

Infor CloudSuite Industrial Configuration Guide

Release 10.x

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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 Infor CloudSuite Industrial for use with Infor Operating Service (OS) in the cloud.

Contacting Infor

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

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

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

Chapter 1: Configuration checklist

Follow this checklist to complete the integration of the components in this CloudSuite:

Complete	Task	Reference
	Understand the concepts behind ION, BODs, APIs, and IMS.	Infor ION Desk User Guide - Cloud Edition
	Understand the applications that are included in the CloudSuite.	Configuration overview on page 12 Infor CloudSuite Industrial Solution Overview
	Perform the prerequisites to this configuration: Determine the ERP site names. Determine the bootstrap administrator. Perform initial sign-in and verify that you can access applications and menu options. Access the support portal to download documents and files.	Getting started on page 16
	Configure your web browser for Infor Ming.le: • Set up compatibility for Internet Explorer browsers • Turn off popup blockers	Configuring your web browser on page 19
	Optionally, integrate your existing on-site identity management (single sign on) system with this CloudSuite.	Configuring security on page 20

Complete	Task	Reference
	 Configure user access and roles: Configure user access to the ERP. Configure additional system administration access to the ERP through Infor Ming.le. Set up roles or groups for users. Associate Infor Ming.le users and roles with users in other applications in the CloudSuite Verify user access. Optionally, set up distribution groups 	Configuring access to applications through Infor Ming.le on page 21
	 Configure SyteLine: Set up a logical file server. Set report options. Set up additional replication rules, if multi-site. Set system parameters. Set up master data. 	Configuring the ERP on page 29 Infor SyteLine Cloud Multi-Site Planning Guide Infor SyteLine Cloud Multi-Site Implementation Guide
	Configure SyteLine and ION to send and receive BODs.	Configuring the ERP to send and receive BODs in ION on page 30
	Optionally, configure workflows and ION messages for your application.	Configuring workflows and ION messages for the ERP on page 37
	If applicable, configure ION APIs for your application.	Configuring ION APIs for SyteLine on page 43
	Verify that drillbacks to your application are working.	Verifying drillbacks to the ERP through Infor Ming.le on page 45
	Configure context and utility apps that are used with your application.	Configuring context apps and utility apps that are used with the ERP on page 48
	Verify that homepages and widgets for your application are working for individual users.	<u>Verifying Homepages for the ERP</u> on page 52
	Configure IDM for the ERP.	Configuring Infor Document Management (IDM) to work with the ERP on page 55
	Configure SyteLine to work with the Data Lake	Configuring Infor Data Lake with SyteLine on page 61
	Configure Analytics for Birst using Syte- Line data	Configuring Analytics for Birst on page 67

Complete	Task	Reference
	Configure other optional applications in the CloudSuite to work with the ERP and with the components of Infor OS such as ION and Infor Ming.le).	Configuring and integrating other applications in the CloudSuite on page 70

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 this CloudSuite

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

Be aware that in the cloud, all of your sites are defined in a single database, and a usage-tracking license is applied.

CloudSuite tenants

Each Infor CloudSuite Industrial customer is set up with three tenants:

- Demo, which includes a SyteLine application database that contains demo data and multiple demo sites. The ION connection points and document flows are fully configured for the demo sites.
- Training, which includes a SyteLine 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 SyteLine 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 on the Infor Support Portal site.

Integration with other products in the CloudSuite

The SyteLine application uses different integration methods to communicate with other products in the suite.

You might need to configure additional parameters or master data in each of the applications to complete the integration. See the appropriate integration guides or chapters in this guide.

Point to point integrations

Point to point integrations are used in cases where you need more immediate (real-time) transfer of information between the products than a BOD integration provides.

Integrations such as the one with Infor Enterprise Quoting use calls to web services to get immediate responses from the other application. This is useful when the information is time-critical; for example, when users need current pricing.

Other integrations use ION API calls or IMS messages to send information between the applications. For example, the integration with Infor Data Lake uses these methods.

In some other integrations, a direct connection between the databases of the products might be used.

BOD integrations

An outbound operation typically begins when a user performs an action in SyteLine that requires a data exchange with another ION-enabled application. A Business Object Document (BOD) XML message is generated by SyteLine and placed in an area designated as the SyteLine 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 SyteLine 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 from SyteLine to another application for a particular BOD, then at specified intervals, ION places the outbound BOD from SyteLine 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 SyteLine, ION retrieves BODs from the sending application's message outbox and delivers them to SyteLine's message inbox for processing. SyteLine 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 this CloudSuite on page 12.

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. SyteLine is the system of record for accounting entities.

For SyteLine, the site is used as the accounting entity.

Do not confuse this Infor definition of "accounting entity" with the SyteLine 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. SyteLine 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 SyteLine 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 SyteLine online help.

Chapter 3: Getting started

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

Determining your ERP application sites

Every Demo environment is provisioned with the same set of named sites and entities.

If your production environment has multiple sites, generally you plan this in advance with your Infor representative. See the *Infor SyteLine Cloud Multi-Site Planning Guide* for information about determining how many sites you need, what base currency each site will use, and strategies for naming the sites.

If you need to add more sites after provisioning is complete, use the steps in the *Infor SyteLine Cloud Multi-Site Implementation Guide*.

Be aware that in the cloud, all of your sites are defined in a single database.

Determining the bootstrap administrator

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

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

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

Accessing your cloud environment (tenant)

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

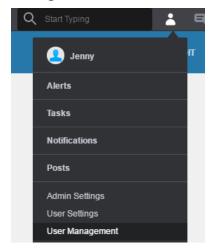
Follow the instructions in this email to complete these tasks:

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

Verifying access to your applications within Infor Ming.le

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

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

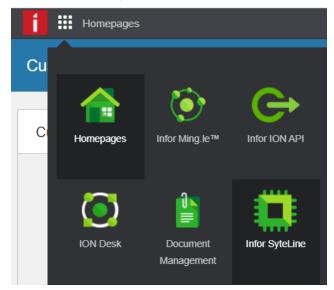


- 2 Verify that the bootstrap administrator has full access to all applications:
 - a From the User Menu, select **User Management**.
 - b Select your bootstrap administrator's account.
 - c Click the Details icon.

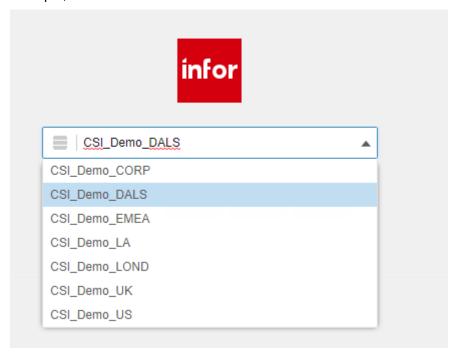
+

- d In the **Security Roles** tab, verify that the bootstrap administrator is assigned to the **Infor-SystemAdministrator** role.
- e If that role is not assigned for that user, click + and select the Infor-SystemAdministrator role. Then click Add & Close.
- f Click the save button to save your changes.

3 Under the App menu, verify that you can access Infor Operating Service applications such as Infor Ming.le, Homepages, ION Desk and Document Managment.



4 Under the App menu, verify that you can access Infor SyteLine. If your tenant is set up with multiple sites, verify that you can access all of them through the login configuration drop-down list. For example, the list in the DEMO tenant looks like this:



5 Under the App menu, verify that you can access any optional applications that you have licensed, such as Infor Factory Track or Enterprise Quoting.

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 Infor CloudSuite Industrial allows pop-ups. If pop-ups are disabled, the SyteLine 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 SyteLine 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.

Accessing the Infor Support Portal

Verify that you can log in to the Infor Support Portal. From this portal, you can download files from the Download Center, view and download guides, and access articles from the Knowledge Base.

Downloading documentation

During the configuration process, you will access instructions that are in other documents. To find the documents, go to docs.infor.com. Select Cloud > CloudSuite Industrial and click the link for the documentation list.

Download the documents that are listed as references in the configuration checklist. See Configuration checklist on page 9.

Chapter 4: Configuring security

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

This CloudSuite is set up for SSO with Infor OS. We recommend that you use one of the Infor OS certified identity providers; however, you may be able to use any SAML 2.0-compliant identity provider. Some of the identity providers that have been certified are ADFS, Okta, and Azure AD. These identity providers can be leveraged to allow users to authenticate to the tenant by using an account defined in your customer-owned domain. User accounts must exist in Infor Federation Services (IFS).

Infor recommends that you use System for Cross-Domain Identity Management (SCIM) to populate user accounts into IFS from your customer-owned domain. You can either use your own SCIM 2.0-compliant Identity Provider or use the SaaS User Provisioning for SCIM software (deployed by your Infor service provider) as the SCIM agent.

Note: Before you configure security for your CloudSuite, contact your Infor representative to discuss your requirements and get a complete listing of certified identity providers. The representative might engage the Infor Global Identity and Access Management (IAM) team to assist you in setting up SSO for the CloudSuite.

Chapter 5: Configuring access to applications 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 SyteLine.

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

Note: In a Cloud usage-tracking environment, licenses are not assigned to specific users, either in SyteLine or through Infor Ming.le roles.

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 SyteLine. This association is handled through Sync SecurityUserMaster BODs that are passed through ION.

SyteLine groups and license modules are mapped to security roles in Infor Ming.le.

The list of available SyteLine groups must be updated and maintained in SyteLine – not in Infor Ming.le - because the types of roles and the names of roles are dependent on the requirements of SyteLine. After the groups are set up in SyteLine, 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 SyteLine, not Infor Ming.le.

When you assign a user to a group or license module in either SyteLine or Infor Ming.le, that information is passed to the other application through a SecurityUserMaster BOD. Infor Ming.le is the System of Record for this information.

SyteLine licenses can be assigned to users either through the SyteLine User Modules form or through "CSI-LicenseModule-" roles in Infor Ming.le. However, these license assignments are meaningless in a usage-tracking environment.

Note: All SyteLine license modules are available as security roles in Infor Ming.le. However, if you assign a license module security role to a user in Infor Ming.le, but your company is not licensed for that module, or if the user count for that module is exceeded, then when SyteLine processes the inbound BOD, it will not assign the license module to the user. This can leave the two applications out of sync.

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

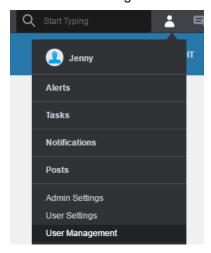
For more information about these BODs, see <u>User and role BOD usage</u> on page 76.

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 SyteLine through Infor Ming.le.

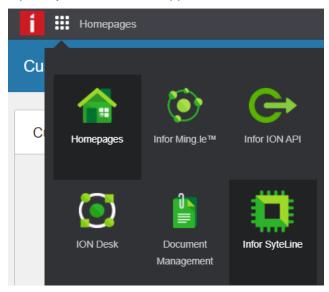
From the Infor Ming.le User Menu, select **User Management**.



- 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.

 details icon □ to view details for the user.
 - **Note:** The IFS ION-Person ID will be used to synchronize personnel records with SyteLine. 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 SyteLine through Infor Ming.le, they must be assigned at least one SyteLine 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 SyteLine.
 - f Save your changes.
 - The information is sent through BODs to SyteLine after you save your changes.
- **3** Open SyteLine from the App Menu.

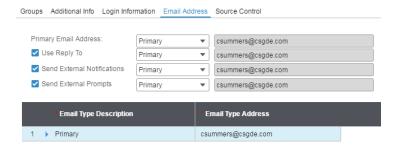


- 4 If prompted, select a configuration, which is linked to one of your SyteLine sites. If you plan to use one site as a master site, select the configuration for the master site.
- 5 In SyteLine, select **Form > Open** and open the **Users** form.
- In the **Users** form, click the filter toolbar button 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 SyteLine 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 SyteLine. This information should be shown in the SyteLine **Users** form:

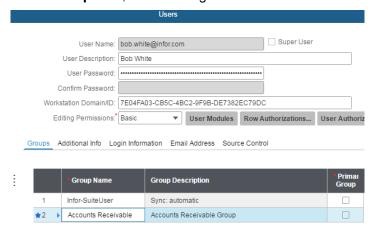
- The user name (email address) that you set for each user in Infor Ming.le is shown in the User Name field.
- The IFS ION-Person ID that was set for each user in Infor Ming.le is shown in the Workstation Domain/ID field.

