



# Infor SyteLine Cloud Multi-Site Implementation Guide

Release 10.x

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# Contents

<b>Multi-site checklist.....</b>	<b>6</b>
Contacting Infor.....	8
<b>Chapter 1: Planning.....</b>	<b>10</b>
<b>Chapter 2: Adding sites and entities.....</b>	<b>11</b>
Adding a site to an existing database.....	11
<b>Chapter 3: Setting domestic currency.....</b>	<b>14</b>
<b>Chapter 4: Setting up replication at sites.....</b>	<b>15</b>
Setting up transactional replication.....	15
Reviewing the predefined intranets.....	15
Defining linking between sites for transactional replication.....	16
Reviewing the links between sites.....	17
Setting up replication categories and rules for transactional replication.....	18
Setting up a master site.....	19
Setting up the master site.....	19
<b>Chapter 5: Setting up licensing at sites.....</b>	<b>21</b>
Enabling optional modules.....	21
Viewing sites where users are connected.....	21
<b>Chapter 6: Setting up accounts and financial reporting hierarchies.....</b>	<b>22</b>
Setting up the financial reporting hierarchy.....	22
Setting up accounts.....	23
Multiple financial sets of books.....	26
Setting up financial statements.....	26
<b>Chapter 7: Setting up parameters and codes.....</b>	<b>27</b>
Modifying site groups.....	27
Setting up countries and states.....	27

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Setting up currency.....	28
Setting general parameters.....	31
Setting up bank codes.....	32
Setting system parameters.....	32
<b>Chapter 8: Setting up users and authorizations.....</b>	<b>35</b>
Setting up shared user tables.....	35
Setting up password parameters.....	38
Adding common users.....	38
Adding external users.....	40
<b>Chapter 9: Setting up supporting data.....</b>	<b>41</b>
Simplifying the data load process.....	42
<b>Chapter 10: Setting up operational data.....</b>	<b>43</b>
Data loads and replication.....	43
Setting up shared customers, vendors, and items.....	43
Adding shared customers through a master site.....	44
Adding shared items through a master site.....	44
Adding shared vendors through a master site.....	44
Copying customers, vendors, or items through a master site.....	44
Adding shared customers, vendors, and items without a master site.....	44
Alternative methods for copying records.....	46
Setting up employees.....	46
Setting up other operational data.....	46
Using different images in different sites.....	47
<b>Chapter 11: Setting up other modules and products.....</b>	<b>48</b>
<b>Appendix A: Troubleshooting.....</b>	<b>50</b>
Handling replication errors.....	50
Errors during transactional replication.....	50
Replication troubleshooting checklist.....	50
Common replication solutions.....	53
Forms and utilities that are used to troubleshoot replication.....	56
<b>Appendix B: Data load to and from spreadsheets.....</b>	<b>58</b>
Requirements for loading data from spreadsheets.....	58
Exporting data from a form to a spreadsheet.....	58

Importing data from a spreadsheet into a form.....59

**Appendix C: Changing the master site.....61**

## Multi-site checklist

Follow this checklist when implementing a new multi-site system. Each step has a corresponding chapter that describes the step in detail.

Step	Description	Where
	Plan: <ul style="list-style-type: none"> <li>See the <i>Multi-Site Planning Guide</i> and create spreadsheets and flowcharts.</li> </ul>	N/A
	Set up the sites: <ul style="list-style-type: none"> <li>Add sites to your existing database.</li> </ul>	initial site
	Specify the domestic currency for the site on the <b>Multi-Currency Parameters</b> form. You can specify the account information later.	Sites (including entities)
	Set up transactional replication: <ul style="list-style-type: none"> <li>Set up replication categories and rules on the <b>Replication Categories</b> form and <b>Replication Rules</b> form, and regenerate triggers on the <b>Replication Management</b> form.</li> </ul>	Sites (including entities)
	Set up a master site: <ul style="list-style-type: none"> <li>Set up transactional replication (above).</li> <li>Set up the master site using the <b>Intranets</b> form and <b>Sites</b> or <b>Sites/Entities</b> form.</li> </ul>	Sites (including entities) (including entities)
	Set up licensing: <ul style="list-style-type: none"> <li>Verify license modules for a database on the License Management form.</li> <li>Enable modules for a site on the Optional Modules form.</li> </ul>	Sites (including entities)
	Set up the financial reporting hierarchy on the <b>Change Reports To Entity</b> form.	Sites and Lower-level Entities

Step	Description	Where
	<p>Set up accounts on these forms:</p> <ul style="list-style-type: none"> <li>• <b>Multi-FSB</b> form (optional)</li> <li>• <b>Chart of Accounts</b> form: Add all accounts; add CTA account</li> <li>• <b>Multi-Site Chart Copy</b> form: Copy Chart of Accounts to mid-level entities</li> <li>• <b>Unit Code 1-4</b> forms</li> <li>• <b>Copy Unit Codes to Accounts</b> form</li> <li>• <b>Accounting Periods</b> form</li> </ul> <p>Set up financial statements using an external solution like the Excel add-in.</p>	Top-level Entity
	<p>Set up accounts on these forms:</p> <ul style="list-style-type: none"> <li>• <b>Multi-FSB (optional)</b></li> <li>• <b>Chart of Accounts</b> form: Specify Reports To account information</li> <li>• <b>Unit Code 1-4</b> forms</li> <li>• <b>Copy Unit Codes to Accounts</b> form</li> <li>• <b>Accounting Periods</b> form</li> <li>• <b>Verify Accounts To Report</b> form</li> </ul> <p>Set up financial statements using an external solution like the Excel add-in (only if mid-level entities will run the statements).</p>	Mid-level Entities
	<p>Set up accounts on these forms:</p> <ul style="list-style-type: none"> <li>• <b>Multi-FSB (optional)</b> form</li> <li>• <b>Chart of Accounts</b> form: Delete accounts that do not apply</li> <li>• <b>Unit Code 1-4</b> forms</li> <li>• <b>Copy Unit Codes to Accounts</b> form</li> <li>• <b>Accounting Periods</b> form - just specify current period</li> </ul> <p>Set up financial statements using an external solution like the Excel add-in (only if sites will run the statements).</p>	Sites
	<p>Set up parameters and codes needed for later steps:</p> <ul style="list-style-type: none"> <li>• Set up site groups on the <b>Site Groups</b> form.</li> <li>• Set up countries and states on the <b>Countries</b> and <b>Prov/States</b> forms.</li> <li>• Set up additional currencies and currency accounts on the <b>Multi-Currency Parameters</b>, <b>Currency Codes</b>, and <b>Currency Rates</b> forms.</li> <li>• Set up parameters on the <b>General Parameters</b> form.</li> </ul>	Sites and entities (some information will replicate)
	Set up bank codes on the <b>Bank Reconciliations</b> form.	Sites

Step	Description	Where
	Set up system parameters on these forms: <ul style="list-style-type: none"> <li>• <b>Inter-Site Parameters</b> form</li> <li>• <b>Accounts Receivable Parameters</b> form</li> <li>• <b>Accounts Payable Parameters</b> form</li> <li>• <b>Order Entry Parameters</b> form</li> <li>• <b>Purchasing Parameters</b> form</li> <li>• <b>Transfer Order Parameters</b> form</li> <li>• <b>Planning Parameters</b> form</li> <li>• <b>Inventory Parameters</b> form</li> <li>• Other parameter forms as needed</li> </ul>	Sites
	Set up users and authorizations: <ul style="list-style-type: none"> <li>• Set up sharing of user tables at the master site on the <b>Intranet Shared User Tables</b> form (optional).</li> <li>• Set up other users on the <b>Users</b> form and <b>Object Authorizations for Users</b> form.</li> <li>• Set up any external customers or suppliers who will log in remotely via the internet as users on particular sites.</li> </ul>	Sites (including entities)
	Set up supporting data. See the list of forms in <a href="#">Setting up supporting data</a> on page 41. The forms you use depend on your company's requirements.	Sites
	Set up operational data: <ul style="list-style-type: none"> <li>• Add common customers on the <b>Customers for Multi-Site Customers</b> form.</li> <li>• Add common vendors on the <b>Vendors</b> or <b>Multi-Site Vendors</b> form.</li> <li>• Add common items on the <b>Items</b>, <b>Multi-Site Items</b>, or <b>Global Items</b> form.</li> <li>• Set up employees on the <b>Employees</b> form.</li> <li>• Set up other operational data. See the list of forms in <a href="#">Setting up operational data</a> on page 43. The forms you use depend on your company's requirements.</li> </ul>	Sites
	Set up add-on products and modules.	Depends on the product

## Contacting Infor

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



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

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

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## Chapter 1: Planning

Follow these steps to plan your multi-site implementation:

- 1 See the *Infor SyteLine Multi-Site Planning Guide*. When you complete the steps in that guide, you will have spreadsheets and flowcharts containing most of the information that you need to install and configure your sites. You can then update the spreadsheets to track changes as your system grows.
- 2 You must know which type of replication you are using before you set up your system, because some steps apply only to one type or the other:
  - Non-transactional replication, as used in this guide, refers to any inbound or outbound asynchronous replication.  
**Note:** The Infor Cloud Team has already set up the non-transactional replication that is needed to communicate with other applications through Infor ION and BODs.
  - Transactional replication, as used here, generally means that sites are on the same database server and are replicating records through database triggers and stored procedures as soon as the records are added or changed on one site. The use of master sites requires much of the same setup as transactional replication.
- 3 We recommend that you set up a test environment and ensure that everything works properly before you set up your production environment.

## Chapter 2: Adding sites and entities

Follow these steps to add sites and entities to your database.

### Adding a site to an existing database

To initiate a request to add a site (or entity-type site) to an existing database, use the **Site Management** utility form. The request includes information about the site as well as a contact email. If the request is successful, you are notified by email, and the site is added to the database associated with the configuration where you accessed the **Site Management** form. If the request fails, an email that describes the errors is sent. You can correct the errors and try again to add the site.

**Note:** Running this utility during regular business hours could cause decreased system performance or deadlocks with other activities. We recommend that you run this utility as a scheduled background task during times of reduced business activity, so that system performance is not affected.

Create one site at a time, and wait for the confirmation email before you create another site.

- 1 Review the information in the *Multi-Site Planning Guide* to determine what sites you need to add. If you decide to add more sites to an existing database that already includes at least one site, use these steps.
- 2 Log into an existing configuration for SyteLine in the database where you want to add a site.
- 3 Open the **Site Management** form and specify this information for a site that you want to add:

**Site ID**

Specify the site ID, which is a shorter version of the **Site Name**. The site ID can be 8 characters, maximum.

This ID will be used as the default configuration name.

**Site Name**

Specify the full site name. You might want to include the site type as part of the name, for example DALS Site or CORP Entity.

**Site Description**

Optionally, provide a short description of the site environment. For example, you could indicate whether it is a production or test environment.

**Site Type**

In most cases, accept the default value of **Site**. Select **Entity** if you are setting up a financial entity to consolidate data from the sites.

**Site Time Zone**

Select the time zone for the site. The time zone you specify is independent of the time zone for the server. Each site can have a different time zone. Most forms and reports show the time zone of the site, and audit columns such as **CreateDate** and **RecordDate** also use the site's time zone.

During replication, as date and time values are exchanged between sites, the values are adjusted by the difference between time zones. For example, an order entered at 8:00 AM in Los Angeles would show up as having been entered at 11:00 AM when the data is copied to New York. This adjustment also occurs during APS planning.

**Site Group**

Specify a group name for the environment that is being created. The group name should be descriptive of the sites in the group. For example, you might have a group name of **NoAm** for North America if all the sites in that group are in North America.

You can select from a list of existing site groups or add a new one.

**Notification Email Address**

Specify a contact email. This defaults to your **Primary Email Address** from the Users form, if it exists. However, you can specify any valid email address.

The Add Site process sends a notification email to this address if the request is successful. If the request to add a site fails, an email that describes the errors is sent to this address. You can correct the errors and try again to add the site.

**4 Click Add Site.**

A task is submitted to process the request using the information from the form.

An email is sent to the **Notification Email Address** defined above and to your SyteLine **Inbox** form, indicating whether the request was successful. If the request failed, error information is provided. You can correct the errors and re-enter the information on the **Site Management** form.

