

Infor CloudSuite Business Licensing Administration Guide

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About this guide

This guide explains the different types of licensing and the license modules that are available with Infor CloudSuite Business. It also explains how to request licenses, and how to set up licensing in the application.

Intended audience

This guide is for the CloudSuite Business users who are responsible for administration of the application.

Contacting Infor

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

If we update this document after the product release, we will post the new version on the Infor Support Portal. To access documentation, select **Search > Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

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

Chapter 1: Licensing overview

Note: This document applies to Infor CloudSuite Business 9.01 and above.

License modules

Infor CloudSuite Business includes license modules that allow users to access specific forms, IDOs, and other objects in the application. For example, there are license modules that control access to the country pack and industry pack features of the application, license modules that control access to the Credit Card and Tax interfaces, and license modules that control access to forms and features in optional modules such as portals, employee self-service, and service management.

See <u>License module details</u> on page 19 for a list and descriptions of the available license modules.

License document

If your product is on-premises, you must have a license document in order to apply your licenses to the application. Infor provides this document in the form of a *.txt file when you purchase an Infor product. The file contains, in an encrypted format, all the information that is needed to apply your licenses to each application database. You must determine which license modules you require, and how many licenses you require for each module, before the license document can be provided.

Tokens

Each module that you purchase has a certain number of tokens available for users to consume, based on the number of licenses that you purchased for that module. Generally, each user who logs in to CloudSuite Business consumes one or more tokens. (There are some exceptions to this rule, as discussed later.) License tokens are consumed when a user logs into the system. The tokens are released when the user logs out.

Session types

CloudSuite Business allows named and concurrent licensing based on session type. Among other benefits, this feature allows named users to be logged in multiple times using different types of sessions, but only consume license modules for the appropriate type of session.

See Licensing by session type on page 14.

Cloud environment

In a cloud environment, be aware of these licensing differences from an on-premises environment:

- The Infor Cloud team applies the licenses to your database. You still must assign the licenses to specific users.
- All licenses are named user licenses.
- Intranet licensing is not needed.
- Some products described in License module details on page 19 are not available.

Chapter 2: License administration in the application

License administration is performed using these CloudSuite Business forms:

- License Management: This form indicates the dates when the license begins and ends, which modules are licensed, and how many licensed users you have. This form is where you apply the license to stay current. You can see your multi-session users in the Multi-Session Users tab.
- Licensed Modules: This form lists the modules for which your company is licensed in the current site. This is helpful for users who cannot access the License Management form.
- User Modules: Use this form to associate user names with license modules.
- License Modules Per User Connection: This form lists the license module names associated with each current user connection. If Intranet Licensing is enabled, then this form also shows the site from which the users are connected. In non-intranet licensed environments, only connections from the current site will be shown. Connected users consume user licenses (tokens) based on the license module to which the users have been assigned, and the session type under which they are logging in.

See Licensing by session type on page 14.

- License Module Concurrent User Counts: This form lists all the license module names that are currently associated with a user connection, as well as the total number of users who are consuming a license on each module. Use this form to monitor whether your purchased license count is appropriate for the number of concurrent logins at peak times.
- **Session Management**: Use this form to view current user sessions, and to delete user sessions when necessary. This form also includes a column to indicate the session type.
- Sites or Sites/Entities: If this form indicates that intranet licensing is being used, then licenses can only be assigned at the master site for the intranet.
- **Modules for Form**: On this form, you can filter by form name to identify licenses or modules that are required to be able to run that form. You can also filter by license module to identify forms that are associated with that module.
- **Optional Modules**: This form lists the optional modules that are available by site. A system administrator must use this form to enable the base CloudSuite Business features of optional modules for a site, after the modules are licensed.

See Licensing and enabling optional modules on page 15.

For more information about using any of these forms, see the online help.

Associating users with modules

The system administrator associates each user with one or more license modules. When an administrator associates a user with a module, the administrator is granting that user the license rights to use resources contained in that module. For online users, the licensed resources are the forms they run. For WebService and other automated sessions, the licensed resources are IDOs.

License rights are separate from security rights. Security rights are controlled by assigning users to groups or by allowing certain types of access (read, delete, execute, etc.) to specific objects. For more information about permissions, see the online help topic about assigning users to groups.

Depending on whether you selected named or concurrent licensing, CloudSuite Business consumes the license tokens in different ways.

Named users vs. concurrent logins

A named user license links one user login to one license through the **User Modules** form. For example, if you plan to have three users (bobw, jeanp, and miker) running CloudSuite Business, you would request three named licenses.

Named license users are only allowed one active login to a CloudSuite Business site, and that login consumes a license. If you try to log in a subsequent time as a named user who still holds an active session, CloudSuite Business requires the active session to be released. However, there is an exception to this: the special Multi-Session user that is provided as part of the license. This special user is described in <u>System users with special licensing</u> on page 12.

With named user licensing, when you associate a user with a license module, CloudSuite Business verifies that there are remaining tokens for the module not yet associated with a user. A license module token is consumed at the time the user is assigned to that module. If a license module assignment is later removed from a user, that license module token is returned to the pool of available tokens. When the user logs in and attempts to access a form or IDO, CloudSuite Business verifies that the user is associated with at least one license module containing the resource.

In a multiple sites per database environment, each named user can log in once per shared site, which counts as one license token against each module to which that user is assigned.