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 SyteLine 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 SyteLine application in Infor Ming.le.)
 - When users access SyteLine 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 Save your changes.
- In Infor Ming.le User Management, select the user's record, and then select **Action > Resend Invitation**.

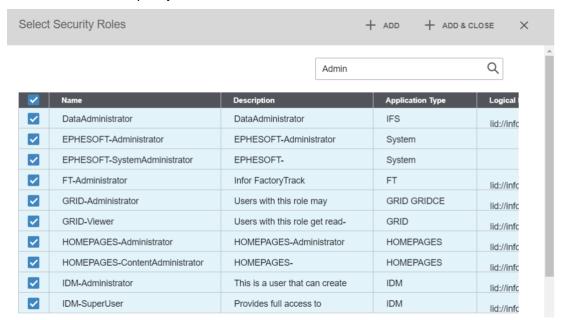
The user receives a notification with a link that provides user-specific access to Infor Ming.le and to SyteLine.

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

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

You can set up additional system administrators for all or some applications that are run inside of Infor Ming.le.

- 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.

Note: If you have "power users" who only need administrator access in some applications, select the "administrator" roles only for specific applications for those users.

- 6 Click Add & Close.
- 7 Click + again and specify Mingle in the filter field. Add all displayed roles to the admin 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 SyteLine.

- 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 SyteLine to synchronize the system administrator users with this role.
- 2 Assign additional system administration roles, either in Infor Ming.le or in the SyteLine **Users** form, to the appropriate users.

Setting up additional roles or groups

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

- 1 In SyteLine, 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 SyteLine:
 - 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. SyteLine uses the information from this BOD to associate the role or group with the SyteLine user record.

To associate groups (roles) with users in SyteLine, 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. SyteLine 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.

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

Automatic login and selecting configurations

When users first access SyteLine 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 SyteLine 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 SyteLine application before exiting Infor Ming.le, then the next time they open the SyteLine application, they must select a configuration.
- If users close the browser without signing out, or exit Infor Ming.le without signing out of SyteLine, then the next time they open the SyteLine 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 SyteLine:

- 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 SyteLine.
- **2** From the App Menu, open SyteLine.
- 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 ION-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 SyteLine 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 SyteLine 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 6: Configuring the ERP

Configure the SyteLine 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 SyteLine 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 Application Administration User Guide or 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.
 - Note: Never select the Intranet Licensing option in a cloud environment!
 - On the Optional Modules form at each site, enable the optional modules whose features you
 want to include at that site. This setting determines whether certain features are available to
 users.
 - Use the *Multi-Site Planning Guide* and the *Multi-Site Implementation Guide* to set up replication between the sites and to configure the rest of the financial, parameter and master data for the application.
 - Optionally, you can 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 SyteLine 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 SyteLine for integrations—for example, customer, vendor or item master records, or system parameters—often depend on the application with which SyteLine will exchange information. For more information, see the appropriate application integration guide.

Configuring the ERP to send and receive BODs in ION

This section describes how to configure SyteLine to communicate with ION using BODs. Some integrations between this application and other applications use ION to send and receive BODs. For details about a specific integration, see the appropriate integration guide.

Tasks completed by the Infor Cloud team

The Infor Cloud team has already set up SyteLine 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 SyteLine:

• The team set up a logical intranet called InforESB in SyteLine. 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 SyteLine, 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 data flows:

- The team set up connection points for SyteLine sites, Infor Ming.le, Infor Document Management and provided the list of documents that can be sent and received by these connection points. (You must set up the documents for connection points for any sites that are added later.)
- 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 SyteLine and Infor Ming.le to pass
 user account and role (group) information. (You must add connection points to this document flow
 for any sites that are added later.)
- The team configured, but did not activate, a document flow between SyteLine and Infor Document Management. (You must add connection points to this document flow for any sites that are added later.)
- The team partially configured document flows between SyteLine and some optional applications.
 (You must add connection points to these document flows, as needed, for any sites that are added later.)

Tasks completed after provisioning

Additional configuration tasks might be performed by Infor Consulting Services, a Business Partner, or an administrator at your company. These tasks can include configuring optional applications, configuring connection points for additional sites, configuring and activating data flows, or adding any needed BODs or messages to the connection points for certain applications.

If you make a change to a preconfigured connection point or data flow, and later you want to see how it was originally configured, see <u>Verifying ION Desk provisioned settings</u> on page 81.

Understanding how applications connect to ION

The Infor Cloud team has created connection points in ION Desk for each of your Infor cloud applications (and SyteLine 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 document flow is a type of data flow.

A connection point can be reused multiple times in one or more data flows. See the section on ION Connect Modeling in the *Infor ION Desk User Guide - Cloud Edition* for additional information about connection points and data flows.

In a connection point, if you remove a document that is used in a data flow, an error is reported in the data flow messages pane.

You cannot activate connection points separately. When you activate a data flow, the associated connection points are activated.

Integrating the ERP with BOD-enabled applications that are not in the CloudSuite

Documents and document flows for SyteLine, Infor Ming.le, Document Management, and some optional applications in the CloudSuite were set up as part of the tenant provisioning.

Optionally, if you want to send and receive BODs to or from another BOD-enabled application that is not part of the CloudSuite, complete the steps in this section. 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.
- In the **Documents** tab of the connection points, include the BODs that can flow to and from the applications.
 - See <u>Outbound BODs from the ERP to integrated applications</u> on page 104. Select **Send from Application** for each of these BODs.
 - See <u>Inbound BODs to the ERP from integrated applications</u> on page 107. 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 SyteLine 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

You publish BODs so that ION can retrieve them from your message outbox, viewed through the **Replication Document Outbox** form. You can publish BODs for general use by any product that

subscribes to the BODs through Infor ION. After you perform an initial data load from your application, you verify that data is flowing out of the application into ION. For details about a specific integration, see the appropriate integration guide.

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

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

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

Initial data load

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.

BOD dependencies

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

- AccountingEntity: This is the first BOD you should publish from each site.
- FinancialCalendar: This must be published before the ChartOfAccounts or any financial transaction BODs.
- AccountingChart: This must be published before any financial transaction BODs.
- ChartOfAccounts: This must be published before any financial transaction BODs.
- Master data, including:
 - CodeDefinition
 - Location
 - CustomerPartyMaster
 - ItemMaster
 - BillToPartyMaster
 - ShipFromPartyMaster
 - ShipToPartyMaster
 - SupplierPartyMaster
- Any required historical transaction data, including:
 - SalesOrder
 - Shipment
 - Invoice

Sending the initial data load

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

- 1 In SyteLine, 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 33.

- 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 SyteLine 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, SyteLine automatically publishes BODs whenever users change certain data or when certain transactions occur in SyteLine.

For a list of the events that generate BODs, see <u>Business events that generate outbound BODs</u> on page 91.

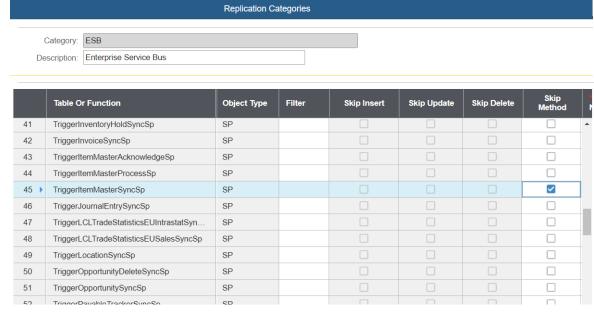
Turning off BOD replication to reduce traffic

SyteLine 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.
- 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:



In a new cloud environment, all of the triggers are turned off (**Skip Method** is selected) except these:

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

Note: This list assumes that SyteLine is only integrating with Infor Ming.le.

If you are integrating with other applications via BODs, you must turn on the triggers (clear the **Skip Method** field) for the required BODs when you integrate with the other applications. See the appendixes of this guide, or the appropriate integration guide, for the list of outbound BODs used in each integration.

Note: For some cloud integrations, the replication triggers might be already turned on as part of the provisioning.

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 <u>Business events that generate outbound BODs</u> on page 91 to determine what user actions generate certain BODs.
- 2 Perform those user actions in SyteLine.
 - 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 SyteLine 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.
- 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 SyteLine **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 SyteLine, 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 <u>Data is not flowing properly</u> on page 80.

Verifying the data flow between applications

After you create and activate data 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 7: Configuring workflows and ION messages for the ERP

You can configure workflows and ION messages for your application.

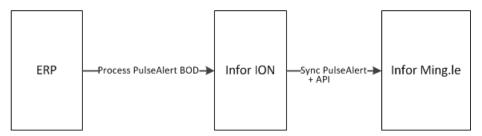
ION messages

This table shows the types of ION messages:

Туре	Description
Alert	Alerts are generated by Event Management in Infor OS or by a PulseAlert BOD. An alert is a business notification or exception indicating that something out of the ordinary has happened in the flow of application documents.
Task	Tasks are generated by Workflow in Infor OS or by a PulseTask BOD. A task is an activity that must be completed within a defined period of time. When the task is generated by Workflow, it suspends the execution of the workflow until the task is completed. When a task is completed, the user's response is sent back to Workflow to resume execution of the workflow.
Notification	Notifications are generated by Workflow or by a PulseNotification BOD. A notification is similar to a task, but it does not require immediate user action. A notification does not suspend the execution of the workflow.
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 <i>Infor ION Alarms Mobile Application User Guide</i> .
	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

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



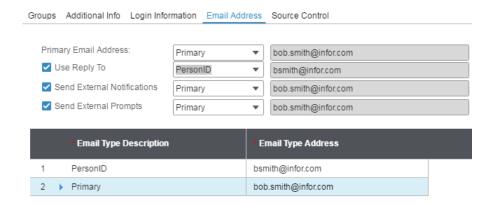
A Process PulseAlert BOD is generated when a business event associated with one of these publications occurs in SyteLine:

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
DCShopFloorTransactionErro- rAlert	A specified number of Data Collection shop floor transaction errors occurred. Key Value 1 defines how any errors must be generated before the user re- ceives an alert	Trigger on dcsfc_mstlup
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_mstlup
JobOperationHoursAlert	Labor hours for a job were more than estimated	Trigger on jobroute_mstlup
JobOverProductionAlert	The completed quantity of a job is greater than the released quantity	Trigger on job_mstlup

Publication	Description	Where defined
JobProjectedLateForCus- tomerAlert	A job is projected to be late for a specified customer. Key Val- ue 1 is the customer number.	Trigger on job_sch_mstlup
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: LateOrderShippin- gAlert, Seq 1
LeadAssignedAlert	A lead is assigned to a salesperson	Event: IdoOnItemUpdate, Seq 19
LockedUserAlert	A user is locked out	Trigger on UserNameslup
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
ScheduledMainte- nanceAddedAlert	A scheduled maintenance task is added for a resource. This alert is used only with the Molding Industry Pack.	Trigger on MO_re- source_maint_mstlup
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: ResourceMainte- nanceScheduleUpdateStatus, 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: TransactionAmoun- tAlert, Seq 1

SyteLine 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.

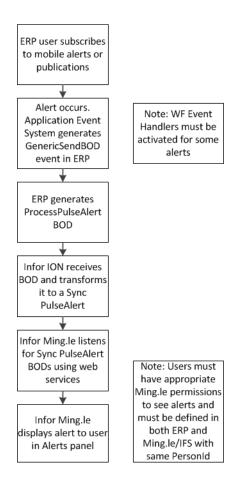
The email address that is used in the BOD is determined by the **Email Type Description** field on the **Users** form. If an address is specified where the **Email Type Description** is set to PersonID, then the email address that is associated with the PersonID type is used. If no PersonID type is found, 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 applications to process alerts

- Configure SyteLine to send alerts.
 - In the Process Defaults form, set ION Pulse Interface to 1.
 - 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 38.
 - c SyteLine users must subscribe to the appropriate publications (alerts) from the list above, through either the Mobile Alerts form or the Publication Subscribers form.
 - Set up SyteLine 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 77.
- 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 SyteLine 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 (as Send from Application) 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.
- 4 Set up Infor Ming.le users with the appropriate roles to access tasks and alerts. See information about configuring user access for tasks and alerts in the *Infor ION Desk User Guide*.

