSecurityUserMasterProcessSp
- TriggerSecurityUserMasterSyncSp

Note: This list assumes that CloudSuite Industrial is only integrating with Infor Ming.le. If you are integrating with other applications via BODs, you must turn on the triggers for the required BODs when you integrate with the other applications. See the appropriate integration guide for the list of outbound BODs.

5 Save your changes.

Verifying the ION configuration

Use these tasks to verify that the connections are set up correctly.

Verifying that BODs are published

1. Use the information in Business events that generate outbound BODs on page 142 to determine what user actions generate certain BODs.
2. Perform those user actions in CloudSuite Industrial.

   For example, information from the **Vendors** form is replicated through the SyncSupplierPartyMaster BOD, so you could change the vendor address and save your change.
3. Check the **Replication Document Outbox** form in CloudSuite Industrial to see if a BOD was generated and marked as processed.

   In our example, the SyncSupplierPartyMaster BOD is generated.

   Depending on settings, the BODs might be removed immediately from the outbox after ION retrieves them. In that case, you can check ION Desk OneView to verify whether the BOD was sent and processed.
4. In ION Desk, review the messages by using ION Desk OneView or other ION Desk functions.

   If messages are not displayed in ION Desk, check the CloudSuite Industrial **Replication Document Outbox** form to see if the BODs were generated but not retrieved by ION.
5. 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 CloudSuite Industrial, monitor these areas in 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 140.

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 systems. See the other application's documentation to determine how to find the message inbox.

Chapter 10: Configuring workflows and ION messages for the ERP

You can configure workflows and ION messages for your application.

Draft Comments When the CSI content is approved (RS 8246), add this sentence: Example workflows are provided.

ION messages

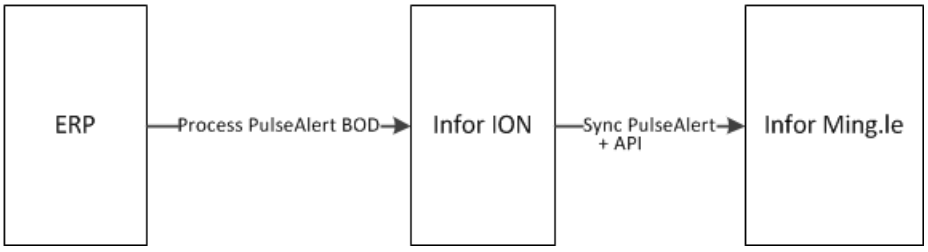
This table shows the types of ION messages:

Type	Description
Alert	In ION Event Management, you can monitor business events and create alerts when exceptions occur. BODs are published by applications when business events occur. Monitors are processes that run in the Event Management engine and evaluate these BODs by applying pre-defined business rules: comparison conditions, value change conditions, and document overdue timer based rules. When exceptions are detected, these are reported as alerts to the business users. The distribution list of alerts is included in the monitor definition. Users can receive alerts on their homepages or by email.
Task	A task is a workflow step that creates an entry in a user's task list. The workflow stops until the user has completed this task, and then the next step in the workflow begins.
Notification	A notification is a workflow step that creates a notification in the user's task list. The workflow continues after the notification is sent to a user. You can configure notifications to perform these actions: • Send a message to inform the user that a certain point in the work-flow has been reached. • Optionally, include notes from previous steps. • Display workflow parameters and structures. A distribution list can be defined for notifications.

Type	Description
Alarm	The ION Alarms mobile application for Android devices is available to create monitors, called alarms. 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 *Infor ION Alarms Mobile Application User Guide*. The users receive the alert on their Infor Ming.le page, in the Infor Ming.le mobile application, or by email.

About alerts sent from the ERP to Infor Ming.le

CloudSuite Industrial can send PulseAlert BODs to ION that can be displayed as alerts in Infor Ming.le, as shown in this process flow:



A Process PulseAlert BOD is generated when a business event associated with one of these publications occurs in CloudSuite Industrial:

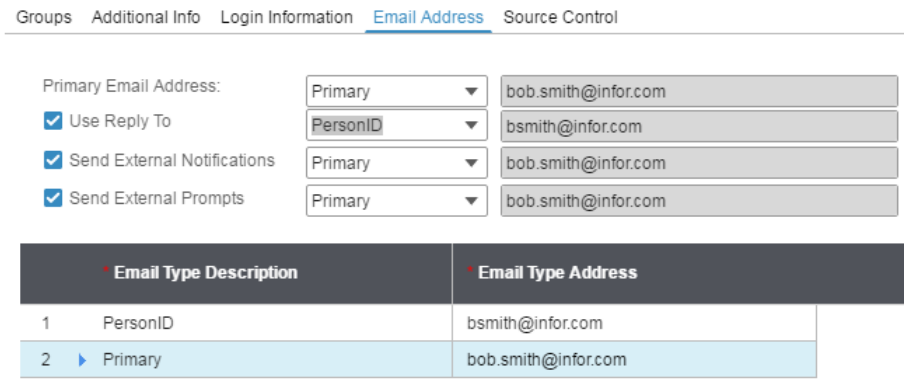
Publication	Description	Where defined
CustomerCreditHoldAlert	A customer was put on credit hold	Event: IdoOnItemUpdate, Seq 15
CustomerInteractionFollowUpAlert	A follow-up is needed to a customer interaction. Key Value 1 defines the customer number.	Event: CustomerInteractionFollowupAlert, Seq 1
CustomerOrderCreditHoldAlert	A customer order was put on credit hold	Event: IdoOnItemUpdate, Seq 16
CustomerShipmentAlert	An order was shipped to a customer (for specific orders/customers)	Event: IdoOnItemUpdate, Seq 17

Publication	Description	Where defined
DCShopFloorTransactionErrorAlert	A specified number of Data Collection shop floor transaction errors occurred. Key Value 1 defines how any errors must be generated before the user receives an alert	Trigger on dcsfc_mstIup
JobMaterialCostAlert	The quantity issued against a job is more than required and the total material cost (actual) of the job exceeds the required cost by a certain percent (tolerance) set by the user	Trigger on jobmatl_mstIup
JobOperationHoursAlert	Labor hours for a job were more than estimated	Trigger on jobroute_mstIup
JobOverProductionAlert	The completed quantity of a job is greater than the released quantity	Trigger on job_mstIup
JobProjectedLateForCustomerAlert	A job is projected to be late for a specified customer. Key Value 1 is the customer number.	Trigger on job_sch_mstIup
LateOrderShippingAlert	At least one open order line for a customer has a due date prior to the current date. Key Value 1 is the customer number	Event: LateOrderShippingAlert, Seq 1
LeadAssignedAlert	A lead is assigned to a salesperson	Event: IdoOnItemUpdate, Seq 19
LockedUserAlert	A user is locked out	Trigger on UserNamesIup
OpportunityDueAlert	An opportunity is due	Event: OpportunityDueAlert, Seq 1
OverBudgetAlert	The specified account's actual amount is above budget for the current fiscal period. Key Value 1 is the account number, and Key Value 2 is the percentage over budget that triggers an alert	Event: OverBudgetAlert, Seq 1
ProjectedLateShipAlert	An order line is projected to ship late. Key Value 1 is the customer number.	Event: IdoOnItemUpdate, Seq 18
ProspectInteractionFollowUpAlert	A follow-up is needed with a prospect. Key Value 1 is the prospect ID.	Event: ProspectInteractionFollowUpAlert, Seq 1

Publication	Description	Where defined
ScheduledMaintenanceAddedAlert	A scheduled maintenance task is added for a resource. This alert is used only with the Molding Industry Pack.	Trigger on MO_resource_maint_mstIup
ScheduledMaintenanceAlert	A scheduled maintenance task has been changed from Planned to Scheduled for a resource. This alert is used only with the Molding Industry Pack.	Event: ResourceMaintenanceScheduleUpdateStatus, Seq 1
TransactionAmountAlert	The amount of a transaction for a specified account is over the specified amount. Key Value 1 is the account number. Key Value 2 is the amount to which transactions should be limited.	Event: TransactionAmountAlert, Seq 1

CloudSuite Industrial users can subscribe to the appropriate publications. Then, when an alert occurs and a BOD is generated, the email addresses for all subscribers are included in the BOD.

