Infor Education
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Infor CRM: v8.4 Administering Training Workbook

Infor CRM

July 9, 2018

Course code: 01_0610840_IEN0172_CRM

Table of contents

About this workbook

Welcome to this Infor Education course! We hope you will find this learning experience enjoyable and instructive. This Training Workbook is designed to support the following forms of learning:

- Classroom instructor-led training
- Virtual instructor-led training
- Self-directed learning

This Training Workbook is not intended for use as a product user guide.

Activity data

You will be asked to complete some practice exercises during this course. Step-by-step instructions are provided in this guide to assist you with completing the exercises. Where necessary, data columns are included for your reference.

Your instructor will provide more information on systems used in class, including server addresses, login IDs, and passwords.

Self-directed learning (SDL)

If you are taking this course as self-directed learning, there may be instructor-recorded presentations and/or simulations available to assist you.

If instructor-recorded presentations are available, a hyperlink to the recording will be included on the first page of each corresponding Lesson.

If simulations are available, the demos and exercises throughout this Training Workbook will include hyperlinks that allow you to view and/or practice the execution of the demo or exercise in a simulated training environment.

Learning Libraries

Learning Libraries in Infor Campus include learning materials that are available to you online, anytime, anywhere. These materials can supplement instructor-led training, providing you with additional learning resources to support your day-to-day business tasks and activities.

Please note that if you accessed this Training Workbook directly via a Learning Library, you will not have access to the Infor Education Training Environment that is provided with all instructor-led and most SDL course versions, as referenced above. Therefore, you will not be able to practice the exercises in the specific Training Environment for which the exercises in this Training Workbook were written.

Symbols used in this workbook

Hands-on exercise (“Exercise”)	Your notes	Question
Instructor demonstration (“Demo”)	Important note	Answer
Can be used for either (“Scenario” or “Discussion”)	Critical note	Task simulation
For your reference		

Course overview

Estimated time

.25 hours

Learning objectives

Upon completion of this course, you'll be able to manage:

- Users
- Teams and departments
- Maintenance
- Security: Lan and Web
- Enhancements and Integrations
- Web Client customization
- Installation of Client components

Topics

- Course description and agenda

Course description and agenda

The Infor CRM Client manages all aspects of the sales cycle. Certain features of the Infor CRM Client require advanced configuration and management from an administrator. This course identifies the different administration procedures completed by both the Infor CRM Administrator and the Infor CRM Web Administrator.

The Infor CRM Administrator is a network based program that can be accessed from any network connected computer where the Infor CRM Administrator is installed and appropriate security rights are given to the user.

The Web Administrator allows users to easily configure most of these options as well, but from the same website you use to access other Infor CRM Web Client features. It's a special interface which can only be accessed by a user logged on to the Web Client with appropriate admin security credentials or who has an administrative role assigned to his or her profile.

The recommended agenda suggests completing Lessons 1-5 on Day 1, Lessons 6-11 on Day 2, and Lessons 12-14 on Day 3. You are welcome to work ahead if you have time. This training is for Infor CRM v8.4.

Prerequisite courses

- Infor CRM: v8.x Using Web

Course duration

20 hours

Prerequisite knowledge

To optimize your learning experience, Infor recommends participants have the following knowledge prior to attending this course:

- Knowledge of Microsoft Windows operating systems, Microsoft Windows server technology and security, and Microsoft Internet Information Services (IIS) Manager
- Knowledge of Microsoft® SQL Server® and relational database
- Basic networking skills such as sharing folders and setting permissions
- Experience using the Infor CRM Windows or Web Clients

Audience

- Business Consultant
- Technical Consultant
- Support
- System Administrator

System requirements

- Infor CRM Training Environment

Reference materials

Infor CRM reference materials are available from the following locations:

- Infor CRM Help menu
- Infor Xtreme®

Course agenda

The agenda below details the contents of this course, including lesson-level learning objectives and supporting objectives.

Lesson	Lesson title	Learning objectives	Day
Course overview		Review course expectations.	1
1	Introduction to the Infor CRM Web Client	• Explain the training environment • Describe and explore the Infor CRM Web Client • Describe and explore the Infor CRM Windows Client • List what's new in Infor CRM v8.4 • Learn about Office Profiles	1
2	User setup	• Describe a New User Checklist prior to creating user • Explain the differences between user types • Create new users	1
3	Team and department setup	• Discuss creating and using teams • Discuss creating and using departments • Describe what a user's manager can see • Discuss security in regards to teams	1
4	Introduction to Infor CRM security	• Describe how Infor CRM handles security • Discuss web security – secured actions and roles • Discover network security – feature and function security • Demonstrate field security • Explain Account Ownership	1
5	Sync Server setup	• Identify the prerequisites to setting up a Synchronization Server Profile. • Understand what happens on the sync server during the synchronization process.	1

Lesson	Lesson title	Learning objectives	Day
		• Summarize the benefits of using a synchronization schedule. • Describe a scenario in which a synchronization conflict might occur. • Explain the purpose of a sync transfer profile.	
6	Remote/Offline database setup	• Summarize user profile sync options. • Attach a Remote Database. • Create a Remote Database link.	2
7	System maintenance	• Discuss scenarios that might require a manual backup or restore of a database. • Summarize the available data maintenance tools and their purposes. • Identify where to find system upgrade documentation and installation files. • Explain how to create Windows and Web development environments.	2
8	Integrations and enhancements	• Discuss the different integration options Infor CRM has: Ming.LE, ION, BOE. • Discuss the enhancements available for outlook • Discuss Web Integrations Nav Bar. • Discuss Administrator integrations.	2
9	Web security	• Describe how Infor CRM handles security. • Discuss creating and using Roles. • Discuss creating and using Secured Actions. • Describe the Security Manager.	2
10	Personalizing the Infor CRM Web Client	Use the Admin Nav Bar features for “Personalization” of the Infor CRM Web Client.	2
11	Customizing the Infor CRM Web Client	• Use Form Manager to edit forms. • Use Entity Manager to edit entities. • Learn about advanced developer customizations.	2
12	Windows security	• Explore the different security features. • Explain administrative roles.	3

Lesson	Lesson title	Learning objectives	Day
		• Explore feature security. • Define field security. • Examine function security. • Apply security.	
13	Prepare the Windows Client	• Setup the Windows Client. • Manage the functions within the Manage toolbar. • Manage the functions within the Tools toolbar.	3
14	Remote network client setup	• List the programs installed in a Remote Client (Windows) installation. • Understand what happens on the remote machine during the synchronization process.	3
Course summary		Debrief course	3

Appendices

This section contains information that is not part of the instructional content of this course, but provides additional related reference information.

Appendix	Appendix title	Content description
Appendix A	User accounts	This appendix provides a reference for student login credentials.
Appendix B	Building test environments	This appendix provides a reference for building test environments.

Lesson 1: Introduction to the Infor CRM Web Client

Estimated time

1 hour

Learning objectives

After completing this lesson, you will be able to navigate through the Infor CRM Web and Windows Clients. In this lesson, you will:

- Explain the training environment.
- Describe and explore the Infor CRM Web Client.
- Describe and explore the Infor CRM Windows Client.
- List what's new in Infor CRM v8.4.
- Learn about Office Profiles.

Topics

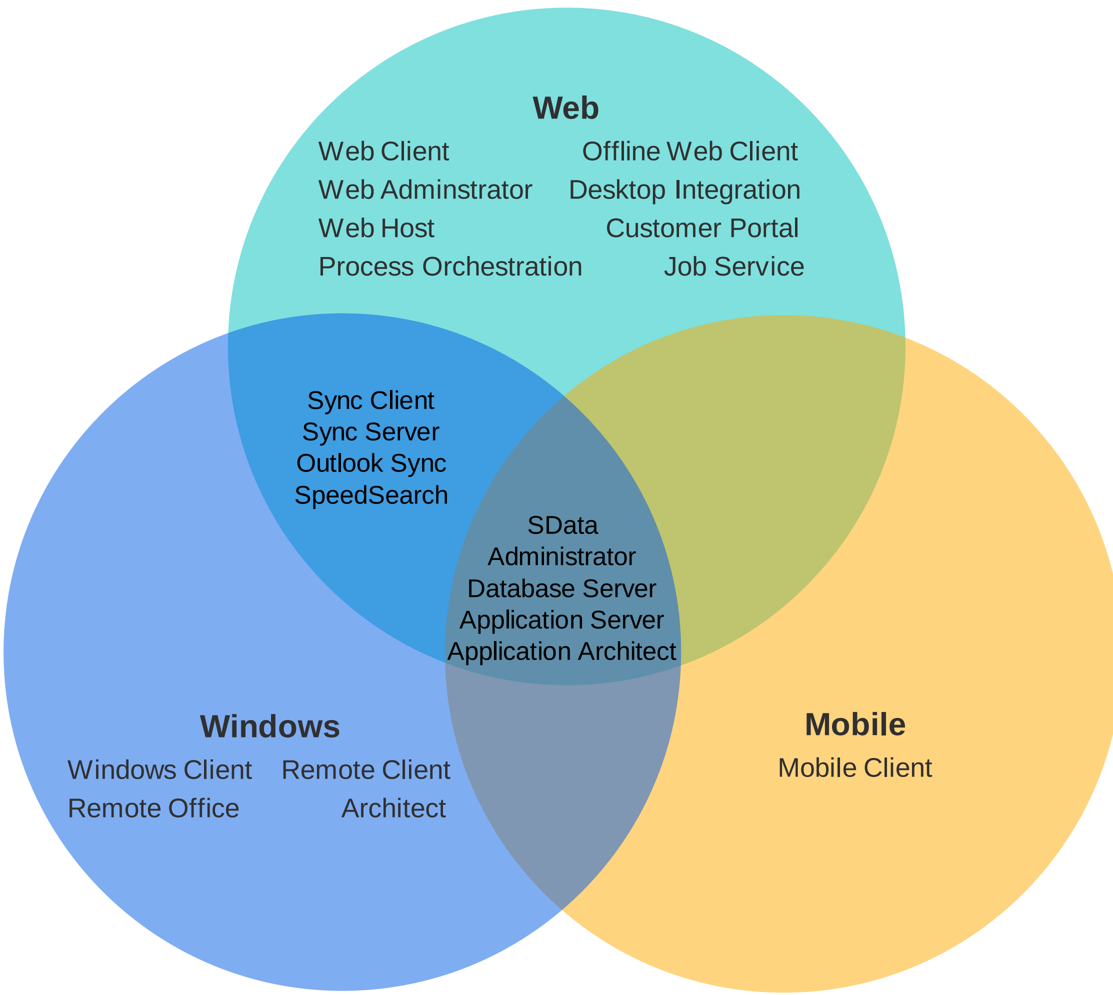
- The Infor CRM environment
- The training environment
- Navigate within Infor CRM
- What's new in v8.4

The Infor CRM environment

This course focuses on how to handle administration of Infor CRM within the Infor CRM Web and Windows Clients. Although the system you will be administering may only have some of these features installed, understanding the various parts of the Infor CRM environment can assist with the administration of a complete system. It's important to have a general understanding of all the features available within Infor CRM.

The Infor CRM environment may include several parts which depend on each company's implementation needs. Users can implement an environment to support the Infor CRM Windows Client (installed program), Web Client (website), or Mobile Client (HTML5-compatible device).

Each implementation requires several components. Some are unique to a deployment, while others overlap. The following diagram lists the main components for each implementation type and illustrates which overlap. Throughout this course, you will learn how to install, configure, and administer many of these components as you deploy Infor CRM in a demonstration environment.

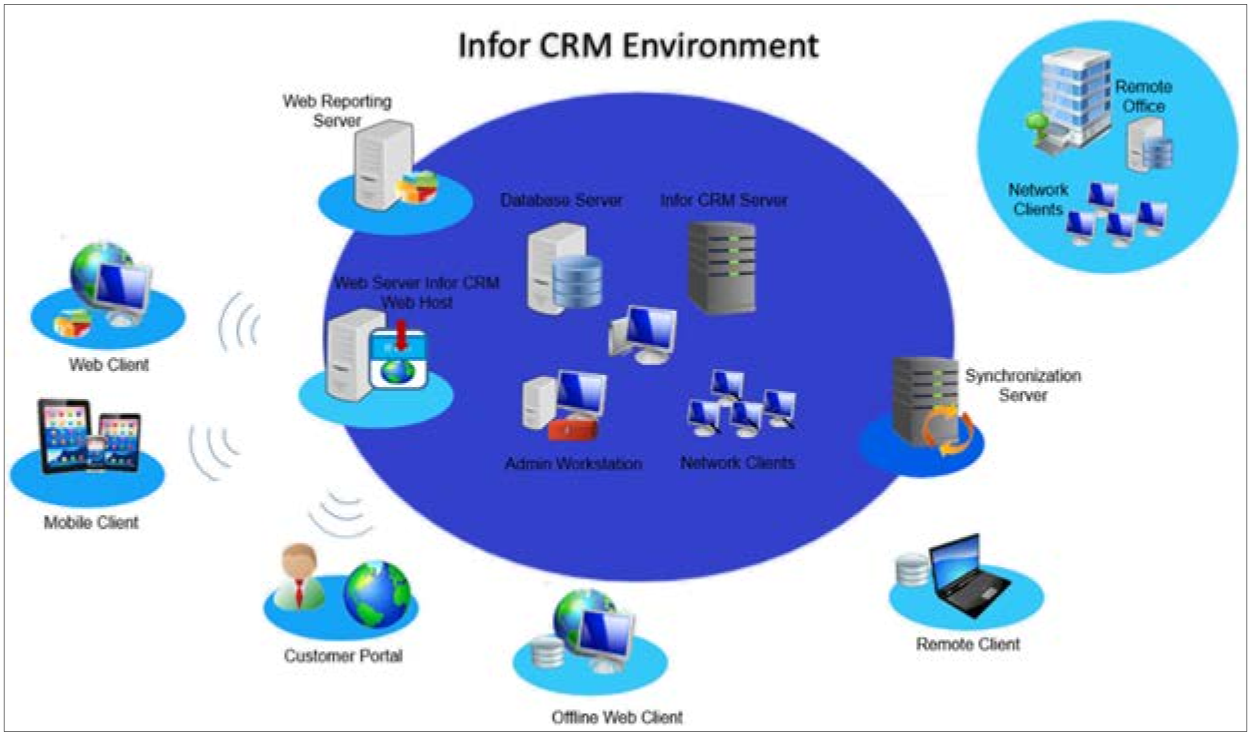


The following is a list of components and the descriptions of each:

Server	**Description**
Database Server	Contains a Database Management System (Microsoft® SQL Server®, Microsoft SQL Express, or Oracle) supporting the SALESLOGIX (blank) and SALESLOGIX_EVAL (demo) databases. The physical connection to your Infor CRM database uses OLE DB Connection Pooling.
Application Server (Infor CRM Server)	Manages user connections to the database and enforces licensing.
SpeedSearch Server	Build indexes allows users to locate information in Infor CRM, such as defects, tickets, and documents within their network. SpeedSearch is also required for Web implementations using Lead Import and Duplicate Checker tools.
Web Server	Hosts the Infor CRM website and other portals, such as SData™ ProcessHost, Customer Portal, Mobile, Outlook Sync, and Job Service.
Administrative Tool	**Description**
Windows Client (Windows)	An Infor CRM Client application running as an installed program. Users interact with sales, marketing, service, and support data. It also includes the SpeedSearch Client.
Web Client	An Infor CRM Client application running on the Web server and accessed through a web browser. Users interact with sales, marketing, service, and support data.
Xbar and Desktop Integration	An optional program allowing Web Client users to record history for Outlook email messages, synchronize Outlook and Infor CRM, and view Infor CRM data within the Outlook application. Xbar (which includes Desktop Integration) requires SData™.
Server	**Description**
Outlook Sync	An optional installed program allowing users to synchronize calendar items, tasks, and contacts between Outlook and Infor CRM. Outlook Sync is available for both Windows (network/remote) and Web Client (online/offline) environments.
Synchronization Component	**Description**
Synchronization Server (Sync Server)	Runs the synchronization process and agents between the main Infor CRM database and all remotes.
Synchronization Client	An installed program on each remote user's computer which transfers changes between the user's local database and the main office database. Use with the Remote Client (Windows) or Offline Web Client.
Remote Client (Windows)	An Infor CRM Client application running as an installed program which connects to a local database (a subset of the main office database).

Remote Office	An installation of Infor CRM at a location other than the main office where multiple offsite users connect to the offside network. The remote office database synchronizes all changes with the main office database.
Offline Web Client	An Infor CRM Web Client application running on the user's machine using Infor CRM Personal Web Server which connects to a local database (a subset of the main office database). Users access the local website through a web browser and interact with sales, marketing, service, and support data.

In addition to the core components, the capabilities of Infor CRM can be extended by implementing additional integrations, such as Sync for Exchange or Back Office Extension. These integrations enable users to synchronize common data between Infor CRM and external systems often containing overlapping data. Additional integrations may also be available from third party vendors and Infor CRM partners.



The training environment

Prior to using Infor CRM, users should familiarize themselves with the scenario used in this training course. This includes learning basic information about the sample data you will be working with throughout this course.

Getting to know the sample data

The Infor CRM evaluation database known as SALESLOGIX_EVAL includes sample data used in this training course. Sample data belongs to a fictitious company known as Phoenix Computers. Knowing how Phoenix Computers is set up helps learners understand concepts in future lessons.

Phoenix Computers sells products and services related to computer software, hardware, and technical support. They service approximately 1,000 accounts with 1,000 contacts in over 18 countries.

Their company, staffed of 27 people is divided into ten departments: Channel Sales, Customer Service, Development, Field Sales, Inside Sales, IS, Marketing, PSG, Sales, and Tech Support. Everyone in the company has access to Infor CRM.

Phoenix Computers uses the term “teams” to group people from different departments by physical region or specialty: Asia/Pac, EMEA, Global, Midwest, Northeast, Northwest, Southeast, Southwest, Tech Support—Hardware, and Tech Support—Software.

There are two primary accounts used during training:

1. The administrative account:

   Username: Admin

   Password: [blank]

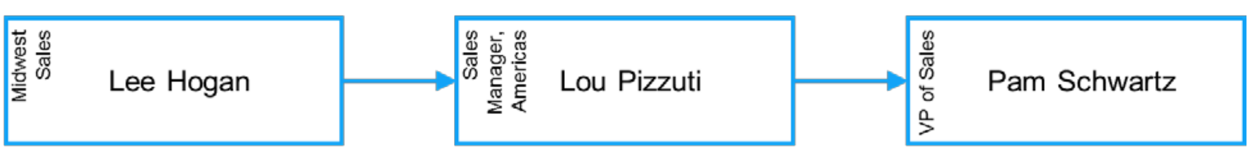
   This is the main administrative account for Phoenix Computers which is reserved for the Infor CRM Administrative team.

2. The user account used during training is Lee Hogan. Lee is a Field Sales Executive on the Midwest team.

   Username: Lee

   Password: [blank]

Lee Hogan reports to Lou Pizzutti (Sales Manager, Americas) who reports directly to Pam Schwartz (VP of Sales). This information can be used to setup manager relationships for use in Account Ownership scenarios.



Follow these steps to sign in to the Infor CRM Web Client for the first time:

1. Open Internet Explorer.

Although you can use Chrome 23+ or Firefox 24+ to access most of the features in the core web application, CRM recommends using Internet Explorer because it supports Mail Merge which isn't available when using other browsers.

2. Type *http://srv10:3333/SlxClient* into the URL field if the window doesn't default to the **Infor CRM Sign In** screen.

Replace SRV10 with your Training Environment's server name if different than SRV10.

3. Type *Lee* in the **Username** field. No password is required.
4. Click **Sign in**. The Infor CRM Web Client opens.

Navigate within Infor CRM

Demo: Navigating Infor CRM

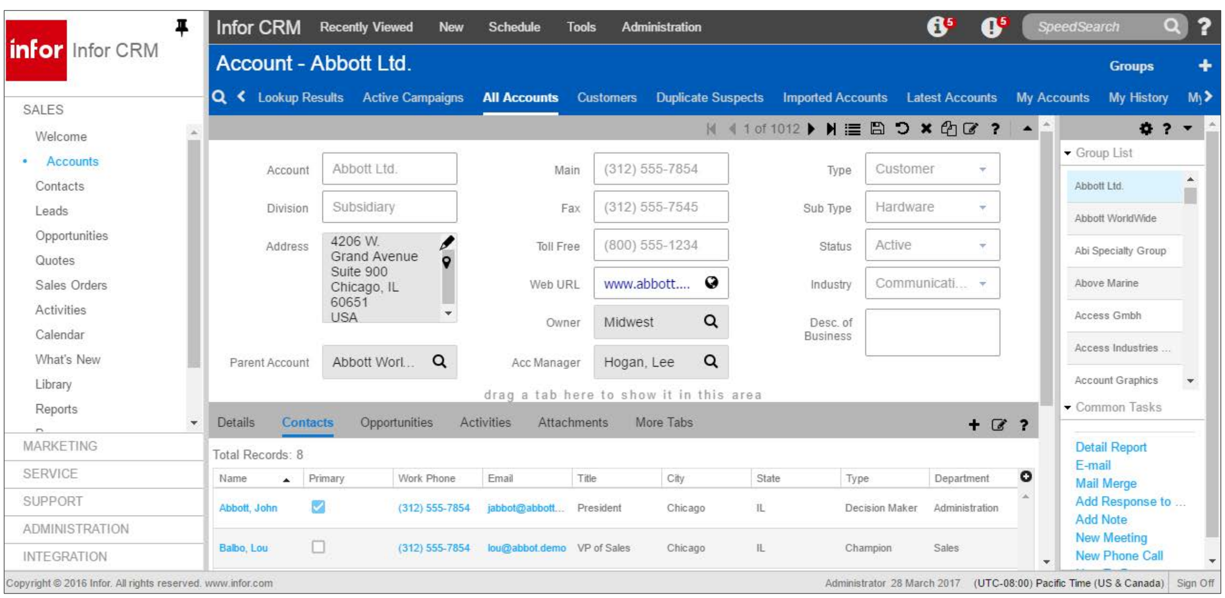
This demonstration shows how to navigate through the Infor CRM Web Client, Windows Client, and Administrator. Major components are identified, such as how to access the Infor CRM Web Administrator, general screens available in each client, and various menu options. This video is intended as a refresher to the UI of the Infor CRM clients.

Notes:

- To prepare the system for future exercises, this demo must be completed.
- If you are taking this course as classroom or virtual instructor-led training, your instructor will demonstrate this task.
- If you are taking this course as self-directed learning, you must complete the steps in this demonstration.

Prior to reviewing the features in the Infor CRM Client, it's important to learn to navigate the workspace so you may find information quickly. The following figure identifies components of the workspace. The **Abbott Ltd. Account Detail** view is shown in the example.

The following section focuses on browsing the Infor CRM Web Client. The Infor CRM Windows Client has a similar UI, however, there are slight differences between the two. Keep this in mind throughout the course and make sure you're in the correct application for each exercise.



Infor CRM Web workspace

Using the Nav Bar

The Nav Bar is the vertical row of features grouped on the left side of the workspace. Each group in the Nav Bar contains links to various views for working with data. To access views and data relevant to a specific job function, expand the appropriate Nav Bar group and then click the desired view.

Action	Description
Expand a Nav Bar group	Click a Nav Bar to expand the group.
Open a main view	Click a group to open the corresponding main view.
Right-clicking a Nav Bar group	This action opens view-specific functions.

Using the menu bar

The menu bar contains commands for commonly used Infor CRM operations. Users can select a menu option by clicking the item.

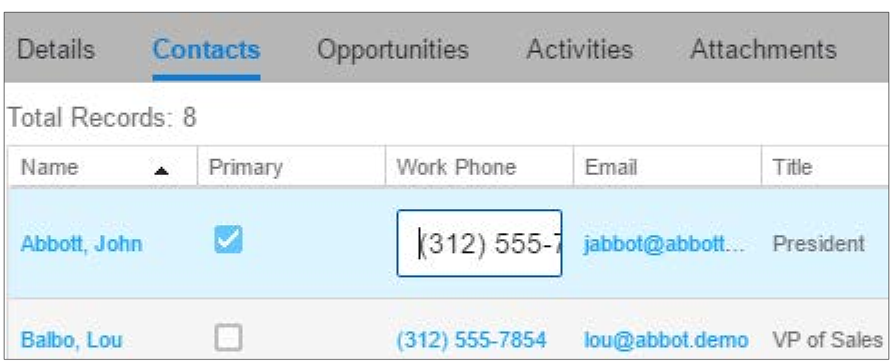
Two commonly used menus are Recently Viewed and Write. **Recently Viewed** is a used to quickly navigate to previously viewed pages. The **Write** menu is only available if Enhanced Features is installed. **Note:** Menu items can be disabled for users.

Using shortcut/context menus (right-click)

Right-clicking activates context menus in many areas of Infor CRM. Right-clicking these areas displays menus relevant to the current view, however, not all areas have context menus.

Editing items in a grid

When you see an item in a grid, click once inside the cell to edit data. **Note:** Not all data grids have editable cells.



Using the toolbar

The toolbar provides quick access to common Infor CRM functions. Icons are context-sensitive, meaning some icons may not be visible if they aren't applicable to the current view.

Icon	Function	Description
	List view	Displays different views visited since your last sign in to Infor CRM.
	Save	Saves your changes. Infor CRM prompts users to save changes before navigating away from a view.
	Reset	Clears the current data in the view.
	Delete	Deletes the current record.
	Copy	Copies the current information to your Windows clipboard.
?	Help	Opens Infor CRM Help for the current view.

Views in the Web Client

There are two main views within Infor CRM:

1. List view
2. Detail view

List views display information like a grid with columns and rows. To sort the grid by a specific field, click one of the column headings. Users can also customize their list view to suit their needs. Infor CRM remembers these changes each time a user logs in using the same browser and computer. Users can also hide or show the list view check boxes.

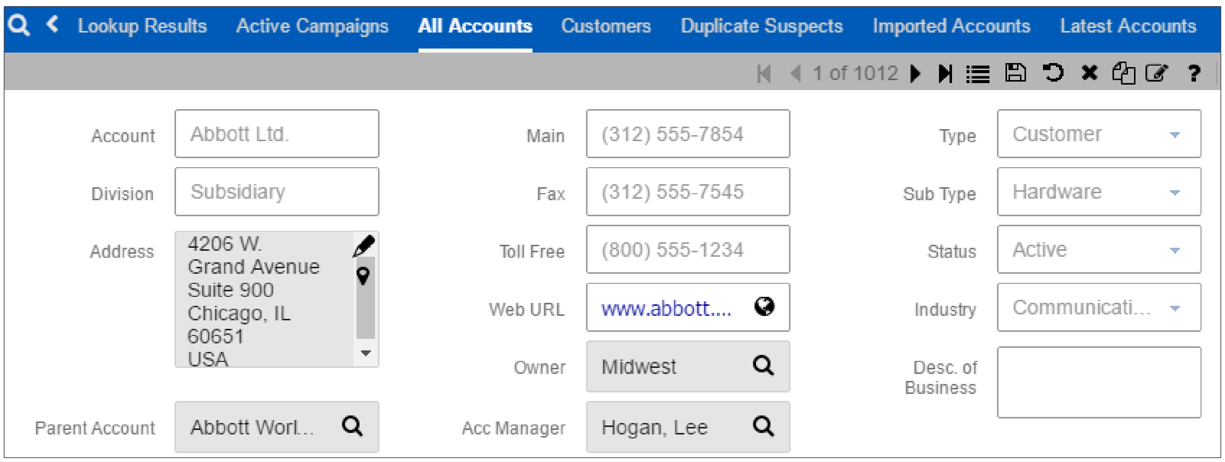
Note: Within a list view, users can use the **Summary** view to see commonly used information for each record type. The information and available features depend on the record type. Information in this view displays in three columns:

Column	Description/Action
Left	Displays primary record information. Depending on the record type, you can: • Click the record name to open the detail view. • Click an email address to send an email. • Click a Web address to open a Web site in a new browser window. • If you're looking at activities, click **Complete** to finalize the activity.
Middle	Displays additional information about the record that may include links to related records or read-only information.
Right	Displays related record types.

	Depending on the record type, you can: • Click hyperlinks to open the detail view with the appropriate tab selected. • Click numerical values to view a list of the related records. For example, contacts or tickets. The list that appears may have hyperlinks to open the detail view for the related record.

Detail views allow users to see, add, or edit information for a selected record. It consists of information fields, tabs, and a user-defined middle section.

- The upper section shows basic information about the selected record. When adding a new record, dialog boxes guide users through entering the information that appears in the **Detail** view. To edit information, click the field you want to change.

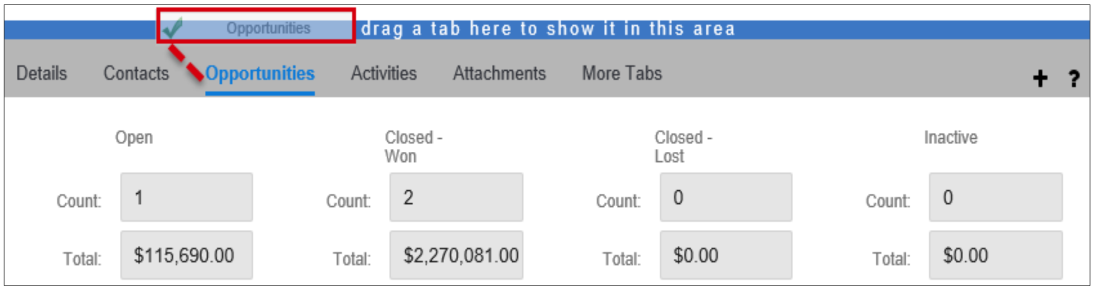


- The middle section, also known as the user-defined area, allows users to keep tabs they use most often visible. To move a tab to the middle section, click one of the tabs in the bottom section, hold the mouse, drag the tab to this area, and release.

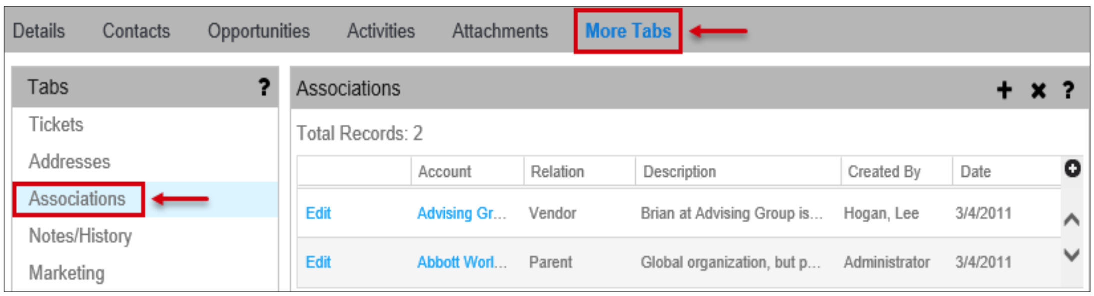
A green check mark indicates you're in the correct area and appears as you're dragging the tab. A red X might also appear which indicates you cannot drop that tab into the area you are in.

- The tab remains open in the user-defined area each time you use the Infor CRM Web Client. If you want to change the tab in the middle section, drag it to the bottom section and drag a new tab up.

Users can drag as many tabs as they want into the middle section and in any order.



- The lower section, also known as the Tab area, contains a group of additional tabs. Each tab shows specific information users need for the related record. **Note:** An administrator can create custom tabs for their company.



Using the status bar

The status bar is located at the bottom of the workspace and displays information about the current session, such as date and time, username logged on, and time zone. The Log Off button is also displayed here. Users can click the time zone to change it while traveling. Note: By default, the system logs a user off after 30 minutes of inactivity.

Using the task pane

The task pane displays to the right of the main window pane. It consists of filters, common tasks, and other features designed to help users complete their work. The available options depend on the record type and type of view where they're working.

From a list view, users can:

- Filter records
- Perform common tasks

From a detail view, users can:

- Use the Group List
- Perform common tasks
- Perform process tasks
    - Process tasks are only available if an administrator configures process orchestration.

Filters

Filters narrow the list of records in a list view group. The available filters are based on the columns in the selected list view and the information contained in those columns. To customize the list of filters to only include the filters you use for each group, use the **Edit Filters** option.

Each filter consists of the criteria selected. When applying a filter, only the records that meet all the criteria display. For example:

- **Account filter criteria**: A, M
- **City filter criteria**: Ann Harbor, Atlanta
- **Records returned**: All records starting with A or M and located in Ann Harbor or Atlanta

Common tasks

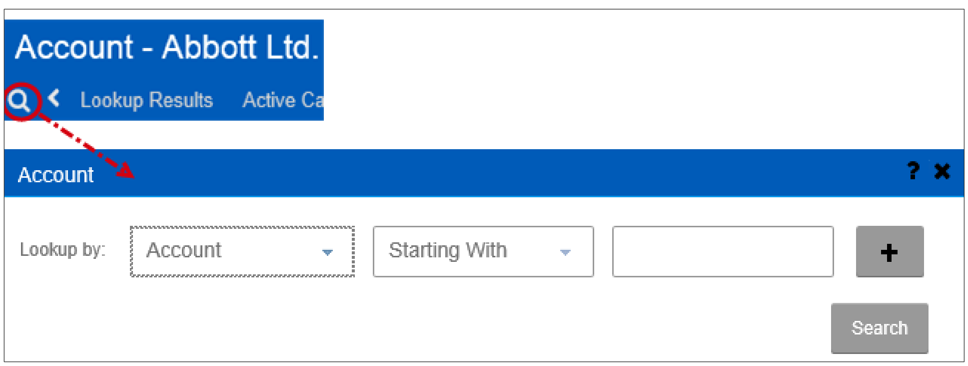
Common tasks help user's complete routine tasks efficiently. The available options depend on the record type and type of view where they're working. **Note:** If zero records are selected prior to performing a common task, the user is asked if all records in the group should be used. If they click **OK**, all group records are selected regardless of any filters and the action is applied to all records in the group.

Navigating records

When a main view is open for **Accounts, Contacts, Leads, Opportunities, Campaigns, Contracts, Defects, Returns,** or **Tickets**, users can quickly find records by using **Lookup**, **Nav** arrows, or **Group** tabs.

Lookup

Lookup searches for a specific record depending on the current view. It's located on the title bar of a main view and is available in both detail and list view modes.



The following are examples of a **Lookup** search:

- **A**: Finds all accounts that start with the letter "A"
- **AB**: Finds all accounts that start with the letters "Ab"
- **[blank]**: Displays all records

Asterisks (*) are not recognized within the **Lookup** search box. If users want to find results containing a certain letter or string of letters, CRM recommends using the **Query Builder** tool.

Change the default **Lookup Condition** by clicking **Tools > Options > Group** tab. Available choices include: starting with, contains, equal to, and not equal to.

Nav arrows

Navigation arrows scroll forward or back through records in a group or go directly to the first or last record. The total number of records in the current group appears between the icons. Nav arrows are only available from the detail view of a record.

Group tabs

Group tabs are used to switch to a different group of records by selecting the tab you want to view. The manage groups options in the upper right corner of the current view is used to either switch to a different group of records or show/hide groups.

Infor CRM Help

Context-sensitive online Help is available for all features in the Infor CRM client. This includes the many administrative features within the product. The Infor CRM Web Client offers a getting started guide, quick reference card, and an about page in addition to the standard Web Client Help.

Using Help

After opening the Infor CRM Web Client Help, users are brought to the Help screen. By default, these help files are stored within Infor and can be accessed through a web browser. Companies can bring the help files internal if they don’t want to use the help files stored on Infor’s servers. This allows them to be stored and accessed on an intranet system if desired.

From the **Help** screen, users can view the complete contents and index, and search for a specific topic. Links are included frequently within help files to see related items based on the help file they’re looking at.

What’s new

In addition to improved product stability due to defect fixes, v8.4, contains the following new functionality.

General enhancements

- Desktop Integration has been separated into Office Integration and Outlook Integration. Outlook Integration is now part of Infor CRM Xbar for Microsoft Outlook. Both can be downloaded by users from the Web Client Tools, General tab.
- The service used for integration is now run as a job through the Job Manager. The SData Synchronization Server is no longer required.
- The Remote Sales Client deployment now includes SData configuration.
- IIS configuration now supports versions of IIS above version 8.
- SData portal performance has been enhanced.
- Field level security information can now be queried and returned through SData.
- Web Client Job Server clustering allows load sharing across multiple machines or multiple nodes on the same machine and to monitor Job Server statistics using SData or Windows Performance Counters.
- Users with appropriate permissions can now remove bad records from the Sync Digest table.
- New CreateUnicodeDB.exe tool enables converting an ANSI database to a Unicode database. The converted database will be approximately double the size of the existing database and the tool requires three times the size of the existing database to be able to run correctly. After converting, you must pipe log information to a file. See task 29 for details.

Web Client enhancements

- There are now separate options for setting language and regional formats. The new Regional Formats option determines date, time, number, and currency formats. Account Hierarchy provides the following: The ability to view a hierarchy view of the parent and all children and grandchildren of an account from the Account detail view.
- Access to a quick view of frequently used entities (contacts, opportunities, sales orders and activities).
- The error message "Mail details to your administrator" link now opens an e-mail message that can be sent to an email address defined by the administrator.
- The Administrator can configure certain pick lists to support multiple languages. When configuration is complete, users can select a language on the Contact Detail view Details tab that will change the list items in the Prefix, Suffix, and Title pick lists for a particular contact.
- When adding a new account, it is now possible to look for potential matching records.
- When moving a contact, there is a new option to assign all items to the same contact.
- Showing groups has been replaced by group Favorites. Favorites determine which groups display as tabs on list and detail views.
- Export to File and Export to Excel have been combined and renamed “Export” in the Common Tasks pane and from the right-click menu.
- Export performance has been improved by including a limit to the number of records to be exported and adding the ability to turn off exporting pivot tables to Microsoft Excel.
- The new Sales Intelligence feature includes the ability to view the likelihood that a contact or account will make a purchase and provides a Recommendations tab that recommends products the contact or account is likely to purchase in the next 30 days.
- Completed meetings now display contact and account information on the Calendar.

- Contour integration provides the ability to map contact and account addresses in order to view contacts and accounts that are near one another. You can also add places that are not contacts or accounts, such as a hotel or airport.
- The Account detail view Sales Order tab includes additional information.
- The Local Pricing feature allows you to choose, on a per entity basis, between the ERP Pricing Service or local Infor CRM pricing which allows users to modify product pricing and discount amounts in Infor CRM. Using local pricing is only recommended for entities that are not synchronized to an ERP system.
- Creating an ad hoc group with a large number of records now uses the Job Manager.
- Improvements to Reporting performance.
- New common task on the Group Manager view to determine which groups will be marked as Favorites by default for new users.
- Integration with the LinkedIn Sales Navigator enables Infor CRM users who have a LinkedIn membership and have subscribed to the LinkedIn Sales Navigator feature to see a widget of Sales Navigator in a tab on the Infor CRM Account, Contact, and Lead Detail views.
- In the Infor CRM Account Detail view, the Widget locates and displays other recommended leads, connections and news for the selected account available through your LinkedIn network.
- On the Contact and Lead detail views, the LinkedIn Sales Navigator tab displays the Icebreaker, Related Leads, and Get Introduced information.
- The version of Contour provided with Infor CRM v8.4 is compatible with Microsoft Bing. If your installation includes a version of Contour provided in Infor CRM v8.3 Update 03 or later, your Contour integration with Google will still function, however it is no longer visible in the UI.

Back Office Integration enhancements

The following improvements are available for implementations that include Back Office Extension integration with a supported ERP system:

- Infor CRM can now be set to function as the authoritative system of record for Opportunities in an integration between Infor CRM and a supported ERP system through Infor ION.
- Normalize Base Currency provides an option to store data published by an ERP in terms of the Infor CRM base currency. This allows customers who opt for this service, to work in Infor CRM using the Infor CRM base currency even though the integrated back office ERP system uses a different base currency.
- ION Workflow enables Infor CRM users to initiate a workflow defined in ION from within Infor CRM. The trigger can be defined as conditional or manual in Infor CRM and the trigger can be extended to other entities.
- Discrete Address provides the option to use a discrete type of address if it is passed from an integrated back office ERP system.
- New logging and exception handling for Price and Availability in the Infor CRM Web Client.
- Master Data Consolidation is an optional feature that:
- Consolidates duplicate accounts with the same CustomerID, which can result from host systems such, as ERP-M3, ERP-LX and ERP-Visual, into a single Infor CRM account record. This applies to Accounts, Ship Tos, Bill Tos, Pay Froms, Contacts, Persons, and Products.
- Adds a filter icon and logic for each of the integrated transactional master data tabs; Account Quotes tab, Account Sales Orders tab, Account Shipments tab, Account Invoices tab, Account Receivables tab, Account Returns tab, Ship To Sales Orders tab, Ship To Shipments tab, Ship To Invoices tab, Ship To Receivables tab, Ship To Returns tab, Bill To Sales Orders, Bill To Invoices, Bill To Receivables and Bill To Returns. The new tab filter control supports filtering the tab content by Accounting Entity and/or by ERP Status. If the ERP integration is later disabled, the Quote and Sales Order filters revert to showing the Infor CRM status.

