Administration Guide

QAD Customer Relationship Management

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Contents

QAD CRM Admin Guide Change Summary

The following table summarizes significant differences between this document and the last published version.

Date/Version	Description	Reference
March 2015/6.7	Added a note for Time Zone setting	page 80
	Added information about CRM APIs as Appendix	page 179
September 2014/6.6.3	Rebranded for version 6.6.3	--
March 2014/6.6.2	Added a chapter about database refresh	page 108
March 2013/6.6.1	Updated the description of Incoming Mail Server	page 18
	Updated the description of Incoming Mail (POP3)	page 19
	Updated information about Configuring AdminService Settings	page 99
November 2012/6.6	Added information about setting up Microsoft Exchange Server 2010	page 166
	Removed obsolete information about integration with Microsoft Exchange Server 2003	--
March 2012/6.5.1	Updated most of the screenshots to reflect UI changes on the QAD CRM webclient	--
	Updated the section on configuring Microsoft Outlook	page 178
October 2011/6.4.4	Added a new section on granting AdminServiceUser full access to mailbox store in Microsoft Exchange Server 2007	--

Chapter 1

Overview

This section contains an overview of QAD Customer Relationship Management (QAD CRM). It discusses the following topics:

QAD CRM Components

This section provides an overview of the following components that constitute the QAD CRM application:

- QAD Sales Force Automation
- QAD Marketing Automation
- QAD Remote Sales

For more information about these components, refer to *QAD Customer Relationship Management User Guide*.

QAD Sales Force Automation

QAD Sales Force Automation is the core of QAD CRM, and enables salespeople to generate business and manage customer relationships. This layer of the QAD CRM application appears as Sales Management on the application menu.

QAD Marketing Automation

QAD Marketing Automation is an optional layer that integrates with the QAD Sales Force Automation layer to provide features for managing and maintaining marketing campaigns. This layer of the QAD CRM application appears as Marketing Management on the application menu.

QAD Remote Sales

QAD Remote Sales is an optional application that can be installed on the stand-alone machines of remote sales personnel to enable interaction with the QAD CRM central (host) database.

Remote users can synchronize the data on their remote machines with the central database to ensure that both remote and central databases contain the latest data.

QAD Remote Sales interacts with both the QAD Sales Force Automation and QAD Marketing Automation layers.

Typically setup configuration of QAD Remote Sales is performed by a system administrator. For details, see Chapter 13, “QAD Remote Sales Integration,” on page 139.

Synchronizing data between remote and host databases is typically performed by salespersons as part of their everyday activities; for details, refer to *QAD Customer Relationship Management User Guide*.

System Integrations

This section provides an overview of the different systems or applications that can be integrated with QAD CRM.

Integration with QAD Enterprise Applications

Certain modules within QAD CRM can be integrated with QAD Enterprise Applications. When these modules are integrated, you can synchronize data—for example, product information—in QAD CRM with the corresponding information in the QAD Enterprise Applications database.

Integration with QAD Enterprise Applications is switch-based; you can configure based on your requirements by specifying the modules you want to integrate. You can also control the data flow and other behavior.

The data synchronization is automatic. Qxtend, database and session triggers update the data, and fields of the integrated tables are mapped. For some modules, the system uses user-defined fields to store the QAD Enterprise Applications fields.

QAD CRM works with multiple QAD Enterprise Applications user interfaces. It can successfully integrate with CHUI and the .NET user interface.

For more details on integration with QAD Enterprise Applications, see Chapter 12, “Integration with QAD Enterprise Applications,” on page 115.

Microsoft Exchange Server

QAD CRM can be integrated with Microsoft Exchange Server 2007/2010. When integrated, you can store references to e-mail messages sent and received from Microsoft Exchange Server, as well as synchronize details of contact persons and activities between the two systems.

Microsoft Exchange Server integration is not a mandatory feature. Any outgoing mails can still be generated from CRM and sent via the Microsoft Outlook client.

So, for example, Marketing Campaigns with e-mail blast are still able to be generated.

The following functionalities are not available when you do not have Microsoft Exchange Integration:

- Allowing inbound mails to be stored against a customer’s account.
- Synchronizing CRM Activities with Microsoft Outlook. Activities can still be assigned and managed in QAD CRM.
- Allowing Contacts from QAD CRM to be shared with Microsoft Outlook.

For details on Microsoft Exchange Server integration, see Chapter 15, “Microsoft Exchange Server Integration,” on page 165.

Security

The QAD CRM system provides multiple types and levels of security that should be viewed within the context of your organization’s overall security framework. While it is beyond the scope of this guide to discuss the details of information security, the fundamental components involve measures to assure the preservation of:

- Confidentiality—ensuring that information is accessible only to those authorized to have access
- Integrity—safeguarding the accuracy and completeness of information and processing methods

- Availability—ensuring that authorized users have access to information when required

Security properly starts with a comprehensive policy statement that demonstrates management support and commitment to security, and defines the principal security components important to the organization

After the policy statement is prepared, procedures, guidelines, and other supporting administrative controls are typically defined to support the policy. Finally, technical controls are designed and implemented to support the administrative controls.

For details about planning and implementing security within QAD CRM, see Chapter 5, “System Security,” on page 29.

QAD AdminService

QAD AdminService (ADS) is a Windows service for managing and executing background jobs that is installed as part of the QAD CRM system installation. QAD ADS is a multi-threaded application that executes jobs concurrently. QAD ADS automates and executes jobs defined in QAD CRM and with QAD ADS. A job can be a single task or a series of tasks.

For details on using and configuring the QAD ADS, refer to the online help for this component.

Chapter 2

Getting Started

This section provides an overview of the QAD Customer Relationship Management (QAD CRM) setup. It discusses the following topics:

Overview

Many tasks must be performed to ensure a successful implementation of the QAD CRM system. Setup tasks are divided into the following types:

- Mandatory setup
- Function setup

Mandatory Setup

Mandatory setup must be performed immediately after installing the QAD CRM system. Mandatory setup tasks must be performed before performing any function setup tasks.

Mandatory setup involves running the Configuration Wizard to provide information required for system operation—details about business units, the host node, the base currency, and supported system languages. Mandatory setup also configures the system administrator profile required for completing function setup.

For details about mandatory setup, refer to Chapter 3, "Post-Installation Configuration," in *QAD Customer Relationship Management Installation Guide*.

Function Setup

Before performing your function setup, it is best to develop a detailed implementation plan that describes how the various system components will support your organization's needs.

An implementation plan helps to identify how your existing business processes can be mapped to the system. In particular, your implementation plan should identify requirements for system security based on the needs of your various departments and personnel. For details on security, see Chapter 5, "System Security," on page 29.

Use the components in the Settings menu to set up and configure your QAD CRM system.

Section 1

Administration

This section describes the administration of the QAD Customer Relationship Management (QAD CRM) system.

Chapter 3

Organization Setup

This section describes how to set up business units, users, and teams in QAD Customer Relationship Management (QAD CRM). It discusses the following topics:

Overview

Managing business units, users, and teams is an integral component of QAD CRM system administration since these components are at the core of your business-generating efforts.

The QAD CRM system provides significant flexibility in the business unit, user, and team setup process. This allows you to create teams and business units when creating and maintaining users from the Users component. Typically these components might be configured in the following sequence:

1. Business units
2. Users
3. Teams

Note It is recommended that you plan your system before implementing these components. In particular, you should have conducted an audit of your organization's security requirements prior to setting up the security-related attributes of business units, teams, and users. For details, see Chapter 5, "System Security," on page 29.

Setting Up Business Units

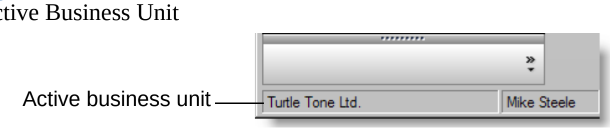
An organization may have branch offices, subsidiaries, or business partners whose data may need to be maintained in the system. QAD CRM provides features for managing business unit data.

Using the Business Units component, you can maintain details of as many business units as required to meet the needs of your organization. System users can only access the data for a business unit when their user profile is associated with that business unit profile.

All users in the system must be associated with at least one business unit in order to log in. A user that is associated with multiple business units can choose which business unit to access at login. A user cannot switch business units during a session—they must log out of the system and then log in again.

The name of the active business unit displays at the far left of the application status bar during the user session, as shown in Figure 3.1.

Fig. 3.1
Active Business Unit



To access the Business Units component, choose Main Menu|Settings|Organization|Business Units. The Business Units pane displays showing the units currently defined in the system.

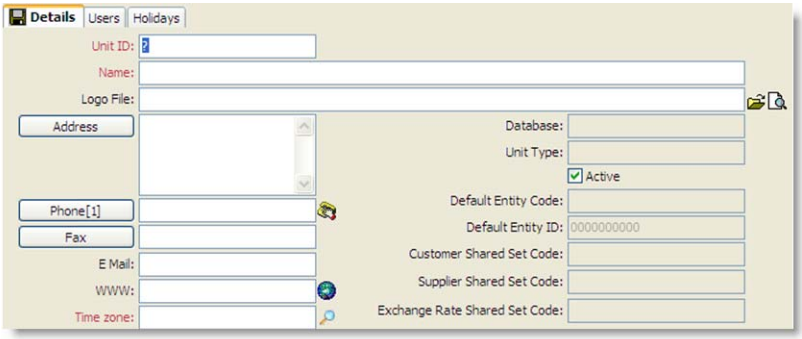
Domains and Business Units

Prior to QAD CRM 6.3, there was an indirect mapping between a single QAD CRM Business unit and a single Enterprise Application domain.

From QAD CRM 6.3 onward, QAD Enterprise Applications domains have been implemented by extending the usage of QAD CRM Business units. When it is integrated to QAD Enterprise Applications, QAD CRM maps a Domain to a Business unit in QAD CRM of the same name.

Details Tab

Fig. 3.2
Business Units - Details Tab



Unit ID. Enter a unique code for the business unit.

Name. Enter the name of the business unit.

Logo File. Enter the location and name of the graphics file containing the logo of the company. Click the Open Folder icon to select the graphics file. To view the specified file, click the View icon.

Note The selected image displays in the main application workspace when no application menu item is selected. For example, you can select a graphic of your company logo and it will display when the application opens.

Address. Enter address details as required. Country information is mandatory.

Phone. Enter telephone details as required.

Note If you have a modem connected to your computer, you can click the icon to the right to use the dial-out facility.

Fax. Enter fax details as required.

E-mail. Enter an e-mail address.

WWW. Enter an Internet address. You can click the icon to the right to launch your Internet browser to the specified address.

Time zone. Enter a time zone for the business unit.

A time zone must be specified when defining a business unit. Time zones are defined in relation to Greenwich Mean Time (GMT); for example, the GMT-8 time zone, which applies to the west coast of the United States, is 8 hours behind GMT.

Note For planning activities, the system uses a hierarchy to determine which time zone to use. First the system checks the time zone specified in the user's Preferences|My Settings module. If there is no time zone specified, the system uses the time zone specified in the user's database record. If the record does not specify a time zone, the system uses the time zone specified for the business unit associated to the user.

Database. Displays name of the database where the domain is located if QAD CRM is integrated with QAD Enterprise Applications.

Unit Type. Displays the type of domain if QAD CRM is integrated with QAD Enterprise Applications.

Active. Indicate whether this business unit is currently active.

- Yes (the default): This business unit can be associated with users and selected at log-in.
- No: This business unit is not active. Users cannot be associated, and the business unit is not selectable at log-in.

Default Entity Code. Displays default entity code of the domain if QAD CRM is integrated with QAD Enterprise Applications.

Default Entity ID. Displays default entity ID of the domain if QAD CRM is integrated with QAD Enterprise Applications – Enterprise Edition.

Customer Shared Set Code. Displays customer shared set code attached to the domain if QAD CRM is integrated with QAD Enterprise Applications – Enterprise Edition.

Supplier Shared Set Code. Displays supplier shared set code attached to the domain if QAD CRM is integrated with QAD Enterprise Applications – Enterprise Edition.

Exchange Rate Shared Set Code. Displays exchange rate shared set code attached to the domain if QAD CRM is integrated with QAD Enterprise Applications – Enterprise Edition.

For information on the QAD Enterprise Applications business model, see *QAD Enterprise Applications Financials User Guide.*

Users Tab

Use the Users tab to associate a user profile to the business unit profile. Every user must be associated with at least one business unit in order to log in to the system. For details of associating users and business units, see “Setting Up Users” on page 12.

Holidays Tab

Use the Holidays tab to define a holiday schedule for a business unit. You specify details of non-working days to a business unit the same way as you do for a user. For details, see “Holidays” on page 17.

Setting Up Users

The system administrator is responsible for creating and maintaining user profiles in the system. A user can have multiple user profiles; each user profile has a unique user ID and password. A user can only use one profile at a time when logged in to the system.

A user can be a member of a *permission group* with access to specific system menus. The system administrator creates permission groups, and defines access permissions to the system according to user profiles.

Users who share areas of responsibility are typically members of the same team; team membership determines access to database records (row-level security). For example, a user cannot view a profile if that profile is associated with a different team.

Permission groups and teams are important considerations when implementing system security. For details, see Chapter 5, “System Security,” on page 29.

Use the features in the Users component to maintain user profile information. The Users component has several tabs to maintain different parts of the user profile, such as basic user profile information; permission group, business unit and menu associations, team affiliations, holidays, and so on.

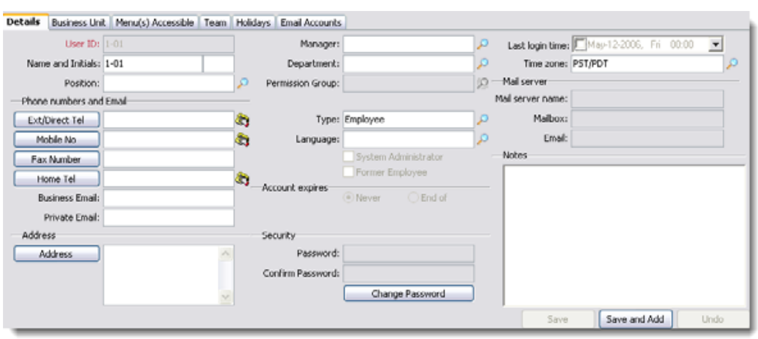
To access the Users component, choose Main Menu|Settings|Organization|Users. The Users browse lists the users defined in the system.

Note You can copy details of an existing user and edit it to create a new user profile. To copy an existing user profile, right-click the user profile you want to copy and choose Copy (or click Copy on the toolbar). The Details tab displays with the copied user details.

Details

Use the Details tab to maintain basic identifying information for the user profile—name, position, manager, contact details, and so on. You also maintain the user password using this tab.

Fig. 3.3
Users - Details Tab



User ID. Enter a unique user ID for the user. This ID is used by the users in conjunction with a password to access the system.

Name and Initials. Enter the first, middle, and last name of the user.

Position. Enter the position of the user.

Manager. Enter the manager to whom the user reports.

Department. Enter the department in which the user works.

Permission Group. Enter a permission group for the user. This determines the areas of the system the user can access. A user can belong to only one permission group. For details about security and permission groups, see “Permission Groups” on page 32.

Last Login Time. Displays the time and date of the previous login of the user.

Time Zone. Enter the time zone for the user.

If a time zone has not been specified in My Settings|Preferences, the system uses the time zone defined here for user activities. If no time zone has been defined here, the system uses the time zone defined for the business unit that is active during the user's current session. If a user is associated with multiple business units, the time zone of the business unit that is active during the current session is used for an activity. Tasks always use local time.

Mail server name. Displays the mail server name if your system is integrated with Microsoft Exchange Server.

Mailbox. Displays the user's mailbox if your system is integrated with Microsoft Exchange Server.

Email. Displays the user's email address if your system is integrated with Microsoft Exchange Server.

Ext/Direct Tel. Enter the direct work telephone or extension numbers of the user. Specify other contact details of the user in the Fax Number, Home Tel, and Mobile No text boxes.

Note You can click the Telephone icon to use the dialout facility to make a phone call or send a fax to the user from your computer.

Business Email. Enter the business e-mail address of the user.

Private Email. Enter the private e-mail address of the user.

Note You can click the e-mail icon next to the text box to directly send a mail to the user.

Address. Enter the user address.

Type. Enter the user type or skill level.

Language. Enter the language the system should automatically use when the user logs in.

System Administrator. Select this check box to assign system administrator rights to the user.

Former Employee. Select this check box to indicate that the user has left the company.

Account Expires. Indicate whether the user profile expires. If the End Of option is selected, you must enter an expiration date.

When a user account expires, that user is prevented from logging in to the system. To restore system access, the user account must be modified by selecting the Never option or providing a new expiration date.

Password. Enter a password for the user, and then enter the same password in Confirm Password. After entering passwords using this function, you must provide passwords to all users so that they can access the system.

Note For an existing user, click Change Password to enable the Password and Confirm Password fields.

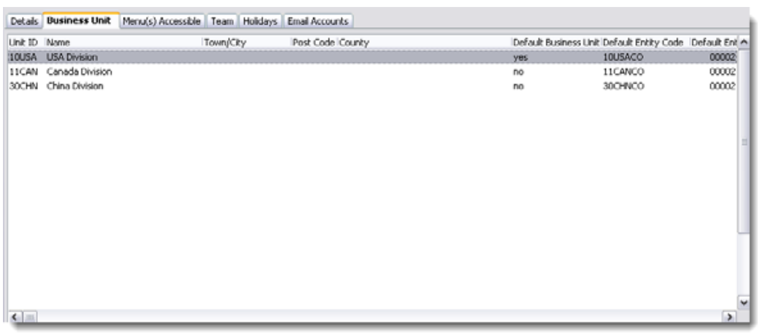
An administrator can give users the ability to change their passwords by providing access to the My Settings|Details screen.

Business Unit

Use the Business Unit tab to maintain associations between a user profile and business units defined in the system. A user must be associated with a business unit in order to access data for that unit. A user profile can be associated with one or more business units, but can only work on data for one business unit at a time. At login, a user who is associated with multiple business units can choose which business unit to work on.

Note You can also use the Business Unit component to maintain user profile/business unit associations.

Fig. 3.4
Users - Business Unit



To attach a user profile to a business unit:

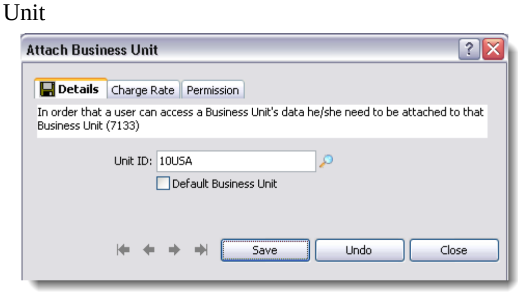
1 Choose Main Menu|Settings|Organization|Users.

2 Select a user in the Users listbox.

3 Right-click the Business Unit listbox and choose Add. The Attach Business Unit dialog box displays.

Note The right-click menu also lets you edit or delete user profile/business unit associations.

Fig. 3.5
Attach Business Unit



4 Provide information for the Details tab, as required.

Unit ID. Specify the business unit to associate with the user profile.

Default Business Unit. If the user profile is attached to multiple business units, select this check box to indicate that this is the default business unit for this user.

5 Provide information for the Charge Rate tab, as required.

Charge Rate 1. Enter the normal hourly charge rate that the business unit pays the user.

Charge Rate 2. Enter any other hourly charge rate—such as weekend charge rate—that a business unit pays the user.

6 Provide information for the Permission tab, as required. The Permissions tab lets you restrict actions for the specified user system wide when that user is working with the business unit:
   - Add Records
   - Edit Records
   - Copy Records
   - Delete Records
   - Update Records

Menu(s) Accessible

Use the Menu(s) Accessible tab to define the menus the user can access. A user can be attached to multiple menus. A user that is attached to multiple menus can choose which menu to use at login.

For details about defining menus, see “Menu Manager” on page 39.

Note You can also use the Menu Manager to manage users and menus.

To assign a user to a menu:

1 Choose Main Menu|Settings|Organization|Users.

2 Select the user in the Users listbox you want to assign to a menu.

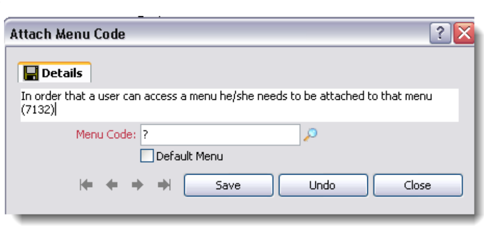
3 Click the Menu(s) Accessible tab. Any menus currently associated with the selected user display.

4 Right-click the Menu(s) Accessible listbox and choose Add.

   Note The right-click menu also provides options for editing and deleting existing menu assignments.

   The Attach Menu Code dialog box displays.

Fig. 3.6
Attach Menu Code



5 In the Menu Code field, specify a code for the menu to attach.

6 If this is the default menu for the user, select the Default Menu check box.

7 Click OK.

Team

Users with similar job profiles can be grouped into teams, such as Sales, Marketing, or Management. A user can be a member of multiple teams. Team affiliation determines a user's record-level permissions in the system; for details, see "Setting Up Teams" on page 19.

Holidays

To assign a user to a holiday schedule:

1 Choose Main Menu|Settings|Organization|Users.

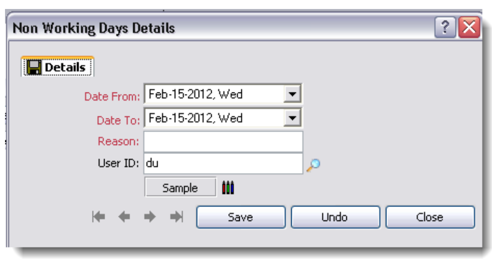
2 Click the Holidays tab. Any holidays currently associated with the selected user display.

3 Right-click the Holidays listbox and choose Add.

   Note The right-click menu also provides options for editing and deleting existing holiday schedules.

   The Non-Working Days Details dialog box displays.

Fig. 3.7
Non-Working Days Details



4 Enter the start and end dates, a reason for the non-working period, and a user ID.

5 Click OK.

E-mail Accounts

Use the Email Accounts tab to associate a user with an e-mail account and to maintain e-mail account details. A user can have multiple e-mail accounts, one of which is a default account.

If Microsoft Outlook is not installed on the client machine, system uses e-mail account information to send the mails. To associate a user to an e-mail account:

1 Choose Main Menu|Settings|Organization|Users.

2 Click the Email Accounts tab. Any accounts currently associated with the selected user are displayed.

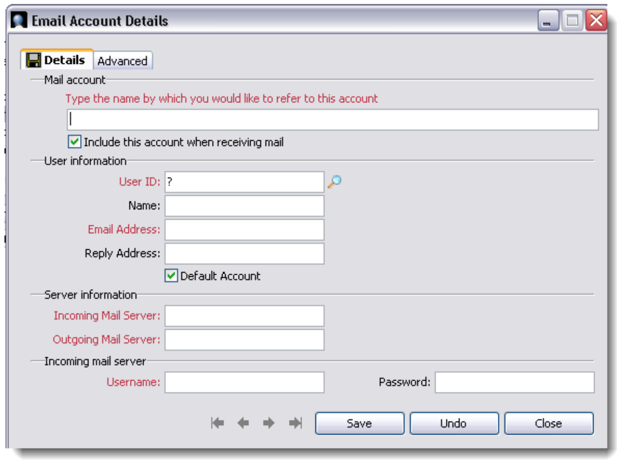
3 Right-click the Email Accounts listbox and choose Add.

   Note The right-click menu also provides options for editing and deleting existing e-mail accounts.

   The dialog box has two tabs: Details and Advanced.

Details

Fig. 3.8
Email Account Details



Account name. Enter a name by which this e-mail account should be called.

Include this account when receiving mail. Select this option to include the e-mail account when receiving mail for the system user.

User ID. Enter a user ID to associate with this e-mail account. The user must be defined in the system.

Name. Enter the name of the user to associate with this e-mail account.

Email Address. Enter the e-mail address for the user. The user will use this e-mail address for sending e-mail messages.

Reply Address. Enter the address on which the user will receive replies to e-mail messages.

Default Account. Select the check box if this is the default e-mail account for this user.

Incoming Mail Server. This field is for reference only.

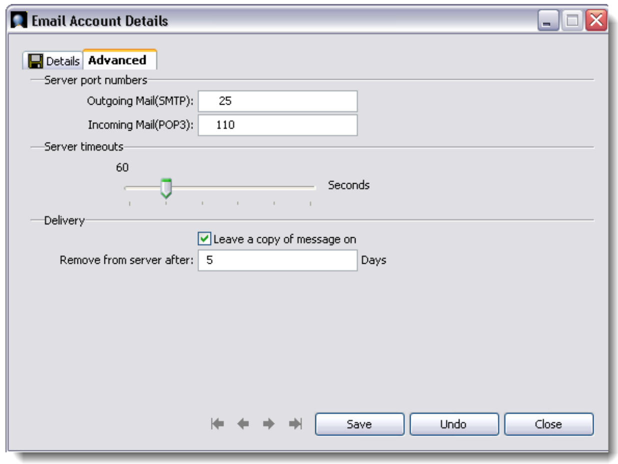
Outgoing Mail Server. Enter the name of the outgoing mail server for the e-mail account.

Username. For the outgoing mail server, enter the user name that the system user must use for sending e-mail messages using the account.

Password. For the outgoing mail server, enter the password that the system user must use for sending e-mail messages using the account.

Advanced

Fig. 3.9
Email Account Details - Advanced Tab



Outgoing Mail (SMTP). Enter the port number of the outgoing mail server.

Incoming Mail (POP3). This field is for reference only.

Server Timeouts. Using the slider, enter the number of seconds for server timeout. This time specifies how long to wait for a response from the server before ceasing attempts to send or receive e-mail messages.