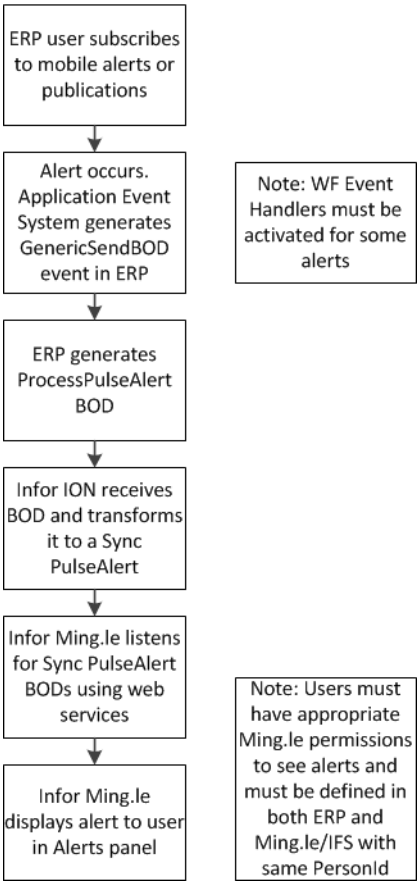
The email address that is used in the BOD is determined by the **Email Type Description** field on the **Users** form. If an address is specified where the **Email Type Description** is set to PersonID, then the email address that is associated with the PersonID type is used. If no PersonID type is found, then the address in the **Primary Email Address** field is used, as shown in this example:



If neither of these areas are populated, then a BOD is not sent.

ION attempts to match the email address from the BOD with a PersonID or primary email address that is defined for a user in Infor Ming.le, so that it can pass along the alert. If a matching address is found, and if the user has the appropriate Infor Ming.le permissions, the alert is displayed on the user's Alerts panel in Infor Ming.le.

This is the general process flow:



Configuring monitors for alerts

1 Configure CloudSuite Industrial to send alerts.

   a In the **Process Defaults** form, set **ION Pulse Interface** to `1`.

   b For publications (alerts) that have associated event handler sequences, activate the sequences so that the BOD will be sent when the events fire. In the **Workflow Event Handler Activation** form, select the appropriate event and sequence, and select **Active for this Site**.

   See the list of publications and their associated event handler sequences in About alerts sent from the ERP to Infor Ming.le on page 116.

   c CloudSuite Industrial users must subscribe to the appropriate publications (alerts) from the list above, through either the **Mobile Alerts** form or the **Publication Subscribers** form.

   d Set up CloudSuite Industrial users with either a PersonID email address or a primary email address, or both. In the **Email Addresses** tab on the **Users** form, add a record to the grid where **Email Type Description** is set to **`PersonID`** and an email address is assigned. You can optionally set the **Primary Email Address** to another email address for the user.

   See Person IDs on page 137.

2 Configure ION to process alerts from this application.

Ensure that the Process PulseAlert BOD is included in the list of BODs that can be sent from the CloudSuite Industrial connection point.

a In ION Desk, select **Connect > Connection Points**.

b Select the Infor Ming.le connection point and add Process.PulseAlert in the **Documents** tab if it does not exist.

Through an internal API, ION passes the alert to Infor Ming.le as a Sync.PulseAlert BOD. See the *Infor ION Desk User Guide*.

3 Configure Infor Ming.le to display alerts for this application.

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*.

In addition, the value in the Infor Ming.le/IFS **Person ID** field must match the **Workstation/Domain ID** field for the same user in CloudSuite Industrial, and the**User Name** field in Infor Ming.le must match either the PersonId email address or Primary email address for the same user in CloudSuite Industrial. This is handled automatically if you set up users first in Infor Ming.le/IFS and then use SecurityUserMaster BODs to populate the user records in CloudSuite Industrial, as described in User and role BOD usage on page 137.

Configuring workflows for tasks and notifications

See the *Infor ION Desk User Guide* for detailed instructions on some of these steps.

1 Configure this application to send tasks and notifications.

2 Configure ION to process tasks and notifications from this application.

3 Configure Infor Ming.le to display tasks and notifications for this application.

Chapter 11: Configuring context apps and utility apps that are used with the ERP

On the right side of the Infor Ming.le page is a collapsible panel that hosts a series of Infor Ming.le context and utility applications. These are mini applications that provide information at a glance.

Context apps subscribe to information published by the application frame and display relevant content only when it is available. The information in the applications is context-sensitive, which means that the values or content in the app depend on the current context (form or field) that is shown in the CloudSuite Industrial application panel in Infor Ming.le.

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

Understanding business context messages

A business context message is a JSON message that is sent from a CloudSuite Industrial screen, field or other user interface object for the purpose of establishing the current context. These messages can be used for many contextual purposes within Infor Ming.le, as well as for drillbacks.

Business context messages are used with these context-sensitive apps when a certain CloudSuite Industrial form is displayed:

- Determines the metrics and reports to display in the In-Context BI context app
- Determines which critical numbers to display in the Critical Numbers context app
- Determines which related files from IDM to display in the Related Information context app

For more information about the available in-context metrics and reports,critical numbers, or context-sensitive IDM documents, see the *Infor CloudSuite Industrial User Guide for Infor Operating Service*.

To find the business context message that is sent by a specific object, use the Context Viewer application. See the Infor Ming.le online help or user guide.

Process default settings that allow context messages to be sent

In CloudSuite Industrial, these options are set on the **Process Defaults** form:

- **Send Context Message on Form Focus** enables sending of business context messages for forms. Default is `0` (not sent), but it is automatically set to `1` for CloudSuite Industrial through initialized data. When set to `1`, the context message "screenId": "MGCore_*Formname*" is sent for all forms, where *Formname* is the form name, for example, “screenId”: “MGCore_UsersMaint”.
  Note: This process default is set to `1` so that CloudSuite Industrial context apps work in Infor Ming.le.
- **Optional Context Message Form Prefix** replaces the MGCore default prefix on all forms with a specified prefix. For CloudSuite Industrial, the prefix is set to CSI_. So, for example, the Customers form is sent as CSI_Customers.

Supported business context messages

Business context messages contain sets of contextual information called entities, which include information similar to that of Infor BODs. CloudSuite Industrial can pass information about multiple entities in one business context message.

When each CloudSuite Industrial form is displayed, a script runs that passes standard metadata in a JSON message. The standard metadata includes the screen ID of the form and the logical ID of the CloudSuite Industrial application. However, the message can contain additional context-sensitive metadata that is specific to the form and current record.

This example shows an inforBusinessContext context message that was sent from the **Customers** form:

```
{"type":"inforBusinessContext","data":{"screenId":"CSI_Customers","enti▶
ties":[{"entityType":"InforAccountingEntity","id1":"DALS"},{"entity▶
Type":"InforShipToPartyMaster","id1":"4851","id2":"0","accountingEnti▶
ty":"DALS","drillbackURL":"?LogicalId=lid://infor.syteline.dals&page=for▶
monly&form=Customers(FILTER(CustNum%3D%27%20%20%20%2013%27%20AND%20Cust▶
Seq%3D0)SETVARVALUES(InitialCommand%3DRefresh))","bodRefer▶
ence":{"noun":"BillToPartyMaster","documentId":"4851","accountingEnti▶
ty":"DALS","logicalId":"lid://infor.syteline.dals"}},{"entityType":"Infor▶
CustomerPartyMaster","id1":"4851","name":"Brand Central Dept Store","ac▶
countingEntity":"DALS"}]}}
```

The message informs context apps that the **Customers** form is currently displaying a record for the Brand Central Dept Store, which has the customer ID 4851 and the Ship To address ID 0, in the accounting entity DALS. The message contains one or more business entities, or collections of information, associated with the current record. The entity information can include a relative URL that can be used to drill back into the application and display the form and record. It also can include a BOD reference that maps from the current entity in the user interface to a corresponding BOD noun.

Any context apps that are associated with CloudSuite Industrial receive all of the information in this message. Each context app searches its data to determine whether it has contextual information to display that is related to information in this message.