- The Local Pricing feature allows you to choose, on a per entity basis, between the ERP Pricing Service or local Infor CRM pricing which allows users to modify product pricing and discount amounts in Infor CRM. Using local pricing is only recommended for entities that are not synchronized to an ERP system.
- Improvements for customizing and upgrading customized BOD mappings and BOD field mappings which previously could not be upgraded.
- A new Language Code option for supporting integrated content in a localized environment.
- The Account Invoice Aging tab provides summarized past due invoice aging content. All host ERP invoices with past due payment due dates and an ERP status of Open or PartialPaid are included in the summary values presented in the new Account Invoice Aging tab.
- The Account Invoices tab contains a new Days Late column, enabling users to see past due invoices for a given account.
- Users can now refresh pricing for sales orders and quotes when using a price service.
- New Test Link button on the Price Service detail view enables testing the price and availability end points.
- The Account Detail View ERP Details tab now contains a notes field which displays notes published by the host ERP system. Notes display in descending date sequence. This field is read-only.

Ming.le Integration enhancements

For implementations that include integration with Infor Ming.le:

- The following new Ming.le Widgets are available:
- Infor Ming.le Funnel Chart widget.
- Infor Ming.le Top Prospects widget is a list of my prospective accounts.
- Infor Ming.le Infor CRM Opportunities widget of associated quotes for each opportunity.
- Infor Ming.le Infor CRM Contracts widget which provides a detailed view of the contract and associated contacts.
- A new Dashboard widget for Group Lists (Infor.CRM.GroupList -v1.0.6.3.zip)
- A new Dashboard widget for Opportunity Status (CRM.opportunity.Status.zip) is available. You must execute the *Master Data Consolidation* conversion option in the Conversion Utility if your
- implementation contains pre-existing ERP data content. Content is dependent upon the Infor CRM instance being integrated to a back office host ERP system publishing invoice content. Access to this feature must be granted to users. For more information, see the Web Client online help topic "Enabling Refresh Pricing".
- A new tool simplifies the Infor Ming.le provisioning process.
- An updated WebProvisioningUI.exe adds provisioning information to the Virtual File System (VFS).
- Users and roles are now synchronized between Infor CRM and Infor Ming.le.
- It is possible to share records and notes and history items
- It is possible to create and manage bookmarks
- Links in Infor Ming.le link to Infor CRM.

Web Client Administrator enhancements

Administrators and users with appropriate roles can access the following new features and functionality:

- The following roles are now default permissions in the Admin User Role. In prior releases, they were not assigned to a Role and had to be manually added: Pick Lists, Users, Roles, A/C/I, Departments, Exchange Rate, Lead Source, Literature, Resource, Standard Problem, Standard

Resolution, Security Manager, Ticket Activity, Ticket Area Owner, Qualification, Package, Office Profile, Country Code Mappings, Competitor, Campaign, Entity Manager.

- Create multi-regional pick lists with different list items for each language. The contents of a multi-regional pick list will depend upon the user's language setting.
- Set a default language for multi-regional pick lists.
- Set the desired language on the Name Prefix and Name Suffix so that users can select a language on the Contact Detail view Details tab in order to change the list items in the Prefix and Suffix, pick lists.
- A new Office Profile Error Notifications tab allows enabling the Error message e-mail link feature and specifying one or more e-mail addresses that will automatically populate the email To: field. When the Error message e-mail link feature is enabled, users who encounter an error message can send an e-mail to the specified address that contains a link that will display Event Viewer information. The Event Viewer information is only available to administrators or users granted access to the ErrorLookupService/View secured action.
- New secured action for Account Hierarchy - Entities/Account/Hierarchy.
- New secured actions for the Job Manager job schedules and triggers.
- Steps for configuring Sales Intelligence, including the displaying the purchase likelihood score options.
- New Custom Settings list view and Custom Settings detail view to manage group export settings, CreatePivot and MaxExportRecords.
- New Office Profile Groups tab that allows you to set a limit for the number of groups that can display as tabs on list and detail views. All standard groups will be marked as Favorites by default.
- New Adminutil.exe enables the Administrator to see which users are logged in to Infor CRM and how many times each user is logged into the various Infor CRM applications. Administrators can filter based on type of user and status. It does not track SData logins.

Mobile enhancements

The following enhancements have been added to the Infor CRM Mobile Client since version 3.4.

- Two new files: configuration/development.default.js and configuration/production.default.js enable preserving modifications to default settings (such as Enable Multi-currency) in future upgrades.
- Field level security settings made for the Infor CRM Web Client using the Infor CRM Web Administrator now cascade into the Mobile Client.
- Infor CRM Mobile can now use the 24-hour clock. Settings enable the user to manually change between the 12 and 24 hour clocks. The default setting is specified by regional settings.
- Settings contains two new Offline options: users can clear their Briefcase and clear Recently Viewed records as well as clearing all records and showing record usage.
- Integrations with ERP LX support ‘Availability to Promise” in Mobile. “Click to check warehouse availability” enables users to verify if the warehouse selected has the requested volume of inventory on hand.
- Users can look up Contacts based on the Accounts to which they were associated.
- The Infor CRM Mobile Client supports single sign-on when Infor CRM is integrated with Infor Ming.le.
- Contour enables searching the Infor CRM database for other accounts that are in a specific geographical proximity.
- The Infor CRM Back Office Extension (ICBOE) feature contains the following improvements in the Infor CRM Mobile Client:
- ICBOE is now part of the Infor CRM Mobile Client. It is no longer necessary to install a separate bundle. ICBOE for the Infor CRM Mobile Client enables Mobile Client users to drill through

account-related information available in back office integration. When ICBOE is configured in the Infor CRM Web Client, users can see the following entities in Infor CRM for Mobile:

- Invoices
- Quotes
- Sales Orders
- Shipments
- Receivables

- The Working Offline “Recently viewed” and “My Briefcase” features are now available for ICBOE records.
- The ICBOE feature in Infor CRM Mobile no longer needs to be activated in the Application Architect.

Lesson 2: User setup

Estimated time

2 hours

Learning objectives

In this lesson, you will:

- Describe a New User Checklist prior to creating user.
- Explain the differences between user types.
- Create new users.

Topics

- About users
- New user checklist
- About creating new users
- Create users in the Web Client
- Create users in the Windows Client
- Customize settings in the Windows Client

About users

Infor CRM users represent individuals who work for your company. Each user requires a user profile. Settings in a user's profile determine the user's log on credentials (such as username and password), user type, and ability to access different Infor CRM components.

Administrators can add any of the following user types:

- Network
- Concurrent
- Remote
- Template
- Web only
- Add-on user
- WebViewer

In addition, Infor CRM supports several special user types:

- System administrator
- Administrative
- Retired

New user checklist

Prior to installing the Infor CRM Server components, review the installation options, prepare service user(s), and identify what's included with Required Administrative Tools and Servers.

After installing Infor CRM Server components and configure required settings in the Administrator workstation, you can setup users. The overall process of getting a new Infor CRM user up-and-running looks like the following checklist:

- Review the Windows' folder sharing permissions for the Sync Logs, Library, and Documents folders to ensure the new user has access to these.
- Determine which type of user will be added (i.e. Network, Remote, Web Only, WebViewer, Concurrent, or other).
- Ensure there is a license available for this type of user.
- Decide how this user will be created:

Creation Method	Description
Add new users based on an existing user template	Add new users based on an existing user template or a custom user template you create.
Create Infor CRM users based on existing Windows' users	If you want existing Windows' users to also be Infor CRM users, you can import your Windows' user information to Infor CRM. During this process, you can select an existing user template to configure user profile settings.
Import users from a comma-delimited text file	If your company maintains user information in another application, you can export the information and import it to Infor CRM to add users. During this process, a user template can be applied to configure user settings not found in the import file.
Create users individually	If you have a small number of users, or each user requires a distinct profile with settings that differ substantially, you can add users individually and configure each profile as appropriate.
Copy an existing user	If an existing user's profile contains the settings you want to apply to the new user, note the existing user's name so that you can select the correct profile to copy from when adding the new user. If some settings should not be copied, note which tabs to exclude when you copy the profile.

- If necessary, modify the user's profile. When finished, verify the **Login Active** check box is selected on the **General** tab.
- If your organization uses teams for account ownership (recommended) then add the user to the appropriate team(s). Since the teams a user belongs to determine which accounts he or she can access, ensure you understand how teams work in Infor CRM.
- Press **F5** to ensure all changes have been made.
- Install and configure the necessary programs on the user's computer, such as the Infor CRM Client. For more information, refer to the Infor CRM Implementation Guide.
- If your company uses Advanced Outlook Integration or Outlook Sync, do one of the following:
  - Configure the Contact Sync group if your company uses Outlook Integration to synchronize contact and calendar information between the Infor CRM Client and Outlook.

- Configure and activate Outlook Sync if your company uses Outlook Sync to share activities and contacts with Microsoft® Outlook®.

You may also need to complete the steps in the following checklist to prepare user data to be imported in to an Infor CRM database using a CSV import.

- Export the user information from an existing database as a comma-delimited file. This is the source file.
- Open the **Users** view in the Infor CRM Administrator and then select **Insert > Import Users**. Click **Open** to edit the default **SaleslogixUserImport.CSV** file in Excel. This is the target file containing all the columns necessary to import user data into Infor CRM.
- Open the source file (created in the first step) in Excel.
- Copy the data from each column in the source file to the appropriate column in the target file. Do not copy over the column headings in the target file or remove any of the columns. Except for USERNAME, columns and cells may be blank.

When exporting data from Windows, use the following table as a guideline to paste additional information in the correct columns of the target file.

Windows exports with column title	Paste data into this column in target file
Office	DIVISION
Business Phone	WORKPHONE
Email address	EMAIL
City	HOMECITY
State	HOMESTATE
Zip Code	HOMEPOSTALCODE
Country	HOMECOUNTRY
Job Title	TITLE
Department	DEPARTMENT
Company	COMPANYNAME

This information is based on Windows 2000 Server and may vary for different versions of Windows.

- Type an additional data in the **SaleslogixUserImport.CSV** file.
- Save the updated file as .CSV, with a name that you choose. You can then use this file to update or import users.

Once the previous steps are completed, you are ready to import users from a CSV file.

About creating new users

Every person who uses Infor CRM must have a user profile. A user profile determines the user's log on credentials, type of license consumed, sync settings, user interface preferences, security permissions, and more.

What user types are available?

User types are determined by the available licenses your company has purchased. Different user types allow you to purchase only the licenses that best match your user needs.

The ability to manage licenses for your Infor CRM implementation is only available in the comprehensive Windows Administrator product.

As mentioned previously, Infor CRM offers the following user types. Here is a more detailed description of each:

- **Add-on:** The Add-on user enables you to create a user with access to the Infor CRM OLE DB Provider for third-party client interfaces.
- **Administrative:** A user who can perform tasks normally reserved for the system administrator. Users with access to administrative functions are defined using administrative roles in the Administrator or roles in the Web Client. Administrative users log on using their username.

  Note: The system administrator remains the only user with full access to all features and functions in the system.

- **Concurrent:** Can access all Infor CRM applications (Windows, Web, and Mobile) but cannot sign in to a Remote database. Concurrent users share licenses so access to all applications is restricted if the number of concurrent users currently logged on exceeds the maximum allotment.
- **Network:** Can access all Infor CRM client applications (Windows, Web, Mobile) but cannot sign in to a Remote database. This type of user who primarily accesses Infor CRM via a direct network connection to the database.
- **Remote:** Can access all Infor CRM applications (Windows, Web, Mobile). Remote Clients keep a subset of the main office database on their local computer (a laptop, for example) and use synchronization to transfer changes between their system and the main office. Note that remote users never connect with the remote office and instead always connect with the main office.
- **Retired:** A user type used to maintain the activity history of users who leave your organization. Retired users are treated like inactive users in that their contact activities are preserved in the database even though they are no longer able to access the system. However, inactive users use licenses while retired users do not.
- **Template:** User templates can be created to define settings you want to use when creating new users. For example, you can create a user template that holds all options for concurrent users. Then, when you create a new user, you can use the concurrent user template and the profile settings are predefined.

  Note:

  - User templates do not affect the license count or appear in the user's list.

- A user template is not an active user and cannot log on to Infor CRM.

- **System Administrator:** A user with access to all features and functions in Infor CRM.

  The system administrator logs on as “admin."

- **Web Only:** Users who only have access to the Infor CRM Web Client and can view, add, delete, or modify information based on their access rights. This user type cannot log on to the Infor CRM Client.
- **WebViewer:** WebViewer users have read-only access to accounts, contacts, opportunities, and tickets. Depending on account and calendar security, Web Viewer users can add, edit, and delete activities, notes, and history but cannot use reporting or processes. This user type cannot log on to the Infor CRM Client.

  A WebViewer user cannot:

  - Be the owner of any team.
  - Be a manager or have anyone report to them.
  - List any other users in the User Team section of the User Profile Teams

  Note: This user cannot log on to any Infor CRM applications.

	Windows Client	Remote Client (w/o database)	Remote Client	Web Client	Mobile Client
Named User License					
Windows User	✓	✓		✓	✓
Remote User	✓	✓	✓	✓	✓
Web Only User License					
Web Only User				✓	✓
WebViewer User License					
WebViewer User				✓	✓
Concurrent User License					
Concurrent User	✓	✓		✓	✓

What method(s) can I use for creating users?

Infor CRM supports the following creation methods:

- Create Infor CRM users based on existing Windows users
- Import users from a comma-delimited text file
- Create users individually

- Copy an existing user
- Add new users based on a template

Import users from Windows

Users are automatically logged on without entering their usernames or passwords if your company uses Windows Authentication. Users' Windows IDs are stored in the Infor CRM database paired with their Infor CRM usernames and passwords.

To set up Infor CRM users with Windows IDs, do one of the following:

- Use the **Import Windows Users** dialog box to select Windows users and create new Infor CRM users.
- Use the **Match Users** dialog box to pair existing Infor CRM usernames with Windows usernames.

Import users from a comma-delimited text (CSV) file

If your company maintains user information in another application, you can export the information and import it to Infor CRM to add or update users. Information in the text file overwrites corresponding information in the user profile of an existing user.

The data in the import file must match the format expected by Infor CRM exactly. This format cannot be customized. There are 62 available fields that can be utilized within a CSV file import. To view a list of fields available for import, see the Import Users File Format topic in the Administrator Help. To create an empty template to be used, select the CSV file option from the **Add Users** dialog box and then select **Open** under the **Import File** group.

Copy an existing user

Similar to creating a user from a template, you can use the Copy User function to copy the configuration information from an existing user to the new one. Everything is copied except the information on the **User Profile General** tab.

CRM recommends creating a user from a template instead of copying an existing user to help prevent any unwanted security or other settings being granted to the new user.

Create users manually

When creating users individually, start with a blank user profile. The required fields (Username, name, Department, and Manager) contain placeholder values.

Create users in the Web Client

When using the Web Client to create a user, the logged in user must have security access to the **Administration Nav Bar** which is based on the secured actions and roles they are assigned. You can also use the administrator account, which is typically the username **Admin**, to create users via the Web Client.

Not all the available methods for creating users are available to you in the Web Client.

Understand administrator and user security differences in the Web Client

The Infor CRM administrator has access to all accounts, menus, toolbars, and features in Infor CRM. However, user access is controlled by the user's profile. The following table summarizes the differences when logging on to the Infor CRM Web Client using the admin username versus a typical Infor CRM user.

Administrator rights	Individual user rights
Full access to all pick lists and pick list attribute settings.	Editing or modifying pick lists is governed by the pick list attributes.
Full access to all System menus and toolbars.	View access to menu commands and toolbars is governed by the role assigned by smart part in the Application Architect.
Can change ownership of accounts regardless of ownership type.	Can change account ownership if the user owns the account and, in the case of a team, if the user has a Team Owner security profile.
Can change any data in any field.	Can change data in a field depending on the account type and user field level security profile.
Can access all groups created by all users.	Can only view groups created by the user or shared by another user.

Create users manually

Infor CRM provides the ability to create a user manually. This option is best used when there are only a small number of users to create. When creating a user manually, the administrator must select every option individually. No option is prefilled with a value.

Exercise 2.1: Create a user manually in the Web Client

In this exercise, you will add a new user manually so they may sign in to Infor CRM.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

Phoenix Computers is creating a new Northeast Sales team. A new hire, Anne Avery, was hired as Sales Manager for this new team. How do I add a user profile for her so she can sign in to Infor CRM?

Note: The user must be able to access both the Windows and Web Clients so you'll want to use a Windows User License.

Exercise steps

Verify you are logged in to the training desktop. If not, log in following instructions provided by your course instructor.

Note: If you are taking this course as self-directed learning, follow the instructions on the course Lab On Demand screen.

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Right-click **Users** and then select **New Users**. The **Add Users** screen opens.
6. Confirm the following:
   - **Network User** is selected in the **Add** field.
   - **1** is selected in the **Quantity** field.
   - The **Create from Profile** check box is cleared.
7. Click **OK**. The **User - User000#** screen opens.

8. Type *anne* in the **Username** field.

A username is required and can only contain letters, numbers, and the special character "_" (no spaces).

9. Type *Anne Avery* in the **Name** field.
10. Select **Sales Manager** from the **Title** drop-down list.
11. Type *aavery@phoenixcomputers.demo* in the **Email** field.

    Note: If an email address is not specified for a user, the user doesn't appear in the Infor CRM address book.
12. Search and select **Northeast** in the **Region** field.
13. Verify **Administrator** is selected in the **Manager** field.
14. Select the **User is a Manager** check box.
15. Click **Save.**
16. Select **More Tabs > Department Membership** from the tabs pane located near the bottom of the page.
17. Click **Add Department to Team**.
18. Search for **Sales.**
19. Click **OK**.
20. Verify the **Login Enabled** check box is selected.
21. Click **Change Password** to modify this for the training environment. The **Change Password** dialog box opens.
22. Click **OK**.
23. Close the **Infor CRM** dialog box.

By clicking **OK** without entering and confirming a password for the new user, the password is set to a blank password unless you have required a password for users. A warning dialog reminds you of the blank password.

24. Click **Save**.

    The new user appears in the **Users** list view of the Infor CRM Web Client. Within the Infor CRM Administrator, you can also see Anne Avery in the following areas of the Organization Chart:

    - In the list of **Departments**, Anne appears under **Sales**. **Note:** Managers are identified by a purple icon to the left of their name while other users include a blue icon.
    - In the list of **Managers**. **Note:** Anne currently has no direct reports.

Add users from a template

Adding new users based on an existing user template or a custom user template you created makes creating new users more efficient. For example, you can create a user template named Manager which functions as the generic user profile for all managers in the company. Then, when creating the users and applying the template, the profile is already configured with the appropriate settings.

Creating templates is highly recommended as they reduce administration time significantly. User templates don't consume an Infor CRM user license and cannot sign in to Infor CRM.

Infor CRM includes several default user templates, such as All Access, Customer Service, Customer Service Manager, Customer Support, Customer Support Manager, Marketing, Sales, Sales Manager, and Executive Management. Open the **Templates** group of the **Users** list view to see all available templates or open a specific template. You can customize the default user template or create a new user template.

Template considerations include:

- Some fields in the user profile don't apply to template users and are unavailable.
- When adding a user based on a template user, you may change any user fields after creating the user.
- Changing template fields doesn't update a user created by the template.
- Don't use spaces in the **Username** field. Instead, use underscores.
- Users cannot be converted to template users and template users cannot be converted to other user types.
- Templates require a department. Use <None> or create a new department for template users.
- Templates added to a team or department nested into a team through the user's **General** tab in their profile appear in the team's hierarchy list. You cannot add a template to a team directly from the team's view.

Exercise 2.2: Create a user template and new user in the Web Client

In this exercise, you will create a new user template and new user.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Create a template

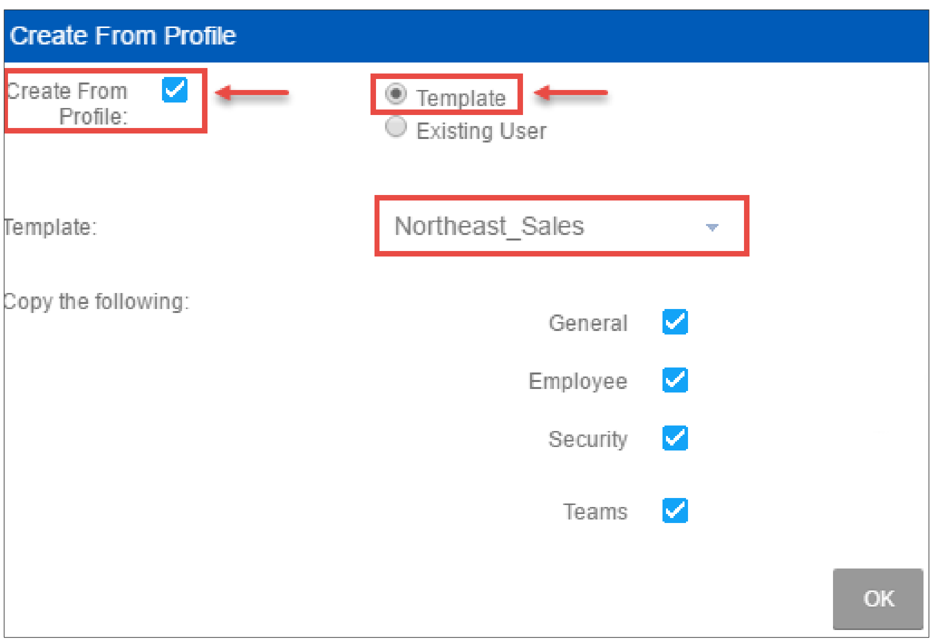
1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Right-Click **Users** and then select **New Users**. The **Add Users** screen opens.
6. Select **Template** from the **Add** drop-down list.

   Note: (No License Required) displays below the **Quantity** field.

7. Click **OK**. The **User - Template000#** window opens.
8. Type *Northeast_Sales* in the **Username** field. This is the name of the template.
9. Type *Northeast_Sales* in the **Name** field.
10. Search and select **Northeast** in the **Region** field.
11. Search and select **Anne Avery** in the **Manager** field.
12. Select **More Tabs > Department Membership** from the tabs pane located near the bottom of the page.
13. Click **Add**.
14. Search for **Sales**.
15. Click **OK**.
16. Click **Save.**
17. Click the **List View** icon and verify the new **Northeast_Sales** template appears.

Part 2: Create a user from a template

1. Select **Administration > Add Users > New Users**. The **Add Users** screen opens.
2. Select **Network User** from the **Add** drop-down list.
3. Select the **Create Profile From** check box.
4. Select the **Template** radio button.
5. Select **Northeast_Sales** from the **Template** drop-down list.



6. Click **OK**. The **User – User000#** screen opens.
7. Type *ella* in the **Username** field.
8. Type *Ella Hall* in the **Name** field.

9. Select **Sales Rep** from the **Title** drop-down list.
10. Type *ehall@phoenixcomputers.demo* in the **Email** field.
11. Verify **Pacific** is selected in the **Region** field.
12. Verify the **Division** field is blank.
13. Verify **Avery, Anne** is selected in the **Manager** field.
14. Select **More Tabs > Department Membership**.
15. Verify membership to the **Sales** department.
16. Click **Save** to create the user.

Change a user's profile settings

A user's profile determines everything about that user's identity and ability to access Infor CRM components. Each user created in Infor CRM requires a profile. The following table summarizes the tabs shown on a user's profile.

Complete these tabs for all users:

- Use the information fields to change the user's name, e-mail, title, department, manager, and password. The username is what the user types to log on to Infor CRM; It should not contain spaces or an apostrophe.
- Use the **Employee** tab to set company information, work phone and fax numbers, and the user's personal information.
- Use the **Team Membership** tab to add the user to system teams.
- Use the **User Team Members** tab to give other users access to this user's accounts.
- Use the **User Team Membership** tab to give this user access to accounts owned by other users.
- Use the **Other Calendars** tab to set access to other user's calendars.
- Use the **User's Calendar** tab to give other users access to this user's calendar.
- Use the **Security** tab to set a field level security profile.
- Use the **Department Membership** tab add the user to departments.
- Use the **Client System** tab to set a default account owner and default templates.

Complete this tab for Customer Service and/or Support users:

- Use the **Service/Support** tab to set options related to customer service features, support features, and SpeedSearch.

Complete these tabs if necessary:

- Use the **Notes** tab to store any additional user-specific information. (This is optional information generally found in the user's personnel file.)

Change a user's type

Use the **User's** detail view to convert a user from one type to another. For example, an administrator can change a Web Only user to a Concurrent user. They can also retire a user or re-activate a retired user.

A license must be available for the new user type, except when a user is changed to retired. Retiring a user releases one instance of the license type previously assigned to that user.

Rules

Prior to changing a user's type to retired, do the following:

- If the user owns any records, do a territory realignment (in the Administrator).
- If the user is an account manager for any accounts, do a territory realignment (in the Administrator) to assign a new account manager.
- If the user is a manager, reassign any users who report to him or her to their new manager or to the Administrator.

Prior to changing a user's type to Web Only, do the following:

- If the user is a manager, clear this setting in the **User's** detail view.
- If other users are listed as part of this user's User Team, remove them.

Exercise 2.3: Edit a user's profile settings in the Web Client

In this exercise, you will change an existing user's profile.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

One of Phoenix Computer's Marketing reps, Larry Peters, has finished moving and is now a remote employee. Unfortunately, during his move to the new house he forgot his Infor CRM password. How can I update Larry's address, user type, and password within the Infor CRM Web Client?

Exercise steps

Part 1: Change a user's password

1. Open **Larry Peter's User** detail view.
2. Click **Change Password**.

   Note: You aren't asked to verify a current password because you are currently logged into an administrator's account.
3. Type *Larry1* in the **New Password** and **Confirm Password** fields.
4. Click **OK**.
5. Close the dialog box.
6. Click **Save**.

Part 2: Change a user's type

1. Select **Remote** from the **User Type** drop-down list**.**
2. Click **Save**.

Part 3: Update a user's address

1. Click **Employee** in the tab pane.
2. Click **Edit** in the **Personal > Address** field and then enter the following new information.
   - **Description:** Home
   - **Address 1:** *40216 Oak St.*
   - **City:** *Phoenix, AZ*
   - **State:** *AZ*
   - **Postal Code:** *85001*
3. Click **Save** within the tab.

When editing information in the tabs, click **Save** on each tab or your option selections will not save.

Edit user options

Infor CRM provides tools allowing you to modify some parts of the interface so you can work in a way that suits you best. User options allow users to set specific preferences for features, such as the view that appears after logging on to the Infor CRM Web Client and Alerts. Settings entered by you are recorded for you and are not visible to other Infor CRM users. Some options are shared between the Infor CRM Windows Client and Infor CRM Web Client.

- The **General** tab edits the initial startup view, the default owner or team, the Mail Merge base templates, the number of templates in the most recently used list, and e-mail options.
- The **Group** tab selects the group of records to use as your default group for each record type.
- The **Calendar** tab sets options for the calendar view. You can determine the information that displays on your calendar, the default view, or the day start and end times.
- The **Change Password** tab changes your password.
- The **Opportunities** tab sets defaults for new opportunities.
- The **Alerts** tab sets defaults to determine how you will be alerted.
- The **Activities** tab sets options for the Activity Main view, follow-up activities, or activity alarms.
- The **Authorize Services** tab sets options for third party integrations.

Exercise 2.4: Edit a user's options in the Web Client

In this exercise, you will set basic user options for Dave Nero..

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

After a few months on the job, Anne Avery wants to set some more tailored user options to her Infor CRM account and needs to change her password. Anne has come to you for some assistance with this as she is still new to the Infor CRM Web Client.

Exercise steps

Part 1: Change your password

1. Open the **Infor CRM Web Client**.
2. Type *anne* in the **Username** field. No password is required.

   Note: If you're still logged in as admin, sign off via the status bar.
3. Click **Sign In**.

   Note: You can verify you are logged in as Anne Avery by looking at the status bar.
4. Select **Tools > Options > Change Password**.
5. Type your current password into the **Current Password** field.

   Note: Anne Avery currently has no password, so leave this blank.
6. Type *Anne1* into the **New Password** and **Confirm Password** fields.
7. Click **Save**.

Part 2: Change your startup screen

1. Click the **General** tab.
2. Select **Account** from the **Show on Startup screen** drop-down list.
3. Click **Save.**

Part 3: Change your default group for contacts

1. Click the **Group** tab**.**
2. Select **Contact** from the **Main View** drop-down list.
3. Select **My Contacts** from the **Default Group** drop-down list.

4. Select **My Contacts** from the **Default Lookup Layout** drop-down list.
5. Click **Save.**

Create users in the Windows Client

Within Infor CRM, you can create new users via both the Infor CRM Windows or Web Clients, however, there are more options available within the Windows Client for creating users. This client is typically used upon an initial installation.

The Administrator program is used to create new users for the Windows Client. To create new users, you must have the appropriate administrative rights. There are four main ways to create a new user in the Infor CRM Windows Client: manually, from template, from CSV file, or from windows.

Creating users in the Windows Client is similar to the Web Client. In the following exercise, you will walk through creating new users by various methods using the Windows Client. You'll also use the user template created in a previous exercise.

Exercise 2.5: Creating users in the Windows Client

In this exercise, you will learn different methods for adding new user(s) to Infor CRM so they may log on to Infor CRM.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Manually add users

1. Select **Start > All Programs > Saleslogix > Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click the **Users Nav Bar**.
4. Click **Add** in the toolbar. The **Add Users** dialog box opens.
5. Select the **Network** user type from the **Add** drop-down list.

   Note: If you select **Template** here, you would be creating a new user template and not a specific user.
6. Select or type *1* into the **Quantity** field.

   Note: The number of users available for this license type displays next to the **Quantity** field.
7. Click **OK**.
8. Fill in the following information:
   - **Username:** dave
   - **Name:** Dave Nero

- **Title:** Sales Manager
- **Region:** Northeast
- **User is a Manager:** Selected

9. Click the **Teams** tab.
10. Click **Manager**. This opens the **Teams** dialog box.
11. Select **Northeast**.
12. Click **OK** twice. The user is created.

Part 2: Create a user from a template or using the profile of an existing user

1. Click the **Users Nav Bar**.
2. Click **Add** in the toolbar. The **Add User** window opens.
3. Select the **Create Profile from** check box.
4. Select the **Template** radio button.
   - **Template** adds a user based on an existing template user. Select the name of the template user in the **Template** field.
   - **Existing User** adds a new user based on an existing user's profile. Select the name of the existing user in the **User** field.
5. Select **Northeast_Sales** from the **Template** drop-down list.
6. Select the tabs to copy from the template or user profile.
7. Click **OK**. The user **<Copy of Northeast_Sales>** is created.

   Once the new user is created, the **User Profile** dialog box opens which you can use to modify the user's profile.
8. Fill in the following information:
   - **Username:** *adam*
   - **Name:** *Adam Garfield*
9. Confirm **Northeast** is selected in the **Region** field.
10. Confirm **Anne Avery** is selected in the **Manager** field.
11. Click **Cancel**.

Part 3: Delete a user

1. Right-click **User0001** from the list of available users and then select **Delete User**.
2. Click **Yes** when the confirmation dialog box opens.

Part 4: Create a copy of a user

1. Click the **Users Nav Bar**.
2. Select **Ella Hall** to copy information from in the user's grid.
3. Select **Edit > Copy User**. The new user appears in the user list as **<Copy of username>**.
4. Update the **User Profile General** tab with information specific to the new user, such as name and email address.

A retired user cannot be copied; However, the retired user's profile can be used as the basis for a new user. The retired user's profile may also be copied to an existing user.

5. Click **OK** to create the new users in Infor CRM.
6. Right-click **User0001** from the list of available users and then select **Delete User**.
7. Click **Yes** when the confirmation dialog box opens.

Part 5: Import users from a CSV file

1. Select **Insert > Import Users > From CSV File**. **Note:** The import functionality is also available from the **Add Users** dialog box.
2. Select **Network** from the **Default User Type** drop-down list.

   Note: This type is used only if the user type is not defined in the import file.
3. Select the **Default Template** if necessary.

   Note: A template user can be used to configure user settings not found in the import file. For example, menu access or security. This template is only used if the user template is not defined in the import file.
4. Confirm the path and file name for your import file are correct in the **Import File** fields. If necessary, browse to the file. Leave this as the default.

   Note: The default is \\ProgramData\SalesLogix\SalesLogixUserImport.CSV . If the file name is changed, the new name should use 0-9, A-Z, a-z, and "_" only. The extensions must be ".csv".\\ProgramData\SalesLogix\SalesLogixUserImport.CSV . If the file name is changed, the new name should use 0-9, A-Z, a-z, and "_" only. The extensions must be ".csv".
5. Select the **Update existing users** check box if necessary.

   If a username already exists in the database, this option updates the user's information with the data in the import file.
6. Click **Open** to edit the import file if necessary.

   Note: On your training environment, the default file has been updated to include 1 new user, Justin R. Cabana. On a live Infor CRM installation, this file will be blank unless it has been overwritten.
7. Click **Import**.
8. Click **No**.

Customize settings in the Windows Client

Changing a user’s profile

Like the Web Client, a user’s profile determines everything about a user’s identity and ability to access Infor CRM components in the Windows Client. Each user you create in Infor CRM requires a profile. The following table summarizes the tabs shown on a user profile.

Complete these tabs for all users:

- Use the **General** tab to add the user’s name, e-mail, title, department, and manager. The username is what the user types to log on to Infor CRM and it should not contain spaces or an apostrophe. Also, the e-mail information may appear in templates and reports.
- Use the **Employee** tab to set company information, work phone and fax numbers, and the user's personal information.
- Use the **Security** tab to set feature security, set a default field security profile, and assign administrative roles. Feature security and administrative roles apply to Infor CRM Client users. Field security profiles apply to Infor CRM Windows Client and Web Client users.
- Use the **Teams** tab to add the user to system teams and give other users access to this user's accounts.
- Use the **Calendar** tab to set access to other user’s calendars and give another users access to this user's calendar.

Complete these tabs for all Infor CRM Client users:

- Use the **Function Security** tab to control the functions available to the user in the Infor CRM Client.
- Use the **Client Settings** tab to set the default groups and lookups that appear for the user in the Infor CRM Client.
- Use the **Client System** tab to set a default account owner, default templates, and the user's e-mail system.

Complete this tab for remote users:

Use the **Sync** tab to assign a sync server to a remote user, determine how the user receives synchronization files, configure subscription, configure what activities the remote user receives, what records they see in What’s New, and what history and account summary records are kept on the remote database.

Complete this tab for Customer Service and/or Support users:

Use the **Service/Support** tab to set options related to customer service features, support features, and SpeedSearch.

Complete these tabs if necessary:

- Use the **Custom** tab to store any additional user-specific information. (This is optional information generally found in the user’s personnel file.)
- If Infor CRM is integrated with your organization’s accounting system, use the **Employee** tab to specify the necessary information.

Manage a user's password

Like the Web Client, new users in the Windows Client are created with a default password of "password." The system administrator, Administrative user, or Infor CRM user can change this password at any time.

You can globally assign, remove, and restrict passwords using password options.

Passwords must begin and end with a numeric character (0-9) or an alphabetical character (A-Z or a-z).

The **Passwords** tab allows the system administrator or administrative user to set restrictions on user passwords. For example, you can require all users to have a password (not blank) or that passwords contain a minimum number of characters.

Additionally, a user may be "locked-out" from logging in to Infor CRM if the number of user's failed login attempts exceeds the number of allowed attempts. The **Login Attempt Threshold** is set in the Administrator on the **Password** tab. Resetting a locked-out user changes the number of attempts to zero and allows the user to attempt to log in again.

- If blank passwords are permitted, ensure the minimum length of password is 0.
- Infor CRM passwords are case-sensitive and may have up to 30 characters.

If Windows Authentication is enabled, the password options do not apply to users with associated Windows usernames.

Exercise 2.6: Edit a user's profile settings in the Windows Client

In this exercise, you will change a user's start-up view when in the Windows Client.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Edit a user's profile

1. Click the **Users Nav Bar**.

2. Double-click **Dave Nero's** name. This is the user you will edit. The **User Profile** dialog box opens.
3. Click the **Client Settings** tab.
4. Select **Account Details** from the **Show On Startup** drop-down list.
5. Select **Account Details** from the **Main View** drop-down list.
6. Select **My Accounts** from the **Default Group** drop-down list.

   Note: Each user can have a different default group for each entity. When you select a main view from the **Main View** drop-down list, the **Default Group** drop-down list changes to show only the groups available from the specific main view selected. Default group selections are retained for each main view.

Part 2: Change a user's password

1. Click the **General** tab.
2. Click **Change Password**. This opens the **Change Password** dialog box.

   Note: There aren't any options here to verify the user's password because you are currently logged in as the administrator account.
3. Click **No Password** to set Dave Nero's password to blank.
4. Click **OK** twice.

Part 3: Reset locked out users

1. Right-click the username of the user who is currently locked out and then select **Reset User Logins**.

Part 4: Set password options

1. Select **Tools > Options**. The **Options** dialog box opens.
2. Click the **Passwords** tab.
3. Clear the **Use Windows Authentication (Saleslogix Password not required to log on)** check box.

   If you're not using Windows Authentication or are only using it for certain users, set the following options as needed for all users who are required to log on to Infor CRM manually.

   After setting an option, click **Show users with invalid passwords** to display a list of users who do not meet the password criteria.

   - Type a password in the **Default password** field to change the default password for new users. The Infor CRM default user password is **SLXMa$t3r**. The default password cannot be blank.
   - Type a number in the **Minimum password length** field to force the user's password to contain a minimum number of characters.
   - Type a number in the **Days until password expires** field to set a password expiration date. This option does not apply if you select the **Force user to change default password** check box.

     Some Infor CRM Web components require Infor CRM usernames to function. If the passwords expire for these usernames, the Web components will not work.

- **Select Password** must contain numbers and letters to require that the user password contains at least one number and at least one letter.

  This check box is only available if **Do not allow blank passwords** is selected.

- Select **Force user to change default password** to require users to change their default password when they log on.
- Select **Do not allow blank passwords** to require all users to have a password.

  When this option is selected, the **No Password** button is unavailable in the **Change Password** dialog box in the client programs and Administrator.

- Select **Do not allow username as password** to prohibit a user from using their Infor CRM username as a password.

4. Select **5** as the **Login Attempt Threshold**. (Applies to Web only)

   This limits the number of times a user can attempt and fail to log in to the Infor CRM Web Client before the user is locked-out. This option does not apply to the Sales Client.

   a. Select the number of failed attempts to allow.
   b. Enter the number of minutes that must pass before the lock is reset automatically.

5. Click **OK**.

Check your understanding

What are the available Infor CRM user types and their supporting licenses?

What methods are available for creating a new user?

What are the benefits of using a User Template?

What categories of User Options are within Infor CRM?

Lesson 3: Team and department setup

Estimated time

2 hours

Learning objectives

In this lesson, you will:

- Discuss creating and using teams.
- Discuss creating and using departments.
- Describe what a user's manager can see.
- Discuss security regarding teams.

Topics

- About teams and departments
- Manage teams and departments in the Windows Client

About teams and departments

A team is a group of users who need access to the same accounts—you might create teams based on region, territory, type of account, or department. For example, Lee Hogan belongs to the Midwest team and has access to all accounts owned by that team. However, Lee is not a member of the Northeast team and cannot access the Northeast team accounts.

A department is a specialized team created from a group of users. By default, users are not assigned to any departments. Departments may be created to specify what role users have within a company, such as Inside Sales or Field Sales.

Using teams

Team considerations

When creating teams, consider what the team members have in common and the information they need to share.

- Teams can consist of users, departments, and other teams.
- When creating a team, a Team Owner is required.
- Users can belong to more than one team and their security profiles can be different for each team.
- When a user is added to a team, the user's default field security profile is used. You can assign a new security profile to the user as it applies to the team only.
- Changing a user's field security profile on one team does not affect the user's default security profile.
- Each team must have at least one Team Owner. The Team Owner profile allows the designated user Read/Write access to the team, which also allows the user to reassign team ownership.

Team restrictions

When determining a user's ability to create and maintain teams, consider the following rules. A user can never:

- Add himself or herself to an existing team.
- Remove himself or herself from a team.
- Remove the system administrator from a team.
- Delete a team.

Team hierarchy rules

When adding a user to a team, the user's immediate manager can also be included. However, there is no further inheritance (for example, the manager's manager). If you don't want the user's manager added to the team, you can clear this option on the **Team Members** tab.

- In the **Team** detail view, if the **Automatically add user's manager to team** is selected, then each time a new user is added to a team, that users' manager is also added to the team if they are not already a member of that team.
- If a team member changes managers and the new manager is not already on the team, the new manager is added to the team.
- If a team member changes managers, the previous manager will not be removed from the team. If the previous manager should not have access to the team, then they need to be manually removed from the team.

What is a Team Owner?

The Team Owner is a team security profile. When you create a team, you are required to specify which user should serve as the Team Owner.