With concurrent login licensing, licenses are assigned to users, but the license check does not occur until users log in. If the number of users logged in to a site with a particular license module is equal to the license number limit, and another user tries to log in, that user is not allowed to log in to the site. Using our example above, if you had two concurrent CloudSuite Business licenses, you could assign that license to three users (bobw, jeanp, and miker). However, only two of them could use the CloudSuite Business license token at a time.

The reverse is also true. For example, miker is assigned concurrent licenses for CloudSuite Business and ServiceManagement, so he could be working in both functional areas while he is logged in.

Under concurrent licenses, a user can log into a certain site multiple times, as long as the total number of license tokens currently consumed in CloudSuite Business for any module that applies to that user is less than the licensing limit for that module in that site. (A module applies to a user if that module is

assigned to that user and has the same session type as the user's connection, or has a session type of Undefined. See <u>Licensing by session type</u> on page 14.

With concurrent login licensing, you can associate as many users as you want with a module in a site, regardless of how many tokens you have purchased for the module. When a user logs in, CloudSuite Business verifies that there are remaining tokens for each of the modules/session types that apply to that user, and then consumes a token for each of those modules for the duration of that user's session. License module tokens consumed during a user's session are returned to the available pool when the user logs off.

Licensing in a multi-site environment

In a multi-site environment with multiple sites in one database, one license document applies to all sites, and named vs. concurrent limits are enforced across all sites.

In an intranet licensed environment or a multiple sites per database environment, if a named license user is logged into one site, the user can log into additional sites without having to relinquish the existing session. However, the user cannot have multiple login instances in the same site; the user must relinquish the current session to start another one.

See Intranet licensing on page 13.

In a multi-site environment with one site per database, if intranet licensing is not used, each site has its own license document and keeps track of its own tokens. Each site has no knowledge of any logins on any other site. If a user is defined in multiple sites and is logged into more than one site, whether concurrent or named, that user uses a license token for each of those logins in each site.

For one site, all the licenses must be specified as either named or concurrent. You cannot mix types.

Multi-site licensing example

This example shows how a multi-site environment consumes the appropriate licenses:

- An environment with 2 sites (Site A and Site B) and one entity, all in separate application databases, as shown in this table.
- 20 Transaction users, 10 at Site A and 10 at Site B
- 5 Inquiry users, 3 at Site A and 2 at Site B
- 5 Multi-Site Transaction users from Site A with access to Site B
- 4 Multi-Site Transaction users from Site B with access to Site A
- 3 Entity users with access to the Entity database

Licensed Module	Site A	Site B	Entity	
Transactional	10	10	0	
Inquiry	3	2	0	
Entity	0	0	3	

Licensed Module	Site A	Site B	Entity
Transactional_MS	4	5	0

These users each have a User record and are associated with the appropriate modules for access to the licensed applications. The individual licenses can be set up as shown in this table:

Site & Users	License Types			
	Trans	Inquiry	Entity	TransMS
Site A Users				
Transaction users (users # 1-10)	Х			
Multi-Site Transaction users (users # 1-4)				Х
Inquiry users (Inquiry users # 1-5)		Х		
Site B Users				
Transaction users (users # 1-10)	Х			
Multi-Site Transaction users (users # 6-10)				
Inquiry users (Inquiry users # 1-2)		Х		
Entity Users				
Entity users (Entity users # 1-3)			Х	

System users with special licensing

These users are special cases:

- SA User: The "sa" user doesn't require licensing. By default, that user has the ability to open any form and run any process in the site. The "sa" user should be reserved for system administration tasks and should not be used to run multi-site processes. Only one instance of the "sa" user can be logged in at any time, even under a concurrent license. Do not assign any license modules to this user.
- Multi-Session (Concurrent) SL_Internal User: All CloudSuite Business customers are given a multi-session user named SL_Internal. This capability is designed for WebService automation scenarios, where an application that is accessing the IDO layer may have multiple threads that process simultaneously, with each thread sharing the same configured multi-session user.

Under a named user license, each standard user is only allowed one session per site. The multi-session user gives an administrator one user that can have multiple concurrent sessions. Under a concurrent license, all users except "sa" can have multiple concurrent sessions. Therefore the multi-session user provides no real significance in a concurrent license environment.

When the multi-session user is assigned to a license module, the tokens consumed are the number of concurrent sessions defined for that user. In other words, if the multi-session user is defined by the license to allow seven concurrent sessions, assigning that user to a module consumes seven license tokens for that module. Multi-session users and their concurrent session limits are defined in the license document generated by the vendor. You cannot create or modify a user to be a multi-session user.

Multi-session users are shown in the Multi-Session Users tab on the License Management form.

- Infor ION: ION uses a direct connection to the application when retrieving BODs, so no license token is required.
- Infor Framework services: Framework services such as the Replicator use service sessions to connect to the application. The service session does not consume a license.

Intranet licensing

You can choose to set up an intranet with a master site that controls licensing for other sites on the intranet. This consolidates license administration and validation at the master site. One license document applied on the master site can service all of the sites enabled for intranet licensing on that intranet. All named user and concurrent login license checks at each of the participating sites are redirected to the master site for validation.

You can choose which sites on the intranet will use intranet licensing, through a check box on the Sites or Sites/Entities form.