For example, the In-Context BI (ICBI) context app uses the screen ID of CSI_Customers and the customer ID 4851 to determine that it should display an Accounts Receivable Aging report for Brand Central Dept Store. The Related Information context app uses the entity type, or context, and its parameters from the message to determine if there are any documents related to that context in its database. If so, the documents are listed in the app and can be opened. If you drag and drop files into the Related Information app pane while this form and record are displayed in CloudSuite Industrial, the files are automatically linked in Infor Document Management to each of the entity types (contexts) listed in the context message.

Context and utility apps that work with the ERP

These standard context and utility apps are available for use with CloudSuite Industrial. For information about how to use the standard apps, see the Infor Ming.le online help or user guide.

- Alerts
- Context Viewer
- Paparazzi
- Posts
- Tasks

These application-specific context apps are also available:

- Critical Number context app

  Critical numbers are key performance indicators, or KPIs, that are specific to CloudSuite Industrial data and transactions. Users must be authorized to view critical numbers, which are associated with certain CloudSuite Industrial forms. See Authorizing users to display critical numbers in widgets or the Critical Numbers app on page 124.

- In-context BI for CloudSuite context app

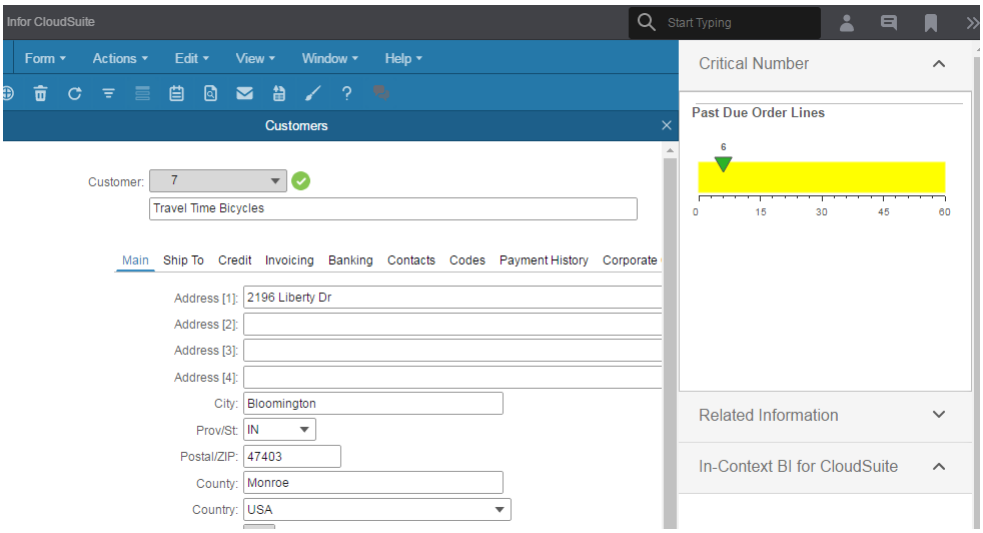
  Use this app to view business critical metrics and reports in an adjacent pane while certain forms are displayed. For example, when you are viewing a customer record on the **Customers** form, you can see metrics specific to that customer.

- Related Information

  This app can display context-sensitive files that are stored in Infor Document Management but that are associated with specific CloudSuite records. You can set up workflows in CloudSuite Industrial to handle this. See Activating the IDM workflows in the ERP on page 71.

For information about how to use the application-specific apps, see the *Infor CloudSuite Industrial User Guide for Infor Operating Service*.

All of the apps are initially disabled. When the apps are enabled for CloudSuite Industrial, their content is displayed in small app panes to the right of your application.



Enabling a context or utility app for the ERP

To enable one or more of the context or utility apps to work with CloudSuite Industrial:

1. From the User Menu, select **Admin Settings**.
2. In the **Manage Applications** tab, double-click to select your application.
3. In the **Manage Context/Utility Apps** tab, select the app that you want to enable.
4. in the **Permissions** tab for that app, either select **Grant access to all users** or click **Add new users and/or IFS security roles** to specify certain users or roles in CloudSuite Industrial that can access this context app.
5. In the **Applications** tab for that app, select your application and enable it for the app.
6. Save your changes.

In order to see the changes, you might need to sign out of the application and Infor Ming.le. Close your browser and reopen it.

Authorizing users to display critical numbers in widgets or the Critical Numbers app

To enable users to view and select critical numbers for display in widgets, home pages or the Critical Numbers context app, you must set up the appropriate authorizations in CloudSuite Industrial.

1. Enable the Critical Numbers context app as described in Enabling a context or utility app for the ERP on page 124
2. In CloudSuite Industrial, open the **Critical Number Users** form.
3. Select a user record.

4 On the **Categories** tab, specify user authorizations for a critical number category, or on the **Permissions** tab, specify user authorizations for specific critical numbers.
5 Save your changes.
6 Ask the user to log out of CloudSuite Industrial and then log in again, so the changes can take effect.
7 Verify that users can view critical numbers that they are authorized to view in the Critical Numbers context app.

How critical numbers are displayed in the Critical Numbers app

When the user opens a CloudSuite Industrial form in the Infor Ming.le portal, the form sends a JSON inforBusinessContext message that includes its entity type. The entity type is the BOD sent when the content of the form is update. For example, the Customers form has the entity type InforCustomerPartyMaster.

These actions are taken when the business context message is received:

- Check the entity type in the business context message and find the related category of forms.
- Determine which critical numbers (if any) the user has selected within that category on the User Critical Number Selection form.
- Determine how many instances of the Critical Number app the user has created in Infor OS.
- Load the selected critical numbers into multiple instances of the **Display Critical Number** form. Each instance is displayed in a Critical Number pane.

The sequence of the critical number determines which critical numbers are shown. For example, if the user selected five critical numbers for a category, but only added three instances of the Critical Number app, then only the first three (sequential) critical numbers are displayed.

Chapter 12: Verifying Homepages for the ERP

Homepages are a flexible and configurable way to present information and activities to users. Administrators can build pages for various groups of users, roles, departments, or business functions. You can select from the library of available Infor widgets or build your own.

The predefined Homepages and widgets for CloudSuite Industrial were imported automatically when the application was added to Infor Ming.le.

In this section, you will verify that they are working for your users.

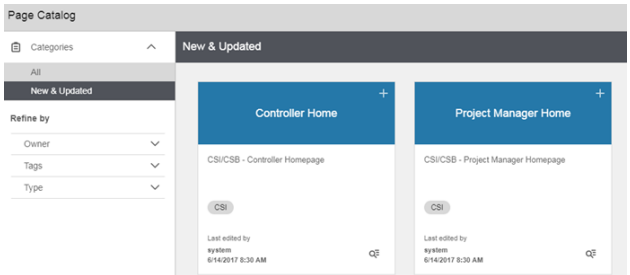
For general Homepages administration tasks, see the Infor Ming.le online help.

For information about using the homepages and widgets, see the *Infor CloudSuite Industrial User Guide for Infor Operating Service.*

Verifying the homepage and widget content

1. Log into Infor Ming.le as a non-administrative user who has access to both Infor Ming.le and CloudSuite Industrial.
2. Open the Homepages application.
3. Add a Homepage:
   a. Click **Create New Page**.
   b. Specify a title and description for the page and click **Create**.
   c. Click the ellipsis (**...**) button and select **Page Catalog**.
   d. Select one of the predefined Homepages and click **Add Page**.

   You must be authorized in CloudSuite Industrial to open that “home page” form.



   These are the groups/roles associated with each home page:

Homepage name	Security role/group
Buyer Home	Purchasing
Controller Home	Mobile Controller
Customer Service Home	Order Entry
Executive Home	Mobile Executive
Inventory Control Home	Inventory
Production Planner Home	Shop Floor Control
Project Manager Home	Projects
Salesperson Home	Order Entry

e Close the catalog to view your new Homepage.

4 Add a widget:

a Click the ellipsis (**...**) button and select **Widget Catalog**.
b Select **Categories > Application**.
c In the **Refine By** filter, select **`Infor CloudSuite`**. You should see the CloudSuite Industrial widget.
d Click **+** (Add Widget).
e Close the catalog to view your new widget.
f Configure the widget.

5 Add a critical numbers widget, and configure it. Ensure that you can view critical numbers that you are authorized to view in this widget.