This permission allows the user to change account ownership within the Infor CRM client for an existing account. All other team members have read-only access to the **Owner** field on an existing account. Limiting access of the **Owner** field helps prevent other users from inadvertently changing an account owner and causing all members of the team to lose access to the record.

It's possible to apply a different security profile to the Team Owner after the team is created so only the administrator has rights to change account ownership of existing accounts. Use the **Tools** menu from the **Teams** view to change a user's security profile for a selected team.

Using departments

Department considerations

Infor CRM automatically creates a department called **None**. This department is applied to all new users by default.

- Departments contain users, not teams.
- A user can belong to more than one department.
- Departments cannot own accounts.
- Departments cannot have security assigned to them.
- Teams can own accounts, and departments can access those accounts, but departments cannot directly own accounts.
- When a user is a member of both a team and a department on that team, rights for the team prevail over department rights.

Manage teams and departments in the Web Client

In the Infor CRM Windows Client, managing teams and departments is done within the Administrator application. Teams are managed from within the **Teams** view. Departments are managed from within the **Users** view. Appropriate permissions are required on the user account trying to access the Administrator application.

Exercise 3.1: Managing teams and departments in the Web client

In this exercise, you will manage teams and departments from the Administrator application in a Windows Client. You'll create, edit, and delete a team and department, learn how to set the field security profile on a team, and view the account access for a team.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Creating a new team

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Click the **Teams** link in the **Administration Nav Bar**. This **Teams** list view opens.
6. Select **Administration > New Team** from the menu bar. This **New Team** page opens.
7. Type *Pacific* in the **Name** field.
8. Search and select **Anne Avery** from the **Owner** field.
9. Select the **Automatically add user's manager to team** check box so it is enabled.
10. Click **Save** in the toolbar.

    This creates the team and opens the detail view for the new team you just created.

Part 2: Adding a user to a team

1. Click the **Add a team member** icon within the **Members** tab toolbar. The **Lookup Member** dialog box opens.
2. Search and select **Ella Hall**.

Note: If searching by the **Member** field by starting with, you must search for Hall as the last name comes first in this field.

3. Click **OK**.
4. Click **Add a team member** again. The **Lookup Member** dialog box opens.
5. Search and select **Justin Cabana**.
6. Click **OK**.

Part 3: Removing a user from a team

1. Select **Cabana, Justin** from the **Members** tab's list. You can see the user is selected by the blue highlight.
2. Click the **Delete** icon. A confirmation dialog box opens.
3. Click **OK**.

Part 4: Checking account access within a team

1. Click the **Account Access** tab within the team detail view.

   This tab shows a list of all accounts the current team has access to within Infor CRM. Since the **Pacific** team was just created, it doesn't have access to any accounts yet.

Part 5: Deleting a team

1. Click **Delete**. This confirmation dialog box opens.
2. Click **Cancel** as the team should not be deleted right now.

   Clicking **OK** on this confirmation dialog removes the team from Infor CRM.

Part 6: Creating a department

1. Select **Administration > New Department** from the menu bar. The **Insert Department** page opens.
2. Type *Sales_Support* in the **Name** field.
3. Click **Save.** This opens the department's detail view.

Part 7: Adding members to a department

1. Click **Add a team member**. The **Lookup Member** dialog box opens.
2. Search and select **Justin Cabana**.
3. Click **OK**.
4. Click **Save**.

Part 8: Deleting a department

1. Click **Delete**. This opens a confirmation dialog box.
2. Click **OK**.

   Clicking **OK** on this confirmation dialog generally removes the department from Infor CRM, however, Infor CRM does not allow deletion of departments containing members, so an error message appears instead.

3. Close the **Deletion Not Allowed** dialog box.

Part 9: Adding a department to a team

1. Click the **Teams** tab.
2. Click **Add department to team**. The **Lookup Member** dialog box opens.
3. Search and select the **Pacific** team.
4. Click **Save.**

   This adds the Sales_Support department to the Pacific team as a member.

   Note: Departments can be a member of a team, but a team cannot be a member of a Department.

Manage teams and departments in the Windows Client

In the Infor CRM Windows Client, managing teams and departments is done within the Administrator application. Teams are managed from within the **Teams** view. Departments are managed from within the **Users** view. Appropriate permissions are required on the user account trying to access the Administrator application.

Exercise 3.2: Managing teams and departments in the Windows client

In this exercise, you will manage teams and departments from the Administrator application in a Windows Client. You'll create, edit, and delete a team and department, set the field security profile on a team, and view the account access for a team.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Create a new team

1. Open the **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Click the **Teams Nav Bar**. The **Teams** view opens in the main window.
5. Click **New Team**. The **New Team** dialog box opens.
6. Type *Atlantic* in the **Team Name** field.
7. Search and select **Dave Nero** from the **Team Owner** field.
8. Search and select **Adam Garfield** from the **Select Team Members** field.

   Note: It's possible to select multiple members in this field.
9. Click **OK**.
10. Press **F5**. This refreshes the Administrator application.

Part 2: Remove members from a team

1. Select and expand the **Atlantic** team from the **Teams** view, if not already selected.
2. Clear the **Automatically add user's Manager to a Team** check box.

3. Select **Anne Avery** from the list of members for the Atlantic team.
4. Click **Remove**. A confirmation dialog box opens.
5. Click **Yes.**

Part 3: Set field security for a user on a team

1. Select **Adam Garfield** from the list of team members in the Atlantic team.
2. Click **Edit** next to the **Field security of user on this team** field. The **Security Profile Manager** dialog box opens.
3. Select the **Read-Only Default** radio button.
4. Click **OK**.
5. Click **Save**.

Check your understanding

What are some considerations to consider before creating a new team or department?

What are the differences between departments and teams?

What is the role of a Team Owner?

Can individual users on a team or department have different security than the team/department itself?

Lesson 4: Introduction to Infor CRM security

Estimated time

1 hour

Learning objectives

In this lesson, you will:

- Describe how Infor CRM handles security.
- Discuss web security – secured actions and roles.
- Discover network security – feature and function security.
- Demonstrate field security.
- Explain Account Ownership.

Topics

- How Infor CRM handles security
- Manage field security
- Account ownership

How Infor CRM handles security

Infor CRM handles security differently based on whether users are accessing it through the Web Client or within the Windows Client. In the Web Client, roles and secured actions determine what actions can be taken. In the Windows Client, feature and function security are the determining factors, while administrator roles determine user access to administrative features.

Additionally, both the Windows and Web Clients use field level security to determine the individual fields within an entity that a user can access. Accounts within both clients are further protected by their account ownership

Windows security

Windows Client security is handled primarily by feature and function security. Feature security determines whether a user can add or delete records. Function security determines which interface items in the client a user can take. For example, accessing an item from the **File** menu. Administrative roles can also be used to restrict user access to administrative features.

Windows Client security is explained in more detail in a later lesson.

Web security

Web client security is handled primarily by roles and secured actions. Roles determine what functionality a user can access in the Web Client. Roles then use secured actions that have been assigned to them to determine access to user interface elements, such as pages and menu items.

Web Client security is discussed in more detail in a later lesson.

Field level security precedence

Field level security prevents users from viewing and changing specific data when viewing an Infor CRM entity. When using field level security, greater access takes precedence over lesser access.

If a user has more than one security profile (for example, the user is added to a team as a nested team or department and is also a direct member of the parent team), the security profiles share the same seccode (owner). When determining security access for a field, multiple profiles may be returned.

In the Infor CRM Windows Client, access is determined based on how the user accessed the view. In the Web Client, access is determined by combining the maximum access of all profiles assigned to that user and owner.

SECCODEID

SECCODEID (Security Code ID) is the primary key in the SECCODE (Security Code) table of the Infor CRM database. Each team, department, and user created is assigned a SECCODEID in the database. When users create a new account record and select an owner, the owner's SECCODEID is stored in the **SECCODEID** field of the **ACCOUNT** table. Infor CRM queries this **SECCODEID** field when determining which access is used for the account. It's important to understand this as SECCODEID is used in many aspects of Infor CRM security.

User security

The standard system provides a basic set of data security features. You can use account ownership to determine which users receive access to accounts and account related data. The system administrator has access to everything and the system administrator's security access cannot be changed. Each user has a default security profile you can modify.

The default security profile includes the following:

- Users have read/write access to all tables
- Users cannot create new teams
- Administrative users can be granted rights to perform tasks normally reserved for the system administrator
- The system administrator or administrative user can set field level security for each user (read/write and view access)
- Security profile templates can be applied to all users (except WebViewer users)

Security features

Infor CRM provides tools to manage users' access to, and sharing of, data, features, and plugins, such as processes and reports. Use the following table to determine which product feature supports your needs.

To manage	Use	If you are a..
Ownership of a single account	Owner Assignment dialog box in the Windows Client	User or system administrator
Changing a user's data access to tables and fields as a member of a team	Teams in Administrator	System administrator or administrative user
A user's data access to tables and fields (default profile)	User Profile Security tab in Administrator	System administrator or administrative user
A user's access to menu items	User Profile Function Security tab in Administrator	System administrator or administrative user
A user's access to another user's calendar	User Profile Calendar tab in Administrator	System administrator or administrative user
A user's access to plugins (processes, views, reports, templates, Basic scripts, and SQL scripts), and groups	Plugins in Architect	User with access to Architect or system administrator
A user's subscription to accounts	Subscription List in Infor CRM Client and Administrator	User, system administrator, r administrative user
Ownership changes of all accounts and contacts	See Realignment Scenarios to determine whether to use Teams or Territory	System administrator or administrative user

	Realignment in Administrator	

Manage field security

Field security prevents users from viewing or changing data. To prevent users from viewing or changing data, use the **Security** tab of a user's profile. Field security refers to a user's ability to view and/or change data for an Infor CRM entity. Field security is managed by using profiles which serve as a template for field security rules. After a template is created, these rules can be applied to more than one user or department. Field security profiles apply to both Windows and Web Client users.

While creating custom field security profiles, there are three available system field security profiles in a new Infor CRM database:

- **Read Only**: View access to all tables and fields.
- **Read/Write**: Edit access to all tables and fields except **Account Owner (seccodeid)** which is read only.
- **Team Owner**: Edit access to all tables and fields.

From a Windows Client, Field Security profiles can be created from the Administrator application, In the Web Client, you can modify these from the Security Manager view.

Exercise 4.1: Managing field security

In this exercise, you will manage field security profiles. Profiles are created in both the Windows and Web Clients, as well as edited.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

Phoenix Computers wants to restrict new sales personnel from working with opportunities. Instead, they want them to focus on existing clients. A new field security profile is created, Sales_Training for the first 30-days a new employee in a sales department is with the company.

Exercise steps

Part 1: Manage field security profiles in the Web Client

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Click the **Administration Nav Bar**.

5. Click **Security Manager**. This opens the **Security Manager** screen.

Part 2: Create a field security profiles in the Web Client

1. Click **Add Profile**. A **Security Profile** dialog box opens.
2. Type *Sales Training* in the **Description** field**.**
3. Select **User** from the **Profile Type** drop-down list.
4. Click **OK**. This creates the new profile and opens it in the **Security Manager** screen.
5. Select the **Read-Only** radio button in the **AccountName** property row.
6. Click **Sign Off**.

   Note: Finding the information to set security within this view can be time consuming and cumbersome. Switching to the Administrator application allows for a much quicker and easier way to work with security profiles. Let's switch to this view.

Part 3: Create and apply a field security profile in the Windows Client

1. Open the **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Select **Manage > Field Security Profiles**. The **Security Profile Manager** dialog box opens.
5. Double-click the **Sales_Training** security profile. The **Edit Security Profile** window opens.
6. Select the **Account** item.
7. Click **Read/Write**. This changes all the account fields back to Read/Write privileges.
8. Select and expand the **Opportunity** item.
9. Click **No Access**.

   Notice that by doing so, all sub fields change to **No Access** as well. They now show with a red X.
10. Click **OK**. The edited profile is saved for later use.
11. Click **OK** again. The **Security Profile Manager** dialog box closes.

Exercise 4.2: Applying field security

In this exercise, you will apply the Sales_Training field security profile to specific users and teams.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

Now that Phoenix Computers has the new field security profile, Sales_Training it needs to be applied to the appropriate Users and Teams.

Exercise steps

Part 1: Apply field security profiles to a user in the Web Client

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Click the **Administration Nav Bar > Users**.
5. Open **Derek Murphy's** detail view.
6. Select **More Tabs > Security**. This opens the **Security** tab in the tabs pane.
7. Select **Sales_Training** from the **Template** drop-down list.
8. Click **Save.**

Part 2: Apply field security profiles to user for a specific team in the Web Client

1. Select **More Tabs > Team Membership**. This opens the **Team Membership** tab in the tabs pane.
2. Click the **FieldSales** link in the **EMEA** row. The **Murray, Derek** dialog box opens.
3. Select **Sales_Training** from the **Security Profile** drop-down list.
4. Click **Save**

   This ensures Derek Murray only has Sales_Training rights even from accounts owned by the EMEA team.

Part 3: Apply a default field security profiles to team in the Web Client

1. Select the **Administration Nav Bar > Teams**. This opens the **Teams** screen.
2. Click the **Pacific** team to open its detail view.
3. Select **Read/Write Default** from the **Security Profile** drop-down list.

   This changes the default security for all members of the team to that security profile, unless otherwise specified in the user profile. **Note:** You can follow an identical path for departments.
4. Click **Sign Off**.

Part 4: Apply field security profiles to a user in the Windows Client

1. Open the **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Click the **Users Nav Bar**.
5. Open **Adam Garfield's** user profile.

6. Click the **Security** tab.
7. Click **Edit** next to the **Default field security profile** field.
8. Select the **Read/Write Default** profile.
9. Click **OK** twice.

   This sets Adam Garfield's default user field level security to the Read/Write Default profile.

Part 5: Apply field security profiles to a team in the Windows Client

1. Click the **Teams Nav Bar**.
2. Select **Pacific** from the list of teams.
3. Click **Edit** next to the **Field security of user on this team** field.
4. Select **Read/Write Default**.
5. Click **OK**.

Part 6: Apply field security profiles to specific user within a team in the Windows Client

1. Double-click **Anne Avery** from the expanded **Pacific** team.
2. Click the **Teams** tab.
3. Select the **Pacific** team. The **Security Profile Manager** dialog box opens.
4. Select **Team Owner Profile**.
5. Click **OK** twice.

   Account security can be restricted at the individual, team, and department level through field level access. You have already seen how to set security for a user. Now you can see how security applies to members of a team as a user, department, or nested team.

Infor CRM supports a variety of security levels; however, most businesses find it easiest and most like their business model to limit account ownership to teams (instead of individual users).

You can create custom security profiles to apply individual users or team members.

Entity	How Team Security Applies
Individual Users	When adding a user to a team, the user's default security profile is automatically applied. Changing the field security of a user on a team only affects the user's security as it applies to the accounts owned by that team. For all other accounts, the user's default security profile is used if nothing else is specified. A user may have one or many security profiles, including a separate security profile for each team or department to which they belong.
Departments	Users who are part of a department share one security profile. You cannot modify a user's team security profile if the user is part of a department. If you want a user to have a different security profile than the rest of the department, you must add the user directly to the top-level team (outside the department).

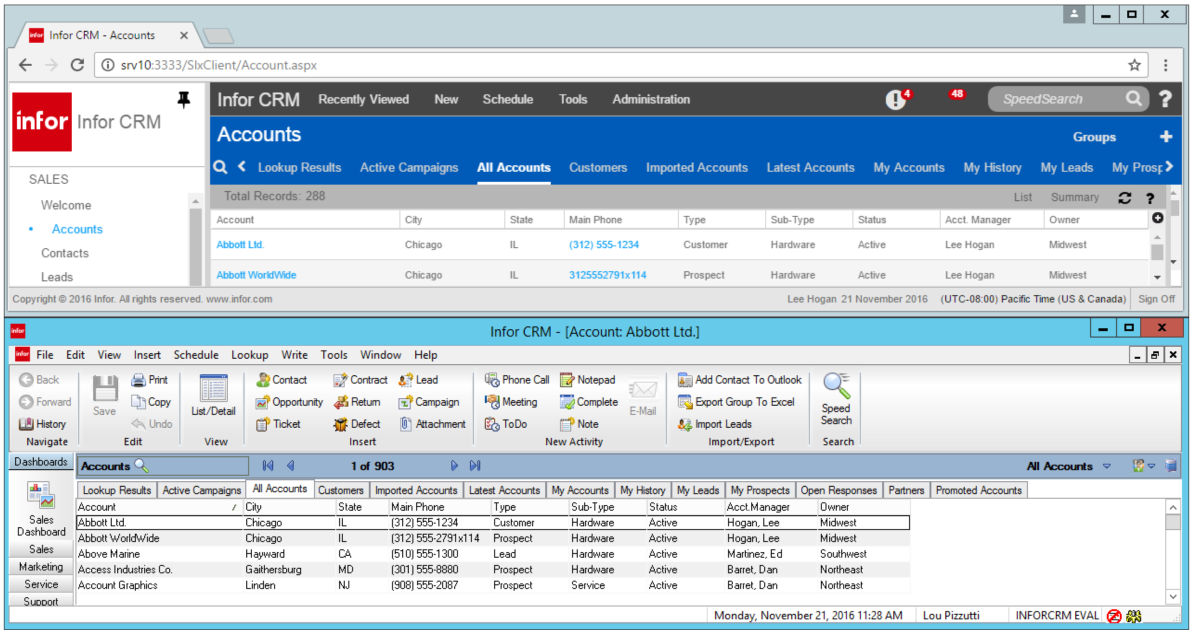
Nested Teams	When adding one team to another team, it is referred to as a nested team. Users on a nested team share one security profile, similar to departments. The difference is that a nested team can own accounts, whereas a department cannot.

Account ownership

Overview of account ownership

Account ownership controls which accounts different users can access from the entire Infor CRM database. For example, when Lee Hogan logs on to Infor CRM, he has access to a total of 288 accounts whereas Lee's manager, Lou Pizzutti, has access to a total of 903 accounts.

Note: The number of accounts may differ depending on what has been added to the Infor CRM database.

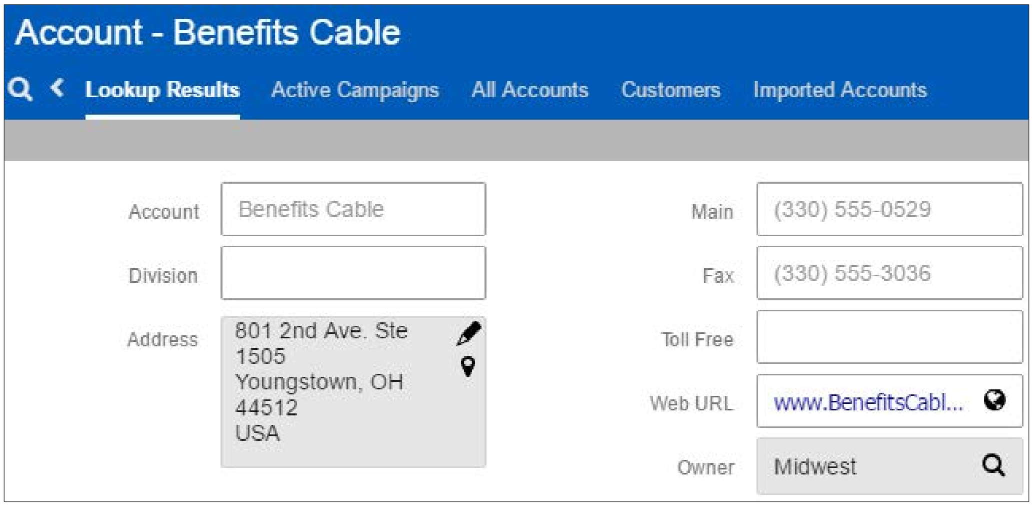


Lee Hogan and Lou Pizzutti's All Accounts List Views in Web and Window Client

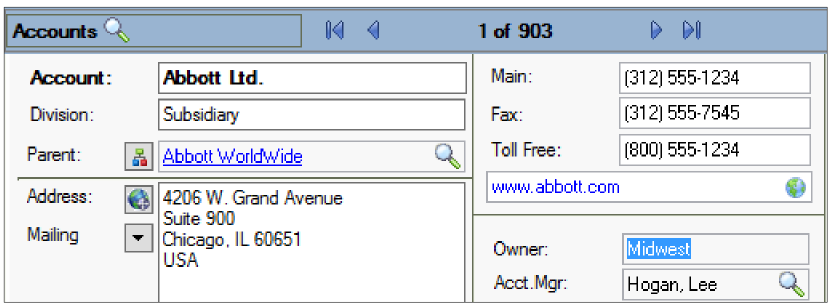
Why are the number of accounts different, when both are looking at the All Accounts group? The answer lies with account ownership rules. Every account has an **Owner** field. This field stores information which determines who owns the account. Based on the type of ownership, one or many users can use the account. There are four possible options for account ownership.

Owner	Description
An individual user	The account is owned by an individual user—typically the user who created the account. The user, members of the user's team, and the administrator can access these accounts.
A team	The account is owned by a team entity—not a specific user. Only members of the team can view and update these accounts. (Most companies implement team ownership instead of individual user ownership.)
Everyone	The account is owned globally. All Infor CRM users have access to these accounts. Everyone can see and update these accounts.

Everyone (View Only)	The account is owned globally. All Infor CRM users have access to these accounts. Everyone can see these accounts but not update these accounts.



Web Client view of an Account owned by Midwest team



Windows Client view of an Account owned by the Midwest team

Because these accounts use different options for their Account Ownership, the users who can view and edit these may be different. For example, Benefits Cable has the account ownership of Everyone. This allows the account to be viewed and edited by any Infor CRM user. Abbott Ltd. has the account ownership of Midwest, a team. Because of this, Abbott Ltd. can only be viewed by members of the Midwest team.

Exercise 4.3: Managing account ownership

In this exercise, you will set the default account ownership setting on a user in the Web and Windows Clients.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Exploring account ownership

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Select the **Sales Nav Bar > Account**. This opens the **Account** main view.
5. Look at the **Total Records** field at the top of the list view. Within the Phoenix Computer database, it should show around 1,000.
6. Click **Sign Off**.
7. Click **Return to Sign In Page**.
8. Type *Lee* in the **Username** field. No password is required.
9. Click **Sign In**.
10. Select the **Sales Nav Bar > Account**.
11. Look at the **Total Records** field at the top of the list view. Within the Phoenix Computer database, it should show around 300.

    The difference between these two numbers is determined by the Account Ownership property.
12. Click the **Abbott Ltd.** Link to open its detail view.

    Notice that within Abbott Ltd., the listed **Owner** is **Midwest** and the listed **Account Manager** is **Lee Hogan.**
13. Click **Sign Off**.
14. Click **Return to Sign In Page**.

Part 2: Modifying account ownership and account manager within the Web Client

1. Type *admin* in the **Username** field. No password is required.
2. Click **Sign In**.
3. Select the **Sales Nav Bar > Account**.

4. Click the **Abbott Worldwide** link to open its detail view.
5. Click **Find** within the **Owner** field. The **Lookup Owner** dialog box opens.
6. Select **Atlantic**.
7. Click **OK**.
8. Click **Save**.
9. Click **List View**.
10. Open the **Abbott Ltd.** detail view.
11. Click **Find** within the **Owner** field. The **Lookup Owner** dialog box opens.
12. Select **Atlantic**.
13. Click **OK**.
14. Click **Find** within the **Acc Manager** field. The **Lookup User** dialog box opens.
15. Select **Anne Avery**.
16. Click **OK**.
17. Click **OK** again when the **Update Contact Options** dialog box opens.
18. Click **Save**

Part 3: Changing a user's default owner

1. Select the **Administration Nav Bar > Users**.
2. Click **Lee Hogan**. This opens the **User – Lee Hogan** screen.
3. Click the **Client System** tab.
4. Click **Find** within the **Accounts** field in the **Default Owner** area.
5. Select **Midwest**.
6. Click **OK**.
7. Click **Save**.
8. Click **Sign Off**.

   Note: You cannot set a default owner from a team or a department, as the default owner is pulled from the user creating the account.

Part 4: Applying field security profiles to a user in the Windows Client

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Click the **Users Nav Bar**.
5. Double-click **Lee Hogan** to open his user profile**.**
6. Click the **Client System** tab.
7. Click the **Find** icon from the **Account** field within the **Default Owner** group. The **Owner Assignment** dialog box opens.

8. Select **Midwest**.
9. Click **OK**.

Exercise 4.4: Exploring account ownership

In this exercise, you will learn how account ownership works.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Applying field security profiles to a user in the Windows Client

1. Open the **Infor CRM Windows Client**.
2. Type *derek* in the **Username** field.
3. Click **OK**.
4. Select the **Sales Nav Bar > Opportunities**.

   Notice how Derek has 22 opportunities available. However, you cannot see them due to the restricted settings of the **Field Security** profile you assigned to him.
5. Click **Accounts**.
6. Click **Abi Specialty Group**.

   Note: Derek has access to this account.
7. Close the **Infor CRM Web Client**.
8. Open the **Infor CRM Windows Client**.
9. Type *Lee* in the **Username** field. No password is required.
10. Click **OK**.
11. Select the **Sales Nav Bar > Accounts**.
12. Switch to the list view if not already viewing it.
13. Select the **All Accounts** group.

    Note: Lee does not have access to this **Abi Specialty** group because of account ownership rules.

Part 2: Exploring account ownership in the Web Client

1. Open the **Infor CRM Web Client**.

2. Type *derek* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Select the **Sales Nav Bar > Accounts**.

   Note: Abi Specialty Group is available again as Derek has ownership access.

5. Click **Opportunities**.

   Note: Derek can see 88 records, however, most of the information is hidden and he cannot access the detail view.

6. Click **Sign Off**.
7. Click **Return to Sign In Page**.
8. Type *admin* in the **Username** field. No password is required.
9. Click **Sign In**.
10. Open the **Opportunities** list view.

    Note: The administrator can see all items and detailed information, as well as opportunities for Abi Specialty Group. Derek was unable to see the Abi Specialty Group opportunities even though Derek was an owner of that account.

Check your understanding

What are the main components of Infor CRM’s Web Client security?

What are the main components of Infor CRM’s Windows Client Security?

What is the importance of the Security Code ID (SECCODEID) field?

What is the importance of Account Ownership?

Lesson 5: Sync Server setup

Estimated time

2 hours

Learning objectives

In this lesson, you will:

- Identify the prerequisites to setting up a Synchronization Server Profile.
- Understand what happens on the sync server during the synchronization process.
- Summarize the benefits of using a synchronization schedule.
- Describe a scenario in which a synchronization conflict might occur.
- Explain the purpose of a sync transfer profile.

Topics

- About synchronization
- Synchronization folders on the Server
- Sync Server schedules
- Conflict resolution
- Sync transfer profiles

About synchronization

If your installation supports remote/offline users or remote offices, changes to all Infor CRM databases must be reconciled. Infor CRM achieves this using synchronization.

In Infor CRM, synchronization is like an exchange of files (containing database changes) between remote offices, remote/offline users, and the main office. This file exchange is possible because all changes made to the remote and main database are logged in Transaction Exchange Files (TEFs). Infor CRM synchronizes at the field level meaning when a specific value is changed only the field change is sent. The entire record doesn't have to be sent to the main database or to the remote offices and users.

No actual connection exists between the Sync Server and the remote database. Instead, Infor CRM uses an off-line synchronization process where all communication is accomplished by both the Sync Server and the Sync Client placing files in and retrieving files from the location(s) specified by the sync transfer profile.

Where should I install the Sync Server?

In this training workstation, all servers and administrative tools, including the Sync Server, are already installed. However, you haven't yet installed the Synchronization Client because you'll do this as part of the Remote Client installation.

In a production environment, it's best practice to install the Sync Server on a dedicated server with a large hard drive where everyone has access to the SyncLogs folder. This means you need to run the Infor CRM Server Installation on the dedicated server, choose Required Administrative Tools and Servers, and choose a Custom Setup with only the Sync Server.

This installation requires 16 MB. Additional space is required on the hard drive where the SyncLogs folder resides. The amount of space required depends on the volume of TEFs, the number of users, and the use of attachments and library items.

Does synchronization require a license?

Yes. Before you can configure the Sync Server you must add the Sync Server license. When this license is installed, the following features are enabled in the Infor CRM Administrator:

- All fields in the **Edit Office Information** window (**Sync Options** tab) become enabled.
- The **SyncServers** tab becomes editable in the System Information view.
- You can access and launch the Sync Server under Program Files.

Contact your sales/account representative to purchase a Sync Server license. Your implementation may require multiple Sync Server licenses depending on the activity and volume of TEFs on the servers. The recommended maximum number of users per Sync Server is 150.

Exercise 5.1: Adding a Sync Server license

In this exercise, you will add the Sync Server license.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

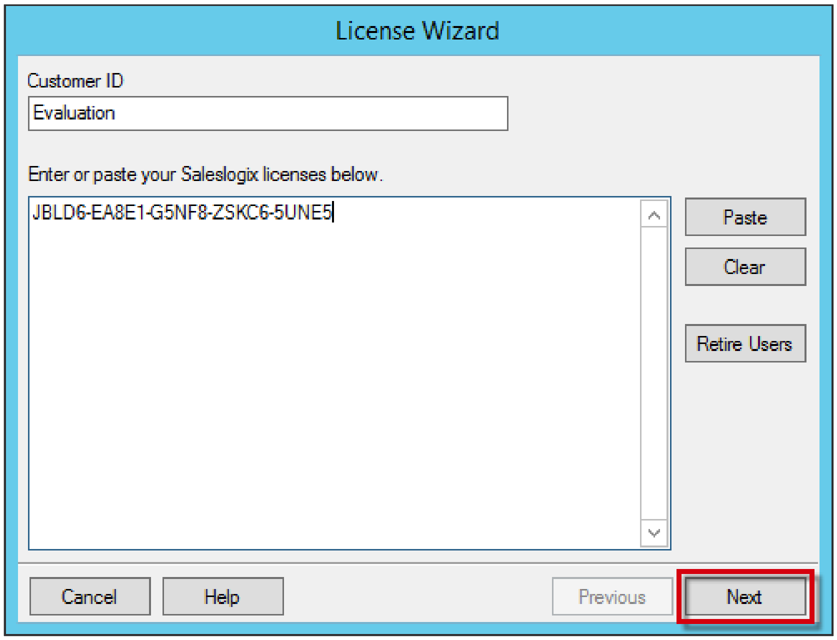
My company has a field sales team which frequently travels. When our field sales representatives are disconnected from the network, how can they access key accounts to update data?

- Add the Sync Server license from the Class Files folder.
- Setup the Sync Server profile.

Exercise steps

1. Copy the Sync Server license key to your Windows clipboard from the class documentation.
2. Open **Infor CRM Administrator**.
3. Type *admin* in the **Username** field. No password is required.
4. Select the **Systems Nav Bar**. The **System Inform.**
5. **ation** screen opens.
6. Click the **Licenses** tab.
7. Right-click and then select **Add License**. The **License Wizard** window opens.
8. Paste the license into the window.
9. Click **Next**.

   Since Infor CRM detected this as a Sync Server license, you're prompted for additional information required to create a Sync Server profile.



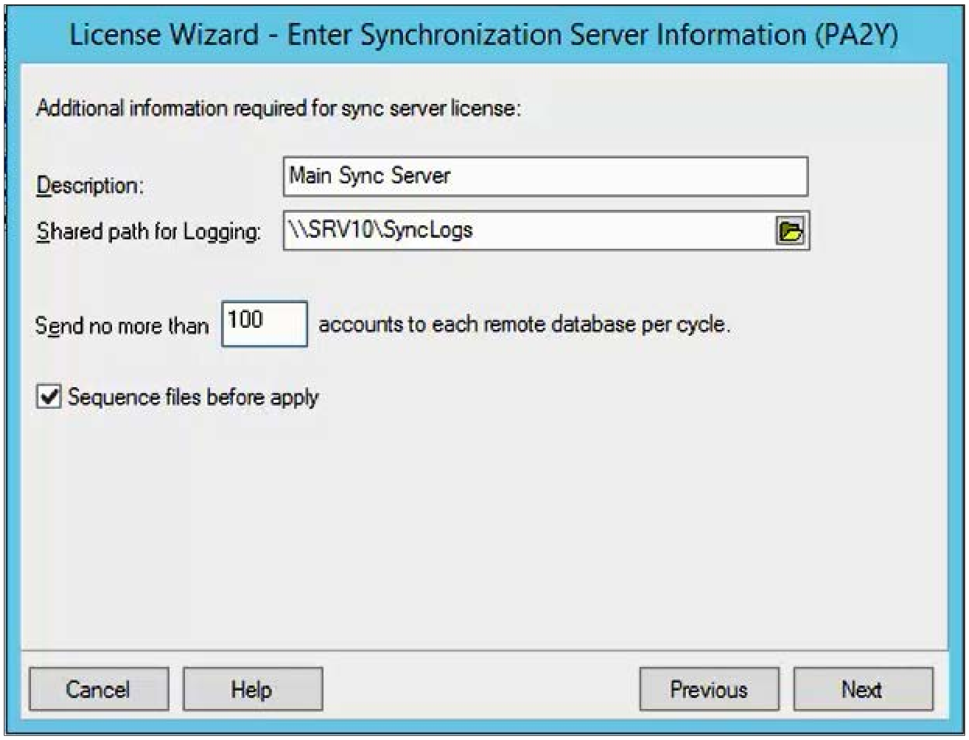
10. Type *Main Sync Server* in the **Description** field.
11. Type **\\SRV10\SyncLogs** in the **Shared path for Logging** field.

    Note: This location may be different on your training environment.

    This path is generally on a separate server from the Administrator workstation, however, because you're using one machine to install everything, you can enter a local path.
12. Type *100* in the field next to **Send no more than**.

    This value determines the number of accounts sent to a remote/offline user during a single synchronization cycle. This value varies by company. In the SALESLOGIX_EVAL database, you have 12 users and less than 1000 total accounts so raising this number will not impact performance.
13. Verify the **Sequence files before apply** check box is selected.

    This setting ensures duplicate, missing, or incorrect TEFs are resolved during the synchronization process. Although this process can take more time, with few remote/offline users, you can afford to take this precaution.



The Site Code in the window header (in this example, “PAZY”) is automatically assigned to each new Sync Server, remote user, remote office, and database. A Site Code is tagged on each TEF which tells the Sync Server which TEF is going or coming to/from which place. The Site Code your environment is assigned may be different than “PAZY.”

14. Click **Next**.
15. Click **Finish** in the License Wizard.

Synchronization folders on the server

Synchronization requires a specific set of folders to exist on the Sync Server and each remote. Let's review the server folders here.

What happens the first time you run the Sync Server?

The first time you run the Sync Server, Infor CRM:

- Creates the required logging subfolders under the SyncLogs directory.
- Creates new subfolders under the Sync directory. This Sync directory is set at the installation of the Sync Server under C:\ProgramData\SalesLogix.

What is the purpose of the SyncLogs subfolders?

The SyncLogs folder on the server contains synchronization metadata related to Network Users. The following table describes the subfolders created under the SyncLogs directory:

Directory	Purpose
Archives	Stores copies of the TEFs placed in the Outfiles for remote/offline clients to retrieve during synchronization.
Documents	Stores attached files for the Main Office Database Server. The folder must be shared and the path must be set in the Edit Office Information window.
FailedTrans	Temporary holding place for failing transactions. When a sync error occurs during the sync cycle, a transaction containing the error and information from the TEF is written to the FailedTrans folder. Errors are also written to the SyncError.txt file. You can view failed transaction files using TrnViewer.
Infiles	Stores TEFs received from remotes.
Library	This is the root folder for the library system. The folder must be shared and the path must be set in Edit Office Information.
Outfiles	Stores TEFs for remotes to retrieve during synchronization.
PortalDeployments	Contains any new Web portal from the Application Architect to be delivered to offline (web) users and remote offices. Each portal within the folder has its own folder named <GUID>_PortalName>.
SharedLogs	Saves copies of all applied changes in systems using more than one Sync Server.
Tasks	When a remote/offline user or office uses the Retrieve option under Remote Tasks to transfer a file, a TEF is created by the Sync Client and is deposited here.
WGLogs	Stores TEFs created by Client users for changes made to the Main Office. By default, WGLogs is closed every 30 minutes.

What is the purpose of the other Sync Server folders?

In addition to the SyncLogs subfolders, when running the Sync Server, the following new subfolders are created under the **Sync** folder:

Directory	Purpose	Path
EventLogs	Stores synchronization logs in text format that you can open with Notepad. In Synchronization Server, under Options, Logs tab, use the Save to Local Folder or Save to Server Path setting. When synchronization is run, the folder is created.	\\Documents and Settings\All Users\Application Data\Saleslogix\Sync\EventLogs(XP/2000/2003) or \\ProgramData\Saleslogix\Sync\EventLogs (Vista/7/2008) or \(server shared path) EventLogs.
SRVXX	This folder holds the WriteCache folder and the ConfTran.stm file used for conflict resolution.	\\Documents and Settings\All Users\Application Data\Saleslogix\Sync(XP/2000/2003) or \\ProgramData\Saleslogix\Sync (Vista/7/2008). The folder's name is server_name-alias_name.

Folder considerations for virus-checking software

If you have virus-checking software scanning synchronization folders as the Sync Server tries to use a file within the folders, you may receive an "Error deleting file or folder" error. This occurs when the virus checking software checks the file at the exact moment the Sync Server tries to use the file.

To avoid errors, set your virus-checking software to modify scans to skip the following folders during real-time scans and/or scans scheduled to run when the Sync Server is scheduled to run. If anti-virus programs are scanning the following folders in real time during a synchronization cycle it may cause problems with synchronization to remotes.

- WriteCache
- Infiles
- Outfiles
- FailedTrans
- WGLogs
- SharedLogs
- Archives

What happens when the Sync Server process is run?

During a synchronization cycle on the server, several transactions occur. The following table describes this process:

Step	Description
1	A network user (Infor CRM Client, Architect, Administrator) makes changes to the main office database. For each change, the main office database is updated

Step	Description
	and a record is written to a transaction exchange file (TEF) located in the main office WGLogs folder. The record represents only the specific values changed, not the entire table record (field level synchronization). If the database is changed because of an agent, then the change is recorded and synchronized.
2	Sync Server checks the WriteCache folder for any transaction files not processed and does one of the following with found files: Deletes if a 0 kb, moves to Outfiles folder for processing, or leaves as is.
3	Sync Server processes all TEFs in the main office WGLogs folder. Because these files reflect changes already made to the host database, the information is written to the ConfTran.stm file for later use in conflict resolution. Only closed WG Logs are processed. The interval to close WG Logs is set on the Sync Options tab of the Edit Office Information dialog box.
4	Sync Server searches the SharedLogs folder for any files generated by secondary Sync servers and updates the database with changes. The contents of the SharedLogs folder are duplicate Workgroup Logs and Infiles processed by other Sync servers and detail changes made to the main database by the secondary Sync servers.
5	Sync Server receives all Remote Client files from the server Infiles directory. Files containing documents or other attachments are placed in the shared Documents folder after decompression. Requests from remote/offline users for Library documents are applied.
6	If the Sequence Files Before Apply option is set on the main Synchronization Server and in each remote user's profile, then (a) files confirming successful application of a file and requesting missing files are processed, (b) missing files are copied from the Archives folder to the Outfiles folder to be resent to the remote, and (c) TEFs containing database changes are sorted, checked for duplicates, missing index numbers, or an incorrect starting index number and apply changes to the database. If a missing file is not available in the Archives folder, a log file in the missing TEFs name is sent instead. See Resolving Synchronization Apply Problems to understand how problems with TEFs are handled.
7	Sync Server uses the ConfTran.stm file to compare all records for conflicts and applies the information to the main office database. If the file cannot be applied because of an error, it is written to the SyncErrors.txt.
8	After all Infor CRM Remote Client TEFs are applied they are deleted from the server Infiles folder. WGLogs files and SharedLogs files are also deleted.
9	If the Sequence Files Before Apply option is set, an acknowledgment transaction is sent to the Remote Client, and the Outfiles stored in the remote's Archives folder are deleted. If Sequence Files Before Apply is not set, Outfiles remain in the Archives folder until they are deleted manually.
10	Sync Server creates one TEF for each Remote Client and selects all records for a specific Remote Client to which the user has subscribed. The TEF is written to the Server Outfiles path, is compressed and encrypted.

Step	Description
	If a portal has been created for an Offline Web Client or Web Remote Office, the portal is saved in the PortalDeployments folder within its own folder named <GUID>_<PortalName>. This folder also contains the list of users the matching portals will be deployed to.
11	To send the files to the Infor CRM Remote Clients, Infor CRM Client opens the log files in the WGLogs folder and writes them to the WriteCache folder as it compresses them into TEFs. Once the log files are converted to TEFs, the logs are deleted.
12	Any missing TEFs requested by the remotes are copied from the Archives folder into the Outfiles folder. All confirmed TEFs are deleted. Any Documents or Library items are compressed into TEFs.
13	Once all these TEFs are processed, they are placed in the Archives folder for confirmation and into the Outfiles folder for transmission to remote/ client users the next time they synchronize.
14	Sync Server copies all records from the ConfTran.stm to the server log. Records needed to support conflict resolution are saved for the length of time specified when setting up conflict resolution rules in the Administrator.
15	If Agents are scheduled, they run after the synchronization cycle is complete. Any synchronization files resulting from the agents are copied to the Outfiles folder so they are ready for remotes.