If the request is successful, these areas are configured for the new site through automation:

- Set up one configuration
- Add the site to the CORP intranet
- Set up replication for the site to ION and Infor Ming.le
- Set up a **Users** record on the new site with the **Primary Email Type** that is contained in the **Notification Email Address**, if it does not already exist
- Set up a system administrator account for the new site
- Set up tax interface and APS parameters for the new site.
- Discard cached information for all relevant existing configurations, so the new configuration can be recognized.
- If Data Lake provisioning has already been completed in the tenant, these additional steps are performed for the new site:
  - Configure the new site to replicate to the Data Lake.
  - Regenerate replication triggers.
  - Create an IMS connection point for the site in ION Desk.

These updates will be available soon after job submission.

- 5 If SyteLine is already integrated with the Data Lake, you must perform these additional steps to set up communication between the new site and the Data Lake.

For more information about these steps, see the *Infor CloudSuite Industrial Configuration Guide*.

- a In ION Desk, refresh the IMS connection point for the site and then click **Save**. This discovers the documents (tables) that are being sent from the site to the Data Lake.
  - b In ION Desk, add the IMS connection point for the site to the `erp_datalake` flow.
  - c In ION Desk, deactivate and then reactivate the `erp_datalake` flow.
- 6 During the initial site add process, an email notification is also sent to Cloud Ops. This email contains all the necessary information for Cloud Ops to submit an update through CSP to create an ION IOBOX connection point. The name of the new connection point in ION Desk is `csi_` appended with the value from the **Site** field. Cloud Ops can take several business days to create the new connection point. If the connection point does not show up in your ION Desk application within a reasonable timeframe, open an Infor support ticket.
  - 7 Add the ION IOBOX connection point for the new site in ION Desk, and edit the connection point to add the required documents. To do this, select **Connect > Connection Points** and select the new `csi_sitename` connection point.

The documents to add to the connection point depend on the applications that will be integrated with the site. See the Administration Guide for the list of available inbound and outbound documents.

At a minimum, you must add these documents to the new connection point so that users and roles can be shared across applications:

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

When done, save your changes.

- 8 In ION Desk, select **Connect > Data Flows**, choose the `erp_mingle` data flow, and add the new connection point to the `ERP_1` box.
- 9 In ION Desk, add or update other data flows to include the new connection point, as needed based on the integrations used with this site.  
See the appropriate integration guides for more information.
- 10 In ION Desk, reactivate the data flows that you changed.

**Note:** When you further define the sites, be aware that you should never select the Intranet Licensing option for a site in a cloud environment.

## Chapter 3: Setting domestic currency

Your first step in each new site and entity should be to set its domestic currency.

**Note:** The domestic currency, which is the default currency for customers and vendors in this site, cannot be changed after it has been saved. You must set the domestic currency before you can add other currency codes.

- 1 Log into the site or entity.
- 2 Select **Form > Open**.
- 3 Open the **Multi-Currency Parameters** form.
- 4 Select the **Domestic Currency**.
- 5 Save your changes.

## Chapter 4: Setting up replication at sites

During the planning phase, you should have determined which type of data sharing you will use, and which categories of data will be replicated or shared. See these sections for information about setting up the appropriate type of data sharing:

- See [Setting up transactional replication](#) on page 15.
- To set up a master site, first follow the steps for setting up transactional replication. Then see [Setting up a master site](#) on page 19.

**Note:** The Infor Cloud Team has already set up the non-transactional replication that is needed to communicate with other applications through Infor ION and BODs.

For detailed information about how replication works, see the *Infor Mongoose Replication Reference Guide*.

### Setting up transactional replication

**Note:** Skip this section if you are not using transactional replication.

See the definition of transactional replication in [Planning](#) on page 10.

Log into each site as the system administrator and perform these steps. See the online help on the various forms for more information about any step.

### Reviewing the predefined intranets

The Infor Cloud team preconfigured two intranets that are used for replication:

- The Corp intranet is set up to include all of the sites in the database. It is used to perform transactional replication between the sites.
- The InforESB intranet includes one virtual site, InforBUS. It is used to perform non-transactional replication, sending and receiving BODs to and from Infor ION.

**1** Open the **Intranets** form.

**2** Review the records for the two intranets. Do not make any changes to these records.

Some forms, like this one, open “filter-in-place,” where all of the fields on the form are blank. You can then specify filter criteria in one or more fields to retrieve a collection of records that meet those

criteria. Alternatively, you can leave all fields blank and click the filter button in the toolbar to see all existing records and add new ones.

## Defining linking between sites for transactional replication

Use the **Sites/Entities** form to specify information about this site and the other sites that it communicates with.

- 1 On the **Sites/Entities** form, ensure that each site that was linked to the current site has a record in this form. This record creation should happen automatically for sites in the same database. For sites in different databases, see [Linking databases](#).
- 2 On the **System Info** tab, select the record for each site and perform these steps:
  - a Ensure that the **Type**, **Time Zone**, **Database Name**, and **Forms Database Name** are set correctly.
  - b Set the **Intranet Name** to one of the intranets you defined. See [Defining intranets for use with transactional replication](#).
  - c In the **Configuration Name** field, specify the name of a configuration that the system will use as the target configuration when building IDORrequest XMLs during replication and AES event handling. If you leave this field blank, the system expects that a configuration exists with exactly the same name as the site name, and it uses that as the target configuration.

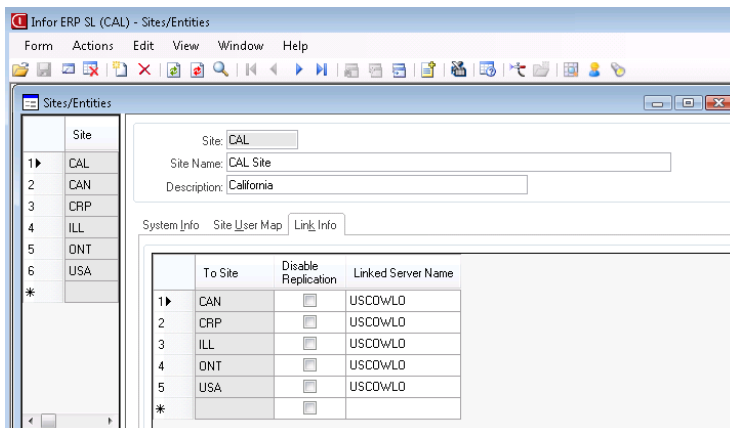
The **Reports To** (entity) field on this tab is display-only. Reporting hierarchies are set up later through the **Change Reports to Entity** utility. See [Setting up the financial reporting hierarchy](#) on page 22.

- 3 Review the list of linked sites shown in the **Link Info** tab.

Sites in the same database are automatically linked. This tab also shows any sites in different databases that you linked, which are used in transactional replication between the currently selected site record's database and other site databases.

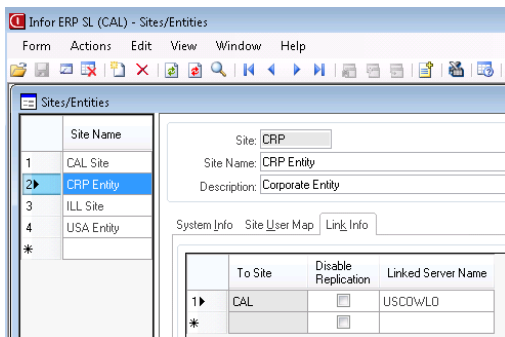
See [Linking databases](#).

- The local site's record should show all the other databases linked to this site.



- The records for other sites should show the link to the local site.



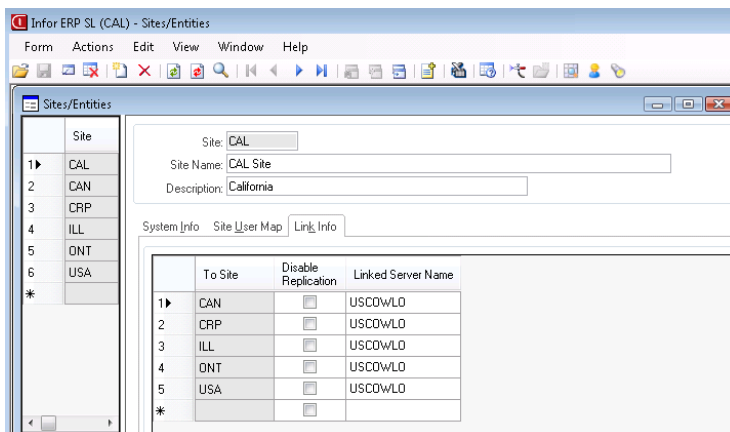


- The **Linked Server Name** is the name of the database server where the site database resides.
- On the local site's record, you can add any other needed links between this local site and other site databases that will perform transactional replication with this database. If you later make changes to this record, the changes can be replicated to other sites through manual replication of the Site Admin replication category.

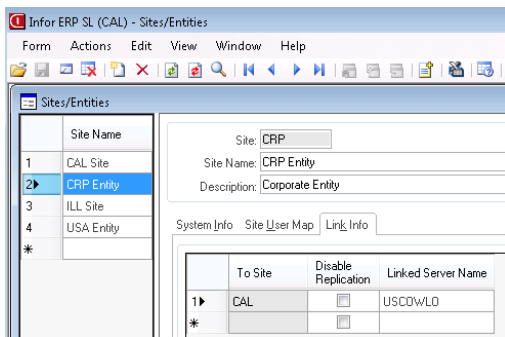
## Reviewing the links between sites

When you add sites to a database through the **Site Management** form, the Infor Cloud team completes the configuration of the sites and the links between them. Use the **Sites/Entities** form to review the links.

- 1 On the **Sites/Entities** form, ensure that each site that was linked to the current site has a record in this form.
  - 2 Review the list of linked sites shown in the **Link Info** tab.
- These links are used in transactional replication between the currently selected site and other sites.
- The local site's record should show all the other sites that are linked to this site.



- The records for other sites should show the link to the local site.



- The **Linked Server Name** is always set to `localhost`.
- 3 Review the INFORBUS site. This is an external, virtual site that represents Infor ION. It is used with the InforESB intranet to send and receive BODs to and from Infor ION through non-transactional replication.

## Setting up replication categories and rules for transactional replication

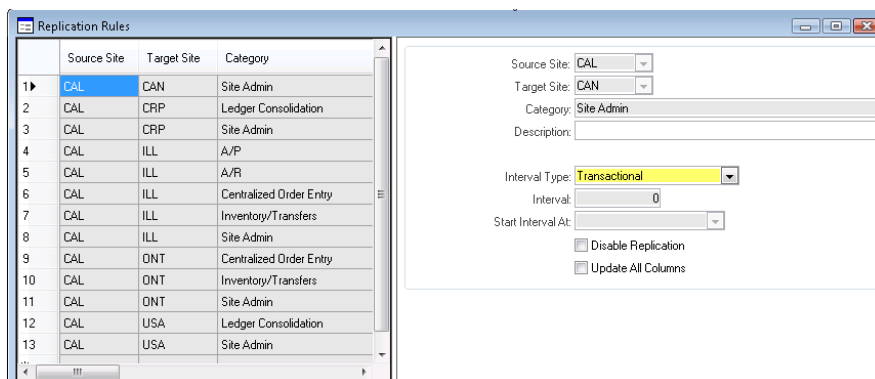
- 1 Familiarize yourself with the default categories listed in the **Replication Categories** form. Be aware of what categories are available and what each one handles.

See the *Multi-Site Planning Guide* for additional information about the categories.

Use the default categories "as is" for now. You may want to add new categories later when your system is up and running.

Adding new categories and rules requires significant knowledge of the database and business rules. When multiple tables are related, the order of replication can be critical. Improperly creating and executing replication categories and rules can result in catastrophic loss of data. Ensure that all such development and testing is performed in a controlled pilot environment prior to implementation. We strongly suggest that you contact Infor Consulting Services for assistance.

- 2 In the **Replication Rules** form, set up rules for the **Site Admin** category from this site to all other sites where replication will take place.



- In the **Interval Type** field, select **Transactional**.