In addition, the value in the Infor Ming.le **IFS ION-Person ID** field must match the **Workstation/Domain ID** field for the same user in SyteLine, and the **User Name** field in Infor Ming.le must match either the Personld email address or Primary email address for the same user in SyteLine. 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 SyteLine, as described in <u>Configuring user access to the ERP through Infor Ming.le</u> on page 22.

Configuring applications to process workflows for tasks and notifications

- 1 Configure this application to send tasks and notifications.
- **2** Configure ION to process tasks and notifications from this application. See the *Infor ION Desk User Guide*.
- 3 Configure Infor Ming.le to display tasks and notifications for this application. See the *Infor ION Desk User Guide*.

Chapter 8: Configuring ION APIs for SyteLine

This section provides instructions for configuring your product to use ION API.

ION API overview

ION API is a component of Infor OS that is used for brokering requests from API consumers, such as web and mobile applications, and API providers, such as SyteLine or third-party services. As a broker, it sits between consumers and providers, and can provide benefits to both consumers and providers.

ION API is used by many integrated applications that use API calls to expose business logic using HTTP protocols. SyteLine uses ION API to allow API consumers to connect to business logic in a secure manner through established endpoints.

The ION API service is a broker for Infor applications that use web service APIs. The service handles synchronous communications to application specific APIs, versus asynchronous BOD communications that conform to the OAGIS standard.

API documentation (Swagger or WSDL)

In the ION APIs app, click the **Documentation** to access one of these types of documentation about the API:

- For REST APIs, Swagger documentation provides call information along with a tool for the user to execute sample calls and view responses.
- For SOAP APIs, WSDL documentation provides information about the web service.

Available SyteLine API calls

This table lists the APIs that are currently available in the SyteLine ION API:

API	Туре	Additional information
SyteLine REST Service	REST	General Mongoose REST API that provide access to the Syte-Line IDOs
		See the Swagger Tool for information about which operations can be executed.
SyteLine REST Service v2	REST	Version 2 of the general Mongoose REST API that provide access to the SyteLine IDOs.
		See the Swagger Tool for information about which operations can be executed.
SyteLine Item Price Service	SOAP	Returns item pricing information based on customer and quantity ordered
SyteLine Order Details Service	SOAP	Returns order line information for a customer order
SyteLine Stock Available Service	SOAP	Returns quantity on hand for warehouse locations
SyteLine ATP Service	SOAP	Returns an Available to Promise date for an order line

Using SyteLine to consume APIs from other applications through ION APIs

The SyteLine application user has an Infor Ming.le identity that is set up through Single Sign On (SSO). SyteLine can exchange the SSO credentials for an ION API token. This token is used to interact with other systems via ION API Gateway.

With the ION API token, SyteLine can invoke web services for other applications on behalf of that user, which are exposed through ION API. These include but are not limited to Infor Ming.le and Infor Document Management.

All interactions are performed with the user credentials in the source and target systems, complying with any security configuration, and ensuring that the audit trail is not compromised.

Chapter 9: Verifying drillbacks to the ERP through Infor Ming.le

Verify the drillbacks that are included for your application.

About drillbacks

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

- Context-sensitive embedded drillbacks: The screens and business data can include embedded drillback links to SyteLine.
 - See Understanding business context messages on page 48.
- BOD-based drillbacks: If a screen or business data is associated with a BOD that was sent from SyteLine, 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.
 - 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 SyteLine screen for that noun. Not every BOD noun has an associated drillback view in SyteLine.

Available drillbacks

An Infor Ming.le search result, alert, or share can include a link to the form with a reference to specific SyteLine data. This type of drillback is displayed in the Infor Ming.le user interface as a link that opens SyteLine to a specific form filtered for specific results.

This table shows the BODs associated with drillbacks, the views that are currently available for this drillback, and the SyteLine form that is launched:

BOD Noun	Drillback view	SyteLine form
BillToPartyMaster	BillToPartyView	Customers
ContactMaster	ContactMasterView	CustomerSalesContactCrossReferences

BOD Noun	Drillback view	SyteLine form
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
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 SyteLine.

See Sending the initial data load on page 34.

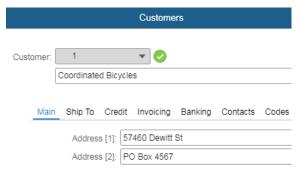
Verifying a drillback

To verify that the drillbacks are working for shared links in Infor Ming.le:

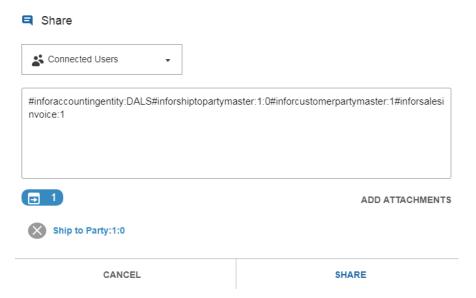
- **1** From the App menu, open SyteLine.
- 2 Open a form that has a drillback, for example, **Customers**.

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 45 and Understanding business context messages on page 48.

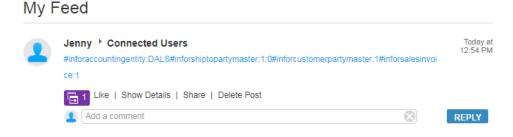
3 Display the information that you want to share, for example, the record for a particular customer.



- 4 Click the Share icon on the Infor Ming.le screen. If prompted, click Share to Feed.
- 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 icon to verify that it is working.



Chapter 10: 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.

Context apps are lightweight applications that communicate with the application frame to present contextual information to the user. These applications subscribe to information published by the application frame and display relevant content only when it is available. The values and content of the application depend on the current context (form or field) that is shown in the SyteLine 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 SyteLine screen, field or other user interface object to establish the current context. These messages can be used for many contextual purposes within Infor Ming.le, including drillbacks.

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

- Determine which related files from IDM are shown in the Related Information context app, based on the context
- Display the appropriate help topic

For more information about the available context-sensitive IDM documents, see the *Infor SyteLine User Guide for Infor OS*.

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

Process default settings that allow context messages to be sent

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

- Send Context Message on Form Focus enables sending of business context messages for forms. This value is automatically set to 1 for SyteLine through initialized data. When set to 1, the context message "screenId": "mongoose_Formname" is sent for all forms, where Formname is the form name, for example, "screenId": "mongoose_UsersMaint".
- Optional Context Message Form Prefix replaces the mongoose_ default prefix on all forms with a specified prefix. For SyteLine, the prefix is set to CSI_. So, for example, the UsersMaint form is sent as CSI_UsersMaint.

The context messages sent from forms allow Infor OS context apps to display context-sensitive information related to the form.

Supported business context messages

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

When each SyteLine 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 SyteLine 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", "entities":[{"entityType":"InforAccountingEntity", "id1":"DALS"}, {"entity Type":"InforShipToPartyMaster", "id1":"4851", "id2":"0", "accountingEntity":"DALS", "drillbackURL":"?LogicalId=lid://infor.syteline.dals&page=formonly&form=Customers(FILTER(CustNum%3D%27%20%20%20%20%2013%27%20AND%20Cust Seq%3D0)SETVARVALUES(InitialCommand%3DRefresh))", "bodReference":{"noun":"BillToPartyMaster", "documentId":"4851", "accountingEntity":"DALS", "logicalId":"lid://infor.syteline.dals"}}, {"entityType":"InforCustomerPartyMaster", "id1":"4851", "name":"Brand Central Dept Store", "accountingEntity":"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 SyteLine 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, you might display the Customers form with the customer ID 4851. 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 SyteLine, 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 SyteLine.

- Alerts
- Context Viewer
- Paparazzi
- Posts
- Related Information
- Smart Help
- Tasks

For information about how to use most of the standard apps, see the Infor Ming.le online help or user guide.

For information about using Related Information, see the Infor Document Management User Guide.

For information about setting up and using Smart Help, see the *Infor Smart Help Administration Guide*.

These application-specific context apps are also available:

Related Information

This app can display context-sensitive files that are stored in Infor Document Management but that are associated with specific SyteLine records. You can set up workflows in SyteLine to handle this. See About the Document Management integration on page 55.

Smart Help

This app displays the help topic associated with the currently displayed form or screen. You can open the full help system for the application from a link.

Depending on the options you select in the Smart Help app and your permissions, you can see any Knowledge Base articles or training information/videos related to that form. You can also view or add links to customized help that your company has created for this form in Infor Document Management. For more information, see the *Smart Help Administration Guide*.

For information about how to use the other application-specific apps, see the *Infor SyteLine User Guide* for *Infor OS*.

Some of the apps are initially disabled. When the apps are enabled for SyteLine, 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 SyteLine:

- 1 From the User Menu, select **Admin Settings**.
- 2 In the **Manage Applications** tab, double-click to select the SyteLine 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 SyteLine 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

To enable users to view and select critical numbers for display in widgets or home pages, you must set up the appropriate authorizations in SyteLine.

- 1 In SyteLine, open the Critical Number Users form.
- Select a user record.
- 3 On the Categories tab, specify user authorizations for a critical number category, or on the Permissions tab, specify user authorizations for specific critical numbers.
- 4 Save your changes.
- 5 Ask the user to log out of SyteLine and then log in again, so the changes can take effect.
- 6 Verify that users can view critical numbers that they are authorized to view.

Chapter 11: 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 SyteLine 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 SyteLine User Guide for Infor OS*.

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 SyteLine.
- **2** Open the Homepages application.
- 3 Add a Homepage:
 - a Click the ellipses (...) and select Page Catalog.
 - b Select All to see all available homepages.
 - Select one of the predefined SyteLine Homepages, such as Controller Home or Project
 Manager Home and click +.

You must be authorized in SyteLine to open that "home page" form. These are the default authorization groups/roles associated with each home page and its widgets:

Homepage name	Security role/group
Controller Home	Mobile Controller
Customer Service Home	Order Entry, Service
Executive Home	Mobile Executive
Inventory Control Home	Inventory
Production Planner Home	Shop Floor Control

Homepage name	Security role/group
Project Manager Home	Projects
Purchasing Home	Purchasing
Quality Control Home	QA Process
Salesperson/Sales Manager Home	Order Entry
System Administration Home	System Administration

- d Close the catalog to view your new Homepage. Verify that the widgets display as expected.
- Add a SyteLine widget to a custom homepage:
 - a From the ellipses (...) menu, select New Page.
 - b Specify a title, description and color for the page and click **Create**.
 - c Click Add Widget.
 - d Under Categories, select **Application**. You should see a lot of application-related widgets. You can use the filter icon in the toolbar to find specific widgets.
 - Select the SyteLine widget and click + (Add Widget).
 - Close the catalog and save the page to view your new widget.
 - g Initially the widget shows a default page. Click the ellipses (...) in the widget and select Configure.
 - h Leave the **Title** and **Application** values as-is. Select a widget from the list and click **Save**. You must be assigned the appropriate SyteLine authorization group/role to display the .home form that underlies this 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 SyteLine to view the critical numbers.
- 6 Drill down to SyteLine forms from the appropriate widgets.

Modifying permissions for standard pages

The SyteLine 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:

- Open the Homepages application.
- Click the ellipses (...) button and select **Advanced > Administration**.
- 3 Click the **Standard Pages** link and select the home page you want to edit.
- Select Permissions > Edit Permissions.

Note: Permissions can be set at the group, role or user level.