You must be authorized in CloudSuite Industrial to view the critical numbers.

6 Drill down to CloudSuite Industrial forms from the appropriate widgets.

Modifying permissions for standard pages

The CloudSuite Industrial Home pages are included in the Standard Pages tab.

If you want only a specific group of users to access the standard page, you can restrict the standard page to a security role in Infor Ming.le.

To view or change the permissions that are assigned to a page:

1 Open the Homepages application.
2 Click the ellipses (…) button and select **Advanced > Administration**.
3 On the **Standard Pages** tab, select the home page you want to edit.
4 Select **Actions > Edit Permissions**.

Note: Permissions can be set at the group, role or user level.

Chapter 13: Configuring BI and Analytics content for the ERP

Draft Comments Update with Birst info when available.

To configure BI and Analytics content for the ERP, you must complete these tasks:

- Configure access to BI.
- Configure In-Context BI content.
- Configure BI Dashboards.
- Configure BI widgets and homepages.
- Configure BI reports.

See the Infor BI documentation for information about performing the steps in the last three bullets.

Configuring access to BI

In order to use Analytics features such as In-Context BI or Analytics widgets and homepages in Infor Ming.le, you must set up roles and permissions in both Infor Ming.le and Analytics.

Setting up roles and permissions in Analytics

See the *Infor CloudSuite Industrial Analytics MT Cloud User Guide* and the Infor BI documentation.

Setting up roles and permissions for Analytics products in Infor Ming.le

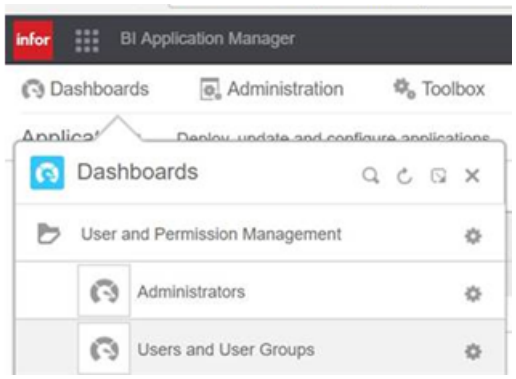
See the Infor Ming.le online help or user guide for information about how to set up roles and associate them with an application.

Configuring In-Context BI content

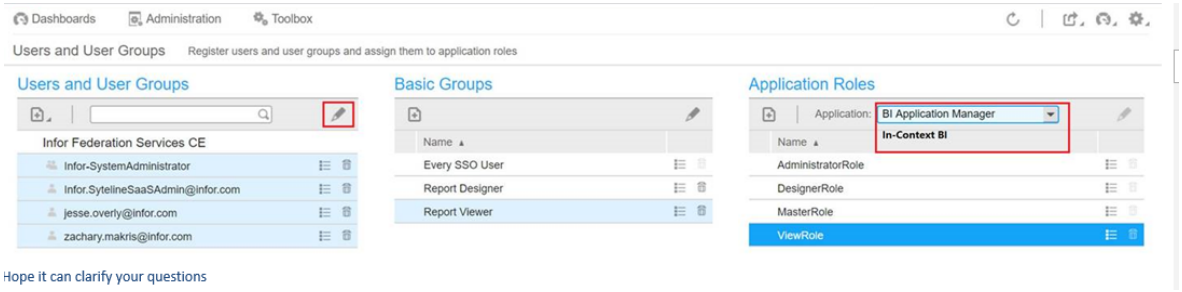
You can display CloudSuite Industrial In-Context BI metrics and reports in Infor Ming.le. To display the metrics and reports with the appropriate forms:

1 Enable the In-Context BI for CloudSuite Industrial context app and set up authorizations for it.
See Enabling a context or utility app for the ERP on page 124.

2 In Analytics, add all CloudSuite Industrial users, as defined in Infor Ming.le (IFS), to the ReportViewer group:
   a From Infor Ming.le, open the BI Application Manager.
   b Click **Dashboards** and select **User and Permission Management > User and User Groups**.



   c If the In-Context BI context app has been enabled, it is listed in the **Application** field. Select **In-Context BI** and select **ViewRole**.



   d Click the edit icon on the left to select the users or user groups who should have view permissions for In-Context BI.

For information about using In-Context BI content for your application within Infor Ming.le, see the *Infor CloudSuite Industrial User Guide for Infor Operating Service*.

Chapter 14: Configuring and integrating optional applications in the CloudSuite

You must configure some optional products in the CloudSuite to work with the components of Infor OS (ION, Infor Ming.le, Infor Document Management, or BI).

Some products also require additional integration steps to work with the ERP.

Integrating with Infor CPQ

If Infor Configure Price Quote (Infor CPQ, formerly known as Product Configuration Management) is included in the CloudSuite, the Infor Cloud team adds the application to Infor Ming.le and configures the point-to-point connection to the ERP.

During post-provisioning, the configuration parameters were set up in the **Inventory Parameters** form, some sample ruleset data was added to Design Studio, and sample content was added to the Infor CPQ Workbench app. See Configuring CPQ on page 56.

To complete the integration between the ERP and Infor CPQ, see these documents:

- Setting Up a Configuration Interface for an Item or Job" in the ERP online help
- *Infor SyteLine Integration Guide for Infor Product Configuration Management*

Integrating with Infor CRM

Infor CRM is currently a hybrid integration; that is, CRM is either installed on-premises or in a single tenant cloud, and then communicates with ION through the Enterprise Connector.

1. To install the Enterprise Connector and set up the CRM connection point for ION in the Cloud, see these guides:
   - *Infor CRM Back Office Extension Configuration Guide for Infor ION*
   - *Infor CRM Implementation Guide*
2. If Infor CRM is included in the CloudSuite, you, Infor Consulting, or the business partner configure the BODs and document flow during Post Provisioning. See these sections:
   - Configuring BODs for the Infor CRM integration with Infor Ming.le on page 39

- Creating the CSI > CRM > CSI document flow on page 86

3 To complete the integration between CRM and the ERP, see the *Infor CloudSuite Industrial Integration Guide for Infor CRM - Cloud Edition*.

Integrating with Infor EAM

1 If EAM is included in the CloudSuite, you, Infor Consulting, or the business partner must configure the BODs and document flow during Post Provisioning. See these sections:
   - Configuring BODs for the Infor EAM connection point on page 85
   - Creating the CSI > EAM > CSI document flow on page 90
2 To set up additional EAM configuration with Infor Ming.le and ION, see these guides:
   - *Infor EAM Configuration Guide for Infor Ming.le*: See the sections on loading EAM in-context BI content and importing EAM drillbacks. Other sections are mainly intended for the on-premises version.
   - *Infor EAM Configuration Guide for Infor ION*: See the sections on Configuring Databridge Partners, Configuring EAM, Sending the initial data load, and Infor EAM BOD dependencies. Other sections are mainly intended for the on-premises version.
3 To complete the integration between EAM and the ERP, see the*Infor CloudSuite Industrial Integration Guide for Infor EAM – Cloud Edition*.

Integrating with Infor Expense Management

1 If Infor Expense Management is included in the CloudSuite, you, Infor Consulting, or the business partner must configure the BODs and document flow during Post Provisioning. See these sections:
   - Configuring BODs for the Infor Expense Management connection point on page 85
   - Creating the CSI > XM > CSI document flow on page 91
2 To set up additional Infor XM configuration with Infor Ming.le and ION, see these guides:
   - *Infor Expense Management Configuration Guide for Infor ION*
   - *Infor Expense Managementt Configuration Guide for Infor Ming.le*
3 To complete the integration between Infor XM and the ERP, see the *Infor CloudSuite Industrial Integration Guide for Infor Expense Management – Cloud Edition*.

Integrating with Infor Factory Track

If Infor Factory Track is included in the CloudSuite, the Infor Ming.le connection and the point-to-point connection to CloudSuite Industrial are configured by the Infor Cloud team. That team also creates one administrative user for Factory Track in Infor Ming.le and Factory Track.

1. Because Infor Ming.le is the system of record for users, you must set up users for each CloudSuite application in Infor Ming.le. Factory Track does not yet use BODs to coordinate user accounts with the accounts that are created in Infor Ming.le. Instead, you must manually link an Infor Ming.le account to a user in that application:
   a. In the Infor Ming.le Portal, open the User Management page.
   b. Create an Infor Ming.le user account.