Leave a Copy of Message on. Select the check box to leave a copy of the e-mail messages on the incoming mail server.

Remove from Server after. Enter the number of days after which to delete e-mail messages from the incoming mail server.

Setting Up Teams

Teams are associated with a business unit. Team members typically share job or role responsibilities. Users can belong to as many teams as required for business requirements. Team affiliation determines the business unit data that a user can access.

Teams can themselves contain teams. For example, a Sales team might consist of two teams, such as Northern Region Sales and Southern Region Sales. Typically a user who is a member of one team cannot view data—such as sales data—for a user associated with a different team.

If required, teams can be configured to allow data to be shared with other teams by creating a team hierarchy. Data sharing operates in a top-down mode: teams higher in a team hierarchy can view the data of members in lower teams, but not vice versa. Teams that are on the same level can share data.

Note If you do not want to implement team-level security for Opportunities and Activities, you must set up a default team and attach all users to this team.

For more information about teams and security, see Chapter 5, “System Security,” on page 29.

Fig. 3.10
Teams

The Teams window has two areas. The left-hand pane lists the name of the business unit and the teams that are currently attached to that unit. Teams are arranged in a hierarchy. The right-hand pane lists the members in the selected team.

To create a team:

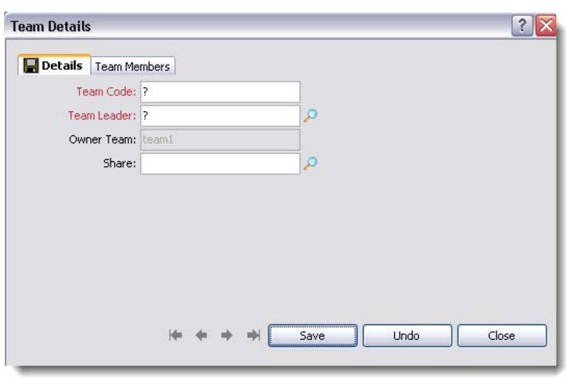
1 Choose Main Menu|Settings|Organization|Teams. The Teams window displays.

2 Right-click the business unit to create a team under the unit. Or right-click an existing team to create a subteam within that team.

   Note The right-click menu also contains options for editing and deleting a team.

3 Choose Add from the menu. The Team Details dialog box displays.

Fig. 3.11
Team Details



4 Complete the Details tab as required.

   Team Code. Enter the team code.

   Team Leader. Enter a team leader for the team. The team leader must be a user defined in the system.

   Owner Team. If you are adding a sub-team, the name of the owner team appears in the Owner Team field.

   Share. Enter teams to share data with. Specified teams will have access to selected team data.

5 Select the Team Members tab. The Members of Team <*Name*> listbox displays. The team leader is listed.

Note You can also attach a user to a team by using the Team tab in the Users component.

6 Right-click the listbox and choose Attach User. The Attach User(s) window displays the system users.

7 Select the users to attach to the team and click OK.

Note You can use Ctrl-click or Shift-click to select multiple users at a time.

Users and Remote Nodes

Using the Users module, you can do the following remote-node related actions:

- Create a remote node.
- Maintain node attachments.

Creating Remote Nodes

If you are on the host database, you can create a remote node for a user by right-clicking the user in the Users browser and choosing Create a Remote Node from the menu.

Note If you are working on a remote database, this option is not available.

If a node already exists for the user, you can edit the node details; otherwise, the system does either of the following:

- If no enabled regional node exists under the login node, the system creates a remote node for the selected user under the login node.
- If one (or more than one) enabled regional node exists under the login node, the user is given the option to choose which parent node the remote should be created under.
- When you create a node for a user, QAD CRM assigns all the user privileges to the remote node.

Maintaining Node Attachments

You can also attach or detach a user from a remote node. Attaching a user to a node means that all the profiles associated with that user are also attached to the node. Conversely, detaching a user from a node also detaches from the remote node any profiles that are attached to that user.

If you remove a system user from a business unit and they are attached to a remote node, if the user is not attached to any other business unit, the system will ask whether to disable the remote node to which the user was attached. This also applies if an employee is made a former employee.

When a team is attached to a node, if another team is configured to share that team’s data, the profiles associated with the new team will also be subscribed to the remote node.

For more information about working with remote nodes, see Chapter 13, “QAD Remote Sales Integration,” on page 139.

Chapter 4

Territory Management

This section describes how to set up territories in QAD Customer Relationship Management (QAD CRM). It discusses the following topics:

Overview

Account managers who are responsible for marketing products operate in certain geographic locations or for certain industries or with a certain group of customers. Such criteria that define a range of profiles are referred to as *territories*.

A territory that is a geographic location can be represented by a zip code or post code, region, county, state, and so on. Different types of industries are represented by standard industry codes (SIC).

Profiles that exist within a specific territory can have an internal account manager as well as an external account manager. An internal account manager manages the account for the profile off-site; the external account manager visits the profile site.

Using the territory management features in the Territory Management component lets you manage details of your territories. These territories are used in modules that manage or require details of account managers, such as the Marketing Management module.

Using the Territory Management module you can:

- Define territories and assign them to account managers.
- Reassign territories to account managers.

Define Territories

To define a territory:

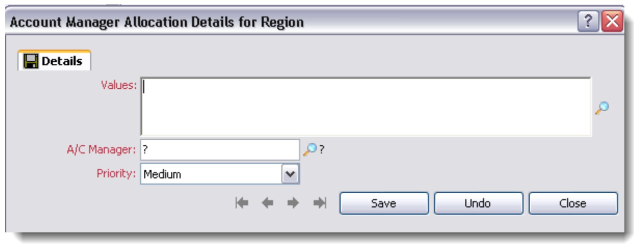
1. Choose Main Menu|Settings|Territory Management|Define Territories. The Allocation by Method browser displays.
2. Depending on which manager you want to define a territory for, click either External A/C Manager or Internal A/C Manager. The list of territory types displays.

Region	A region defines the territory; for example, Asia-Pacific.
Post Code	A post code defines the territory; for example, 95066.
County	A county defines the territory; for example, San Francisco.
State	A state defines the territory; for example, California.
Country	A country defines the territory; for example, Czech Republic.
Group	A group defines the territory; for example, QAD or Oracle.
SIC Code	A code defines the territory; for example, 44613 - Optical Goods Stores.
Profile Type	A profile type defines the territory; for example, Competitor or Customer.
Analysis Group	An analysis code defines the territory; for example, Airfreight export or Road freight export

3. Select a territory type.
4. Right-click the Define Territories list box, and then choose Add. The Account Manager Allocation Details dialog box displays for the selected territory type.

   Note The context menu also contains options for editing or deleting an allocation, as well as creating an Allocation by User report.

Fig. 4.1
Account Manager Allocation Details



5 Complete the fields as required.

Values. Enter a value for the territory type.

Note You can enter multiple territory codes by using commas between values; for example, for post codes you can enter 95066, 95067, 95068.

A/C Manager. Enter a manager defined in the system to associate with the territory.

Priority. Enter a priority: Low, Medium, or High.

Note Priorities are used to control display preferences in browsers if territories overlap. For example, if you define sales representative A for Sydney using the high priority and sales representative B with a medium priority, in the browser sales representative A displays above sales representative B.

Reassign Territories

As circumstances change, it may be necessary to reassign the territories belonging to an account manager to a different account manager. Using the Reassign Territories component in Territory Management, you can reassign profiles that comply with certain conditions to other account managers. For example, you can reassign all profiles in the Asia-Pacific region to a new account manager; or reassign all profiles in the USA whose SIC code is 111.

Note Territories are assigned to an account manager when specifying a territory record, so profiles in the territory have the same account manager as allocated to that territory; see “Define Territories” on page 24 for details. However, a different account manager can be allocated to a profile when the profile is created or modified.

You reassign profiles by doing the following:

1 Select the profiles to reassign.

2 Process the profiles.

Profile Selection

You can manually select the profiles to reassign, or use search criteria to assemble a list of profiles to be reassigned. If you need to reassign many profiles, use search criteria to save time.

Manual Selection

To select a profile manually:

1. Choose Main Menu|Settings|Territory Management|Reassign Territories. The List browser displays any profiles in the system requiring reassignment that have not yet been processed.

   Note If you already see the profiles you want to reassign, select the profiles and jump to "Profile Processing" on page 27.

2. Right-click the browser and choose Add. The Enter Profile dialog box displays.

   Note You can remove a profile from the reassignment list by right-clicking the profile and choosing Delete. This removes the profile from the reassignment list—it does not delete the profile from the system.

3. Click the Select Profile button. The Find Profile/Contact dialog box displays.
4. Locate and select the profile you want to reassign, and then click OK.
5. Click OK to add the selected profile to the list for reassignment.

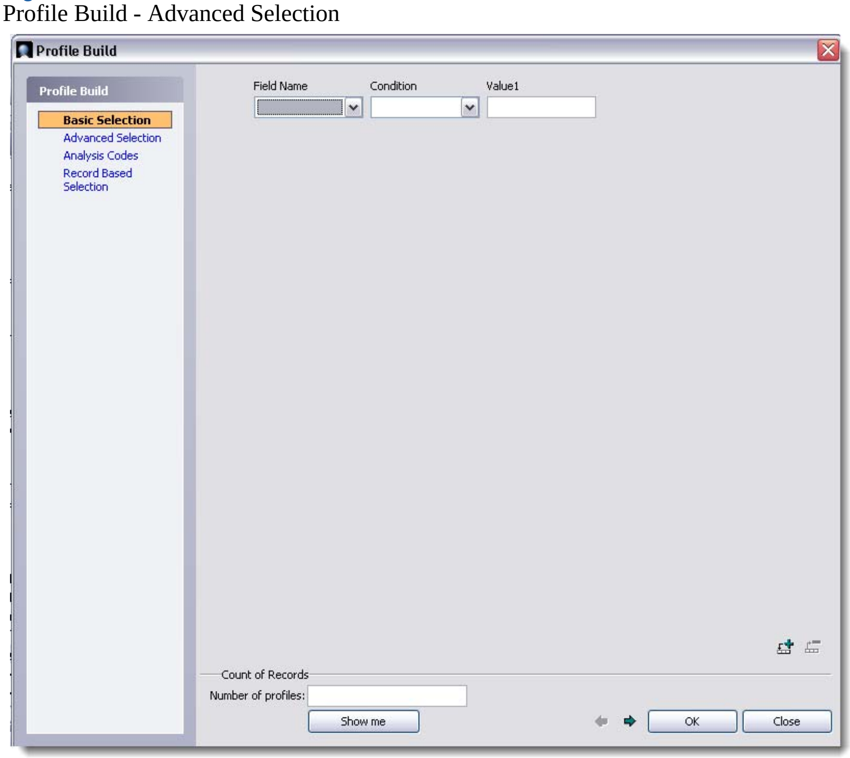
Selecting Profiles Search Criteria

1. Choose Main Menu|Settings|Territory Management|Reassign Territories.
2. Right-click the List browser and choose Build.

   Note You can also choose File|Build or click Build on the toolbar.

   The Profile Build dialog box displays.

Fig. 4.2
Profile Build - Advanced Selection



3 Specify your criteria for selecting profiles in the fields at the top of the dialog box.

Note You can click Basic Selection, Advanced Selection, Analysis Codes, or Record Based Selection to change the types of criteria you can use.

For example, to display all profiles in the North region, specify the following:

```
(PROSPECT.Region is(exactly) 'North')
```

To add more criteria, click Append and repeat this step.

Note Syntax errors may occur when you append or modify conditions. It is a good practice to check the syntax before processing conditions. To check syntax errors, click Check Syntax.

4 Click OK. The profiles that fulfill the specified conditions are displayed in the List browser. You can now reassign these profiles to a different account manager; see “Profile Processing” on page 27.

Profile Processing

To reassign profiles:

1 Select the profiles you want to reassign to a different account manager.

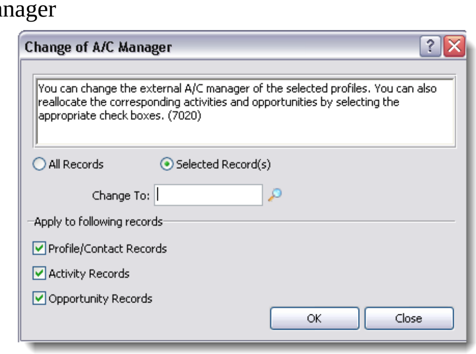
Note To select multiple profiles, hold down the Ctrl key and select the profile records.

2 Right-click the list of territories and choose Process.

Note You can also choose File|Process or click Process on the toolbar.

The Change of A/C Manager dialog box displays.

Fig. 4.3
Change of A/C Manager



3 Specify the profiles to reassign: All Records or Selected Records.

4 In the Change To text box, enter the new account manager for the profiles.

5 In the Apply to Following Records area, select which records to reassign: Profile/Contact Records, Activity Records, or Opportunity Records.

6 Click OK. The specified account manager is assigned to the selected profiles.

Chapter 5

System Security

This section describes security in QAD Customer Relationship Management (QAD CRM). It discusses the following topics:

Overview

The security model used by the QAD CRM system controls who can access the system and defines the actions that users defined in the system can perform.

Using system security features, you can configure system login behavior, create and maintain users, teams (roles), and permission groups, and specify user access to business units. Using a combination of these security-related features, you can control user access to system menus and functions.

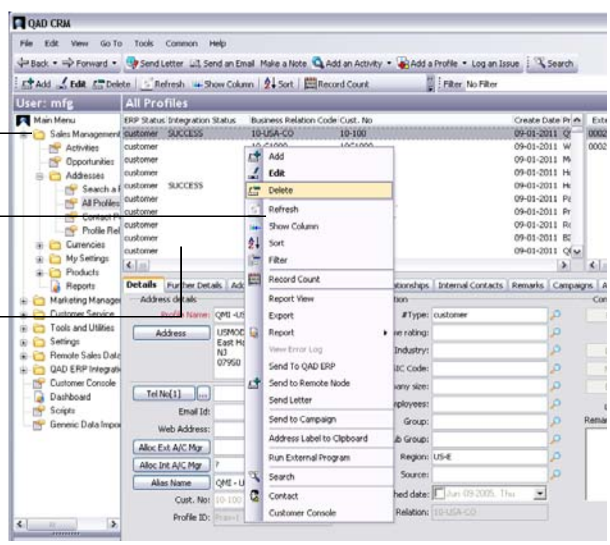
Using login security features, you can secure your system from unauthorized users. You can also configure additional types of security that provide enhanced protection for individual database records.

Note If you intend to use QAD Enterprise Applications with QAD CRM, a system administrator must configure security for the ERP application separately. For details, see *QAD Security and Controls User Guide* or *QAD Manager Functions User Guide*, depending on your version of QAD Enterprise Applications.

Security

The QAD CRM system has several types or levels of security that work together to ensure a secure system. During an application session, these security levels or types may operate at the same time, as shown in Figure 5.1.

Fig. 5.1
Different Types of Security



The QAD CRM system does not have a specific component that is dedicated to security setup. Instead, configuring your system security involves using multiple system components, such as the User component, the Program Manager, Menu Manager, and Field Object Manager.

For details about the User component, see “Setting Up Users” on page 12. For details about the Program Manager, Menu Manager, and Field Object Manager, see Chapter 6, “Menu, Program, and Field Object Management,” on page 33.

Security in QAD CRM involves the following system features or components:

- Login security
- Business units
- Teams
- Permission Groups

Login Security

Login security determines whether a user can log in to the application. This level of security is always active and requires that users specify a valid user ID and password combination before they can log in.

If, after three login attempts, the user has still not entered a valid user ID and password combination, the Logon screen closes. The user must relaunch the application and attempt to log in again.

For details about logging in to the system, refer to *QAD Customer Relationship Management User Guide*.

Business Units

A *business unit* can be a branch office, subsidiary, or business partner whose data must be maintained in the system. You can associate a user profile with one or more business units to allow a user to access data for that business unit.

A user must be assigned to at least one business unit in order to access the system; in turn, a business unit is assigned a system menu. If a user is assigned to more than one business unit, the user can choose which business unit to log in to, as well as which system menu to use.

Use roles to control the menus that your system users have access to—and the functions they can perform—according to the requirements of the department or organization. For example, a Management group might require access to all system features, while a Sales group might only require access to a subset of features that are relevant to their business activities.

For details about business units, see "Setting Up Business Units" on page 10.

Teams

A *team* is a group within a business unit with which a system user is associated. Business units may have multiple teams.

For example, your business unit may have two teams: the Northern Region Sales team and the Southern Region Sales team. Typically users assigned to a team can access sales data for their team only, unless the teams have been configured to share sales data.

For details about business units, see "Setting Up Teams" on page 19.

Permission Groups

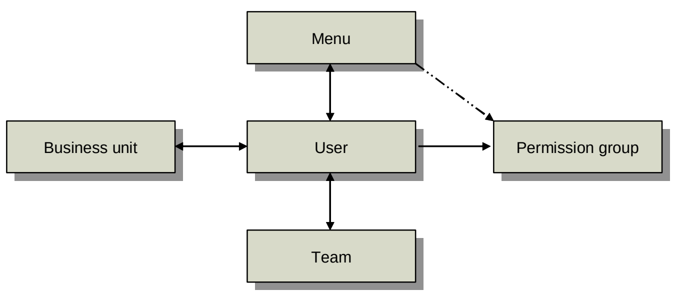
Permission groups are used to control user access to system objects such as programs and program pages (tabs on screens). You can assign a program object in the system to a specific permission group so that only users within that group can access the program.

For details about business units, see "Setting Up Users" on page 12.

Security Relationships

Figure 5.2 illustrates the relationship between a system user and system menus, business units, permission groups, and teams.

Fig. 5.2
Security Model



The direction of the arrows indicates how associations are made. For example, a user can be assigned to a team, or a team to a user (bi-directional arrows); a user can be assigned to a permission group, but not vice versa (unidirectional arrows). The dotted line between Menu and Permission group indicates this relationship is created by the association between User and Menu.

For details about setting up your organization, see Chapter 3, "Organization Setup," on page 9.

Chapter 6

Menu, Program, and Field Object Management

This section describes maintaining menus, programs, and field objects in QAD Customer Relationship Management (QAD CRM). It discusses the following topics:

Overview

Using the Program Manager, Menu Manager, and Field Object Manager, you can configure the programs, application menus, and fields on the various screens to suit your requirements. Configuration also integrates your security model into your system; for details on security, see Chapter 5, “System Security,” on page 29.

Programs

The modules within the QAD CRM system are collections of Progress programs. Programs have user interfaces such as dialog boxes or screens.

Each system program has objects or procedures, which are used to perform various tasks. For example, the Activity Manager has the Add Activity procedure that the program uses to add details of a new activity.

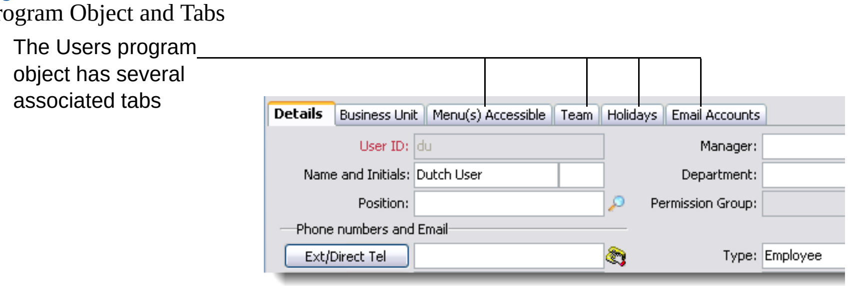
Programs have two levels of objects:

- Tab-level
- Procedure-level

Tab-Level Objects

You can maintain the tabs on program screens, their labels, display order, and context ID used for the help system. For example, you can configure the Details tab in the Activity Manager program to be the second tab from the left-hand side of the program object.

Fig. 6.1
Program Object and Tabs



Tabs typically contain procedures. For example, the Holidays tab generally has options to execute the Add, Edit, and Delete procedures. In this case, these three procedure objects are associated with the Holidays tab object.

Procedure-Level Objects

Procedure-level objects are associated with tab objects and define the tab contents. Procedure-level objects specify internal procedures for performing tasks. For example, the ability to add details of a new activity in the Activity Manager program is achieved through a procedure-level object.

You can put procedure-level objects in the toolbar and/or menu. Some procedures have a user interface—others can run in the background without being noticed by the user.

When configuring security, you can specify which users can access a tab or procedure. Implementing new or modified objects requires technical knowledge of the QAD CRM system; it is recommended that you contact QAD Services prior to customizing your system.

For details on using the Program Manager, see “Program Manager” on page 35.

Menus

QAD CRM allows you to configure the menus that are available to system users according to their responsibilities and business function. For example, the Management group may need access to the entire system, but the Sales group might need access to only a subset of features. When a user logs in, the system displays only those menus and menu options accessible to the user.

Using the Menu Manager, you can create menus and assign functionality to users and permission groups. Only system administrators should have access to the Menu Manager.

For details on using the Menu Manager, see “Menu Manager” on page 39.

Field Objects

Field objects in the system correspond to the records in the system database. Field object security—implemented by assigning specific fields on a screen to a user or a permission group—enables users to view and/or edit the values in certain fields, while other fields are protected.

Use the Field Object Manager to maintain the database table fields that display on the system dialog boxes and screens. You can customize various attributes, as well as define permissions for individual fields.

For details on using the Field Object Manager, see “Field Object Manager” on page 48.

Program Manager

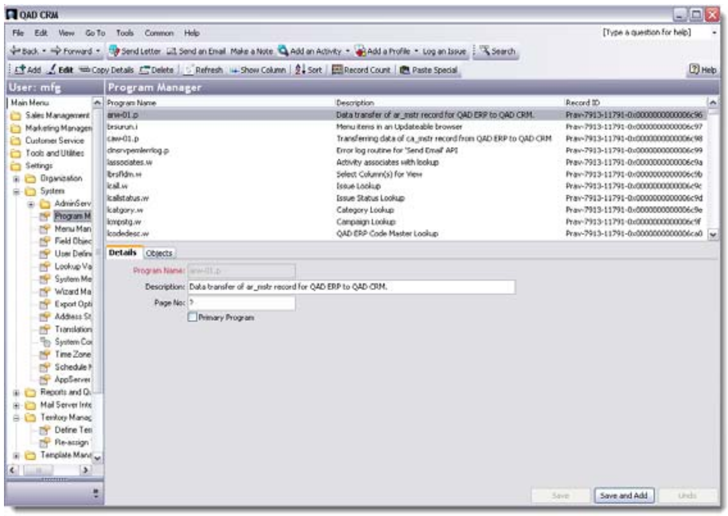
Use the Program Manager to maintain system programs and customize the system to your requirements. You can maintain the objects associated with a program by using the Objects tab.

Important Using the Program Manager to customize your system programs requires prior experience with Progress systems, as well as in-depth technical knowledge of the QAD CRM system. It is recommended you contact QAD Services for assistance with customizing your system.

To access the Program Manager, choose Main Menu|Settings|System|Program Manager.

The Program Manager pane displays the programs defined in the system and a description.

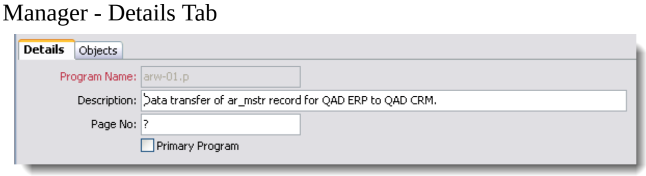
Fig. 6.2
Program Manager



Details Tab

Use the Details tab to maintain program details such as descriptions, page number, and so on. You also can indicate if a program is a primary program. Only primary programs can be accessed from the application menu.

Fig. 6.3
Program Manager - Details Tab



Program Name. Enter the name of the program, including the extension (`.i`, `.w`, or `.p`). Once the record is saved, the program name cannot be changed.

Description. Enter a short description of the program.

Page Number. If required, specify the page number for the program. An incorrect page number may cause an error when the program is executed, so the value entered here must be correct.

Primary Program. Select the check box to indicate that this is a primary program that will be executed by selecting the program shortcut from the application menu.

Note Only primary programs can be added to menus as shortcuts by using the Menu Manager. For details, see “Menu Manager” on page 39.

Note Other tasks must be performed to implement the program successfully. Depending on implementation requirements, this may include changing program code and recompiling.

Deleting Programs

You can use the Program Manager to delete programs from the system.

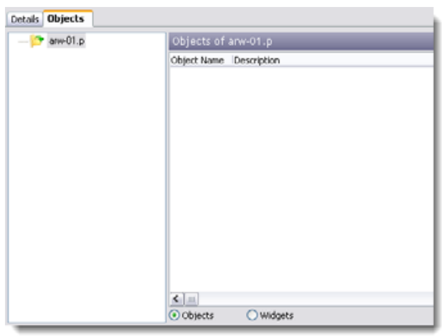
Important Before deleting a program, make sure you understand the consequences of doing so. After deleting the program, you must also remove any references to the program in the application menu.

To delete a program, right-click the program and then choose Delete. The system prompts you to confirm the operation. Click Yes. The system deletes the program.

Objects Tab

Use the Objects tab to view the tab-level and procedure-level objects associated with the programs defined in your system. You also can access the Object Details dialog box used for maintaining objects associated with a program or a tab.

Fig. 6.4
Program Manager - Objects Tab



The Objects tree hierarchy displays the program and associated tab objects for the program selected in the Program Manager browser. Select a tab object in the Objects tree hierarchy to display the procedure objects associated with that tab in the right-hand pane.

You can click the Widgets option at the bottom of the Objects tab to display widgets associated with the selected item. For details of configuring widgets, see “Widget Details” on page 39.

Note A program can have objects and widgets. Objects are represented by tabs—for example, Details, Further Details, and so on. Widgets are non-database fields, such as the text in a field for address details.