Exercise 5.2: Starting the Synchronization Server

In this exercise, you will register the machine and run the Sync Server.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

I installed the Sync Server, added the required license, and setup a Sync Server profile. How do I start the Sync Server for the first time?

- Register the current machine as the Sync Server.
- Run the Sync Server to create additional logging folders.

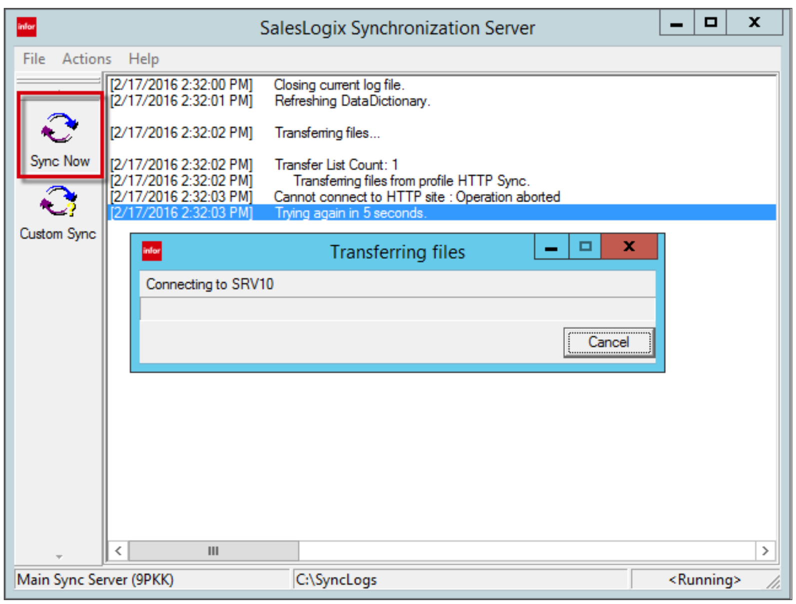
Exercise steps

1. Select **Start > Programs > Saleslogix > Synchronization Server**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.

   Since this is your first time running the Sync Server, a **Confirm** window opens prompting you register the machine as the Sync Server with the database.

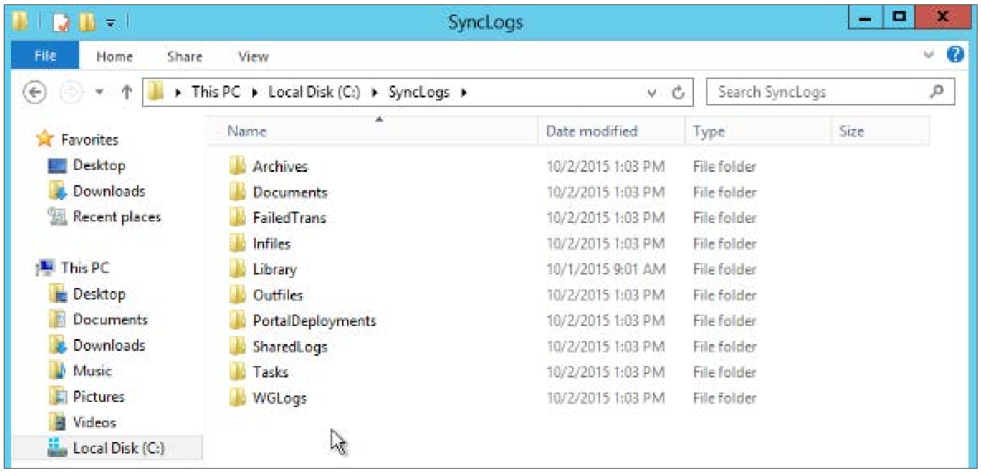
   

4. Click **Yes**. The **Verify Administrator Password** window opens.
5. Confirm the field is blank; There is no password.
6. Click **OK**. The **Synchronization Server** window opens.
7. Click **Sync Now**.

   During synchronization, messages displaying in the **Sync Server** dialog box are written to the event log in the **EventLogs** folder (C:\ProgramData\Saleslogix\Sync). A new file is created each time you sync, unless you specifically save them as one large file on the **Logs** tab of the **File > Options** window of the Sync Server.

8. Browse to **C:\SyncLogs** when the cycle is complete. Notice the new subfolders created by the Sync Server.


SyncLogs
File
Home
Share
View
This PC › Local Disk (C:) › SyncLogs ›
Search SyncLogs
Favorites
Desktop
Downloads
Recent places
This PC
Desktop
Documents
Downloads
Music
Pictures
Videos
Local Disk (C:)
Name
Date modified
Type
Size
Archives 10/2/2015 1:03 PM File folder
Documents 10/2/2015 1:03 PM File folder
FailedTrans 10/2/2015 1:03 PM File folder
Infiles 10/2/2015 1:03 PM File folder
Library 10/1/2015 9:01 AM File folder
Outfiles 10/2/2015 1:03 PM File folder
PortalDeployments 10/2/2015 1:03 PM File folder
SharedLogs 10/2/2015 1:03 PM File folder
Tasks 10/2/2015 1:03 PM File folder
WGLogs 10/2/2015 1:03 PM File folder

Sync Server schedules

You can run synchronization in three ways:

- Manually using the Sync Server or the Command Prompt
- As a service
- Third party scheduler

Why run synchronization as a service?

Running the Sync Server from a Windows service allows synchronization to process without an administrator signed in to the server. You can monitor the status of the scheduled jobs using the Infor CRM Monitor Console. The Monitor Console monitors remotely so it can run from any computer with access to the computer(s) where the synchronization service is installed. The Monitor Console is installed with the Administrative Tools.

You can configure one sync automation service profile per server but each profile can have any number of jobs using various databases.

How often should the synchronization service run?

A synchronization cycle is the time required by the Sync Server to process changes and generate files for remotes. The time it takes to complete a sync cycle and the frequency with which you should schedule them depends on the number of TEFs sent, your synchronization method, and the amount of traffic on your network. For best results, run synchronization during off-peak times or after normal business hours.

Exercise 5.3: Scheduling the Synchronization Server

In this exercise, you will create a service configuration schedule and monitor the schedule.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

How do I schedule the Sync Server so I don't have to start it manually every few hours?

- Create a sync automation service profile.
- Setup the Monitor Console to monitor the schedule.

Exercise steps

Part 1: Create a service configuration schedule

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click the **Systems Nav Bar**. The **System Information** view opens.
4. Click the **Sync Automation Services** tab. The **Sync Services File Path** window opens.
5. Type *\\SRV10\SyncService* in the **shared file path** field. You created this field in an earlier lesson and shared it with everyone (full control).
6. Click **OK**.
7. Right-click within the empty space on the **Sync Automation Services** tab and then click **Add Service**. The **Service Configuration** window opens.
8. Enter the following details:
    - **Service Name:** Daily Sync
    - **Service Machine:** SRV10
    - **Service Port:** 8950
    - **NT Log Level:** Select Errors, Warnings, and Information
    - **Job Name:** Daily Sync Job
    - **Sync Server:** Select your server from the drop-down list
    - **Enabled check box:** selected
    - **Run on:** Verify every day of the week is selected
    - **Daily Schedule:** Every 60 minutes between 6:00AM and 7:00PM
9. Click **Apply Job**.
10. Click **OK**.
11. Restart the Infor CRM synchronization service after the sync automation service has been created.
12. Select **Start > Administrative Tools > Services**. The **Services** window opens.
13. Right-click **Saleslogix Synchronization Service** in the list of services and then click **Restart**.
14. Close the **Services** window.

Part 2: Monitor the schedule

1. Browse to **C:\Program Files (x86)\Saleslogix** and open **SLXMonitorConsole.exe**. The **Monitor Console** opens.
2. Select **File > Register Service**. The **Service Registration** window opens.
3. Type *Daily Sync* in the **Service Name** field.
4. Type *SRV10* in the **Machine Name** field.
5. Type *8950* in the **Port** field.
6. Click **OK**.

    The Daily Sync service adds to the list and the green arrow is indicating it’s currently being monitored.

7. Expand the **Daily Sync** service and then click **Pending Jobs**.

   Notice the Daily Sync job is pending to run within the hour (every 60 minutes).

8. Close the **Monitor Console** window.

   With the Monitor Console configured, you can remotely monitor the status of processes and jobs running on the Sync Server.

Conflict resolution

After installing and configuring the sync server you can set additional synchronization options to support conflict resolution preferences.

What is conflict resolution?

Conflict resolution is the process used during synchronization to determine which database changes remain when more than one user changes the same data. Using conflict resolution, you can identify up to three criteria determining which user wins when a conflict occurs. After analyzing the conflicting transactions, a win, loss, or tie occurs. In the event of a tie, the next criterion is used to settle the conflict. Generally, if all options are exhausted and the transactions are still in conflict, the system allows the most recent change to win.

The default conflict resolution rules are:

- The user wins if he or she is a remote/offline client.
- If after step one both users are equal, the user wins if he or she is the owner of the record.
- If after step two both users are equal, the user wins if he or she makes the most recent change.

What happens to a rejected transaction?

Rejected conflicts and accepted transactions are stored in the **ConfTran.stm** file for a specified number of days and can be used later for reference and resynchronization. After a set time period, old transactions are deleted and a notification is sent to the user whose transaction is rejected. This user can view a list of conflicts as well as normal database changes in the **What's New** view in the Infor CRM Remote and Offline Clients.

It's best to limit the time for the **ConfTran.stm** file to something relatively small to optimize Sync Server performance.

Exercise 5.4: Setting conflict resolution rules

In this exercise, you will set conflict resolution rules.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

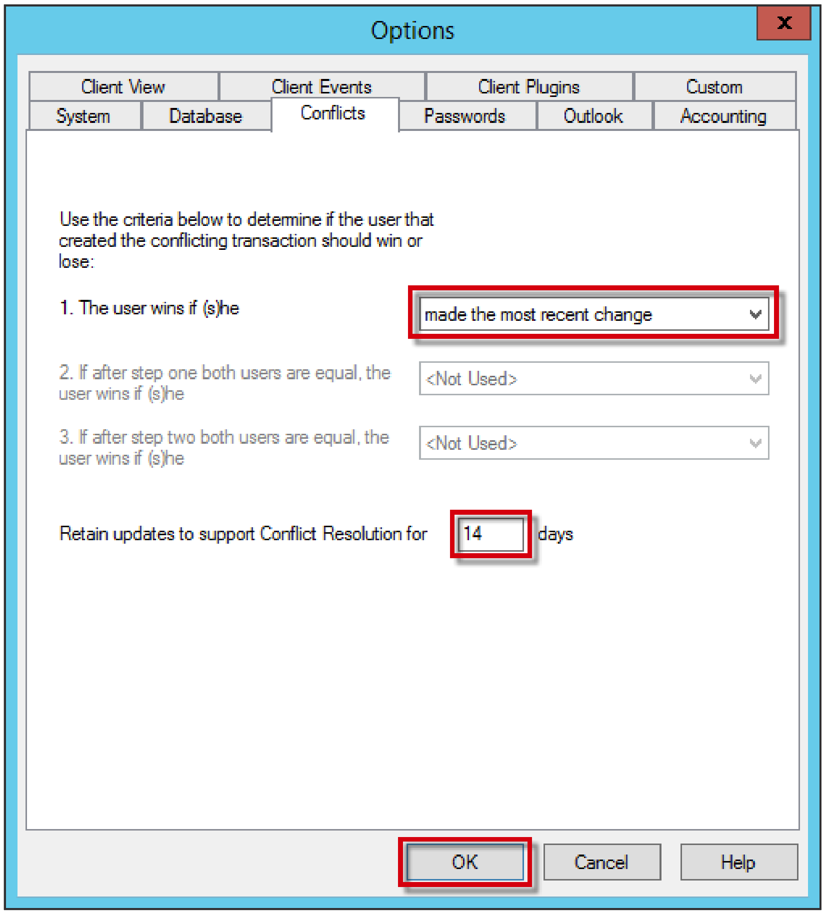
Scenario

Before our remote/offline users use synchronization, how can I set conflict resolution rules so Infor CRM knows which change to apply to the database in the event a remote/offline and Windows user change the same data?

- Change the default rule priority so the user who makes the most recent change always wins regardless of other criteria.
- Phoenix Computers has a small number of remote employees to keep sync performance in check so extend the default value to retain updates for 14 days.

Exercise steps

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Select **Tools > Options** from the menu bar. The **Options** window opens.
4. Click the **Conflicts** tab.
5. Select **made the most recent change** from the rule priority **1. The user wins if (s)he** drop-down list. The other rule priorities become disabled as they're no longer applicable.
6. Type *14* in the field next to **Retain updates to support Conflict Resolution for**.
7. Click **OK**.


Options
Client View
Client Events
Client Plugins
Custom
System
Database
Conflicts
Passwords
Outlook
Accounting
Use the criteria below to determine if the user that created the conflicting transaction should win or lose:
1. The user wins if (s)he
made the most recent change
2. If after step one both users are equal, the user wins if (s)he
<Not Used>
3. If after step two both users are equal, the user wins if (s)he
<Not Used>
Retain updates to support Conflict Resolution for
14
days
OK
Cancel
Help

Sync transfer profiles

When developing synchronization strategy, administrators must determine how remote office and remote/offline users send and retrieve transactions. Generally, remote office and remote/offline users do not have persistent connections to the network and intermittently connect to the sync server via the Internet after working offline for some time. Infor CRM supports three synchronization methods: Network Synchronization, FTP, and HTTP.

Why use a network sync transfer profile?

If remote/offline users connect to your company's network through a VPN (Virtual Private Network), Infor recommends creating a network sync transfer profile. Using VPN, remote users connect to the Infor CRM network via the Internet to send and receive transactions from the main office database. This is the default method of synchronization for most companies using the Windows (network/remote) Clients.

Why use an FTP sync transfer profile?

If you have an FTP site on an FTP server, Infor recommends creating an FTP sync transfer profile. Remote offices and remote/offline users upload and download files through the Internet or a TCP/IP network connection using FTP.

When creating an FTP site for Infor CRM, you must:

- Create three folders on the FTP server. For example, /Infiles, /Outfiles, and /FailedTrans. These folders must be shared and all remote/offline users and the Sync Server must have read, write, and delete access.
- Create three virtual directories pointing to the /Infiles, /Outfiles, and /FailedTrans folders. All remote/offline users as well as the Sync Server must have read, write, and delete access to these directories.

Tip: If your organization uses FTP to synchronize data, you can create additional directories to improve data transfer. Refer to the Infor CRM Administrator Help for more details.

Signing on to an FTP site can be accomplished in one of two ways:

- **Global logon:** Using a global logon, the Sync Server and all remote/offline users share the same logon and password.
- **Personal logons:** Using personal logons, the Sync Server and each remote/offline user is assigned a different logon to the FTP on the Sync tab of each remote user profile.

Why use an HTTP sync transfer profile?

If you have an HTTP/web site hosted on a Microsoft ® Internet Information Services (IIS) server already deployed on your network, then you can leverage your existing network infrastructure and services required for transferring sync data via HTTP. HTTP Synchronization provides a secure method of transferring data using a website on an HTTP Server and requires Internet Information Services (IIS) with World Wide Web Service installed.

When the Sync Server cycles, it connects to the HTTP Server and searches the Infiles folder for any transaction exchange files (TEFs) uploaded by remote/offline users. Likewise, when the Sync Client cycles it connects to the HTTP Server and searches the Outfiles folder for any transaction exchange files placed there by the main office. All transaction exchange files, library files, and documents are uploaded to and downloaded from the HTTP Server.

When creating an HTTP site for Infor CRM, you must:

- Create three folders on the FTP server. For example, /Infiles, /Outfiles, and /FailedTrans. These folders must be shared and all remote/offline users and the Sync Server must have read, write, and delete access.
- Create three virtual directories pointing to the /Infiles, /Outfiles, and /FailedTrans folders. All remote/offline users as well as the Sync Server must have read, write, and delete access to these directories.

Signing in to an HTTP site can be accomplished in one of two ways:

- **Global logon:** Using a global logon, the Sync Server and remote/offline users share the same logon and password.
- **Personal logons:** Using personal logons, the Sync Server and each remote/offline user is assigned a different logon to the HTTP on the Sync tab of each remote/offline user profile.

Exercise 5.5: Creating an HTTP sync transfer profile

In this exercise, you will create an HTTP sync transfer profile.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

My organization has an HTTP server available to use for synchronization. How do I create an HTTP sync transfer profile to configure remote/offline users who aren't able to connect through VPN?

- Create the HTTP site directory and subfolders.
- Enable permissions to the directory.
- Create an HTTP site with the required folders.
- Create the sync transfer profile within the Infor CRM Administrator referencing the HTTP site you created.

Exercise steps

Part 1: Create the HTTP site directory and enable permissions

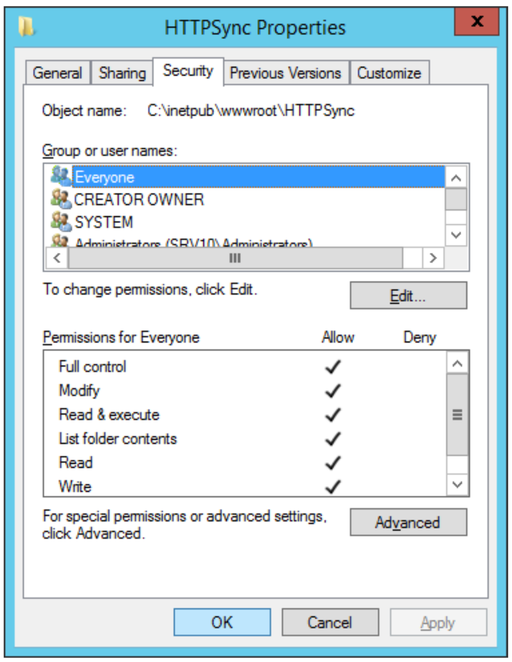
1. Create a folder named "**HTTPSync**" in the following location: **C:\Inetpub\wwwroot**. This is for the Infor CRM HTTP Sync web application on the HTTP (web) server.
2. Create the following subfolders within the **HTTPSync** folder:

   - Infiles
   - Outfiles

- FailedTrans

You must allow domain users access to the site. Let's use **Everyone** in the training environment.

3. Right-click the new **HTTPSync** folder and then click **Properties**. The **HTTPSync Properties** window opens.
4. Click the **Security** tab and then click **Edit**. The **Permissions for HTTPSync** window opens.
5. Click **Add**. **The Select Users or Groups** window opens.
6. Type *Everyone* in the **Enter the object names to select** field.
7. Click **Check Names**.
8. Click **OK**.
9. Select the **Everyone** group and then select the **Full control** check box.
10. Click **Apply**.
11. Click **OK**.



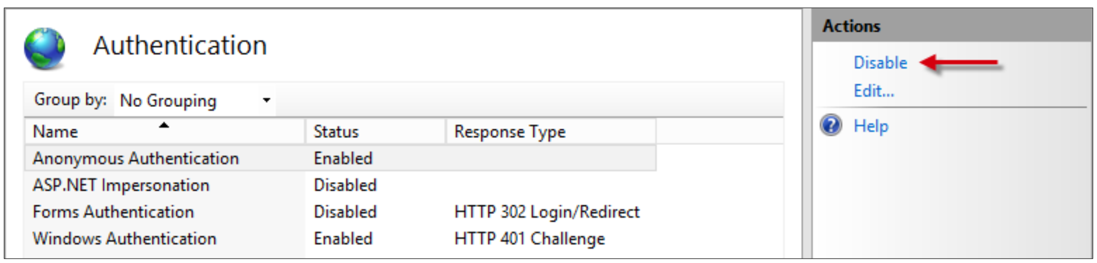
12. Click **OK** again to close the **HTTPSync Properties** window.

Part 2: Create and configure an HTTP site for sync

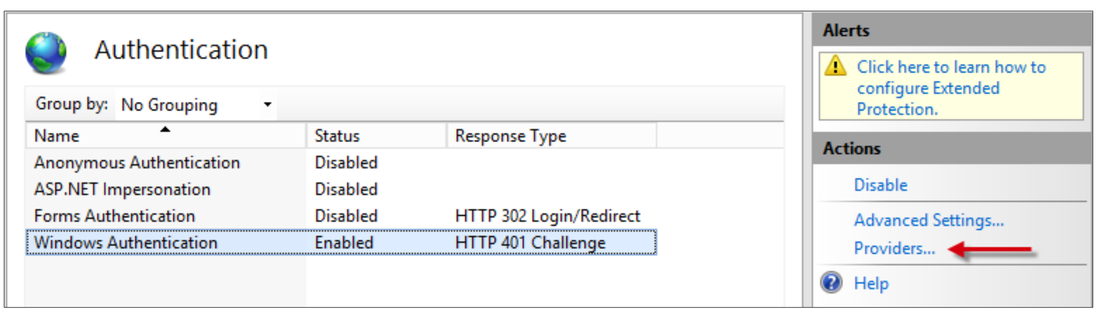
1. Select **Start > Administrative Tools > Internet Information Services (IIS) Manager**. The **Internet Information Services** window opens.
2. Expand **SRV10** in the **Internet Information Services** tree view.
3. Right-click the **Sites** folder and then click **Add Website**. The **Add Website** window opens.
4. Type *HTTPSync* in the **Site name** field.
5. Type *C:\Inetpub\wwwroot\HTTPSync* in the **Physical path** field.
6. Type *8080* in the **Port** field. **Note:** You can use any unused port higher than 1024.

7. Click **Connect as**. The **Connect As** window opens.
8. Select the **Specific user** radio button and then click **Set**. The **Set Credentials** window opens.
9. Type *WebDLL* in the **User name** field.
10. Type *crmweb* in the **Password** and **Confirm password** fields.

    Note: Your production installation may have a different username and password.
11. Click **OK**.
12. Click **OK** again to close the **Connect As** window.
13. Click **Test Settings** to verify it's working correctly.
14. Click **Close**.
15. Click **OK** to close the **Add Website** window.
16. With the HTTPSync website still selected, double-click **Authentication** in the features view. The **Authentication** list opens.
17. Select **Anonymous Authentication** and then click **Disable** under **Actions** in the Actions pane.

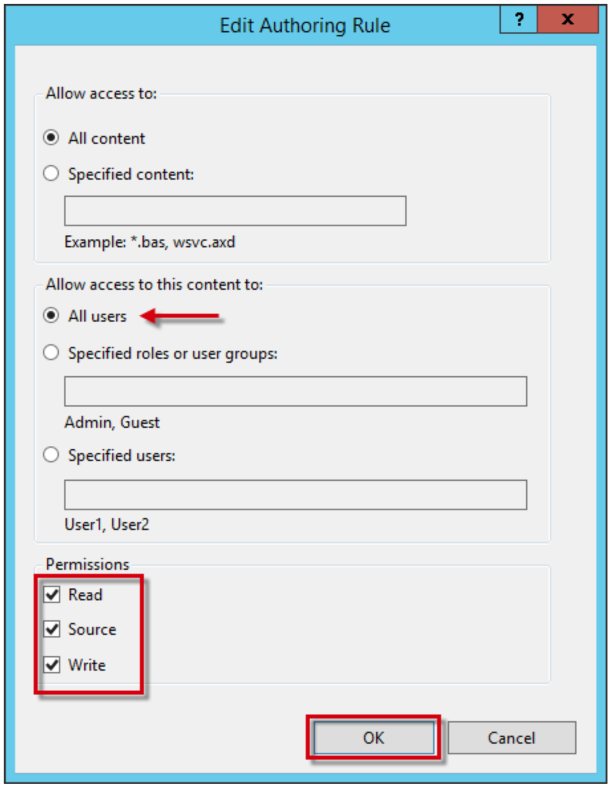


18. Select **Windows Authentication** and then click **Enable**.
19. Click the **Providers** link. The **Providers** window opens.



20. Select **NTLM** and then click **Move Up** to move it to the top of the list.
21. Click **OK**.
22. Select the **HTTPSync** website in the tree list view again and double-click **MIME Types** within the features view.
23. Right-click in the workspace and then click **Add**. The **Add MIME Type** window opens.
24. Type *SLXT* in the **File name extension** field.
25. Type *text/plain* in the **MIME type** field.

26. Click **OK**.
27. Return to the **HTTPSync** features view and double-click **WebDAV Authoring Rules**.
28. Click **Enable WebDav** in the **Actions** pane.
29. Click **Add Authoring Rule** in the **Actions** pane. The **Add Authoring Rule** window opens.
30. Select the **All users** radio button within the **Allow access to this content to** pane.
31. Select the **Read**, **Source**, and **Write** check boxes within the **Permissions** pane.

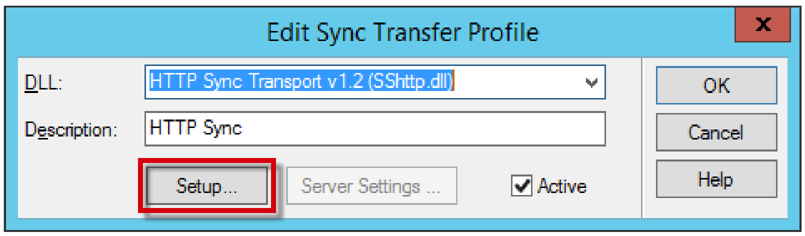


32. Click **OK**.
33. Return to the **HTTPSync** features view and double-click **Directory Browsing**.
34. Click **Enable** in the **Actions** pane.
35. Verify the **Time**, **Size**, **Extension**, and **Date** check boxes are selected and then click **Apply** if necessary.
36. Exit the IIS Manager by selecting **File > Exit**.
37. Reset IIS by selecting **Start > Run**, typing *iisreset*, and then pressing **Enter**.
38. Close the command prompt.

Part 3: Create a sync profile

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Select **Manage > Sync Transfer Profiles** from the menu bar. The **Sync Transfer Profile** window opens.

4. Click **Add**. The **Edit Sync Transfer Profile** window opens.
5. Select **HTTP Sync Transport v1.2 (SShttp.dll)** from the **DLL** drop-down list.
6. Type *HTTP Sync* in the **Description** field.
7. Click **Setup**.

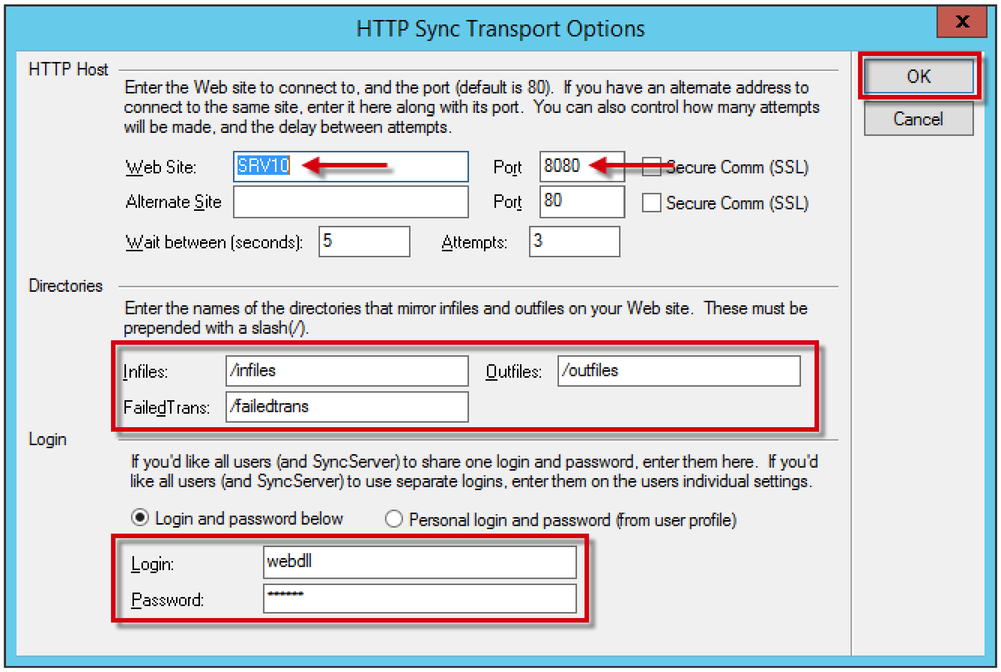


8. The **HTTP Sync Transport Options** window opens. Type *SRV10* in the **Web Site** field.
9. Type *8080* in the **Port** field.
10. Type */Infiles* in the **Infiles** field.
11. Type */Outfiles* in the **Outfiles** field.
12. Type */FailedTrans* in the **FailedTrans** field.
13. Select the **Login and password below** radio button.
14. Type *webdll* in the **Login** field.

    This is the global login shared by all remote/offline users and the Sync Server.
15. Type *crmweb* in the **Password** field.

Personal logins for remote/offline users are set in the individual's user profile.

16. Click **OK**.



17. Click **OK** again to close the **Edit Sync Transfer Profile** window.
18. Click **OK** again to close the **Sync Transfer Profiles** window.

Check your understanding

What are the prerequisites to setting up a Synchronization Server profile?

What happens on the sync server during the synchronization process?

What are the benefits of using a synchronization schedule?

What is the purpose of a sync transfer profile?

Lesson 6: Remote/Offline database setup

Estimated time

1 hour

Learning objectives

In this lesson, you will:

- Summarize user profile sync options.
- Attach a Remote Database.
- Create a Remote Database link.

Topics

- Remote/Offline user configuration

Remote/Offline user configuration

When opening the **User Profile** window for a user configured with a Remote User license, all fields on the **Sync** tab are editable. These settings determine what data is included in the remote database, such as which sync transfer method the user can use, which accounts the user sees, whether the user can see file attachments and file size limit, and which activities the user can see.

Configure user Sync settings before creating the remote database. Any changes you make to these settings after creating the remote database require you to re-create it.

The computer used for creating remote databases must have SQL 2005 Native client installed.

Subscription Rules: What account records are included in a remote database?

By default, a remote database includes certain accounts. These records are called forced accounts and include the following:

- All accounts owned by the user individually, not a team.
- All accounts owned by the user's team where (s)he is the team owner.
- All accounts for which the user is assigned an activity.

To sync only certain accounts, limit the number of records in a user's database. This has several benefits including minimizing the amount of space required on the user's computer for data storage and reducing the time required to transmit synchronized data.

To limit accounts, you can:

- **Select them individually:** Only accounts to which the user has access are available for inclusion. You can also individually unsubscribe from selected accounts except for forced accounts.
- **Set up a subscription rule:** New accounts automatically get sent to the user if they meet a specific set of criteria. For example, you may choose to subscribe a user to accounts owned by Everyone only if an open opportunity with a close probability of 75% or more exists in the data set.

You can also allow or prevent users from creating their own subscription rules or unsubscribing from accounts. Users can never unsubscribe from forced accounts.

Attachment Filters: What documents are sent to remotes?

Like accounts, library items are also handled by request. Attachments on the other hand are automatically included in synchronization with the appropriate record if they don't exceed the file size or the number of days old criteria specified in the Attachment Filters.

What's New Options: What changes were made since the last sync?

Whenever the Sync Server cycles, changes made by Windows Client users are queued to be picked up by a remote user's database the next time the user runs sync on the Synchronization Client. The remote user affected by the change, meaning the user or the user's team owns a record that has been added/updated/deleted, can view the change by selecting the **What's New** view from the **Sales Nav Bar**.

By default, remote users can view new activity for accounts, contacts, opportunities, and activities. To limit the data a user sees or to allow users to see notification of changed history records, lost conflicts, or delivered documents, configure the What's New Options (**User Profile > Sync settings** in the Infor CRM Administrator).

History Options: Do history records expire?

By default, all history records included with a record remain in the remote user's database indefinitely. To change these options to free up space, modify the History Filters. When choosing to purge history records, all selected records are deleted from the user's database after a specified number of days unless created by the remote user in which case they stay. The default number of days is 180.

Create remote databases

After setting options for each user, create a unique remote database file for each user, and then distribute the remote database file to each user's computer. If the Remote user's computer is connected to the network, create a folder on the Administrative Workstation and copy the database to the folder. Share this folder so that the Remote user's computer has access to it.

If the Remote user is not connected to the network, copy the database to the user's computer using some form of removable media. Another option is to zip the database, e-mail it to the Remote user, and instruct the user to copy it to his or her computer and unzip it.

If remote clients use Infor Xbar to integrate Infor CRM and Microsoft® Outlook®, the SData portal must be deployed to remote clients. See the Infor CRM Implementation Guide for more information.

Exercise 6.1: Configuring user sync options

In this exercise, you will configure user sync options.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

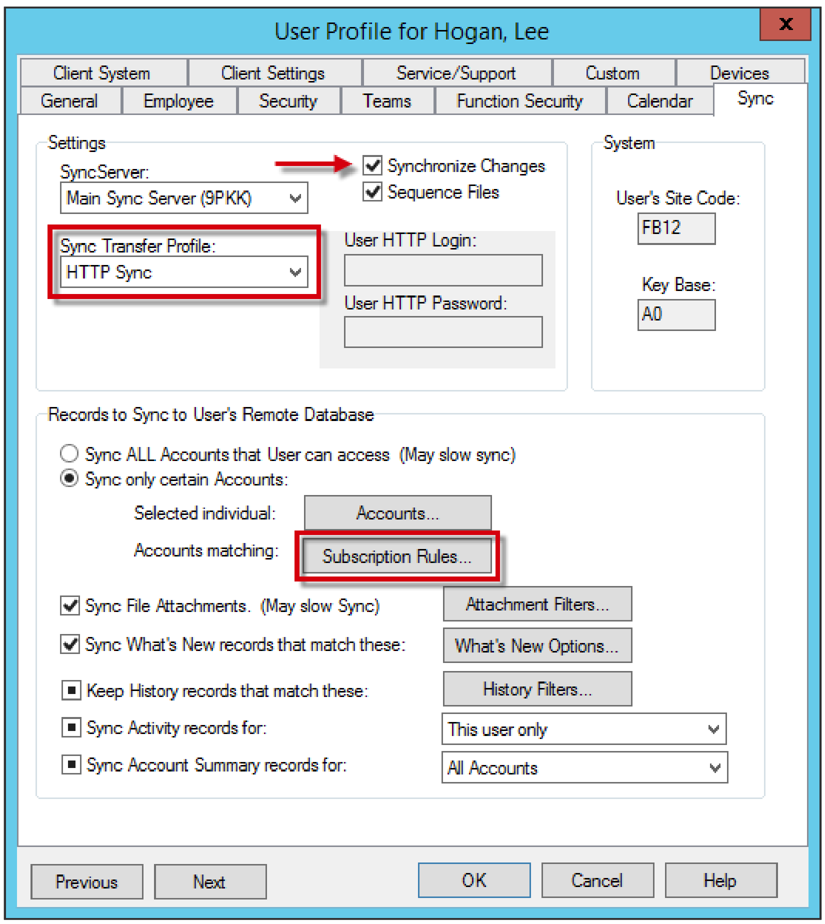
Although Lee is a member of both the Global and Midwest teams, he primarily accesses accounts for Midwest and those on the Global team where he is the Account Manager.

- Configure the Sync settings for Lee Hogan's user profile.

- Select a subscription rule so Lee only syncs records owned by the Midwest team.

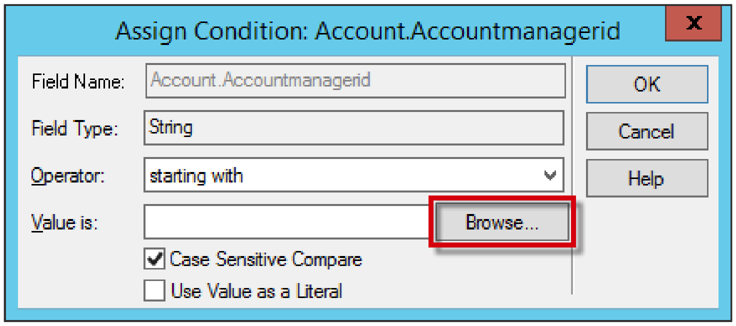
Exercise steps

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Double-click **Lee Hogan** in the **Users** view. The **User Profile for Hogan, Lee** window opens.
4. Click the **Sync** tab.
5. Select **HTTP Sync** from the **Sync Transfer Profile** drop-down list.
6. Select the **Synchronize Changes** check box.
7. Click **Subscription Rules**. The **Subscription Rules** window opens.

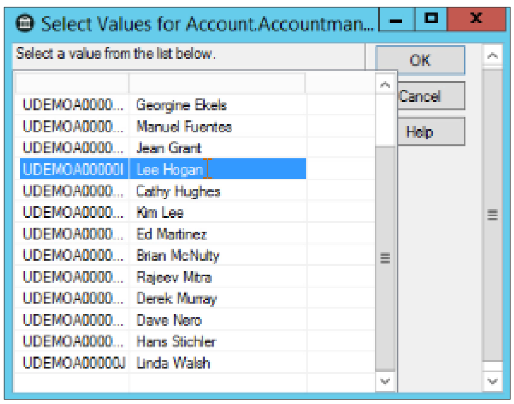


8. Select **Midwest** and then click **Copy**.
9. Click **Add**. The **New Subscription Rule/Template** window opens.
10. Select the **Create a New Rule** radio button.
11. Click **OK**. The **Query Builder** window opens.
12. Type *Global Lee* in the **Name** and **Display Name** fields.
13. Click the **Conditions** tab.

14. Double-click **Accountmanagerid** from the list of fields in the top right pane. The **Assign Condition: Account.Accountmanagerid** window opens.
15. Click **Browse**. The **Select Values for Account.Accountmanagerid** window opens.



16. Double-click **Lee Hogan**.



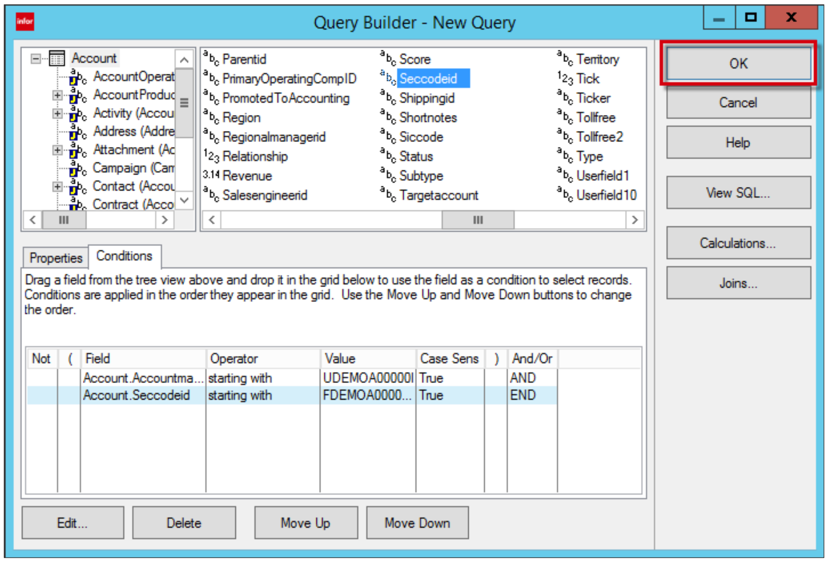
17. Click **OK** to return to the **Query Builder – New Query** window.

    Notice the field is added to the **Conditions** tab.

18. Double-click **Seccodeid** from the list of fields in the top right pane. The **Assign Condition: Account.Seccodeid** window opens.
19. Click **Browse**. The **Select Values for Account.Seccodeid** window opens.
20. Double-click **Global**.
21. Click **OK** to return to the **Query Builder** window.

    Notice the field is added to the **Conditions** tab. The default operator is set to **AND** for **Account.Accountmanagerid** and **END** for **Account.Seccodeid**. Both conditions must be true for a record to be included in this group.

22. Click **OK** again.



23. Click **OK** again to close the **Subscription Rules** window.
24. Click **Yes** after reading the information in the **Confirm** dialog box.
25. Click **OK** to close the **User Profile for Hogan, Lee** window.

Exercise 6.2: Creating a remote user database

In this exercise, you will create a server folder and a remote user database.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

How do I create Lee's remote database now that I've configured user sync options?

- Create a folder on the server in which to save remote databases.
- Create the remote database for Lee.

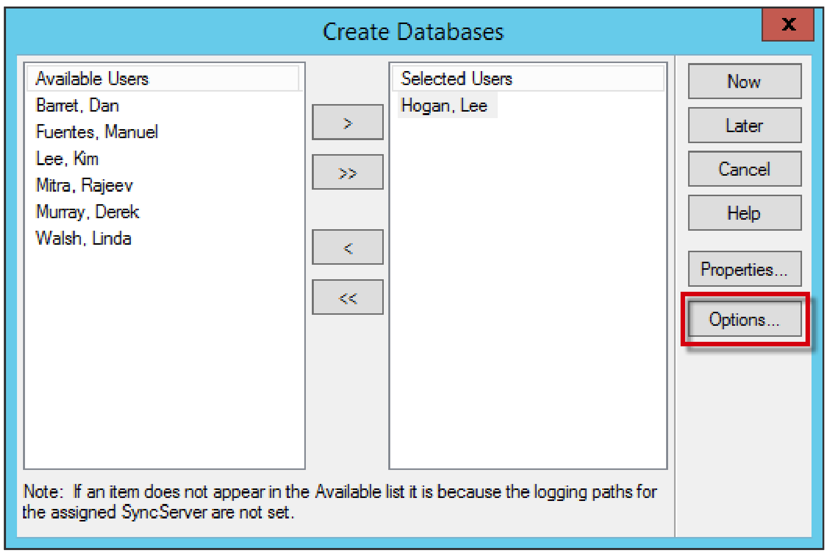
Exercise steps

1. Create a new folder called **RemoteDB** on the **C:** drive of the training workstation.

When using the Create on SQL Host option, the folder must be on the Database Server and shared. The CREATOR OWNER must also be set to Modify Permissions at a minimum. In the training workstation, you're using the Create on SQL Express Instance from SQL Host option so you need a valid folder location on the computer where SQL Express is installed.