- You should have created a ReplicationRules spreadsheet as part of your planning phase. You can save time by importing the appropriate rules for each site from the spreadsheet into the grid on the form at that site.  
See [Data load to and from spreadsheets](#) on page 58 for more information.
- If a rule refers to a site that is not set up with matching information in the **Sites** or **Sites/Entities** form, a validation error is displayed when you try to save the rule.
- The shared \_all tables in the category will not be replicated; however, many categories contain additional base tables or stored procedures that are needed to perform certain functions.

### 3 Go to the **Replication Management** form and click **Regenerate Replication Triggers**.

If you have multiple sites or entities per database, you can set up rules for each site and entity and then regenerate triggers for all sites and entities in the database from one site.

## Setting up a master site

**Note:** Skip this section if you are not using a master site.

See the online help on the various forms for more information about any step.

## Setting up the master site

Log in to the site that you want to make the master site where the shared tables will exist for the intranet. Then follow these steps at that site only:

**Note:** Use a site, not an entity, as your master site.

**Note:** Never select the Intranet Licensing option in a cloud environment.

- Verify the information on the **Link Info** tab on the **Sites** or **Sites/Entities** form at the master site:
  - On the **Link Info** tab for the master site's record, each of the other sites on its intranet should be listed as linked sites. For example, if the master site is ILL and the other sites on the intranet are CRP, USA, and CAL, the local site record for ILL would list all the other sites on its intranet.

To Site	Disable Replication	Linked Server Name
1▶ CAL	<input type="checkbox"/>	USCOWLO
2 CRP	<input type="checkbox"/>	USCOWLO
3 USA	<input type="checkbox"/>	USCOWLO
*	<input type="checkbox"/>	

- On the **Link Info** tab for other site records on the shared intranet, the master site should be listed.

For example, when you are logged into the ILL master site, the CAL site record's Link Info tab would look like this:

The screenshot shows the 'Sites/Entities' form with the 'Link Info' tab selected. The site is 'CAL' with 'CAL Site' as the name and 'California' as the description. Below, a table lists linked sites:

To Site	Disable Replication	Linked Server Name
1 ILL	<input type="checkbox"/>	USCOwLD
* *	<input type="checkbox"/>	

- 2 On the **Intranets** form, select this site's intranet. In the **Master Site** field, specify the master site where shared tables will reside.

The screenshot shows the 'Intranets' form with the 'SHARED' intranet selected. The 'Master Site' dropdown is set to 'ILL Site'.

These requirements must be met in order to add or change a value in this field:

- You must be logged into the site that you want to specify as the master site.
- This site must be defined as being within the selected intranet. Live links must be set up (on the **Sites** or **Sites/Entities** form) between this site and the other sites in the intranet.
- No table within the intranet is currently shared using the Shared \_All Tables utility.

This master site must be an SyteLine site, not an entity.

**Note:** After you define the master site for an intranet on the master site's **Intranets** form, the master site name displays, but cannot be changed, on the **Intranets** form at all other sites. (This assumes you have set up replication of the Site Admin category from the master site to the other sites in the intranet, or the sites are in the same application database.)

## Chapter 5: Setting up licensing at sites

You must have requested and received the proper licenses for each of your sites from your Infor representative. Use the Licensing spreadsheet from your planning phase to help with this.

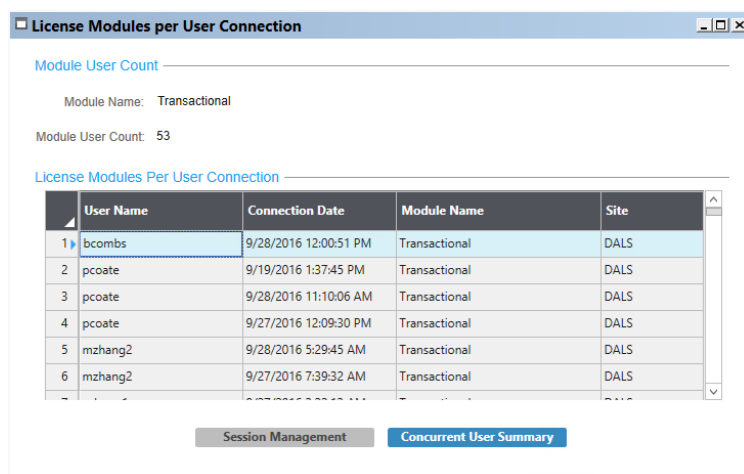
### Enabling optional modules

Licensing is applied to an application database, while optional modules are enabled for specific sites.

At each site, use the **Optional Modules** form to enable the optional modules that you want to be active in that site. For example, you might have a site where the Mexico Country Pack is enabled and a different site where the France Country Pack is enabled.

### Viewing sites where users are connected

The **License Modules per User Connection** form has a **Sites** column that lets you monitor the site to which each user is connected.



**License Modules per User Connection**

Module User Count: \_\_\_\_\_

Module Name: Transactional

Module User Count: 53

License Modules Per User Connection

	User Name	Connection Date	Module Name	Site
1	bcombs	9/28/2016 12:00:51 PM	Transactional	DALS
2	pcoate	9/19/2016 1:37:45 PM	Transactional	DALS
3	pcoate	9/28/2016 11:10:06 AM	Transactional	DALS
4	pcoate	9/27/2016 12:09:30 PM	Transactional	DALS
5	mzhang2	9/28/2016 5:29:45 AM	Transactional	DALS
6	mzhang2	9/27/2016 7:39:32 AM	Transactional	DALS

Session Management    Concurrent User Summary

## Chapter 6: Setting up accounts and financial reporting hierarchies

Follow these steps to set up financial accounts and hierarchies.

### Setting up the financial reporting hierarchy

Perform this step only if you are setting up a hierarchy of sites and entities.

- 1 At each site and lower-level entity, run the **Change Reports To Entity** utility and specify the entity to which this site or entity reports.

This utility allows a Consolidation Reporting Structure to be set up and modified. Historic data will not change. Before running this utility, the ending balances for every account at the Site must be calculated and consolidated up the old Financial Entity hierarchy by running the Ledger Consolidation activity at each site. When run, this utility changes the reports-to Financial Entity. The Ledger Consolidation Utility must be run again to complete the change process. This consolidates the beginning balances for each account up the new Financial Entity Hierarchy.

If this utility is run at a Site, the reports-to change is limited to Financial Entities which have the same base currency and Chart of Accounts. The ending balances for every account at the Site will be calculated and consolidated up the old Financial Entity hierarchy. The utility then changes the reports-to Financial Entity. To complete the change process, the Ledger Consolidation Utility must be run to consolidate the beginning balances for each account up the new Financial Entity Hierarchy.

If this utility is being run at a Financial Entity at any level, the closing balances for each account at every site beneath the Financial Entity will be calculated and consolidated all the way up the hierarchy. The utility then changes the reports-to for the Financial Entity. To complete the change process, all of the reports-to account mappings for the Financial Entity's Chart of Accounts must be corrected to map to the Chart of Accounts of the new reports-to Financial Entity and the Ledger Consolidation Utility must be run at each affected Site to consolidate the beginning balances in the new structure.

Reports To: USA  Maintain Chart Mapping

Cutoff Date: 01/01/1753  Post Balances

Currency Translation Date: 10/10/2010

- Use your flowchart from the *Multi-Site Planning Guide* to help you set up this hierarchy.
- If there is only one entity in the hierarchy, you do not need to run this utility at the entity.
- You do not need to run this utility at the highest-level entity in the hierarchy.
- For sites and entities that will communicate financial information through replication, replication rules must be set up and running before you run the Change Reports To Entity utility. The **Change Reports To** data is replicated in the G/L or Ledger Consolidation categories, and the **Reports To** field is replicated in the Site Admin category.
- Before you run this utility, ensure that the base currency and the chart of accounts match at the current site and at the entity it will report to. (If this is a new site or entity, the chart of accounts does not yet exist.)

- The site will report to the new entity on the day after the **Cutoff Date**. This date cannot be earlier than the creation date of the site database.
  - During consolidation, the system looks for a currency exchange rate with the **Currency Translation Date** that you specify on this form, and then uses that rate for the consolidation.
  - See the online help for additional information about this utility.
- 2 After you run this utility, verify whether the reporting hierarchy is set up correctly. Go to the **Sites/Entities** form at the highest-level entity and check whether the **Reports To** field displays as expected for each site and entity.

## Setting up accounts

- 1 In the **Chart of Accounts** form at the corporate (highest-level) entity, add all of your accounts. If your system does not include any entities, set up the **Chart of Accounts** at each site.

The screenshot shows the 'Chart of Accounts' form. The account being edited is '10000 Cash'. The account type is 'Asset' and the class is 'Current Assets'. There are fields for 'Effective Date' and 'Obsolete Date'. The 'Exchange Rate Type' is set to 'Buying'. Below these are fields for 'Unit Code 1' through 'Unit Code 4', with 'Unit Code 1' and 'Unit Code 3' set to 'No Access' and 'Unit Code 2' and 'Unit Code 4' set to 'Accessible'. A table for 'Unit Code 4' is shown with the following data:

Unit Code 4	Description
1 01	US Dollar
2 02	Australian Dollar
3 03	Japanese YEN
4 04	Euro
5 05	German Deutsche Mark

You might be able to input your accounts from a spreadsheet that is set up to match the form's grid view. See [Data load to and from spreadsheets](#) on page 58.

You cannot add the unit code information in the same spreadsheet as the account information, since they are different collections.

- If you have entities and are consolidating accounts, be sure to add an account with an Account Type of Owner's Equity to be used as your Cumulative Translation Adjustment (CTA) account.
- Make sure that Inter-entity account numbers used for material transfers at sites that perform transfers with profit are different from your normal sales account numbers. This helps you know what to eliminate as profit when you consolidate to the entity level.
- By default all unit codes are accessible for all accounts. If you want certain unit codes to be required or not accessible for certain accounts, specify that in the **Chart of Accounts** at the corporate entity. When you save the account record, this message is displayed for each unit code that you marked as not accessible: Any Unit Code X values for this Account will be deleted.

- d Click **OK**.
  - e Do not set up information on the Unit Code 1-4 tabs yet. This information may be different for each account at each site/entity and will be set up later, after unit codes are defined.
- 2** If you have multiple levels of entities, perform these tasks. If you have only one entity, or no entities, skip these tasks.
- a At the corporate entity, use the **Multi-Site Chart Copy form** to copy the chart of accounts from the corporate entity to any mid-level entities that use the same (or similar) chart of accounts. You might see the message `Account will be created`. If so, click **OK**. When processing is complete, a message indicates the number of accounts that were processed. If an error message displays while you are performing this step, see the information in [Troubleshooting](#) on page 50. If a different chart of accounts is required at the mid-level entity, then the chart of accounts can be created at the mid-level entity, setting up Reports To accounts to the corporate entity.
  - b In mid-level entities, use the **Chart of Accounts** form to map each account to a "Reports To" account in the entity being reported to. You must do this in order for the **Ledger Consolidation** utility to work properly.

- The existing accounts at the higher entity are listed in the **Reports To Acct** field drop-down. You can map to the same account or to a different account.
  - If the mid-level entity's base currency is different from the higher entity's base currency, you can specify the currency translation method to use when consolidating the account information. To comply with FASB52 or GAAP standards, you must set the currency translation method to **Average** for revenue and expense accounts and to **End** for asset and liability accounts.
- 3** Verify that the **Chart of Accounts** was automatically populated in each of the sites reporting to each entity. This is handled by ChartAcctRemoteSp in the Ledger Consolidation or G/L replication category.
- Users cannot change the chart at the child sites, but they can update descriptions, delete accounts that do not apply to the local database, update obsolete/effective dates, and set up the **Unit Code 1-4** tabs for the accounts.