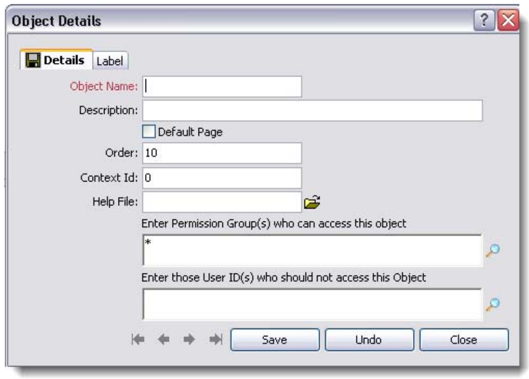
To add a new tab object to a program, right-click the program in the Objects tree hierarchy and then choose Add. (Or, to add a new procedure to a tab object, select a tab object.) The Object Details dialog box displays, showing fields appropriate to tabs or procedures.

Note You can also copy details of an existing program entry and edit it as required. This is useful if you want to customize programs for different users. To copy a program, select the program in the List tab and then click Copy on the toolbar or menu. The Details screen displays with the option to Copy only page objects (tab objects only) or Copy all objects (tab and procedure objects).

Object Details Dialog Box

Use the Details tab to describe tabs or procedures and to specify their behavior. The fields available in this box change according to whether a tab or a procedure is selected in the Program Manager. Use the Labels tab to specify a label for a tab or procedure.

Fig. 6.5
Object Details



Object Name. Enter the name of the object. For example, type PAGE 1 for the first tab in the program interface. Once the record is saved, the object name cannot be changed.

Description. Enter a brief description of the object.

Default Page. Select the check box to indicate that the tab page should display when users run the program. Only one default tab page is allowed for a program interface. (Tab only.)

Context ID. Enter the context ID number for the tab screen. This ID is used to map the tab screen with the help system. (Tab only.)

Help File. Enter the path and name of the context-sensitive help file that should open when the help is invoked. If the default help file is to be used, skip this step. (Tab only.)

Object Type. Enter the type of procedure object. (Procedure only.)

The types (File, Edit, View, and Go To) represent the menus on the main menu bar. A menu object can be invoked from three places (a right-mouse click in the browser, from the toolbar, and one of the submenus). The submenus change according to the context. If you choose the Add command on the File menu, the object will be added to the File menu on the menu bar.

Internal Procedure. Enter the name of the internal procedure if required. For details, contact QAD Support. (Procedure only.)

Order. Enter a value to represent the sequence in which the tab should display, using the format [*Order Number*]0. For example, to display the tab as the first tab from the left in the program interface, enter `10`.

Display in Toolbar. Select this check box to display the option in the toolbar.

Display in Menu. Select this check box to display the option in the menu.

Default Action. Select the check box to have the option execute automatically when users start the program. Only one default action is allowed per object/tab page.

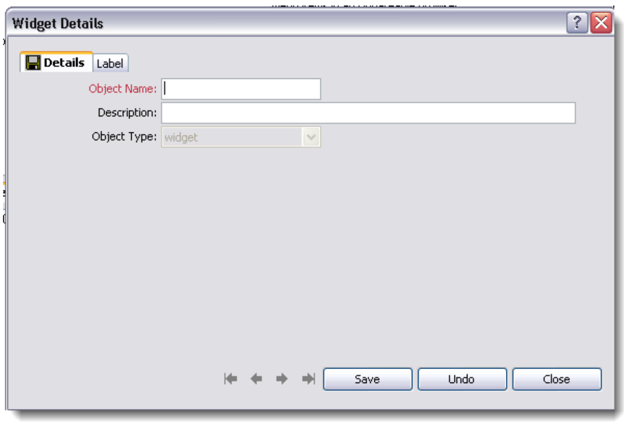
Permission Groups. Specify the permission groups permitted to access the object. By default all permission groups (*) are given access.

User IDs. Specify the users you want to prevent from accessing this object. If a user is a member of a group listed in the Permission Groups field but is specifically excluded in this field, the exclusion takes precedence.

Widget Details

Use the Widget Details box to describe widgets.

Fig. 6.6
Widget Details



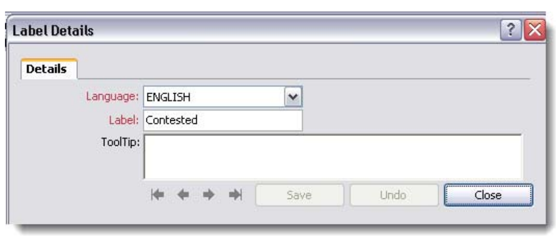
Object Name. Enter the field name of the widget; for example, `lbl_contact_toolbar`.

Description. Enter a description for the widget.

Label Details

Use the Label Details tab to specify a label for a tab object or procedure object. Tab labels display as text in the tabs. For procedure objects, labels display in the toolbar and menu.

Fig. 6.7
Label Details



Language. Enter the supported language for the label. When logging in to the system, users choose a language. The label specified for the object displays.

Label. Enter the label in the specified language.

Tooltip. Enter the Tooltip for the label.

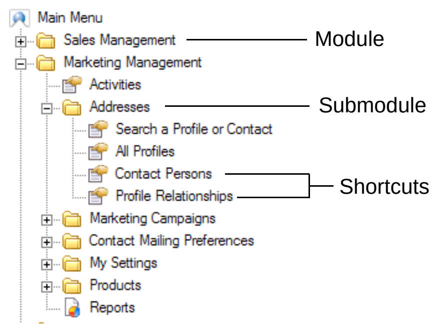
Menu Manager

Use the Menu Manager to maintain system menus and shortcuts to executable programs, and to assign menus to users and permission groups.

Depending on their roles within an organization, users typically have different access privileges to system menus. When a user logs in to the system, the application menu displays only those menus and associated shortcuts that are appropriate for that user. You use the Menu Manager to configure system menus and assign them to your system users.

Figure 6.8 displays a typical menu and its shortcuts.

Fig. 6.8
System Menu



A menu consists of the items described in the table below.

Menu item	Description
Menu	A list of options arranged in a tree hierarchy that displays in the left pane of the main application window. A menu contains modules, submodules, and/or shortcuts to executable procedures.
Module	Containers that hold submodules and shortcuts to executable programs. In the tree hierarchy, modules occupy the top level. Modules can be expanded or collapsed to view or hide the submodules and program shortcuts they contain.
Submodule	Containers within a module that hold shortcuts to executable procedures and/or their submodules. Submodules, like modules, can be expanded or collapsed.
Shortcut	Shortcuts to executable system procedures or third-party procedures. A user clicks a shortcut to invoke an executable procedure, which usually starts its program in the right main window pane.

You can create menus for individual users and for permission groups. Menus are assigned to users and permission groups through user profiles. A user can be assigned more than one menu; if a user has multiple menus assigned, the user can select which menu to use during login. The system determines the menus that are available for a user by using the login ID.

To access the Menu Manager, choose Main Menu|Settings|System|Menu Manager.

Note You can also define menus by using the Copy Menu Wizard to copy an existing menu, and then edit the menu details as needed. For details, see “Copy Menu Wizard” on page 47.

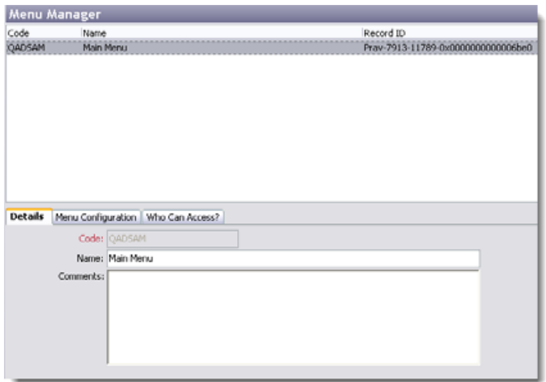
Typically defining a menu consists of three steps:

1 Define the menu in the system by providing basic details (Details tab). See “Defining a Menu” on page 41.

2 Define the modules, submodules, and shortcuts for the menu (Menu Configuration tab). See “Configuring the Menu” on page 41.

3 Associate the menu with users and permission groups, as required (Who Can Access? tab). See “Attaching Users and Permission Groups” on page 47.

Fig. 6.9
Menu Manager

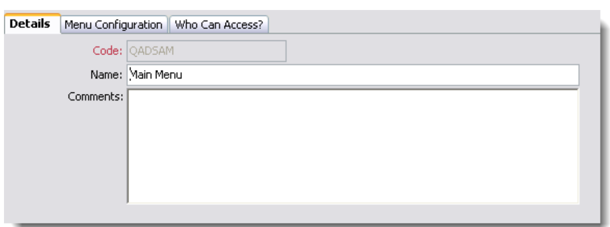


The browser displays the menus already defined in the system.

Defining a Menu

Use the Details tab to define basic information for the menu you want to create.

Fig. 6.10
Details Tab



Code. Enter a unique code for the menu.

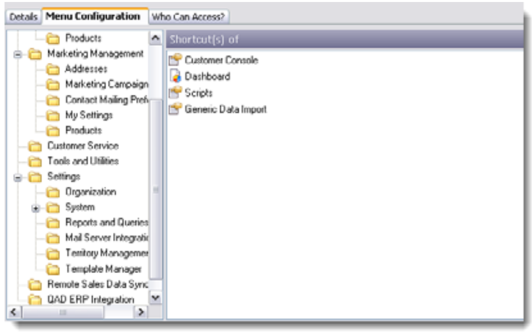
Name. Enter a name for the menu.

Comments. Enter any comments for the menu as required.

Configuring the Menu

Use the Menu Configuration tab to define the menu hierarchy: the modules, submodules, and shortcuts in the menu and their arrangement.

Fig. 6.11
Menu Configuration Tab



The left-hand pane displays the menu tree hierarchy consisting of the modules and submodules. The right-hand pane displays the shortcuts associated with the module or submodule that is currently selected in the left-hand pane.

The process of defining a menu consists of:

- Adding a module or submodule
- Adding shortcuts to modules or submodules

Adding Modules or Submodules

Select a module or submodule in the left-hand pane, and then right-click the pane and choose Add Module. The Module Details dialog box displays.

Note When maintaining menus, only executable programs and objects that are registered with the Program Manager can be used.

Fig. 6.12
Module Details

1. In the Description field, enter a name for the module.
2. In the Image field, enter the image you want to display before the module label on the application menu; for example, `images\browse.bmp`.

   Note Images are stored in the `/images` directory in the QAD CRM installation directory. Images must be `.bmp` or `.ico` format.

3 In the Selected Image field, enter the image you want to display when the user selects the module. For example, you might use an image of an open folder to indicate the item is selected.

4 Select the Hidden check box to hide the module on the menu.

5 In the Order field, enter the order in which the module must appear in the menu. For example, to have the module display as the second module from the top, enter `20`.

6 Enter the IDs of any users who should not have access to this object.

7 Select the External Database Dependant check box if the module depends on the availability of one or more databases. In the Hide the Module if the following database(s) are not connected field, enter the name of the relevant databases. When these databases are not available, the system does not display the module in the menu.

Adding Shortcuts to Modules or Submodules

Select the module or submodule in the left-hand pane to which you want to add a shortcut. Existing shortcuts associated with the selected module display in the Shortcuts pane. Right-click the Shortcuts pane and choose Add Shortcut. The Shortcut Details dialog box displays. The dialog box has three tabs, used for the following:

- Defining shortcut details (Details)
- Defining labels for the shortcut (Label)
- Defining objects for the shortcut (Objects)

Defining Shortcut Details

Fig. 6.13
Shortcut Details

1. In the Description field, enter a brief description of the shortcut.
2. Select the Progress Procedure check box if the program whose shortcut you are creating is a Progress procedure. Shortcut can also execute a non-Progress program; for example, Microsoft Word or Internet Explorer. If you want to attach a non-Progress program to the shortcut clear the Progress Procedure check box. When you clear the Progress procedure check box, the system changes the label of the Program Name field to Application Name.
3. Select the QAD CRM Procedure check box if the program is a QAD CRM system procedure.
4. Select the Run Persistent check box if you want to run the program persistently.
5. In the Program Name field, enter the name of the main program (`*.w` file) for the shortcut to call. For a non-Progress program, enter the name of the application with the full path name. If you want the application to open a file when you select the shortcut, enter the name of the file only. For example, if you want to open a Word document called `qadcrm.doc`, enter `c:\qadcrm\prod\notes\qadcrm.doc only`. QAD CRM finds the correct application name from the Windows registry using the file extension.
6. In the Enter Name of Program to Run before Main Program field and the Enter Name of Program to Run after Main Program field, enter the name of the programs you want to run before and after the main program, respectively.
7. In the Startup Parameters field, enter the parameters that the program must use while starting.
8. In the Image field, enter the image you want to display before the module label on the application menu. Images are stored in the `/images` directory in the QAD CRM installation directory.

   Note Images must be `.bmp` or `.ico` format.

9 In the Selected Image field, enter the image you want to display when the user selects the module. For example, you might use an image of an open folder to indicate the item is selected.

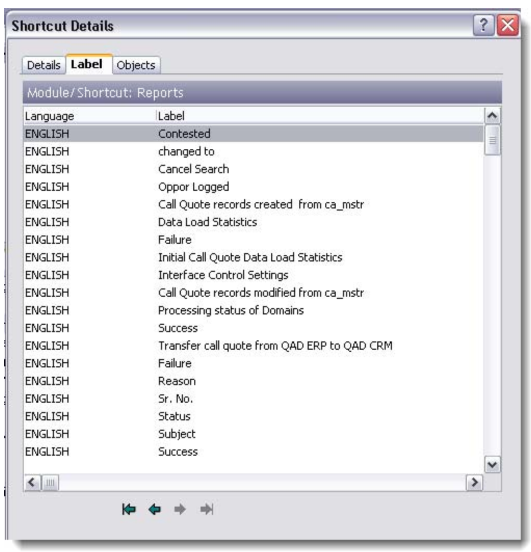
10 In the Order field, enter the order in which the module must appear in the menu. For example, to have the module display as the second module from the top, enter `20`.

11 Enter the IDs of any users who should not have access to this object.

12 Select the External Database Dependant check box if the module depends on the availability of one or more databases. In the Hide the Module if the following database(s) are not connected field, enter the name of the relevant databases. If these databases are not available, the system does not display the module in the menu.

Defining Shortcut Labels

Fig. 6.14
Shortcut Details - Labels Tab

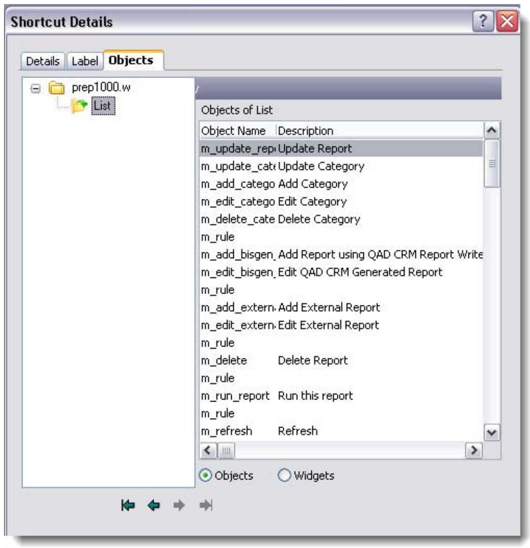


Right-click the list box and choose Add Label from the menu. A blank row opens up in the list box. Enter the language of the label (for example, ENGLISH) and the text of the label.

Note You can enter labels in different languages if your system is configured for multi-language support. The system will display the label using the language selected for the current session using the Application Language drop-down list on the Logon screen.

Defining Shortcuts

Fig. 6.15
Shortcut Details - Objects Tab



If the program you specified in the details tab is a QAD CRM program, the system displays the tab and its object in the Objects tab.

Use the Shortcut Details – Objects tab to configure the menu shortcuts by either modifying an object or tab to a shortcut, or adding a procedure to an object.

Note For details about programs and objects, see "Program Manager" on page 35.

1 Do one of the following:
   - To add an object or a tab to a shortcut, select the shortcut in the left-hand pane to display its associated objects in the right-hand pane.
   - To add a procedure to an object, select an object (folder) in the left-hand pane to display its associated procedures in the right-hand pane.

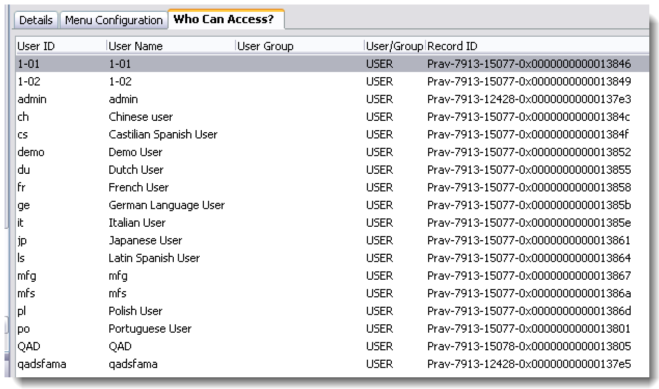
2 Select the Objects option or the Widgets option.

3 Right-click the right-hand pane and choose Add from the menu.

4 Configure the object, tab, or procedure as appropriate. For details on configuring objects, see "Object Details Dialog Box" on page 37.

Attaching Users and Permission Groups

Fig. 6.16
Who Can Access? Tab



User ID	User Name	User Group	User/Group	Record ID
1-01	1-01		USER	Prav-7913-15077-0x0000000000013846
1-02	1-02		USER	Prav-7913-15077-0x0000000000013849
admin	admin		USER	Prav-7913-12428-0x00000000000137e3
ch	Chinese user		USER	Prav-7913-15077-0x000000000001384c
cs	Castilian Spanish User		USER	Prav-7913-15077-0x000000000001384f
demo	Demo User		USER	Prav-7913-15077-0x0000000000013852
du	Dutch User		USER	Prav-7913-15077-0x0000000000013855
fr	French User		USER	Prav-7913-15077-0x0000000000013858
ge	German Language User		USER	Prav-7913-15077-0x000000000001385b
it	Italian User		USER	Prav-7913-15077-0x000000000001385e
jp	Japanese User		USER	Prav-7913-15077-0x0000000000013861
ls	Latin Spanish User		USER	Prav-7913-15077-0x0000000000013864
mfg	mfg		USER	Prav-7913-15077-0x0000000000013867
mfs	mfs		USER	Prav-7913-15077-0x000000000001386a
pl	Polish User		USER	Prav-7913-15077-0x000000000001386d
po	Portuguese User		USER	Prav-7913-15077-0x0000000000013801
QAD	QAD		USER	Prav-7913-15078-0x0000000000013805
qadsfama	qadsfama		USER	Prav-7913-12428-0x00000000000137e5

A menu can be assigned to a menu or a permission group.

Use the Who Can Access? tab to associate users and permission groups with the menu. This tab displays the users and permission groups currently attached to the menu. Right-click the browser to access commands for maintaining associations between menus and users/permission groups.

To create a permission group, right-click the Select Permission Group look-up box and choose Add.

Note A user can be assigned a menu and belong to a permission group that is assigned a different menu. In this case, the user has access to at least two menus. When the user logs in, the logon screen displays all the menus associated with the user, allowing the user to decide which menu to use during the session.

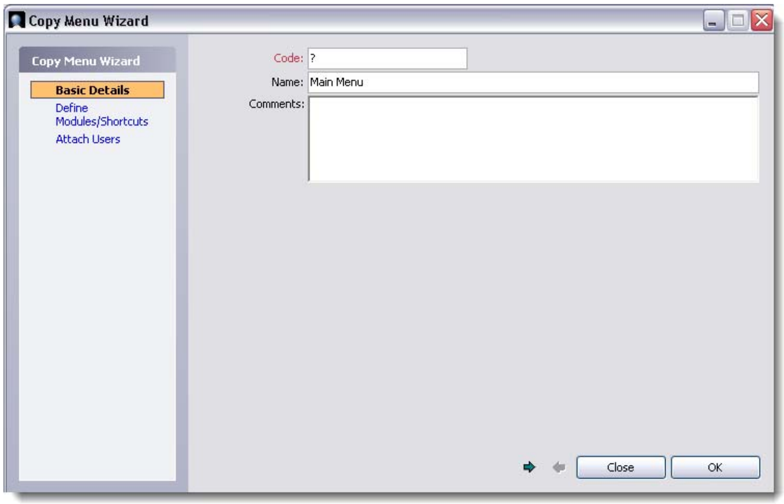
Copy Menu Wizard

Use the Copy Menu Wizard to copy an existing menu to use as the basis for the new menu.

To access the Copy Menu Wizard, right-click an existing menu in the Menu Manager browser and choose Copy.

Note The Wizard copies a menu but not the users attached to the menu.

Fig. 6.17
Copy Menu Wizard



Creating a menu using the Copy Menu Wizard consists of the same three steps as creating a menu manually:

1. Specify basic details of the menu (Basic Details page). This step is mandatory.
2. Define modules and shortcuts by using the arrows to move the items from the Available Modules/Shortcuts list into the Selected Modules/Shortcuts list (Define Modules/Shortcuts page). You can also use the drag-and-drop option to select a module or a shortcut. This step is optional.

   Note Make sure you arrange the menu items in the order you want before saving the menu.
3. Attach users and/or permission groups to the new menu (Attach Users page). This step is optional.

Field Object Manager

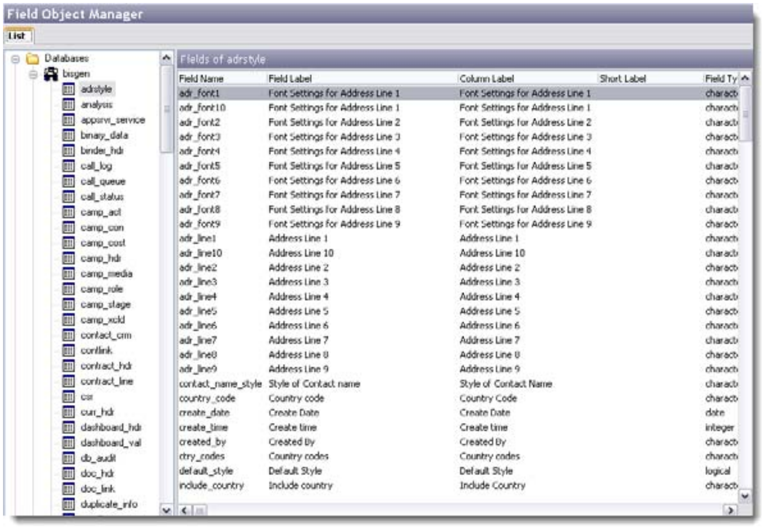
Use the Field Object Manager to maintain the database table fields that display on the system dialog boxes and screens. You can manage identifying information, field colors, label characteristics, hyperlink behavior, and audit status.

You can also define permissions for individual fields on screens and dialog boxes to control the permission groups and users that can view and update fields in a database record.

For example, access to information about product cost price or customer credit limits may be appropriate for some systems users, but not others. You can restrict access to these fields as appropriate by using field security. In addition, organizations can hide unwanted fields from screens to reflect their business requirements—for example, some organizations choose to remove customer turnover from their system implementations.

To access the Field Object Manager, choose Main Menu|Settings|System|Field Object Manager.

Fig. 6.18
Field Object Manager



The Field Object Manager screen has two panes. The left-hand pane shows the system databases arranged in a tree hierarchy and the Mandatory Field Settings link. The right-hand pane shows the fields within the selected database table.

Note For details on changing colors for mandatory fields, see “Field Object Manager” on page 48.

Expand a database to view the database table names. When a database table name is selected, the right-hand area displays the field names, associated field label, type, and format.

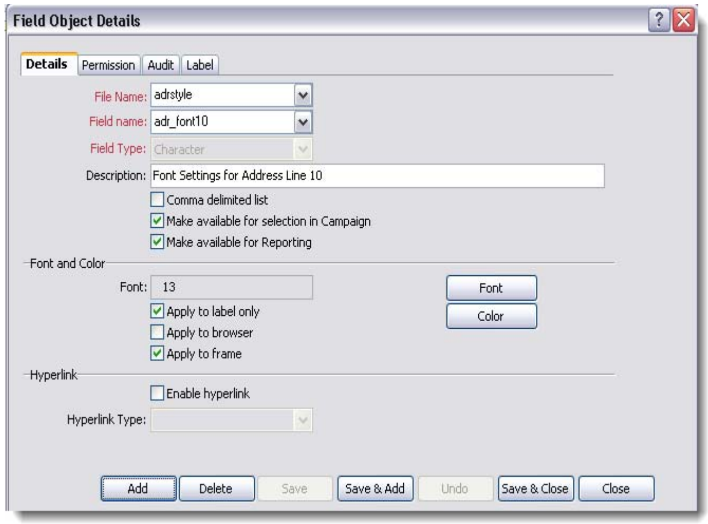
To specify characteristics for a field, right-click the field and choose Edit.

Note The right-click menu also contains options for adding and deleting.

Details

Use the Details tab to specify basic characteristics of the field, such as associated database table and field name, description, availability in other modules, font and color, and so on.

Fig. 6.19
Field Object Details - Details Tab



File Name. Enter the name of the database table for the field. The drop-down list contains the table names contained within the selected database.

Field Name. Enter the name of the field.

Description. Enter a description for the field.

Comma Delimited List. Select the check box to allow comma delimited values to be entered into the field.

Make available for selection in Campaign. Select this check box to make this field available for building campaigns.

Make available for Reporting. Select this check box to make this field available in user-defined queries and reports.

Specify font and color settings as required using the Select Font and Select Color dialog boxes. Click Font and Color, respectively, to access these boxes.

Apply to label only. Select the check box to apply the specified font and color settings to the field label only.