You can use the Intranet Shared User Tables feature, which requires Intranet Licensing, to create and administer all users for the intranet from the master site. If you select Intranet Licensing but you do not use the Intranet Shared User Tables feature, users must be created at each participating site, and all users from all participating sites must be created at the master site as well.

A named user is allowed one login at each participating site on the intranet. If a named user tries to log into the same site that he is already logged into, the system requires the user to cancel the existing session first.

A user with a concurrent license can log in as many times on as many sites as needed, up to the license limit. Each of those concurrent logins consumes a license token.

Intranet licensing requires reliable connectivity between all participating sites. If connectivity between an intranet licensing site and its master site goes down, then all subsequent license checks will fail until connectivity is restored, so users will not be able to log in at non-master sites.

After intranet licensing has been turned on for a site, you should not turn it off without good reason. If you do, you must apply license documents to each site where you turn it off. In addition, custom objects at that site may then have incomplete licensing, if the site is not either the master site or the site at which the objects were originally created, because the appropriate licensing records for the object will not exist in the application database at that site.

License information is not replicated and no tables need to be shared specifically for intranet licensing. (However, the sites on the intranet must replicate the Site Admin category, in order to recognize the

master site.) Information about how many sites are logged on using a particular license is stored in the SiteConnectionInformation table, which is kept up-to-date only at the master site.

The Session Management form reflects only the sessions for the local site. If the current site is enabled for intranet licensing, the License Modules per User Connection form shows license module use across all participating sites.

The License Management and User Modules forms are disabled at participating sites other than the master site.

Licensing by session type

CloudSuite Business allows named and concurrent licensing based on session type. Among other benefits, this feature allows named users to be logged in multiple times using different types of sessions, but only consume license modules for the appropriate type of session.

One of these session types is associated with each license module:

• Full client: Used for a fully trusted client where form licensing grants permission to the form and all of the IDOs used by that form. This includes smart clients and Web clients where the Web rendering is not in form-only mode.

For example, when users log in from a smart client on a computer, it is a "full client" session, and they can access both forms and IDOs.

• Web form only: Used for Web clients in form-only mode.

When a user logs in from a mobile device, it is generally a "Web form only" session (that is, through a URL that includes the specification "formonly"). The "Web form only" session type also applies to forms displayed through our Microsoft Office Integration (for example, the Sales Contacts (Office) form defined in the "OfficeIntegration" license module).

• IDO: Used for programmatic (automation) access to the framework IDOs and their methods.

For example, when users log in through the CloudSuite Business Microsoft add-in or through a CloudSuite Business portal, it is an "IDO" session, because they access CloudSuite Business IDOs rather than forms.

 IDO Custom User: Used for CloudSuite Business web service calls only. This session allows multiple (concurrent) web service calls to consume one license token for a given user and user module. An IDO Custom User session type will match any modules defined as IDO session type.
 Note: This header attribute must be specified as part of each web service call to leverage this session type:

X-infor-MongooseSessionType: CustomUser

Any web service calls that do not contain this header attribute will be executed with a standard IDO session type.

• Undefined: No session type is defined. You should see this only if an orphaned connection record still exists from an earlier version of the application.

You should see this only if an orphaned connection record still exists from an earlier version of the application.

• Additionally, there is a Service session type that is not associated with any module. The Service session type is used by framework utilities such as TaskMan. Under a service session, access to licensed form and IDO resources is granted without consuming any license tokens.

See <u>License module details</u> on page 19 for the list of license modules and their associated session types.

Verifying the license at user login

When license checks are made during user logins, only license modules whose session type specification matches the user's current session type are considered.

If the module is associated with a session type, then a license token is only consumed for that module if the module's session type matches the user's connection session type.

For example, the user twilson is assigned both a Transactional license (where the session type is defined as "full client") and a Mobile license (where the session type is defined as "Web form only"). When twilson logs in from his mobile device in Web form only mode, only the Mobile license is consumed. When twilson logs in using the smart client on his laptop, only the Transactional license is consumed.

Verifying the license at runtime

After the user has successfully logged in, runtime license checks are made to determine if a certain object (form or IDO) is available to that user, based on the user's licensing and session type. Again, only modules matching the user's current session type are considered.

Otherwise, the session type is considered.

For example, the user twilson tries to open a form that is assigned to the Transactional module but not to the Mobile module. Twilson can open the form if he is logged in from his smart client, but not if he is logged in from his mobile device.

Licensing and enabling optional modules

The optional modules that are listed in the CloudSuite Business Explorer are installed automatically with CloudSuite Business. However, each module must be licensed and enabled before it can be used in a site.

Forms that are part of an optional module (that is, forms that are not included in base CloudSuite Business) can only be opened by a user when both of these cases are true:

- The license module has been applied to the database.
- The current user is licensed for the module.

Sometimes buttons or fields that are related to a module are displayed on base CloudSuite Business forms, or back-end CloudSuite Business logic is related to a module. For example, the **Pay with Credit Card** button on the **Customer Orders** form is used only with the Credit Card Interface module. These base CloudSuite Business features of the module are handled on a site-by-site basis; you can enable them for one site in a database but not for other sites in the same database.

Use the **Optional Modules** form to enable the features for a specific optional module at a specific CloudSuite Business site:

 When a module is shown as Disabled on this form for a site, fields and buttons related to that module are not displayed (in some cases) or are displayed but not enabled (in other cases) when any user is logged into that site. In addition, none of the back-end business logic related to that module is executed for the site.