Adding the What's New widget to a homepage

The What's New widget provides highlights about upcoming updates to multi-tenant products that are licensed by your organization. The widget provides advanced notice of important changes, by product, and the date the changes will be generally available.

The What's New widget is available from the Infor Ming.le Homepages Widget catalog. For instructions to add and configure widgets, see the Infor Ming.le Online Help – Cloud Edition on docs.infor.com.

Chapter 12: Configuring Infor Document Management (IDM) to work with the ERP

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

About the Document Management integration

Some reports and documents that are generated in SyteLine can be automatically sent to Infor Document Management for storage. You can then view the documents in Document Management or in the context of a SyteLine form, through the Related Information context app. For example, you can view a specific customer invoice while you are in that customer's record in the **Customers** form.

You can also manually add documents and tag them with SyteLine-specific document types, which allow them to be associated with certain SyteLine forms.

This integration uses predefined SyteLine document workflows, APIs that transmit the data from SyteLine to Document Management, and this predefined SyteLine-specific information in the Document Management app:

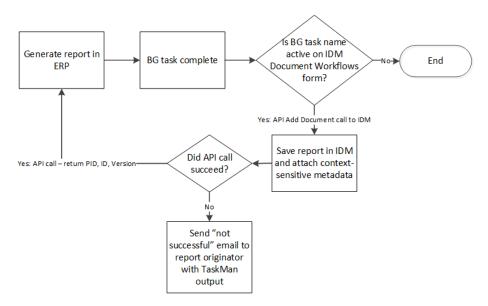
- A predefined business context model that is used to link context-sensitive documents stored in Document Management to the appropriate forms in SyteLine
- A set of Document Type definitions
- Access control list (ACL) security definitions

You can customize the integration to include additional document workflows, or to modify the existing workflows. You can also customize the ERP-specific information in Document Management.

Attribute values are assigned as metadata that accompanies the documents. The attributes can be used for filtering within Document Management, and for associating related documents in the Related Information context app.

For example, the metadata for a purchase order 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 SyteLine **Users** form to the user who originated the report. The PDF file that could not be stored in Document Management is included as an attachment in the email.

SyteLine also supports a BOD-based integration with Infor Document Capture (using Ephesoft). See the *Infor SyteLine Integration Guide for Infor Document Capture*.

Document Management-related forms in the ERP

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

The API call to Document Management impersonates the user who is actually creating the documents in SyteLinel. SyteLine users are matched to Document Management 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. You will activate some of the predefined workflows in a later step.

Later, you could also 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.

Other document management options

In addition to the features of the Document Management application, there are document management features built into SyteLine. The SyteLine 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 Document Management features.

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

Preconfigured information

These areas of the Document Management integration are already configured for you:

- The Document Management connection information was set up on the **External App Parameters** form in SyteLine.
- The Document Management connection point and the erp_idm document flow were added in ION Desk.
- A SyteLine-specific model was imported into Document Management. The model includes document
 type definitions, Access Control List (ACL) security definitions, bundling rules (also known as related
 documents) and a business context model (BCM) that is used to link context-sensitive documents
 stored in Document Management to the appropriate forms in SyteLine.

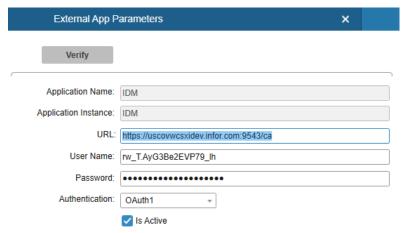
Prerequisites for IDM integration

Before you start integrating Document Management with SyteLine, ensure that these prerequisites are met:

- On the **Sites/Entities** form, verify that the value of the **Configuration Name** field exactly matches the configuration that you are using.
- On the SyteLine **Document Types** form, ensure that the document type **PDF** exists, with the pdf extension.
- On the SyteLine **Report Options** form, verify that every defined output type matches an extension shown on the **Document Types** form.
- In the **Shared Groups** tab on the **Document Types** form, for any document type that you want to send to Document Management (including PDF), ensure that appropriate groups are assigned to the document type. Then ensure that those groups are assigned to the users who will be generating the documents that are sent to Document Management.
- On the **Event Handlers** form, verify that an event handler called **TaskPostPerform** is defined and active.
- Ensure that users who will generate documents through these workflows have the IDM-User and IDM-RelatedInformation security roles, as well as the appropriate roles to access the SyteLine forms, assigned in Infor Ming.le. Users who will view the generated documents in Document Management or the Related Information context app must also have the appropriate roles assigned. See the information about Document Types and their Assigned Roles in the administration guide help.
- If you have enabled **TaskMan Options** and set the value to **debugrep** on the **Process Defaults** form, then you must define a txt extension for a document type in the **Document Types** form. This setting should only be used for report debugging purposes, and must be removed as soon as testing is done.

Verifying the IDM connection in the ERP

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



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

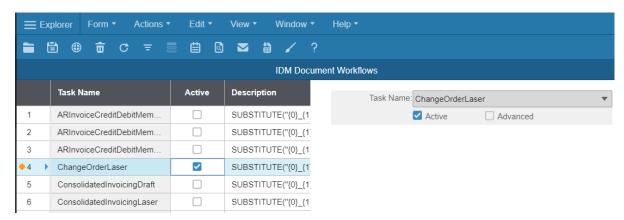


If the connection was not successful, a red X is displayed. If the **Is Active** field is not selected, select it and click **Verify** again. If it still fails, log a support incident with Infor.

Activating the IDM workflows in the ERP

When SyteLine users generate a document that has an active workflow, the document is sent to Document Management. To activate the workflows:

- In SyteLine, open the **IDM Document Workflows** form.
- Select Active for each predefined workflow if you want that type of document to be sent to Document Management. Your choices should be based on business decisions for the company.



Note: Any generated output format from a workflow background task must have a Document Type record associated with that extension and appropriate groups assigned.

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 IDM workflows

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

For verification purposes, just ensure that the PO report is generated and displayed:

- 1 In SyteLine, 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.
- In the Infor Document Management application, verify that you can find and preview the document using these options in the Search:

Document Type

Specify CS_PurchaseOrder.

Property or Attribute

Verify that these attributes are in the list: Purchase Order and Vendor Number. Select Purchase Order.

Operation

Select Like.

Search Value

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

4 In SyteLine, 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.

If you encounter problems with workflows, see the help topic on troubleshooting IDM workflows.

Configuring Infor Document Capture with Infor OS

Infor Document Capture (Ephesoft Transact) 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.

To configure Document Capture with SyteLine, see the *Infor SyteLine Integration Guide for Infor Document Capture*.

Chapter 13: Configuring Infor Data Lake with SyteLine

SyteLine can send database table schemas, master data and transaction information to the Data Lake for use by other applications. For example, Infor Birst takes information from the Data Lake to use in Analytics.

Preconfigured information

These areas of the Data Lake integration are already configured for you:

- A DATALAKE record was added on Intranets form. Some of this information is then displayed on the Generate Data Lake Schema form
- A DATALAKE logical site record was added on the Sites/Entities form.
- Site User Map records were set up between DATALAKE and other sites on the Sites/Entities form.
- Rules were added for the DATALAKE replication category between all sites and the DATALAKE site on Replication Rules form.

The tables in the replication category were populated as initialized data.

Note: During initial configuration and any time you modify the list, you must refresh the IMS connection points, as documented later in this chapter.

- The Datalake Prefix process default value was set to csi_.
- In ION Desk, IMS connection points were created for all SyteLine sites, and the erp_datalake flow
 was added. The initial site's CSI IMS connection point was added to the flow, and it was activated.
 Note: If you add more sites later, then you must add replication rules for sites to the DATALAKE
 category, regenerate replication triggers, and update the erp_datallake flow to include the connection
 points for the sites.

Refresh the IMS connection points

The Infor Cloud Team set up the IMS connection points for the ERP sites. However, you must refresh the connection point data in ION so that it lists the latest documents (tables) from SyteLine.

1 In ION Desk, select Connect > Connection Points.

- 2 Select each of the ERP IMS connection points and perform these steps to refresh the list of tables for each connection point:
 - a In the **Documents** tab, click the Refresh icon. ION calls SyteLine and retrieves the latest list of documents (tables) from the DATALAKE replication category.
 - b Click **Save** to keep the discovered tables.
- 3 Select Connect > Data Flows.
- 4 Select the erp datalake flow.
- 5 Click the erp_ims box and verify that it contains connection points for all SyteLine sites. If not, add the connection points.
- 6 In the flow, click the document icon between the erp_ims and Data Lake applications, and verify that it includes the appropriate documents (tables).
 - If there is a mismatch between the connection point table list and what the data flow expects, the data flow will not activate, and ION displays each problem in the data flow details.
- **7** Activate the flow.

The flow must be reactivated every time you refresh the list of tables.

Manually replicating existing data to the Data Lake

You must send replicate existing data from SyteLine to the Data Lake in any of these instances:

- If your SyteLine application includes historical master or transactional data that you want to include in Birst reports, you must send that data to the Data Lake during the initial system configuration.
- You must run this step with each monthly maintenance release.
- Run this step any time the full data needs to be refreshed in the Data Lake.

Perform this step from each SyteLine site in your tenant, to send the current site's data.

Note: Depending on how much historical data is in the application database, this process could take a significant amount of time. We suggest that you perform this task during non-business hours.

- 1 In the **Replication Rules** form, verify that the replication rule for the DATALAKE category is enabled.
- 2 Purge the existing SyteLine data in the Data Lake. Only purge the tables you are going to replicate.
- 3 In SyteLine, open the Manual Replication Utility form.
- 4 Specify this information, leaving all other fields blank:

Site

Select the DATALAKE site.

Category

Select the DATALAKE replication category.

- 5 Save your changes.
- 6 Click Replicate.

Data is replicated based on the replication category, and not per table in the replication category. All data is sent. The data includes the name of the accounting entity (site) from which it was sent. You

can look at the **Background Task History** form for detailed information about progress status, how many tables, etc.

Verifying the Data Lake configuration

Use these steps to verify that your configuration is set up correctly for sending data to the Data Lake.

- 1 In SyteLine, make a change to a form that affects a table listed in the Data Lake replication category. For example, if the Data Lake replication category contains the Customer Master (customer_mst) table, add a new customer on the **Customers** form.
 - This sends a JSON message to the replication tables. The message is then sent directly to ION and does not use the Replication Outbox. The message updates the information in the customer schema in the Data Lake.
- 2 Check to see if any replication errors were reported for the changed table.
- 3 Check the ION Messaging Errors form to see if any errors occurred. Problems could include an incorrect URL or a problem with the Replication Listener. If an error occurred, correct the error and select **Resubmit**. When you save the record, the message is resubmitted for reprocessing.
- 4 In ION Desk, check OneView to see whether the message was received and sent on to the Data Lake.
 - You can also select **Data Lake > Data Lake Overview** to view general information about the data that was received.
- 5 In ION Desk, select Data Lake > Compass.
 - Verify the data replication using Compass. The data transfer is performed alphabetically by table names, so when data is present in the last table, it is assumed all transfer is complete.

Integrating on-premises SyteLine to multi-tenant Data Lake

The information in this section is for integrating on-premises SyteLine to multi-tenant Data Lake, or a hybrid setup.

Requirements

In order to integrate on-premises SyteLine to multi-tenant Data Lake, you must meet these requirements:

- You must have a tenant in MT cloud with ION API and ION Desk provisioned.
- This tenant cannot have both Mongoose and CSI provisioned.

- You must have a user with appropriate admin privileges for on-premises SyteLine and multi-tenant ION API and ION Desk. Your SyteLine setup must include the REST service, and the server must be accessible from the public Internet, including a DNS address. Switch the REST service to use HTTPS (change the bindingConfiguration attribute from "webBinding" to "httpsWebBinding").
- Enable OAuth 1.0 in web.config (set enableRestWorkstationLogin to true and choose appropriate values for restOAuthConsumerKey and restOAuthConsumerSecret).
- The tenant must have access to ION API, ION Desk, and User Management. ION API must not be provisioned with the product that you will be integrating to on-premises. For example, if the on-premises system is SyteLine, ION API should not have the CloudSuite Industrial suite provisioned.