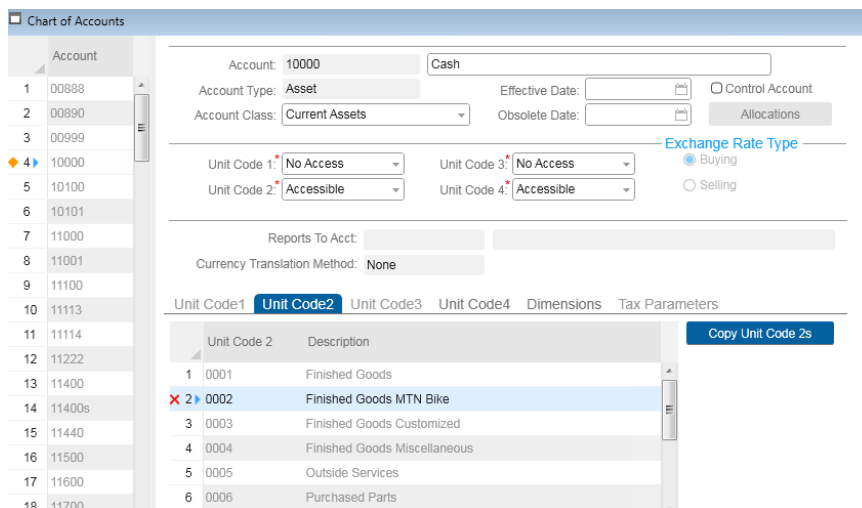
- 4 At each site and entity, set up the unit codes that can be selected for each account.
  - a Define unit codes on the **Unit Code 1-4** forms. See the help topic on "Account Unit Code (1-4)" for information about how unit codes are used.

You might be able to input your unit codes from a spreadsheet that is set up to match the form's grid view. See [Data load to and from spreadsheets](#) on page 58 for more information.

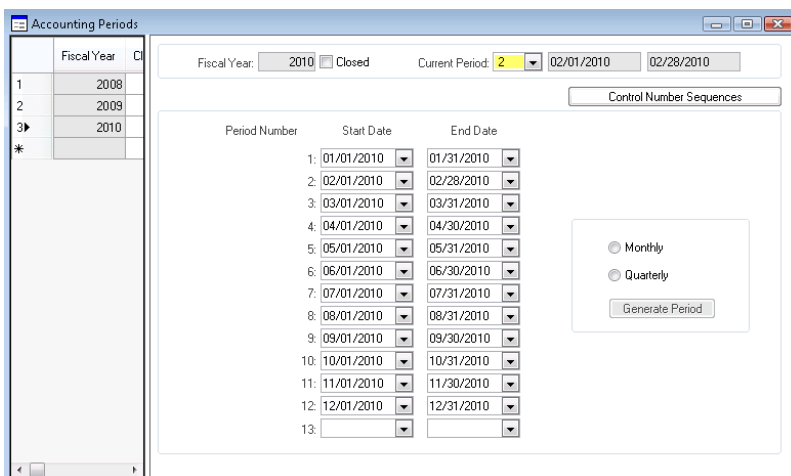
- b Run the **Copy Unit Codes to Accounts** form to copy a range of unit codes to a range of accounts. This fills in the information for each account on the **Chart of Accounts** form's Unit Codes tabs at the site or entity. If an account is set up so that one or more of the unit codes is inaccessible, the utility does not populate those unit codes.

Run the **Copy Unit Codes to Accounts** form to copy a range of unit codes to a range of accounts. This fills in the information for each account on the **Chart of Accounts** form's Unit Codes tabs at the site or entity. If an account is set up so that one or more of the unit codes is inaccessible, the utility does not populate those unit codes.

- c For greater efficiency, you can copy all unit codes to all accounts in step b, and then go to the **Chart of Accounts** form to delete individual unit codes from certain accounts, as appropriate.



- 5 At all entities, in the **Accounting Periods** form, add accounting periods. If your system does not include any entities, set up Accounting Periods at each site.



Accounting periods that are set at an entity automatically populate each child site's accounting periods (through Ledger Consolidation or G/L replication). If you have entities, you cannot update accounting periods at the site level. You will maintain the Current Period at all entities and sites.

Accounting periods must be set up manually at mid-level entities. You might want to export the accounting period grid at the corporate entity to a spreadsheet, to use when populating mid-level entities. See [Data load to and from spreadsheets](#) on page 58 for more information.

- 6 Make sure the Accounting Periods were replicated to the appropriate sites.
- 7 If you have multiple levels of entities, do this: at mid-level entities, run the **Verify Reports To Account Report**, clearing the **Invalid Accounts Only** flag so that all accounts are listed. Keep this report for future reference. If you have only one entity, or no entities, skip this step.

## Multiple financial sets of books

If you need more than one set of financial books, you can set up that feature at any time, for a specific site. The first step is to select **Multiple Financial Sets of Books** on the **General Parameters** form. See [Setting general parameters](#) on page 31.

For more information, see the help topic on setting up multiple financial sets of books.

## Setting up financial statements

During the planning phase, you should have determined where you want to run financial statements (at which level of entity, or at each site).

These are some reports that you might design:

- Balance Sheet
- Income Statement (Profit and Loss)
- Statement of Cash Flow
- Components of Working Capital
- Changes in Financial Position

You can use SyteLine's Excel-based toolset for financial reporting to connect to any site or entity database and extract data, using formulas, into a spreadsheet. The spreadsheet can then be used for financial reporting. The toolset supports multi-currency consolidation with its currency conversion feature. For more information, see the *Infor SyteLine Microsoft Office Integration User Guide*.

You can also use the SyteLine integrations with SyteLine Analytics (Birst) or Infor Dynamic Enterprise Performance Management to handle your financial reporting.

## Chapter 7: Setting up parameters and codes

Parameters and codes must be set up at this point, because they are used when you create the records in later steps. Any special implications for multi-site setup are explained in this section. Read the online help for each form to get additional details.

**Note:** Many parameters and codes do not need to be set up at sites that are defined as financial entities. This section specifies which parameters and codes are to be set at entities.

### Modifying site groups

At all sites and entities, set up **Site Groups** for the various sites that will be doing centralized order entry, transfer orders, or financial reporting.

Since Site Groups are replicated (in the Site Admin category), they can be set in one site or entity and be replicated to other linked sites/entities.

One or more site groups were set up when you added sites, but the sites in the groups might need tweaking, or you might want to define additional groups for additional purposes.

### Setting up countries and states

- 1 For each site and entity, go to the **Countries** form and add records for the countries listed on the Currency spreadsheet you created during the planning phase. Include any countries that are needed for the site or entity addresses on the **General Parameters** form. See [Setting general parameters](#) on page 31. You can also add other countries needed for customers and vendors.

	Country	ISO Country Code	ISO Country	EU Code	SSD EU Code	Export Document Required
1	ANDORRA	AD	ANDORRA			<input type="checkbox"/>
2	ANGOLA	AO	ANGOLA			<input type="checkbox"/>
3	Australia	AU	AUSTRALIA	AU	AU	<input type="checkbox"/>
4	Austria	AT	AUSTRIA	AT	AT	<input type="checkbox"/>
5	Bahrain	BH	BAHRAIN			<input type="checkbox"/>
6	Belgium	BE	BELGIUM	BE	BE	<input type="checkbox"/>
7	BOSNIA AND HERZEGOVINA	BA	BOSNIA AND HERZEGOVINA			<input type="checkbox"/>
8	Brazil	BR	BRAZIL	BR	BR	<input type="checkbox"/>
9	Bulgaria	BG	BULGARIA	BG	BG	<input type="checkbox"/>
10	Canada	CA	CANADA	CA	CA	<input type="checkbox"/>
11	China	CN	CHINA	CN	CN	<input type="checkbox"/>
12	Cyprus	CY	CYPRUS	CY	CY	<input type="checkbox"/>
13	Czech Republic	CZ	CZECH REPUBLIC	CZ	CZ	<input type="checkbox"/>
14	Estonia	EE	ESTONIA	EE	EE	<input type="checkbox"/>

- Country codes are replicated to other sites/entities if A/P, Shared Currency, or Centralized Order Entry categories are being replicated. Thus, if you are maintaining currency information at one site or entity and replicating it to the others, you should enter your initial country list at the site/entity where you will maintain currency information.
  - If the **Activate EU VAT Reporting** field is not selected on the **General Parameters** form, the **EU** and **SSD EU** fields are disabled here and do not allow data entry.
  - When you integrate SyteLine with other Infor BOD-enabled products, only ISO country codes can be passed in the BODs. If you are creating a new system, we recommend that you use the ISO country codes when defining new countries. If you already have existing non-ISO country codes, you can map them to ISO codes using this form.
- 2** For each site and entity, use the **Prov/States** form to create province and state records to be used when you specify the company address in the **General Parameters** form for each site and entity database. You can also add other provinces and states needed for customers and vendors. Province and state codes are replicated in the Multi-Site CRM category.

## Setting up currency

- For each site and entity, set up **Multi-Currency Parameters**. These are used as the default account values when you add new currency codes.

- The domestic currency should already be set for each site and entity. See [Setting domestic currency](#) on page 14.
  - Use the **Allow Currency Rate Override** field to determine whether a currency exchange rate can be overridden. If you select this check box, the exchange rate can be overridden on transaction forms. You can also specify the override tolerance type and amount to be used. You can clear the setting for a selected currency code on the **Currency Codes** form. However, if you clear the **Allow Currency Rate Override** option on the **Multi-Currency Parameters** form, then even if the setting is selected on the **Currency Codes** form for a specific currency, overrides are not allowed.
  - You can return to this form later to specify the Euro currency, if necessary. It is not defined until the next step.
  - This information is not replicated and must be entered at each site and entity.
- 2** For each site and entity, set up information on the **Currency Codes** form.

When you use this form, a message is displayed to indicate that you must log out of SyteLine after you update this information. However, you actually can continue through setting up the **General Parameters** before logging out and restarting SyteLine.

- Some currency information is replicated to other sites/entities if categories containing the currency\_mst, currency\_mst\_all, currate\_mst or currate\_mst\_all tables are being replicated. So if you are maintaining currency information at one site or entity and replicating it to the others, you should enter your initial currency codes at the site/entity where you will maintain currency information. You can also specify the override tolerance type and amount to be used.
  - When you integrate SyteLine with other Infor BOD-enabled products, only ISO currency codes can be passed in the BODs. If you are creating a new system, we recommend that you use the ISO currency codes when defining new currencies. If you already have existing non-ISO currency codes, you can map them to ISO codes using this form.
  - The currency codes, formats, and rates are replicated with any category that contains the tables listed above, but the related account information is not replicated.
  - Use the Currency spreadsheet you created during the Planning phase. An initial record already exists for the site’s domestic currency, so do not include the domestic currency in the import from the spreadsheet. Edit that record manually in the form.
- 3** If you set up additional currencies beyond the domestic currency, then when you save the record the system asks if you want to run the **Currency Rates** form to create rates for the new currency codes. Click **No**.
- (Clicking **Yes** opens the **Currency Rates** form linked to the last new currency you added. It is faster to set multiple rates using an unlinked version of the form, as in step 4.)
- 4** For each site and entity, on the **Currency Rates** form, specify the appropriate rates between the domestic currency and any other currencies. Rates can be modified later.

## Setting general parameters

**Note:** Some general parameter information for each site can be replicated to other sites and stored in the `parms_mst_all` table. None of that information from other sites is displayed on the **General Parameters** form, however.

- 1 For each site and entity, go to the **General Parameters** form.
- 2 On the **Address** tab, specify the company address to be used for the entity or site. The name and address specified on this tab is displayed on invoices, checks, credit/debit memos, payroll and tax documents, and so on.
- 3 On the **General** tab, specify at least these options. Many of these parameters enable or disable other features and fields in SyteLine. Use the online help to select the options you need.

- Update the **Current Fiscal Year**.
- Specify a multi-site group. This group becomes the default value that is used in the **Site Group** field on reports and utilities.
- Optionally, specify a transfer/project BOL prefix. Site-specific prefixes can make it easier to determine which site originated an advance ship notice.
- Select Set Default Ending Value to Starting Value. Then, in any form where users can specify a range of values, the value they specify in the Starting field is automatically set as the default value in the Ending field. This prevents users from accidentally running extremely long reports that list all possible values.
- If you want to use multiple financial sets of books, select that option. For more information about this feature, see the online help.
- For entities, specify the **CTA Account**. This account is used to store the currency translation differences that might occur during the consolidation of accounts to this corporate entity.

**Note:** The CTA account can only be set up after the Reports To Entity hierarchy is set up. See [Setting up the financial reporting hierarchy](#) on page 22.