If a module is licensed for a database, but disabled for a particular site in that database, the site administrator should ensure that authorizations are set so that users cannot access forms which are part of the optional module.

- When a module is shown as Enabled on this form, any fields or buttons related to that module are displayed on base CloudSuite Business forms, and back-end business logic related to that module is executed. However, fields or buttons are enabled only for users who are assigned the appropriate license. Thus, in our example, the **Pay with Credit Card** button is enabled only when all of these are true for the CreditCardInterface license module:
 - The license module has been applied to the database.
 - On the **Optional Modules** form, the license module is enabled for the site.
 - The current user is licensed for the module.

Licensing custom forms and IDOs

If you add custom forms, copy or extend existing forms, create new IDOs, or extend existing IDOs, the forms and IDOs are licensed using this information in the license document and the ModuleMembers table:

- New customer-created IDOs that do not extend other IDOs are automatically assigned to the CustomerIDOs internal module member and associated with the Automation license module.
- Imported or extended IDOs are automatically assigned to the CopiedExtendedIDOs internal module member and associated with the license module(s) of the base IDO which it extends. If the base IDO belongs to more than one license module, then a CopiedExtendedIDOs ModuleMember record will be created for each license module to which the base IDO belongs.
- New custom forms are automatically assigned to the CustomerForms internal module member and associated with the Transactional, Transactional_MS Mobile, and Mobile_MS license documents.
- Copied forms, which belong to the CopiedForms internal module member, inherit the license module assignments of the source form from which they were copied. Thus, if you copied the CustomerOrders form to some new name (and changed it for your purposes), it would belong to all the same license modules the original CustomerOrders form belonged to.
- A new form that extends an existing form is automatically assigned to the license modules to which the existing form belonged.

Be aware that, if you have multiple application databases pointing to the same forms database, you must copy the form licensing information to each application database, using FormSync.

Licensing for automation sessions

In automation sessions, multiple threads of the calling application may overlap. For example, a web application can call the CloudSuite Business IDOWebService to query data to present. When making a call to the IDO Web Service, the web application supplies a specific user ID, password, and configuration. The web application can have multiple threads executing simultaneously, so it requires multiple concurrent CloudSuite Business sessions.

Multi-session users are designed for use with automation sessions. They are defined in your license document and are created when the license document is applied.

The SL_Internal user is the only multi-session user that is available in a named user environment.

However, any user can make overlapping web service requests and still only consume one IDO license token, if the IDO Custom User session type is used. This session type is optionally available to sessions that are created during Mongoose REST, WebService, and IntegrationService calls.

Automation sessions can be established using the technologies and tools listed in this topic. Each of these options exposes the same underlying IDO Request interface, as described in the document *Integrating IDOs with External Applications*. The licensing implications of these options vary, as described in this list:

- SOAP WebService: These calls are synchronous, consuming a license token during the processing.
- COM: These calls are synchronous, consuming a license token during the processing.
- XML: CloudSuite Business utility/web servers provide both synchronous and asynchronous URLs. The calling process must format an IDORequest XML document, and then decide whether to use the synchronous route or asynchronous route:
 - For the synchronous route, an automation session is established for the user specified in the XML, consuming a license that is assigned to that user. (Often this user is assigned an Automation license, because Automation is the only license module that contains all the CloudSuite Business IDOs plus customer-created ones.) The synchronous route allows the calling application to receive the results of the request.
 - For the asynchronous route, although security is checked for the user specified in the XML, no licensing consumption occurs. The processing is performed by the framework service ReplQListener. XMLs processed this way require a valid user, but that user does not need to take licensing into account, only security.
- Microsoft Outlook or Project add-in: Each user configures the add-in in Outlook or Project with an CloudSuite Business user, password, and configuration. This user must be assigned the Automation license module and must be assigned the appropriate IDO permissions in CloudSuite Business, as described in the *Infor CloudSuite Business Microsoft Office Integration User Guide*. Connections to CloudSuite Business to synchronize data are short-lived. In addition, the OfficeIntegration license is needed if the user plans to include custom CloudSuite Business forms inside Microsoft Office modules.

• Excel add-in: If you use the drill-down functionality and choose to have the data displayed in a CloudSuite Business form, and a separate CloudSuite Business session is open at the same time, you must have a concurrent license. If you do not have a concurrent license, you can still operate in this scenario if you have two user IDs, one for CloudSuite Business and the other to use in the drilldown from Excel.

Licensing demo and pilot databases

Demo and pilot databases must be licensed and must meet the requirements in the Infor Non-Production Server Licensing Policy. Contact your Infor representative for a copy of this policy.

You can request license keys for demo or pilot databases through the Infor Support Portal, using the Key Request link.

See <u>Requesting a license</u> on page 29.

Demo database licensing

Each demo database requires a license key specific to the database and the server on which the database resides. Thus, there is no way to provide a generic license to enable the use of the demo database by more than one person.

These restrictions and notes apply to demo database license keys:

- Licenses are valid for 90 days.
- There is a fixed user count of 10 for any user-based module.
- All products managed by the license key generation are available.
- The names of the databases are fixed at demo01 demo10.
- In the Key Request, you must include your Server Name and Host Name (demo1 demo10).