2. Open **Infor CRM Administrator**.
3. Type *admin* in the **Username** field. No password is required.
4. Select **Tools > Create Remote User Databases** from the menu bar. The **Create Databases** window opens.

   Only users created with the Remote User type are included in this list.
5. Select **Hogan, Lee** from the list of **Available Users** and then click the right arrow to move Lee to the Select Users list.
6. Click **Options**. The **Create Database Options** window opens.



7. Select the **Create on SQL Host** radio button.
8. Type *Ma$t3rk3y* in the **SQL Express sysdba password** field.

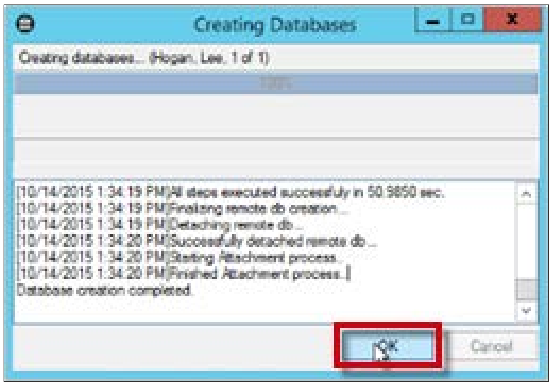
   Since you configured Database Options in a previous exercise the usernames and passwords for Host and Target Database are already populated. To review, they are:

   - **Host Database Owner Login ID:** sysdba
   - **Host Database Owner Login Password:** Ma$t3rk3y
   - **Target Database Administrator Login ID:** sa
   - **Target Database Administrator Login Password:** password
9. Type *C:\RemoteDB* in the field within the **Remote Path** pane.

   Use the format drive letter:\shared_folder_path. Do not include the computer name.
10. Select the **Create DTS** package and run it immediately (do not save it) option.
11. Click **OK**. The **Create Databases** window opens.
12. Click **Now**.

The status of the database creation indicates the progress. If there are any errors, double-check the **Remote Path** entered matches an existing folder and the passwords for the **Host** and **Target Database** are correct.

13. Click **OK** after the database creation is complete.



14. Click **Cancel** in the **Create Databases** window.
15. Minimize the Infor CRM Administrator.

- Open the **C:\RemoteDB** folder to view the files created:
- SLX_lee_dat.dat (database)
- SLX_lee_log.ldf (log file)

You're now ready to attach the database to the SQL Express instance on Lee's workstation.

How do remote users receive their remote database files?

If a user's computer is connected to the network, you can save the database file to a shared network folder and they can copy the file(s) to their local systems. If a user's computer isn't connected to the network, you can copy the database file(s) to the user's computer using some form of removable media or send through email or another file hosting service.

How do remote users attach their database files?

The Attach Remote utility is used to attach and detach databases. If a database already exists on a remote/offline user's computer, Attach Remote automatically detaches the existing database and attaches the new database when executing the *.sxd file.

You may also use the Attach Remote utility on the Administrator workstation when resynchronizing or testing with a copy of a remote user or remote office database.

Some notes to consider when using this utility:

- It's only possible to attach a remote database locally. However, you can detach a remote database across a network.
- To attach a database, the remote database, Attach Remote, and the SQL Express instance must all be present on the local machine.
- Attach Remote doesn't accept a mapped drive or UNC path for the remote database.
- The connection contains the following values:
  - The Database Name is set to SLXRemote.
  - The Server Name is set to the name of the Remote user's computer.

- The User name is set to sa.
- The sysdba password is set to Ma$t3rk3y.
    - When attaching the remote database, if the sysdba user does not exist, the user is created with a password set to Ma$t3rk3y. If the sysdba user already exists in the remote Microsoft SQL instance, then the sysdba user's password remains unchanged. However, the database installation sets the sysdba password in the Connection Manager to Ma$t3rk3y. Therefore, if the sysdba password on the remote database is set to a value other than Ma$t3rk3y, the Remote user must open the Connection Manager and change the sysdba password to the value in their database.

After creating the remote database, there is no sa password. You may need to adjust this setting in the Attach Remote utility.

In addition to the password, if you must change other settings in the Attach Remote utility, run command "C:\Program Files\Saleslogix\AttachRemote.exe"

How do users sign in to Infor CRM when remote?

After installation, the user who installed Infor CRM must log on to the Client computer(s) for the first time and launch various applications. This process creates the necessary registry entries for each application and creates a connection to the Remote database.

A user can sign in to the Infor CRM Windows Client using the new remote database data link (e.g. REMOTEDB). The user can still use the main database/main office data link (e.g. MAINDB) whenever (s)he is back in the office and sync as soon as a network connection is obtained and before disconnecting again.

Exercise 6.3: Attaching a remote database

In this exercise, you will attach a remote database and setup a remote data link.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

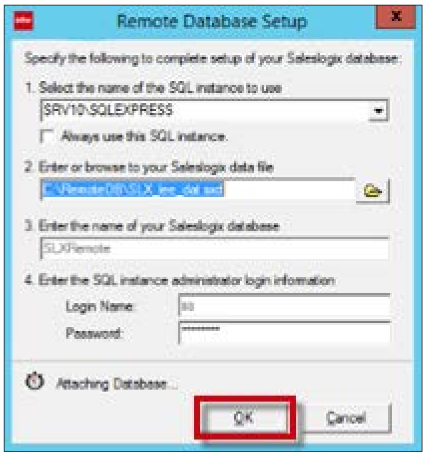
I've installed the Remote Client on Lee Hogan's computer. How do I attach the remote database now so he can sign in and test synchronization?

- Use the Attach Remote utility to attach the remote database.
- Setup the remote data link and sign in to the Remote Client.

Exercise steps

Part 1: Attach a remote database

1. Open the **C:\RemoteDB** folder housing the remote database files for Lee Hogan.
2. Double-click the **SLX_lee_dat** file. The **Remote Database Setup** window opens.
3. The setup automatically detaches an existing remote database (if any) and attaches the new database. After this process completes, a pop-up message informs you that the database installed successfully.
4. Click **OK** on the popup message.
5. Click **OK** again (if required) on the **Remote Database Setup** window.



Part 2: Setup a remote data link

1. Select **Start > All Programs > Saleslogix > Infor CRM Client**. The **Please log on** window opens.
2. Click the ellipsis in the **Log on to** field. The **Data Link Manager** window opens.
3. Click **Add**.
4. Select **Saleslogix OLE DB Provider** and then click **Next**.
5. Select **SRV10** from the **Select or enter the Saleslogix Server** drop-down list.
6. Select **SLXREMOTE** from the **Select Saleslogix database name** drop-down list.
7. Type *admin* in the **Saleslogix User Name** field.
8. Click **Test Connection**. The **Test connect** window opens.
9. Click **OK**.
10. Click **OK** again.
11. Click **OK** again to close the **Connection Name** window.
12. Double-click **SLXREMOTE** from the **Data Link Manager** window.
13. Type *lee* in the **Username** field. No password is required.
14. Click **OK**.

The **Infor CRM Remote Client (Windows)** opens. Notice the **What's New** option under the **Sales Nav Bar**, **Synchronize** in the toolbar, as well as the **File > Subscribe** and **File > Synchronize** menu items. We'll explore the Remote Windows Client in a later lesson.

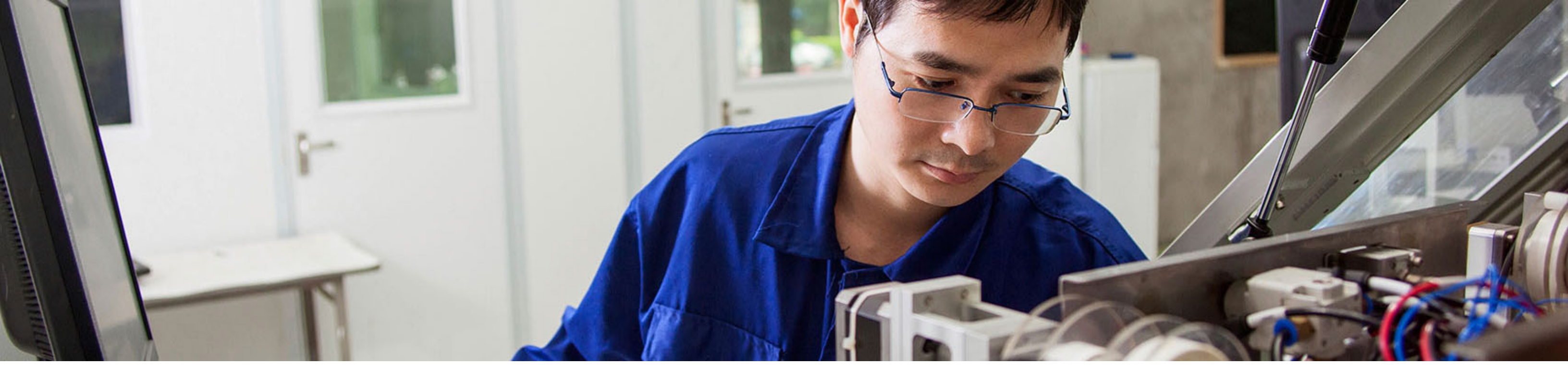
Check your understanding

What are the options for user profile sync?

Does a remote user need to connect to the host database before use?

Do History Records expire?

How do users attach their database?



Lesson 7: System maintenance

Estimated time

2 hours

Learning objectives

After completing this lesson, you will be able to:

- Discuss scenarios that might require a manual backup or restore of a database.
- Summarize the available data maintenance tools and their purposes.
- Identify where to find system upgrade documentation and installation files.
- Explain how to create Windows and Web development environments.

Topics

- Data backup and recovery
- Data maintenance tools
- System upgrades
- Customizations
- User maintenance

Data backup and recovery

Creating and executing a backup schedule is crucial for disaster recovery and preparedness. You or your Database Administrator (DBA) should automate a backup job for the Infor CRM database that runs on a regular schedule (Infor recommends daily). In addition to scheduled jobs, you should always create a database backup before applying an update, creating a development environment, installing a customization, or performing data maintenance so you can restore its previous state if anything goes wrong.

Can I restore the Infor CRM database on another server?

When restoring an Infor CRM SQL database backup from one server to another, you must synchronize the database's sysdba user to the new SQL server's sysdba user. This can be done using a SQL stored procedure. You can find this procedure in the **\Database** folder on the Infor CRM Installation DVD: sysdbafix_script.sql. It contains the following command to run against the Infor CRM database:

sp_change_users_login 'Update_One', 'sysdba', 'sysdba'

How can I tell when users are signed on?

The physical connection to your Infor CRM database uses OLE DB Connection Pooling. Each client query uses one connection from a pool of connections available for use on the Infor CRM Server and then releases the connection when the query is complete. If a user is signed in to Infor CRM but (s)he is not retrieving information from the database, a connection to the database is not being consumed.

Nevertheless, if you are planning system maintenance, it's best to wait until all users are signed off before making changes. In the **Users** view of the Infor CRM Administrator, any users currently signed in to Infor CRM Windows or Web (not Mobile) are denoted with a green arrow next to their user record.

Exercise 7.1: Backup and restore a database

In this exercise, you will backup and restore a database under the same name.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

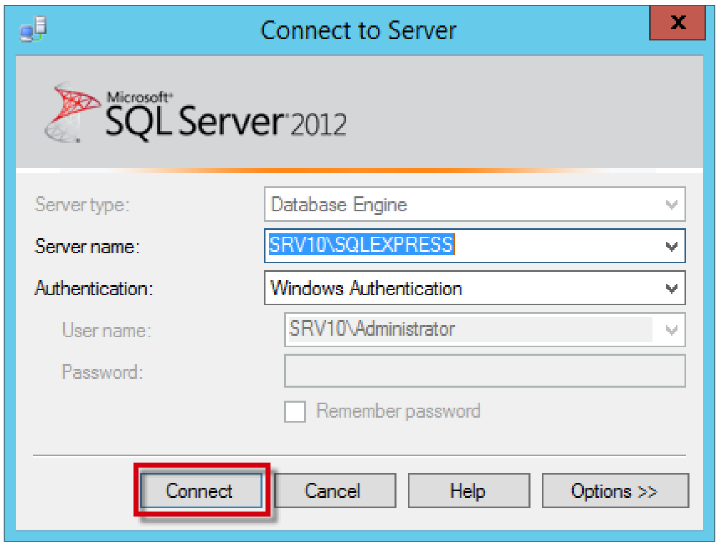
Before performing data maintenance on the Infor CRM database, how do I create a backup in case I need to restore?

- Backup the saleslogix_eval database as an example. Use the defaults provided by Microsoft SQL Server 2012.
- Restore the database under the same name.

Exercise steps

Part 1: Backup a database

1. Select **Start > All Programs > Microsoft SQL Server 2012 > SQL Server Management Studio**. The **Connect to Server** window opens.
2. Select **SRV10\SQLEXPRESS** from the **Server name** drop-down list.
3. Select **Windows Authentication** from the **Authentication** drop-down list.
4. Click **Connect**.



5. Expand **SRV10\SQLEXPRESS > Databases** from the Object Explorer.
6. Right-click **saleslogix_eval**, point to **Tasks**, and then click **Back Up**. The **Back Up Database – saleslogix_eval** window opens.
7. Click **OK**. A confirmation window opens.
8. Click **OK** again.

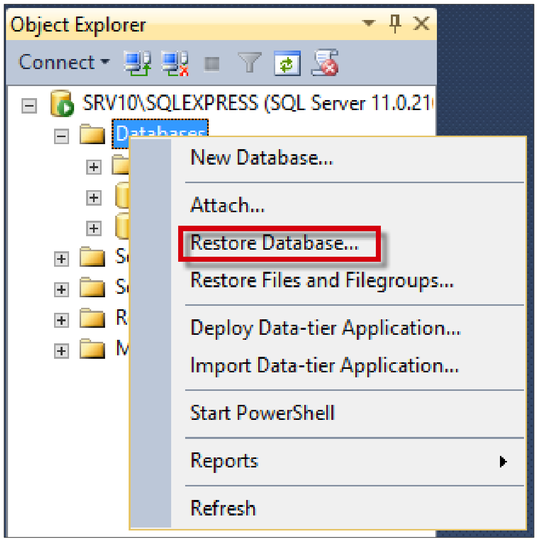
   The saleslogix_eval.bak file is saved in the following default folder on the same server: **C:\ProgramFiles\Microsoft SQL Server\MSSQL11.SALESLOGIX\MSSQL\Backup**.

Part 2: Restore a database under the same name

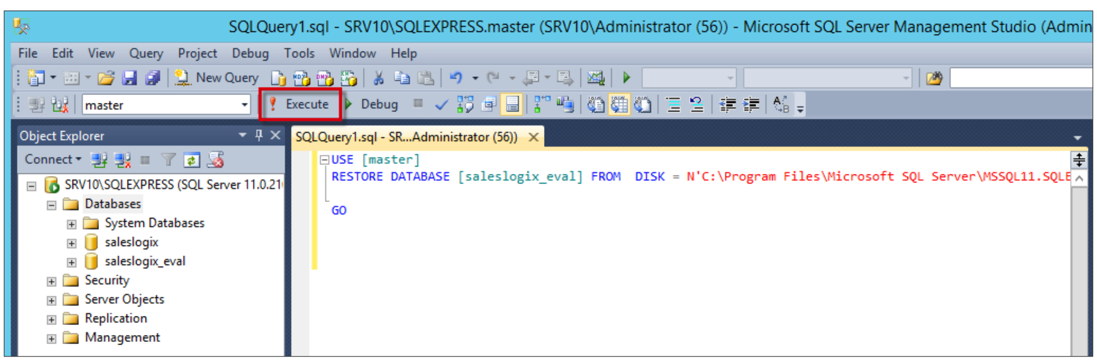
Imagine you made some errant changes in the database and now want to restore it to its previous state. Restoring the database under the same name allows you to keep existing connections in the Infor CRM Connection Manager. Before restoring a database, you must ensure the target database (if it already exists) isn't currently in use.

1. Expand **SRV10\SQLEXPRESS > Databases** from the Object Explorer.
2. Right-click **saleslogix_eval** and then click **Delete**. The **Delete Object** window opens.
3. Clear the **Delete backup and restore history information for databases** check box.
4. Select the **Close existing connections** check box.
5. Click **OK**.

6. Right-click **Databases** from the Object Explorer and then click **Restore Database**.



7. Select **saleslogix_eval** from the **Database** drop-down list. **Note**: This name must be the same as the one you deleted.
8. Click **Script** on the **General** tab.
9. Click **Verify Backup Media**.
10. Close the **Restore Database – saleslogix_eval** window. Notice the restore script is written in the background.
11. Click **Execute** to run the SQLQuery.

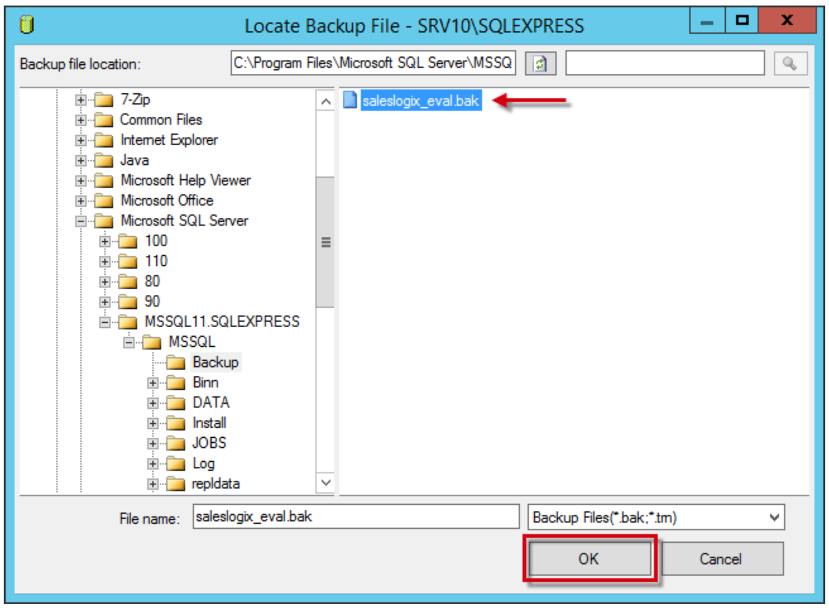


12. Click **Refresh** within the Object Explorer to refresh the database.

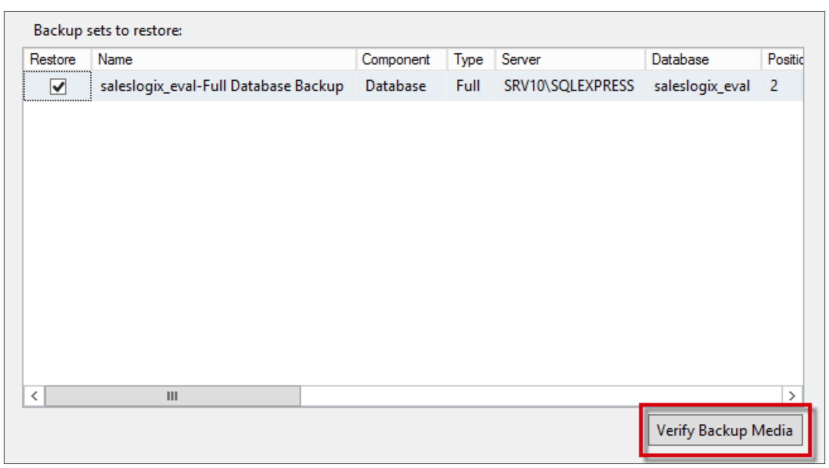
Part 3: Alternative method for restoring a database

1. Right-click **saleslogix_eval** and then click **Delete**. The **Delete Object** window opens.
2. Clear the **Delete backup and restore history information for databases** check box.
3. Select the **Close existing connections** check box.
4. Click **OK**.
5. Right-click **Databases** from the Object Explorer and then click **Restore Database**. The **Restore Database** window opens.

6. Select the **Device** radio button and then click the ellipses. The **Select backup devices** window opens.
7. Verify **File** is selected in the **Backup media type** drop-down list.
8. Click **Add**. The **Locate Database Files – SRV10\SQLEXPRESS** window opens.
9. Navigate to **the C:\Program Files\Microsoft SQL Server\MSSQL 11.SALESLOGIX\MSSQL\Backup** directory (if you don't begin here by default) and then select **saleslogix_eval.bak**.
10. Click **OK**.



11. Click **OK** again to close the **Select backup devices** window.
12. Select the most recent backup set to restore and then click **Verify Backup Media**.



13. Click **Script** once the media has been verified.
14. Close the **Restore Database – saleslogix_eval** window.
15. Click **Execute**.

16. Click **Refresh** in the Object Explorer once the query successfully executes.
17. Close **Microsoft SQL Server Management Studio**.

Data maintenance tools

Infor CRM includes several utilities to inspect your Infor CRM data and make bulk changes. Although you can write your own queries inside SQL Server Management Studio (or other Relational Database Management System) to act with data, the Infor CRM tools allow you to perform specific, commonly-used data maintenance tasks without having to sign in directly to your database server.

What tool should I use to search and replace data?

The Replace Data Wizard in the Infor CRM Windows Client (Tools > Maintenance > Replace Data) is an easy way to replace one or more values with another value in the ACCOUNT, CONTACT, or OPPORTUNITY tables. Locate the Replace Data Wizard by clicking **Tools**, clicking **Maintenance**, and then clicking **Replace Data**. Consider running this wizard if mass changes need to be made to data. For example, a new telephone area code is introduced and must be applied to all affected records.

The Replace Data Wizard works within the context of the current account, contact, or opportunity group. Before running the wizard, it is best practice to select the group you want to work with from the group tabs, or create an ad hoc group using the Query Builder. If you want to find/replace data for records other than account, contact, or opportunity, use the Execute SQL tool in the Saleslogix Administrator (**Tools > Execute SQL**).

What tool should I use to delete a group of records?

The Purge Records Wizard in the Infor CRM Windows Client found by clicking **Tools**, clicking **Maintenance**, and then clicking **Purge Data** is an easy way to delete a group of records in the ACCOUNT, CONTACT, or OPPORTUNITY tables. Deleting one of these records also purges data in related tables for that record such as HISTORY.

To purge data for records other than account, contact, or opportunity, use the Execute SQL tool in the Infor CRM Administrator by clicking **Tools** and then clicking **Execute SQL**.

What tool should I use to find and resolve missing or invalid references?

The Integrity Checker in the Infor CRM Administrator found by clicking **Tools** and then clicking **Integrity Checker** allows you to locate errors and correct records in your database. Integrity Checker uses libraries of tests looking for missing or invalid references in a variety of tables such as attachments with a bad file name/path or a ticket activity not tied to a parent ticket ID.

What tool should I use to find and resolve duplicate records?

A Check for Duplicates wizard is available from both the Windows and Web Clients. Although both tools allow you to check for and resolve duplicate records in the Infor CRM database, they have a few differences.

Windows Client duplicate checker

The Check for Duplicates Wizard in the Infor CRM Windows Client is an easy way to check for duplicate records in the ACCOUNT or CONTACT tables. Locate the Check for Duplicates Wizard by clicking **Tools**, clicking **Maintenance**, and then clicking **Check for Duplicates**. The Windows version of the duplicate checker offers the following benefits:

- Choose any field on the entity to use for comparison whereas the Web version allows you to choose from a limited number of fields.
- Broaden or narrow matching criteria by including case sensitivity or comparing the first few letters of a field value—a number you can choose.

Web Client duplicate checker

If you have the Web Client running with SpeedSearch configured, you can alternatively use the duplicate checker by clicking **Tools** and then clicking **Check for Duplicates** to check for duplicate records in the ACCOUNT, CONTACT, and LEAD tables.

- You can save the results of a duplicate checking job for processing later whereas the Windows version requires you to act on the results at the same time as the duplicate checking process.
- You can use a custom rating system to label matching records. This rating may be useful if you have different people running the check and processing the jobs.
- You can broaden or narrow matching criteria by including Stemming, Phonics, Synonyms, and a custom Fuzzy Matching level.
- You can choose individual fields to keep from either the source or target record when performing a merge whereas the Windows version doesn't allow you to choose at the field level.

Exercise 7.2: Checking for duplicate records

In this exercise, you will check for duplicate contacts and leads.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

It's been a few weeks since my customers have entered Infor CRM data. How do I check for duplicate records to ensure data is kept clean?

- Use the Windows Client to check for duplicate account records.
- Restore the database under the same name.

Exercise steps

Part 1: Check for duplicate contacts

1. Open the **Infor CRM Windows Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.

4. Select **Tools > Maintenance > Check for Duplicates**. The **Check for Duplicates Wizard** opens.
5. Select the **Accounts** radio button and then click **Next**. The **Select Search Options** screen opens.
6. Select the **All records** radio button and then click **Next**. The **Select Group Options** screen opens.
7. Select the **Entire Database** radio button and then click **Next**. The **Select Fields to Compare** screen opens.
8. Select the following fields:
    - Account.Type
    - Account.Account
9. Click **Next**. The **Field Comparison options** dialog box opens.

The Duplicate Checker looks for all selected fields using **AND**. The more fields you select, the more filtered the search.

10. Double-click inside the **ALL** cell in the **Characters** column of the **Account.Account** row. Another **Field Comparison Options** window opens.
11. Select the **Compare the first** radio button and set the value to **3**.
12. Click **OK**. The **Field Comparison Options** screen opens.
13. Click **Next**. The **Assign Default Behavior** screen opens.
14. Select **Merge records into the FIRST record CREATED** from the drop-down list and then click **Finish**.

You can change the behavior per set of duplicate records later. Setting a default now prevents you from having to do a lot of manual intervention later.

If no matching records are found, the Duplicate Checker closes. If one or more records match the criteria, they appear as a set in the **Duplicate Record Confirmation** window. The window shows one matching set at a time. Notice the two records found match the criteria specified:

Status	Created (yyyy/mm/dd) /	Modified (yyyy/mm/dd)	Account.Type	Account.Account	History
MERGE	2010/12/10	2014/08/05	Customer	First Management	0
PRIMARY	2010/12/10	2014/08/05	Customer	First America	0

Duplicate Record Confirmation window

- Account Type is equal (Customer)
- The first three letter of the Account Name are equal to "**Fir**."

Evidently, the search criteria is a bit loose. These are two separate records so let's skip this set.

15. Click **Skip**.

The next set of matching records appears in the window. This time you have three records which meet the criteria.

Status	Created (yyyy/mm/dd)	Modified (yyyy/mm/dd)	Account.Type	Account.Account	History
MERGE	2010/12/10	2014/08/05	Prospect	First Radio	0
MERGE	2010/12/10	2014/08/05	Prospect	First Printing	0
PRIMARY	2010/12/10	2014/08/05	Prospect	First Processing	0

Duplicate Record Confirmation window

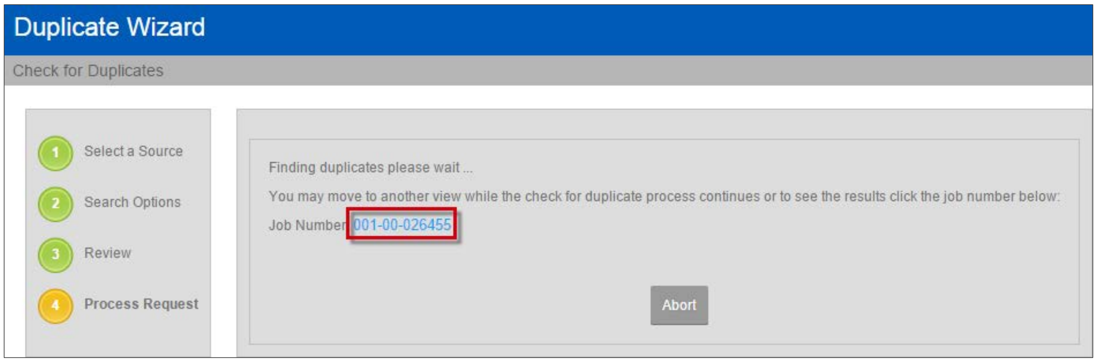
For training purposes, let's assume you know First Printing and First Processing are the same company. They've recently had a name change. Since both accounts were created on the same date, you should next check to see which record has the most history. Neither of these rules apply here because it's evaluation data so leave the First Processing record as PRIMARY and the First Printing record set to MERGE.

16. Right-click the **Status** cell of the **First Radio** record and then click **Change Status**. The **Status** window opens.
17. Select **IGNORE.**
18. Click **OK**.

    Infor CRM merges the selected record with the primary record. All notes, history and activities appear in the Primary record, however, other information such as address, phone numbers, type are deleted. Within the Duplicate Checker, the next set of matching records appears in the window. Because you used broad criteria for training purposes, you have various potential matches.
19. Click **Cancel** to close the remaining sets.

Part 2: Check for duplicate leads

1. Open the **Infor CRM Windows Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Select **Tools > Check for Duplicates**. The **Select a Source** screen opens.
5. Select **Lead** from the **Select type of job** drop-down list.
6. Select **All Leads** from the **Group** drop-down list.
7. Click **Next**. The **Search Options** screen opens.
8. Click **Advanced Match Options**. The **Match Options** window opens.
9. Set the value of the **Fuzziness Level number** to **1** to narrow the search criteria.
10. Click **OK** to return to the **Search Options** screen.
11. Clear the **Email** check box.
12. Select the **Industry** check box.
13. Click **Next**. The **Review** screen opens.
14. Click **Submit**. The **Process Request** screen opens.
15. Click the **Job Number** link. The **Check for Duplicates History 0 –1-00-025862** screen opens.



Wait for the job status to finish. When complete, there are two duplicates with a score of 100:

16. Click **Resolve** next to Richard Bowersock. The **Resolve Duplicate Record** window opens.
17. Scroll down to the **Unresolved Duplicates** pane and click **Merge** next to Bridget Bowersock. The **Merge Records** window opens.

18. Choose the values you want to keep during the merge either from the Source or Target record. Since these records are different, there aren't many shared values. Let's keep all values from the Target. Click **Merge**.

    The selected records merge and the **ALL LEADS** view opens.

System upgrades

Periodically, updates (previously known as hot fixes) and service packs are released to correct known issues or feature enhancements.

Where do I find updates and service packs?

Infor CRM partners can find updates and service pack downloads/documentation in the Infor CRM Partner Portal: https://www.inforxtreme.com. Customers can also find downloads appropriate to their product from the Infor CRM Customer Portal https://www.inforxtreme.com. If you have signed up for alerts from within the portal, you receive notifications of new updates via email.

What steps are involved in an upgrade?

Always follow the steps in the upgrade documentation before performing a system update. Each upgrade may have specific steps included in the Upgrade Workplan. Generally, most upgrades use the following process:

- Confirm all Infor CRM users are signed off.
- Confirm the Sync server won't run while installing.
- Backup your Infor CRM database.
- Backup any customizations made.
- Upgrade administrative tools and servers.
- Upgrade client applications.
- Install the service pack bundles (.sxb) in the Administrator.
- Upgrade the Web Host
- Restore the project backup (.zip) in the Application Architect.
- Rebuild the web platform.
- Deploy Core Portals.
- Test the upgrade.

Customizations

The Infor CRM Clients (Windows, Web, and Mobile) are fully customizable. Although training for customizations is outside the scope of this course, you'll review which tools are available and how to create a development or test environment. Visit http://www.infor.com/services/education/ to learn about more training opportunities for Infor CRM Developer courses.

Windows customizations

Your resident developer or Infor CRM Business Partner can use the Infor CRM Architect to customize the Infor CRM Windows Client. All the pieces making up the Infor CRM Windows Client interface such as forms, main views, toolbars, menus, scripts, and more are referred to as plugins. The Architect allows you to modify existing plugins or create your own. You can also create custom tables, fields, joins, lookups, and pick lists.

The Architect includes a code editor that supports VBScript. For advanced customizations, you can use the Infor CRM .NET Extensions Manager to import custom DLLs or EXEs created outside the Architect tool such as those created in Visual Studio.

Any of these customized and tested items in a development environment must be packaged inside of a bundle (sxb) file. After backing up the production database again, you can then install the bundle in the production environment using the Infor CRM Administrator. During the bundle installation process, you can also choose the users and teams to release plugins to should you want to limit the customizations to a specific group of users.

Web customizations

Your resident developer or Infor CRM Business Partner can use the Infor CRM Application Architect to make customizations to the Infor CRM Web Client. All pages (aspx) making up the Infor CRM Web Client interface such as Account Detail or Insert Opportunity are grouped within the Infor CRM portal. The portal determines the look and feel (template) and the navigation (menus and nav bars) for the website. Pages serve as containers for smart parts (ascx) including the controls (text boxes, lookups, buttons, and more) with which users interact. Each control has a set of properties defining which property it's linked to in the database as well as any actions or behaviors it has through business rules, events, and more. The Application Architect allows you to modify existing interface elements or create your own. You can also create custom entities, properties, relationships, and action items.

The Application Architect includes a code editor supporting C#.NET. For advanced customizations, you can import external assemblies or VB.NET code snippets created outside the Application Architect tool such as those created in Visual Studio.

Any of these customized and tested items in a development environment must be packaged inside of a web bundle (zip) file. After backing up the production database again, you can then install the web bundle in the production environment and redeploy the website using the Application Architect. To release the customizations to a specific group of users, you must assign the items to a secured action, assign the secured action to a role, and assign specific users to that role.

Mobile customizations

Your resident developer or Infor CRM Business Partner can use Notepad++ or other JavaScript/CSS/HTML Editor such as WebStorm to make customizations to the Infor CRM Mobile Client. In addition to an editor and a working Infor CRM Web environment with SData configured, a mobile development environment also requires a copy of the Infor CRM mobile deployment files and the argos-sdk and argos-saleslogix frameworks.

After backing up the production database again you can add the customized files in the production environment as support files in the SlxMobile portal using the Application Architect.

User maintenance

Over time, personnel and user needs may change. Infor CRM supports a variety of scenarios when user circumstances change.

What happens when a user leaves and no longer requires Infor CRM?

When a user leaves your company, it's recommended to convert his or her user profile to a retired user rather than delete it. Retired users don't use a license and cannot sign in but their name is preserved in the database. This prevents history records from displaying "Unknown User." Instead, choose to inactivate a user by clearing the Login Active check box which also preserves history and prevents the user from signing in to Infor CRM but still consumes a license.

Variable	Deleted	Inactivated	Retired
Can sign in to the database			
Consumes a license		X	
History records removed reference to the user	X		

If you are retiring a user who owns accounts, it's recommended to reassign territories and activities. Additionally, ensure the user doesn't have a Team Owner security profile, reports only to the Administrator, and isn't a manager with direct reports.

Exercise 7.3: Realigning activities and changing a user's type

In this exercise, you will realign activities and change a user's type.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

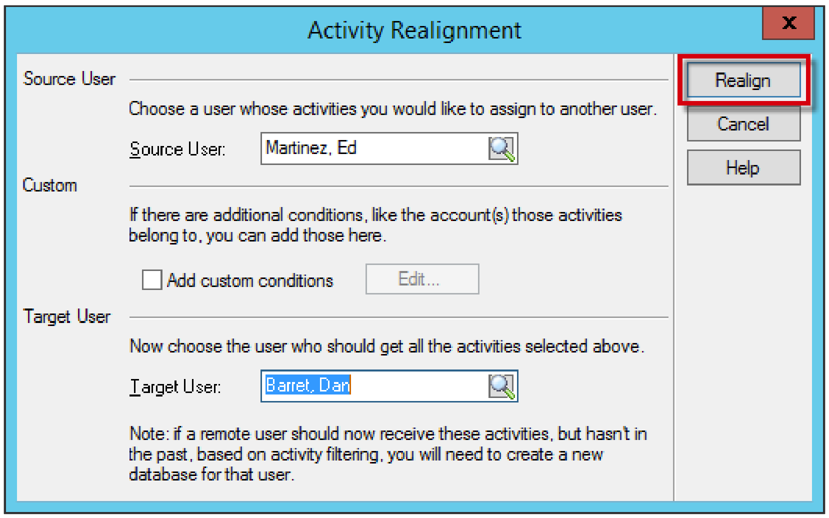
Ed Martinez is taking a short leave of absence. While he is gone, Dan Barret is managing Ed's activities. How do I adjust these settings?

- Change the user's user type to Retired during the leave.
- Change the user's user type back to Network when he returns.

Exercise steps

Part 1: Realign activities

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Select **Tools > Realign Activities** in the menu bar. The **Activity Realignment** window opens.
5. Search and select **Ed Martinez** in the **Source User** field.
6. Search and select **Dan Barret** in the **Target User** field.
7. Click **Realign**. A confirmation message appears.

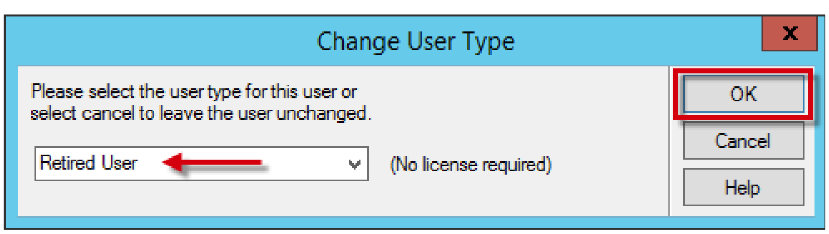


8. Click **Yes**.

   Infor CRM sets Dan as the owner of Ed's scheduled activities. When Dan signs in to Infor CRM, he sees the new activities on his calendar.

Part 2: Change a user's type

1. Select the **Administration Nav Bar > Users**.
2. Click the **All Users** tab and locate **Ed Martinez**.
3. Right-click and then select **Change User Type**. The **Change User Type** window opens.
4. Select **Retired User** from the drop-down list.
5. Click **OK**.



Notice how a license isn't required for a retired user type. When Ed Martinez returns, you can change his user type back to Network User. Any new activities scheduled by Ed after the activity realignment are no longer assigned to Dan.

Check your understanding

When would you want to realign a user's activities?

Can you restore a backed-up database to a different server?

?

What is the difference between Retiring and Deleting a User?

!

?

Why should you regularly check for duplicate records?

!

Lesson 8: Integrations and enhancements

Estimated time

1 hour

Learning objectives

In this lesson, you will:

- Discuss the different integration options Infor CRM has: Ming.LE, ION, BOE.
- Discuss the enhancements available for outlook
- Discuss Web Integrations Nav Bar.
- Discuss Administrator integrations.

Topics

- About integrations and enhancements
- Different integrations for Infor CRM
- Web Client integrations Nav Bar

About integrations and enhancements

Within Infor CRM there are many integrations and enhancements that can be added to a standard installation. These include business intelligence software, enhancements to emails programs, and integrations to certain ERP systems.

To learn more about these products, including how to administer, install, please contact your business partner or sales representative.

Different integrations for Infor CRM

Intelligent Open Network (ION)

Infor's Intelligent Open Network, or ION, allows for the easy integration of both Infor and third-party software applications. ION is Infor's advanced middleware platform. Providing the flexibility needed to make a complex set of enterprise systems work together for long-term sustainability and optimize ROI.

Advanced Analytics

Advanced Analytics is a powerful yet easy to learn and use interactive business intelligence solution that allows you to increase organizational and customer intelligence. This enhancement provides the tools so that users at every level can monitor productivity, analyze trends, and identify issues that enable them to focus attention and resources on the most profitable business activities.

Back Office Extension (BOE)

Back Office Extension is a product that allows your Infor CRM application to integrate with your ERP system. By integrating Infor CRM to your ERP solution; including detailed customer information, invoices, orders, and more, you can streamline your systems. Using this can allow you to be more responsive to your customer needs, to help your sales people close more deals, and service more customers.

When enabled the Back Office Extension feature users the Infor ION framework to manage the flow of real-time data between Infor CRM and ERP software.

Ming.LE

Infor Ming.le is a comprehensive platform for social collaboration, business process improvement, and contextual analytics. Infor Ming.le is fully embedded with organizational systems such as ERP, financials, and Infor CRM.

Desktop enhancements

Xbar

Infor CRM's Xbar for Microsoft® Outlook® is an add-in to Infor CRM that seamlessly embeds the functionality of Infor CRM into Microsoft® Outlook® 2010 and newer versions. Xbar docks a window seamlessly into Outlook that allows for a context-aware, intuitive addition to the Outlook interface.