- 4 Log out of the site and then log back in. Changes to the currency codes and the general parameters require this.

## Setting up bank codes

At each site, you must set up at least one bank code. If A/P checks will be written in multiple currencies, you must set up a bank code representing each currency. Use the **Bank Reconciliations** form to do this.

## Setting system parameters

- 1 At all sites that will transfer items or material to other sites, use the **Inter-Site Parameters** form to establish the relationship between sites and to identify the inter-company account numbers to use during transactions. See the help topic about moving items or materials between sites.

- This form must be completed before any multi-site activities take place. Specify the information in one site, and then most of the information in the records is added automatically at other sites where Site Admin is being replicated.
- Specify this information:
  - **Posting Method:** Although your choice here is "intra-entity" or "inter-entity," this setting really has little to do with entities. It determines how accounting transactions between the sites are handled. Think of "intra-entity" as "at cost" and "inter-entity" as "with revenue."
  - **Price Code:** This code can be selected here but it is not defined yet. Return to this form and select a price code later. The price code is only used when the **Posting Method** is inter-entity.
  - **Exchange Rate:** The exchange rate is only used when the **To Site** and the **From Site** have different base currencies.
  - If the **Posting Method** is intra-entity, specify accounts.
- The information regarding Ship From, Ship From COS, and Receive To is used only when the **Posting Method** is inter-entity.
- The information regarding Payments is used only for A/P and A/R payments.

- 2 At the sites, set up **Accounts Receivable Parameters**:



- You must specify a multi-site group on this form. Only records for sites in this group are considered when performing Accounts Receivable payments and quick invoice payments, and when consolidating A/R posted transactions.
- You can set up a customer prefix that indicates the originating site as well as the type of record. For example, you can use **CI** as the prefix for customer numbers local to the ILL site and **CC** for customers local to the CAL site. If you have global customers, you could have one site that can create only global customers, and use the prefix **CG** in that site. For more information about prefixes, see the *Infor SyteLine Multi-Site Planning Guide*.
- A credit hold reason code can be specified here but is not defined yet. You can return to this form later to select the appropriate code.

### 3 At the sites, set up **Accounts Payable Parameters**:

- You must specify a multi-site group on this form. Only records for sites in this group are considered when performing Accounts Payable payments and quick voucher payments, and when consolidating A/P posted transactions.
- You can set up a vendor prefix that indicates the originating site as well as the type of record. For example, you could use the prefix **VI** for vendors local to the ILL site and **VC** for vendors local to the CAL site. If you have global vendors, you could set up one site that can create only global vendors, and use the prefix **VG** in that site. See the *Infor SyteLine Multi-Site Planning Guide* for more information about using prefixes.

### 4 At the sites, set up **Order Entry Parameters**:

- Specify the invoice number length in the **Invoice Length** field. We recommend that you set this field to 12, which is the maximum.

**Caution:** The invoice number length must be the same for all sites in the system. It must be set at each site; it cannot be replicated to the other sites. When you enter a value here, the system verifies it against the **Invoice Length** value set for other sites, if the other sites are replicating at least one category containing the coparms\_all table with this site. After the **Invoice Length** field is set to a non-null value, the value can never be updated. When you save the change, the system updates about 50 database tables, so it may take a long time to process.

- If you plan to use delivery orders, specify the DO/BOL length.
- Site-specific prefixes are recommended if Centralized Order Entry, Invoice Builder, or Accounts Receivable payments across sites will be performed. See the information on prefixes in the *Infor SyteLine Multi-Site Planning Guide*.
- If you will use DIFOT (Delivered In Full and On Time) as a standard to measure delivery performance in your supply chain, provide tolerances.
- If the **Price From Originating Site** field is selected, default item prices for CO lines are pulled from the site originating the order. This allows you to maintain pricing in one centralized site. Otherwise, the system pulls the default prices from the site that ships the order line item.

**Caution:** After you update the **Invoice Length** and/or **DO/BOL Length** and save the record, log yourself and all other users out of SyteLine. This resets the session variables. Then log back in.

- When you save this record, you might see a message that asks you to perform manual replication of A/R data. If so, go to the **Manual Replication Utility**, select the A/R category, and select the site(s) to which A/R data is being replicated. This ensures that the required data is in the proper tables at the other sites.

- 5** At the sites, set up **Purchasing Parameters**.  
Site-specific prefixes are recommended if Accounts Payable payments across sites will be performed. See the information about prefixes in the *Infor SyteLine Multi-Site Planning Guide*.
- 6** At the sites, set up **Transfer Order Parameters**.  
Site-specific prefixes are recommended to make it easier to determine which site initiates a transfer order. See the information about prefixes in the *Infor SyteLine Multi-Site Planning Guide*.
- 7** At the sites, if you will use MRP or APS, set up the information in the **Planning Parameters** form. See the online help and the *Infor SyteLine APS Configuration Guide* for information about how to set up these parameters for use in a multi-site environment.
- 8** At the sites, set up **Inventory Parameters** to determine how SyteLine handles inventory at each site.  
You can choose to track the cost of items at the warehouse level rather than at the item level (that is, for the entire site). See the help to determine the consequences of this selection.
- 9** At the sites, go to the **Master Explorer > Modules > Codes > Parameters** and open the other parameters forms that you have not yet accessed, to set up parameters appropriate for your system.
  - Depending on your system, you might not need to set up some of these parameters.
  - Some forms might require selection of data that is not yet set up. If so, return to finish the setup of those forms later.
  - When a prefix field appears on a parameter form, you might want to specify a site-specific prefix where appropriate, as described for the other parameter forms above.
- 10** After you update all parameters, log out of each site or entity and then log in again. This updates system variables so that they contain the latest parameter information.

## Chapter 8: Setting up users and authorizations

If you plan to use a master site to maintain users for all sites on an intranet, set up the shared user tables as described below and then perform the other steps in this chapter only at the master site.

If you are not using a master site, skip the first step and perform the other steps in this chapter at each site to set up users.

### Setting up shared user tables

If your sites are in different databases and you have a master site, you can use the **Intranet Shared User Tables** form to share user tables. User maintenance tasks for all sites (maintaining user and group names and permissions, user-group mappings, and application-specific user information) can then be handled from the master site.

When all sites are in the same database (for example, in a multi-tenant cloud environment), the sites are already sharing user tables.

Prerequisites:

- You must set up the sites on an intranet and assign a master site to the intranet. For more information about master sites, see the help topic about [Setting Up a Master Site and Shared Tables](#).
- We highly recommend that an administrator back up all of the application databases (from the master and participating non-master sites) before you run this process. These backups can be used to restore the databases in all of the sites to their original state if necessary.
- While you are setting up or reverting tables on this form, ensure that no other users are logged into any of the sites where changes will occur.

**Note:**

- Never select the Intranet Licensing option in a cloud environment.
- If FDA traceability is a requirement, and your environment includes sites that are not in the same database as the master site, do not use the Shared User Tables feature.
- User sessions are still managed at individual sites.
- For each shared user table, the RowPointer in the master site is no longer unique in other sites, since it is shared with the view. Event processing needs to take this into account, including the InWorkflow column.
- Specialized note processing, including copy utilities, might be affected by the creation of these views. The NoteExistsFlag column is set when any note is added in any site. However, with the

shared table views, the actual note might not exist in the site that reads the NoteExistsFlag column. In this case, the NoteExistsFlag indicates that one or more notes exist in one or more sites.

To set up the shared user tables:

- 1 Log in to the master site for the intranet where you want to share user tables.
- 2 On the **Intranet Shared User Tables** form, select the master site's intranet.

In order to make changes using this form, you must be logged into the selected intranet's master site. You can view, but not change, the shared tables information on this form from other sites on the intranet if the master site is replicating the Site Admin category to the other sites.

If a master site has been declared for this site's intranet, the system displays the master site name and a list of the user maintenance tables that can be shared. Not every user maintenance table is listed here, because some tables are not available for sharing.

If no master site has been declared for the selected intranet, the rest of the form is blank and you cannot continue.

Two lists of tables are displayed:

- The top grid lists user tables that can be shared. You cannot edit this list. When you select Set up shared user tables, all of the user tables in the top grid are selected for sharing. You can clear the **Shared** option for some tables, but not all of them, as described below.

The user tables let you maintain user information, which can include application-specific information such as initials, employee, or multi-site group, user groups, and user/group assignments.

For more information about how sharing of these tables is handled in multiple sites per database vs. one site per database environments, see the help topic about Setting Up a Master Site and Shared Tables.

- The bottom grid lists tables that contain a column whose base domain is UserNames.UserId or GroupNames.GroupId. The bottom grid is used during the setup of shared user tables to identify the tables and columns that might need to be updated if records that were formerly defined in the Usernames or Groupnames tables in the non-master site are moved to the master site, but with different UserId or GroupId values.

When you select Set up Shared User Tables, the Update Referenced ID check box for each of these associated tables is selected. This grid is display-only for standard application tables. You can add custom tables that include user or group references at the end of this grid. When the user tables are shared or unshared, the references in the associated tables are updated appropriately.

- 3 If you have custom tables that contain a column whose value comes from base domain UserNames.UserId or GroupNames.GroupId, add your custom table and its associated ID column to the Non-Shareable Tables grid. We recommend that your custom tables refer to the Username or Groupname columns, rather than the ID columns, because the distinct list of Usernames and Groupnames across intranet sites is always the same, whether they are stored in shared tables or per site, and therefore no changes are required for data referencing this base domain.
- 4 Select **Set up shared user tables**, which automatically selects Shared for all tables in the top grid and Update Referenced ID for all tables in the bottom grid.
- 5 In the top grid, clear the **Shared** check box for any tables that you do not want to share between sites.

Be aware of how this option works:

Table names	Select Shared on Intranet Shared User Tables?	Result for one site per database	Result for multiple sites per database
Usernames, GroupNames, userEmail, UserModules, UserPasswordHistory, UserCalendar, and User-Task	No	Tables are not shared across multiple sites.	Tables are shared for multiple sites within a database, but not across different databases.
Usernames, GroupNames, userEmail, UserModules, UserPasswordHistory, UserCalendar, and User-Task	Yes	Tables are shared across multiple sites.	Tables are shared across multiple sites and databases.
AccountAuthorizations_mst, user_local_mst, and UserGroupMap_mst	No	Tables are not shared across multiple sites.	Tables are not shared across multiple sites.
AccountAuthorizations_mst, user_local_mst, and UserGroupMap_mst	Yes. You can select each of these tables individually for sharing.	Tables are shared across multiple sites and databases.	Tables are shared across multiple sites and databases.

The sharing process copies any records in a non-master site's UserNames table to the master site's table if UserName does not already exist in the master site. If the UserId for a given record does not exist in the master site, the same UserId is kept. If the UserId for a given record does exist in the master site, a new UserId is generated via identity column defaulting. If a user exists in the master site and non-master site with different UserIds, the UserId in the master site is used and the UserId in the non-master site is flagged to be updated. The UserIds in the two sites are mapped via the shared Username.

We have identified the standard tables where UserId and GroupId are used as keys or foreign keys. These tables are included in the **Non-shareable Tables Containing References to UserID or GroupID** grid. Tables in this grid are updated if there are changes to the UserId, to guarantee referential integrity.

- Click **Process** to copy information from the tables at the other sites to the master site's table, delete the table from the other sites (creating views into the master site tables instead), and regenerate the replication triggers for the other sites. (Removing tables and setting up views does not happen if the non-master site is in the same application database as the master site.)

If you have many sites on this intranet or many users and groups, processing can take a while to complete. The Processing Step area displays the system's progress.

During processing, the system validates link setup between the master site and the using sites of an intranet. If it finds a problem, an error message displays and nothing is processed; fix the link and then click **Process** again.

The **Processed** field indicates which tables have been processed - for example, if shared, they are now resident only in the master site's database. (After a row on the form is marked as Processed, subsequent "Process" runs do not reprocess that row.)

The **Status** field indicates that the user tables are either shared or not shared.

After processing all the tables and sites, the system regenerates the replication triggers at the master site.

- 7 After processing is complete, you must reapply a valid license document on the master site.