Pilot database licensing

You might want to make copies of your production systems for piloting, testing or development work. For pilot databases, you can ask Customer Service to generate a new production database license key based on the old production key, with these constraints:

- The licenses that are created are valid indefinitely.
- The database name of the pilot database must be the same name as the production database with a "_plt1", "_plt2" or "_plt3" appended to the end of the name.
- The number of users allowed for user-based modules is limited to 10 users, or 20 percent of the production database license count, whichever is greater.

Chapter 3: License module details

This section provides more information about the modules. The Transactional or Transactional_MS license module is the most commonly assigned module.

AdvancePlanningScheduling module

You license CloudSuite Business APS per user, per site. You must request as many APS licenses as you have transactional users in each site. Although the APS license provides access to only a few additional UI features, such as the APS Mode flag and the ATP/CTP switch, the APS license provides value-add to all CloudSuite Business users. The base application includes available to promise (ATP) and Infinite capabilities, as well as MRP. An AdvancePlanningScheduling license adds Capable to Promise (CTP) and Finite capabilities.

This license module is always assigned the session type Full client.

Access to the Analyzer Planning and Scheduling forms is part of the basic Transactional license and is not controlled by the APS license.

AssetManagement module

Use this license module to allow users access to all Plant Maintenance forms and related fields and buttons on other forms. This license module is always assigned the session type Full client.

AssetManagement_MS module

Use this license module to allow a Plant Maintenance user access to Plant Maintenance-related forms in an additional site. Users with this license must have a matching AssetManagement license in their "Home" site. This license module is always assigned the session type Full client.

Automation module

This license allows other applications to connect to CloudSuite Business through the IDO layer. If you have an Infor application such as APS that is connecting to CloudSuite Business, you do not need an additional Automation license.

However, integrations to external applications such as the CloudSuite Business SharePoint IDO web parts and the CloudSuite Business Outlook add-in require the Automation license module in order to log in to CloudSuite Business and collect data. Infor allows you to request automation licenses equal to the number of Transactional licenses your company buys.

If you plan to have custom applications connecting to CloudSuite Business through the IDO layer, you may need to buy additional Automation licenses in order to have enough licenses for each application connection. This license module is always assigned the session type IDO.

See Licensing for automation sessions on page 17.

Automotive_Mfg module

Use this license module to allow users to open the Automotive Industry Pack forms and to see and use fields and buttons on other forms that are specific to the Automotive Industry Pack. This license module is always assigned the session type Full client.

ChinaCountryPack module

Use this license module to allow users to open the China Localization forms. This license module is always assigned the session type Full client.

Configuration module

CPQ uses this module to license per user, per site. If this product is required, you will need as many Configuration licenses as you have transactional users in each site. This license provides access to all the configuration functions (limited, however, by the user's authorizations). This license module is always assigned the session type Full client.

CreditCardInterface module

Use this license module to allow users to open the Credit Card Interface forms and to see and use fields and buttons on other forms that are specific to the Credit Card Interface. This license module is always assigned the session type Full client.

CRM Module

Use this license module to allow users to enter CRM information, including orders and estimates, in CloudSuite Business. The license provides access to certain CloudSuite Business forms used for order entry, estimates, item availability, shipping, RMAs, and so on.

This license module does not allow users to configure products; that requires a Configuration and full Transactional license, as described above.

CRM_MS module

Use this license module to allow CRM users to access most of the CRM forms in an additional site.

Developer module

Request this license if you plan to create or customize IDOs or SQL tables. This module allows the use of CloudSuite Business forms that start with the prefix "IDO" or "SQL" that are used for development. This license module is always assigned the session type Full client.

EmployeeSelfService module

Use this license module to allow users to open the Employee Self Service forms, and use associated IDOs, in the web client. This license module is always assigned the session types Full client and Web Form Only. The forms in this module are designed for use in the Web client (web form only mode); however, full client access is available for use when you want to customize these forms.

Entity module

This license module enables users to run all forms appropriate to the entity - such as General Ledger and other financial functions - and prevents them from running non-entity CloudSuite Business forms. In a site where the site type is "entity," all users except a system administrator should be limited to this license. (Entity users also should be set up to belong only to the Entity Forms default authorization group, which limits the forms they can see and the actions they can take.) This license module is always assigned the session type Full client.

GermanyCountryPack module

Use this license module to allow users to open the Germany Localization forms and to enable the Germany Localization fields on standard forms. This license module is always assigned the session type Full client.

GlobalEPI module

Use this license module to allow users to access the external payroll forms associated with a Celergo integration. This license module is always assigned the session type Full client.

Inquiry module

You can use the Inquiry license for occasional or management users who only need to view information or to run reports. If the user has the appropriate authorization, this license provides access to query and reports forms, as well as the Item Availability form. This license module is always assigned the session type Full client.

New customers cannot purchase this license. However, existing customers who already own Inquiry licenses can continue to use them with and can purchase additional copies.

JapanCountryPack module

Use this license module to allow users to open the Japan Localization forms. This license module is always assigned the session type Full client.

MexicanCountryPack module

Use this license module to allow users to open the Mexico Localization forms. This license module is always assigned the session type Full client.

Mobile module

Request this module for users who want to receive alerts and access CloudSuite Business from their mobile devices. This license module is always assigned the session type Web form only. Each mobile user is assigned a mobile default home page (small CloudSuite Business form) that displays when the user logs in from a mobile device.