Apply to browser. Select the check box to apply the specified font and color settings to the field as it displays in a column in a browser.

Apply to frame. Select the check box to apply the specified font and color settings to the field as it displays in a frame.

Specify Hyperlink settings as required.

Enable Hyperlinks. Select the check box to enable hyperlinks for this field. Selecting this field enables the Hyperlink Type drop-down list.

Hyperlink Type. Select a hyperlink type to use for the field.

Email. Launches the mail client.

Web Access. Launches the web browser and navigates to the Web address specified.

File. Executes the specified file.

Run Program. Executes the specified program.

When you configure a field with hyperlinks enabled, QAD CRM Report Viewer uses the hyperlink type to invoke the appropriate application.

For example, if you configure Profile Web Address field as Web Access hyperlink, when you select the Web Address field in a user-defined report and click the field in the QAD CRM Report Viewer, the system launches the default Web browser and passes the field value to the browser as the Web address.

Currently you can use hyperlink functionality only from QAD CRM Report Viewer.

Permission

Use the Permission tab to maintain permissions for permission groups and users. For example, you can specify that only the Sales team can see a field, update the field, or both. Or you can specify individual users that do not have access or modification privileges for a field. By default, all groups have access and modify permissions for all fields.

Fig. 6.20
Field Object Details - Permission Tab

System mandatory. Displays if the selected field is defined as system mandatory. System mandatory fields are used by the business logic in the system and require a value. System mandatory fields must be populated before the information on the screen or box on which they are located can be saved. You cannot change the value of this field.

You also can set colors and fonts for mandatory fields. For details, see “Mandatory Field Settings” on page 54.

Non blank field. Select the check box to indicate that the field must contain a value. The business logic used by the system does not stipulate that non-blank fields must contain a value—this is up to the system user. Selecting the check box enables the Enter Message Number field.

Validation conditions depend upon the field data type; for example, a value in the date field should not be earlier than Jan/01/2011.

Enter Message Number. Enter the number of the system message to display if the Non Blank Field validation is not fulfilled when the screen or dialog box containing the field is saved.

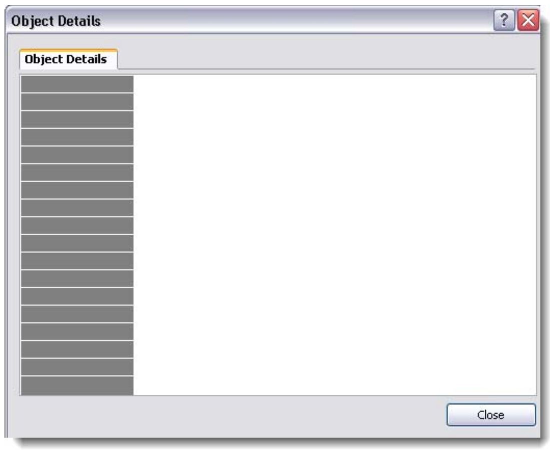
Specify Permissions as required.

Changing Field Permissions

To change permissions for a field:

1. Determine the database table that the field belongs to by clicking the field and then pressing Ctrl+F5. The Object Details box displays.

Fig. 6.21
Object Details

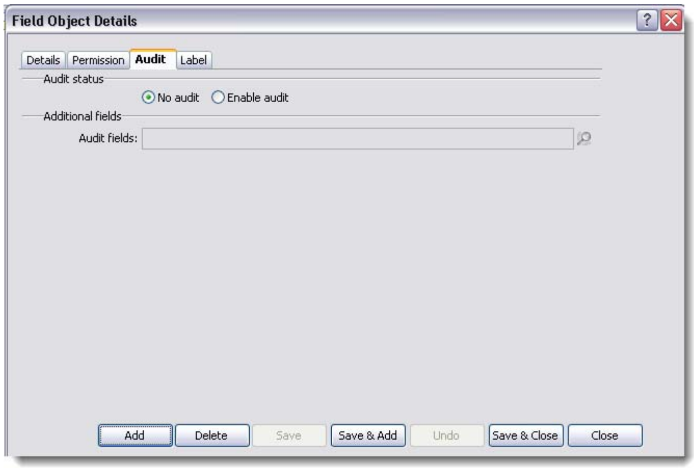


2. Determine the table name and field name of the field you want to specify permissions for.
3. Select Main Menu|Settings|System|Field Object Manager and locate the table in the database listing.
4. Select the table name, and then right-click the field name and choose Edit. The Field Object Details dialog appears.
5. Click the Permissions tab and specify permissions as appropriate.

Audit

Use the Audit tab to specify auditing behavior for fields in the system. Auditing a field permits changes to a field to be tracked for various purposes. For example, you can audit how frequently an activity start date is changed; or how long it takes for an opportunity to move from the inquiry stage to the quote stage.

Fig. 6.22
Field Object Details - Audit Tab



Audit Status. Select the audit options as required.

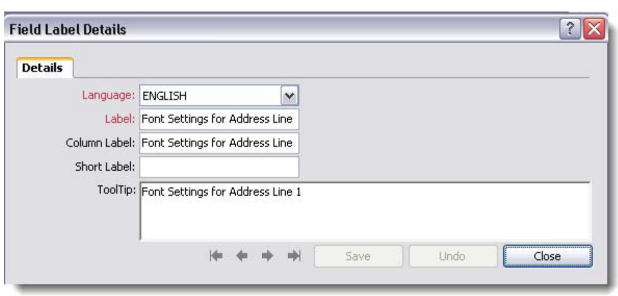
No audit. Select this option to indicate auditing is not enabled for this field.

Enable audit. Select this option to enable auditing for this field. Selecting this option enables the Audit Fields field. Enter any additional fields to be audited.

Label

Use the Label tab to specify label and Tooltip settings for the field.

Fig. 6.23
Field Object Details - Field Label Details



Language. Specify a language for the field label.

Label. Enter the field label.

Column Label. Enter the column label. The column label is used in the system browsers.

Short Label. Enter a short label. The short label is used when space restrictions prevent the full label from being used; for example, if the label is translated.

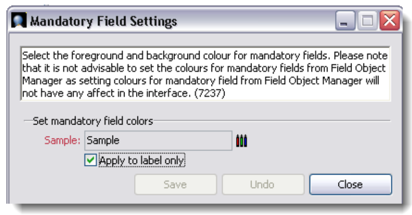
Tooltip. Enter the Tooltip text for the field. The Tooltip displays when the mouse cursor is on the field. Users can enable or disable the display of Tooltips if they have permission.

Mandatory Field Settings

Use the Mandatory Field Settings dialog box to specify the color and other characteristics of mandatory fields on screens and dialog boxes so that these fields are easier to see.

To access the Mandatory Field Settings dialog box, choose Main Menu|Settings|System|Field Object Manager. Then click the Mandatory Field Settings item in the tree hierarchy.

Fig. 6.24
Mandatory Field Settings



Click the Crayon icon next to the Sample field to display the Select Color dialog box. Choose a foreground and background color as required. Use the Edit button to customize available colors.

Select the Apply to Label Only check box to apply the specified color to the label only; or clear the check box to apply the specified color to the field entry also.

Note After changing colors for mandatory fields, you must exit your current session and log in again for the changes to take effect.

Chapter 7

System Configuration

This section describes how to configure settings for various modules within the QAD Customer Relationship Management (QAD CRM) application. It discusses the following topics:

Overview

When you start using QAD CRM, you may want to change some of the default settings or configure settings according to specific business unit and user requirements. The System module helps you maintain these settings. To access the System module, go to Main Menu|Settings|System. This displays the list of functions and modules for which you can maintain and configure settings.

Most of the screens in the System module are divided into two parts—the top half is a browser displaying the list of records available in the database, while the bottom half opens the selected record in edit mode.

If you have the required edit permissions for this module, you can edit a record selected in the browser in any of the following ways:

- Click the Edit button on the toolbar.
- Right-click and choose Edit.
- Choose Edit from the File menu.

However, if you do not have edit permissions for this module, the Edit option is unavailable.

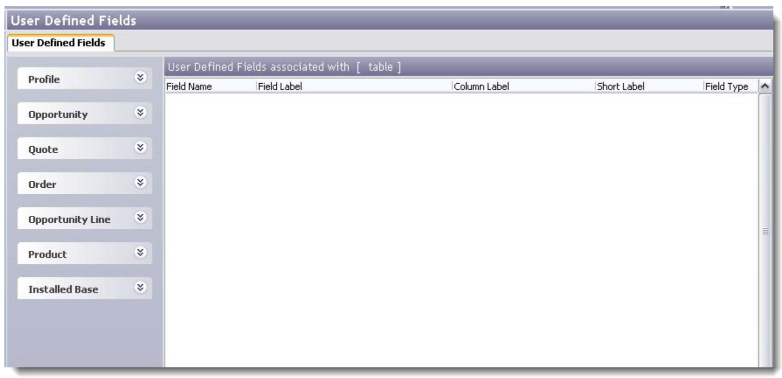
User Defined Fields

You can use the user-defined fields option to add frames and fields to the system modules depending on your specific and unique requirements. User Defined fields can be set for the following modules and sub-modules:

- Profiles
- Contacts
- Opportunities
- Quotes (in Opportunities)
- Orders (in Opportunities)
- Opportunity Lines
- Products
- Installed Base
- Customer Service (Issue)
- Campaign Response (in Target Details window)

For example, you can create a user-defined frame and associated fields for the All Profiles module that lets end users edit the credit rating of the selected customer directly from the User Defined Fields tab. To assist in data entry, you can associate look-up tables to field displays. You can also configure user-defined frames to validate data entered by end users. To implement field-level security, you can set access permission for fields using the Field Object Manager. For details on the Field Object Manager, see “Field Object Manager” on page 48.

Fig. 7.1
User Defined Fields



To create new user-defined frames, you can either use fields from the database or choose from the following extra user-defined fields available:

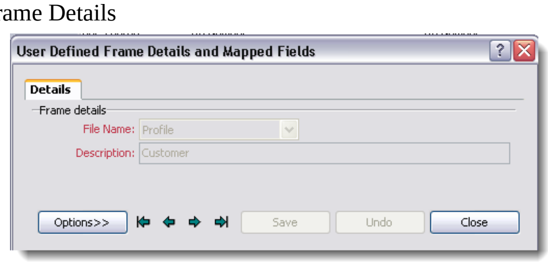
- 50 character type fields
- 20 decimal type fields
- 15 date fields
- 15 logical fields
- 10 sections

The User Defined Fields screen is divided into two parts. The left pane displays the list of modules and the user-defined frames added under them. The right part displays the list of fields available in each user-defined frame. You can add, edit, copy, and delete frames and fields through this screen.

Maintain Frames

You can maintain frames from the left pane of the User Defined Fields screen. Right-click in this area and choose Add Frame. The User Defined Frame Details window displays.

Fig. 7.2
User Defined Frame Details



Details

Use the Details tab to record the description for a new user-defined frame.

File Name. Use the drop-down list to select the module under which to place the new user-defined frame.

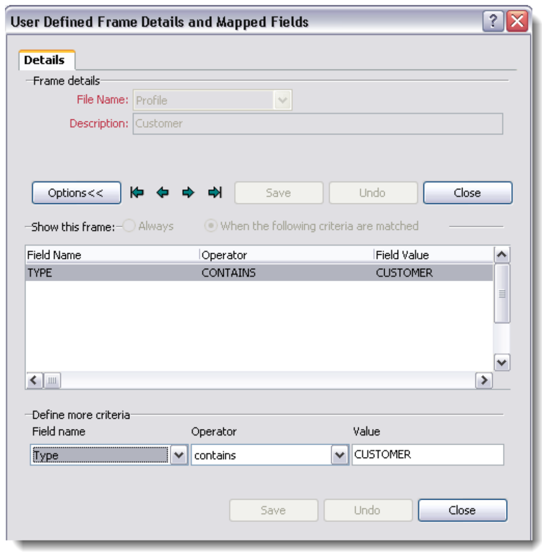
Description. Enter a name for the new user-defined frame you are creating.

Note Both fields are mandatory.

Click Options to expand the window and define conditions that the system applies while displaying user-defined fields.

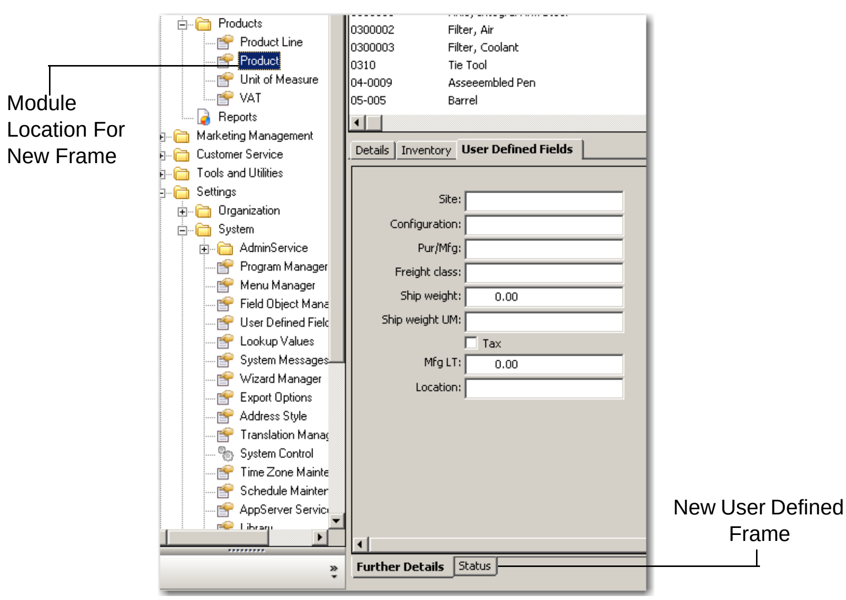
Example You want the user-defined field tab to display only for those profiles that are of type `Customer`. You can create these settings by defining a condition where `Type` (Field Name) `Contains` (Operator) `Customer` (Field Value).

Fig. 7.3
User Defined Frame - Options



Click Save to create a new user-defined frame in the module you selected. To verify, you can navigate to the relevant module and view the new frame under the User Defined Fields tab. The new frame appears as a new tab as indicated in the figure below.

Fig. 7.4
New User Defined Frame



After defining a frame you need to add fields to it. You can then verify that the new fields you create appear in the user-defined frame for that particular module.

Maintain Fields

You can add fields to the new frame using two different methods:

- Add Field—Lets you add field-level details such as name, description, type and associated values.
- Design Frame—Lets you add field objects and provides a visual representation of the changes to your frame.

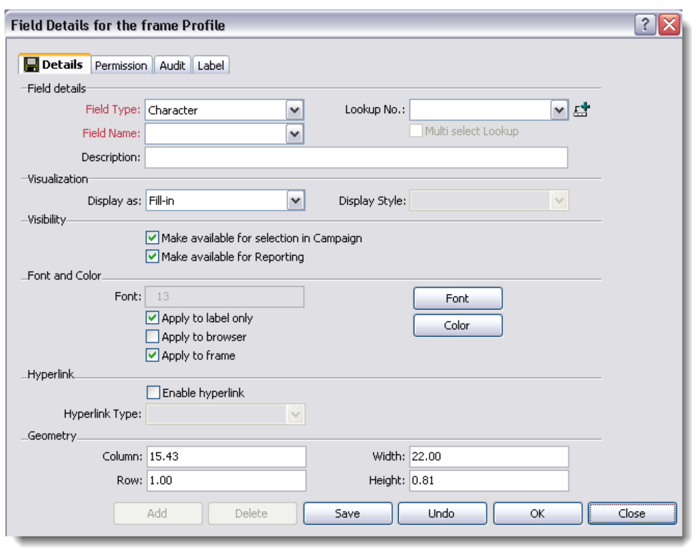
Add Field

The Add Field option is more suited to users who have good knowledge of the system and its databases. Since this option does not provide any visualization of the fields you create, you must be able to visualize the size and placement of field objects within a frame. To use this option, do the following:

1 Select the new frame from the left pane of the User Defined Fields screen.

2 Right-click in the right part of the screen and choose Add Field. The Field Details for Frame window displays.

Fig. 7.5
Add Field Details for Frame

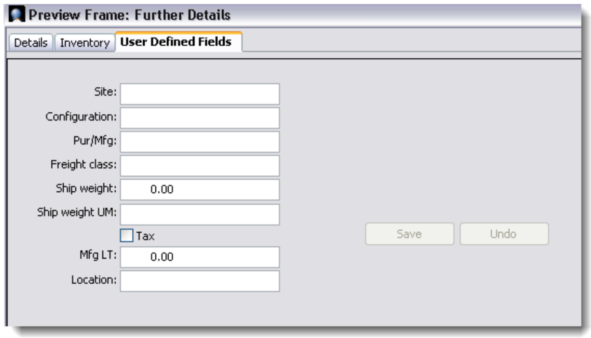


3 Enter the required field object details on all the tabs—Details, Permission, Audit, and Label.

4 Save the settings.

You can now view the user-defined fields you added through the Preview Frame option. You can also navigate to the relevant module and verify the user-defined fields.

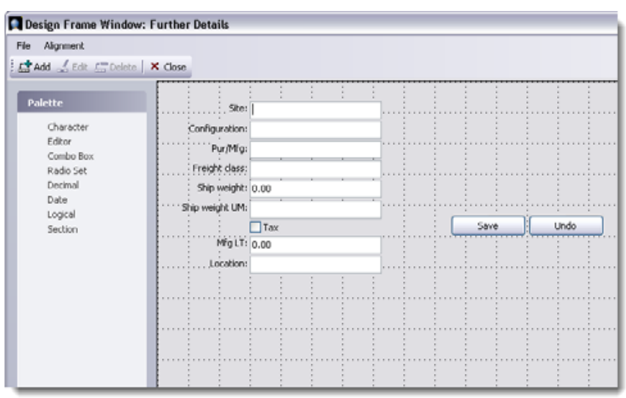
Fig. 7.6
Preview Frame



Design Frame

The Design Frame option lets you use a design grid, add fields to a new frame, and place those fields appropriately. Even if you have defined fields using the Add Field option, the Design Frame can help in the placement of those fields. The design grid also gives you the option to align fields and check their placement in a dynamic setting.

Fig. 7.7
Design Frame



To use the Design Frame option, do the following:

1. Select the new frame from the left pane of the User Defined Fields screen.
2. Right-click and choose Design Frame or click the Design Frame button on the toolbar. The Design Frame window displays.
3. Select the field object types that you want to add from the Palette on the left. This automatically opens the Add Field Details for Frame window.
4. Add field level details in the Add Field Details for Frame window.
5. Select field objects and use their handles to move them or alter their size. You can use the Alignment option from the menu to fix the alignment of the selected fields.
6. Save the settings.

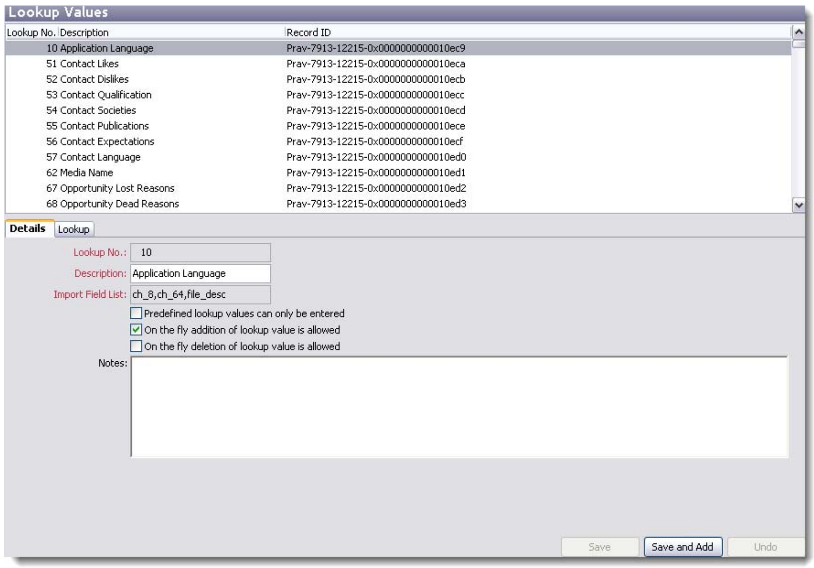
You can now view the user-defined fields you added to a new frame through the Preview Frame option. You can also navigate to the relevant module and verify the user-defined fields.

Lookup Values

The Lookup Values option lets you to create new lookups and add values to existing ones.

The Lookup Values browser displays the list of lookups available in the database. You can add, edit, copy, and delete lookups through this screen.

Fig. 7.8
Lookup Values



Details

Use the Details tab to record the complete description of a new lookup.

Lookup Number. Enter a unique number for the new lookup you are creating.

Description. Enter a description for the lookup.

Import Field List. The Import Field List contains information about the fields that the system can import. Enter the column values to be populated through the Import File option. Use commas to enter multiple values.

Example For a lookup based on regions, this field may contain values `Ch_8,file_desc.` This means that the file to import will contain information in this format—an eight-character name followed by a file description, as shown below.

```
APAC,Asia Pacific Region
CAN,Canadian Region
EUR,European Region
PAC,Pacific Region
US,United States Region
```

Note The file to import must be a plain text file, and should not have headers or labels.

Predefined lookup values can only be entered. Select this check box if you want that wherever in the system the current lookup is used, the user can only enter or select values that are defined here. This option prevents the end user from entering new values directly into an associated field.

On the fly addition of lookup value is allowed. Select this check box to give the end user the flexibility to add new values to the lookup table from wherever this lookup is accessed.

On the fly deletion of lookup value is allowed. Select this check box to give the end user the flexibility to delete values from the lookup table from wherever this lookup is accessed.

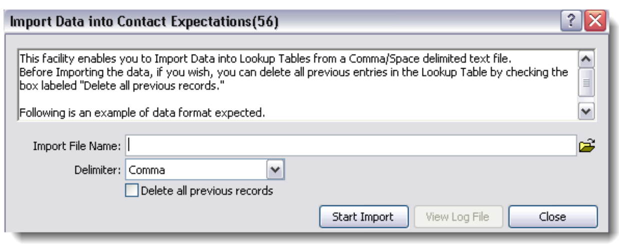
Notes. Enter notes related to the lookup you are creating.

Lookup

Use the Lookup tab to add values to the lookup table.

Through the Lookup Values screen you can also import data from an external source by importing a comma-delimited text file in comma-separated values (.csv) format to create records in a lookup table.

Fig. 7.9
Import Data



To import records, complete the following fields:

Import File Name. Enter the file location from which to import the data for the lookup table values.

Delimiter. Select the appropriate delimiter from the drop-down list.

Delete All Previous Records. Select this check box if you want to delete any previous entries in the lookup table.

Example If you are importing look up data for lookup number 54, the system will, during the import process, delete all previous lookup data for which lookup number is 54.

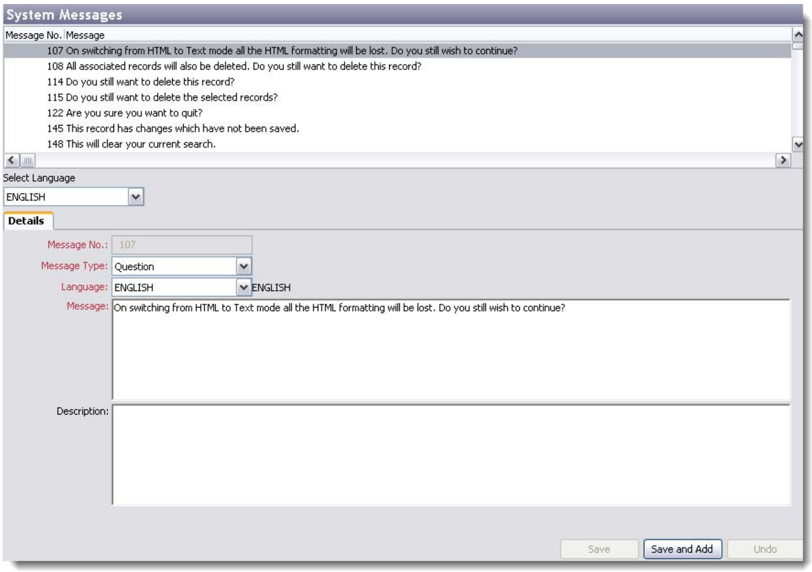
Click Start Import to start the import process. Once the import is complete, click View Log File to view the log file.

System Messages

You can use the System Messages option to create new messages or edit existing ones.

The System Messages browser displays the list of messages available in the database. You can add, edit, copy, and delete messages through this screen.

Fig. 7.10
System Messages



Details

Use the Details tab to record the complete description of a new message.

Select Language. Choose the display language for the new message using this dropdown. If you select the asterisk (*), the new message will display in all the languages supported by the system.

Message Number. Enter the message number of the new message you are creating.

Message Type. Select a message type from the drop-down list. The five options available are Information, Question, Error, Warning, and Informative Text.

Language. Select the language in which you want to create the new message.

Note The system gives you the option of displaying the same message in multiple languages. In such a case, the message number remains the same but multiple versions of the same message are saved in different languages. The end user sees the message display in the language specified during login.

Message. Enter the actual message content the system will display.

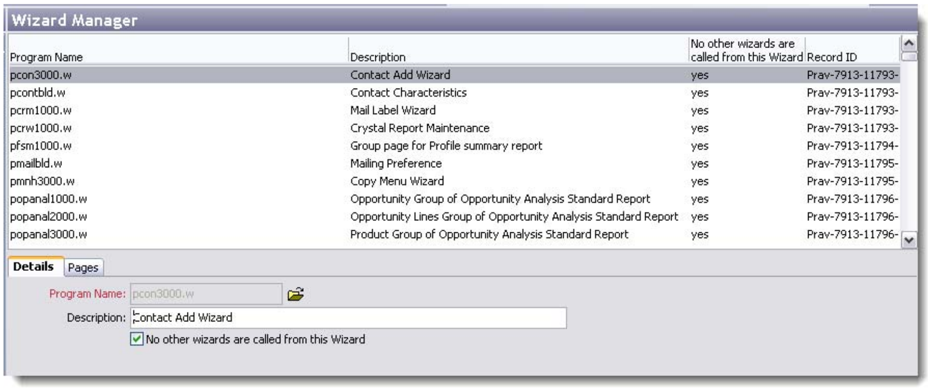
Description. Enter any additional description for the message.