Create authorized backend app

Create an authorized backend app in multi-tenant ION API for the on-premises SyteLine install.

Download the .ionapi file. Ensure "create service account" is selected, but you do not need to pick a user identity for the service account.

Create ION API suites

- 1 Create an API suite in multi-tenant ION API for on-premises SyteLine. Use "Infor non-provisioned" and choose the "Infor SyteLine version 10" template. If ION API has SyteLine provisioned but not Mongoose, choose the "Infor Mongoose" template. Use the on-premises SyteLine server name and consumer key/secret (OAuth 1.0 information) specified in the earlier **Requirements** section.
- 2 Create an ION Messaging Service v3 Suite using the same deployment Instance info as mentioned in Step 1.

Update SyteLine forms

- 1 In SyteLine, open the **Intranets** form.
 - a Set External to true.
 - b Set Transport to ESB.
 - c Set ION Transfer Type to ION Messaging.
 - d Select the Use ION API check box.
 - e Select the ION API server you created earlier from the ION API Server field.
 - f Ensure API Context field is /IONSERVICES.
- 2 Open the Sites/Entites form in SyteLine.
 - a Create a site entry for Data Lake.
 - b In the **Intranet Name** field, select the intranet you created earlier.

- c Fill in the **Message Bus Logical ID** with the ID being used for the on-premises SyteLine application, "lid://infor.syteline.datalake".
- d In the **Site User Map** area, create a map with "sa" as the user name. This user will be used for testing purposes.

е

- 3 Open the Replication Categories form. Set up a table to replicate to Data Lake.
 - a Create a Replication Category with a Replication Transfer Type of "Data Lake" and containing the table, i.e. Usernames, as an object to be replicated.
- 4 On the Replication Rules form, create a replication rule with Interval Type "Immediate", a Source Site set to the current site being replicated, and the Target Site set to the site created on the Sites/Entities form.
- 5 Use the Replication Management form to regenerate triggers,
- 6 Use the **Service Configuration Manager** application to set up the Replicator.
 - a On the **Replication** tab, add the configuration corresponding to the site being replicated. Do not check the "Master Site" check box.

Do not start the Replicator Service or host application until you complete the next section, *Multi-tenant updates*.

Multi-tenant updates

- 1 In the tenant, go to "User Management" from the menu in the upper right corner.
- 2 From the menu on the left, choose Service Accounts.
- 3 Create a new service account.
- 4 Save the CSV file.
- 5 In Multi-tenant ION Desk, choose type "IMS through ION API".
- 6 Click **Select** to pick the ION API suite for the IMS Endpoint. From the dropdown, choose the suite created in the *Create ION API suites* section ("Infor SyteLine" or "Infor Mongoose") and the discovery operation that comes up.
- 7 Click the button to import service account credentials and upload the CSV file saved earlier.
- 8 Fill in the **ION API Client ID** field with the value of the client ID from the ION API authorized app definition created in the *Create authorized backend app* section. Name it something like "datalake" and enter a logical ID type of "syteline" this will create a logical ID of "lid://infor.syteline.datalake". This has to match the LID entered in the *Update SyteLine forms* section. The second and third parts of the LID can be tailored. For example, it could be "lid://infor.csi.onprem".
- 9 Click **Test** to ensure the basic connection is working.
- 10 Create a Data Lake data flow in multi-tenant ION Desk.
 - a Add an application step named something like "Mongoose" or "SyteLine". Use the "+" sign to add the connection point created earlier.
 - b Add Ingest to Data Lake step after the application step.
 - c Click the document icon between the two new steps and use the "+" sign to add a document corresponding to the table set up to replicate in *Update SyteLine forms* section.
 - d Activate the Data Flow.

Additional SyteLine steps

- 1 Within SyteLine, open the **Process Defaults** form.
- 2 Scroll down to **Datalake Prefix** and change the Default Value to "CSI_".
- 3 Save.
- 4 Open the Generate Data Lake Schema form.
- 5 Select the site created in the *Update SyteLine forms* section.
- 6 Click Generate Schema.

Optional steps

The steps in this section are optional. If you wish, document definitions can also be imported from the ION side.

- 1 Go to ION Desk and choose the Connection Points page.
- 2 Click on the Connection Point created earlier, and go to the **Documents** tab.
- 3 Click the **Refresh** button. A message is displayed about document definitions being added.
- 4 Click OK.
- 5 Go to ION Desk and check that there is a new document schema for Usernames.

Verification

To verify that your integration of SyteLine to multi-tenant Data Lake is successful, perform these steps:

- 1 In SyteLine, open the **Users** form, change some data, and save.
- 2 Go to ION Desk in your tenant and check that there is a new document resulting from the row replicated from SyteLine.
 - a Go to the OneView page.
 - b Click **Search** to search with the default filter (usually "Last hour").

Chapter 14: Configuring Analytics for Birst

This section includes information on configuring your Analytics content.

Prerequisites

Before you start the configuration, ensure that these prerequisites are met:

- Assign the Space Administrator role to the person performing the configuration tasks.
- Configure the Data Lake. See Configuring Infor Data Lake with SyteLine on page 61.

Setting parameters on the Sites/Entities form

Ensure that sites listed on the Sites/Entities form are also listed on the BI Setting form.

- Launch SyteLine.
- 2 Open the Sites/Entities form.
- 3 Select the site that you use to login to Birst.
- 4 In the Link Info area, ensure that the list of sites is the same as the list of sites on the **BI Setting** form
- 5 Ensure the Disable Replication field is cleared for all sites.
- **6** Specify the server name in the **Linked Server Name** field. If you do not know the server name, specify Localhost.
- 7 Save.

Setting parameters on the BI Setting form

The **BI Setting** form is provided for administrators to set parameters within SyteLine.

Ensure you have set up the currency rate on the **Currency Rates** form before performing the steps in this section, otherwise, there may be errors during data loading.

- Launch SyteLine.
- 2 Open the BI Setting form.
- 3 Click **New** to add a new site for analysis, or select a site in the grid.
- 4 Default Site/Currency is required. Select the **Default** check box to set the default.
- **5** Click **Update** to save the setting.

Note: Update not only saves the record, but it also calculates the period currency rate (average rate, end rate and current rate), so when you have any currency rate or accounting period changes, you should run it to synchronize rates before you run Orchestration in Birst.

Accessing Birst

You must have proper permissions to access Birst. See your System Administration to ensure you have the proper permissions.

- 1 From within Ming.le, click the App Menu icon.
- 2 Click CloudSuite Industrial Analytics. The landing page is displayed.

Predefining cash flow accounts

This section describes how to predefine cashflow accounts and apply for a Cash Flow Statement report.

- 1 For the specified space, select **Designer**.
- 2 Select Report and choose Open in the menu list.
- 3 For shared folder, expand Reports > Finance > Cash Flow Summary.
- 4 Click Account Filter on the top of the report to edit the filter, and update the account range or account if needed.
- **5** Save and close.

Update accounts on these reports and keep Cash Flow Summary as the total for these six types of data:

- Cash Flow In from Operating Activities
- Cash Flow Out from Operating Activities
- Cash Flow In from Investing Activities
- Cash Flow Out from Investing Activities
- Cash Flow In from Financing Activities
- Cash Flow Out from Financing Activities

Predefining SG&A Accounts

This section describes how to predefine SG&A accounts and how to apply for an SG&A Cost (per 1000 revenue) report.

- 1 For the specified space, select **Designer**.
- 2 Select Report and choose Open in the menu list.
- 3 For shared folder, expand Report > Sales > SG&A Cost (per 1000 revenue).
 Click SGA Account on the top of the report to edit the filter, and update the account range or account if needed.
- 4 Save and close.
- **5** Go back to the SG&A report and select the **Layout** tab.
- **6** Right-click SGA Cost Column and select Column Properties on the bottom of the report. Update the account range or account if needed.
- 7 Save and close.

Ensure the SG&A account filter and SG&A column on the report layout are consistent.

Loading the data into Birst

- 1 From within Ming.le, launch Birst.
- 2 Select Home.
- 3 Select Admin.
- 4 Select **Orchestration**. Perform these steps:
 - a Extract all data from the Data Lake.
 - b Publish 1000,2500,2700,3000 from Source Space.
 - c Publish all from Dimension Space.
 - d Publish all from Model Sales Space.
 - e Publish all from Model Finance Space.
 - f Publish 9999 from Source Space.
- 5 Select Workflows.
- 6 Select **Run Workflow**. This workflow must be a CSI-DataLake workflow. Do not run an SMD workflow.
 - You can select Run History to check the result.
- 7 After you run through all previous steps the first time, create a schedule to run your workflows on a daily basis.

Chapter 15: Configuring and integrating other applications in the CloudSuite

You must configure some of the optional products in the CloudSuite to work with the components of Infor OS (which include ION, Infor Ming.le, Infor Document Management, and Infor Localization Services).

Some products also require additional integration steps to work with the ERP.

The integration guides mentioned in this chapter are available on the Infor Support Portal.

Integrating with Infor CPQ Enterprise Configurator

If Infor CPQ Enterprise Configurator is included in the CloudSuite, these areas of integration are already configured for you:

- The point-to-point connection between the Configurator and SyteLine
- The configuration parameters in the SyteLine Inventory Parameters form
- Some sample ruleset data in Design Studio, and sample content in the Workbench. (DEM tenant only)

In the PRD tenant, only the initial SyteLine site is configured. If you add more sites that will integrate with this application, you must perform the tasks to configure those sites.

You must have some company data available in SyteLine before you can complete and test the integration in the PRD tenant.

To complete the integration between SyteLine and Infor CPQ Enterprise Configurator, see this information:

- "Setting Up a Configuration Interface for an Item or Job" in the SyteLine online help
- Infor SyteLine Integration Guide for Infor Product Configuration Management

Integrating with Infor CPQ Enterprise Quoting

If Infor CPQ Enterprise Quoting is included in the CloudSuite, these areas of integration are already configured for you:

- The web service, as well as the ION connection points and document flow
- The configuration parameters in the SyteLine **Inventory Parameters** form
- Replication triggers enabled in SyteLine for the BODs used in the Infor Enterprise Quoting integration
- Sample ruleset data in Designer (DEM tenant only)
- Enterprise Quoting application preferences and drillbacks to SyteLine (DEM tenant only)

In the PRD tenant, only the initial SyteLine site is configured. If you add more sites that will integrate with this application, you must perform the tasks to configure those sites.

You must have some company data available in SyteLine before you can complete and test the integration in the PRD tenant.

To complete the integration between SyteLine and Enterprise Quoting, see these documents:

- "Setting Up a Configuration Interface for an Item or Job" in the SyteLine online help.
- Infor SyteLine Integration Guide for Infor CPQ Enterprise Quoting see the Infor SyteLine Integration Guide for Infor CPQ Enterprise Quoting.

Integrating with Infor CRM

There are two available integrations:

- Infor CRM CE is a multi-tenant cloud integration.
- Infor CRM 8.x is 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.

If Infor CRM CE is included in the CloudSuite, the ION integration with CRM is configured for the DEM tenant. Your business partner or Infor consultant might configure ION integration for the initial site in the PRD tenant. You must have some company data available in before you can complete and test the integration in the PRD tenant. See the *Infor SyteLine Cloud Integration Guide for Infor CRM CE*.

Alternatively, if Infor CRM 8.x hybrid integration is used, these steps must be followed:

- 1 Install the Enterprise Connector and configure the CRM connection point in ION.
- 2 To complete the hybrid integration between CRM 8.x and the ERP, see the Infor SyteLine Cloud Integration Guide for Infor CRM CE.

Integrating with Infor EAM

If Infor EAM is included in the CloudSuite, these areas of integration are already configured for you:

- The ION connection points and document flow
- Replication triggers enabled in SyteLine for the BODs used in the EAM integration
- Some initial parameters and default Databridge configuration in EAM (DEM tenant only)

In the PRD tenant, only the initial SyteLine site is configured. If you add more sites that will integrate with this application, you must perform the tasks to configure those sites.