Mobile license prices are calculated on a per user basis.

Mobile_MS module

For CloudSuite Business Mobile, this module is similar to the Transactional_MS module, in that you need a Mobile license for each mobile device used in its "home" site, and a Mobile_MS license for each other site where that mobile device might be used. This license module is always assigned the session type Web form only.

Mobile_MS license prices are calculated on a per user basis.

MobileDisconnected module

Use this license module to access the CloudSuite Business Service mobile app. This native mobile app can be used on mobile devices by technicians in the field.

Mobile license prices are calculated on a per user basis.

MobileDisconnected_MS module

Use this license module to access the CloudSuite Business Service mobile app when working in a multi-site environment. This native mobile app can be used on mobile devices by technicians in the field.

Mobile license prices are calculated on a per user basis.

MoldingPack module

Use this license module to allow users to open the Molding Industry Pack forms and to see and use fields and buttons on other forms that are specific to the Molding Industry Pack. This license module is always assigned the session type Full client.

OfficeIntegration module

This module allows you to display custom CloudSuite Business forms inside Microsoft Office modules. For example, if you have this license, and if the CloudSuite Business Outlook add-in is enabled, you can view the Sales Contacts (Office) form from the Contacts tab of Microsoft Outlook.

You license CloudSuite BusinessOfficeIntegration per user, per site. You will need as many CloudSuite BusinessOfficeIntegration licenses as you have transactional users plus CRM users in each site.

This license module is always assigned the session type Web form only.

Portals module

Request this named license module for your customers who you want to allow to access CloudSuite Business through an Infor Portal Foundation (IPF) portal. The administrator must map that user ID to the customer number, so that predefined row-level authorizations will prevent the customers from seeing anything beyond their own data. User creation and mapping is done through the portal User Account Management utility. When business-to-customer (B2C) portal users create their own login accounts, the CloudSuite Business user IDs and customer numbers are assigned automatically.

Portals license prices are calculated on a per user basis.

Note: For both Portals and Portals_MS users, verify that your Microsoft Server and Microsoft SQL Server licenses are correct for the type of user and data you are planning to expose.

Portal customizations

You can customize the Customer and Vendor portals by modifying standard scripting delivered with our Web Parts or by creating new scripting for new or existing Web Parts. If you plan to create new scripts, you must have at least one Developer license. If you do not have this license, your new scripts will not function properly in the portals.

Portals_MS module

For the CloudSuite Business Portal, this module is similar to the Transactional_MS module, in that you require a Portals license for each portal user ID that is assigned to the primary site (that is, the site in which orders are entered), and a Portals_MS license for any other site that is exposed on the portal. The user needs a Portals_MS license to access data from the other sites.

If users are shared through the Intranet Shared User Tables form (which requires Intranet Licensing to be turned on), then you do not need to specify a Portals_MS license for the user; you only need to specify the Portals license for the user at the master site. In this case, the master site must be the primary site.

When business-to-customer (B2C) users create their own portal accounts, the appropriate Portals and Portals_MS licenses are automatically assigned to the new account.

Portals_MS license prices are calculated on a per user basis. This license module is always assigned the session type IDO.

PrintingPack module

Use this license module to allow users to open the Printing Industry Pack forms and to see and use fields and buttons on other forms that are specific to the Printing Industry Pack. This license module is always assigned the session type Full client.

QualityControlSolution module

Use this license module to allow users to open the forms in the Quality Control Solution (QCS) optional module. This license module is always assigned the session type Full client.

ServiceManagement module

Use this license module to allow users to open the CloudSuite Business Service forms and to see and use fields and buttons on other forms that are specific to Service. This license module is always assigned the session type Full client.

ServiceManagementLite module

The ServiceManagementLite license module allows limited CloudSuite Business access for service technicians who just need to use these forms:

- Service Order Labor Data Collection, to log labor transactions against a service order.
- Service Order Material Data Collection, to log material expenses against a service order.
- Partner Console, to log labor transactions by clocking on and off operations that are assigned to them, and to see their work queue.

Technicians can import data into these forms using a keyboard or a barcode Wedge reader implemented in a connected (online) mode. This license module is always assigned the session type Full client.

ServiceManagement_MS module

Use this license module to allow a ServiceManagement user to access most of the CloudSuite Business Service forms in an additional site. Users with this license must have a matching ServiceManagement license in their "Home" site. This license module is always assigned the session type Full client.

SLSITrans module

The license module SLSITrans is used to access all of the forms in the Infor CloudSuite Business Enterprise Financials (Infor SunSystems) interface. This license module is always assigned the session type Full client.

Note that this interface has a separate App and Forms database, as well as a separate user interface. The Enterprise Financials database is specified in the licensing. For example, your database server might have databases set up as in this example:

MyDBServer contains these databases:

- SLSite1_App
- SLSite2_App
- SLSI_App

The system generates three different license documents, with the correct database server and database names provided: one for each CloudSuite Business site, and another one for the interface application.

TaxInterface module

Use this license module to allow users to open the Tax Interface forms and to see and use fields and buttons on other forms that are specific to the Tax Interface. This license module is always assigned the session type Full client.

ThailandCountryPack module

Use this license module to allow users to open the Thailand Localization forms. This license module is always assigned the session type Full client.