Wizard Manager

The Wizard Manager lets you maintain wizards used in the system. Wizards help enter data in a logical, predefined format.

The Wizard Manager browser displays the list of wizards being used by QAD CRM. You can add, edit, and delete wizards through this screen.

Fig. 7.11
Wizard Manager



Details

Use the Details tab to record the program name and description for a new wizard.

Program Name. Enter or choose the program name for the new wizard you are creating.

Description. Enter an appropriate description for the wizard.

No other wizards are called from this Wizard . Select this check box to confirm that the wizard you are creating will not be called from any other wizard in the system. If you leave this check box clear, it means the current wizard will have a parent-child relationship with one or more wizards in the system.

Pages

The Pages tab displays the pages or widgets used in a wizard depending on the radio button you choose. It also lets you add subsequent pages to a wizard through the Page Details window. You can also edit, copy, and delete wizard pages from here.

Details

Object Name. Enter the object name or the page number for the new page. The object name must be preceded by the word `PAGE` like `PAGE01`, `PAGE02`, and so on.

Description. Enter a description for the new page.

Message No. Use the lookup to choose the system message number that you want displayed as help text. The message that you specify here displays as a Tooltip when the end user runs the wizard and focuses on the page link.

Order. Enter the numeric order in which the new page is available in the wizard.

Context ID. Enter the context sensitive ID that links to the appropriate help topic in the system help file.

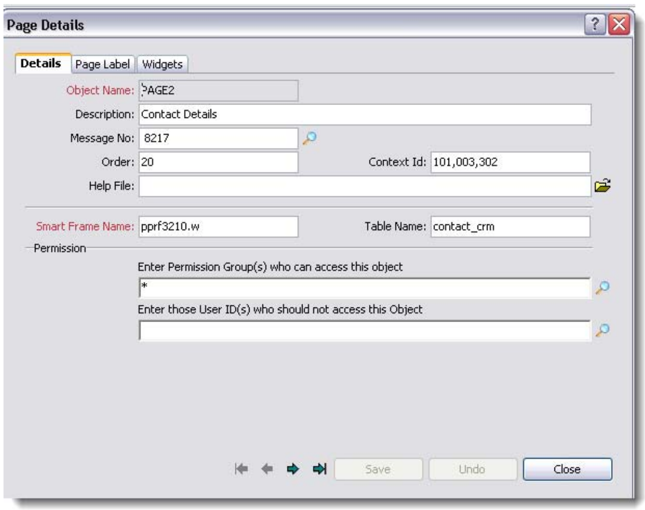
Help File. If you want to invoke a help file other than the default help file used in the system, click the folder icon to choose an alternate file. The Context ID should pertain to this file.

Smart Frame Name. Enter the name of the program that should run when users open the page through the wizard.

Table Name. Specify the database table where you want to store data gathered through the page.

Permission. Use the lookups to choose access rights for the page you are adding to the wizard. Enter an asterisk (*) in the Permission fields to give complete access to all user groups.

Fig. 7.12
Page Details



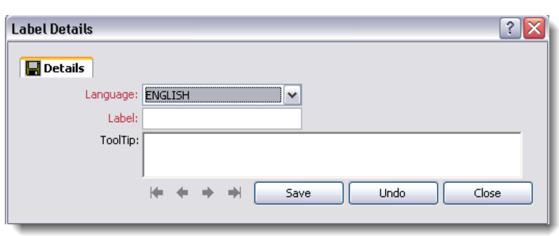
Page Label

Language. Select the language of the page label.

Label. Enter the text for the page label.

Tooltip. Enter a Tooltip for the page label. A Tooltip provides the end user with a description of the label.

Fig. 7.13
Label Details



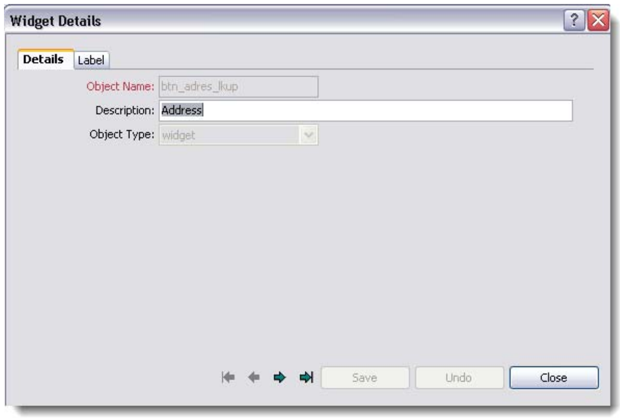
Widgets

Object Name. Enter the object name for the widget associated with the page.

Description. Enter a description for the widget.

Object Type. Select object type from the drop-down list.

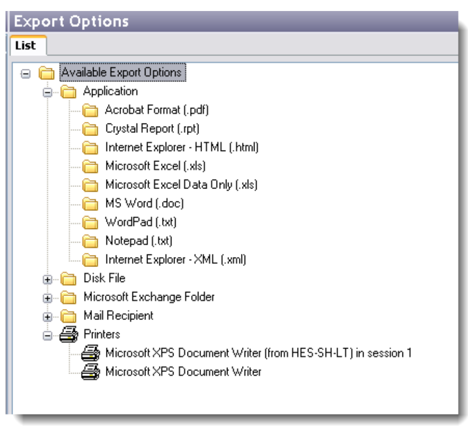
Fig. 7.14
Wizard Manager



Export Options

The Export Options screen lists the types of options available in the QAD CRM system to export data.

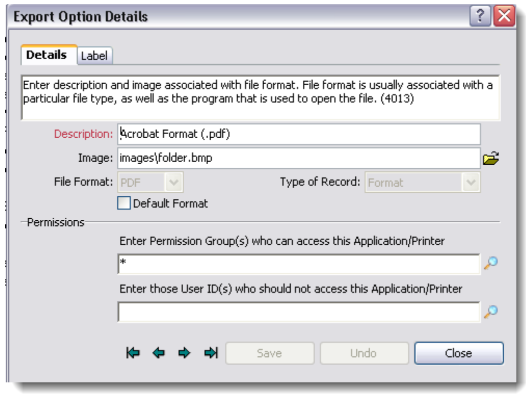
Fig. 7.15
Export Options



All browsers in the system let you export information to a selected output channel. Right-click and choose Export from any of the system browsers. This opens the Export Wizard, which guides you through the process of exporting data. For more details, see the Reports section of *QAD Customer Relationship Management User Guide*.

All output formats in the system are mapped to the export capabilities of Crystal Reports. The Export Options screen therefore does not let you add or delete any options. You can only edit the options listed through the Export Option Details window.

Fig. 7.16
Export Option Details



Select any export option. Right-click and choose Edit to display the Export Option Details window.

Details

Use the Details tab to change the description and image associated with the selected export file format. The image file you choose displays as the associated icon for the export option. You can also set permissions from this tab.

Select the Default Format check box to indicate that the export option should be displayed by default when users select the Export option.

Label

Use the Label tab to add, edit, or delete labels for the listed export options.

Address Style

You can use the Address Style option to maintain the various forms of addresses used in the system. The system gives you the flexibility to define different address styles for different countries.

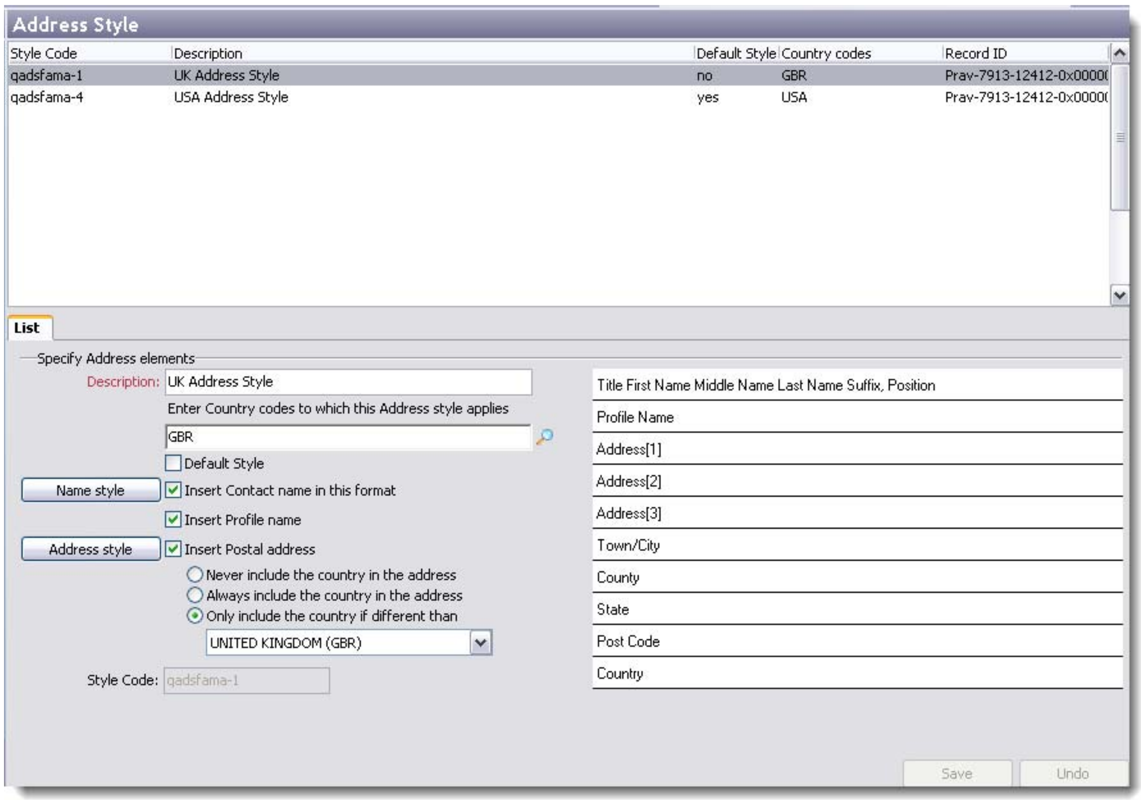
Example Suppose you have to post campaign letters to addresses both within your country, and overseas. For addresses belonging to your own country, you may not want to display the country name to save space on the mailing label. However, you require that all overseas addresses mention the country name as well. In such a case, you can define two address style options—one for inland addresses, and another one for overseas addresses.

The address style you define here is used throughout various modules in the system:

- In All Profiles—Details and Addresses tabs.
- In Contacts—Details tab and Print Mail Labels option.
- In Marketing Campaigns—Details tab in Media Source and Target Details window.
- In Settings—Details tab in Users and Business Units.
- In CSR Maintenance—Details tab.

The Address Style browser displays the list of address styles currently in use. You can add, edit, copy, and delete address styles through this screen.

Fig. 7.17
Address Style



List

Use the List tab to record the elements of a new address style.

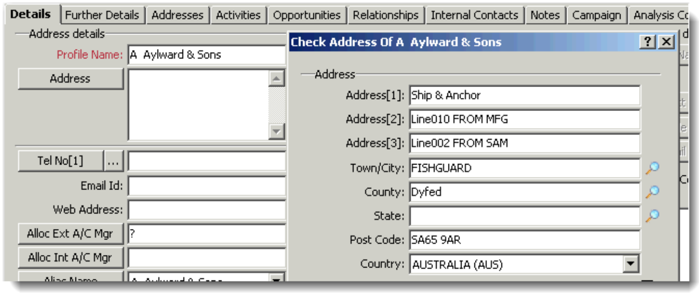
Description. Enter the description for the new address style you are creating.

Enter Country Codes to which this Address Style applies. Use the lookup to choose the codes for those countries in the system database to which the current address style applies. Use commas to enter multiple country codes.

Default Style. Select this check box if you want this to be the default address style for all addresses recorded.

Note The address editor in Main Menu|Sales/Marketing Management|Addresses|All Profiles|Details shows up blank if the system cannot find a corresponding address style record. This is because the addresses displayed in Profiles are picked up by the system from the Address Style settings defined here. The system looks for the address style record using the country. If it cannot find a record this way, the system uses the default address style record.

Fig. 7.18
All Profiles: Blank Address Editor



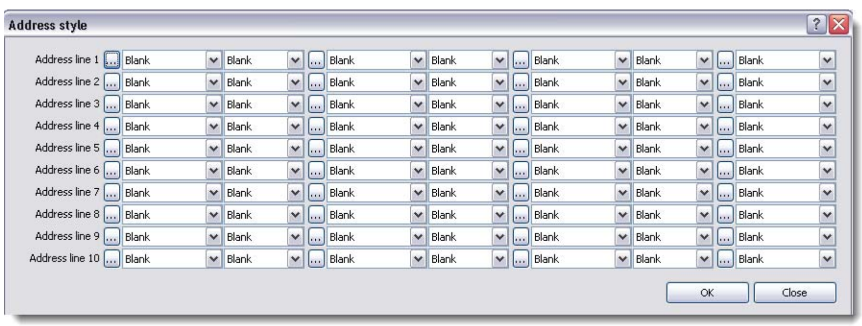
Name Style. Click this button to display the Name Style window. Use this window to record the format in which you want the name to appear.

Insert Contact Name in this format. Select this check box if you want the contact name to appear in the format specified here.

Insert Profile Name. Select this check box if you want the profile name to be included in the address style you are creating.

Address Style. Click this button to display the Address Style window. Use this window to record the format in which you want the address to appear.

Fig. 7.19
Address Style Window



Insert Postal Address. Select this check box if you want the postal address to be included in the address style you are creating. Choose the appropriate radio button to define the condition under which to include the postal address.

Style Code. This is a unique system generated number for each new address style that is added.

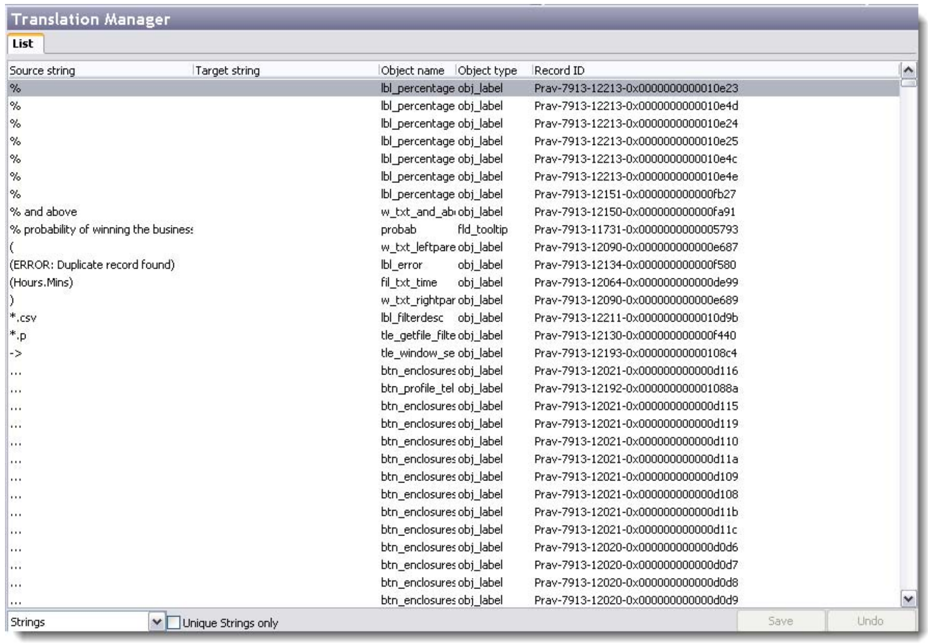
The address style you create is displayed in a preview frame.

Translation Manager

The Translation Manager helps in the translation of strings from one source language into more than one target language.

The Translation Manager browser displays the list of translatable strings and messages being used by QAD CRM. You can edit these strings and messages, export them to Excel files for translation, and import the translated strings back into the system through this screen.

Fig. 7.20
Translation Manager



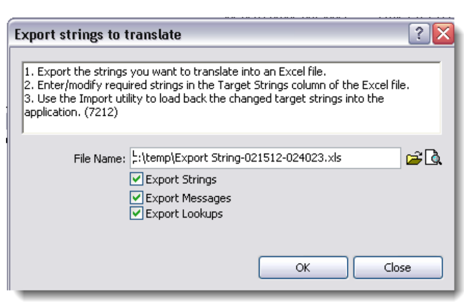
The List tab includes a drop-down list at the bottom left where you can choose whether you want to view strings or messages. If you select the Unique Strings Only check box, the system displays only those strings that have a unique combination of Object Name and Source String fields. There is also a drop-down list in the toolbar that displays all the target languages in the system. You can choose to translate the source strings or messages to any of these languages. Select a record, right-click and choose Edit to modify the target string or message.

Note The system must have at least two languages set up for the Translation Manager to translate the messages or strings. If only a single language is available in the system, then the Translation Manager browser displays a blank screen. There is no second language to which the available messages or strings can be translated.

Export Data

The Export Data option of the Translation Manager lets you export source strings and messages for translation from the system to Microsoft Excel spreadsheets in predefined formats.

Fig. 7.21
Export Data



File Name. Click the folder icon to browse and choose a file and location where the exported source strings and messages are saved. If this is an existing file, you can view it by clicking on the document icon. In case a file already exists, the system confirms whether you want to overwrite the file.

Export Strings. Select this check box to export source strings.

Export Messages. Select this check box to export source messages.

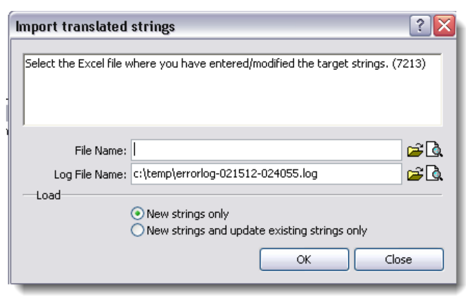
You can export strings and messages together or separately. If exported together, the first sheet of the Excel file contains the exported strings and the second sheet contains the exported messages.

The Excel sheet consists of the same columns as in the Translation Manager browser. All the columns of this Excel sheet are read-only except the Target Language column. The editable and read-only columns are displayed in different colors.

Import Data

The Import Data option of the Translation Manager lets you import the Microsoft Excel spreadsheets where you have entered or modified the target strings and messages.

Fig. 7.22
Import Data



File Name. Enter or choose the Excel file from which to import the translated target strings and messages into the system.

Log File Name. This field displays the location of the error log. The system automatically generates an error log after the import process is through. Click the folder icon to choose an alternate location.

New Strings Only. Select this radio button if you want to import only the new strings from the Excel file into the system. This option imports only those strings for which no target language has been specified.

New Strings and Update Existing Strings. Select this radio button if you want to import new strings as well as update the existing strings from the Excel file.

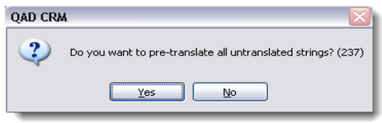
Pre Translation

The Pre Translation utility is used for simultaneously translating multiple strings that have the same values in their source and target strings.

Example `Edit` is the source string value and `Bewerken` is the target string value. If you choose to pre-translate, all the source strings having the value `Edit` and for which the target strings read `Bewerken` are translated at the same time. However, if two `Edit` source strings have two different target string values, then pre-translation does not work for those source strings.

Right-click in the Translation Manager browser and choose Pre Translation. A confirmation message pops up. Choose Yes to start pre- translation or No to cancel the process.

Fig. 7.23
Pre Translation

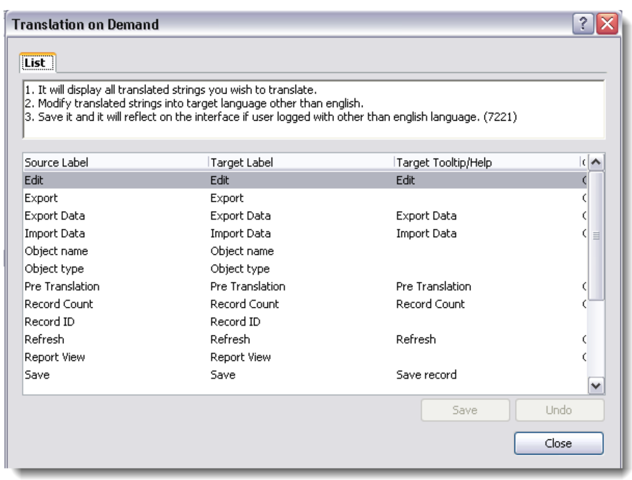


Note Pre Translation does not work with unique strings or messages. The Pre Translation option does not appear in the right-click menu if you select the Unique Strings Only check box.

Translation on Demand

The Translation on Demand option lets you view and modify all the labels and Tooltips for the current interface.

Fig. 7.24
Translation On Demand



In any browser, press Alt+F3 to display the Translation on Demand window. Right-click and choose Edit to modify target labels and Tooltips. Click Save to modify the record.

Note Modifying and saving a record through the Translation on Demand window does not make any global changes or replacements in the system. It only modifies the selected record.

If you are logged into the system using any language other than English, then the modifications you make through the Translation on Demand window get updated immediately.

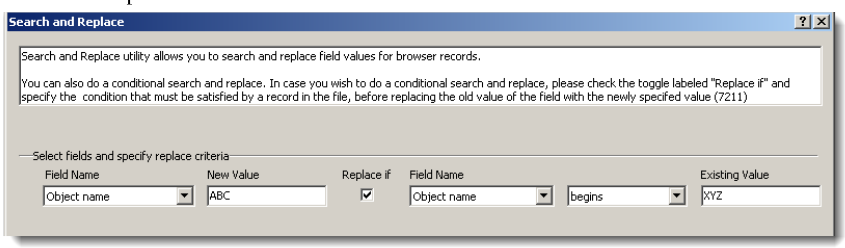
However, you cannot modify labels and Tooltips through the Translation on Demand option if the current login language is English. In this case when you click Save, a Target Language pop-up opens. Use the drop-down list to choose the target language for modification. The system does not let you change labels and Tooltips in English since that is the default language used by QAD CRM.

Fig. 7.25
Target Language

Replace

The Search and Replace utility allows you to search and replace field values for browser records within the Translation Manager. You can also perform a conditional search and replace.

Fig. 7.26
Search and Replace



Note Once you replace a term using the search and replace utility, you cannot undo the task. It is therefore advisable to ensure the validity of the search and replace task before using this utility.

System Control

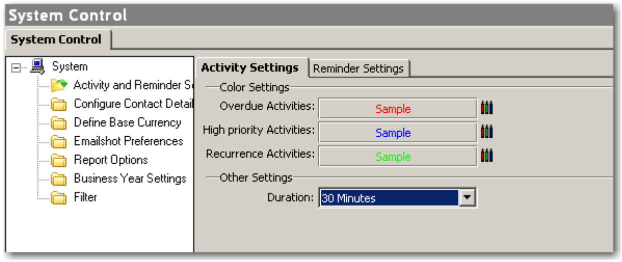
The System Control option lets you define the settings of the following functions:

- Activity and Reminder Settings
- Configure Contact Detail Frame
- Define Base Currency
- Emailshot Preferences
- Report Options
- Business Year Settings
- Filter

Activity and Reminder Settings

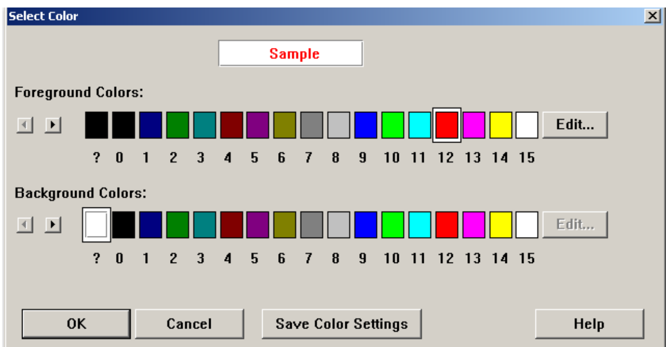
The Activity Settings tab lets you apply color settings to differentiate between activity categories. System default settings use red to indicate overdue activities, blue for high-priority activities, and green to highlight recurring activities.

Fig. 7.27
Activity Settings



However, you can change these default settings by clicking on the Select Color icon. The Select Color window displays. Use it to define foreground and background colors for a selected activity category.

Fig. 7.28
Select Color



The Activity Settings tab also lets you specify a default duration for any new activity that you add. You can select an appropriate time interval from the Duration drop-down list.

Note The duration that you specify here as the default is used by the system when the end user creates a new Appointment type activity. The default duration that appears in the Appointment Details window is automatically taken from this field.

Use the Reminder Settings tab to enable reminders for activities.

Reminder. Select the Reminder check box to activate the reminder function for activities.

Remind Before. Select the time interval prior to the actual event when you want the reminder to be sent.

Note The time interval you select here is used by the system as the default for reminders. However, you can change this for individual activities when you create a new activity or modify an existing one.

Polling Interval. Select the default polling interval (“snooze time”) for reminders in the system.