      Note the Email address and IFS Person ID (GUID). The GUID is the link between the Infor Ming.le and Factory Track accounts that allows SSO/SLO to function correctly.
   c. In the Infor Ming.le Portal, open the Factory Track application.
   d. If needed, select the appropriate configuration
   e. Open the **Users** form.
   f. Create a user account with the same user name (email address) that was used in step b.
   g. Save your changes.
   h. Add the IFS Person ID from step b into the **Workstation Domain/ID** field.
   i. Set the required license modules for the user.
   j. Set the required groups (roles) for the user.
   k. Save your changes.
2. To complete the integration between Factory Track and CloudSuite Industrial, see the *Infor Factory Track for SL Implementation Guide*.

Integrating with Microsoft Office

Before using the integrated Office features with CloudSuite Industrial, users must download the plug-ins for Excel, Word, and Projects from the Infor Xtreme Download Center to their local devices. The Trust setting must be enabled for Excel.

See the *Infor CloudSuite Industrial MicrosoftOffice Integration User Guide*.

Configuring add-in applications

Add-in applications are built into the ERP application. However, some of the add-ins require additional configuration. See these documents:

Add-in module	Reference
APS	Help topic: “APS: Initial Setup Steps”
Automotive Industry Pack	Automotive Industry Pack help topics and user guide
Credit Card Interface module	*Infor CloudSuite Industrial Credit Card Interface Configuration Guide* Help topic: “Setting Up the Credit Card Interface”
Employee Self Service	Help topic: “Configuring Employee Self Service”
Forecasting	*Infor CloudSuite Industrial Forecasting User Guide*
Mobile	Help topic: “Setting Up Mobile Access”
Molding Industry Pack	Molding Industry Pack help topics and user guide
Portals	*Infor CloudSuite Industrial Portal Administration Guide - Cloud Edition*
Printing Industry Pack	Printing Industry Pack help topics and user guide
Process Industry Pack	Process user guide
Quality (QCS)	QCS help topics and user guide
Service	Help topic: “Setting up Service Parameters”
SytePlan	*Infor CloudSuite Industrial SytePlan Implementation and User Guide*
Tax System Interface	*Infor CloudSuite Industrial Tax System Interface Configuration Guide* Help topic: “Setting Up a Tax Interface”

Appendix A: Useful URLs

The Infor Cloud team provided you with working URLs to the products in your CloudSuite. These examples are provided for your convenience.

Standard URLs

Infor Ming.le Web:

`https://<Mingle_Prod_Domain>/<TenantID>`

Example: `https://mingle-portal.inforcloudsuite.com/TENANT_Dem`

Web Client:

`https://<App_Prod_Domain>/WSWebClientM/default.aspx?ConfigGroup=<ConfigGroupName>`

Example: `https://csi901.inforcloudsuite.com/WSWebClientM/default.aspx?ConfigGroup=TENANT_Dem`

Mobile Client:

`https://<App_Prod_Domain>/WSWebClientM/mobile.aspx?ConfigGroup=<ConfigGroupName>&page=formonly`

Example: `https://csi901.inforcloudsuite.com/WSWebClientM/mobile.aspx?ConfigGroup=TENANT_Dem &page=formonly`

IDO Web Service Connection:

`https://<App_Prod_Domain>/IDORequestService/IDOWebService.asmx?ConfigGroup=<ConfigGroupName>`

Example: `https://csi901.inforcloudsuite.com/IDORequestService/IDOWebService.asmx?ConfigGroup=TENANT_Dem`

ERP specific URLs

Click Once Client:

`https://<ERP_Prod_Domain>/slclientdeploy/syteline.application?ConfigGroup=<ConfigGroupName>`

Example: `https://csi901.inforcloudsuite.com/slclientdeploy/syteline.application?configgroup=TENANT_Dem`

Production Tax Interface Web Service:

`https://<ERP_Prod_Domain>/TaxIntegrationService/SSSAvataxSvc.asmx?ConfigGroup=<ConfigGroupName>`

Example: `https://csi901.inforcloudsuite.com/TaxIntegrationService/SSSAvataxSvc.asmx?ConfigGroup=TENANT_Dem`

Development Tax Interface Web Service:

`https://<ERP_Prod_Domain>/TaxIntegrationServiceDev/SSSAvataxSvc.asmx?ConfigGroup=<ConfigGroupName>`

Example: `https://csi901.inforcloudsuite.com/TaxIntegrationServiceDev/SSSAvataxSvc.asmx?ConfigGroup=TENANT_Dem`

Credit Card Interface Web Service:

`https://<ERP_Prod_Domain>/CreditCardIntegrationService/`

Example: `https://csi901.inforcloudsuite.com/CreditCardIntegrationService/`

Employee Self Service:

`https://<ERP_Prod_Domain>/WSWebClientM/default.aspx?page=FormOnly&notitile=1&ConfigGroup=<TENANTID>&form=EmployeeSelfServiceHome.ess`

Example: `https://csi901.inforcloudsuite.com/WSWebClientM/default.aspx?page=FormOnly&notitile=1&ConfigGroup=TENANT_Dem&form=EmployeeSelfServiceHome.ess`

Online Service Mobile:

`https://<CSI Prod Domain>/WSWebClientM/default.aspx?page=FormOnly&notitile=1&ConfigGroup=<TENANTID>&form=HomePage_Service.mobi`

Example: `https://csi901.inforcloudsuite.com/WSWebClientM/default.aspx?page=FormOnly&notitile=1&ConfigGroup=TENANT_DEM&form=HomePage_Service.mobi`

Factory Track standard URLs

Click Once Client:

`https://<FTK_Prod_Domain>/clientdeploy/factorytrack.application?ConfigGroup=<ConfigGroupName>`

Example: `https://ft601.inforcloudsuite.com/clientdeploy/factorytrack.application?ConfigGroup=TENANT_Dem`

Light Client:

`https://<FTK_Prod_Domain>/WSWebClientM/Default.aspx?page=light&form=ICWMMainMenu.mobi&ConfigGroup=<ConfigGroupName>`

Example: `https://ft601.inforcloudsuite.com/WSWebClientM/Default.aspx?page=light&form=ICWMMainMenu.mobi&ConfigGroup=TENANT_Dem`

Shop Floor URL:

`https://<FTK_Prod_Domain>/WSWebClientM/Default.aspx?page=formonly&form=ICSLWorkCenterNavigationHome.ts&&ConfigGroup=<ConfigGroupName>`

Example: `https://ft601.inforcloudsuite.com/WSWebClientM/Default.aspx?page=formonly&form=ICSLWorkCenterNavigationHome.ts&&ConfigGroup=TENANT_Dem`

Warehouse Mobility URL:

`https://<FTK_Prod_Domain>/WSWebClientM/Mobile.aspx?page=light&form=ICWMMainMenu.mobi&&ConfigGroup=<ConfigGroupName>`

Example: `https://ft601.inforcloudsuite.com/WSWebClientM/Mobile.aspx?page=light&form=ICWMMainMenu.mobi&&ConfigGroup=TENANT_Dem`

Appendix B: User and role BOD usage

This appendix provides detailed information about how the security BODs are used between CloudSuite Industrial and Infor Ming.le.

BODs that send roles (authorization groups) from the ERP to Infor Ming.le

Some roles from CloudSuite Industrial are preconfigured in Infor Ming.le when the application is added in Infor Ming.le.

When you create or edit an authorization group in CloudSuite Industrial, a Sync.SecurityRoleMaster BOD is generated. This BOD is defined at the tenant level. The information from this BOD is used in Infor Ming.le to automatically create a matching security role.

If you create a security role in Infor Ming.le that does not exist in CloudSuite Industrial, you must manually create a matching group in CloudSuite Industrial. Remember that CloudSuite Industrial is the system of record for roles/groups.

If you delete a role in either CloudSuite Industrial or Infor Ming.le, you must also delete the group or role in the other application.

Person IDs

Any CloudSuite Industrial users who plan to use Infor Ming.le or other Infor OS components must be set up as users in Infor Ming.le, and the user's Person ID must be synchronized between Infor Ming.le and CloudSuite Industrial.