You must have some company data available in both SyteLine and Infor EAM before you can complete and test the integration in the PRD tenant.

To complete the integration between EAM and SyteLine, see the Infor SyteLine Cloud Integration Guide for Infor EAM.

Integrating with Infor Expense Management

If Infor Expense Management is included in the CloudSuite, these areas of integration are already configured for you:

- The ION connection points and document flow
- Replication triggers enabled in SyteLine for the BODs used in the Infor Expense Management integration

In the PRD tenant, only the initial SyteLine site is configured. If you add more sites that will integrate with this application, you must perform the tasks to configure those sites.

You must have some company data available in both SyteLine and Infor Expense Management before you can complete and test the integration in the PRD tenant.

To complete the integration between Infor Expense Management and SyteLine, see the Infor SyteLine Cloud Integration Guide for Infor Expense Management.

Integrating with Infor Factory Track

If Infor Factory Track is included in the CloudSuite, these areas of integration are already configured for you:

- The point-to-point connection as well as connection points and document flows in ION
- Replication triggers enabled in SyteLine for the BODs used in the Factory Track integration
- SyteLine-specific information in the Factory Track Site Parameters form
- One administrative user for Factory Track in both Infor Ming.le and Factory Track

In the PRD tenant, only the initial SyteLine site is configured. If you add more sites that will integrate with this application, you must perform the tasks to configure those sites.

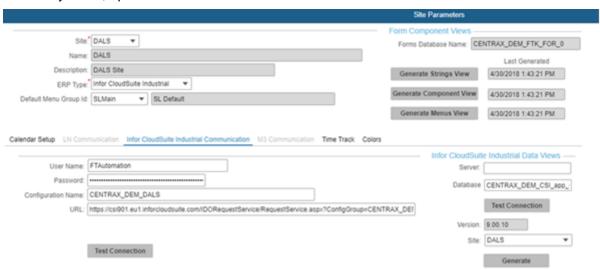
For users who will work in both Factory Track and other Infor Ming.le applications such as SyteLine, set up those users in Infor Ming.le. These user accounts are coordinated with the Factory Track user accounts through BODs sent between Infor Ming.le and Factory Track.

To complete the integration between Factory Track and SyteLine, see the Infor Factory Track Integration Guide for Infor SyteLine.

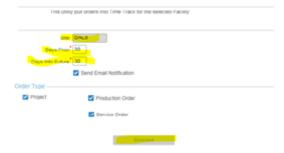
You must have some company data available in both SyteLine and Factory Track before you can complete and test the integration in the PRD tenant.

After your company data is available in SyteLine and Factory Track, you can verify that the provisioning setup is working by using these steps

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. If the test fails, log an issue with Infor Support.
- Open the **Jobs List** form, and make a note of how many jobs are currently listed there, for later reference.
- Open the Load Orders from ERP form. Specify the number of days prior and into the future to import data. Select the types of orders to import, and click **Process**.



Reopen the Jobs List form and filter to show all jobs. If there are more jobs than were shown in step d, 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.

Integrating with Infor Risk and Compliance (Approva)

If Infor Risk and Compliance is included in the CloudSuite, the IRC connection point and the flow of BODs between Infor Risk and Compliance and SyteLine are partially configured during tenant provisioning.

To complete the integration between Infor Risk and Compliance and SyteLine, see the Infor Mongoose Integration Guide for Infor Risk and Compliance.

Integrating with Infor Global HR and Talent Management

If Infor Global HR is included in the CloudSuite, the Global HR connection point and the flow of BODs between Global HR and SyteLine are partially configured during tenant provisioning.

To complete the integration between Infor Global HR and SyteLine, see the Infor SyteLine Cloud Integration Guide for Infor Global HR and Talent Management.

Integrating with Infor Localization Services

In order to use some features in certain localizations, Infor Localization Services is required. See these documents for information about configuring and integrating Infor Localization Services with your application:

- See the appropriate country guide for information about whether Infor Localization Services is required, and if so, which components must be downloaded and imported.
- For information about how to set up SyteLine and Infor Localization Services to work together, see the Infor SyteLine Cloud Integration Guide for Infor Localization Services.
- For more information about the components of Infor Localization Services, see the *Infor Localization Services Product Overview*.

Integrating with Microsoft Office

Before using the integrated Office features with SyteLine, users must download the plug-ins for Excel, Word, and Projects from the Infor Support Portal Download Center to their local devices. The Trust setting must be enabled for Excel.

See the Infor SyteLine User Guide for Microsoft Office Add-ins.

Integrating with Infor Rhythm for Commerce

Although the erp_rhythm document flow is provisioned as part of the solution, you must add the connection points for SyteLine and Rhythm to it, and you must verify that the appropriate documents are included. Then you must perform additional configuration in both products.

See the Infor SyteLine Cloud Integration Guide for Infor Rhythm for Commerce.

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 SyteLine Credit Card Interface Configuration Guide
	Help topic: "Setting Up the Credit Card Interface"
Employee Self Service	Help topic: "Employee Self Service Overview"
Forecasting	Infor SyteLine Forecasting User Guide
Mobile	Help topic: "Setting Up Mobile Access"
Molding Industry Pack	Molding Industry Pack help topics and user guide
Portals	Infor SyteLine Portal Administration Guide
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 SyteLine SytePlan Implementation and User Guide
Tax System Interface	Infor SyteLine Tax System Interface Configuration Guide
	Help topic: "Setting Up a Tax Interface"

Appendix A: User and role BOD usage

This appendix provides detailed information about how the security BODs are used between SyteLine and Infor Ming.le.

BODs that send roles (authorization groups) from the ERP to Infor Ming.le

Some authorization groups from SyteLine are preconfigured as security roles in Infor Ming.le when the SyteLine application is added in Infor Ming.le.

When you create or edit an authorization group in SyteLine, 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. The name of the role created in The name of the role created in Infor Ming.le depends on whether the group name is currently mapped to an External Role Alias. If so, the alias is used. If not, the group name is used.

Note: Remember that SyteLine is the system of record for roles/groups. It sends the Sync.SecurityRoleMaster BOD when a group is created or changed in SyteLine.

Alternatively, you can create a security role in Infor Ming.le that does not exist in SyteLine. If you assign that role to a user, then when Infor Ming.leInfor Ming.le sends the Sync.SecurityUserMaster BOD for that user to SyteLine, SyteLine automatically creates a "placeholder" group for that role. (First, it checks both the External Role Alias table, for license modules, and the Groups table, to make sure the Infor Ming.le security role does not already exist in SyteLine. If not, SyteLine assigns the placeholder group to the user.) The placeholder group is just a name and description, with no assigned privileges. SyteLine then sends a Sync.SecurityRoleMaster BOD back to Infor Ming.le for the new group/role.

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

Person IDs

Any SyteLine 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 SyteLine.

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 SyteLine 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 ION-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 ION-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 SyteLine for a user, a Process.SecurityUserMaster BOD is published by SyteLine.

The **Workstation/Domain ID** field on the **Users** form in SyteLine contains the IFS ION-Person ID for a user. This value should not be changed. It is possible to update this value in SyteLine 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 IFS ION-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.

Infor Ming.le is the system of record for the SecurityUserMaster BOD.

When SyteLine receives the BOD, these actions occur:

- For a new user that does not exist in SyteLine:
 - 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.
 - By default, the Transactional license module is assigned to all new users in SyteLine. (In a usage-tracking environment, this assignment is ignored.)
 - In addition, if any CSI-License-xxxx security roles were assigned to the user in Infor Ming.le, the matching license modules are assigned in SyteLine, as mapped in the **External Role Alias** form. (In a usage-tracking environment, this assignment is ignored.)
 - 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 SyteLine User Description field, separated by a space.
- For an existing user in SyteLine:
 - The user status, user descriptions, and primary email address are updated.
 - The user record is updated with any new user group authorizations, user modules, based on the assignments in Infor Ming.le.
 - An Acknowledge SecurityUserMaster BOD is sent back to Infor Ming.le.

About the "Keep Groups in SecurityUserMaster" process default

You can set a process default in the **Process Defaults** form that determines how the groups assigned to a user should be treated in SyteLine when synchronizing user records with Infor Ming.le:

- When set to 0 or left as null (the default), any groups that are assigned to the user in SyteLine, but that are not referenced by (or known by) Infor Ming.le are automatically removed from the user record in SyteLine during synchronization.
- When set to 1, the default behavior is overridden and the groups assigned to the user are left intact
 in SyteLine. In this case, if you want to remove a group membership for a user in SyteLine you
 must remove it manually on the **Users** form.

Note: This process default has no effect on the ability to *add* roles to users in Infor Ming.le, which end up as group memberships for that user in SyteLine. It also has no effect on whether the role/group itself is deleted entirely from the application.

About the "Keep Modules in SecurityUserMaster" process default

This process default handles license module updates the same way that the "Keep Groups in SecurityUserMaster" process default handles updates for groups.

BODs that send user information from the ERP to Infor Ming.le

When any of this information is manually added or updated in SyteLine for a user, a Process.SecurityUserMaster BOD is published by SyteLine:

- User login status
- User description: A value is required in this field if you are passing user information from SyteLine 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 SyteLine 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 SyteLine to Infor Ming.le through the Process SecurityUserMaster BOD.
- Group authorizations
- License modules (In a usage-tracking environment, this information is ignored.)

However, if the user information was changed in SyteLine because of an incoming Sync.SecurityUserMaster BOD from Infor Ming.le, the Process.SecurityUserMaster BOD is not published.

SyteLine Portals users

If a new user is created in SyteLine based on a request from the vendor, customer or reseller portals, the BOD is not sent to Infor Ming.le.

See the portal administration guide for information about creating new portal users.

Adding users in the ERP

It is possible to add users in SyteLine rather than in Infor Ming.le. If the user information is set up correctly, it will be transmitted in the Process.SecurityUserMaster BOD to Infor Ming.le and the user is created automatically there, too.

Note: This method is not recommended, because Infor Ming.le is the system of record for users. We recommend that you instead use the method described in <u>Configuring user access to the ERP through Infor Ming.le</u> on page 22.

- 1 If you are using AD FS, create the user in AD FS before you add the user in SyteLine. Otherwise, Infor Ming.le will reject the BOD.
- 2 In the SyteLine **Users** form, specify this information:

User Name

Specify the user name in the format domain_name\user_name.

Workstation Domain/ID

Specify the user name in the format *domain_name\user_name*.

Email Type Address

For the Primary email address, specify the user's email address.

- **3** For the rest of the field values, see the online help.
- 4 After the Process. Security User Master BOD is received by Infor Ming.le, the user is created there.

Appendix B: 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 SyteLine 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 Utilities** form 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.

Verifying ION Desk provisioned settings

Some connection points and some data flows were provisioned for you by the Infor Cloud team.

This section is provided in case you make a change from the provisioned settings and need to correct your system back to the original setting.

Provisioned connection points

In ION Desk, select **Connect > Connection Points**. You should see at least these connection points:

- Infor Document Management
- Infor Ming.le
- SyteLine. There might be multiple SyteLine sites.

Connection points for optional applications in this tenant might also be provisioned.

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.

The **Documents** tab for each connection point lists all of the documents (BODs) that can be sent or received by this application instance for any integration. For each document, the list indicates whether the document can be sent, received, or both.

Verifying the provisioned ERP connection points

If you have a multi-site system, one connection point is defined for each site. Verify that they contain the correct documents.