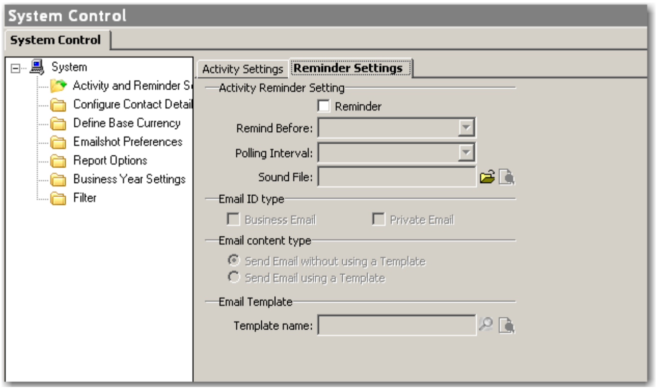
Sound File. Select a sound file from your hard drive.

Email ID Type. Select the e-mail ID to which you want the reminder e-mail to be sent.

Email Content Type. Indicate whether you want to use a template to create the reminder e-mail.

Email Template. Select the template file for the reminder e-mail.

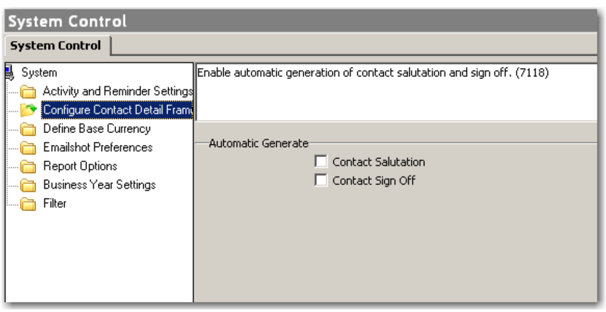
Fig. 7.29
Reminder Settings



Configure Contact Detail Frame

The Configure Contact Detail option lets you enable automatic generation of contact salutation and sign-off. Select the relevant check boxes to activate these features.

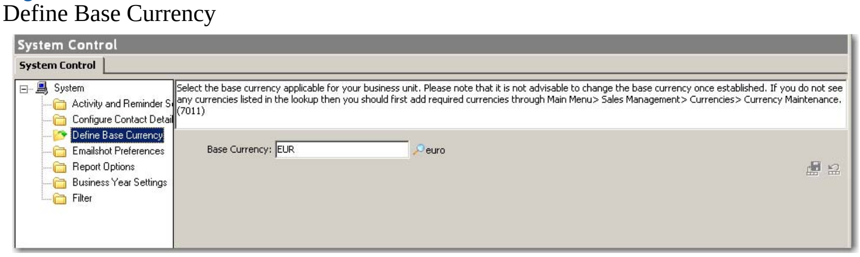
Fig. 7.30
Configure Contact Detail Frame



Define Base Currency

This option lets you define a base currency for a business unit. Use the lookup provided to select a currency.

Fig. 7.31
Define Base Currency



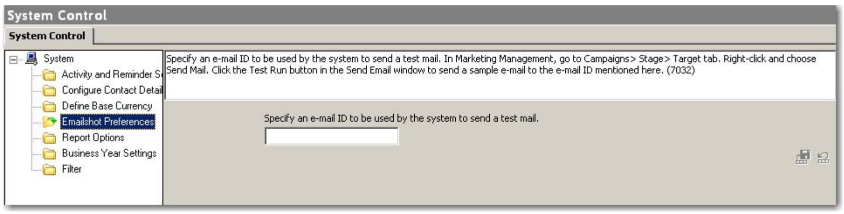
In case a required currency is not available in the lookup, go to Main Menu|Sales Management|Currencies|Currency Maintenance to add a new currency. For details, see *QAD Customer Relationship Management User Guide*.

Note You should not change the base currency once it has been set up.

Emailshot Preferences

This option lets you specify a test e-mail account where you can receive sample system-generated mails. This e-mail account receives mails sent during the test run of emailshots created through the Campaigns module.

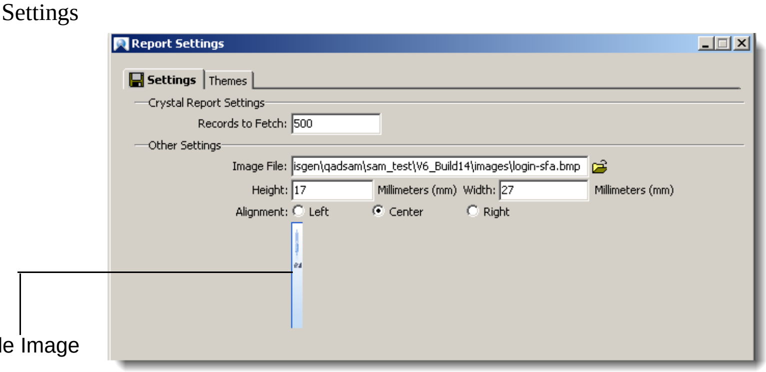
Fig. 7.32
Emailshot Preferences



Report Options

Use the Report Options to specify report-related settings for the Crystal reports supported by QAD CRM.

Fig. 7.33
Report Settings



Sample Image File

Settings

Records to Fetch. Enter the number of records that you want displayed in each report screen.

Image File. Click on the folder icon to browse and select an image file. The image that you choose here is displayed by the QAD CRM report viewer for all standard and user-defined reports. The system displays a sample of the selected image file.

Height/Width. Specify the height and width (in millimeters) of the image display.

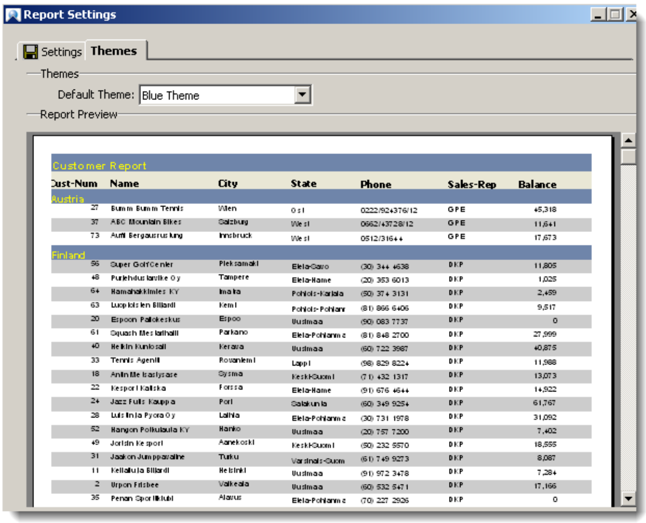
Alignment. Choose the alignment of the selected image by clicking the appropriate radio button.

Note The image feature is designed especially for situations where, for example, a company wants to display the company logo on all its reports.

Themes

Use the drop-down list to choose the default theme for your report display. You can see a preview of the chosen theme in the Report Preview area.

Fig. 7.34
Report Themes



Business Year Settings

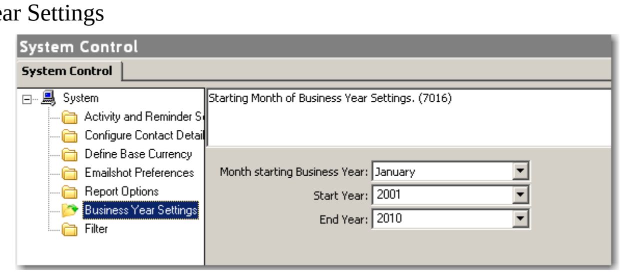
Use this option to establish the business year settings for a business unit.

Month Starting Business Year. Select the starting month of the business year for the current business unit.

Start Year. Select the year marking the start of the business unit.

End Year. Select the last year through which the business unit is expected to function.

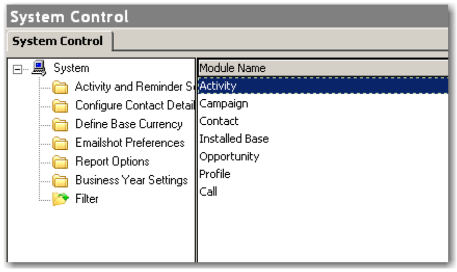
Fig. 7.35
Business Year Settings



Filter

The Filter option lets you view the list of system filters defined in the system.

Fig. 7.36
Filter



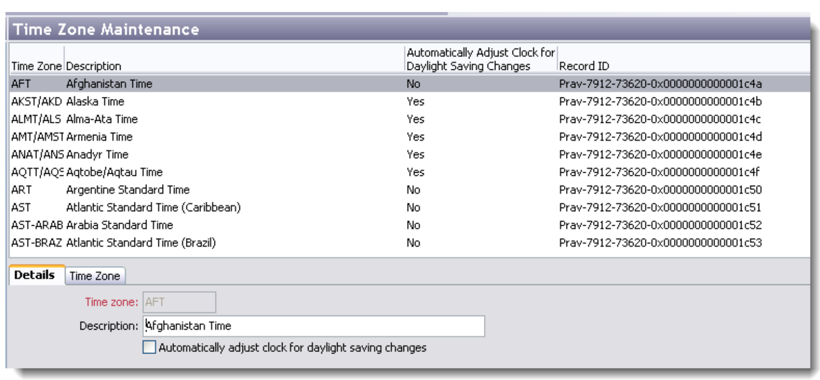
You can add, edit, and delete filters from here. Select a filter and double-click on it to view details. You can also right-click and choose View Filter to perform these functions. All the users can access these filters from the filter combo.

Time Zone Maintenance

The Time Zone Maintenance option lets you manage records for all the time zones used by the system.

The Time Zone Maintenance browser displays the list of time zones available in the database. You can add, edit, copy, and delete time zones.

Fig. 7.37
Time Zone Maintenance



Details

Use the Details tab to record the name and description of the new time zone.

Time Zone. Enter the name of the new time zone you are adding.

Description. Enter a description for the new time zone.

Select the check box if you want the system to automatically adjust the clock for daylight saving changes.

Time Zone

Use the Time Zone tab to record basic information about the new time zone.

Time Period. Use the drop-down list to choose the time period you want to add. This field is editable if Automatically Adjust Clock for Daylight Saving Changes is Yes. Valid choices are Standard time, Summer time and Daylight Saving time.

Start Year. Enter the beginning year of a range of years to which this time zone definition applies. In some countries, the implementation of time zones varies from year to year. Using start and end dates enables you to set up multiple records that apply to different periods.

End Year. Enter the ending year of a range of years to which this time zone definition applies. In some countries, the implementation of time zones varies from year to year. Using start and end dates enables you to set up multiple records that apply to different periods. If you do not know when the current definition will cease to be effective, use a number such as 9999 for the end year.

GMT Offset. Enter the actual offset in hours and minutes from Greenwich Mean Time (GMT). This number must be entered with either a plus sign (+) or minus sign (-) indicating the direction of the offset.

GMT is used internationally as the basis for establishing relationships among time zones and is never affected by daylight saving time adjustments.

Start Period. When Automatically Adjust Clock for Daylight Saving is Yes, enter the first day of the week in which the change of time occurs in MM/DD format. This format is required regardless of the date format you are using.

For the United States, daylight savings normally begins on the second Sunday in March (identified by a start date of 03/08) and ends on the first Sunday in November (identified by a start date of 11/01).

This field is used in conjunction with the Weekday and Time fields to identify precisely when the time change occurs.

Note Ensure that the date you choose falls in the same week for every year that the new time period remains effective. For example, if you choose the last Sunday in March as the start date for a particular time period, then your start period cannot be a date earlier than 25 March in any given year.

Weekday. When Automatically Adjust Clock for Daylight Saving is Yes, enter a number (0-7) indicating the day of the week (identified by the Start Period field) when the time change occurs:

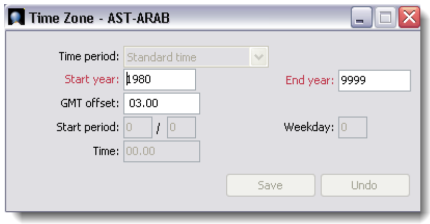
Enter 0 if the change occurs on the date entered for Start date, regardless of the day of the week on which it fails.

Enter a number in the range 1-7 corresponding to Sunday through Saturday if the change always occurs on a certain day of the week. For example, in the US, time changes always occur on Sunday (1).

Time. When Automatically Adjust Clock for Daylight Saving is Yes, enter the exact time of day (identified by the Start Period and Weekday fields) when the time change occurs. Use 24-hour clock format. This time is always entered in standard time.

In the United States, enter 02.00 when switching from standard time to daylight savings, but 01.00 when switching from daylight savings time back to standard.

Fig. 7.38
Time Zone



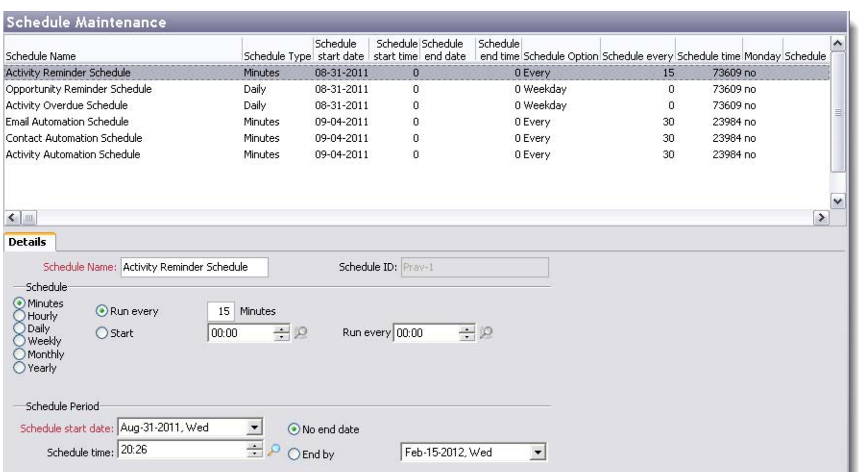
Note Make sure that the time zone data entered is correct for the current year and a few years in the future, and that the data is consistent with the time zone in ERP. Incorrect time zone data can cause unexpected results or malfunctions. Ensure that you update CRM Time Zone data when the Time Zone setting is changed in ERP.

Schedule Maintenance

You can use the Schedule Maintenance option to maintain all schedules defined in the system. Schedules can be attached to defined jobs created for AdminService, or used for replication in Activities.

The Schedule Maintenance browser displays the list of schedules available in the database. You can add, edit, copy, and delete schedules through this screen.

Fig. 7.39
Schedule Maintenance



Details

Use the Details tab to record basic information about a new schedule.

Schedule Name. Enter the name of the new schedule you are adding.

Schedule ID. This refers to a unique ID automatically generated by the system when you save the new schedule.

Schedule. Click the appropriate radio button to select a time line for the new schedule. Specify the schedule interval and pattern.

Schedule Start Date. Enter the start date of the new schedule.

No End Date/End By. Select the appropriate radio button to specify whether the schedule is effective indefinitely. If you choose End By, enter an end date.

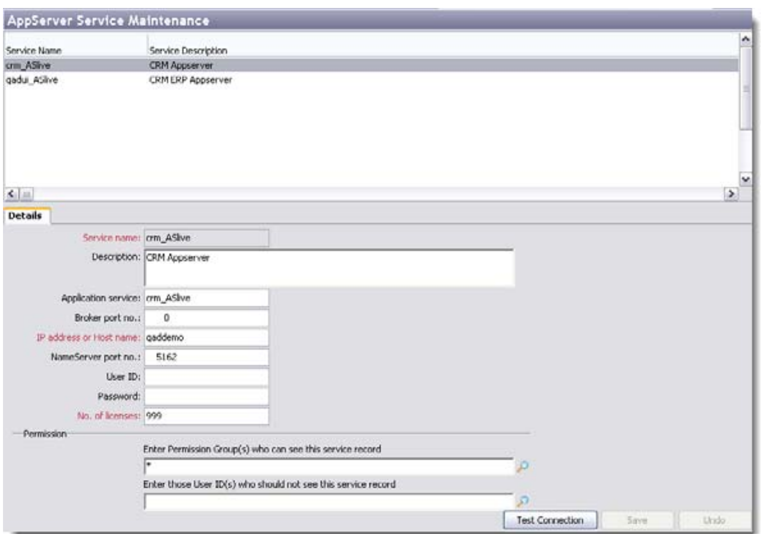
Schedule Time. Enter the start time of the new schedule.

AppServer Service Maintenance

The AppServer Service Maintenance browser displays the list of application services available in the system. You can add, edit, copy, and delete application services.

To enable the AdminService utility to run on your system, you must first configure your application server (AppServer) settings in the QAD CRM system.

Fig. 7.40
AppServer Service Maintenance



Details

Use the Details tab to record basic information about a new service.

Service name. Enter the name of the new service you are adding.

Description. Enter a description for the new service.

Application service. Enter a name of a valid AppServer Application Service.

Broker port no. Enter the port number of the broker.

IP Address or Host name. Enter the host name or IP address of the NameServer that provides the AppServer connection.

NameServer port no. Enter the port number of the NameServer that provides the AppServer connection.

User ID. Enter the unique code to connect to the AppServer. This is not a mandatory field.

Password. Enter a password that will enable connecting to the AppServer. This is not a mandatory field.

No. of licenses. Enter the number of licenses that will be issued for using the new service. If you do not know the number of licenses, enter 99.

Permission. Use the look-up buttons to define permissions to the new service. You can grant access or deny permissions to specified user groups.

Click the Test Connection button to check whether the new service that you have set up works effectively. If it does, you can save the service record.

Chapter 8

Reports and Queries

This section describes how to create queries and run reports using the Reports and Queries module of the QAD Customer Relationship Management (QAD CRM) application. It discusses the following topics:

Overview

The Reports and Queries module gives you the flexibility to use reports provided with QAD CRM, or create your own custom reports using the Query Builder tool. The system also lets you choose different output media for the reports. You can send export reports to external applications as well.

Reports

You can access the Reports module from Main Menu|Settings|Reports and Queries|Reports. Links to the Reports module are also available from Sales Management and Marketing Management menus.

The Reports screen displays the different categories of reports available. For more details on reports, see the Reports section of *QAD Customer Relationship Management User Guide*.

Query Builder

The Query Builder helps you generate custom reports, and extract desired data in mails and document templates used for mail merges. Typically, database specialists or system administrators design queries to extract data that match specific conditions. Sales and marketing personnel can then use these queries to generate custom reports to meet their specific requirements without having to possess any knowledge of the system database. To access this option, go to Main Menu|Settings|Reports and Queries|Query Builder.

Building queries involves specifying conditions for extracting the desired data from the system database. For example, if you want to extract data for profiles that offer opportunities with at least 80% probability, you should join the tables of profiles and opportunities. Then you should specify the conditions for display by selecting the required fields. You can then use this query to generate a report or write a business letter that includes this data.

Note You should have a good understanding of the QAD CRM system database and its tables before attempting to create queries.

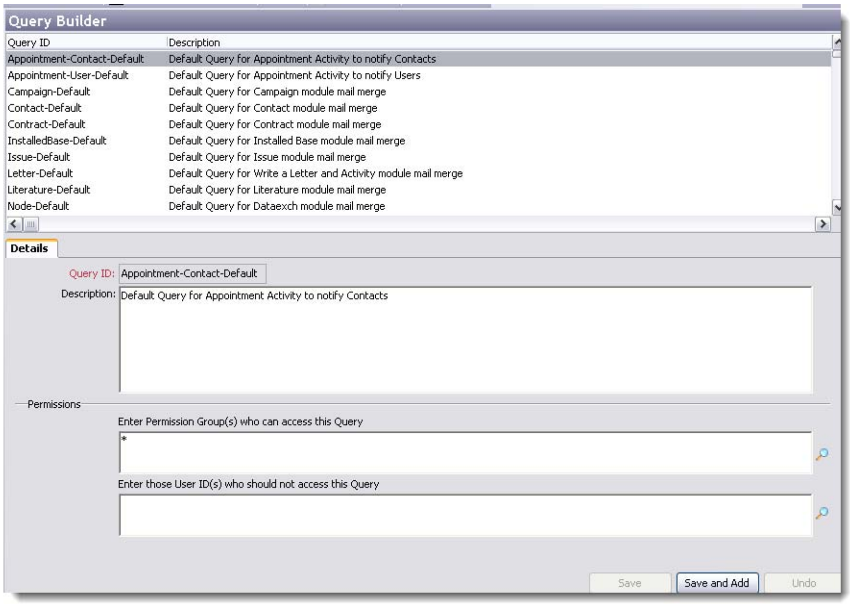
Query Builder Maintenance

Using the Query Builder, you can:

- Manage query records
- Build queries to extract data from the database

Right-click in the Query Builder browser to add a new query record. You can also edit or delete existing query records.

Fig. 8.1
Query Builder



Details

Query ID. Enter a query ID for the new record. This is a mandatory field.

Description. Enter an appropriate description for the new query record.

Permissions. Define access permissions to the new query record.

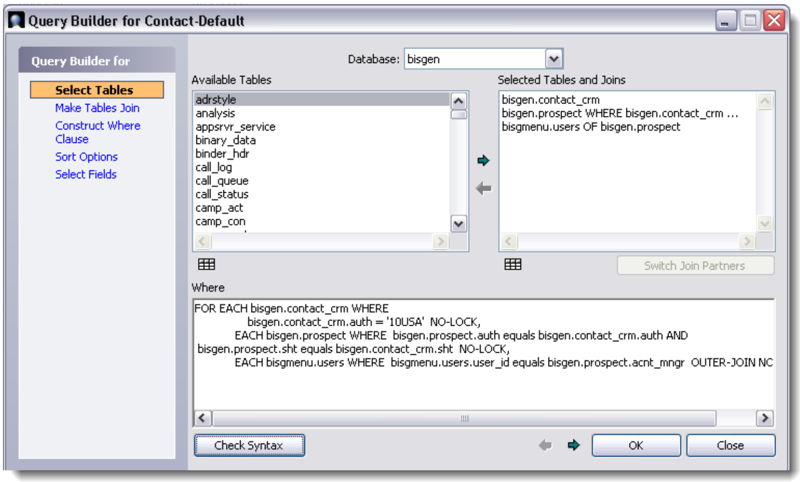
Save the record. This opens the Query Builder wizard.

Query Builder Wizard

The system provides the Query Builder wizard to assist you in designing queries. You can build a query when you save a new query record or while editing an existing query record.

To build a query from an existing record, select a query in the Query Builder browser. Right-click and choose Compose Query. The Query Builder wizard displays.

Fig. 8.2
Query Builder Wizard - Select Tables



Select Tables

This option lets you choose the tables that you want to use for defining a new query. It lists all the tables available for a chosen database.

Database. Select the appropriate database from the Database drop-down list.

Note QAD CRM uses three databases. The tables displayed depend on the database you choose.

Available Tables/Selected Tables and Joins. Select the appropriate tables from the Available Tables list. Use the arrow keys to move the selected tables to the Selected Tables and Joins list. You can view the field list of the selected tables by clicking the checkered button below each table.

Switch Join Partners . This button is enabled when the table you select can connect with more than one table. Clicking this button opens a dialog box that displays the possible options and lets you choose which related table you want to join.

Where . This text box describes how the selected tables function.

Check Syntax . Click this button to check the validity of your query.

Make Tables Join

You can use this option to join tables when you are defining complex queries.

Join. This drop-down list shows the joining conditions between the various tables you selected in the previous option Select Tables. Choose a condition; all the fields related to the selected tables display in the two list boxes.

Operator and And/Or. Click the appropriate button to specify the joining conditions between the fields of the two selected tables.

Inner Join/Outer Join. Select the appropriate radio button depending on the type of joining criteria you want to specify.

Note In Progress, *inner join* is a term used to specify that in a query combining two tables, the result returns records from the first table that meets the specified criteria, combined with the corresponding records from the second table that meets the specified criteria. The result does not include any records that have failed to meet any part of the criteria. Inner join is the default for all queries. However, *outer join* combines and returns data from the specified tables in two ways. First, the records selected for the table (or join) on the left side combine with each record selected using the OF or WHERE options from the table on the right (record). Second, the records selected for the table (or join) on the left side combine with the Unknown value (?) for the fields from the table on the right (record) for which no records are selected using the OF or WHERE options. The join is ordered according to the given sort criteria starting with the left-most table in the query.

For example, using the SPORTS database, an inner join between customer and order does not include any customers that do not have any orders. In an outer join between customer and order includes those customers that do not have any orders and do have orders.

Join Criteria. This box displays the criteria you defined for joining fields from two selected tables. You can validate the syntax of the joining by clicking the Check Syntax button.

To join fields from two different tables, do the following:

1. Scroll through the left list and select a field by double-clicking it.
2. Click Operator or And/Or to apply a joining condition.
3. Scroll through the right list and select the second field from here by double-clicking it.

You can join as many tables as required for your query.

Construct Where Clause

Use this option only if you want to add some specific, hard-coded values to some of the fields you have selected for your query. Construct Where Clause is not a mandatory option.

Sort Options

Sort options let you sort data while executing a query.

Table. Select the table for which you want to define sort options.

Available Fields. Select the required fields from the Available Fields list.

Selected Fields. Use the arrow keys to move them to the Selected Fields list.

Click the appropriate radio button—ascending or descending—to sort the selected fields. You can select up to five fields for sorting.

Select Fields

This option lets you expose only selected fields in the custom report that is to be generated using the query you are building. For example, a table can have 100 fields, but you can set the number of fields that will be visible in the report to 20. Only those fields that you select here show up in the report writer when the actual report is being created.

Select the check box adjoining each field that you want to display in the report.

Save your settings in the Query Builder wizard for the new query record created. This record now displays in the Query Builder browser.