With Xbar you can easily access Infor CRM information from within Microsoft® Outlook®, or have data seamlessly load based on contacts within Outlook. Create Infor CRM Contacts from Outlook Contacts, as well as new accounts and opportunities. You can sync Outlook with Infor CRM to add new calendar events and activities to Infor CRM as well.

Web Client integrations Nav Bar

This navigation bar gives you access to different integrations you have installed on your Infor CRM system.

SData Sync Configuration

Sdata provides a simple protocol for reading data from and writing to Business Applications. The Sdata integration is used for everything from the Infor CRM Mobile Client, Desktop Integration, and Xbar. Sdata is deployed on your Infor CRM Webserver.

The Sdata Sync Configuration toolbar is used to feed synchronization information to Infor CRM. This can be used to create integrations with different extensions such as Infor CPQ, Sync with Google, Outlook Sync, and Back Office Extensions.

Integrations

The Integrations List view displays all the integrations that you have access to. This list includes all the integrations released by Infor CRM as well as any custom integrations. You can use groups and lookups to narrow the list of records that display.

ERP Persons

This will be available if you have Back Office Extensions installed on your Infor CRM installation. This view allows access to a user within the back office integration and can be used to assign data ownership.

Outbound Trans

Outbound transaction is another component of Infor CRM's Back Office Extensions. The list view will detail all the outbound transactions that the logged-on user has access to. This view can also show newly promoted or updated Infor CRM records that are waiting to be processed by the outbound JobService.

Lesson 9: Web security

Estimated time

1 hour

Learning objectives

In this lesson, you will:

- Describe how Infor CRM handles security.
- Discuss creating and using Roles.
- Discuss creating and using Secured Actions.
- Describe the Security Manager.

Topics

- Web security
- About roles

Web security

About secured actions

A role determines what functionality a user can access in the Web Client. Roles use secured actions to control access to user interface elements such as pages, menus, menu items, toolbars, and buttons. When you control access to individual user interface elements, you can control access to actions such as editing, deleting, or printing. Current secured elements are all user interface elements giving access to accounts, contacts, and opportunities.

You secure a user interface element by assigning a secured action to its Applied Secured property in the Application Architect. Once a secured action is applied to a user interface element, only users who are assigned a role that includes the secured action can see and use the element. For example, Entities/Account/Save is the secured action assigned to the Applied Security property for the Save button action on the Account Detail view. When the button loads at runtime, the display value changes depending on whether the user has permission to perform the action.

A user interface element in the Web Client that is secured restricts access from all users until a role is assigned which gives access to the user. To secure elements in the Web Client using roles you must add secured actions to elements, add the secured action to a role, and assign users to the role.

Elements are secured in the Application Architect by assigning a secured action to them, or applying security. The value of the Applied Security property is the secured action name. To secure an element in the UI and allow users access to that element you must:

1. Determine which secured action you want to use to secure the element. If necessary, you can create a new secured action in the Web Client.
2. Add a secured action to the Applied Security property for the element in the Application Architect. See the "Understanding Secured Actions" topic in the Application Architect Help for more information.
3. Add the secured action for that element to a role in the Web Client.
4. Assign users to the role.

Exercise 9.1: Creating secured actions and assigning them to a user interface item

In this exercise, you will create new Secured Actions from the Web Client, and the Application Architect application. A Sales_Script secured action will be created to secure a button on the Account Details form. Also, a Navigation/Marketing action will be created to secure the Marketing Nav Bar.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Create a new secured action in the Web Client

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Right-click the **Secured Actions** link.
6. Click **New Secured Action**.
7. Type *Sales* Script in the **Name** field.
8. Type *Run a Sales Script Button* in the **Description** field.
9. Click **Save**.
10. Minimize the **Sage SalesLogix Web Client** browser window.

The following steps are examples to show how you could modify a user interface item to use a secured action in the evaluation database. You should always consult your Infor CRM Web Developer before modifying anything in a production environment.

Part 2: Assign a secured action to an interface item

1. Open **Application Architect** by selecting **Start > All Programs >Saleslogix > Application Architect**.
2. Open **Project Explorer** by selecting **View > Project Explorer**.
3. Expand **VFS on INFORCRM EVAL > Entity Model > Packages > SalesLogix Application Entities > Account > Forms**.
4. Double-click the **AccountDetails** form to open it in the workspace.
5. Right-click on the form and then select **Rows > Add Row**.
6. Right-click the left cell in the new row.
7. Select **Insert > Button > Button**.
8. Select **View > Properties**. The **Properties** window opens.
9. Click the new button to show its properties in the **Properties** window.
10. Type *Sales Script* in the **Caption** property.
11. Expand the **On Click Action** property.
12. Select *Sales Script* from the drop-down list in the **Applied Security** property.
13. Click the ellipses within the **Action Name** property. The **Action Item Designer** dialog box opens.
14. Select the **Show Message** action.
15. Type *Phoenix Computers was founded in 1987* in the **Text** field.

16. Type *Company History* into the **Title** field.
17. Click **OK** in the **Action Item Designer** window.
18. Click **Save**.

Part 3: Create a Secured Action from Application Architect

1. Expand **VFS on INFORCRM EVAL > Portal Manager > SlxClient > Navigation**.
2. Double-click **Marketing** to open it.
3. Select **<Add New Action>** from the **Applied Security** field. The **Add Secured Action** dialog box opens.
4. Type *Navigation/Marketing* in the **Secured Action Name** field.
5. Type *Access Marketing Nav Bar* in the **Description** field.
6. Click **OK**.
7. Click **Save All**.

Part 4: Rebuild the Web Client

1. Click **Run** on the Application Architect toolbar.
2. Close **Application Architect** when the deployment is complete.

   At this point, you haven't used the secured action yet because this feature is currently available to all Infor CRM Web Client users. Now you need to assign the action to a role, and then assign new sales representatives to that role.

About roles

Permissions to features and functionality in the Web Client are determined by roles. You can create any number of roles and assign them to any number of users. A user can have one or more roles assigned to them. You cannot assign a role to a department or team.

Default roles

By default, new users created in the Administrator application are not assigned any role. Users created in the Web Client are given the Standard User role by default. This allows access to most non-administrative functions in the Web Client, such as access to Leads, Accounts, Contacts, and Opportunities.

If you remove a user from this role, the user will not have access to any items that have been secured unless you assign them a new role.

The default roles include:

- **Administrator:** Allows add, edit, and delete permissions to administration functions such as users, teams, departments, pick lists, products, and packages.
- **Standard User:** Allows add, edit, and delete permissions to all Web Client non- administrative entities such as accounts, contacts, opportunities, tickets, defects, and so on.
- **Account Management:** Allows add, edit, and delete permissions to accounts.
- **Contact Management:** Allows add, edit, and delete permissions to contacts.
- **Opportunity Management:** Allows add, edit, and delete permissions to opportunities.

Roles work differently in the Web Client than they do in the Windows Client. Security in the Windows Client is defined using feature security, function security, and administrative roles, whereas Web security combines all Network elements into one security model - a role. You cannot use the Network security model for Web users or the Web security model for Network users.

Exercise 9.2: Managing roles

In this exercise, you will add a new role for service/support users and assign a user to the Administrator role.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Add a user to a role

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Select the **Administration Nav Bar > Roles**.
5. Click **Administrator**. This opens the detail view for the Administrator role.
6. Click the **Users** tab.
7. Click **Add Users**.
8. Type *Lee* in the **Search** field.
9. Click **Search**.
10. Select **Lee Hogan**.
11. Click **Add Selected**.
12. Click **Close**.

Part 2: Add a new role

1. Right-click **Roles** from the **Administrative Nav Bar** to open the context menu.
2. Click **New Role**. The **Insert Role** screen opens.
3. Type *Sales Script* in the **Name** field.
4. Type *Allow access to Sales Script button and Marketing Nav Bar* in the **Description** text box.
5. Click **Save.**
6. Click the **Users** tab.
7. Click **Add Users**.
8. Select **Anne Avery**, **Adam Garfield**, and **Ella Hall** by holding down **Ctrl** while clicking on each.
9. Click **Add Selected**.
10. Click **Close**.
11. Click the **Actions** tab.
12. Click **Add Action**. The **Lookup Action** dialog box opens.
13. Select **Navigation/Marketing** and **Sales Script** by holding down **Ctrl** while clicking on each.
14. Click **Add Selected**.
15. Click **Close**.
16. Click **Save**.

Part 3: Remove a user

1. Click **List View** from the toolbar.
2. Click the **All Roles** tab.

3. Click **Standard User** from the **Roles** list view to open its detail view.

   Note: Anne Avery and Ella Hall are already in this role as they were created within the Infor CRM Web Client.

4. Select **Ella Hall**.
5. Click **Remove** from the toolbar. An **Infor CRM** dialog box opens confirming the deletion request.
6. Click **Yes**.

Exercise 9.3: Exploring roles and secured actions

In this exercise, you will you will log on as Ella Hall, Anne Avery, and Lee Hogan to explore the different features available to them based on the Secured Actions and Roles they have access to.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Explore a user with no Standard User access

1. Open the **Infor CRM Web Client**.
2. Type *Ella* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Sales Nav Bar**.

   You will see that the Leads, Contacts, Accounts, and Opportunities are not available because Ella Hall's user does not have access to the Standard User Role.

5. Expand the **Marketing Nav Bar**.

   Notice Ella Hall has access to the Marketing Nav Bar as she now has access to the new Sales Script Role.

6. Expand the **Administration Nav Bar**.

   Because the Administration Nav Bar does not have any secured action to secure it, Ella can access the navigation bar. However, because Ella does not have access to any of the items because no Role Ella is a part of has Secured Actions for these pages associated with her.

7. Click **Sign Off**.
8. Click **Return to Sign In Page**.

Part 2: Explore a user with the Standard User role

1. Type *Anne* in the **Username** field.
2. Type *Anne1* in the **Password** field.
3. Click **Sign In**.
4. Expand the **Sales Nav Bar**.

   Notice Leads, Contacts, Accounts, and Opportunities are now available because Anne Avery's user does have access to the Standard User role.
5. Click **Charter Software** to open the account detail view.
6. Click **Sales Script**. A message opens.

   Because Anne has access to the Sales Script role, she can access and use the Sales Script button in the account detail view.
7. Expand the **Marketing Nav Bar**.

   You can see Anne has access to the Marketing Nav Bar as Ella does have access to the new Sales Script role.
8. Expand the **Administration Nav Bar.**

   Because the Administration Nav Bar does not have any secured action that secures it, Anne can access the navigation bar. Anne also has access to a few administrative items that come with the Standard User role.
9. Click **Sign Off** from the status bar.
10. Click **Return to Sign In Page**.

Part 3: Explore a user with the Administrator Role

1. Type *Lee* in the **Username** field. No password is required.
2. Click **Sign In**.
3. Expand the **Sales Nav Bar**.

   Notice Leads, Contacts, Accounts, and Opportunities are now available because Lee Hogan's user does have access to the Standard User role.
4. Click on **Charter Software** to open the account detail view.
5. Look for the **Sales Script** button.

   Because Lee was not granted access to the Sales Script role, which is the only role with the Sales Script Secured Action. This means Lee is not permitted to see or use the new **Sales Script** button you created.
6. Look for the **Marketing Nav Bar**.

   The **Marketing Nav Bar** is not on the Navigation Pane for Lee Hogan. This is because we did not grant Lee access to the Sales Script role we created. This is the only role with the Navigation\Marketing secured action that controls access to the Marketing Nav Bar.
7. Expand the **Administration Nav Bar.**

Lee Hogan has access to the Administrator role; he has many options available to him. However, because he does not have access to all the Administrative functions and he is not the admin user, Lee is restricted from using some of the features found here.

8. Click **Sign Off** from the status bar.

Check your understanding

What is the difference between a role and secured actions?

What is the importance of the Standard Role?

Can roles be assigned to users, teams, or departments?

Lesson 10: Personalize the Infor CRM Web Client

Estimated time

2 hours

Learning objectives

In this lesson, you will:

- Use the Admin Nav Bar features for "Personalization" of the Infor CRM Web Client.

Topics

- About personalization
- Personalize resources
- Personalize selections

About personalization

The Infor CRM Web Client can be personalized for your company making specific resources available, such as literature or resources, and by customizing available selections in items such as pick lists and lead sources.

Specifying personalization's doesn't require a redeployment of the Infor CRM Web Client or a rebuild of the files which make up the web client. These personalization's can be used to help transition a new employee to using the Infor CRM Web Client, to ensure your company's terminology is consistent throughout the product, or various other reasons.

Personalize resources

Literature items

Literature items refer to company brochures, product information sheets, or other marketing collateral made available to customers. Users select from the list of literature items when they submit a Literature Request (a type of activity).

You can track the following information about literature items

- Item number
- Name
- Author
- On hand (quantity in inventory)
- Reorder quantity (minimum quantity that indicates it's time to restock)
- File (type a file path to the document)
- Expires (date to expire the item)

Resources

You can add a resource, such as a conference room to the list of available resources that appears when other Infor CRM users schedule an activity. This allows users to know what items they have available to them when scheduling meetings with other employees, leads, or contacts.

Exercise 10.1: Creating literature items and resources

In this exercise, you will create new literature items and resources for use with accounts, contacts, and activities.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Add new literature items

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.

5. Right-click **Literature Items** and then click **New Literature Item**. The **Insert Literature Item** window opens.
6. Enter the following information:
   - **Item Number:** WP-Web83
   - **Name:** White Paper - Infor CRM Web Client 8.4
   - **Author:** James Dobbey
   - **Family:** Services
   - **Cost:** $5.00
   - **On Hand:** 100
   - **Reorder Qty:** 25
7. Click **Save.**

Part 2: Delete literature items

1. Click the **List View** icon.
2. Click the **All Literature Items** group.
3. Click the **Lenovo ThinkPad Brochure** link.
4. Click **Delete**.
5. Click **OK**.

Part 3: Edit literature items

1. Click the **All Literature Items** group if not already there.
2. Click the **PHCPC Mouse Pads** link.
3. Enter *100* in the **On Hand** field.
4. Click **Save**.

Part 4: Create new resource

1. Select **Administration > New Resource** from the menu bar.
2. Enter the following information:
   - **Name:** Sales-WebExNE
   - **Type:** WebEx Account
   - **Coordinator:** Anne Avery
   - **Location/Description:** User: PhxComWebEx-NE Pass: PhxComputers1
3. Click **Save.**

Part 5: Edit an existing resource

1. Click the **List View** icon.
2. Click the **All Resources** group.
3. Click the **Conference Room 100** link.
4. Select the **Is Location** field so it’s enabled.
5. Click **Save.**

Part 6: Delete an existing resource

1. Click the **Next Record** icon on the toolbar to open the **Conference Room 200** resource detail view.
2. Click **Delete**.
3. Click **OK**.

Infor CRM users who do not have access to the Administration menu are not able to see the coordinator's information when they schedule the resource.

Products

Products refer to the goods and/or services your company sells. Users select from the list of products from the **Insert Opportunity** view, the **Insert Sales Order** view, or from the **Insert New Asset** view located within the account detail view.

You can track the following information about products:

- Name
- Description
- SKU
- Family
- Status
- Cost
- Price level
- Package
- Attachment

To help organize products, you should consider first modifying the Product Family pick list. For example, a technology company may have the following product families: Hardware, Software, Warranty, Service, and so on.

Packages

Packages represent a method for grouping a set of products for ease of bulk pricing and order entry. For example, you may want to bundle three products into one package and sell the package as a set. If a customer purchases a package, all products within the package are listed individually as assets under the customer's account detail view. Users select from the list of products from the **Insert Opportunity** view or the **Insert Sales Order** view.

You can track the following information about packages:

- Name
- Description
- SKU
- Products

Exercise 10.2: Products and packages

In this exercise, you will personalize the Infor CRM Web Client by inserting, and discontinuing products, as well as creating new packages that can be used within sales orders, opportunities and other areas within Infor CRM.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Insert a product

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Select **Administration > New Product** from the menu bar.
6. Enter the following information:
   - **Name:** Windows 10 Upgrade Services
   - **Description:** Consulting Services for Windows 10
   - **SKU:** Win10-Upg
   - **Status:** Available
   - **Family:** Service
   - **Type:** Download
   - **Cost: $250**
7. Click **Save.**
8. Click the **Price Levels** tab from the tab pane.
9. Click **Add Price**. This opens the **Add Product Price** dialog box.
10. Enter the following information:
    - **Description:** Presidential
    - **Price:** 125
11. Click **OK.**

Part 2: Discontinue a product

1. Click **List View**.
2. Click the **All Products** group.

3. Click the **Fujitsu Lifebook TabletPC** link**.**
4. Select **Discontinued** from the **Status** drop-down list.
5. Click **Save**.

Part 3: Insert a new package

1. Right-click **Package** and then select **New Package**. The **Insert Package** window opens.
2. Enter the following information:
    - **Name:** Windows 10 Upgrade
    - **Description:** Windows 10 Upgrade
    - **Status:** Available
3. Click **Save**.
4. Click **Associate Product** from the **Products** tab toolbar.
5. Select **Consulting Services**, **Windows 10 Upgrade Service**, and **Wireless Optical Mouse.**
6. Click **Add Selected.**
7. Click **Close.**
8. Click **Save** from the **Products** tab toolbar.

Personalize selections

Competitors

Competitors refer to another business that may sell similar products or services that competes with your company for a sale. Users select from the list of competitors from the Opportunity detail view.

You can track the following information about competitors:

- Name
- Account
- Contact
- Phone
- Web address
- Rating
- Weaknesses
- Strengths
- Strategy
- Notes

Exercise 10.3: Adding a competitor

In this exercise, you will add and edit competitor information for use in opportunities.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Insert a competitor

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Select **Administration > New Competitor** from the menu bar.
6. Enter the following information:
   - **Competitor:** Abbott Ltd.
   - **Account:** Abbott Ltd.
   - **Contact:** John Abbott

- **Rating:** 25

7. Click **Save.**

Part 2: Edit a competitor

1. Click **List View**.
2. Click the **All Competitors** group.
3. Click **Paradigm Systems** to open their detail view.
4. Type *50* in the **Ratings** field.
5. Click **Save**.

Lead sources

Lead sources represent a method for keeping track of how your company obtained a business lead. Users select from the list of lead sources when adding or importing leads.

You can track the following information about lead sources:

- Description
- Abbreviated description
- Type
- Status
- Cost
- Date

About qualifications

Qualifications are a collection of qualification items used to validate lead information or determine when a lead is ready to become a sales opportunity.

Exercise 10.4: Adding lead sources and qualifications

In this exercise, you will insert and edit Lead Sources and Qualifications.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Create a new lead source

1. Open the **Infor CRM Web Client**.

2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Expand the **Administration Nav Bar**.
5. Right-click **Lead Sources** and then select **New Lead Source**. The **Insert Lead Source** window opens.
6. Enter the following information:
   - **Description:** Social Media – Twitter
   - **Abbrev. Desc:** Twitter
   - **Type:** Web
   - **Status:** Active
   - **Cost:** $0.00
   - **Date:** <Today>
7. Click **Save**.
8. Right-click **Lead Sources** and then select **New Lead Source**. The **Insert Lead Source** window opens.
9. Enter the following information:
   - **Description:** Social Media – Facebook
   - **Abbrev. Desc:** Facebook
   - **Type:** Web
   - **Status:** Active
   - **Cost:** $0.00
   - **Date:** <Today>
10. Click **Save**.

Part 2: Edit a lead source

1. Click **List View**.
2. Click the **All Lead Sources** group.
3. Open the **Telemarketing – General** lead source.
4. Change the **Status** field to **Inactive**.
5. Click **Save**.

The more information you track about a lead source, the more options you have for querying that information. For example, by entering a cost, you can run custom queries on future events to measure the success of an event by comparing the number of leads generated against a dollar amount spent.

Part 3: Insert a qualification

1. Right-click **Qualification** and then select **New Qualification**. The **Insert Qualification** window opens.
2. Type *Social Media Direct Contact* in the **Qualification For** field.
3. Click **Save**.
4. Click **Add Qualification Item** from the **Items** tab.
5. Enter the following information

- **Visible:** Selected
- **Sort Position:** 1
- **Description:** Facebook

6. Click **OK**.
7. Click **Add Qualification Item** from the **Items** tab.
8. Enter the following information
   - **Visible:** Selected
   - **Sort Position:** 2
   - **Description:** Twitter
9. Click **Save**.

Pick lists

A pick list is a list of values that you can select from when entering data in an Infor CRM field. For example, in a contact Title field, the user can select from a list of titles rather than typing in a value. Pick lists are useful because they eliminate keystrokes and encourage correct, consistent data entry—that way you don't have one value for President and another value for Pres. When pick lists are synchronized, they provide consistent information across databases.

Almost any pick list you see in the Infor CRM Web site can be changed. The Pick Lists list view shows over 165 default pick lists in the product, you may see more depending on whether your Infor CRM implementation has any customizations.

Pick list options

For each pick list, you can set different options or rules for how end users can interact with the items.

Option	Description
Required entry	Requires users to enter a value before they can continue to the next field.
Allow multiple selections	Allows users to select more than one item from a pick list.
Text must match a	Ensures that the value entered matches a pick list item.
Sorted alphabetically	Displays pick list items alphabetically. If this option is selected, the Order values are ignored.
Users can edit items (Windows version	Allows users to add or change pick list items.
Apply options to Web pick list	Select this check box to use the options selected on this view for Web pick lists. By default, the options automatically control pick lists in the Sage SalesLogix Client. If this option is cleared, the Web pick list is controlled by the attributes set on the control in the Application Architect.

Exercise 10.5: Modifying and adding pick lists

In this exercise, you will modify pick list options and items and add a new pick list.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Modify pick list options and items

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Select the **Administration Nav Bar > Pick Lists**.
5. Click the **Account Type** from the **Pick Lists** list view.
6. Click **Add Item** from the **Items** tab toolbar.
7. Type *Presidential* in the **Text** field.
8. Type *Presidential* in the **Code** field.
9. Type *9* in the **Order** field.
10. Click **OK**.
11. Click **Save**.

    Testing the pick list now shows us that the **Other** option shows up before the new **Presidential** option. Let's fix this by changing the order value for **Other**.
12. Click **Edit** in the row for the **Other** value.
13. Type *99* in the **Order** field.
14. Click **OK**.
15. Type *Presidential* in the **Text** field.
16. Click **Save**.

    Testing the pick list now shows **Other** properly falling as the final option in the Pick List.

Part 2: Add a pick list

1. Click **Add Pick List** from the Common Tasks pane.
2. Type *Priority* in the **Pick List Name** field.
3. Click **OK**.

4. Click **Add New Item**.
5. Type *Low* into the **Text** field.
6. Type *Low* into the **Code** field.
7. Click **Save and New**.
8. Type *Medium* into the **Text** field.
9. Type *Medium* into the **Code** field.
10. Click **Save and New**.
11. Type *High* into the **Text** field.
12. Type *High* into the **Code** field.
13. Click **Save and New**.
14. Type *Urgent* into the **Text** field.
15. Type *Urgent* into the **Code** field.
16. Click **OK**.
17. Click **Save**.

New pick lists need to be assigned to controls from the Application Architect application. This application is used to create advanced customizations within the web client such as new entities and forms. If you need to use this application, it is suggested you consult business partners or a certified Infor CRM Developer within your company.

Groups

The tabs at the top of every main view represent groups. These represent records meeting one or more criteria. Groups can be ad hoc, or built with the Query Builder.

The following two groups are always available:

Lookup Results: This group always appears as the first tab. It contains a temporary set of records from your last lookup and is overwritten each time you perform a new lookup; it keeps your most recent search results easily accessible.

All [Main View entity]: This group generally appears as the second tab because it starts with "A," however, tabs are sorted alphabetically so other tabs may become before it. The All group shows all records for the selected view that the current user has permission to access. There are no "where" conditions applied to it.

Groups with conditions

Groups with conditions show records meeting one or more criteria. Create this type of group when saving results from a lookup or when creating a new group using Query Builder. For example, right-click the Latest Leads group and click Edit to launch the Query Builder. The Conditions tab says to show records where the Modify Date is within the last 30 days.

Conditions tab

Groups with conditions are dynamic. If you edit a record so it no longer fits the group criteria it no longer appears in that group. For example, create a lookup to search for active accounts that purchased your product during the past year. Save this lookup as a group. As active accounts purchase a product they are automatically added to the group and remain there the next 365 days unless they purchase an additional product.

Groups without conditions

Groups not based on a condition are called ad hoc. These groups contain records that are manually added. For example, you can create an ad hoc group of contacts with whom you play golf by adding those contacts from memory rather than a field in the database.

If you create some group other Infor CRM users find useful, you can share the group with specific users, departments, or teams. After sharing the group, users whom you shared it with can see the group the next time they sign in to Infor CRM or refresh their view.

You can only share groups you create. For example, if Lee shares a group with Dan, Dan cannot share the same group with Lois unless Dan makes a copy and shares this copy. The Infor CRM administrator sees all created groups whether they are shared or not.

The list view becomes crowded if you have many groups. You can only delete groups you've created and cannot delete groups shared with you. This means unless you're the Infor CRM administrator you cannot edit or delete any of the out-of-the-box groups because they are owned by everyone.

To clear space, hide groups less frequently used.

Group Manager

The group manager feature in the Web Administrator allows you to see every group you current have on your Infor CRM Web Client, for all Entities. There is additional information that you can filter on here, such as First Used and Last Used date. This additional auditing features can give you insight into which groups may no longer be needed or could be modified to better serve their intended purpose. There are three tabs available in Group Manager; Groups, Shares, and Usage. You can also Edit groups from here, however it may be easier to edit groups from the Entity View.

Groups

The **Groups** tab shows you generic about the groups. This includes the family, name, ad hoc status, create/Modify date, and other generic information regarding the group. This tab will show you all groups.

The **Groups** tab will also allow you to view, edit, delete, share, and reassign an owner of a group.

Shares

The groups tab shows you information regarding the shared status of your groups. This includes the shared date, who it was shared to, user types, and more information. This tab will only show you groups that have been shared.

Usage

The **Groups** tab shows you statistics regarding your groups. This includes the number of times a group has been used, when it was first used, and an owner's usage stats. This tab also will allow you to reset the statistics of a group.

Exercise 10.6: Groups and group manager

In this exercise, you will XXXXXX.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Access Group Manager

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Select the **Administration Nav Bar > Group Manager**. This opens the **Group Manager** view.

Part 2: Create a Group without Conditions (Ad Hoc)

1. Click **Sales** to open the **Sales Nav Bar.**
2. Click **Accounts** to open the Accounts main view.
3. Click **Lookup**. This opens the **Account** dialog box for a lookup search.
4. Select the following conditions:
   - **Lookup By:** Account
   - **Condition:** Starting With
   - **Criteria:** A
5. Click **Search.** This opens the **Lookup Results** group.
6. Select all the results by selecting first results, scroll down, and shift click the last result.
7. Right-click the selected items.
8. Select **Save Records as Group**. This opens the **Add Records to a New Group** dialog box.
9. Type *Ad Hoc Starts With A* in the **Group Name** field.
10. Click **OK**.

    The new group is now created and available along with the other groups tabs. Because group tabs are sorted alphabetically it should appear near the beginning of the list.

Part 3: Create a group with conditions (Dynamic)

1. Click **Add Group** in the **Account** list view.
2. Type *A Condition* in the **Name** field.

3. Type *A Condition* in the **Display Name** field.

   Generally, you would want a more descriptive name, however this will allow our query to be near the beginning of our groups tabs, to allow for easier comparison with our **Ad Hoc Starts With A** group.

4. Click the **Conditions** tab. This opens the conditions view in the bottom pane.
5. Click **Account** in the top left window of the Query Builder. This loads all **Account** columns into the field on the right in the Query Builder.
6. Click and drag **Account Name** from the **Column** field into the **Conditions** tab. This opens the **Assign Conditions** dialog box.
7. Enter the following information:
   - **Operator:** Starting With
   - **Value is:** A
8. Click **OK** in the **Assign Conditions** dialog box.
9. Click **OK** in the Query Builder.

   The group is now saved and available for use from the groups tabs.

Part 4: Explore the difference of Ad Hoc and dynamic queries

1. Click the **Ad Hoc Starts with A** group.
2. Make note of the number of records in this group.
3. Click the **A Condition** group.
4. Make note of the number of records in this group.
5. Open the **All Accounts** group.
6. Open the **AWI Limes Account** detail view.
7. Type *BWI Limes* in the **Account Name** field.
8. Click **Save**.
9. Click **List View** to return to the **Accounts** list view.
10. Open the **Zenith Robotics Corp.** account.
11. Type *AZenith Robotics Corp.* in the **Account Name** field.
12. Click **Save**.
13. Click **List View** to return to the **Accounts** list view.
14. Open the **Zefer May Industrial Account** detail view.
15. Type *Azefer May Industrial* in the **Account Name** field.
16. Click **Save**.
17. Click **List View** to return to the **Accounts** list view.
18. Click the **Ad Hoc Starts With A** group.

    Note the total records. This should number should not have changed. Because this is an Ad Hoc group, the records in it are static and will not change based on the initial criteria the group started with.

19. Click the **A Condition** group.

    Note the total records. This number should be one higher than before. This is because a dynamic group will update based on the current information stored in the database against the conditions used to create the group. In this case, we removed one record AWI Limes, and added two Zenith and Zefer, by changing the Account Names of each to either start with A or to no longer start with A.

Check your understanding

List six items that can be personalized within Infor CRM's Web Client?

What are the differences between products and packages? How can each benefit Infor CRM's Web Client?

How can lead sources and qualifications help convert leads into contacts and accounts?

What is are some benefits of utilizing Groups within an entity?

Lesson 11: Customize the Infor CRM Web Client

Estimated time

1 hour

Learning objectives

In this lesson, you will:

- Use Form Manager to edit forms.
- Use Entity Manager to edit entities.
- Learn about advanced developer customizations.

Topics

- About customizations
- Form Manager customizations
- Entity Manager customizations
- Development level customizations

About customizations

The Infor CRM Web Client can be customized in many ways to better help your company attain the goals it wishes to accomplish with Infor CRM. In addition to the multiple ways you can personalize the out-of-the-box entities and form, developers can greatly enhance the capabilities of Infor CRM's Web Client by adding new entities, forms, business rules and events.

Administrators can use Form Manager to edit already existing forms, to add fields, change captions, and other simple customizations. While the Entity Manager is available to make small changes to existing entities.

Form Manager customizations

Form Manager Nav Bar

Form Manager will show you a list of all the forms that are available within your Infor CRM Web Client installation. This includes any custom forms developers have created and deployed for you. From this view, you can open any of the forms into the Form Designer to make basic changes to the form.

Form Designer

Form Designer allows you to actively change the way an existing form appears within Infor CRM's Web Client. The look and feel of the form can be changed including; layout of fields in the grid, which fields are visible, adding and removing fields from the form, and changing captions for each field.

Form Designer can also be reached from most individual forms as well. Many administrators find it easy to access Form Designer from the actual form that is going to be modified as within Form Manager the list of forms can be long and robust.

Exercise 11.1: Customizing forms with Form Designer

In this exercise, you will access Form Manager to see a list of all forms, open a form inside Form Designer from the Form Manager view, access Form Designer from an active form, and use Form Designer to change the look of a form.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Using Form Manager to access Form Designer

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Click the **Administration Nav Bar > Form Manager**. The **From Manager** screen opens.
5. Click **Account Details** to open the **Account Details** form in Form Designer.

   There are over 300 current forms in our Web Client, so accessing the forms from Form Manager can sometimes be cumbersome. If the form name is unknown, but a user process to get to this form is known, it may be easier to access Form Designer from the form itself.

Part 2: Access Form Designer from an Active Form

1. Select the **Sales Nav Bar > Account**. This opens the Account list view.
2. Click the **Abi Specialty Group** to open their detail view.
3. Right-click the **Edit Form** icon located in the toolbar.
4. Select **Open in New Tab** to open the **Form Designer** in a new tab.

   Note: It's not required to open Form Designer in a new tab. If your browser does not have this capability it is not a requirement. Most Administrators find it easier to open Form Designer in a new tab, as this allows them the ability to quickly switch back to the active forms tab to refresh and see their changes more quickly.

5. Switch to the newly opened tab in your web browser.

Part 3: Edit an active form in Form Designer

1. Right-click a grey cell on the left of the grid.
2. Select **Insert Row > Above**. This adds an empty row above the row with the grey cell.
3. Click and drag the **Status** field to the empty cell below **Acc Manager.**

   Note: A green highlight appears on the field when you can stop the click and drag.

4. Find the **Territory** field from the list on the right.
5. Click and drag **Territory** into the cell where **Status** was removed earlier.
6. Select the **Address** field from within the grid.
7. Select the **Basic** tab.
8. Type *Home Office Address* in the **Caption f**ield.
9. Click **Save**.

Part 4: Verify the changes

1. Switch to the active form tab in your web browser. This is our form not open in Form Designer.
2. Click the refresh button on your web browser.

   After the refresh completes, you should see you changes to the form. This includes the new fields, and the updated caption.

Entity Manager customizations

Entity Manager

The Entity Manager provides a list of entities and allows you to take certain actions from this view. Within the Entity Manage use the filters to narrow the list of entities you want to view, and create new entities from the Task Pane. Find details about specific entities from the details pane tabs as well as to manage entity related information.

The items within Entity Manager can greatly affect the Infor CRM system. Incorrectly creating, deleting, or modifying an entity can impact several items. Due to this it is recommended that only advanced users or developers be given access to this administrative feature.

List view

The Entity Manager list view contains 4 tabs within it by default; Fields, Filters, Metrics, and Relationships. The information within each tab will change depending on the Entity that is selected within the list above them.

Missing from the List View for Entity Manager is the ability to create groups, or run a lookup search. These items are also disabled from the Entity Manager context menu from the navigation bar

Fields

The fields tab lists all the fields associated with the currently selected entity. From within this tab you can add new fields to the entity, as well as edit existing fields. Deleting a field is not available from within this tab.

When adding a new field, you can use any of the available types, and if required add additional information to the field. For example, creating a calculated field will allow you to create the calculation.

Filters

The filters tab lists all the filters associated with the currently selected entity. From within this tab you can add, edit, and delete filters related to the currently selected entity.

Metrics

The metrics tab lists all the metrics associated with the currently selected entity. From within this tab you can add, edit, and delete metrics related to the currently selected entity. These metrics can be used in places such as dashboards as calculated data.

Relationships

The filters tab lists all the relationships associated with the currently selected entity. From within this tab you can add, edit, and delete relationships related to the currently selected entity. This will allow you to connect to related entities via a shared ID field. By having a relationship, the two entities can then be used with lookups on forms within Infor CRM among other items.

Detail view (dialog window)

The detail view within Entity Manager is a dialog window which allows you to edit basic information related to the Entity. This includes items such as the Entity's display name and plural display name. What field is used as the title for the entity. If the Entity is an Extension, and some of the advanced options; Import, Match, Bulk Update, Audited, Put, Post, and Delete.

Exercise 11.2: Exploring Entity Manager

In this exercise, you will create a new field in the Account entity, Priority, as a Pick List and associate the Priority pick list to it.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

1. Open the **Infor CRM Web Client**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **Sign In**.
4. Select the **Administration Nav Bar > Entity Manager**. The **Entity Manager** screen opens.
5. Select the **Account** entity.
6. Click **Add** within the **Fields** tab. This opens the **Add Field to Account Entity** dialog box.
7. Enter the following information
    - **Display:** *Priority*
    - **Name:** *Priority*
    - **Type:** Pick List
      Once you select Pick List, some additional options appear.
    - **Pick List:** Priority
8. Click **OK**.
9. Click **Save**.

   Now that the new field has been added to the Entity, you could go back into Form Designer for an account form and add the new field.

Development level customizations

In addition to Form Manager and Entity Manager customizations, Infor CRM allows for more advanced customizations to be created within Infor CRM's Web Client. Creating these customizations is better left to developers to ensure they work properly. Some of these customization options are listed below.

These customizations will typically be created within the Application Architect program that comes with Infor CRM. However, for some of these customizations you can code in other IDE's such as Microsoft Visual Studio or Eclipse.

Make your own entities

Application Architect gives you the ability to create brand new entities from scratch. These entities can either extend already existing entities to add new functionality, or they can be brand new entities to help maintain and organize new information within your database.

Make your own forms

Application Architect also allows for you to create brand new forms and pages to view them on. These forms can be created as a detail form, summary view, or a form with a grid. These forms can then be used as Main Views, new Tabs, or even pop-up Dialogs.

Create custom relationships

Relationships in Infor CRM connect two entities together with shared data. Such as how a Contact can be included in an Account view, or how we use lookups in forms. Application Architect will allow you to create additional relationships to connect new entities to existing out-of-the-box entities, or connect nay existing entity to another.

Use .NET or other languages for customer business rules

Application Architect is the main program used for creating new customizations within Infor CRM's Web Client, however it is not the only program you can use. Application Architect can take DLL files that have been created in other programs and use the methods stored within them as business rules within forms, or entities.

Customization example

Perhaps Phoenix Computers wanted to track Projects that they are working with their customers. A new Entity could be created, ClientProjects, with a relationship to Accounts. This would allow Phoenix Computers to know what account is related to which project.

This could be further customized if ClientProject also had a relationship with the Contacts entity, if there was a specific person within an Account that was the key manager of the Project.

Perhaps these projects were handled within Phoenix Computers by using the Ticket entity already available in Infor CRM, another relationship could be created to connect those.

Also, Client Projects may have a status field, which could include 'Closed' as an option. A developer could create a new business rule that will verify before a save occurs if that status field is set to closed, to verify all associated Tickets are also closed before allowing the save to occur.

Though this is a simple example of a customization that may be utilized, it shows just how robust Infor CRM’s Web Client can get when you start creating new customizations for it.

Check your understanding

What can be changed in a form via Form Designer?

Can new entities be created to customize Infor CRM?

What benefit is there to using Entity Manger to view or modify existing entities?

What is Application Architect used for in regards to customizations?

Lesson 12: Windows security

Estimated time

2 hours

Learning objectives

In this lesson, you will:

- Explore the different security features.
- Explain administrative roles.
- Explore feature security.
- Define field security.
- Examine function security.
- Apply security.

Topics

- Windows security
- Set user security in the Windows Client

Windows security

Managing administrative roles

The admin user is the only user account with full access rights to all features and operations in the Infor CRM Clients and Infor CRM Administrator. If you want to allow another user to assist with administrative functions, you must give the user access to the Infor CRM Administrator workstation or install the Administrator application on the user's computer. If you install multiple copies of the Administrator, all executable files for the Administrator (Admin.exe) must contain the same release number.

To perform the functions assigned to an administrative role, a user must have:

- An administrative role assigned using the Security tab on the User Profile.
- Access to the Infor CRM Administrator.

Infor CRM does not recommend giving the same administrative role to more than one user. Administrative roles allow other users to perform limited, specific tasks in the Infor CRM Administrator generally reserved for the system administrator. You can assign an administrative role to a user on the user's Security tab within their profile.

Although Infor CRM includes the following administrative roles by default, you can create custom administrative roles as well.

- **Sales admin** – Users assigned this role can perform all functions except managing SpeedSearch, using the Database Manager, and modifying the Library.
- **DB admin** – Users assigned this role can perform all functions except realigning territories, modifying sync transfer profiles, modifying the Library, and managing currency.
- **Librarian** – Users assigned this role can manage SpeedSearch, manage NetForms, and modify the Library.

When a new administrative role is created, access rights to all functions automatically default to No. Double-click a function to change the value to Yes, making it available for that administrative role.

The following functions are available for each administrative role:

Function	Description
Attach Remote	Allows the user to attach or detach remote databases.
Calc Field Manager	Allows the user to add, edit, and delete calculated fields.
Change User Password	Allows the user to change another user's password. Note: To give password access, you must also enable the Modify Users (restricted) function.

Create Remote Office DB	Allows the user to create a Remote Office database.
Create Remote User DB	Allows the user to create a Remote user database.
Execute SQL	Allows the user to run SQL statements against the database.
Integrity Checker	Allows the user to run the Integrity Checker to locate errors and correct records in the database.
Join Manager	Allows the user to add, edit, and delete global joins.
Lookup Manager	Allows the user to add, edit, and delete lookups.
Manage Currency	Allows the user to enable multi-currency; add, edit, or delete currency values; and update open opportunities with revised currency values.
Manage NetForms	Allows the user to manage .NET Extensions.
Manage SpeedSearch	Allows the user to configure SpeedSearch, manage indexes, and manage schedules.
Modify Bundles	Allows the user to manage, add, remove, or upgrade bundles.
Modify Library	Allows the user to edit the files and folders in the Library.
Modify Systems	Allows the user to modify agents, offices, sync servers, licenses, and remote tasks.
Modify Teams	Allows the user to modify teams.
Modify Users	Allows the person with this role to change everything on users' profiles. Note: The person with this role can also match Infor CRM users to Windows users.
Modify Users (restricted)	Allows the person with this role to modify users' profiles. Note: The person with this role cannot set the Windows ID, password, or the information on the User Profile Security tab.
PickList Manager	Allows the user to add, edit, and delete pick lists and pick list items.
Realign Activities	Allows the user to realign activities and processes.
Realign Territories	Allows the user to reassign account ownership.
Resync Remote DB	Allows the user to resynchronize a remote database.
Security Profiles	Allows the user to manage security profiles. The user can create, edit, and delete profiles but cannot assign them to users.
Sync Transfer Profiles	Allows the user to define the methods and parameters used for synchronization.
Tools Options Menu	Allows the user to access the Options dialog box and set various Infor CRM system options.