**Note:** This step is not required in a usage-tracking license environment.

- 8 In the master site, open the **View Management** form and regenerate views at the master site, so that the views reflect the changes to table sharing.
- 9 In the master site, open the **Trigger Management** form and regenerate table triggers at the master site.

**Note:** When you are already sharing user tables, and you add a new site to the current master site's intranet, you might also want to set up the new site to share user tables. To do this:

- In the **Intranet Shared User Tables** form, select **Set up per site user tables** and click **Change Setup Option** to change the field label to **Set up shared user tables**.
- Click **Process**. The status of the shared tables is checked as each site is processed. If sharing has already been set up for a site, no processing occurs for that site, and the process continues with the next site. When it encounters a site that is not already set up, the site is processed.

## Setting up password parameters

Use the **Password Parameters** form to specify password expiration and complexity rules for all users. Be sure to explain the rules you choose to the users of your system.

The password parameter data is replicated as part of the Site Admin category.

## Adding common users

**Note:** In an environment where SyteLine is running in Infor Ming.le, you add users in Infor Ming.le as described in the *Infor SyteLine Configuration Guide*. The user definitions are sent through BODs to SyteLine. Use the information in this chapter to complete the setup for each user in SyteLine.

- 1 In the **Users** form, set up other common users who will be working in multiple sites. You can also set up local users now, if you want.

These users are in addition to the system administrator users, which have full access to the local site.

If the user\_local\_mst table is not shared in the **Intranet Shared User Tables form**, then you must update the multi-site group and other user fields at each site where the user record exists, even for sites in the same database. If the AccountAuthorizations and/or UserGroupMap tables are not shared, then you must update authorizations and groups at each site.

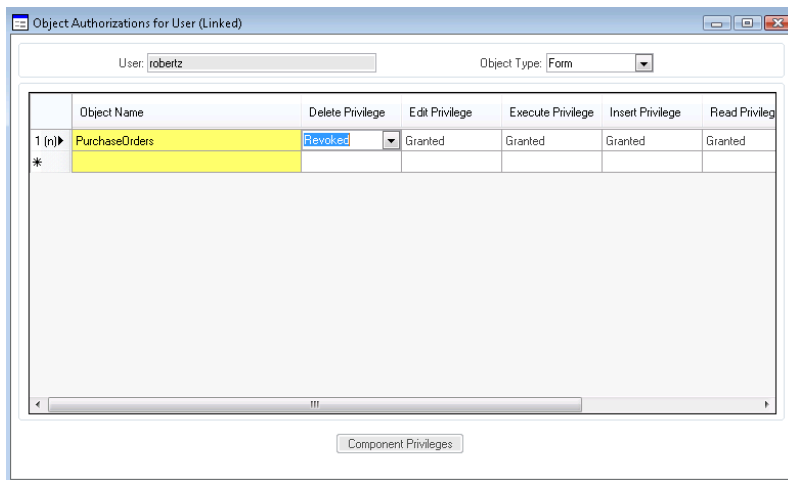
- You must specify a default authorization group for each user.
  - For entity users, the authorization group should be Entity Forms. This will prevent users from doing anything in the entity that is not supposed to be done in an entity.
  - For site users, select an authorization group. For now, select one or more of the default authorization groups. On the **Users** form, select one or more authorization groups for each user from the drop-down list. (Later, after you become more familiar with the system, you may want to set up new groups that more closely resemble your needs. Do not change the default groups!)
  - To find out which forms are included in each default authorization group, go to the **Groups** form. Select a group and then click **Group Authorizations** to list the forms that members of this group can access.
  - If you do not set up at least one authorization group for a user, then the user has access to no forms, unless the user is set up with super user access.
- You must specify a default multi-site group for each user. This is the default value that appears in the **Multi-Site Group** field when this user opens the **Item Availability** form.
- Select a user who will have General Ledger administration duties. Add the **Enter Out of Date Range** group authorization for that user. This authorization is used to correct journal entries that were incorrectly created in the wrong accounting period
- For mobile users, specify a Mobile Default Form on the Login Information tab. See the help topic on setting up SyteLine mobile access for more information.
- If you have multiple sites or entities in one application database, any data stored in the non-multi-site tables is shared across all of the sites and entities. This data includes the user ID, password, and email addresses, as well as some other fields. However, certain other fields such as multi-site group must be set up at each site and entity, if those other fields are in tables that are not being shared.
- A warehouse (Whse) may be specified here but is not defined yet. You can return to this form later to select the appropriate warehouse.
- You can optionally select a time zone to display the current time based on the user's time zone. This field is ignored unless the **DateTime in Client Time Zone** process default is enabled. If the process default is enabled and this field is blank, the value defaults to the time zone of either the local user's machine or the web server. If the process default is enabled, we recommend that the local time zone be specified for each user and not be left blank.

**Caution:** The local time zone field and the associated process default should not be used with SyteLine at this time.

- 2 From the **Users** form, click **User Authorizations** to display the **Object Authorizations for User** form, where you set up object authorizations for each new user record. Settings made here override any group authorizations for this user.

Some of your users might require special access to certain forms that is not covered in the default group authorizations.

For example, the user robertz is in the Purchasing authorization group, which has full access to the **Purchase Orders** form. However, you do not want to allow robertz to delete POs.



- 3 If the site will allow access from a SyteLine portal, set up the portal users as described in the *Portal Administration Guide*.
- 4 Run the **User Authorization Report** form if you want to have a list of authorization information for each user, for auditing purposes.

## Adding external users

External customers or suppliers may be added as users on particular sites.

Set up these users in Infor SyteLine using authorizations that limit their access only to the specific forms you want them to view. You may also want to limit their object authorizations to view-only, as described in [Adding common users](#) on page 38.



## Chapter 9: Setting up supporting data

In each site, set up data that is required to support your transactions.

**Note:** It is not necessary to set up supporting data at sites that are defined as financial entities.

The forms listed in this section add data to supporting tables that are used when entering customer, vendor, and item information, creating transactions, and so on. Your company might not use some of this data; in that case, you can skip those forms.

**Note:** Be careful about the order in which the data is defined, so that table dependencies are not violated, which will prevent records from loading. For example, product codes must be defined before distribution accounts are defined, both of which must precede the definition of items. Items must be defined before routings, BOMs, CO and PO lines, jobs, and so on.

The forms are listed in the order that the data should be entered because of data dependencies.

- **Offices**
- **Companies:** optionally includes CEO (from Employees, which is not available until later)
- **Divisions:** requires Company and Office, optionally includes Div Manager (from Employees, not available until later)
- **Departments:** optionally includes Company, Office and Manager (from Employees, not available until later)
- **Price Codes:** you might want to skip until later when items are defined
- **Project Cost Codes**
- **Product Codes:** optionally includes Price Code and Project Cost Code. Even though the account fields are not required fields in this form, you must specify them now. When you add items later, the product cost requires these associated accounts.
- **Nature of Transaction Codes (NOTC)**
- **Secondary NOTC**
- Carrier Codes
- **Ship Via Codes: optionally includes Carrier Code**
- **Delivery Terms**
- **Warehouses:** optionally includes Prov/State, Country, NOTC, Secondary NOTC, Delivery Terms and Ship Via
- **Distribution Accounts:** requires Warehouse and Product Code (In-Transit account values default from the product code)
- **Tax Codes:** requires Tax System - but there is a default Tax System 1 defined here, optionally includes Tax Jurisdiction
- **Tax Systems:** requires Tax Code

- **Tax Jurisdictions:** requires Tax System, optionally includes EC Code (from Countries form) and Vendor number (not available until later)
- **Billing Terms**
- **Reason Codes:** there are many of these - use **Form > Open** and filter on reason to find them all. Some of them optionally include NOTC and Secondary NOTC
- **Scheduling Shifts**
- **Resource Types**
- **Resources:** requires Resource Types and Shift Exception ID, optionally includes Item (not added until later), Scheduling Shift, Fixed Asset Number (which in turn requires other data)
- **Resource Groups:** requires Resources
- **Work Centers:** requires Department, optionally includes Scheduling Shift and Resource Group
- **Locations:** optionally includes Work Centers
- **Unit of Measure Codes:** some U/M information is replicated between sites when the sites are replicating the Centralized Order Entry, Inventory/Transfers, Purchase Order Builder, or Voucher Builder categories
- **Shift Codes**
- **Commodity Codes**
- **Language IDs**
- **Multi-Lingual Ship Via**
- **Multi-Lingual Terms**
- **Unit of Measure Conversions:** requires Unit of Measure Codes
- **End User Types**
- Customer Types
- **Vendor Categories**
- **Fixed Asset Class Codes:** optionally includes Department
- **Territories**
- **Sales Periods**
- **Campaign Statutes, Campaign Types**
- **Lead Statutes**
- **Opportunity Task Types, Opportunity Sources, Opportunity Statutes, Opportunity Stages**
- **Email Types**
- **Lot Attributes**
- **Manufacturers**
- **Electronic Signature Setup**
- **Electronic Signature Authorizers**

## Simplifying the data load process

In many cases, you can create a spreadsheet based on the grid view of a form to copy and paste the supporting data into SyteLine.

See [Data load to and from spreadsheets](#) on page 58.

## Chapter 10: Setting up operational data

Use these steps to set up operational data.

### Data loads and replication

To speed up the data load, you might want to turn off replication before loading operational data. Consider turning off replication if all of these statements are true:

- You are loading large amounts of data into tables, AND
- Those tables have triggers replicating to \_all tables, AND
- Your system is replicating those \_all tables between sites, AND
- Those \_all tables reside at the local sites rather than at one master site.

In addition, there might be conflicts between data records being loaded at different sites (for example, different customers with the same number). In that case, you might want to turn off replication before loading the data, in order to minimize errors, and then deal with the conflicts later.

In the **Sites/Entities** form, click the **Link Info** tab and disable replication between sites before loading the data in these cases.

After the load is complete, enable replication and run the **Manual Replication Utility** for the necessary replication categories.

### Setting up shared customers, vendors, and items

You might want an administrator to control adding, updating, and deleting shared customers, vendors, and items across the system. Each site can control its local customer records, and these records are independent of other sites.

## Adding shared customers through a master site

If you have set up a master site, use the **Multi-Site Customers** form at the master site to add customers for all sites in the intranet. Instructions for using this form are in the online help. Appropriate replication rules must be set up between the sites in order for the form to work.

See the chapter on master sites in the *Infor SyteLine Multi-Site Planning Guide* for information about the replication rules that are required.

## Adding shared items through a master site

If you have set up a master site, use the **Multi-Site Items** form at the master site to add items for all sites in the intranet. Instructions for using this form are in the online help. Appropriate replication rules must be set up between the sites in order for the form to work.

See the chapter on master sites in the *Infor SyteLine Multi-Site Planning Guide* for information about the replication rules that are required.

## Adding shared vendors through a master site

If you have set up a master site, use the **Multi-Site Vendors** form at the master site to add vendors for all sites in the intranet. Instructions for using this form are in the online help. Appropriate replication rules must be set up between the sites in order for the form to work.

See the chapter on master sites in the *Infor SyteLine Multi-Site Planning Guide* for information about the replication rules required.

## Copying customers, vendors, or items through a master site

You can define a customer, vendor or item record in one site and then select **Actions > Multi-Site Copy** in the **Multi-Site Customers**, **Multi-Site Vendors**, or **Multi-Site Items** form to copy the record to other sites that are in the same intranet and multi-site group as the master site. BOMs are not copied with item records when you use this method; use the **Multi-Site BOM Builder** form to copy the BOM to the other sites.

## Adding shared customers, vendors, and items without a master site

As described in the *Multi-Site Planning Guide*, some customer, vendor, and/or item data may be replicated when a new customer, vendor or item is added. However, the new record is not automatically

displayed in the **Customers**, **Vendors**, and **Items** forms at the other sites. You must add it as described below.

## Adding shared customers without a master site

When a customer record is added in one site, it does not automatically populate in other shared sites. If you want a customer to exist in multiple sites, first create it in one site and then add the existing customer into other shared sites using these steps:

**Note:** In the following description, "sharing sites" means all categories that contain the custaddr table are being replicated between the sites.