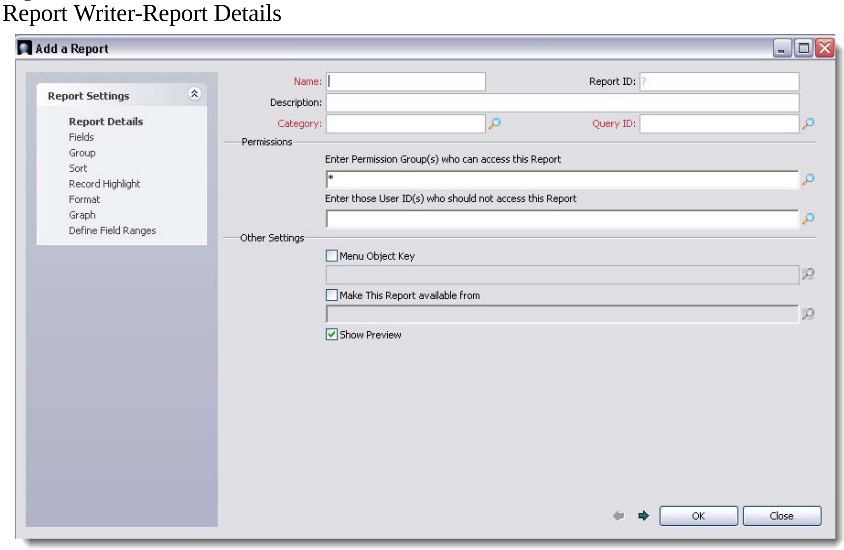
After creating a query, you can use it to generate custom or user-defined reports using the Report Writer.

Report Writer

You can generate various custom or user-defined reports through the Reports module using the Report Writer, also called the Add a Report wizard.

To open the Add a Report wizard, right-click the Reports screen and choose Add Report using QAD SFA/MA Report Writer. The Report Writer lets you design report formats and categorize them as required. These formats define the conditions, tables, and fields to use to extract data for browser reports using queries created through the Query Builder.

Fig. 8.3
Report Writer-Report Details



For more details on using the Report Writer, see *QAD Customer Relationship Management User Guide*.

Chapter 9

Template Manager

This section describes how to design and apply templates to standard letters and e-mail messages in the QAD Customer Relationship Management (QAD CRM) application. It discusses the following topics:

Overview

A template is a pre-designed file containing prescribed formats, based on which you can create new files. A template ensures that all documents based on it have a consistent layout and format.

You can maintain templates for Microsoft Word documents and e-mail messages in QAD Customer Relationship Management (QAD CRM) through the Template Manager module. To access this module, go to Main Menu|Settings|Template Manager.

Templates are useful for creating multiple documents or e-mail messages having similar content. Microsoft Word templates are used when creating documents using the mail merge facility or the Send Letter option. You use E-mail templates while sending e-mail messages to multiple contacts during a marketing campaign.

The system uses registered templates to automatically create various documents such as campaign catalogs, mailing labels, and business letters. In addition to pre-specified content, a template contains data extracted from specified fields of system tables. This is possible as templates are associated with database queries. Other fields, such as Microsoft Word fields, can also be included in templates.

Using the Template Manager module you can:

- Manage Microsoft Word templates.
- Manage e-mail message templates.
- Manage the location of templates and files used in mail-merge.

Standard Letters

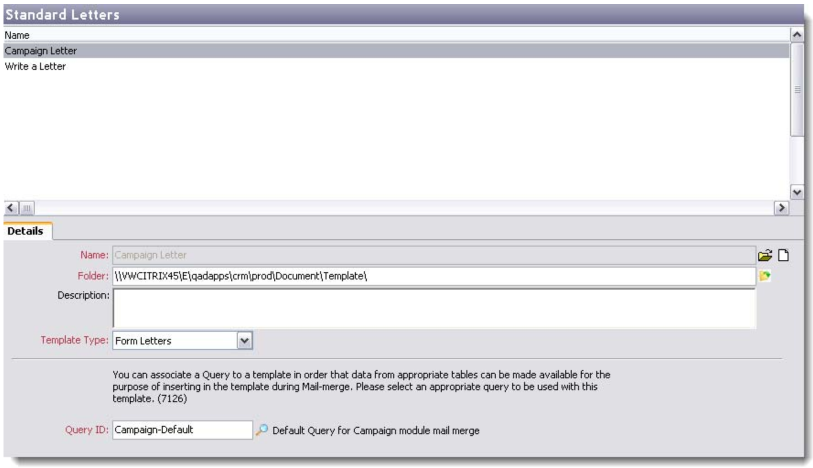
Using the Standard Letters option, you can register and create Microsoft Word templates. You also specify their mail-merge type, which includes letter, label, or catalog. Templates must be associated with a pre-defined query. Once you register a template, you can design, view, edit, and delete it as required.

Microsoft Word templates are `.dot` files. You can create these files by designing the layout, format, styles, and default content of a Microsoft Word document, and saving it as a document template file in the desired location. To create a new document based on a template, double-click the template file from Windows Explorer.

Manage Document Templates

You can manage document template records from the Standard Letters option. Go to Main Menu|Settings|Template Manager|Standard Letters. Right-click in the browser area and choose to add, edit, copy, or delete a template record from the displayed list.

Fig. 9.1
Standard Letters



Details

Use the Details tab to record basic information for a new template.

> *Name.* Enter a name for the new template record you are adding. Alternately, select an existing template file by clicking on the folder icon.
>
> *Folder.* Enter a folder location where you want to save the new template. This location serves as the default location for this template. You can browse for the location by clicking on the folder icon.
>
> *Description.* Enter a description for the template you are creating. You could include the purpose and function of the template in this field.
>
> *Template Type.* Select the template type from the drop-down list. Template type refers to the kind of document for which you want to create a template. Options include Form Letters, Mailing Labels, and Catalog.
>
> *Query ID.* Use the look-up to select the appropriate query that you want to attach to your template.
>
> ***Note*** All fields except Description are mandatory.

Save the template record. It displays in the Standard Letters browser as a registered template. You can now design a template for this new record you created.

Design or Edit Templates

To design a template, do the following:

1 Select a template record from the list of registered templates in the Standard Letters browser.

2 With a selected template record, do one of the following:
   - Click the Design Template button on the toolbar.
   - Right-click anywhere in the list of templates and choose Design Template.
   - Select Design Template from the File menu on the menu bar.

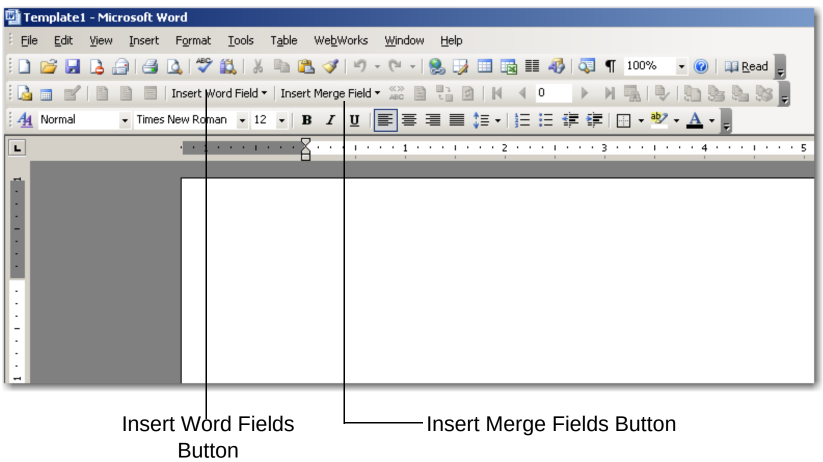
3 Design a new template according to your requirements, or edit an existing template.

4 Save and close the template.

New Template

If there is no template associated with a template entry, the system opens Microsoft Word and creates a blank template. The name and location where the system saves the blank template is specified in the template entry.

Fig. 9.2
Design New Template



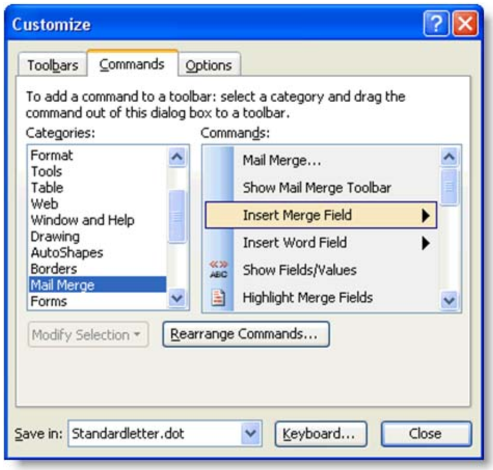
Though you can design a new template directly from Microsoft Word, it is recommended that you do this from within the QAD CRM system. When you design a template through the system, the template includes the Insert Merge Fields button to insert custom results of associated queries, which are otherwise not available. The query fields available depend on the query you specify while adding the template entry.

When you design a template, by default, Microsoft Word 2003 does not display the Insert Merge Field button on the toolbar. Perform the following steps to enable the Insert Merge Field button, once you have selected the Design or Edit template option from CRM:

1 On the toolbar, right-click and select Customize.

2 Select Mail Merge from the categories and then Insert Merge Field from the right-hand side commands.

Fig. 9.3
Insert Merge Field

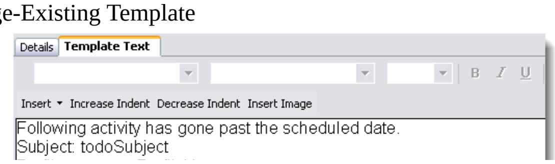


3 Drag the Insert Merge Field command and drop just after Insert Word Field.

Existing Template

If an existing template is already associated with a template entry, the system prompts you to confirm. If you choose to redesign the template, the system deletes all content in the template and opens it for editing.

Fig. 9.4
System Message-Existing Template



Note Opening an existing template in redesign mode removes the previous content. QAD recommends that you open an existing template in edit mode instead.

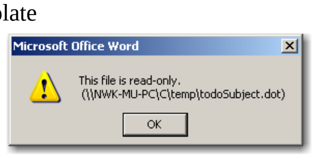
View Templates

To view a template, select a template record from the list of registered templates in the Standard Letters browser and do one of the following:

- Click the View Template button on the toolbar.
- Right-click and choose View Template.
- Select View Template from the File menu on the menu bar.

The system opens the template in Microsoft Word as a read-only file. You cannot save any changes made to the template.

Fig. 9.5
System Message-View Template

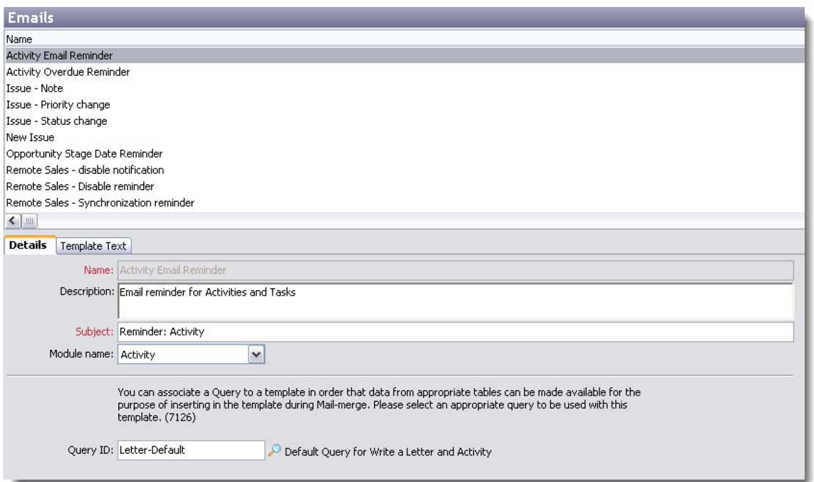


Emails

Using the Emails option, you can create and save templates for e-mail messages. These templates contain pre-defined content and data from specified fields, and are useful in composing e-mail messages that are to be sent to multiple contacts. They are especially suitable for sending out emailshots through the Campaign module, where e-mail messages regarding a campaign are sent to a filtered target audience.

You can manage e-mail template records from the Emails option. Go to Main Menu|Settings|Template Manager|Emails. Right-click in the browser area and choose to add, edit, copy or delete a template record from the list displayed.

Fig. 9.6
Emails-Details tab



Details

Use the Details tab to record basic information for a new template.

Name. Enter a name for the new template record you are adding. This is a mandatory field.

Description. Enter a description for the template you are creating. You could include the purpose and function of the template in this field.

Subject. Enter the subject line for the e-mail template. This subject line is used for all mails that are sent out using this template record. This is a mandatory field.

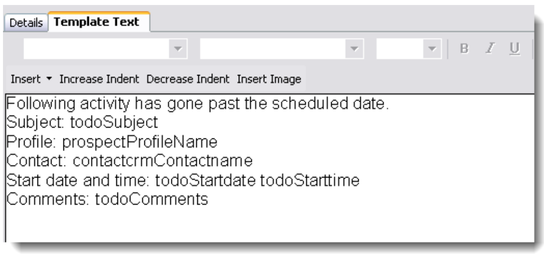
Module Name. Select the module name from the drop-down list, if you wish to filter the templates using module name during selection.

Query ID. Use the look-up to select the appropriate query that you want to attach with your template. If you leave this field blank, the e-mail template record is available across all modules.

Template Text

Use the Template Text tab to design a template for the selected e-mail template record. This tab contains an editing toolbar similar to that of Microsoft Word. You can use the Insert button to insert custom results of associated queries.

Fig. 9.7
Emails-Template Text tab



Save the template record. It displays in the Emails browser as a registered e-mail template.

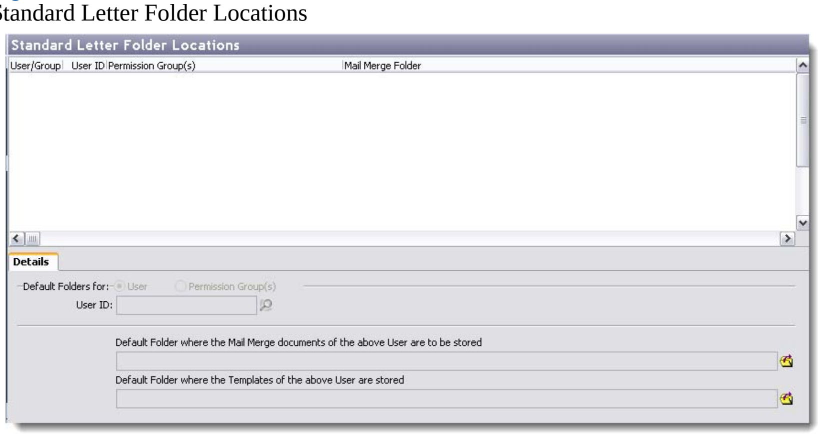
Standard Letter Folder Locations

Using the Standard Letter Folder Locations option of the Template Manager, you can specify default folders for storing templates, and documents based on those templates. When you save a template, it is useful to save it in a default folder prescribed for particular user types or user groups.

Since the templates listed under Standard Letters can used by multiple users, consider storing them in a central location on the network. Storing all the templates on a shared network drive provides direct access to multiple system users.

You can manage document template locations from the Standard Letter Folder Locations option. Go to Main Menu|Settings|Template Manager|Standard Letter Folder Locations. Right-click in the browser area and choose to add, edit, copy, or delete a template location from the list displayed.

Fig. 9.8
Standard Letter Folder Locations



Details

Use the Details tab to record permissions and default folder locations for a new template.

User/Permission Groups. Select the appropriate radio button. To make a template available to an individual user, select User. To make a template available to a user group, select Permission Groups.

Use the lookup to enter names of those users or user groups who will have permission to access the indicated templates and mail merge folders on a shared drive.

Default Folder for storing Mail Merge documents/Templates for above Permission Groups.

Click the folder icon next to these fields to browse and select the default location for storing mail merge documents and templates for selected users or user groups.

Click Save to save the default folder locations.

Chapter 10

QAD AdminService

This section describes the settings required to run the QAD AdminService (QAD ADS). The QAD ADS is an essential component for the smooth functioning of the QAD Customer Relationship Management (QAD CRM) application. It discusses the following topics:

Overview

QAD ADS is a Windows service that manages and simultaneously executes background jobs that are defined in the QAD CRM system:

- Synchronizes QAD ADS settings with the settings of QAD CRM
- Monitors defined jobs
- Schedules and executes predefined jobs, and performs post-job processing

Understanding Jobs

A job can be a single task or a series of tasks that are defined in the QAD CRM system. QAD ADS implements multiple job instances simultaneously. It processes two types of jobs:

- Predefined jobs in QAD ADS
- Jobs defined in the QAD CRM system

Jobs are linked to QAD ADS through instances. QAD ADS can work with multiple instances or environments, such as Production, Test, Training, and so on. Each instance on QAD ADS can have a separate database and a separate set of jobs to be executed.

Predefined Jobs

QAD ADS contains the following predefined jobs:

- DataSyncJob: Perform data synchronization activities
- DeleteLog: Delete job history and event log records
- SendEmail: Send and receive mails on behalf of QAD CRM

The QAD ADS service executes predefined jobs at defined intervals. For more details, see “Managing Predefined Jobs”.

Defined Jobs

Job definitions in QAD CRM are stored in a database table called job. The job table can have one or more tasks. A schedule can be attached to either a job or a task, as specified in the QAD CRM system.

Defined jobs for QAD ADS include:

- Exchange Server Automation
- Email Reminder
- Activity Overdue Reminder
- Opportunity Stage Date Reminder

For more details, see “Managing Defined Jobs”.

Configuring AppServer Settings

To enable the QAD ADS service to run on your system, you must first configure your application server (AppServer) settings in the QAD CRM system. To define these settings, go to Main Menu|Settings|System|AppServer Service Maintenance. For details, see AppServer Service Maintenance.

Setting Up QAD ADS

Two types of settings are required to run QAD ADS:

- Settings defined in the QAD CRM system through the AdminService Settings screen (see "Configuring AdminService Settings")
- Settings defined in the QAD ADS Windows service and stored in the registry (see "Configuring the QAD ADS" on page 100)

Configuring AdminService Settings

After defining the settings in the AppServer Service Maintenance screen, you must set up the AdminService Settings screen in the QAD CRM system. To configure these settings, go to Main Menu|Settings|System|AdminService|Settings. The Settings screen displays.

Fig. 10.1
Settings Screen - Exchange Server

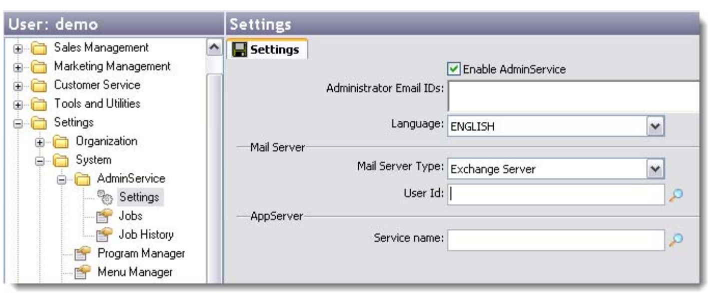
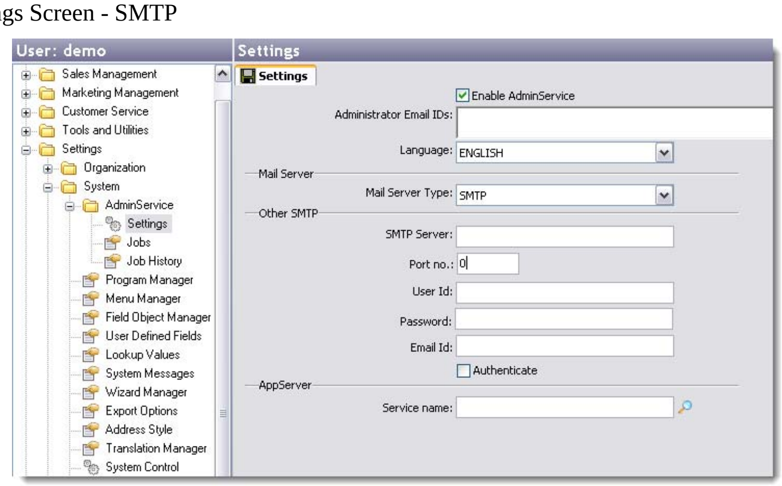


Fig. 10.2
Settings Screen - SMTP



Settings

Enable AdminService. Select this check box to enable AdminService and enable the other fields in this screen.

Administrator Email IDs. Enter the e-mail IDs of the system administrators. Separate Multiple e-mail IDs with commas or semi-colons.

Language. Choose the language you want to use for this service.

Mail Server Type. Specify your mail server type: Exchange Server or SMTP.

User ID. QAD AdminService requires a user on your Windows network for communicating with the mail server. If the mail server is an Exchange Server, the user is required to have a mailbox. Create a user account and enter the user logon name.

When you select SMTP as the mail server type, the associated settings for SMTP server are displayed.

SMTP Server. Enter the SMTP server address.

Port no. Enter the SMTP port number for outgoing mails.

User ID. See User ID.

Password. Enter the password for the AdminService user.

Email ID. Enter the e-mail ID of the AdminService user.

Service name. Enter the service name of the AppServer to which you want QAD ADS to connect.

Save the settings you have recorded for the AdminService Settings and restart QAD CRM. You can now start the QAD ADS service.

Configuring the QAD ADS

To configure the QAD ADS Windows service:

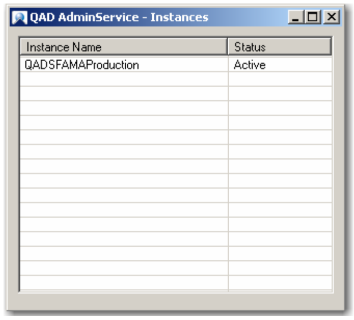
1 Start the QAD ADS through Start|Programs|QAD AdminService 6.00|Settings. A shortcut icon is created in the system tray of your machine.

2 Double-click the QAD icon in the system tray or right-click it and choose Settings.

Fig. 10.3
QAD Icon

The Instances window displays showing the available instances, and their status on QAD ADS.

Fig. 10.4
Instances Window

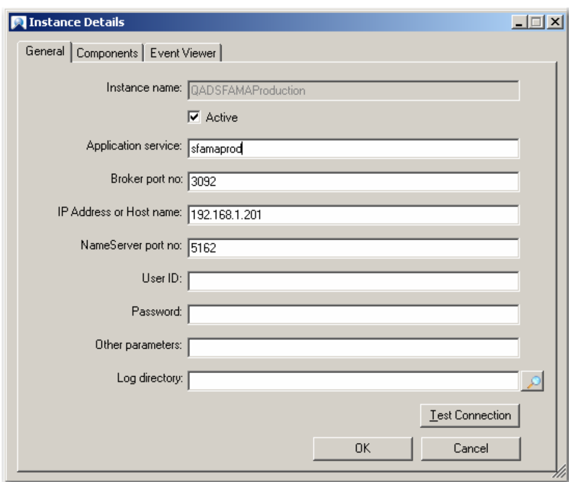


3 Right-click and choose Add to add a new instance.

Note Similar options are available for Edit, Copy, and Delete.

The Instance Details screen displays.

Fig. 10.5
Instance Details-General



4 Enter the instance name and other details in the General tab of the Instance Details screen. Select the Active check box to activate the new instance.

Important For a given application service, apart from the Instance Name and Other Parameters fields, all other field values must match those entered in the AppServer Service Maintenance screen of QAD CRM (see Configuring AppServer Settings).

5 Click Test Connection to verify that the AppServer connection is established and running successfully.

6 Click OK to save the new instance or Cancel to return to the Instances window. When you save a new instance, QAD ADS sends a message confirming the creation of a new instance and provides an option to restart the QAD ADS service.

7 Exit QAD ADS and restart the service on your machine. This operation ensures that QAD ADS pick up all of the latest settings when running the instance.

Modifying QAD ADS Settings

You can modify the service settings by using the AdminService Settings screen in QAD CRM (see Configuring AdminService Settings). After you change the field values here, restart QAD ADS to automatically pick up the new settings.

Note It is recommended that you do not change the service settings using the Edit option in the Instances window. Settings defined in the AdminService Settings screen override any changes you make in the service directly.

Exiting QAD ADS

To exit the QAD ADS service, do one of the following:

- Click the Close (X) button on the top right corner of the QAD ADS Instances window.
- Right-click the system tray icon for QAD ADS and choose Exit.

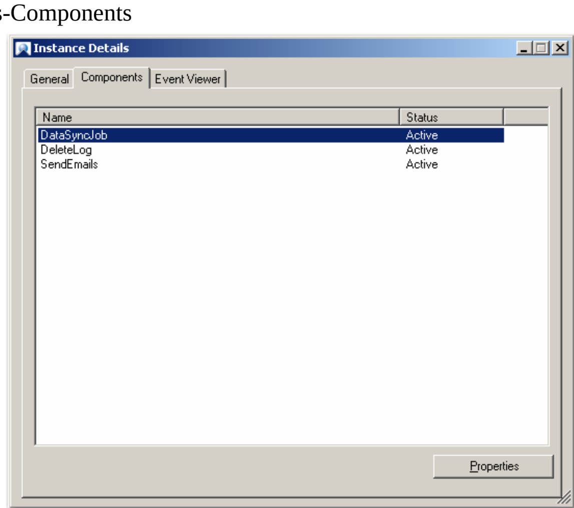
Note Closing the QAD ADS service does not stop it. It keeps running in the background.

Managing Predefined Jobs

Predefined jobs display on the Components tab of the Instance Details screen. The three predefined jobs that QAD ADS performs for any selected instance include:

- DataSyncJob: assists in data synchronization with QAD CRM.
- DeleteLog: deletes job history and event log records that are older than a specified number of days.
- SendEmails: helps deliver mails forwarded by QAD CRM.

Fig. 10.6
Instance Details-Components



You can activate the predefined jobs, and edit the properties associated with them by using the Properties window. To do so, select the job and click Properties.

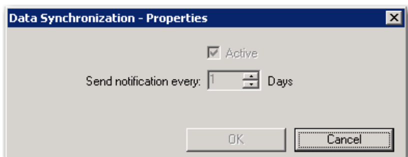
DataSyncJob

DataSyncJob executes the following tasks:

- Disables remote nodes for which no valid QAD CRM user can be located
- Sends e-mail reminders to inactive nodes
- Disables child nodes that have not synchronized data in a given span of time

Note DataSyncJob works only if data synchronization is activated in the QAD CRM system, and its corresponding component is enabled in QAD ADS. The notification frequency of the DataSyncJob is not editable. Its value is preset to once a day. The Properties window for this job is view-only.