Use DB Manager	Allows the user to add, view, and delete tables and fields in the database.

User Profile Function Security tab

Item	Function
Activity Reminder	Allows the user to access the Activity Reminder to keep track of his or her activities.
Dial Phone	Allows the user to access dialing properties for Dialer.
Options	Allows the user to access the Options dialog box which contains options for setting Display settings, Lookups and Groups settings, Outlook Synchronization settings, Email settings, Activity settings, Calendar settings, and Other settings.
Add Contact to Outlook	Allows the user to add an Infor CRM contact to the Outlook address book.
Literature Fulfillment	Allows the user to access the Literature Requests view to fulfill, complete, and reject literature requests.
Mail Log on/off	Allows the user to log on or off the email system.
Customize, Menus	Allows the user to customize Infor CRM Client menus.
Customizing, Toolbars	Allows the user to customize Infor CRM Client toolbars.
Processes, Scan Interval	Allows the user to determine how often to scan processes.
Processes, Process Manager	Allows the user to access the Process Manager to assign, scan (start), and monitor the status of processes assigned to their contacts.
Processes, Scan All Processes	Allows the user to run al processes that they own, including those on contacts they are not currently viewing.
Processes, Purge Processes	Allows the user to delete processes.
Processes, Scan this record	Allows the user to scan all processes for the current contact.
Maintenance, Check for Duplicates	Allows the user to eliminate duplicate accounts or contacts using the Check for Duplicates Wizard.
Maintenance, Replace Data	Allows the user to replace one or more values with another value in the Account, Contact, or Opportunity tables using the Replace Data Wizard.
Maintenance, Purge Records	Allows the user to delete account, contact, or opportunity records and related data from the database using the Purge Records Wizard.
Manage, Customer Service Defaults	Allows the user to access the Manage Customer Service Defaults dialog box which contains options for ticket entry and time tracking.

Manage, AreaCategoryIssue	Allows the user to manage the Area, Category, and Issue lists used to classify tickets and defects for Customer Service.
Manage, Customer Service Options	Allows the user to access the Manage Customer Service Options dialog box which contains options for setting Auto-Assignment, User Defaults, and Ticket Rate options.
Manage, Dashboard Options	Allows the user to access the Manage Dashboard Options dialog box which contains access to Fiscal Calendar Periods.
Manage, Qualifications	Allows the user to access the Configure Qualifications dialog box which contains fields for providing descriptions for each level in the qualification process.
Manage, Standard Resolutions	Allows the user to access the Mange Standard Resolutions dial box where information for standard resolutions is entered into Infor CRM.
Manage, Standard Problems	Allows the user to access the Manage Standard Problems dialog box where information for standard problems is entered into Infor CRM.
Manage, Opportunity Defaults	Allows the user to access the Opportunity Defaults dialog box which contains default settings for new opportunities.
Manage, Quotas	Allows the user to manage quotas for their sales team using the Mange Quotas dialog box.
Manage, Products	Allows the user to add to, edit, and delete from the list of products. When the user adds an opportunity, they can add one or more products to the opportunity.
Manage, Competitors	Allows the user to add to, edit, or delete from the list of competitors using the Manage Competitors dialog box. The user can also add, edit, or delete information about competitors' products and customers.
Manage, Lead Sources	Allows the user to add to, edit, or delete from the list of lead sources. Lead sources can be items such as trade shows, conferences, dealer referrals, or web inquiries.
Manage, Resources	Allows the user to add, edit, delete, and schedules resources. Resources can include conference rooms and equipment such as overhead projectors and white boards.
Manage, Pick Lists	Allows the user to add, edit, or delete pick lists and pick list data.
Manage, Sales Processes	Allows the user to access the Manage Sales Processes dialog box where the user can create sales processes and edit existing sales processes.
Manage, Literature	Allows the user to select a document from the list of literature when scheduling a literature request and to use the Manage Literature dialog box to add to, edit, or delete from the list of available literature.
Macros, Record Macro	Allows the user to record a macro.
Macros, Run Macro	Allows the user to run a macro.
SpeedSearch Options	Allows the user to specify the options available through SpeedSearch.

Exercise 12.1: Create and assign an administrator roles

In this exercise, you will create and assign an administrator role.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

Lois Tomlin is the inside sales manager. Due to frequent turnover in the Sales department, Lois wants the ability to realign territories and activities when a sales user leaves or joins the company. How can Lois adjust these settings?

- Create an administrative role for Realignment.
- Assign the Realignment role to Lois Tomlin.
- Sign in to the Administrator as Lois to verify settings.

Exercise steps

Part 1: Create a new role

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **username** field. No password is required.
3. Click **OK**.
4. Select **Manage > Administrative Roles** from the menu bar. The **Manage Administrative Roles** screen opens.
5. Click **New Role**. The **New Administrative Role** window opens.
6. Type *Realignment* in the **Enter Role Name** field.
7. Click **OK**. A new column is created for the **Realignment** role.
8. Double-click inside the **Realign Territories** cell under the **Realignment** role (column) to change the value from **No** to **Yes**.
9. Double-click inside the **Realign Activities** cell under the **Realignment** role to change the value from **No** to **Yes**.
10. Press **F5** to refresh the Administrator so the new role is available.

Part 2: Assign the administrative role to Lois Tomlin

1. Click **Users** to open the **Users** view.
2. Click the **All Users** tab to browse all users.
3. Double-click **Tomlin, Lois**. The **User Profile for Tomlin, Lois** window opens.

4. Click the **Security** tab.
5. Select **Realignment** from the **Administrative Role** drop-down list.
6. Click **OK** to close Lois Tomlin's profile.

   Now Lois has rights to sign in to the Infor CRM Administrator application. You can either install the application on her computer or give her access to the Administrator workstation. Let's test her credentials to see what Lois can view when she signs in to the Administrator.
7. Select **File > Exit** from the menu bar.
8. Sign back in to Infor CRM Administrator by selecting **Start > All Programs > Infor CRM > Administrator**.
9. Type *Lois* in the **Username** field. No password is required.
10. Click **OK**.

    Notice how all navigation menus, toolbars, and other menus are inaccessible except the **Realign Territories** and **Realign Activities** under the **Tools** menu.
11. Exit the **Infor CRM Administrator**.

Part 3: Delete an administrative role

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Click **OK**.
4. Select **Manage > Administrative Roles** from the menu bar. The **Manage Administrative Roles** screen opens.
5. Click **New Role**. The **New Administrative Role** window opens.
6. Type *Delete* in the **Enter Role Name** field.
7. Click **OK**. A new column is created for the Delete role.
8. Select the **Delete** role by clicking on a cell in that column.
9. Click **Delete Role**. A confirmation dialog box opens.
10. Click **Yes**. This deletes the selected role.

Set user security in the Windows Client

User security refers to the ways in which you can restrict or allow access to features, functions, and fields within the Infor CRM client.

- Windows Client users can set user security from the **Security** and **Function Security** tabs of a user profile in the Administrator.
- Web Client users can set user security from the **Roles** and **Secured Actions** view in the Web Administrator. Field security profiles set in the Windows Administrator apply to both Windows and Web users. You can also view and edit field security profiles in the **Security Manager** of the Web Administrator.

Feature Security: Prevent users from adding or deleting records

To prevent users from adding or deleting records, use the Security tab of a user profile. Feature security permissions determine whether a user can add or delete records. Multiple entities can be secured from this tab by selecting security preferences for each entity, e.g., ACCOUNT, CONTACT, OPPORTUNITY, RETURN, and more. For each entity, you can choose which detail view and lookup view to set as the user's default.

Function Security: Prevent users from using interface items

To limit items on the Windows Client interface, use the **Function Security** tab of a user's profile. When you remove access to a function, the related menu item or toolbar appears grayed out in the Windows Client.

Consider the following for function security:

1. When you add a new user, the following functions are disabled (no access) by default:
   - File > Subscribe to Account
   - Edit > Account Unsubscribe
   - Tools > Literature Fulfillment
   - Tools > Customize
   - Tools > Maintenance
   - Tools > Manage
   - Tools > Macros
2. When removing access from a main category, access to all dependent items is also removed
3. Changes take effect the next time the user signs in to Infor CRM or refreshes the client by clicking **CTRL + F5**.
4. Create new secured functions in the Architect by clicking **Manage** and then clicking **Secured Functions**.

Exercise 12.2: Set custom feature and function security

In this exercise, you will set and apply custom features and functions to a user and then verify the settings.

Notes:

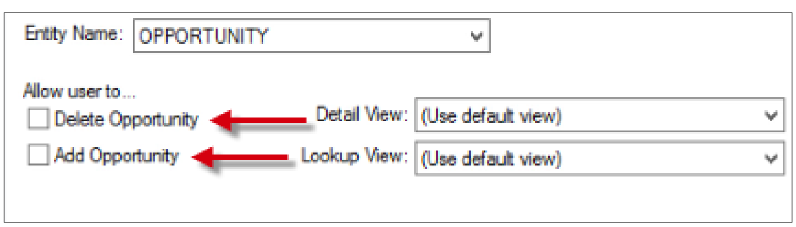
- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Exercise steps

Part 1: Remove access from a user's profile

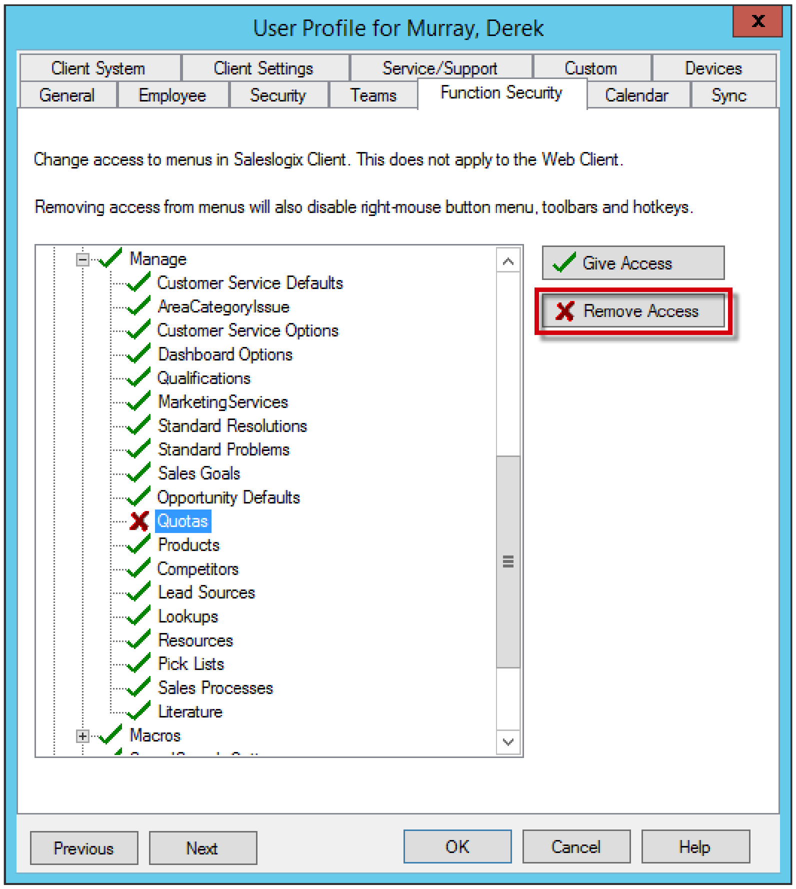
1. Open **Infor CRM Administrator**.
2. Type *admin* in the **username** field. No password is required.
3. Click **OK**.
4. Select the **Administration Nav Bar > Users**.
5. Double-click **Derek Murray** from the **All Users** list. The **User Profile for Murray, Derek** window opens.
6. Click the **Security** tab.
7. Select **OPPORTUNITY** from the **Entity Name** drop-down list.
8. Clear the **Delete Opportunity** check box. A dialog box opens indicating the user's ability to purge records is removed.
9. Clear the **Add Opportunity** check box.



10. Click **OK**.

Part 2: Set function security

1. Click the **Function Security** tab in Derek Murray's user profile.
2. Select **Tools > Manage**.
3. Select **Quotas**.
4. Click **Remove Access**. The menu item is updated with a red X.



5. Click **Maintenance**.
6. Click **Remove Access**. Notice this time all functions under maintenance now have the red X showing there is no access granted.

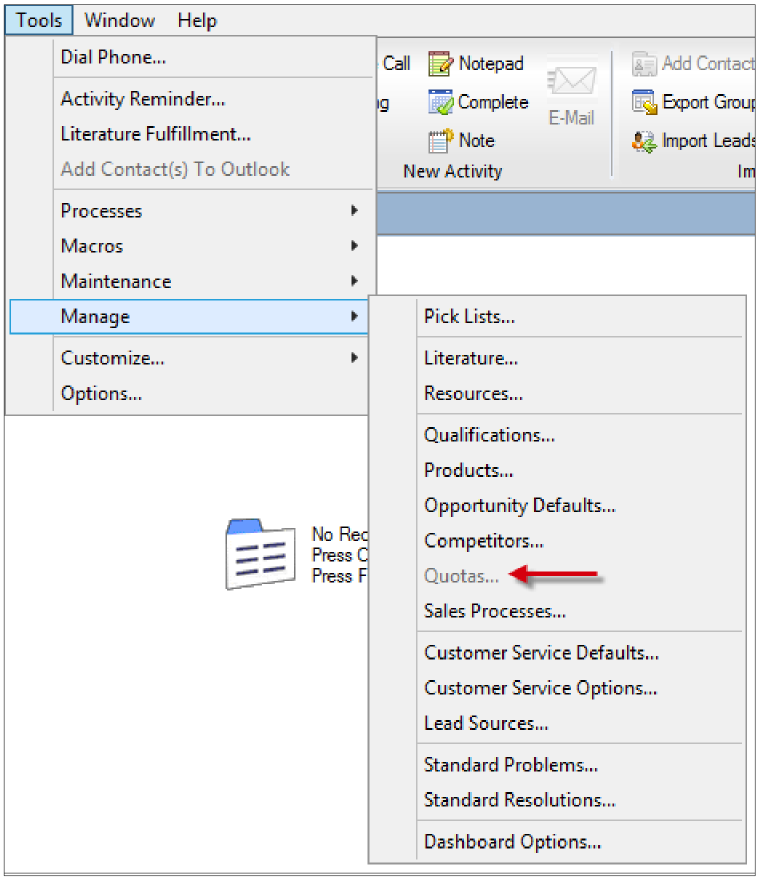
Part 3: Verify security settings

1. Select **Start > All Programs > Saleslogix > Infor CRM Client**. The **Please log on** window opens.
2. Type *derek* in the **Username** field. No password is required.
3. Click **OK**.
4. Close the **Activity Reminders** window if it opens.
5. Select **Insert > Opportunity** from the menu bar.

   A dialog box opens stating Derek doesn't have security for this feature. This is expected because you removed Derek's access to view Opportunities.
6. Click **OK** to close the message.

Part 4: Test function security to ensure Derek cannot adjust sales quotas.

1. Select **Tools > Manage** from the menu bar. Notice the **Quotas** menu item not available to Derek in the **Manage** menu.



2. Select **Tools > Maintenance**. Notice all items are grayed out.
3. Exit the Infor CRM Client.

Check your understanding

What are some benefits of using feature security?

What are some benefits of using function security?

What are administrative roles?

Lesson 13: Prepare the Windows Client

Estimated time

1 hour

Learning objectives

After completing this lesson, you will be able to <terminal learning objective for lesson X>. In this lesson, you will:

- Setup the Windows Client.
- Manage the functions within the Manage toolbar.
- Manage the functions within the Tools toolbar.

Topics

- Install the Windows Client
- Establish a database connection
- Explore the Manage toolbar
- Explore the Tools toolbar

Install the Windows Client

Because you haven't configured user profiles yet, imagine you're installing the Infor CRM Windows Client on the Administrator workstation to test the implementation. The administrator profile is added automatically.

The Windows Client refers to either the Windows Client or the Remote Client.

What's included in a typical Windows Client installation?

In a typical Infor CRM Windows Client installation, the following programs and files are installed:

- **Infor CRM client:** The program allowing users to interact with sales data.
- **Import Wizard:** A separate utility allowing you to import a large amount of data from another database or from a text file.
- **Mail Client:** A separate utility interfacing with the user's email system.
- **Help Files:** Infor CRM Client, SpeedSearch Client, and Import Wizard.
- **Documentation:** Infor CRM Quick Reference for the Customer Service and Support user, Infor CRM Quick Reference for the Sales and Marketing user.

Import Wizard implications

You may want to install the Import Wizard utility on the Administrator's workstation only and import data (if any) before non-administrative users sign in to Infor CRM. An import is generally a one-time event which you might perform if you have data in an older system prior to installing Infor CRM. Next, it's recommended for non-administrative Infor CRM users to insert additional records manually as they are discovered. Removing the Import Wizard from other users' machines prevents users who aren't properly trained on its use from accidentally tainting the database.

Can I automate client installations?

Instead of physically inserting an installation disk into each Infor CRM client user's computer you can create an automated installation (executable file) which you can then host in a shared location or distribute to users for self-service. When you build an auto-installation, any custom settings you choose are retained for each user who executes the auto-installation file including the data link to your Infor CRM Server. Building a client installation is available for both the Network and Remote Clients (Windows).

What settings should I adjust in the client after installation?

After installing and signing in to Infor CRM you may want to set additional administrative settings by clicking Tools and then clicking Manage. By default, new users don't have access to this menu as it's generally reserved for the administrative user or for "'power" end users who you've chosen to assist you with these settings:

- Pick lists
- Lookups
- Literature
- Resources
- Quotas
- Sales processes
- Customer service defaults
- Customer service options

- Qualifications
- Products
- Opportunity defaults
- Competitors
- Lead sources
- Standard problems
- Standard resolutions
- Dashboard options

Exercise 13.1: Installing an Infor CRM Windows Client

In this exercise, you will install the Windows Client.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

There are settings I'd like to change within Infor CRM for all users. How do I install the Infor CRM Windows Client on the Administrator's workstation to configure and validate preferred settings?

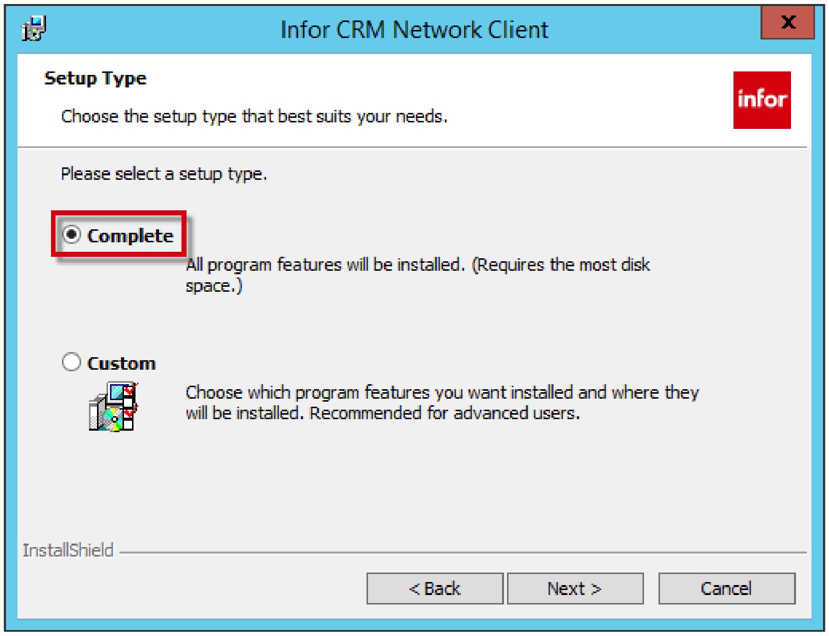
- Install all features including the Import Wizard on the Administrator's workstation.

Exercise steps

The steps below are for a new installation on a clean environment. Because your training environment already has an Infor CRM Windows Client installed there will be some minor differences including a Modify, Repair, or Remove screen instead of being able to select a complete installation. Please follow along with the steps, but **do not click Install** when that option is available.

1. Open the **C:\ClassFiles\Infor CRM** folder on your training workstation.
2. Double-click the **Setup.exe** file to launch the **Infor CRM Installation Wizard**. The **Infor CRM Installation** screen opens.
3. Click **Run** if prompted with a security message.
4. Click **Client Installations**. The **Infor CRM Client Installation** screen opens.
5. Click **Install Network Client**. The **Welcome** screen opens.
6. Click **Run** if prompted with a security message.
7. Click **Next**. The **Setup Type** screen opens.

8. Verify the **Complete** radio button is selected and then click **Next**. The **Ready to Install the Program** screen opens.

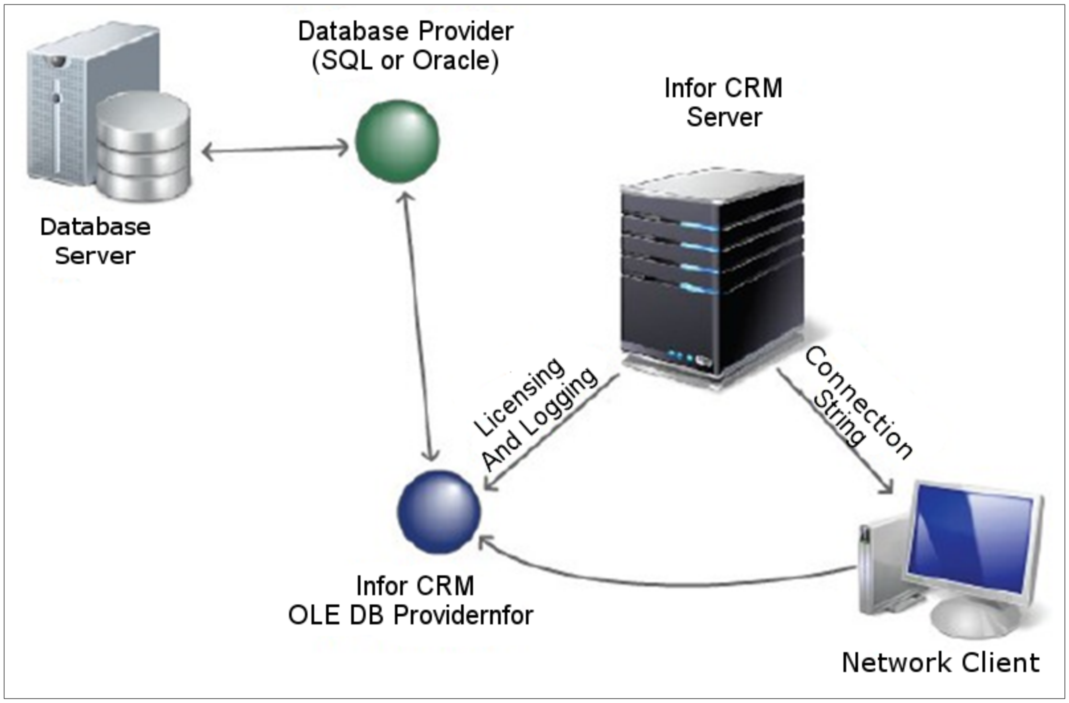


Please do not follow the remaining steps in the training environment. Please click cancel to end your installation process.

9. Click **Install**.
10. Click **Finish**.
11. Click **Exit** to close the Infor CRM setup wizard.

Establish a database connection

All Infor CRM administrative and client applications connect to the Infor CRM Server using a data link while the Infor CRM Server connects to the Database Server using OLE DB.

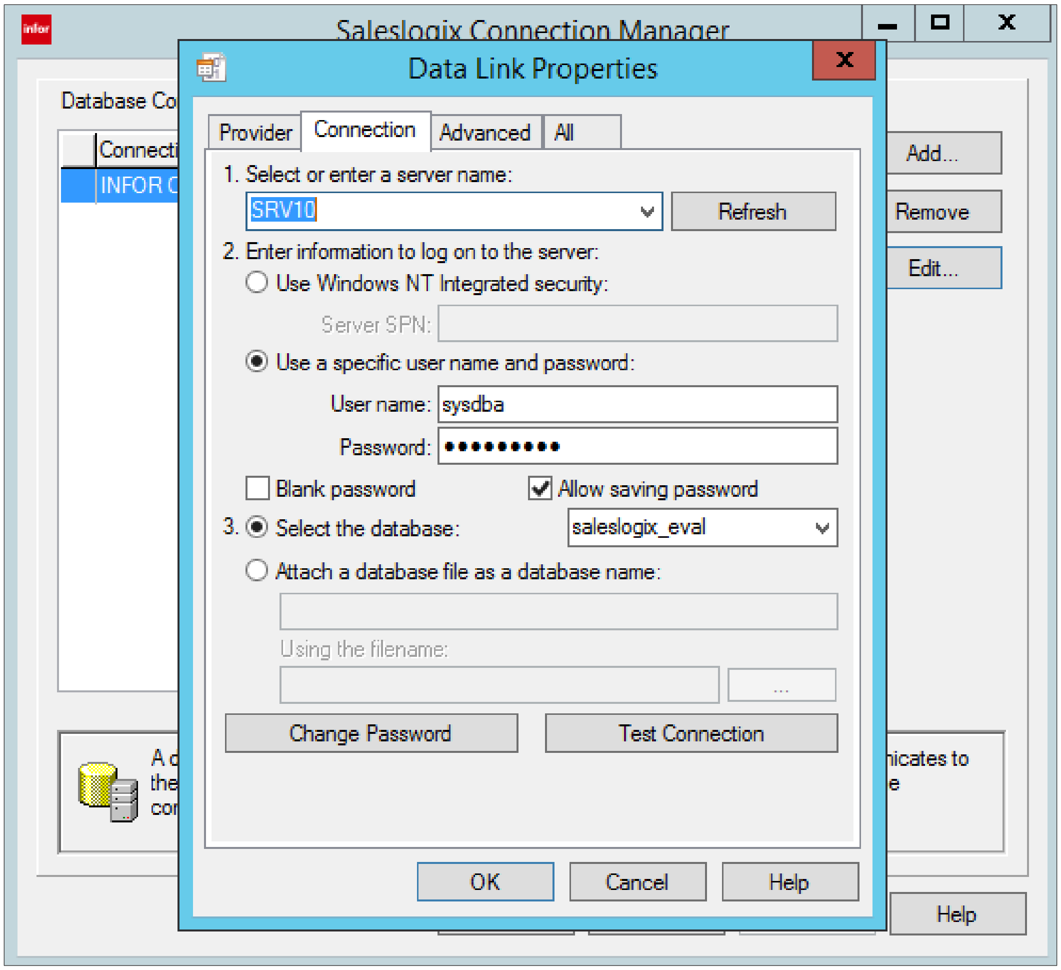


If you install Infor CRM using the Express Installation or run the Standard Installation and install the Infor CRM Server on the Database Server (Microsoft SQL Server only) then Infor CRM automatically creates your database connections.

When you install the Infor CRM Server on a separate machine from the Database Server, you must create the connection manually using the Connection Manager. Do this by clicking **Start**, clicking **All Programs**, clicking **Infor CRM**, and then clicking **Connection Manager**.

Since every component is installed in the training workstation, the connection is already made.

Within your Infor CRM installation, if you decide to add an additional database for testing or development purposes you may also need to create another database connection through Connection Manager.



All non-remote Infor CRM client and administrative applications use this connection on the Infor CRM Server by way of a data link. The following settings are default settings for the connection:

- **User name:** sysdba
- **Password:** Ma$t3rk3y
- **Allow saving password:** selected

Exercise 13.2: Create a database connection

In this exercise, you will create the database connection.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Scenario

Our company needed to create a new database for testing purposes. How can I create a connection to this new database within Infor CRM?

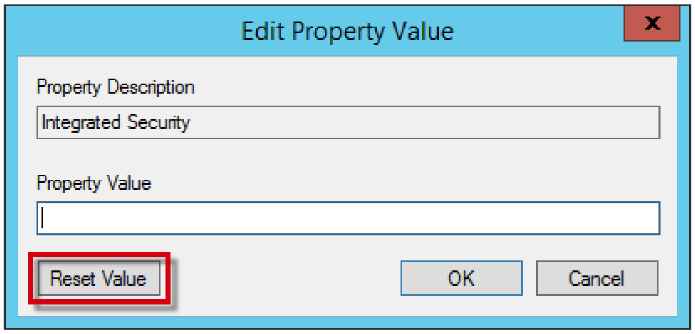
- Use Connection Manager to create a new Infor CRM Database Connection.
- Add the newly created connection to the options within Infor CRM.

Exercise steps

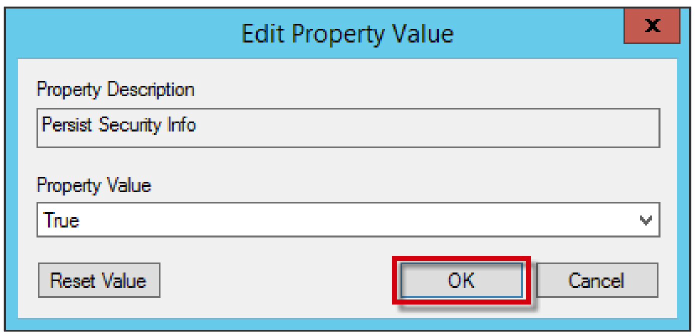
The steps below are for a new installation on a clean environment. Because your training environment already has a InforCRM_EVAL database installed please follow along with the steps, but choose a different name when that option is available.

Part 1: Create the database connections for the databases

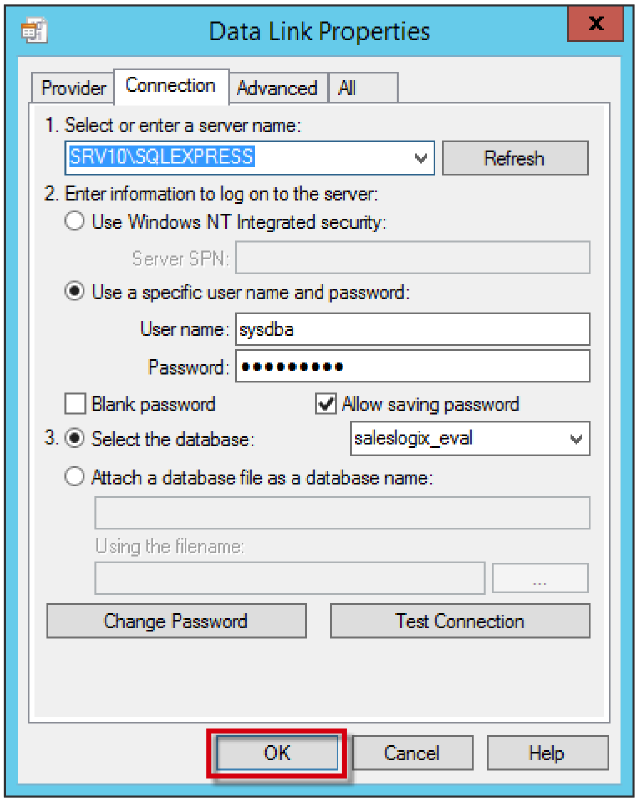
1. Select **Start > All Programs > Connection Manager**. The **Saleslogix Connection Manager** window opens.
2. Click **Add**. The **Connection Name** window opens.
3. Type *INFORCRM_EVAL* in the **Name** used to refer to this connection field.
4. Click **OK**. The **Data Link Properties** window opens.
5. Select **SQL Server Native Client 11.0** and then click **Next**.
6. Type *SRV10\SQLEXPRESS* in the **Select or enter a server name** field. Remember, depending on your server's name, "SRV10" may be different.
7. Select the **Use a specific user name and password** radio button.
8. Type *sysdba* in the **User name** field.
9. Clear the checkmark in the **Blank password** field.
10. Type *Ma$t3rk3y* in the **Password** field.
11. Select the **Select the database** radio button and then select saleslogix_eval from the drop-down list.
12. Click **Test Connection**.
13. Click **OK**.
14. Click the **All** tab.
15. Double-click **Integrated Security**. The **Edit Property Value** window opens.
16. Click **Reset Value**.



17. Click **OK**.
18. Double-click **Persist Security Info**. The **Edit Property Value** window opens.
19. Select **True** from the **Property Value** drop-down list.
20. Click **OK**.



21. Click the **Connection** tab and then click **Test Connection**.
22. Click **OK**.
23. Click **OK** again. This creates your connection and brings you back to the **Saleslogix Connection Manager** window.



24. Click **Apply**, this will save our new connection.
25. Click **Edit**. The **Data Link Properties** window opens again for a final test.
26. Click **Test Connection**.
27. Click **OK**.
28. Click **OK** again.

Part 2: Add the InforCRM_EVAL database

1. Open the **Infor CRM Windows Client.**
2. Click the ellipsis next to the **Log On To** field**.**
3. Click **Add** in the **Data Link Manager** dialog.
4. Select **SalesLogix OLE DB Provider**.
5. Click **Next.**
6. Enter **SRV10** as the SalesLogix Server.

   Note: This maybe different on your Training Environment.
7. Select **InforCRM_Eval** from the **SalesLogix Database Name** field.
8. Enter *Admin* into the **Username** field.
9. Click **Test Connection**, to verify all the settings.
10. Click **OK**.
11. Click **OK** again.

12. Click **OK** again.
13. Click **OK** again.
14. Click **OK** again to log on to the Infor CRM and verify the database connection worked.

Exercise 13.3: Installing Infor CRM Administrator

In this exercise, you will install Infor CRM Administrator.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

Not all Administrators want to log on to the Administrative Server to run admin functions within Infor CRM. Installing the administrator application on a local machine can alleviate this problem.

Exercise steps

The steps below are for a new installation on a clean environment. Because your training environment already has an Infor CRM Windows Client installed there will be some minor differences including a Modify, Repair, or Remove screen instead of being able to select a complete installation. Please follow along with the steps, but do not click Install when that option is available.

1. Open the **C:\ClassFiles\Infor CRM** folder on your training workstation.
2. Double-click the **Setup.exe** file to launch the **Infor CRM Installation Wizard**. The **Infor CRM Installation** screen opens.
3. Click **Run** if prompted with a security message.
4. Click **Server Installations**. The **Infor CRM Server Installation** screen opens.
5. Click **Required Administrative Tools and Servers**. The **Installation Wizard** appears.
6. Click **Next**. This opens a prompt asking if you want to install Microsoft SQL Express.
7. Click **No.** Installing SQL Express, is not expected for a machine that will only have an Infor CRM Administrator application. After some setup, the **Welcome** screen will appear.
8. Click **Next, this will open the** setup type **screen.**
9. Select **Custom**.
10. Click **Next**. The **Custom Setup** screen opens.

11. Change **Administrator** to the **This feature, and all sub features, will be installed on the local hard drive.**
12. **Click Next.**
13. Click **Install**.
14. Enable the **Launch Administrator** option.
15. Click **Finish**.
16. Type *Admin* into the **Username** field.
17. Verify **InforCRM_Eval** is selected in the **Log on to** field.
18. Click **OK,** to verify access to the **Administrator** application.

Explore the Manage toolbar

The manage toolbar within Administrator give you multiple options to manage your Infor CRM Database and Installation. Below you will read summaries of what each of the tools are used for.

For more comprehensive information on each of these tools, please see the Infor CRM Administrator help files.

Database

The Database Manager will show you a list of all associated tables within your Infor CRM database. Selecting a table will allow you to see a list of all fields setup within that table.

From the Database Manager, you can add new fields to an existing Entity, remove fields, check field properties, change whether a field is indexed or hidden, among other options. The ability to create a new Table (Entity) is also available.

Ensure that any changes made here are finalized by using the Apply Changes or Cancel Changes buttons in the toolbar.

Global Join Manager

The Global Join Manager displays all global joins in your Infor CRM database, and permits the system administrator or administrative user to add, edit, and delete global joins as necessary. A global join is permanent and exists from session to session in the Query Builder data tree structure.

Extreme care should be taken if you add or edit a global join, as these can cause performance problems when not created properly.

Pick lists

The Pick List Manager allows a user with sufficient administrative rights the ability to manager all the Pick Lists within the Infor CRM system. This includes creating new Pick Lists, editing existing Pick Lists, and deleting pick lists.

Lookups

Lookups are used to search for, and populate a field with a specific value. To include a list of options with the lookup, you can associate it with a pick list. For example, when a user performs a lookup on City, the City pick list appears. For more customization, you can add the lookups you create to a menu, toolbar, or view using the Architect. See the Architect Help for more information.

The Lookup Manager displays lookups for the selected main table. The name of a lookup is based on the lookup field within a table.

Currency

If your company has Infor CRM users in multiple countries using different currencies, you can enable multi-currency support. Before you enable multi-currency support, review Understanding Multi-Currency Support. Once multi-currency support is enabled and you set a base currency, you can use the Manage Currency dialog box to set up currencies to be used with opportunities, sales orders, and products.

Calculated fields

A calculated field is dynamic and consists of two or more fields from the database. The fields used to create a calculated field can come from one table or from several joined tables. The values that appear for a calculated field are updated after changes are made to the fields comprising it. A calculated field can perform mathematical operations or concatenate strings, depending on the type of calculation.

Exercise 13.4: Exploring the Manage menu

In this exercise, you will explore the Manage features, Database, Global Joins, Lookup, Calculated Fields, and Pick Lists. You will also use the Pick List features within the Manage toolbar to create a new Customer Priority picklist.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

The manager toolbar contains many different features to help maintain and manage your Infor CRM system. In this exercise, you'll explore the different features of this toolbar and work with some of the different functions.

Exercise steps

Part 1: Pick Lists

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **username** field. No password is required.
3. Click **OK**.
4. Select **Manage > PickLists**. The **Pick List Manager** dialog box opens.
5. Click **Add.** The **Pick List Name** dialog box opens.
6. Type *CustPriority* in the **Name** field.
7. Click **OK.** This will open the **Edit List: CustPriority** dialog.
8. Click **Add.**
9. Enter *Ruby* in the **Item** field.
10. Click **OK**.
11. Repeat steps **5 – 7** for the values; Presidential and Diamond.
12. Click **OK**. Our new custom Pick List is now available for use.

13. Click the **ellipsis** next to the **Test List** field to verify the Pick List works.

Explore the Tools toolbar

The Tools menu within Infor CRM Administrator offers options and tools used to help maintain your Infor CRM system. These include the ability to create Remote features, such as Databases and Offices, to realign activities and territories in the event of a Retirement or other user issue. As well as maintaining Database Integrity and verifying your system.

Most of these tabs have been explained and examined in other lessons within this workbook. A quick overview of these tabs follows as a refresher and as information for tabs not explored already in this workbook.

Integrity Checker

The Integrity Checker is a utility that can be used to locate errors and correct records that are in your database. It is also available as a stand-alone utility (SLXDBChecker.exe), but is typically run from within the Infor CRM Administrator.

The Integrity Checker does not work with Unicode data. If you do have Unicode enabled, test results may be inaccurate.

Do not use the repair functionality of the Integrity Checker if any user or application is currently using the database. This includes having a running synchronization server, active users, or other services within Infor CRM.

Systems Summary report

The systems summary report displays information about your Infor CRM system. When you are contacting Infor CRM customer support they may request a copy of this report. This can only be accessed by the Infor CRM System Administrator, there is no Administrative Role that can be assigned to grant access to this report.

This report includes items such as the Company the report is generated for, a Report number, which version and port your Infor CRM is installed on and using, which license keys are installed, any bundles that are installed, and information about the database.

The File created is a text file that will open in your default TXT viewer. By default, it is given the name **SLXSummary-<DATE>.txt**.

Options

The options selection in the Tools menu contains multiple tabs representing different areas within the Infor CRM Windows Client. This can control everything from views you see at startup to rules for password complexity. Each tab within it represents a series of different options about a similar topic, such as Security, Passwords, or System.

Client view

The client view tab handles items that pertain to the general Infor CRM Windows Client. These options do not alter how the Infor CRM Web Client views function.

Options include warning users before switching to potentially large groups, which could affect the performance of Infor CRM. Whether large icons are shown within the client. If public contacts can be used in personal activities. As well as the ability to show (or unhide) all groups created in versions earlier than version 6.2 of Infor CRM.

Client events

The client events tab allows you to manage the event types for all Infor CRM Client users. New event types can be created such as trade shows or business trips. These event types can be assigned different colors to allow a user to quickly identify events within their calendar.

Client plugins

The client plugins tab controls the global basic script and actions that run when a user logs on or logs off onto the Infor CRM Windows Client. This tab does not apply to the Infor CRM Web Client.

From this tab, you can set a Global Basic action that you want to append to any basic script. Also, from the DB Open option allows for a basic script to run when a user logs onto the Infor CRM client. The DB Close option will allow you to set a script for when a user logs off.

Within this tab you can also set which views, menus, and toolbars are visible within the Infor CRM Windows client. These include options such as; Notes-History, Activities, and Attachments within the Contacts Entity, or Details, Marketing and Notes within the Leads entity.