- 1 In one site, go to the **Customers** form. Add and save the new customer records. The customer number, name, and some other data from the custaddr table is replicated to sharing sites
- 2 At the other sites, go to the **Customers** form and select **Actions > New**.
- 3 Specify the customer number. The customer name, address, and some other information from the custaddr table is displayed.
- 4 Fill in the rest of the information manually in the **Customers** form at the sharing site.

## Adding shared (global) vendors without a master site

When a vendor record is added in one site, it does not automatically populate in other shared sites. If you want a vendor to exist in multiple sites, first create it in one site and then add the existing vendor into other sharing sites using these steps:

**Note:** In the following description, "sharing sites" means all categories that contain the vendaddr table are being replicated between the sites.

- 1 In one site, go to the **Vendors** form. Add and save the new vendor records. The vendor number, name and some other information from the vendaddr table is replicated to sharing sites.
- 2 At the other sites, go to the **Vendors** form and select **Actions > New**.
- 3 Specify the vendor number. The vendor name, address and some other information from the vendaddr table is displayed.
- 4 Fill in the rest of the information manually in the **Vendors** form at the sharing site.

## Adding shared (global) items without a master site

When an item record is added in one site, it does not automatically populate in other shared sites. If you want an item to exist in multiple sites, first create it in one site and then add the existing item into other sharing sites using these steps:

**Note:** In the following description, "sharing sites" means the Centralized Order Entry category and/or the Inventory/Transfers category are being replicated between the sites.

- 1 In one site, go to the **Items** form and add and save the items. The item numbers, descriptions and U/M values are replicated to sharing sites - but the new items will not automatically appear in the

**Items** form at the sharing sites. This information will, however, appear in the **Global Items** form at the sharing sites.

- 2 In the sharing sites, go to the **Items** form and select **Actions > New**.
- 3 Specify the item number. The system enters the default values from the **Global Items** form into these fields: **Item**, **Description**, and **U/M**.
- 4 Fill in the rest of the item record manually at the sharing site.

The **Global Items** form also contains a default **Shipping Site**, which is used to determine how the **Customer Order Lineship** site defaults when entering a centralized order for the item.

Typically, shared sites have identical Global Items default values when all sites are within the same country. If sites are in different countries, the **Description** and **U/M** fields can be updated as required.

## Alternative methods for copying records

Another way to duplicate vendor, customer or item records in multiple sites is to create the records in one site, export them to a spreadsheet, and import the spreadsheet into the same form at the new site. (Make sure the form's grid columns are arranged in the same order at both sites.) See [Data load to and from spreadsheets](#) on page 58 for more information.

If your sites are accessible through a single computer, you also may be able to use the right-click **Copy** feature to copy the item rows from the **Customers**, **Vendors**, or **Items** form on one site and then select **Edit > Paste Rows Append** to add them at the other site.

## Setting up employees

On the **Employees** form, specify information about each employee. Fill in at least the required fields, which are used in other areas of the system.

## Setting up other operational data

- 1 In each site, set up current routings and BOMs.
- 2 In each site, set up beginning balances for accounts in the **Journal Entries** form.
- 3 In each site, set up units on the **Units** form.

## Using different images in different sites

You can set up site-specific image overrides when you store images in the forms database. This is especially helpful in reports where the same report definition is used across sites, but a site-specific image such as a company logo is needed.

Use this naming convention when you add the override image in design mode: *imagename\_site.type*.

For example, the image named **company-logo.jpg** can be overridden for the DALS site by adding an image named **company-logo\_DALS.jpg**. We recommend that you add these override images at Site scope so that they can be seen by everyone using the site.

Using this technique, you can add site-specific images without changing form definitions to look for the site-specific images.

## Chapter 11: Setting up other modules and products

After you have set up the base SyteLine multi-site system, you can install and configure other modules and products according to the documentation listed in this table.

Product or module	See
APS	<i>Infor SyteLine APS Configuration Guide</i> online help
Application Event System	<i>Guide to the Application Event System</i> , online help
SyteLine Analytics	<i>Infor SyteLine Analytics Administration Guide</i>
Country Packs/Localizations	Online help
Credit Card Interface	<i>Infor SyteLine Credit Card Interface Configuration Guide</i> , online help
Infor CRM	<i>Infor SyteLine Integration Guide for Infor CRM</i>
Data Collection background tasks	Online help
Infor EAM	<i>Infor SyteLine Integration Guide for Infor EAM</i>
EDI	Online help
EFT (bank reconciliations, customer payments)	Online help
Industry Packs	Online help
Infor Localization Services	<i>Infor SyteLine Integration Guide for Infor Localization Services</i>
Portals	Portals installation and administration guides
Microsoft Office	<i>Infor SyteLine Microsoft Office Integration User Guide</i> , online help
Mobile	Online help, mobile user guides
Payroll Interface	Online help
Infor CPQ	Various CPQ installation, upgrade, integration, and reference guides, SyteLine online help
Product Configurator (Features and Options)	Online help
Tax Interface	<i>Infor SyteLine Tax System Interface Configuration Guide</i> , online help



Product or module	See
Infor Factory Track	Contact Infor Consulting Services
Infor Operating Service (Infor Ming.le, ION, Infor Document Management!)	<i>Infor CloudSuite Industrial Configuration Guide</i> <i>Infor SyteLine User Guide for Infor OS Apps</i>

Some of these products are installed as part of the SyteLine installation, but are licensed separately. These products are licensed for an application database, but you must also use the **Optional Modules** form in SyteLine to enable the products for each site. For more information, see the *Licensing Administration Guide*.

## Appendix A: Troubleshooting

Use this information to find and fix problems.

### Handling replication errors

Use this information to find and fix problems with the replication of data.

### Errors during transactional replication

Validation errors relating to transactional replication generally display during data entry or saving of transaction records at the local site, and do not allow the user to continue.

However, if transactional replication appears to not be working (that is, the data is not being moved to the target site as expected) and the cause is not immediately apparent, see [Replication troubleshooting checklist](#) on page 50.

### Replication troubleshooting checklist

For replication problems, check these areas:

- 1 Replication Rules form:** Ensure that the rules are set up properly between the site where the data was added and the one where the data was supposed to appear.

Are the proper categories being replicated?

Use this table to see what types of results to expect on the target site for each replicated category.

Category	Expected results on target site (for forms with Site or Site Group fields)
A/P	<p>Posted A/P vouchers, adjustments and payments from source sites are visible on view forms.</p> <p>A/P reports contain data from source sites.</p> <p>_all tables contain account, currency, item, journal, period, vendor and tax information from source sites.</p>

Category	Expected results on target site (for forms with Site or Site Group fields)
A/R	<p>Posted A/R invoices, debit memos, credit memos and payments from source sites are visible on view forms.</p> <p>A/P reports contain data from source sites.</p> <p>_all tables contain account, currency, item, journal, period, customer and tax information from source sites.</p>
CCI Centralized Order Entry	<p>Credit card authorization information is replicated from the source site.</p>
Centralized Order Entry	<p>Customer orders with lines that have a local ship site are visible.</p> <p>Transfer orders to or from the local site are visible.</p> <p>_all tables contain customer, customer order, account, currency, item, job, period, purchase order, project, transfer order and tax information from source sites.</p>
Customer Portal	<p>Portal users can see item pricing. B2B users can see that prices are from multiple sites.</p>
Dimensions	<p>View dimensions and attributes at other sites.</p>
ESB	<p>Data is received in other BOD-enabled application; acknowledgement data is received in SyteLine.</p>
EXTFIN	<p>Not typically used between SyteLine sites.</p>
EXTFIN Customer	<p>Not typically used between SyteLine sites.</p>
EXTFIN Vendor	<p>Not typically used between SyteLine sites.</p>
G/L	<p>Financial and G/L reports and views show data from source sites.</p> <p>_all tables contain ledger, account, currency, period, and journal information from source sites.</p>
Initialize _All Parameters	<p>N/A. Used only during replication setup.</p>
Inventory/Transfers	<p>Transfer orders to or from the local site are visible.</p> <p>_all tables contain account, currency, item, job, period, and transfer order information from source sites.</p>
Invoice Builder	<p>Invoices for customer order shipments and returns can be created at target sites.</p>
ION	<p>Not used for SyteLine.</p>
Journal Builder	<p>Pending journal transactions created by Journal Builder in source site appear in the local site.</p> <p>Journal Builder site can validate data from the local site.</p>
Ledger Consolidation	<p>Ledger records are consolidated from source sites when invoked.</p> <p>_all tables contain account, currency, and period information from source sites.</p>

Category	Expected results on target site (for forms with Site or Site Group fields)
Ledger Detail	<p>Ability to drill down into G/L records from remote sites if transaction data is also replicated.</p> <p>_all tables contain account, material transaction and voucher pre-register information from source sites.</p>
Manufacturer Item	<p>_all tables contain manufacturer and manufacturer item information and cross-reference information between manufacturer item and SyteLine item records from source sites.</p>
Multi-Site (home forms)	<p>This applies to the <b>Multi-Site Buyer, Controller, CRM, Customer Service, Inventory Control, Production Planner, and Project Manager</b> categories: On the various Home forms, information from source sites is visible.</p>
Multi-Site Customers	<p>On the <b>Multi-Site Customers</b> form, customer information that is defined on source sites is visible.</p>
Multi-Site Items	<p>On the <b>Multi-Site Customers</b> form, item information that is defined on source sites is visible.</p>
Planning	<p>Planning is invoked for source sites when specified.</p> <p>Planning views include requirements and receipts for source sites.</p>
PO-CO Across Sites	<p>Upon receiving a customer's order, the demanding site automatically creates a PO and links it to the source site.</p>
Purchase Order Builder	<p>POs are created in the local sites with data entered at the source site through the Purchase Order Builder.</p> <p>Purchase Order Builder site can validate data from the local site.</p>
Service - Global Incidents	<p>Incidents and associated events, reasons and resolutions are replicated from the source site.</p>
Service - Global Scheduling Shared Partners	<p>Scheduled appointments for Service are replicated from the source site.</p>
Service - Global Service History	<p>Summarized history information about Incidents, service orders, and units are replicated from the source site.</p>
Service - Global Units	<p>Units and their component configuration, warranty information and owner history are replicated from the source site.</p>
Service - Multi-Site SRO Copy	<p>Users can trigger the copy of a service order from the source site to the target site.</p>
Shared Currency	<p>Currency information from source sites is visible.</p>
Site Admin	<p>Site and intranet information from source sites is visible.</p> <p>_all tables contain account information from source sites.</p>
Vendor Portal	<p>Vendor portal users can see purchase orders initiated from multiple sites.</p>

Category	Expected results on target site (for forms with Site or Site Group fields)
Voucher Builder	<p>Vouchers and adjustments are created in the local sites with data entered at the source site through the Voucher Builder.</p> <p>Vouchers are created in the local sites with data entered at the source site through the Manual Voucher Builder.</p> <p>The Voucher Builder site, or the Manual Voucher Builder site, can validate data from the local site.</p>

- a** View the **Replication Rules** form in the source site (for example, if you're expecting to see CAL data in ONT, view the CAL database), and determine if there is a rule set up with **Target Site** set to the site where you expect to see the data, and with **Category** set to the category as determined above.
- b** If such a record does not exist, this means the behavior was expected. You can create a new rule if desired, and retest to verify that the data was passed over.
- c** If the record exists, check its **Interval Type**:

  - If the **Interval Type** is **Transactional**, there might be another problem with the replication setup. Continue through the other steps in this checklist.
  - If the **Interval Type** is **Immediate**, there might be a problem with the setup of the replication services.
  - If the **Interval Type** is something other than Transactional or Immediate, wait until the time specified in **Start Interval At** before testing again. If the interval time has passed and the change has still not occurred on the target machine, there might be a problem with the setup of the replication services.
- 2** **Replication Management** form: You must click the **Regenerate Replication Triggers** button on this form after any replication rules have been changed. Failure to do so will result in replication not working properly.
- 3** **Find Replication Setup Issues** form: Use this form to find problems relating to the setup of replication from the current site to another site for a particular database table or stored procedure. Not all problems found by this utility are valid in all situations. For example, it checks to see if a user name is set up between the sites, which applies only if non-transactional replication is being used.
- 4** UETs: If you are using user extended tables, and the UET information is not replicating properly, see the information about UETs and `_all` tables in the *Infor Mongoose Replication Reference Guide*.