Transactional module

Most users are assigned a **Transactional** license, which provides access to most forms in CloudSuite Business. You can then limit individual user's access by setting up group and user authorizations. This license module is always assigned the session type Full client.

Users with this license can access, edit and delete data or transactions. They cannot access, for example, the **Planning Mode** form, which is used to set up APS. The **Planning Mode** form is part of a separate application module and is licensed accordingly.

Transactional_MS module

Both Transactional and Transactional_MS licenses allow access to most forms in the database. The Transactional_MS module is the preferred option for named users in a multi-site environment because it costs less but has the same functionality as the Transactional license. (This license module does not apply in a concurrent licensing environment.) If named users require access to multiple sites, they should be assigned a Transactional license in their "home" site and a Transactional_MS license in any other sites where access is required. This license module is always assigned the session type Full client.

Transactional and Transactional_MS license prices are calculated on a per user basis. The Transactional_MS license applies only to the core product and does not include any optional modules.

Transactional_MS calculation matrix

The sample matrix below calculates the number of multi-site users required. In this example, 3 users from Site A also need access to Site B, and 5 users from Site A need access to Site C. The total

	Site A	Site B	Site C	Total
Users/Site A	N/A	3	5	8
Users/Site B	2	N/A	4	6
Users/Site C	1	2	N/A	3
Total	3	5	9	17

required for Site A is 8 Transactional_MS users. In total, 17 Transactional_MS users are required to manage the inter-site access requirements for this sample multi-site system.

Chapter 4: Requesting a license

Review the information in this guide and decide what types of licenses and how many of each license you need. Then use this worksheet to fill in the information that Infor requires in order to generate your license document. If you are performing a multi-site implementation, we recommend that you also read the *Multi-Site Planning Guide* before you request your licenses.

Filling out the license worksheet

Make a copy of these tables and fill in the appropriate information for each license key you are requesting. You must request one license key per database server.

Specify the number of each type of user license in this table:

User Licenses	Specify the number of each type of license you want	Notes
Additional Automation		Automation
Country Pack China		ChinaCountryPack
Country Pack Germany		GermanyCountryPack
Country Pack Japan		JapanCountryPack
Country Pack Mexico		MexicanCountryPack
Country Pack Thailand		ThailandCountryPack
Credit Card Interface		CreditCardInterface
CRM		CRM
CRM Multi Site		CRM_MS
Developer User		Developer
Entity Users		Entity
Inquiry Users		Inquiry
Global EPI		GlobalEPI
Mobile		Mobile

User Licenses	Specify the number of each type of license you want	Notes
Mobile Disconnected		MobileDisconnected
Mobile Disconnected Multi Site		MobileDisconnected_MS
Mobile Multi Site		Mobile_MS
Office Integration		OfficeIntegration. User count should equal the total of Transaction + CRM users
Plant Maintenance		AssetManagement
Plant Maintenance Multi Site		AssetManagement_MS
Portals		Portals
Portals Multi Site		Portals_MS
Quality Control Solution (QCS)		QualityControlSolution
Service		ServiceManagement
Service Multi Site		ServiceManagement_MS
Service Data Collection		ServiceManagementLite
Transaction Users		Transactional
Transaction Users Multi Site		Transactional_MS

Specify the number of each type of module license in this table:

Module licenses	Specify the number of each type of license you want	Notes
APS Transaction User		AdvancePlanningScheduling
Configuration		Configuration
Forecasting		See BTA documentation
Industry Pack Molding		MoldingPack
Industry Pack Printing		PrintingPack
SytePlan		See BTA documentation
Tax Interface		TaxInterface

Specify additional environment information in this table:

Environment in- Your a formation	answer	Notes
Host Name		Specify the application database name to which this license will be applied. This is case-sensitive and must exactly match your database name. For Cloud users, this information is supplied by the Cloud administrator.
Server Name		Specify the SQL Server instance ID. This is case- sensitive and must exactly match your server ID. For Cloud users, this information is supplied by the Cloud administrator.
Additional infor- Your mation	notes	Description
		To request license modules that are not displayed on the request form, add a note specifying the li- cense modules that you want to include and the number of users. Specify multi-site here if you want to include a matching number of multi-site li- censes for each module that has a multi-site op- tion. For example, if you specify 50 users for Transactional, you will also get 50 users for Transactional_MS.
		If you only want multi-site users for a certain module, or if you want a different number of multi- site users than regular users for a module, specify that information here.
		Note: Multi-site licenses can only be assigned to named users. Specify configuration here if you want to include a CPQ Configurator license.

Requesting the license on the Infor Support Portal

After you have completed the license worksheet(s), customers with on-premises installations can log in to the Infor Support Portal and follow these steps to request a license:

Note: Cloud customers should contact your Infor representative to request new or additional licenses.

- 1 Select Resources > Request a Software Key > Key Request.
- 2 Click Browse and specify your customer ID.
- 3 Select your product line (CloudSuite, Business or Industrial).

- 4 In the **Key Request Reason** field, specify whether the license key is **Permanent** or **Temporary**. Temporary keys are generally used for testing purposes. Demonstration/evaluation is intended only for sales purposes.
- 5 Specify the rest of your contact information and click Next.
- 6 In the **Key Length** field, specify the amount of time the license key is valid: the number of months, 1 year, or **Permanent**.
- 7 In the **Key Start Date** field, specify the date when the key starts, if it is different from the current date.
- 8 The form lists the modules you are entitled to, based on the SKU. Use the information from your User Licenses and Module Licenses worksheets (above) to select the modules and specify the user count for each module. To include a module in the license key, change No Key Required to Yes, Key Required. Confirm the release number.