System

The systems tab allows the configuring of dates, contact names, and how views and other toolbars appear in the Administrator. This tab allows you to select which view is opened on startup of the Administrator; Users, Teams, Library, Systems, Bundle Manager, or Database Manager. How far tree views are expanded by default, which toolbars are visible.

The systems tab also allows for customizing how certain dates and names are viewed. Such as how the century used within a two-digit year. This allows you to set when the switch from 19XX to 20XX is utilized, such as from 1930 – 2029. Also, how a contacts name appears, either in a U.S. or International style

Database

The database tab stores and changes information regarding the Infor CRM Database. Options included whether a SQL or Oracle database are being used, what the ID and Password are for the Host Owner and Host Admin.

Within this tab you can also see the Server Name associated with your Databases, where Remote DBs will be in your server, and the way a Remote DB will be prepared for creation.

Conflicts

The Conflicts tab is used with the synchronization clients and handles the conflict rules when a conflicting transaction occurs. A conflict is when multiple databases, remote or networked, have changed a record between synchronizations.

There is up to a three-step check to see which transaction will win, or be used, by the database to determine what the record should be updated to.

Passwords

The **Password** tab controls the password rules for updating and creating passwords. This tab controls what the default password will be for new users. Also, this tab will control what, if any, minimum password length is required and if there is a set number of days until a password will expire.

Other options that can be set within this tab include the number of logins that can be attempted before a user will be locked out of their account, as well as the amount of time (in minutes) that the lockout will last.

Changes to password rules that may invalidate specific user's passwords will populate when clicking the button **Show users with invalid passwords**. This helps administrators know who they need to contact about updating their passwords.

Outlook

This **Outlook** tab controls whether Advanced Outlook Integration is used within an Infor CRM installation, and how attachments are saved when using the **Send to CRM** option within Microsoft® Outlook®.

Accounting

The Accounting tab contains system-level information that will allow Infor CRM to communicate with certain, supported, external accounting applications. This information must be configured before database transfer between Infor CRM and the accounting application can take place.

Custom

The Custom tab allows for managing options associated with specific categories, add-ons, and integrations. These include items such as Back Office Extensions, GoogleMail, GoogleSync, OutlookSync, and others.

Items that you can view and edit vary depending on the category selected. For instance, the Back Office Extensions category contains items including; Tenant, Logical ID, Outbound Retry count, and others.

Check your understanding

What pieces of Infor CRM are required in a Windows Client installation?

How do you create a new Database connection to an Infor CRM system?

What computers should the Infor CRM Administrator be installed on?

What benefits can be found in the Infor CRM Manage menu?

Lesson 14: Remote Network Client setup

Estimated time

2 hours

Learning objectives

In this lesson, you will:

- List the programs installed in a Remote Client (Windows) installation.
- Understand what happens on the remote machine during the synchronization process.

Topics

- Remote Client installation (Windows)
- Synchronization folders on the client
- Offline Client installation (Web)
- Synchronization utilities

Remote Client installation (Windows)

Synchronization is available for Windows and Web users. The Remote Client is used for Windows users using Infor CRM when disconnected from the network.

What’s included in a typical Remote Client installation?

In addition to some of the programs installed in a typical Network Client installation (Infor CRM client, Import Wizard, Mail Client, Help Files, Documentation), the following programs are installed for Remote Client installations:

- **Microsoft SQL Server 2012 Express:** Hosts the remote database. Other prerequisite compatibility tools may also be required depending on the machine.
- **Infor CRM Sync Client:** This required utility transfers data between the remote database and main office database.

Remote client users may optionally install and configure Infor Xbar for Outlook to take advantage of Outlook Sync and access to Infor CRM data within Outlook. Administrators may copy the Infor CRM Xbar Setup.exe to a convenient location and share that location with Remote users.

Import wizard implications

Infor CRM recommends installing the Import Wizard utility on the Administrator’s workstation only and import data (if any) before non-administrative users sign in to Infor CRM. An import is generally a one-time event which should be performed when you have data in an older system prior to installing Infor CRM. After, Infor recommends non-administrative Infor CRM users to insert additional records manually as they are discovered. Removing the Import Wizard from other users’ machines prevents users not properly trained on its use from accidentally tainting the database.

Can I automate client installations?

Instead of physically inserting an installation disk into each Infor CRM client user’s computer, you can create an automated installation (executable file) hosted in either a shared location or distributed to users for self-service. When building an auto-installation, any custom settings chosen are retained for each user executing the auto-installation file including the data link to your Infor CRM Server. Building a client installation is available for both the Network and Remote Clients (Windows).

Exercise 14.1: Install the Remote Client (Windows)

In this exercise, you will install the Infor CRM Remote Client.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

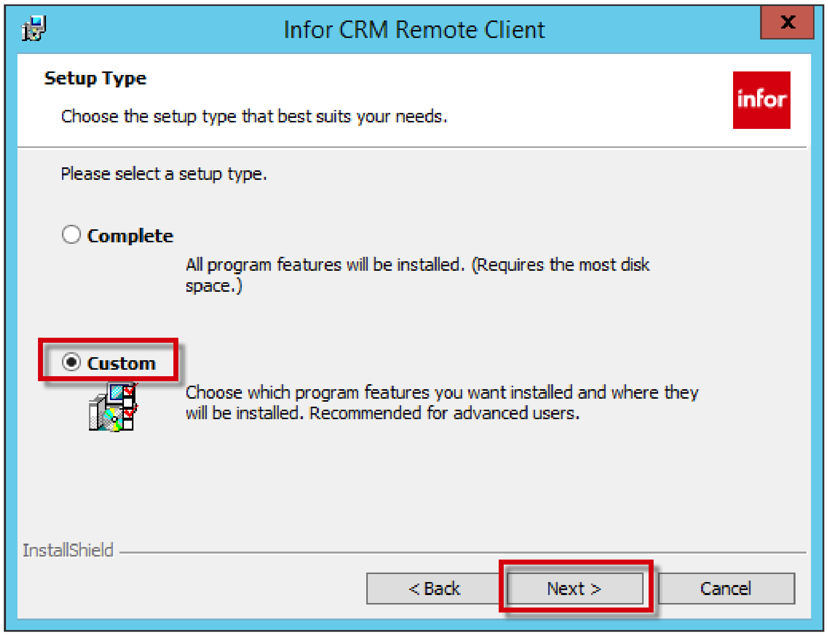
Lee Hogan is a field sales rep who travels frequently. He requires access to Infor CRM data when he's not connected to the network at the office.

- During the Remote Client installation, you're prompted to install prerequisites. Install SQL Server 2005 Backward Compatibility and Microsoft SQL Server 2012 Express.
- Remove the Import Wizard utility since you're installing on a user's machine.

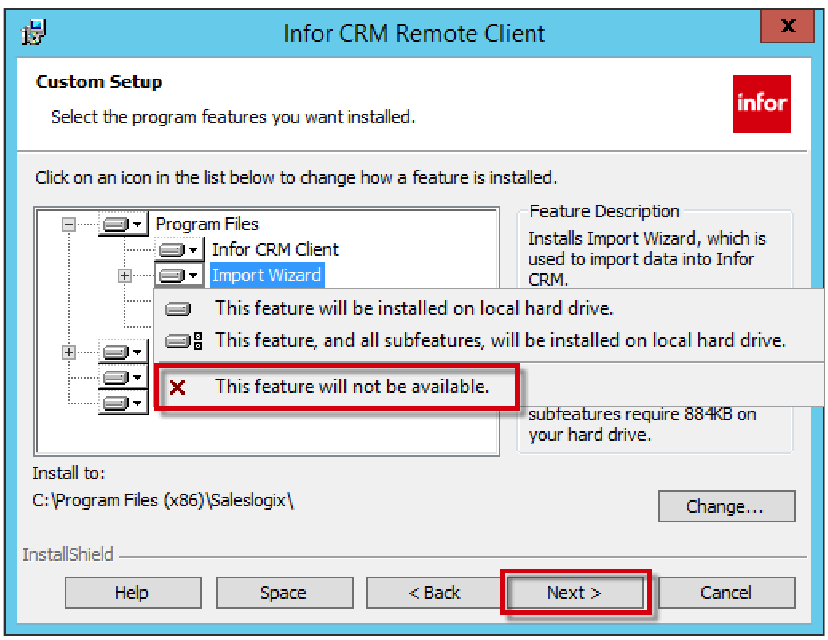
Exercise steps

1. Close all open **Infor CRM** programs.
2. Double-click the **Setup.exe** file from the **C:\ClassFiles\Infor CRM** folder on your training workstation to launch the Infor CRM Installation Wizard. The **Infor CRM Installation** screen opens.
3. Click **Client Installations**. The **Client Installation** screen opens.
4. Click **Install Remote Client**. The welcome window opens.
5. Click **Next**.
6. Click **Run** if prompted with a security warning.

   If any prerequisite component for the Remote Client isn't detected on the computer, Infor CRM prompts you to install those components first. Installing these prerequisites may require your computer to restart.
7. Click **Yes** if Infor CRM prompts you with an upgrade message when pre-installation is complete. This message appears in the training environment because the Infor CRM Network Client is already installed.
8. Click **Next**, when the **Infor CRM Remote Client** welcome screen opens.
9. Select the **Custom** radio button and then click **Next**. The **Custom Setup** screen opens.



10. Expand **Program Files** and remove the **Import Wizard** from the installation.



11. Click Next. The Ready to Install the Program screen opens.
12. Click Install. The Installing Infor CRM Remote Client screen opens.

    Note: If a Files in Use window opens, select the **Automatically close and attempt to restart applications** radio button, and then click **OK**.

13. Click **Finish**.

    When the installation completes, you can find the following new items by clicking **Start**, pointing to **All Programs**, and then clicking **Infor CRM**. Programs denoted with an asterisk (*) were already installed in the training environment from a previous Infor CRM installation.

- Attach Remote
- Mail client*
- Infor CRM client *
- SpeedSearch client*
- Synchronization client
- Documentation*

Synchronization folders on the client

Synchronization requires a specific set of folders to exist on the Sync Server and each remote client. Let's review the client folders here.

What happens the first time you run the Sync Client?

The first time you run the Sync Client, Infor CRM creates new subfolders under the Sync directory. This Sync directory is set at installation of the Sync Client under C:\ProgramData\SalesLogix.

What is the purpose of the sync subfolders?

The following table describes the subfolders created under the sync directory.

Directory	Purpose
Archives	Archives TEFs after they are sent to the main office. This is a subfolder under the **Synchronization** folder.
Cache	For a remote/offline user, cache is a temporary storage for TEFs before they are closed and placed in the **Outfiles** folder. Cache contains a subfolder named with the site code of the remote.
Documents	Stores attachment files retrieved by the Sync server as requested.
FailedTrans	Temporary holding place for failing transactions sent to the Host at the end of the synchronization cycle. When a sync error occurs during the synchronization cycle, a transaction containing the error and information from the TEF is written to the **FailedTrans** folder. Errors are also written to the **SyncError.txt** file. View failed transaction files using TrnViewer.
Infiles	Stores TEFs received from the main office. Files are deleted as transactions within the files are successfully applied to the database.
Outfiles	Stores TEFs created by Infor CRM Remote/Offline clients for the Synchronization Client to send to the main office.
PortalDeployments	Contains any new Web portals from the Application Architect. Portals are held in this folder until they are registered on the remote computer. During the registration process the portal is moved to its final location.
QUEUEFiles\Failed	Stores transaction queue files generated by the remote/offline user. These queue files are created with every database commit and typically contain a small amount of data. This is a subfolder of the **Sync** folder. **QUEUEFiles** and its child **Failed** folder are created by the Infor CRM system during installation.
Sync	This is a directory folder containing subfolders as well as the SyncStatus.txt, SyncErrors.txt, and WhatsNew.tlg.

WGLogs	This is on the remote office only. WGLogs stores TEFs containing changes to the remote office database.

Exercise 14.2: Run the Synchronization Client

In this exercise, you will start the Sync Client.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

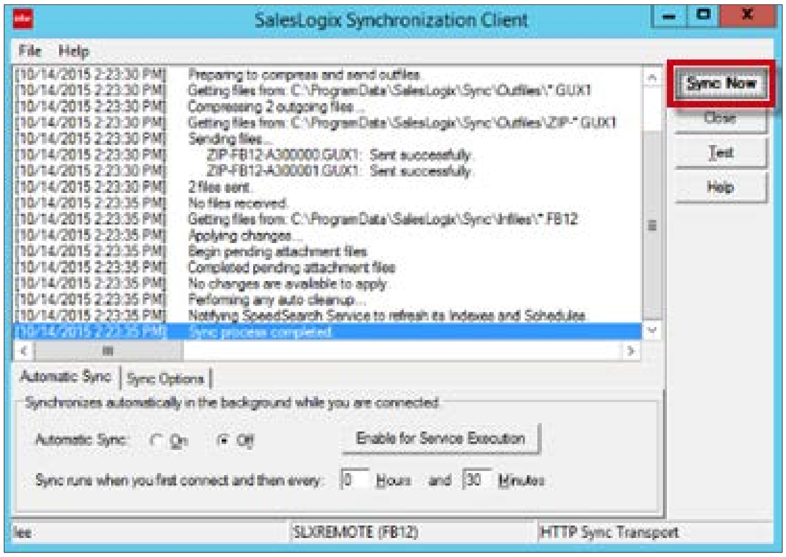
Lee Hogan is signing in to the Infor CRM client using his SLXRemote data link. Prior to making any changes, Infor recommends he start the sync client for the first time to create required sync folders.

- See Lee's sync preferences.
- Use Network as the Connection method.

Exercise steps

1. Open the **Infor CRM Windows Client**.
2. Type *Lee* in the **Username** field. No password is required.
3. Verify the **SLXREMOTE** data link is selected.
4. Click **Sign In**.
5. Click **Synchronize** in the toolbar. The **Saleslogix Synchronization Client** window opens.

   Tip: You don't need to sign in to the Infor CRM client to access the Sync Client. Instead, you can launch it by clicking **Start**, clicking **All Programs**, clicking **Saleslogix**, and then clicking **Synchronization Client**.
6. Click **Sync Now**. The synchronization progress displays in the window.



7. Click **Close**.

Verify you can make a successful connection to SRV10 on port 8080. If not, sign in to the Sync server and check to see if it also has a connection issue. If so, troubleshoot the HTTPSync site setup.

If a synchronization error occurs, remote users are encouraged to contact the system administrator. If necessary, they can view and send a copy of the log activity in the **SyncStatus.txt** file under C:\ProgramData\Saleslogix\Sync\.

- If a transaction fails to apply during synchronization, a message in the Event Log displays the number of transactions failed to apply. The remote user receives a message stating how Sync Client is sending the failed transactions back to the Host.
- If the remote user sends files from an Infor CRM version newer than their installed client, the user receives a message stating how the file is being skipped. The file remains pending until the user upgrades to match the file version.
- If the message “Failed to send file” appears after the name of a TEF in the Sending files area of the dialog box, the disk drive where the Host Infiles is located might be full.

Tip: View the “Resolving Synchronization Apply Problems” and “Explaining Synchronization Error Messages” in the Sync Server Help file for more troubleshooting tips.

Synchronization utilities

As more users start using synchronization, you can take advantage of additional Infor CRM synchronization utilities such as Transaction Viewer/Analyzer, Sync Conflict Transaction Viewer, Resynchronize Database, and Remote Tasks.

What is the purpose of the transaction viewer/analyzer?

The Transaction Viewer and Transaction Analyzer utilities are located in C:\Program Files (x86)\Saleslogix.

- **TrnAnalyzer.exe** compiles statistics of TEF contents used by the synchronization process.
- **TrnViewer.exe** allows you to view the details of the TEF contents or save the TEF information to a text document. When viewing TEF files in text format you can use different text editors to view the information and find specific text.

You might use one of these utilities to view and troubleshoot the contents of a TEF.

About TEFs

A binary transaction exchange file commonly referred to as a TEF contains changes to data transferred between the main office and each Infor CRM remote client or remote office database during synchronization. Synchronization uses TEFs to align remote and network databases and to resolve conflicting changes.

TEFs contain a prefix, a site code of the machine creating the file, an Infor CRM key file value, and the site code of the machine designated to receive the file.

Example: **Transaction Exchange File: ZIP-ZEVR-A100002.Q5AH**

- **ZIP:** Prefix (indicates the kind of file). Available prefixes are ZIP, FILE, and CMD.
- **ZEVR:** Site code of the machine creating the file (the FROM site code).
- **A10002:** Key Base value followed by an incremental number (5 characters on remotes, 7 characters on the host) from the Infor CRM key file of the machine creating the file.
- **Q5AH:** Site code of the machine designated to receive the file (the TO site code). You can find a list of user site codes in the Administrator Users view (**Remote Users** tab).

In all cases, either the FROM site code or the TO site code are the Infor CRM Synchronization Server machine. You can find the Sync Server site code in the office profile (**Sync Options** tab). You can find a list of user site codes in the **Users** view (**Remote Users** tab).

What is the purpose of the sync conflict transaction viewer?

The SyncConfTranViewer utility is located in C:\Program Files\Saleslogix. This utility allows you to view the contents of a **ConfTran.stm** file which stores rejected conflicts and accepted transactions on the Sync server. This file is typically located here:
C:\ProgramData\Saleslogix\Sync\SRVXX\SQLEXPRESS-DBNAME where “DBNAME” is the name of your database. The contents of a ConfTran file includes the following values:

- User
- Date
- Table
- Field

- Primary value
- Site code

What is the purpose of the resynchronize databases utility?

Use the Resynchronize Database feature when a remote/offline user cannot synchronize normally because they have not synchronized for a long period or their synchronization log files (Infiles, Outfiles, Archives) are destroyed. If the remote database is not corrupted, you can resynchronize to recover the remote user's data. Matching records are updated on the Host database and records not matching are inserted.

Resynchronize Database transfers information from the remote database to the main office database. If a record on the remote database was modified earlier than the same record on the Host, it isn't recovered.

If Log Changes is enabled in the utility, all changes are logged and synced to any existing remote users or offices. To avoid overwriting the information you're trying to recover from this remote, Infor CRM recommends opening this user's **User Profile Sync** tab and clearing the synchronize changes check box.

After resynchronizing the database, you must create a new remote database for the user to continue using Infor CRM.

What is the purpose of remote tasks?

Remote tasks allow you to create and execute tasks for one or more remote offices or remote users. These tasks may carry out a variety of actions including sending files, executing programs, retrieving files, and deleting files. You can combine several actions in a single remote task and control the order in which they execute. The tasks are added as transactions, delivered, and performed on the remote user or remote office computer through synchronization.

After remote tasks are delivered to the remote they must be manually executed. You can also automate remote tasks by scheduling them to run as an agent to perform the same duties on the remote database.

Agents can perform automatic, regularly scheduled tasks for both network and remote/offline users. You'll learn more about agents in a later lesson.

Exercise 14.3: Creating and applying a remote task

In this exercise, you will create a remote task and initiate synchronization.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Click here to view a demo and/or practice this task

Scenario

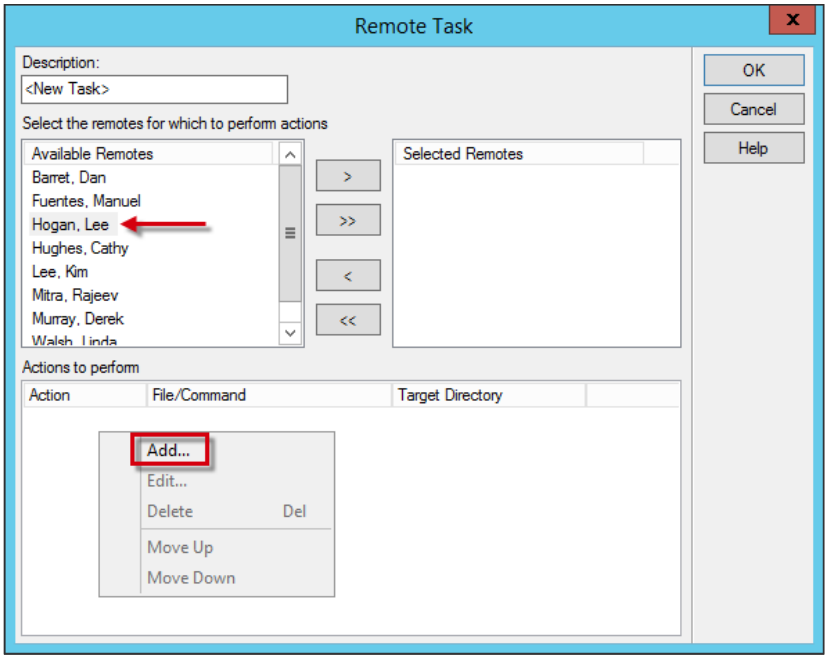
I want to send all remote users training documentation on using Remote Client features. How do I create a remote task to send a PDF file to Lee Hogan and then launch the document in Acrobat Reader?

- Create a remote task with two actions: 1) Create an action to send the file (PDF) to the user and 2) Create an action to execute the file in Acrobat Reader.
- Apply the task by cycling the Sync server and Sync Client.

Exercise steps

Part 1: Create a remote task

1. Open **Infor CRM Administrator**.
2. Type *admin* in the **Username** field. No password is required.
3. Verify the **INFORCRM_EVAL** data link is selected.
4. Click **Systems** from the **Navigation Bar**.
5. Click the **Remote Tasks** tab.
6. Right-click in the workspace and then click **Add Task**. The **Remote Task** window opens.
7. Type *Getting Started* in the **Description** text box.
8. Select **Lee Hogan** from the list of Available Remotes and then click the right arrow to move him to the Selected Remotes list.
9. Right-click in the **Actions to perform** pane and then click **Add**. The **Add Action** window opens.

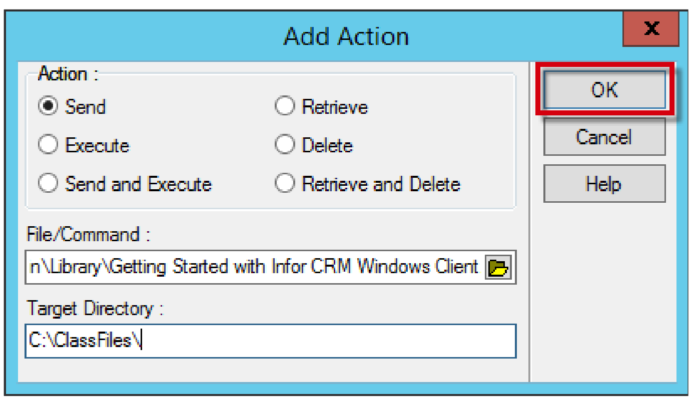


10. Select the **Send** radio button.

11. Browse to **C:\ClassFiles\ImpAdmin\Library\Getting Started with Infor CRM Windows Client.pdf** in the **File/Command** field. This location identifies where the file currently resides. It can be a network or local location.

12. Type *C:\ClassFiles* in the **Target Directory** field. This location identifies where the file is saved on the remote user's computer.

13. Click **OK**.



14. Right-click in the **Actions to perform** pane and then click **Add**. The **Add Action** window opens.

15. Select the **Execute** radio button.

16. Set the **File/Command** to the following (including the quotation marks and a space between each command):

"C:\Program Files (x86)\Adobe\Acrobat Reader DC\Reader\AcroRd32.exe" "C:\ClassFiles\ImpAdmin\Library\Getting Started with Infor CRM Windows Client.pdf"

Note: The location of Acrobat Reader may be different on your machine. Please verify the location first.

17. Click **OK**.
18. Click **OK** again to close the **Remote Task** window.
19. Right-click the **Getting Started** task in the **System Information** view and then click **Execute**. This action tells Infor CRM to execute this task the next time the Sync server runs.
20. Click **Yes** in the **Confirm** window.
21. Press **F5** to refresh. Click the **Remote Tasks** tab to verify the task has executed.

Part 2: Initiate synchronization

1. Sign in to the Synchronization Server as **admin** using the INFORCRM_EVAL data link. No password is required. The **Sync Server** window opens.
2. Click **Sync Now**.
3. Close the Synchronization Server once the sync is complete.
4. Open the following folder: **C:\inetpub\wwwroot\HTTPSync\Outfiles**
5. This directory contains two TEFs that the Sync Client will pick up the next time it cycles.

CMDGUX1-A000001.FB12.SLXT	10/14/2015 2:43 PM	SLXT File
ZIP-FILEDEMOA000JY3.FB12.SLXT	10/14/2015 2:43 PM	SLXT File
ZIP-GUX1-A300001.FB12.SLXT	10/14/2015 2:43 PM	SLXT File

6. Sign in to the Synchronization Client as **lee** using the **SLXRemote** data link. No password is required. The **Saleslogix Synchronization Client** window opens.
7. Click **Sync Now**.

   When the sync is complete, the remote task executes the Adobe Reader and opens the delivered PDF.

   The Synchronization Client waits to perform cleanup until you close Adobe Acrobat Reader.
8. Close Acrobat Reader.
9. Close the Synchronization Client.

Check your understanding

How does a remote task work?

What happens on the remote machine during the synchronization process?

Can client installations be automated?

What is the purpose of a TEF file?

Course summary

Estimated time

5 minutes

Course objectives

Now that you have completed this course, you should be able to:

- Users.
- Teams and departments.
- Maintenance.
- Security: Lan and Web.
- Enhancements and Integrations.
- Web Client customization.
- Installation of Client components.

Topics

- Course review

Appendices

The following are included in this section:

- Appendix A: Learner user accounts
- Appendix B: Building test environments

Appendix A: User accounts

Your instructor will assign you a student user ID from the table listed below to use for class exercises.
Note: If you are taking this course as self-directed learning, refer to the Training Desktop Login Instructions on the Lab On Demand page.

Application	User name	Password
Infor CRM	Admin	<blank>
SQL	sysdba	Ma$t3rk3y

Appendix B: Building test environments

Having test environments to test installation of upgrades, new customizations, or new administrative and security rules is an important part of any production system. The following steps will show you how to create a Windows or Web development/test environment.

Exercise B.1: Create a Windows development/test environment

In this exercise, you will restore the database under a new name, modify the logging paths in the test database, create a connection to the test database, and create a test data link and install customization bundle.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Scenario

My company's developer handed me a customization bundle (sxb). I've budgeted five hours for testing during which time users cannot be signed in (entering data) in case I need to restore the database to its previous state. How do I create a test environment so I don't take the production environment down for this long?

- Backup the saleslogix_eval database as an example. Use the defaults provided by Microsoft SQL Server 2012.
- Restore the database under a new name.
- Modify the logging paths in the test database.
- Create a connection to the test database.
- Create a data link to the test connection and install customization bundles.

Exercise steps

Part 1: Restore the database under a new name

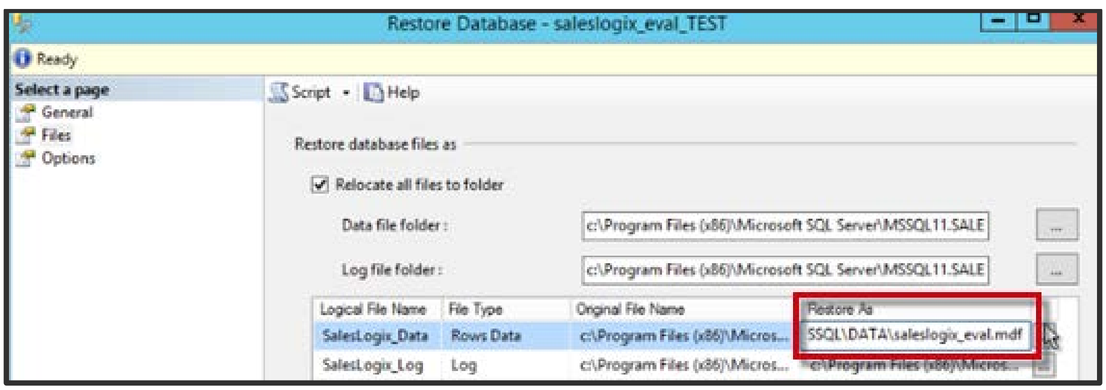
Start by backing up the database. Since you already did this in the training environment you can use the same backup file: **C:\Program Files\Microsoft SQL Server\MSSQL11.SALESLOGIX \MSSQL\Backup\saleslogix_eval.bak**.

Now, let's restore the database under a new name.

1. Select **Start > All Programs > Microsoft SQL Server 2012 > SQL Server Management Studio**. The **Connect to Server** window opens.
2. Verify **Windows Authentication** is selected in the **Authentication** field.
3. Click **Connect**.
4. Expand **SRV10\SQLEXPRESS** from the Object Explorer.

5. Right-click **Databases** and then select **Restore Database**. The **Restore Database** window opens.
6. Select the **Device** radio button and then click the **ellipses**. The **Select backup devices** window opens.
7. Verify **File** is selected from the **Backup media** type drop-down list.
8. Click **Add**. The **Locate Backup File – SRV10\SQLEXPRESS** window opens.
9. Select saleslogix_eval.bak.
10. Click **OK**.
11. Click **OK** again to close the Select backup devices window.
12. Type inforcrm_eval_test in the Database field within the Destination pane.

    This value is important because you want to restore it under a new name which allows you to create a clone of the production environment so you can keep the production environment running seamlessly while testing.
13. Click the **Files** page.
14. Select the **Relocate all files to folder** check box.
15. Click the cell in the **Restore As** column and change *saleslogix_eval* to *inforcrm_eval_test.mdf* and *inforcrm_eval_test_log.ldf* for the data and log file rows, respectively.

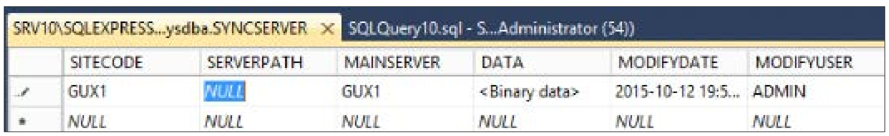
    

    This backup set points to the default file location: C:\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS\ MSSQL\Backup\saleslogix_eval.bak.
16. Click the **Options** page.
17. Select the **Overwrite the existing database (WITH REPLACE)** check box.
18. Select the **Preserve the replication settings (WITH KEEP_REPLICATION)** check box.
19. Click **Script**.
20. Close the **Restore Database – inforcrm_eval_test** window.
21. Click **Execute**.
22. Refresh the Project Explorer when the query successfully executes.

Part 2: Modify the logging paths in the test database

While you are testing, you don’t want any of your remote users to accidentally receive any new records or other changes you might make in the test database. Additionally, if you plan to add sample library items or attachments during your test, you don’t want network users to see them. Removing the production logging path from a few tables in our test database prevent these potential faulty data changes for production users.

1. Expand **inforcrm_eval_test > Tables** from the Object Explorer.
2. Right-click the **sysdba.SYNCSERVER** table and then click **Edit Top 200 Rows**.
3. Click inside the **SERVERPATH** cell in the record for your sync server.
4. Press **CTRL-0** to set the field to **Null**. **Note:** Deleting the text leaves an empty string.

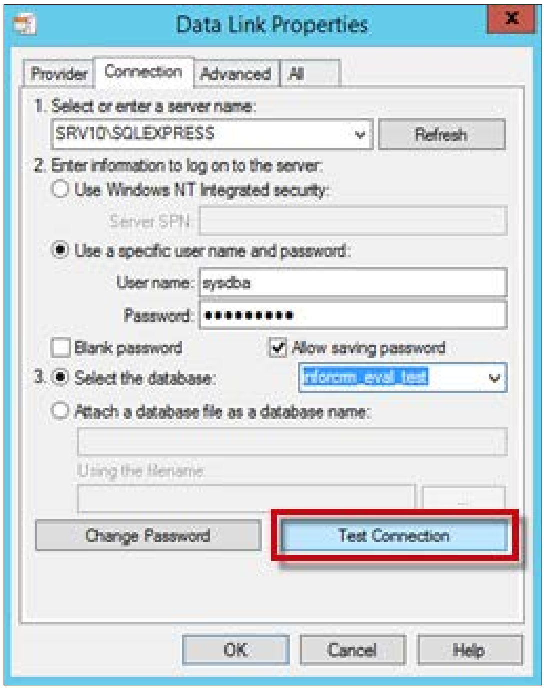

SRV10\SQLEXPRESS...ysdba.SYNCSERVER × SQLQuery10.sql - S...Administrator (54))

	SITECODE	SERVERPATH	MAINSERVER	DATA	MODIFYDATE	MODIFYUSER
	GUX1	NULL	GUX1	<Binary data>	2015-10-12 19:5...	ADMIN
*	NULL	NULL	NULL	NULL	NULL	NULL

5. Close the **sysdba.SYNCSERVER** table.
6. Right-click the **sysdba.BRANCHOPTIONS** table and then click **Edit Top 200 Rows**.
7. Click inside the **ATTACHMENTPATH** cell in the record for your sync server.
8. Press **CTRL + 0** to set the field to **Null**.
9. Click inside the **SALESLIBRARY** cell in the record for your sync server.
10. Press **CTRL-0** to set the field to **Null**.
11. Close the **sysdba.BRANCHOPTIONS** table.
12. Close Microsoft SQL Server Management Studio.

Part 3: Create a connection to the test database

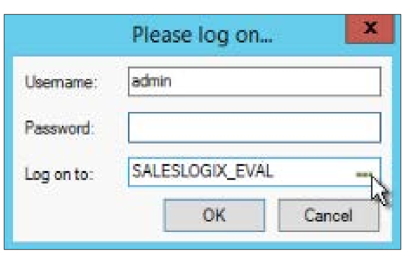
1. Select **Start > All Programs > Saleslogix > Connection Manager** on the administrator workstation. The **Saleslogix Connection Manager** window opens.
2. Click **Add**. The **Connection Name** window opens.
3. Type *INFORCRM_EVAL_TEST* in the **Name used to refer to this connection** field.
4. Click **OK**. The **Data Link Properties** window opens.
5. Select **SQL Server Native Client 11.0** on the **Provider** tab and then click **Next**.
6. Click the **Connection** tab.
7. Type *SRV10\SQLEXPRESS* in the **Select or enter a server name** field.
8. Type *sysdba* in the **User name** field.
9. Clear the **Blank password** check box.
10. Type *Ma$t3rk3y* in the **Password** field.
11. Select the **Allow saving password** check box.
12. Select **inforcrm_eval_test f**rom the **Select the database** drop-down list.
13. Click **Test Connection**. A confirmation window opens.



14. Click **OK**.
15. Click the **All** tab.
16. Double-click the **Persist Security Info** value. The **Edit Property Value** window opens.
17. Select **True** from the **Property Value** drop-down list.
18. Click **OK**.
19. Double-click the **Integrated Security** value. The **Edit Property Value** window opens.
20. Click **Reset Value**.
21. Click **OK**.
22. Click **OK** again to close the **Data Link Properties** window.
23. Click **Apply** within the Saleslogix Connection Manager window.
24. Click **OK**.

Part 4: Create a test data link and install customization bundles.

1. Open **Infor CRM Administrator**.
2. Click the ellipses in the **Log on to** field. The **Data Link Manager** window opens.



3. Click **Add**. The **Data Link Properties** window opens.

4. Select **Saleslogix OLE DB Provider**.
5. Click the **Connection** tab and set the following properties:
    - **Server:** SRV10
    - **Database name:** INFORCRM_EVAL_TEST
    - **User Name:** admin
6. Click **Test Connection** to verify a valid connection.
7. Click **OK**.
8. Click **OK** again. The **Connection Name** window displays.
9. Verify the name is set to **INFORCRM_EVAL_TEST**.
10. Click **OK**.
11. Click **OK** again.
12. Click **OK** once more in the **Please log on** window.
13. Click the **Bundles Nav Bar**.
14. Click **Install**.

    Let's stop here in the training environment as you have no customization bundles to install.
15. Click **Cancel**.

    After installing bundles and releasing plugins, sign in to the Infor CRM Windows Client using the TEST data link to test the customizations and enter sample data without affecting production users. When satisfied with your test, complete the following steps:

- Ensure all Infor CRM users are signed off production.
- Create another backup of the production database to capture any changes made by users since your last backup.
- Sign in to the Administrator using the production data link (INFOR CRM).
- Install the bundle and release plugins. Production users can see customizations the next time they sign in to the Infor CRM Windows Client.

Keep the TEST connection and data link (e.g. inforcrm_eval_test database) for future testing or development purposes. When required, you can simply back up the production database and restore it under the existing TEST database, modify the logging paths, and log in to the Infor CRM client to test your latest bundle or change without having to create a new connection or data link.

Exercise B.2: Create a Web development/test environment

In this exercise, you will install web customization bundles and create a test deployment.

Notes:

- If you are taking this course as classroom or virtual instructor-led training, observe as your instructor first demonstrates this exercise.
- If you are taking this course as self-directed learning, complete the steps below.

Scenario

My company's developer handed me a customization web bundle (zip). I've budgeted five hours for testing during which time users cannot be signed in (entering data) in the event I need to restore the database to its previous state. How do I create a test environment so I don't take the production environment down for this long?

- Backup the saleslogix_eval database as an example. (You already did this.)
- Restore the database under a new name. (You already did this.)
- Modify the logging paths in the test database. (You already did this.)
- Create a connection to the test database. (You already did this.)
- Create a data link to the test connection. (You already did this.)
- Install web customization bundle.
- Create a new test website and deployment.

Exercise steps

A typical Infor CRM Web or Mobile development/test environment requires the same steps as an Infor CRM Windows environment backing up the database, restoring it under a new name, modifying the logging paths of the test database, creating a connection to the test database, and creating a data link to the test connection. Because you've already completed these steps in the training environment, you can move to the next step in the process.

Part 1: Install web customization bundles

1. Open **Application Architect** on the administrator workstation.
2. Type *admin* in the **Username** field and use the **INFORCRM_EVAL_TEST** data link. No password is required.
3. Click **OK**.
4. Select **View > Project Explorer** from the menu bar.
5. Right-click the **VFS on INFORCRM_EVAL_TEST** and then click **Install Bundle**.

   Let's stop here in the training environment. You have no customization bundles to install.
6. Click Cancel.

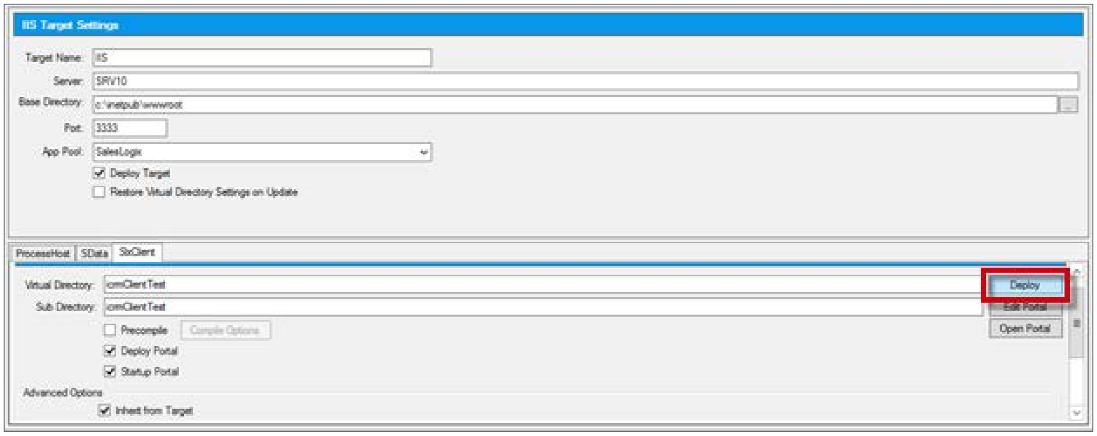
   After installing bundles, you would rebuild the web platform.

Part 2: Create a test deployment

Creating a test deployment ensure you don't overwrite the production website with the test website files. It also allows you to sign in to Infor CRM Web and enter test data without affecting production users.

1. Open the **Deployment Explorer** by selecting **View > Deployment Explorer** from the menu bar.
2. Expand the **Deployments** node and double-click **Core Portals**.
3. Click the **SlxClient** deployment.
4. Set the **Virtual Directory** and **Sub Directory** to **icrmClientTest** within the IIS Portal Configuration pane.
5. Click **Save**.

6. Click **Deploy**.



When the deployment completes, a new **icrmClientTest** virtual directory appears in IIS under the Infor CRM website. The connection.config inside C:\inetpub\wwwroot\SlxClient_test references the Initial Catalog as INFOR_EVAL_TEST.

Sign in to the Infor CRM Web Client using the **http://srv10:3333/icrmClientTest** URL to test the customizations and enter sample data without affecting production users. When satisfied with your test, complete the following steps:

a. Ensure all Infor CRM users are signed off production.
b. Create another backup of the production database to capture any changes made by users since your last backup.
c. Sign in to the Application Architect using the production data link (INFOR CRM).
d. Install the web bundle, build the web platform, and deploy the SlxClient portal. Production users see the customizations the next time they sign in to the Infor CRM Web Client: http://srv10:3333/slxclient

Keep the TEST connection and data link (e.g. inforcrm_eval_test database) for future testing or development purposes. When required, you can simply back up the production database and restore it under the existing TEST database, modify the logging paths, and log in to the Infor CRM client to test your latest bundle or change without having to create a new connection or data link.