Person IDs in Infor Ming.le

The user details page in Infor Ming.le includes an ERP Person ID tab. The ERP Person ID tab is populated if CloudSuite Industrial publishes the Sync Person BOD. The ERP Person ID is used as the

identifier of the user in the ERP application, and allows you to link the Infor Ming.le user to the ERP application user. The ERP Person ID tab shows all ERP person IDs that are associated with this Infor Ming.le user.

The IFS Person ID is used as the user identifier in ION, which then links the Infor Ming.le user with the ION BODs. By default, the IFS Person ID is set to the User Principal Name (UPN) of the user. UPN is an AD FS concept.

The IFS Globally Unique Identifier (GUID) is the same as the UPN.

Sending the Person ID from the ERP to Infor Ming.le

When certain information is manually added or updated in CloudSuite Industrial for a user, a Process.SecurityUserMaster BOD is published by CloudSuite Industrial.

The **Workstation/Domain ID** field on the **Users** form in CloudSuite Industrial contains the Person ID for a user. This value should not be changed. It is possible to update this value in CloudSuite Industrial and then manually publish the Process.SecurityUserMaster BOD to Infor Ming.le; however, Infor Ming.le is the system of record for user information, so you should only maintain the Person ID value In Infor Ming.le.

BODs that send user information from Infor Ming.le to the ERP

When you add a user in the Infor Ming.le portal, a SecurityUserMaster BOD is sent through ION to your application at the specified intervals, where a matching user record is created or updated. This BOD contains the user name, login, creation date, status, description, email address, and the roles, or groups, to which the user is assigned.

When CloudSuite Industrial receives the BOD, these actions occur:

- For a new user that does not exist in CloudSuite Industrial:
  - A new user record is added.
  - The **Workstation Domain/ID** field is populated with a row pointer value that should not be changed.
  - The group authorizations for that user are added.
  - A primary email type description is added that contains the user's email address.
  - The user's First Name and Last Name values from Infor Ming.le are combined into the CloudSuite Industrial User Description field, separated by a space.
- For an existing user in CloudSuite Industrial, if the existing user ID has not changed:
  - The existing user group authorizations are deleted.
  - The user status, user descriptions, primary email address, and user group authorizations are updated.

- For an existing user in CloudSuite Industrial, if the existing user ID has changed:
  - The record for the user with the matching Workstation Login is set to a status of disabled, and the Workstation Login for the user is cleared.
  - The **Workstation Domain/ID** field is populated with a row pointer value that should not be changed.
  - A new user record is created, copying the user information from the disabled record. Any existing user group authorizations in CloudSuite Industrial are deleted, and then the groups from the BOD are added. The status, email, and description are updated if they have changed.
  - An Acknowledge SecurityUserMaster BOD is sent back to Infor Ming.le.

BODs that send user information from the ERP to Infor Ming.le

When any of this information is manually added or updated in CloudSuite Industrial for a user, a Process.SecurityUserMaster BOD is published by CloudSuite Industrial:

- User login status
- User description: A value is required in this field if you are passing user information from CloudSuite Industrial to Infor Ming.le through the Process SecurityUserMaster BOD. The field must contain values separated by a space. The first value becomes the **First Name** in Infor Ming.le. Everything after the space becomes the **Last Name** in Infor Ming.le. For example, if the CloudSuite Industrial User Description is Tom Van Winkle, Tom is the First Name and Van Winkle is the Last Name in Infor Ming.le.
- Workstation login
- Primary email address: A value is required in this field if you are passing user information from CloudSuite Industrial to Infor Ming.le through the Process SecurityUserMaster BOD.
- Group authorizations

However, if the user information was changed in CloudSuite Industrial because of an incoming Sync.SecurityUserMaster BOD from Infor Ming.le, the Process.SecurityUserMaster BOD is not published.

CloudSuite Portals users

Draft Comments Issue 229711

If a new user is created in CloudSuite Industrial based on a request from the CloudSuite vendor or customer portals, the BOD is not sent to Infor Ming.le.

Appendix C: Troubleshooting

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

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.

ION OneView can be found in the menu for ION Desk. 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 while processing the message
  - Drilldown views that are used to display the appropriate management pages for the selected ION component
  - Visibility and correlation 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
  - View 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 application and integrated applications, correct any errors as soon possible.

BOD information needs to be purged

Information from every inbound BOD, including sequencing information, is collected in a table in the CloudSuite Industrial application. This data constantly builds up and, over time, could cause performance issues. For this reason, system administrators should periodically use the **Purge BOD Information** form to purge information from that table. You can set up a background task to perform this function automatically

You can also use the **Replication Document Inbox/Outbox Purge Utility** to clear out older BODs from the **Replication Document Inbox** and **Replication Document Outbox**.

ERP help is not working

Verify that the user's web browser has popup blockers turned off. Clear the browser cache, restart Infor Ming.le and try again.

Appendix D: Business events that generate outbound BODs

This table shows the events, which are user actions in CloudSuite Industrial that generate an outbound BOD from CloudSuite Industrial:

Verb	Noun	User action to generate the BOD
Process	AccountingBookDefinition	Run the Replication Document Manual Request Utility with AccountingBookDefinition selected. This should be done once per site.
Sync	AccountingChart	Run the Replication Document Manual Request Utility with AccountingChart selected. This should be done once per site, after the Chart of Accounts is set up at the site.
Sync	AccountingEntity	Run the Replication Document Manual Request Utility with AccountingEntity selected. This should be done once per site, after the tenant ID is set up at the site.
Process	AdvanceShipNotice	Ship the order, either manually with the **Transfer Order Ship** form, or automatically in response to a received Sync Shipment BOD.
Acknowledge	BillofMaterials	Acknowledge the receipt of a BillofMaterials from an external application.
Sync	BillofMaterials	Indicate that changes have been made in the application after receipt of a Process BillofMaterials from an external application
Acknowledge	BillToPartyMaster	Acknowledge the receipt of a BillToPartyMaster from an external application.
Sync	BillToPartyMaster	Change any information on the Customers form. Change any information on the Ship Tos form.
Sync	Calendar	Add or update a shift calendar in Scheduling Shifts. Add a holiday. This creates a BOD that indicates all resources are busy on that day.

Verb	Noun	User action to generate the BOD
Sync	CarrierRoute	Select the Physically Shipped check box on the Special tab of the Delivery Orders form.
Sync	ChartOfAccounts	Create or update an account record in the Chart of Accounts form. Statistical and allocation accounts are not included.
Acknowledge	CodeDefinition	Acknowledge the receipt of a CodeDefinition from an external application
Sync	CodeDefinition	* Add an Education Major * Add an External Expense Type * Add an Indirect Labor Code * Add an Inventory Adjustment Reason Code * Add or update an ISO U/M on the Unit of Measure Codes form * Add an Item Category * Add an Obsolete Slow Moving Reason Code * Add an Opportunity Source * Add an Opportunity Stage * Add a Payment Type * Add a Position * Add a Price Code * Add a Product Code * Add a Project Cost Code * Add a Province/State * Add a Shift ID on the Scheduling Shifts form * Add a Ship Via Code * Add a Skill * Add a Tax Code of type Exempt * Add a Tax Jurisdiction * Add a Territory * Add a Training Course * Add a unit code on the Unit Code 1 - 4 forms * Add a Work Code * Add a Work Experience BODS for some other codes, such as language IDs and cost methods, are automatically generated when the Replication Document Manual Request Utility is run.