- 1 In ION Desk, select Connect > Connection Points.
- Select one of the predefined SyteLine connection points.
 The SyteLine connection points should contain these documents after provisioning:

Document	Receive in application	Send from application	Used in integra- tion with
Process.BillToPartyMaster	X		CRM
Process.ContactMaster	X		CRM
Process.CustomerPartyMaster	X		CRM
Process.PulseAlert		X	ION (for alerts)
Process.Quote	X		CRM, EQ
Process.Requisition	X		EAM
Process.SalesOrder	X		CRM, EQ
Process.SecurityUserMaster		X	Infor Ming.le
Process.ShipToPartyMaster	Х		CRM, EQ
Sync.BillToPartyMaster		Х	CRM, EQ
Sync.CodeDefinition	X	X	CRM, EQ, Ex- pense Mgt, Glob- al HR
Sync.ContactMaster		X	CRM
Sync.CurrencyExchangeRateMaster		X	EQ, Expense Mgt
Sync.CustomerPartyMaster		X	CRM, EQ
Sync.CustomerReturn		X	CRM
Sync.EmployeeTimesheet	X		Expense Mgt
Sync.EmployeeWorkSchedule	X		Global HR
Sync.ExpenseReport	X		Expense Mgt
Sync.Invoice		Х	CRM
Sync.ItemMaster		Х	CRM, EQ
Sync.Location		Х	CRM
Sync.PayFromPartyMaster		Х	CRM
Sync.Person		Х	CRM

Document	Receive in application	Send from application	Used in integra- tion with
Sync.Personnel	Х	X	Expense Mgt, Global HR
Sync.ProductionOrder		X	Expense Mgt
Sync.ProjectMaster		X	Expense Mgt
Sync.PurchaseOrder		X	EAM
Sync.Quote		X	CRM, EQ (set to Receive in Appli- cation if EQ is sending Sync in- stead of Pro- cess)
Sync.ReceivableTransaction		X	CRM
Sync.ReceiveDelivery		X	EAM
Sync.RemittanceAdvice		X	Expense Mgt
Sync.SalesOrder		X	CRM
Sync.SecurityPermissionMaster		X	IRC
Sync.SecurityRoleMaster		Х	Infor Ming.le, IRC
Sync.SecurityUserMaster	Х		Infor Ming.le
Sync.ServiceOrder		Х	Expense Mgt
Sync.Shipment		X	CRM
Sync.ShipToPartyMaster		X	CRM, EQ
Sync.SupplierPartyMaster		Х	EAM

This list might change later, if integrations with other products are added or removed.

Verifying the provisioned 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 Connection > Connection Points.
- 2 Select the Infor Ming.le connection point.

The **Documents** tab should contain these documents after provisioning:

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

Verifying the provisioned Infor Document Management connection point

The Infor Cloud team has already set up the Infor Document Management (Document Management) connection point. Verify that it contains the correct documents.

- 1 In ION Desk, select Connect > Connection Points.
- 2 Select the Document Management connection point.

The **Documents** tab should contain these documents after provisioning:

Document	Receive in application	Send from application
Sync.CaptureDocument		X

Provisioned data flows

In ION Desk, select **Connect > Data Flows**. You should see these data flows; the actual list depends on the optional integrations that you are using:

- erp_mingle
- erp_crm
- erp_eam
- erp idm
- erp_xm
- erp_irc_ifs
- ft_mingle

Each data flow should contain application boxes with connection points. For document flows, the document icon between the application boxes should list only the documents (BODs) that are sent or received between the applications in that part of the flow.

Verifying the provisioned erp_mingle document flow

The Infor Cloud team has already set up a document flow between SyteLine 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.

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the **erp_mingle** document flow and verify that it is marked as **Active**.
- 3 Select the document flow to open it. The document flow should look like this diagram:



4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.

Note: In this flow, the ERP_1 application box contains only oneSyteLine 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 SyteLine. (See the *Infor SyteLine Cloud Multi-Site Planning Guide.*) If you don't want to use a master site and shared user tables, then you must include all of the SyteLine site connection points in this document flow.

- 5 Select the document icon between MINGLE_1 and ERP_1 and verify that it lists these documents:
 - Sync.SecurityUserMaster
- 6 Select the document icon between ERP_1 and MINGLE_2 and verify that it lists these documents:
 - Sync.SecurityRoleMaster
 - Process.SecurityUserMaster

Verifying the provisioned erp_idm document flow

The Infor Cloud team has already set up a document flow between SyteLine and Infor Document Management. If you will be using the Infor Document Capture (using Ephesoft) document scanning application and Infor Document Management with SyteLine, verify that the flow is activated and that it contains the correct connection points and documents.

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the **erp_idm** document flow. If you are using this integration, verify that it is marked as **Active**.
- 3 Select the document flow to open it. The document flow should look like this diagram:



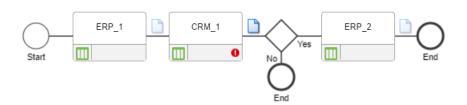
- 4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.
- 5 Select the document icon between IDM_1 and ERP_1 and verify that it lists this document: Sync.CaptureDocument.

Verifying the provisioned erp_crm document flow

.

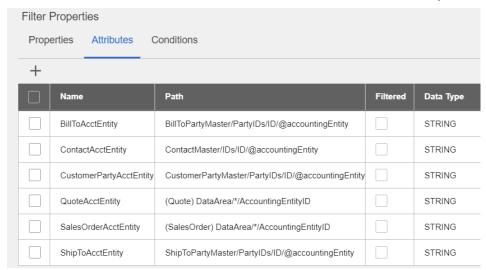
The Infor Cloud team has already set up a document flow between SyteLine and Infor CRM. If you are using this optional integration, verify that the flow is activated and that it contains the correct connection points and documents

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the erp crm document flow. If you are using this integration, verify that it is marked as Active.
- 3 Select the document flow to open it. The document flow should look like this diagram:



- 4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.
- 5 Select the document icon between ERP_1 and CRM_1 and verify that it lists 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
- 6 Select the document icon between CRM_1 and ERP_2 and verify that it lists these documents:
 - Process BillToPartyMaster
 - Process ContactMaster
 - Process CustomerPartyMaster
 - Process Quote
 - Process SalesOrder
 - Process ShipToPartyMaster
- 7 Click on the Filter decision box between CRM_1 and ERP_2 and verify its attributes:



8 Verify that its condition looks like this example:



Where the **Expression** contains the accounting entity IDs for each of the SyteLine sites that should receive BODs from Infor CRM.

Verifying the provisioned erp_eam document flow

The Infor Cloud team has already set up a document flow between SyteLine andInfor EAM. If you are using this optional integration, verify that the flow is activated and that it contains the correct connection points and documents.

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the **erp_eam** document flow. If you are using this integration, verify that it is marked as **Active**.
- 3 Select the document flow to open it. The document flow should look like this diagram:



- 4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.
- 5 Select the document icon between ERP_1 and EAM_1 and verify that it lists these documents:
 - Sync.CodeDefinition
 - Sync PurchaseOrder
 - Sync ReceiveDelivery
 - Sync SupplierPartyMaster
- 6 Select the document icon between EAM_1 and ERP_2 and verify that it lists this document: Process Requisition.

Verifying the provisioned erp_xm document flow

The Infor Cloud team has already set up a document flow between SyteLine and Infor Expense Management. If you will be using this optional integration, verify that the flow is activated and that it contains the correct connection points and documents.

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the **erp_xm** document flow. If you are using this integration, verify that it is marked as **Active**.
- 3 Select the document flow to open it. The document flow should look like this diagram:



- 4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.
- 5 Select the document icon between ERP_1 and XM_1 and verify that it lists these documents:
 - Sync CodeDefinition
 - Sync CurrencyExchangeRateMaster

- Sync Personnel
- Sync ProductionOrder
- Sync ProjectMaster
- Sync RemittanceAdvice
- Sync ServiceOrder
- 6 Select the document icon between XM_2 and ERP_2 and verify that it lists these documents:
 - Sync EmployeeTimesheet
 - Sync ExpenseReport

Verifying the provisioned erp_cpq_eq document flow

The Infor Cloud team has already set up a document flow between SyteLine and Infor Enterprise Quoting. If you will be using this optional integration, verify that the flow is activated and that it contains the correct connection points and documents.

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the **erp_cpq_eq** document flow. If you are using this integration, verify that it is marked as **Active**.
- 3 Select the document flow to open it. The document flow should look like this diagram:



- 4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.
- 5 Select the document icon between CPQ_EQ_1 and ERP_1 and verify that it lists these documents:
 - Process Quote
 - Process SalesOrder
 - Process ShipToPartyMaster
- 6 Select the document icon between ERP_1 and CPQ_EQ_1 and verify that it lists these documents:
 - Sync BillToPartyMaster
 - Sync CodeDefinition
 - Sync CurrencyExchangeRateMaster
 - Sync CustomerPartyMaster
 - Sync Item Master
 - Sync ShipToPartyMaster

Verifying the provisioned ft_mingle document flow

The Infor Cloud team has already set up a document flow between Infor Ming.le and Infor Factory Track. If you will be using the optional Factory Track integration with SyteLine, verify that the flow is activated and that it contains the correct connection points and documents.

- 1 In ION Desk, select Connect > Data Flows.
- 2 Find the **ft_mingle** document flow. If you are using this integration, verify that it is marked as **Active**.
- 3 Select the document flow to open it. The document flow should look like this diagram:



- 4 Click in each of the application boxes and verify that the appropriate connection point(s) are listed as applications. If not, add them.
- 5 Select the document icon between MINGLE_1 and FT_1 and verify that it lists this document:
 - Sync.SecurityUserMaster
- 6 Select the document icon between FT_1 and MINGLE_2 and verify that it lists these documents:
 - Sync.SecurityRoleMaster
 - Process.SecurityUserMaster

Appendix C: Business events that generate outbound BODs

This table shows the events, which are user actions in SyteLine that generate an outbound BOD from SyteLine:

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.
		* 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.
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

Verb	Noun	User action to generate the BOD
Sync	BillofResources	Perform a cost rollup in:
		* Current BOM Cost Roll Up form (current item BillOfResources BOD)
		* Single Level Current BOM Cost Roll Up form (current item BillOfResources BOD)
		* Roll Current Cost to Standard Cost form (financial standard BillOfResources BOD)
		(BOD is not currently active)
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.
Confirm	BOD	The system could not process a BOD sent from another system because of validation or other errors.
Sync	Calendar	* Delete a Resource Group.
		 * Add or update a resource on the Resources form (creates a BOD for each shift line)
		* Add or update a Resource Group, or change the elements of a group (creates a BOD for each shift line that is affected)
		* Add or update a shift calendar in Scheduling Shifts.
		* Update a Shift Exception (creates a BOD for the affected resource with WORKFG (Work) set to Y if the resource is free or N (Down Time) if the resource is busy.
		* Update a resource schedule (creates a BOD for the affected resource and resource group, indicating that the resource is busy).
		* Add a holiday. This creates a BOD that indicates all resources are busy on that day.
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

Verb	Noun	User action to generate the BOD
Sync	CodeDefinition	* Add or update Billing Terms
		* Add an Education Major
		* Add a Certification/License
		* Add a Commodity Code
		* 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.
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

Verb	Noun	User action to generate the BOD
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
		* If certain country packs such as Sweden or Poland are enabled, only vendor payments from the AP EFT and Wire Payments form are used to generate a CreditTransfer BOD. Employee or customer payments do not generate this BOD.
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, Prospects, Customer Sales Contact Cross Ref- erences, or Sales Contact Salesperson Cross- References, or Customer ShipTos form
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
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

Verb	Noun	User action to generate the BOD
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	InventoryHold	Change either of these for an Item Stockroom Location record: Location Type or Non-Nettable Flag
		(BOD is not currently active.)
Sync	Invoice	* Print and post an invoice through the Consoli- dated 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 an item 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, Country of Origin
		* 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)
Sync	Opportunity	* Create or update a record on the Opportunities, Customer Orders, or Opportunity Tasks form * Delete an Opportunity

Verb	Noun	User action to generate the BOD
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/Li- cense, Employee Education, Employee Training Courses, Employee Work Experience, or Employ- ee 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. * Delete a job or production schedule release,
		where the job status is not Firm or the production schedule status is not Planned.
		 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	ProductionReceiver	* Create or update an unposted job transaction that moves inventory into stock for a job order or a co-product job order
		* Delete an Unposted Job Transaction that was to receive inventory.
		(BOD is not currently active)
Sync	ProjectMaster	Create a Project or update the project status on the project header.
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; Scheduled-MaintenanceAddedAlert; ScheduledMaintenanceAlert; TransactionAmountAlert Note: This BOD is not related to the Replication Document forms.