## Common replication solutions

**Problem:** System performance is slow and you suspect replication may be causing this.

**Solution:** Check these areas:

- 1** If there are `_all` tables (that is, replicated data) that contain very large numbers of records, then make sure you are not replicating unnecessary data.

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See the Replication Categories chapter in the *Infor SyteLine Multi-Site Planning Guide*, particularly the information about replicating financial data.

Also look at the descriptions of how the tables in each category are used. If your large \_all tables are used only for reports that you rarely or never require, you might be able to remove that object from the category.

Before you make changes to replication categories, seriously consider requesting help from your Infor SyteLine provider or Infor Consulting Services.

- 2 See also the information on improving system performance in the *Infor SyteLine Administration Guide*.

### **Problem: Outbound BODs are not being sent from the ERP to another system**

Solution: Follow these steps to determine the cause:

- 1 Does the BOD appear in the **Replication Document Outbox**?  
(BODs are saved in the outbox after processing only if the BOD service is configured to not delete them.)  
If yes, continue to the next step.  
If no, then contact Infor Support.
- 2 Is the **Processed** check box selected?  
If yes, the BOD was picked up by the BOD service. Check in the ION application for details.  
If no, then there is a problem that is preventing the BOD service from picking up the message. Either the service is not running, or the configuration and deployment of the sending/receiving applications is not set up properly in the receiving application(s).

### **Problem: Inbound BODs are not being received or processed by the ERP**

Solution: Follow these steps to determine the cause:

- 1 Does the BOD appear in the **Replication Document Inbox**?  
(If there are many documents in the inbox, it can be difficult to find the BOD because currently you cannot filter by BOD name.)  
If yes, continue to the next step.  
If no, then something prevented it from being delivered by the BOD service:
  - a Check whether the configuration and deployment of the sending/receiving applications is set up properly. See the appropriate integration guide for more information.
- 2 Is the **Processed** check box selected?  
If yes, and the expected information does not appear in the appropriate SyteLine form or table, then there was an error in processing. Check the **Replication Document Outbox** for a Confirmation BOD. A confirmation BOD indicates an error.  
If no, then either the Infor Framework Inbound Bus Service is not running, or it is still working through previous messages.

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**Problem: Error occurs in the Replication Document Manual Request Utility due to timeout**

If you receive either of these errors during generation of BODs through the **Replication Document Manual Request** utility, then transactions are taking longer to run than the timeout values set in SyteLine or other related applications and services.

```
Exception from load collection: Error processing an IDO request
(Protocol=Http, URL=http://servername/IDORequestService/RequestService.aspx):
The remote server returned an error: (500) Internal Server Error.
```

**BOD generation errors**

If you receive either of these errors during generation of BODs through the **Replication Document Manual Request** utility, then transactions are taking longer to run than the timeout values set in SyteLine or other related applications and services.

```
Exception from load collection: Error processing an IDO request
(Protocol=Http, URL=http://jokerswild/IDORequestService/RequestService.aspx):
The remote server returned an error: (500) Internal Server Error.
```

or

```
The transaction has aborted.
Transaction Timeout
```

**Solution:** For a list of timeout values that can be reset, see the chapter on improving performance in the *SyteLine Administration Guide*.

**Problem: The Multi-Site Customers, Multi-Site Items, or Multi-Site Vendors form is not showing drop-down values for the selected site**

**Solution:** Make sure that the replication rules are set up between the sites as described in the online help for the multi-site form. Then regenerate the replication triggers at each of the sites involved.

## Forms and utilities that are used to troubleshoot replication

### Find Replication Setup Issue form

If you know that a specific object, for example, a table, is not replicating changes from the current site to another site, use this form to help troubleshoot why replication is not occurring.

You enter an object name and type (a table, stored procedure, or XML document) and select the remote site name. When you click **List Issues**, any setup errors for that site/object combination are listed.

	Message
1	Replication Category that has [Replication Category Object: no_table] does not exist.
2	Replication Rule that has [Replication Category Object: no_table] and [From Site: Demo] and [To Site: MI] does not exist.
3	Intranet that has [From Site: Demo] does not exist.
4	Intranet that has [To Site: MI] does not exist.
5	User Name that has [From Site: Demo] and [To Site: MI] does not exist.

These are some of the setup problems that might be displayed:

- The From Site or To Site does not exist in the site table.
- No replication category contains the specified object (table, SP, etc.).
- No replication rule exists for the specified From Site and To Site, and for any category that contains the specified object.
- A rule exists for a category using the specified object, but the rule is currently disabled on the Replication Rules form.
- Replication is currently disabled between the specified From Site and To Site on the Sites or **Sites/Entities** form.
- No replication trigger exists for the specified object (if it is a table), or the trigger is disabled.
- The To Site has not been set up with a linked server name on the Sites or **Sites/Entities** form or through a command interface. (Transactional replication) Transactional replication checks are made only if at least one transactional replication rule is enabled at this site.
- The To and From sites are on different database servers, and the To Site's database server has no link to it from this site's database server. This is established through the Linked Servers node in SQL Server. (Transactional replication)
- The To Site's database name is not specified on the Sites or **Sites/Entities** form. (Transactional replication)
- The user name specified for this From Site and To Site does not exist. (Non-Transactional replication)



- The replication user name is not a super user or has not been given access to the proper group. (Non-Transactional replication)
- The To Site and/or From Site does not have an Intranet defined on the Sites or **Sites/Entities** form. (Non-Transactional replication)
- The To Site's intranet has no URL defined on the Intranets form. This is a problem only if the To Site is on a different intranet than the From Site. (Non-Transactional replication)

If no problems are found, the replication triggers may just need to be regenerated.

## Appendix B: Data load to and from spreadsheets

If you have many sites with similar data to be entered at each site, it may make sense to load the data into the system from a spreadsheet. The spreadsheet method only works well if you have smaller volumes of data. It is much more difficult to deal with errors in spreadsheets when you are trying to load a large number of records at once.

**Note:** Consider using Infor Consulting Services if you have larger volumes of data to load. Contact your Infor representative for more information.

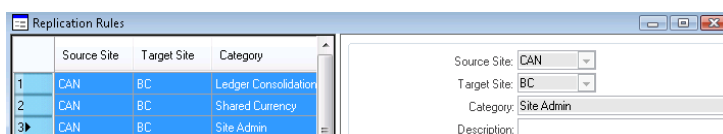
### Requirements for loading data from spreadsheets

- Make sure the columns in the spreadsheet exactly match the order of the grid in the form, and that the data is in the format required by the form. The best way to do this is to create several sample records in the SyteLine form and then export them to a spreadsheet. Then use that data as a template for the other rows. Or you may want to create a "demo" database and export the sample data to use as a template. In the template, you may want to hide columns for data that comes from calculated or read-only fields so that you do not enter data into them accidentally. Do not delete these columns; otherwise the columns will not match up when you paste them back into SyteLine.
- Make sure any supporting data has already been loaded.  
For example, if you try to load a customer address that includes IN as the state, but a **Prov/States** record does not yet exist for IN, the system sends a validation error and stops importing.

### Exporting data from a form to a spreadsheet

To quickly create a spreadsheet that contains all the rows in the current form's grid, including the header rows, use this process:

- 1 In the form's grid, select the rows by shift-clicking in the row numbers on the left.



You can use Ctrl-2 to toggle between the grid view and the form view.

- 2 Type Ctrl-C to copy the rows to the clipboard.
- 3 Open a spreadsheet and paste the rows into it. Notice that some columns are empty and some are set to a different format than appears in the form (for example, 0's and 1's instead of checkboxes).

	A	B	C	D	E	F	G	H	I
1	SourceSite	TargetSite	ReplicationCategory	Description	IntervalType	Interval	StartIn	Disable	UpdateAll
2	CRP	USA	Site Admin		Transactional	0		0	0
3	CRP	USA	Ledger Consolidation		Transactional	0		0	0
4	CAN	BC	Ledger Consolidation		Transactional	0		0	0
5	CAN	BC	Shared Currency		Transactional	0		0	0
6	CAN	BC	Site Admin		Transactional	0		0	0

**Caution:** The **Actions > To Excel** menu option is also available, but it is intended for export of data to other applications, not for updating data that will be imported back into SyteLine. By default, this option saves the columns in the order they appear in the IDO collection, which may not be the same order that they appear in the grid. (However, you can choose to match the sequence of columns in the grid.) Also, be aware that cells with data that contains hard and soft returns might not work as expected with the To Excel option. In addition, the **To Excel** output might include cells that are hidden on the grid. Be careful to ensure that the order of the cells are the same as the grid if you plan to copy the cells back into the application.

## Importing data from a spreadsheet into a form

- 1 Ensure that the columns in the spreadsheet are in the same order as the columns in the form's grid.
- 2 In the spreadsheet, select the rows by shift-clicking in the row numbers on the left.

	A	B	C	D	E	F	G	H	I
1	SourceSite	TargetSite	ReplicationCategory	Description	IntervalType	Interval	StartIn	Disable	UpdateAll
25	CAN	CRP	Site Admin		Immediate		0	0	0
26	CAN	CRP	Ledger Consolidation		Immediate		0	0	0
27	CAN	USA	Site Admin		Immediate		0	0	0
34	CAN	ILL	Site Admin		Immediate		0	0	0
35	CAN	CAL	Site Admin		Immediate		0	0	0

- 3 Right-click and select **Copy**.
- 4 Ensure that the form is in "Add" mode. that is, the **New** toolbar button is enabled.
- 5 In the form's grid, click in the left column of the first empty row.

The screenshot shows the 'Replication Rules' dialog box. On the left, there is a list of rows with columns for Source Site and Target Site. The right side of the dialog contains several input fields: Source Site (dropdown), Target Site (dropdown), Category (text input), Description (text input), Interval Type (dropdown menu set to 'Immediate'), Interval (text input), Start Interval At (text input), and two checkboxes: 'Disable Replication' and 'Update All Columns'.

- 6 Select **Edit > Paste Rows Append**.
- 7 Paste the data from the spreadsheet into the dialog box and click OK.  
The rows are added in the grid.

Replication Rules

	Source Site	Target Site
1	CAL	CAN
2	CAL	CRP
3	CAL	CRP
4	CAL	ILL
5	CAL	ILL
6	CAL	ILL
7	CAL	ILL
8	CAL	ILL
9	CAN	CRP
10	CAN	USA
11	CAN	ILL

Source Site: CAN  
Target Site: ILL  
Category: Invoice Builder  
Description:  
Interval Type: Immediate  
Interval:  
Start Interval At:  
 Disable Replication  
 Update All Columns

**8** Click the Save button to save the rows.

The copy works only if all the information in the rows is valid and in the proper format. Otherwise, you get data validation errors and the import stops. See [Requirements for loading data from spreadsheets](#) on page 58.

## Appendix C: Changing the master site

These steps assume the following:

- Multiple existing sites all on one intranet, where Site A is the current master site and Site B is another existing site in a different database on the same intranet.
- You want to switch the master site to Site B.

Follow these steps:

- 1 Ensure that all users are logged out.
- 2 At Site A, unshare any `_all` or user tables that are shared. Keep a record of the tables that you are unsharing. See the help topic "Unsharing Multi-Site Shared Tables."

This could take a long time.

**Note:** If all sites are in one database, you can skip this step.

- 3 In the **Intranets** form at Site A, set the **Master Site** to blank.
- 4 In the **Intranets** form at Site B, set the **Master Site** to Site B.
- 5 At Site B, share any `_all` or user tables that were previously shared with Site A.  
This could take a long time.
- 6 On the **Trigger Management** form at both sites, regenerate triggers.
- 7 On the **Replication Management** form at both sites, regenerate replication triggers.
- 8 Use the **Unload Farm IDO Metadata** form to clear the cache for the current configuration, across all servers in a farm.

To clear the cache for all configurations for all sites in the farm, you must log into each configuration individually and unload the metadata.

Verification: If sites are not in the same database, and sharing of `_all` tables or user tables is in place, verify that the data in user tables at the master site is updated when data is updated in the subordinate sites. Also ensure that views are set up appropriately within the databases.

**Note:** Never select the Intranet Licensing option in a cloud environment.