Verb	Noun	User action to generate the BOD
Process	ConstrainedResource	Insert or modify a Shift ID (creates a BOD for associated resources)
Acknowledge	ContactMaster	Acknowledge the receipt of a ContactMaster from an external application
Sync	ContactMaster	* Add or change a Contact * Create a Customer Sales Contact Cross-Reference
Sync	Contract	* Add or update Customer Order header * Add or update Customer Order Blanket Line
Sync	CreditTransfer	Create a Bank Reconciliations record for a vendor payment, employee payment, or customer payment
Sync	CurrencyExchangeRateMaster	Add or update a Currency Rate
Acknowledge	CustomerPartyMaster	Acknowledge the receipt of a CustomerPartyMaster from an external application
Sync	CustomerPartyMaster	* Change any information on the Customers form, Ship Tos form, or Customer Sales Contact Cross References form * Add a prospect on the Prospects form to send this BOD with a status of “Pending”
Sync	CustomerReturn	* Print the RMA Order Verification Report * Change the status of an RMA
Sync	DebitTransfer	Post a direct debit transaction from a customer on the A/R Direct Debit Posting form.
Acknowledge	ExpenseReport	Acknowledge the receipt of an expense report.
Sync	FinancialCalendar	* Change any information on the Accounting Periods form * Run the change Reports To Entity utility

Verb	Noun	User action to generate the BOD
Sync	InventoryAdjustment	* Perform Quantity Adjustment * Perform Miscellaneous Receipt or Miscellaneous Issue * Perform Cycle Count Posting - one BOD is generated for each combination of item, warehouse, and location where the quantity on hand has changed * Perform Physical Inventory Posting - one BOD is generated for each combination of item, warehouse, and location where the quantity on hand has changed
Sync	InventoryCount	* Run the Cycle Count Posting utility * Run the Physical Inventory Posting utility One InventoryCount BOD is sent for each item/warehouse combination
Sync	Invoice	* Print and post an invoice through the Consolidated Invoicing form * Post an invoice through the Invoice Posting (A/R) form Note: The Invoice BOD publishes one line for every order line included in the Invoice. When Line Summarization is turned on in Consolidated Invoicing, the summary invoice lines are not published; instead, each customer order line will be published as a line in the Invoice BOD.
Acknowledge	ItemMaster	Acknowledge the receipt of a Process ItemMaster from an external application.
Sync	ItemMaster	* Create a new item on the Items form * Make a change to these fields on the Items form: Item, Description, ABC Code, Commodity, Cost Method, Material Status, Reason, Backflush, Last Change, U/M, Unit Cost, S/N Track, Lot Track, Source, Order Minimum, Order Maximum, Alternate Item * Add or change an item description on the Multi-Lingual Items form
Sync	LCLTradeStatistics	* Print EU Sales List Report * Print SSD Transaction Listing Report
Sync	Location	* Create a new Warehouse * Update General Parameters form (creates a Location BOD with the site as the location)

Verb	Noun	User action to generate the BOD
Sync	Opportunity	* Create or update a record on the Opportunities, Customer Orders, or Opportunity Tasks form
Sync	PayableTracker	* Post a voucher or an Adjustment through the A/P Voucher Posting form * Post a payment from any of these forms: A/P Check Printing/Posting, A/P Draft Printing/Posting, A/P EFT Posting, A/P Wire Posting
Sync	PayableTransaction	* Post a voucher through the A/P Voucher Posting form * Post a payment from any of these forms: A/P Check Printing/Posting, A/P Draft Printing/Posting, A/P EFT Posting, A/P Wire Posting * Set or release a Hold status on a voucher
Acknowledge	PayFromPartyMaster	Acknowledge the receipt of a PayFromPartyMaster from an external application
Sync	PayFromPartyMaster	* Change any information on the Customers form * Change any information on the Ship Tos form
Sync	Person	* Add or update information about a salesperson or sales manager on the Salespersons form * Update information related to a salesperson on the Employees form (for employee sales people) or Vendors form (for outside sales people)
Sync	Personnel	* Add or update information on these forms: Employee, Employee Skills, Employee Cert/License, Employee Education, Employee Training Courses, Employee Work Experience, or Employee Position
Acknowledge	PlanningSchedule	Acknowledge the receipt of a Planning Schedule from an external application.
Acknowledge	ProductionOrder	Acknowledge the receipt of a ProductionOrder from an external application

Verb	Noun	User action to generate the BOD
Sync	ProductionOrder	* Applied filters on the Background Task generate this BOD for a firm job that is scheduled for the first time. This does not apply to jobs that have just been processed by the TriggerProductionOrderBGSyncSp Background task. You can add subsequent filters to reduce the number of BODs triggered by this task. Without filtering, after every scheduling or planning function a significant number of BODs could be created. * Change the status of a job or production schedule. * Change the Qty Released of a job or production schedule when the status is Released. Notes: Creating a job generates this BOD, but changes to a firm job do not generate this BOD. This BOD must be included in an initial load of ProductionOrder data.
Sync	ProjectMaster	Create a Project or change the project status.
Process	PulseAlert	One or more of these publications is triggered by a system event: CustomerCreditHoldAlert; CustomerInteractionFollowupAlert CustomerOrderCreditHoldAlert; CustomerShipmentAlert; DCShopFloorTransactionErrorAlert; JobMaterialCostAlert; JobOperationHoursAlert; JobOverProductionAlert; JobProjectedLateForCustomerAlert; LateOrderShippingAlert;LeadAssignedAlert; LockedUserAlert; OpportunityDueAlert; OverBudgetAlert; ProjectedLateShipAlert; ProspectInteractionFollowupAlert; ScheduledMaintenanceAddedAlert; ScheduledMaintenanceAlert; TransactionAmountAlert
Sync	PurchaseOrder	* Print the Purchase Order Report * Print a Change Order Report
Acknowledge	Quote	* Print the Purchase Order Report * Print the Builder Purchase Order Report * Change the Purchase Order status to Complete * Print a Change Order Report
Sync	Quote	Acknowledge the receipt of a Quote from an external application.
Sync	ReceivableTracker	Change the Estimate status to Quoted

Verb	Noun	User action to generate the BOD
Sync	ReceivableTransaction	* Generate an invoice for customers with an 'Open Item' balance method. The status is set as Open. * Generate a debit memo/finance charge for customers with an 'Open Item' balance method. The status is set as Open. * Make a payment and apply it to an invoice for customers with an 'Open Items' balance method. The status changes to Paid. * Generate a credit memo and attach it to an invoice for customers with an 'Open Item' balance method. This changes the status to Paid. (For bullet points 2, 3, and 4: If all or part of the debit memo/finance charge, payment, or credit memo is left unapplied, a second BOD is generated. Similar transactions are grouped and shown under an invoice number '0' with a status of Unapplied Cash.)* Create an invoice, payment, credit memo, debit memo or finance charge transaction for a customer with a 'Balance Forward' balance method. The system maintains one balance under invoice number '0'. Its status is set as follows: for a debit balance, the status is set as Paid; for a credit balance, the status is set as UnappliedCash.
Sync	ReceiveDelivery	* Perform material transactions that add inventory tied to these types of orders: Project, Job, Customer Order (with a negative quantity), Purchase Order, RMA, Production Order or Transfer Order that cause a material transaction to occur * Run the Multi-Site Quantity Move utility
Sync	RemittanceAdvice	* Post a payment from any of these forms: A/P Check Printing/Posting, A/P Draft Printing/Posting, A/P EFT Posting, A/P Wire Posting, or Print/Post Payroll Checks
Sync	RemitToPartyMaster	* Add or update Vendor information * Update the vendor's address information * Update Bank Address information
Acknowledge	Requisition	Acknowledge receipt of a Requisition from an external application

Verb	Noun	User action to generate the BOD
Sync	Requisition	* Print the requisition on either the Purchase Requisition Report or the PO Requisition Report forms * Convert a requisition to a purchase order * Convert additional items on an existing requisition (in this case, another BOD is created, replacing the original BOD)
Acknowledge	SalesOrder	Acknowledge the receipt of a SalesOrder from an external application
Sync	SalesOrder	* Print the Customer Order Verification Report * Change order header status to Completed
Sync	SecurityPermissionMaster	Add, delete or change the objects that a group or user can access.
Sync	SecurityRoleMaster	Add or delete a Group Authorization or change the group description.
Acknowledge	SecurityUserMaster	Acknowledge the receipt of a SecurityUserMaster from an external application.
Process	SecurityUserMaster	Add or change the user status, user description or workstation login.
Sync	ServiceOrder	Add or update Service Order or Service Order Operations or Lines.
Sync	ShipFromPartyMaster	* Add or update Vendor information * Update the vendor's address information * Update Bank Address information
Process	Shipment	* For customer orders or lines that are assigned to the local site and that are assigned to an external controlled warehouse, print the **Order Verification Report**. * For transfer orders or lines where the Ship From site is the local site and the Ship From warehouse is an external controlled warehouse, print the **Transfer Order Report**.
Sync	Shipment	* Perform material transactions that remove inventory tied to these types of orders: Project, Job, Customer Order, Purchase Order (with a negative quantity), RMA, Production Order or Transfer Order * Run the Multi-Site Quantity Move utility