Verb	Noun	User action to generate the BOD
Sync	PurchaseOrder	* Print the Purchase Order Report * Print the Builder Purchase Order Report * Change the Purchase Order status to Complete * Delete a Purchase Order * Print a Change Order Report
Acknowledge	Quote	Acknowledge the receipt of a Quote from an external application.
Sync	Quote	Change the Estimate status to Quoted * Delete an Estimate
Sync	ReceivableTracker	Create an invoice, payment, credit memo, debit memo or finance charge transaction for a customer with a 'Balance Forward' balance method.
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.

Verb	Noun	User action to generate the BOD
Sync	ReceiveDelivery	* Perform material transactions that add inventory tied to these types of orders: Project, Job, Cus- tomer 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
		When Poland Country Pack is enabled, ReceiveDeliveryPL is sent instead
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
Sync	Requisition	* Print the requisition on either the Purchase Requisition Report or the PO Requisition Report forms
		* Delete a requisition
		* 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
		* Delete an order
		* 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, change the group description, or change the permissions associated with the group
Acknowledge	SecurityUserMaster	Acknowledge the receipt of a SecurityUserMaster from an external application.

Verb	Noun	User action to generate the BOD
Process	SecurityUserMaster	Add or change the user status, user description or workstation login, or add/change a group assigned to the user.
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 .
		When Poland Country Pack is enabled, Shipment- PL is sent instead
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
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

Verb	Noun	User action to generate the BOD
Sync	SupplierBalance	* Change the price on a Purchase Order Line
		* Change the status or vendor on a Purchase Order
		(BOD is not currently active)
Sync	SupplierInvoice	* Post voucher
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 D: Inbound BOD usage

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

Verb	Noun	Destination of processed data in SyteLine
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
Process	ChartOfAccounts	chart table
Process	CodeDefinition	Depends on type of code
Sync	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	EmployeeWorkSchedule	Employee absence/time-off forms
Sync	ExpenseReport	prtrx table
Sync	InventoryAdjustment	Miscellaneous Receipt and Miscella- neous Issue forms
Sync	InventoryCount	Miscellaneous Receipt and Miscella- neous Issue forms
Process	ItemMaster	Items form and related forms
Process	PayableTransaction	Updates Vendor Paid YTD, Paid Fiscal YTD and Last Paid Date
Sync	Personnel	Employees form and tables

Verb	Noun	Destination of processed data in SyteLine
Sync	PlanningSchedule	coitem table (blanket items)
Process	ProductionOrder	job table
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_ship-ment_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 Sta- tus="Shipped" create Customer Order Shipment
Sync	Shipment	coitem or trnitem table (depending on record type), last_external_ship-ment_doc_id
Sync	ShipmentSchedule	coitem table (blanket items)
Process	ShipToPartyMaster	Customer Ship Tos form and related forms
Load	SupplierInvoice	Creates an unposted AP voucher that must be manually cross-referenced to a PO.

Appendix E: BODs used in integrations with this application

This section contains the list of BODs that are available for integrations with SyteLine.

Outbound BODs from the ERP to integrated applications

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

Noun	To applications
AccountingChart	d/EPM
	Infor Localization Services
AccountingEntity	d/EPM
	Infor Localization Services
AdvanceShipNotice	WMS Warehouse Management
BankStatement	Infor Localization Services
BillToPartyMaster	CPQ/EQ
	CRM
	e-Commerce
	Rhythm Commerce
	WMS Warehouse Management
ChartOfAccounts	d/EPM
	Infor Localization Services
	AccountingChart AccountingEntity AdvanceShipNotice BankStatement BillToPartyMaster

Verb	Noun	To applications
Sync	CodeDefinition	CPQ/EQ CRM d/EPM EAM Expense Management Infor Localization Services
Sync	ContactMaster	CRM Infor Localization Services
Sync	CreditTransfer	Infor Localization Services
	CurrencyExchangeRateMaster Sync	CPQ/EQ Expense Management
Sync	CustomerPartyMaster	CPQ/EQ CRM e-Commerce Rhythm Commerce Infor Localization Services WMS Warehouse Management
Sync	CustomerReturn	CRM
Sync	DebitTransfer	Infor Localization Services
Sync	FinancialCalendar	Infor Localization Services
Sync	InventoryAdjustment	Infor Localization Services
Sync	InventoryCount	Infor Localization Services
Sync	InventoryHold	Infor Localization Services
Sync	Invoice (sends InvoiceMX when Mexico Country Pack is enabled)	CRM e-Commerce Rhythm Commerce Infor Localization Services
Sync	ItemMaster	CPQ/EQ CRM e-Commerce Rhythm Commerce Infor Localization Services WMS Warehouse Management

Verb	Noun	To applications
Sync	Location	CRM e-Commerce Rhythm Commerce Infor Localization Services
Sync	PayableTracker	Infor Localization Services
Sync	PayFromPartyMaster	CRM
Sync	Person	CRM
Sync	Personnel	Expense Management
Sync	ProductionOrder	Expense Management
Sync	ProjectMaster	Expense Management
Process	PulseAlert	Infor Ming.le
Sync	PurchaseOrder	EAM WMS Warehouse Manage- ment
Sync	Quote	CPQ/EQ CRM
Sync	ReceivableTracker	Infor Localization Services
Sync	ReceivableTransaction	CRM Rhythm Commerce Infor Localization Services
Sync	ReceiveDelivery (sends ReceiveDeliveryPL when Poland Country Pack is enabled)	EAM Infor Localization Services WMS Warehouse Management
Sync	RemittanceAdvice	Expense Management
Acknowledge	Requisition	EAM
Sync	SalesOrder	CRM e-Commerce Rhythm Commerce
Sync	SecurityPermissionMaster	IRC (Approva)
Sync	SecurityRoleMaster	Infor Ming.le IRC (Approva)
Process	SecurityUserMaster	Infor Ming.le IRC (Approva)

Verb	Noun	To applications
Sync	ServiceOrder	Expense Management
Sync	ShipFromPartyMaster	Infor Localization Services WMS
Process	Shipment	WMS
Sync	Shipment (sends ShipmentPL when Poland Country Pack is enabled)	CRM e-Commerce Infor Localization Services Rhythm Commerce
Sync	ShipToPartyMaster	CPQ/EQ CRM e-Commerce Rhythm Commerce Infor Localization Services WMS Warehouse Management
Sync	SourceSystemGLMovement	d/EPM Infor Localization Services
Sync	SourceSystemJournalEntry	d/EPM Infor Localization Services
Sync	SupplierInvoice	Infor Localization Services
Sync	SupplierPartyMaster	EAM WMS Warehouse Management Infor Localization Services

Inbound BODs to the ERP from integrated applications

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

Verb	Noun	From applications
Load	BankStatement	Infor Localization Services
Process	BillToPartyMaster	CRM
Sync	CaptureDocument	Document Management

Verb	Noun	From applications
Sync	CodeDefinition	Global HR
Process	ContactMaster	CRM
Process	CustomerPartyMaster	CRM
Sync	EmployeeTimesheet	Expense Management
Sync	EmployeeWorkSchedule	Global HR
Sync	ExpenseReport	Expense Management
Sync	InventoryAdjustment	WMS Warehouse Manage- ment
Sync	InventoryCount	WMS Warehouse Manage- ment
Sync	Personnel	Global HR
Acknowledge	PulseAlert	Infor Ming.le
Process	Quote	CRM
		CPQ/EQ
Sync	ReceiveDelivery	WMS Warehouse Manage- ment
Process	Requisition	EAM
Process	SalesOrder	CPQ/EQ
		CRM
		Rhythm Commerce
Sync	SecurityUserMaster	Infor Ming.le
Acknowledge	Shipment	WMS Warehouse Manage- ment
Sync	Shipment	WMS Warehouse Manage- ment
Process	ShipToPartyMaster	CPQ/EQ
		CRM
Load	SupplierInvoice	Infor Localization Services

Appendix F: 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=<ConfigGroup Name>

Example: https://csi10a.erpsl.inforcloudsuite.com/WSWebClientM/default.as px?ConfigGroup=TENANT Dem

Mobile Client:

https://<App_Prod_Domain>/WSWebClientM/mobile.aspx?ConfigGroup=<ConfigGroup Name>&page=formonly

Example: https://csi10a.erpsl.inforcloudsuite.com/WSWebClientM/mobile.aspx?Con figGroup=TENANT Dem &page=formonly

Smart Client:

https://<App_Prod_Domain>/ClientDeploy/mongoose.application?ConfigGroup=<ConfigGroupName>

Example: https://csi10a.erpsl.inforcloudsuite.com/ClientDeploy/mongoose.ap plication?ConfigGroup=TENANT Dem

IDO Web Service Connection:

https://<App_Prod_Domain>/IDORequestService/IDOWebService.asmx?Config Group=<ConfigGroupName>

Example: https://csi10a.erpsl.inforcloudsuite.com/IDORequestService/IDOWeb Service.asmx?ConfigGroup=TENANT Dem

Config Server Service Connection:

https://<App_Prod_Domain>/IDORequestService/ConfigServer.aspx?Config
Group=<ConfigGroupName>

Example: https://csi10a.erpsl.inforcloudsuite.com/IDORequestService/ConfigServer.aspx?ConfigGroup=TENANT Dem

ERP specific URLs

Credit Card Interface (Production):

https://<ERP Prod Domain>/CreditCardIntegrationService/

Example: https://csi10a.erpsl.inforcloudsuite.com/CreditCardIntegrationService/

Credit Card Interface (Development):

https://<ERP Prod Domain>/CreditCardIntegrationServiceDev/

Example: https://csil0a.erpsl.inforcloudsuite.com/CreditCardIntegrationSer
viceDev/

Employee Self Service:

https://<ERP_Prod_Domain>/WSWebClientM/default.aspx?page=FormOnly¬itile=1&ConfigGroup=<ConfigGroupName>&form=EmployeeSelfServiceHome.ess

Example: https://csi10a.erpsl.inforcloudsuite.com/WSWebClientM/default.as px?page=FormOnly¬itile=1&ConfigGroup=TENANT_Dem&form=EmployeeSelfService Home.ess

Tax Interface (Production):

https://<ERP Prod Domain>/TaxIntegrationService/

Example: https://csil0a.erpsl.inforcloudsuite.com/TaxIntegrationService/

Tax Interface (Production):

https://<ERP Prod Domain>/TaxIntegrationServiceDev/

Example: https://csi10a.erpsl.inforcloudsuite.com/TaxIntegrationServiceDev/

Service Mobile:

ERP_Prod_Domain with HTTPS setting turned on

Factory Track standard URLs

Light Client:

https://<FTK_Prod_Domain>/WSWebClientM/mobile.aspx?page=light&form=FTIcon Menu.mobi&ConfigGroup=<ConfigGroupName>

Example: https://ft7a.ft.inforcloudsuite.com/WSWebClientM/Default.as px?page=light&form=FTIconMenu.mobi&ConfigGroup=TENANT_Dem

Shop Floor:

https://<FTK_Prod_Domain>/WSWebClientM/default.aspx?page=formonly&form=IC SLWorkCenterNavigationHome.ts&ConfigGroup=<ConfigGroupName>

Example: https://ft7a.ft.inforcloudsuite.com/WSWebClientM/Default.aspx?page=formonly&form=ICSLWorkCenterNavigationHome.ts&ConfigGroup=TENANT Dem

Warehouse Mobility:

https://<FTK_Prod_Domain>/WSWebClientM/mobile.aspx?page=light&form=FTIcon Menu.mobi&ConfigGroup=<ConfigGroupName>

Example: https://ft7a.ft.inforcloudsuite.com/WSWebClientM/Mobile.as px?page=light&form=FTIconMenu.mobi&ConfigGroup=TENANT Dem