If all modules require renewal, you can use the **Select All Keys** option. The user count and release version must be confirmed.

Note: The form does not list multi-site modules. See the Additional Information worksheet for information on specifying multi-site users.

- 9 Click **Next** and specify environment details from your Environment Information worksheet (above). These details are used to generate your key, so please ensure that they reflect the environment where you will install the new key.
- **10** In the **Additional Information** field, provide any clarification on your request that you believe is important. For example, you can specify requests for multi-site users or Configuration licenses here. See the Additional Information worksheet (above).

If you want to attach a file with some relevant information, click **Attach** and follow the instructions to upload the file.

11 Carefully review the information before you click Submit.

Chapter 5: Applying a license

Ensure that you are logged into the application as a user in the System Administration group when you apply the license.

1 Open the License Management form and select the Apply License tab.

Note: If you are using Intranet Licensing, this form is blocked for users on all sites except the master site.

2 Paste your license document into the License Document field.

You can cut and paste the text from the license document into this field, or you can click **Import License** and select the license document file. The document is encrypted and every character counts, so if you copy and paste, be sure to copy the entire document.

3 Click Apply License.

Any previous multi-session users that you had are deleted and replaced with the ones that are defined in the new license document.

If you get an error message, see <u>Troubleshooting license and token problems</u> on page 37.

- 4 If there were active CloudSuite Business sessions when you applied the license, follow these steps:
 - a On the application server, open the Configuration Manager utility.
 - b Click the **Utilities** tab.
 - c Select **All Configurations** and **IDO Runtime on local machine**, and click **Discard IDO Cache**. This discards the cache for all configurations that reference the application database to which the new license has been applied.

See the Configuration Manager help for more information about the options on this tab.

Applying a license through a command line

As an alternative to applying the license in the License Management form, you can use the Apply MongooseLicense.exe utility to apply a license document to the application database of a specified configuration through a command line interface.

Utility location

This utility file must reside in the executable folder of a Mongoose-based application's admin client or application server, and the file must be run from that location. The IDO Runtime Service (or equivalent

IDORuntimeHost) must also be running on that machine. If not, you receive an error message when you try to apply the license:

```
Error processing an IDO request (Protocol=Ipc): Communication error executing IDO request: Failed to connect to an IPC Port: The system cannot find the file specified.
```

Running the command

To run ApplyMongooseLicense.exe as a command line utility, use this syntax:

```
ApplyMongooseLicense -config:config_name {-license:license_document |
-licensefile:filename}
```

To apply a new license, use only one of these options:

- -license: Specifies an actual license document
- -licensefile: Specifies a path/file containing a license document

To reapply the current license, specify the command without either of those options.

If any arguments are provided that do not match the required parameters, then a "Usage" message is displayed to show the required format:

```
Usage: ApplyMongooseLicense <parameters> where <parameters> represents:
  -help: Displays this usage text. If specified, only parm required.
  -config: Config name (required)
  -logfile: Path/filename of logfile (optional)
One of the following to apply new license or neither if reapplying current
  -license: A license document
  -licensefile: Path/filename containing a license document
```

The command line utility returns an exit code of 0 if the license is successfully applied. Otherwise it return -1. If the license application is successful, a success message is displayed on the console.

Troubleshooting

These conditions can cause an error when you run the utility:

- Insufficient or invalid parameters are specified for the command line.
- The specified configuration does not exist.

In this case, this message is displayed when the utility tries to connect to the configuration.

```
[Machine_Name] NullReferenceException exception processing
'OpenServiceSession' request: Object reference not set to an instance of
an object.
```

- The license document is invalid or does not match the server and database name to which it is being applied.
- The IDO Runtime Service, or equivalent IDORuntimeHost.exe, is not currently running on this computer.
- The ApplyMonogooseLicense.exe utility is not being run from the installed Mongoose executable folder. This utility is dependent on other assembly files that exist in this folder.

• If neither **-license** or **-licensefile** is specified and no license document is currently installed, this message is displayed:

Reapply License Failed: Reason = License is missing or invalid

Chapter 6: Other types of licensing

These licenses are required outside of <productname> if you use these products with the application.

Analytics licensing

If you plan to use Infor CloudSuite Business Analytics, you must have the BI platform and ImportMaster licenses.

Microsoft SSRS licensing

If you install SSRS on a SQL database server, no additional SSRS licensing is required. If you install SSRS on a different server, you must have an additional Microsoft SQL license for that server.

Chapter 7: Troubleshooting license and token problems

Replacing a license with fewer users

You might receive an error if your new license is for fewer users than your old license. For example, your old Transactional license was for 50 users, and your new license is for 40 users. In this case, when you click **Apply License** in the **License Management** form, you could see an error message. To correct this, open the **User Modules** form and delete user associations with the Transactional module until you have the same or fewer users than the new license allows.

Recovering locked tokens

If CloudSuite Business terminates unexpectedly, it is possible that license tokens that were in use at the time are still locked, thus preventing users from logging in. Use the **Session Management** form to free the locked tokens. See the help on the form for more information.