Verb	Noun	User action to generate the BOD
Acknowledge	ShipmentSchedule	Acknowledge the receipt of a ShipmentSchedule from an external application
Acknowledge	ShipToPartyMaster	Acknowledge the receipt of a ShipToPartyMaster from an external application
Sync	ShipToPartyMaster	* Change any information on the Customers form, Ship Tos form, or Customer Sales Contact Cross References form
Sync	SourceSystemGLMovement	* Run the Change Reports To Entity utility * Run the Copy Balances to Budgets utility * Modify Chart of Accounts Budget and Plan information * Run the Rebalance Ledger Period Totals utility * Run Ledger Posting for Journals * Run the Mass Journal Posting utility
Sync	SourceSystemJournalEntry	* Post journal entries to a ledger
Sync	SupplierPartyMaster	* Add or update Vendor information * Update the vendor's address information * Update Bank Address information
Sync	Transfer	* Perform a Transfer Order Ship * Perform a Transfer Order Receive * Perform a Combined Transfer Order Ship/Receive
Sync	WorkCenter	Add a Work Center

Appendix E: Inbound BOD usage

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

Verb	Noun	Destination of processed data in CloudSuite Industrial
Load	BankStatement	Bank Statements form, and A/P automatic payments generated
Process	BillOfMaterials	Engineering Workbench, Current Operations, Engineering Board
Process	BillToPartyMaster	Customers form and related forms
Sync	CaptureDocument	tmp_voucher_builder table
Process	ChartOfAccounts	chart table
Process	CodeDefinition	Depends on type of code
Process	ContactMaster	Contacts form and related forms
Process	CurrencyExchangeRateMaster	currate table
Process	CustomerPartyMaster	Customers form and related forms
Sync	EmployeeTimesheet	Service order transactions, attendance, project Labor transactions, unposted job transactions (Indirect, Run or Setup)
Sync	ExpenseReport	prtrx table
Sync	InventoryAdjustment	Miscellaneous Receipt and Miscellaneous Issue forms
Sync	InventoryCount	Miscellaneous Receipt and Miscellaneous Issue forms
Process	ItemMaster	Items form and related forms
Process	PayableTransaction	Updates Vendor Paid YTD, Paid Fiscal YTD and Last Paid Date
Sync	PlanningSchedule	coitem table (blanket items)
Process	ProductionOrder	job table

Verb	Noun	Destination of processed data in CloudSuite Industrial
Process	Quote	Estimates form and related forms
Acknowledge	PulseAlert	N/A
Process	ReceivableTransaction	Updates Customer Posted Balance
Sync	ReceiveDelivery	If Type=”Transfer” and Status=”Received” create transfer order receipt. If Type=”Purchase Order” and Status=”Received”create PO receipt If Type=“Customer Return” create RMA receipt If Type=“Sales Order” create negative CO receipt.
Process	Requisition	preq table
Process	SalesOrder	Customer Orders form and related forms
Sync	SecurityUserMaster	coitem or trnitem table (depending on record type), last_external_shipment_doc_id
Acnowledge	Shipment	If Type=“Transfer” and Status=”Shipped” create Transfer Order Shipment If Type=“Purchase Order” create Purchase Order Return If Type=“Sales Order” and Status=”Shipped” create Customer Order Shipment
Sync	Shipment	coitem or trnitem table (depending on record type), last_external_shipment_doc_id
Sync	ShipmentSchedule	coitem table (blanket items)
Process	ShipToPartyMaster	Customer Ship Tos form and related forms

Appendix F: BODs used in integrations with this application

This section contains the list of BODs that are available for integrations with CloudSuite Industrial.

Outbound BODs from the ERP to integrated applications

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

Verb	Noun	To applications
Sync	AccountingChart	d/EPM
Sync	AccountingEntity	d/EPM
Process	AdvanceShipNotice	SCE Warehouse Management
Acknowledge	BillOfMaterials	PLM Accelerate
Acknowledge	BillToPartyMaster	Infor Back Office Connect
Sync	BillToPartyMaster	CPQ/EQ CRM e-Commerce Infor Back Office Connect SCE Warehouse Management
Sync	ChartOfAccounts	d/EPM

Verb	Noun	To applications
Sync	CodeDefinition	CPQ/EQ CRM d/EPM EAM Expense Management Infor Back Office Connect PLM Accelerate
Sync	ContactMaster	CRM Infor Back Office Connect
	CurrencyExchangeRateMaster Sync	CPQ/EQ Expense Management
Process	CustomerPartyMaster	Infor Back Office Connect
Sync	CustomerPartyMaster	CPQ/EQ CRM e-Commerce Infor Back Office Connect PLM Accelerate SCE Warehouse Management
Sync	CustomerReturn	CRM Infor Back Office Connect
Sync	Invoice	CRM e-Commerce Infor Back Office Connect
Acknowledge	ItemMaster	PLM Accelerate
Sync	ItemMaster	CPQ/EQ CRM e-Commerce Infor Back Office Connect PLM Accelerate SCE Warehouse Management
Sync	Location	CRM e-Commerce Infor Back Office Connect
Acknowledge	PayFromPartyMaster	Infor Back Office Connect

Verb	Noun	To applications
Sync	PayFromPartyMaster	CRM Infor Back Office Connect
Sync	Person	CRM
Sync	Personnel	Expense Management
Sync	ProductionOrder	Expense Management
Sync	ProjectMaster	Expense Management
Process	PulseAlert	Infor Ming.le
Sync	PurchaseOrder	EAM SCE Warehouse Management
Sync	Quote	CRM Infor Back Office Connect
Sync	ReceivableTransaction	CRM Infor Back Office Connect
Sync	ReceiveDelivery	EAM
Sync	RemittanceAdvice	Expense Management
Acknowledge	Requisition	EAM
Sync	SalesOrder	CRM e-Commerce Infor Back Office Connect
Sync	SecurityRoleMaster	Infor Ming.le
Process	SecurityUserMaster	Infor Ming.le
Sync	ServiceOrder	Expense Management
Sync	ShipFromPartyMaster	SCE Warehouse Management
Process	Shipment	SCE Warehouse Management
Sync	Shipment	CRM e-Commerce Infor Back Office Connect
Sync	ShipToPartyMaster	CPQ/EQ CRM e-Commerce Infor Back Office Connect SCE Warehouse Management
Sync	SourceSystemGLMovement	d/EPM

Verb	Noun	To applications
Sync	SourceSystemJournalEntry	d/EPM
Sync	SupplierPartyMaster	EAM PLM Accelerate SCE Warehouse Management
Sync	WorkCenter	PLM Accelerate

Inbound BODs to the ERP from integrated applications

This table shows the BODs that can be received and processed by CloudSuite Industrial. Where the application is blank, the BOD is not currently used by integrating applications.

Verb	Noun	From applications
Process	BillOfMaterials	PLM Accelerate
Process	BillToPartyMaster	CRM Infor Back Office Connect
Process	CodeDefinition	Infor Back Office Connect
Process	ContactMaster	CRM Infor Back Office Connect
Process	CustomerPartyMaster	CRM Infor Back Office Connect
Sync	EmployeeTimesheet	Expense Management
Sync	ExpenseReport	Expense Management
Sync	InventoryAdjustment	SCE Warehouse Management
Sync	InventoryCount	SCE Warehouse Management
Process	ItemMaster	PLM Accelerate
Acknowledge	PulseAlert	Infor Ming.le
Process	Quote	CRM CPQ/EQ
Sync	ReceiveDelivery	SCE Warehouse Management
Process	Requisition	EAM

Verb	Noun	From applications
Process	SalesOrder	CPQ/EQ CRM e-Commerce
Sync	SecurityUserMaster	Infor Ming.le
Acknowledge	Shipment	SCE Warehouse Management
Sync	Shipment	SCE Warehouse Management
Process	ShipToPartyMaster	CRM Infor Back Office Connect