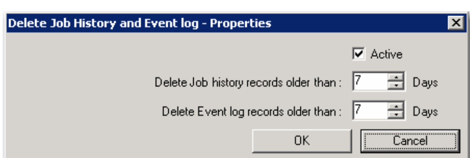
Fig. 10.7
DataSyncJob-Properties



DeleteLog

DeleteLog deletes job history and event log records. You can specify the frequency of these tasks by clicking Properties. The following window displays.

Fig. 10.8
DeleteLog-Properties



Select the number of days after which you want QAD ADS to delete the job history and event log records.

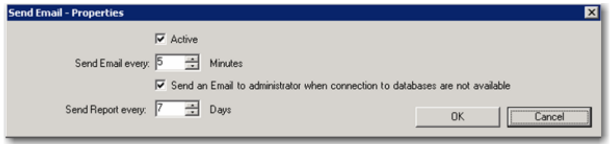
SendEmail

SendEmail executes the following tasks:

- Sends mails forwarded by QAD CRM
- Alerts system administrators through e-mail if database connections fail
- Sends e-mail activity report after a predefined interval, listing the number of mails that were sent or not sent through QAD ADS

You can specify the frequency of these tasks by clicking Properties. The following window displays.

Fig. 10.9
Send Email-Properties



Select the frequency with which to send mails and forward reports to the system administrators. Select the appropriate check box to alert system administrators if connections to databases are not available.

Note Only those system administrators are alerted whose e-mail IDs are specified in AdminService Settings screen.

Managing Defined Jobs

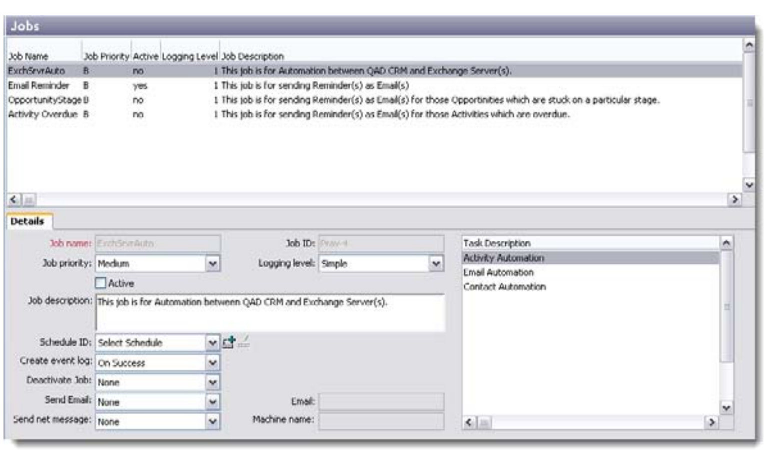
Use the Jobs screen in QAD CRM to view defined jobs for QAD ADS. To access the Jobs screen, go to Main Menu|Settings|System|AdminService|Jobs.

You can use the following system-supplied defined jobs that QAD ADS performs for any selected instance:

- Activity Overdue: This job is for sending Reminder(s) as Email(s) for those Activities which are overdue.
- Email Reminder: This job is for sending Reminder(s) as Email(s)
- Opportunity Stage: This job is for sending Reminder(s) as Email(s) for those opportunities which are stuck on a particular stage.
- ExchSrvrAuto: This job is for Automation between QAD CRM and Microsoft Exchange Servers.

The Jobs screen is divided into two parts—the top half is a browser displaying the list of defined jobs available, while the bottom half opens the selected job in edit mode.

Fig. 10.10
Jobs



To edit a job, select a job and then do one of the following:

- Click the Edit button on the toolbar.

- Right-click and choose Edit.
- Choose Edit from the File menu.

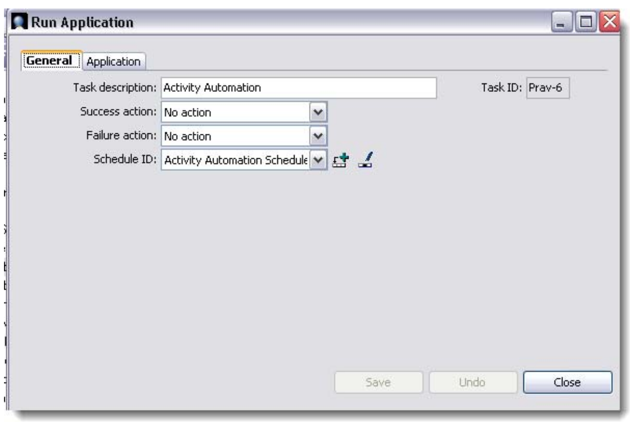
Note Similar options are available for Add and Delete.

When you right-click and choose Add, the system displays the types of defined jobs available. After you add a job, it displays as a new record in the browser.

You can only choose the defined job type that you want to add. All field values and tasks associated with a defined job are preset in the system. However, you can edit the fields or the task settings according to your requirements.

Tasks can only be edited by right-clicking in the Task Description area and choosing Edit. The Edit Task window displays to allow you to edit task settings. Depending on the task type you select, the appropriate Edit Task window displays.

Fig. 10.11
Edit Task-Opportunity Stage Date Reminder



Note You cannot add or delete a task.

Managing Schedules

You can also attach a schedule to a defined job by using the Schedule ID drop-down either in the Jobs screen, or in the Edit Task window.

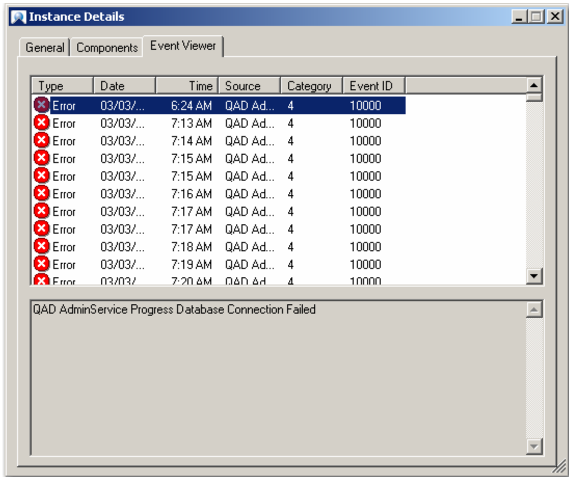
Note You can attach schedules only at one level—job or task—at a time. It is recommended that you attach schedules at the job level rather than at the task level. When you attach a schedule at the job level, the related tasks get sequenced automatically.

For more details on schedules, see Schedule Maintenance.

Using the Event Viewer

Use the Event Viewer to view the event log for defined jobs related to a selected instance. To access the log, click the Event Viewer tab of the Instance Details screen on QAD ADS.

Fig. 10.12
Event Viewer

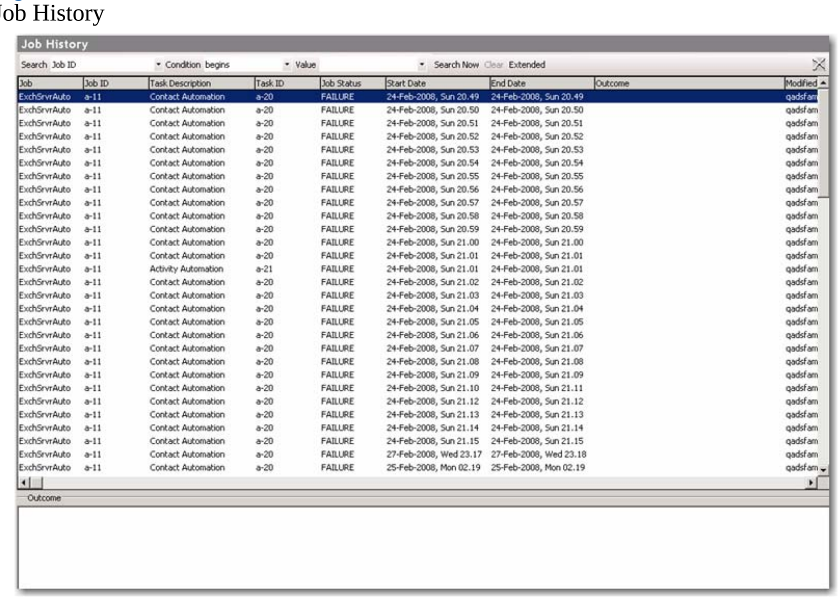


Choose the type of events you want to display here through the Create Event Log field of the Jobs screen in QAD CRM. The viewer currently displays Error and Information type events. To refresh data in the event viewer, right-click and choose Refresh.

Viewing Job History

Use the Job History screen to view the job history records in QAD CRM. Go to Main Menu|Settings|System|AdminService|Job History.

Fig. 10.13
Job History



The records displayed depend on the settings specified in the “DeleteLog” job in QAD ADS.

Chapter 11

QAD CRM Database Refresh

This section describes the settings required to refresh databases.

Lists the prerequisites for database refresh.

Includes the required configurations for database refresh.

Overview

Database refresh is a process needed when a live database is copied over another database; for example, a test database or a training database.

The following prerequisites are required for database refresh:

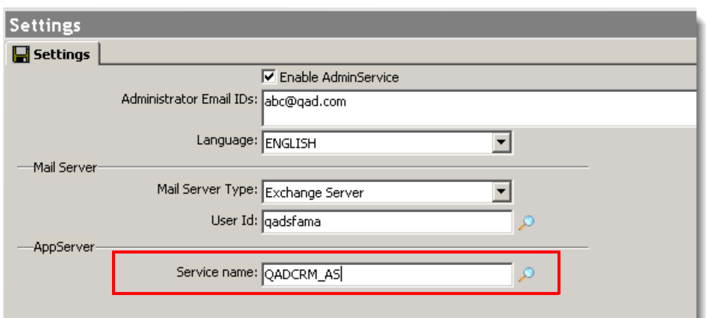
- Both the ERP databases and the CRM databases are refreshed.
- All the AppServer service records are created in the live database.

Configurations

After you finish copying the databases to the live database, configure the following settings to complete the CRM LIVE to CRM TEST database refresh process:

- AdminService Settings

  Change the AppServer service name in the AdminService Settings.



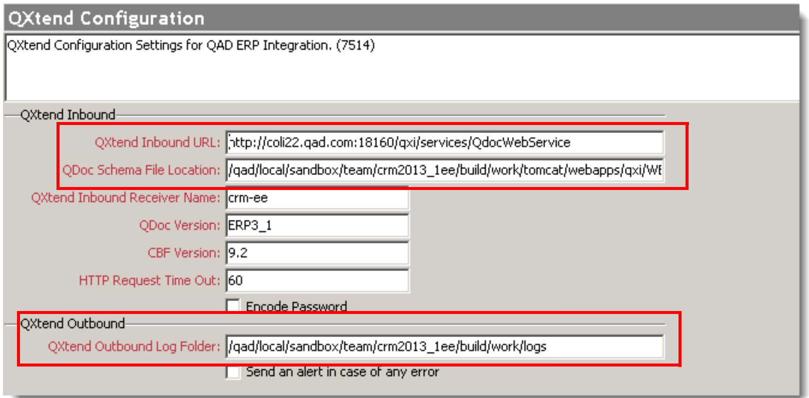
  Launch a Progress Editor session connected to the TEST databases, and run the following simple Progress 4GL update routine:

```
## Code Start
define buffer alt_bisgparam for bisg_param.
find first bisg_param where bisg_param.auth    = "THISNODE" and
                     bisg_param.rec_num = 1 NO-LOCK no-error.
find first alt_bisgparam where alt_bisgparam.auth = bisg_param.ch_80[1] and
                               alt_bisgparam.rec_num = 700 no-error.
assign alt_bisgparam.ch_80[7] = <Service name for example "qadsfamatest">

## Code end
```

- QXtend Configuration

  This configuration is required for integration of QAD Enterprise Applications (Enterprise Application).

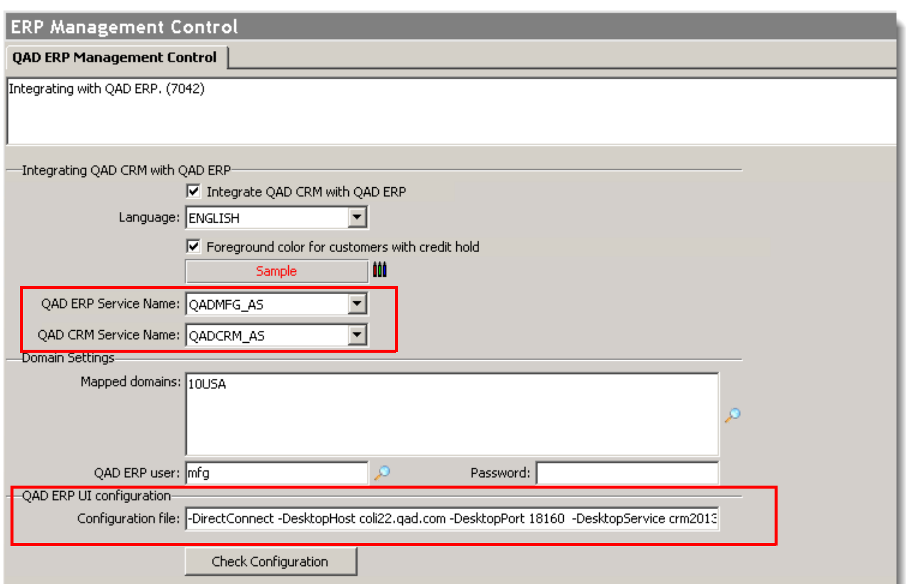


Launch a Progress Editor session connected to the TEST databases, and run the following Progress 4GL update routine:

```
## Code begins
find first bisg_param where bisg_param.auth = "THISNODE" and
                            bisg_param.rec_num = 512 exclusive-lock no-error.
bisg_param.ch_80[1] = <QXtend Inbound URL>
bisg_param.ch_80[2] = <QDoc Schema File Location>
bisg_param.ch_80[10] = <QXtend Outbound Log Folder>
##Code end>
```

- ERP Management Control

  Modify QAD ERP Service Name, QAD CRM Service Name, and QAD ERP UI configuration.



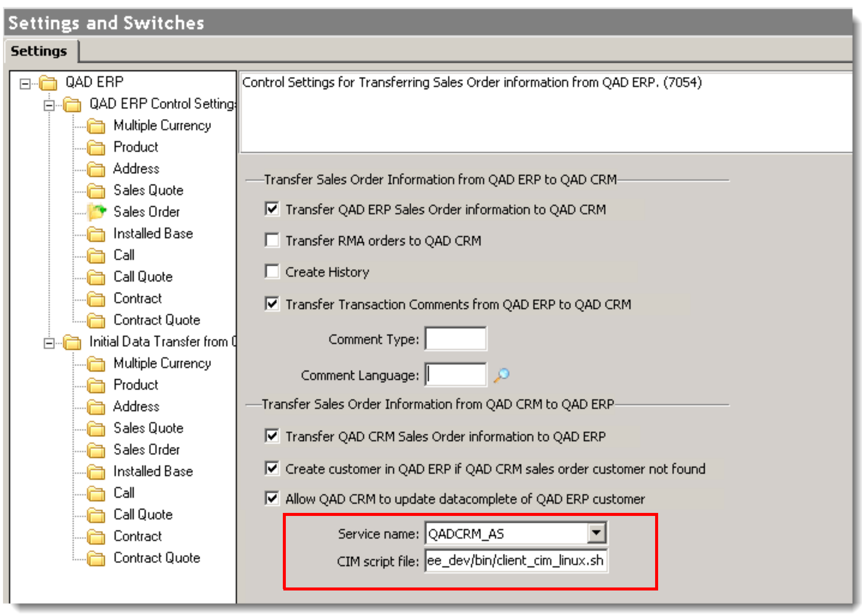
Launch a Progress Editor session connected to the TEST databases, and run the following Progress 4GL update routine:

```
##Code begins
find first bisg_param where bisg_param.auth         = "THISNODE" and
                      bisg_param.rec_num = 500 exclusive-lock no-error.
ch_80[6] = QAD ERP Service Name
ch_80[1] = QAD CRM Service Name
ch_1[5]   = QAD ERP UI Configuration

##Code end
```

- Sales Order Integration

  Modify Service name and CIM script file location.



  Launch a Progress Editor session connected to the TEST databases, and run the following Progress 4GL update routine:

```
##Code begins
find first bisg_param where bisg_param.auth = "THISNODE" and
                                            bisg_param.rec_num = 507 no-error.

bisg_param.ch_80[1] = QAD CRM Service Name
bisg_param.ch_80[2]  = CIM Script file

##Code end
```

- Code Example - The following is an example program that combines all the previously described database updates required into a single program. You can substitute the appropriate values and refresh your Test CRM databases with a single update routine.

```
<Program Start>
/* *******************************************************************
Description - QAD CRM database refresh procedure

Note - Modify below initial values as per the environment.
******************************************************************** */

/* Variable section */
define variable w_crmnode       as character init "THISNODE"  no-undo.
define variable w_crmasname    as character init "crm_AS"   no-undo. /*CRM Appserver
Service name */
define variable w_erpasname     as character init "erp_AS"    no-undo. /* ERP
Appserver Service name */
define variable w_erpuiconf     as character init "-DirectConnect -DesktopHost
coli22.qad.com -DesktopPort 54080 -DesktopService qadui -Configuration dev -WebApp
qadhome" no-undo.  /* QAD ERP UI configuration */
define variable w_qxiurl        as character init
"http://coli22.qad.com:7054/qxi_dev/QdocWebService" no-undo. /* QXtend Inbound URL
*/
define variable w_qdoclocation  as character init
"/qad/dev/tomcatqxt/6.0.24/webapps/qxi_dev/WEB-INF/QADEE" no-undo. /* QDoc Schema
file location */
define variable w_qxologdir     as character init "/qadtmp/dev/logs" no-undo. /*
Qxtend outbound log folder */
define variable w_cimscriptfile as character init
"/qad/dev/qdt/envs/dev/scripts/client_cim_linux.sh" no-undo. /* CIM Script file */

define buffer alt_bisgparam for bisg_param.
disable triggers for load of bisg_param.

find first alt_bisgparam where alt_bisgparam.auth    = w_crmnode and
                               alt_bisgparam.rec_num = 1 NO-LOCK no-error.

/* Adminservice settings */
find first bisg_param where bisg_param.auth    = alt_bisgparam.ch_80[1]
                        and bisg_param.rec_num = 700
                        exclusive-lock no-error.
if available bisg_param then
    bisg_param.ch_80[7] = w_crmasname.

/* Qxtend configuration */
find first bisg_param where bisg_param.auth    = w_crmnode
                        and bisg_param.rec_num = 512
                        exclusive-lock no-error.
if available bisg_param then
    assign bisg_param.ch_80[1]  = w_qxiurl
```

```
           bisg_param.ch_80[2]  = w_qdoclocation
           bisg_param.ch_80[10] = w_qxologdir.

/* ERP management control */
find first bisg_param where bisg_param.auth    = w_crmnode
                        and bisg_param.rec_num = 500
                        exclusive-lock no-error.
if available bisg_param then
    assign bisg_param.ch_80[6] = w_erpasname
           bisg_param.ch_80[1] = w_crmasname
           bisg_param.ch_1[5]  = w_erpuiconf.

/* SO Integration */
find first bisg_param where bisg_param.auth    = w_crmnode
                        and bisg_param.rec_num = 507
                        exclusive-lock no-error.
if available bisg_param then
    assign bisg_param.ch_80[1] = w_crmasname
           bisg_param.ch_80[2]  = w_cimscriptfile.

<Program end >
```

Section 2

Integration

This section describes how to integrate the QAD Customer Relationship Management (QAD CRM) system with other third-party applications.

Chapter 12

Integration with QAD Enterprise Applications

This section describes how to configure the settings to activate integration of the QAD Customer Relationship Management (QAD CRM) application with QAD Enterprise Applications. It discusses the following topics:

Overview

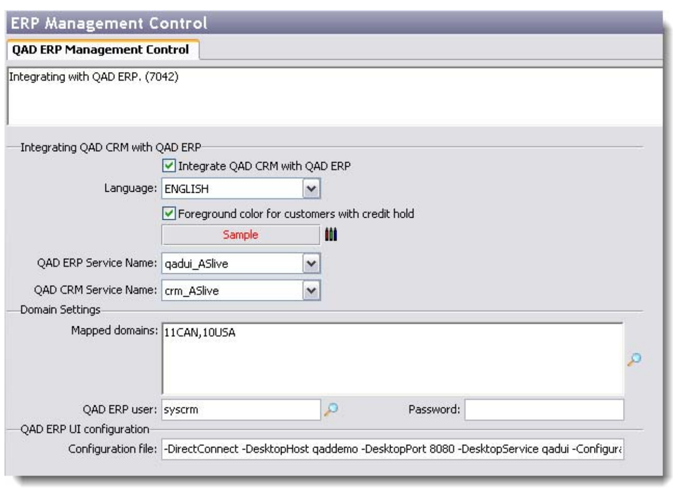
You can integrate QAD CRM with QAD Enterprise Applications – Standard Edition and Enterprise Edition application. You can configure this switch-based integration according to your requirements by specifying the modules you want to integrate. You can also control data flow and other behavior.

The QAD Enterprise Applications Integration module helps to maintain settings and set switches for the integration of QAD CRM and QAD Enterprise Applications. You can set up the integration for particular modules based on your requirements. You can access the QAD Enterprise Applications Integration module through the main menu of QAD CRM.

Integration Setup

To activate integration with QAD Enterprise Applications and maintain domain settings, go to Main Menu|QAD ERP Integration|ERP Management Control.

Fig. 12.1
ERP Management Control



QAD ERP Management Control

Use the QAD ERP Management Control option to configure settings that control the integration of QAD CRM and QAD Enterprise Applications.

Integrate QAD CRM with QAD ERP. Select this check box to activate the integration of the two applications.

Language. Select a language from the drop-down list. The language you select here is used in other integration programs. For example, initial data transfer uses this field to find translated text and export it to the log file.

Foreground color for customers with credit hold. Select this check box if you want the foreground color to show up as defined in the color scheme here. Choose a different foreground color by clicking on the color button.

Note If a customer is on credit hold, then this foreground color will be used to distinguish that customer from the other customers who do not have any credit hold. The customers with credit hold will show up in the chosen color in browsers like All Profiles and the Customer Console.

QAD ERP Service Name. Select a service name for using Pricing tables and rules (best pricing) defined in QAD Enterprise Applications.

From CRM 6.4 onward, opportunity lines in CRM can make use of pricing tables and rules. These are not maintained within CRM. Using this service, CRM gets all the information from QAD Enterprise Applications.

You must first configure this service name in QAD CRM using QAD .NET UI AppServer parameters.

QAD CRM Service Name. Select a service name for QXtend Inbound and Customer Console. QAD CRM Service Name is mandatory for integration with QAD Enterprise Applications – Enterprise Edition.

You must first configure your application server (AppServer) settings in the QAD CRM system. To define these settings, go to Main Menu|Settings|System|AppServer Service Maintenance. For details, see “AppServer Service Maintenance” on page 81.

Note In case QAD Enterprise Applications databases are not connected in the current QAD CRM session, the settings defined for this service name in Main Menu|Settings|System|AppServer Service Maintenance are used to connect to the required QAD Enterprise Applications databases.

Mapped Domains. Select the QAD Enterprise Applications domains with which you want to integrate.

Note Prior to QAD CRM 6.3, there was an indirect mapping between a single QAD CRM Business unit and a single Enterprise Application domain. In QAD CRM 6.3, QAD Enterprise Applications domains were implemented by extending the usage of QAD CRM Business units. When it is integrated to QAD Enterprise Applications, QAD CRM maps a domain to a Business unit in QAD CRM of the same name.

QAD ERP User. Enter a QAD Enterprise Applications user ID. QAD CRM uses this user ID when it sends any data to QAD Enterprise Applications. This user ID is used by the system in conjunction with the password.

Password. Enter the password of the above user ID. This password is used by the system in conjunction with the user ID.

Configuration File. The settings in the configuration file are used to call QAD Enterprise Applications .NET / Desktop screens. You can call QAD Enterprise Applications screens from Customer Console / Profile Summary Report.

There are two ways you can enter the settings in the Configuration File:

a QAD .NET UI configuration file.

Enter the path to the configuration file; for example:

http://coli45:8080/testsfm93ui/configurations/default/client-session.xml

Where:

- coli45: Name of the machine where QAD Enterprise Applications is installed

- 8080: Homeserver port
- testsfm93ui: WebApp name
- default: Configuration name

b DirectConnect option.

Enter all the parameters in a configuration file entry that begins with -DirectConnect; for example

```
-DirectConnect -DesktopHost coli45 -DesktopPort 8090 -DesktopService testdb -
Configuration testdb -WebApp qadhome
```

- -DirectConnect: CRM reads settings directly from the configuration file fill-in, if it begins with -DirectConnect
- -DesktopHost: Name of the machine where QAD Enterprise Applications is installed
- -DesktopPort: Homeserver port
- -DesktopService: Name of the Desktop Service
- -Configuration: .NET UI Configuration name. This is not mandatory; if not specified, system takes as ‘default’
- -WebApp: WebApp name
- -DesktopAPI: This is not mandatory; if not specified, system takes as ‘shell.jsp’
- -DesktopProtocol: This is not mandatory; if not specified, system takes as ‘http’

The parameters may vary based on your configuration.

Note The settings in the configuration file are used to connect to the QAD Enterprise Applications desktop session whenever you click a related hyperlink in Customer Console, or in system-generated reports that display QAD Enterprise Applications data.

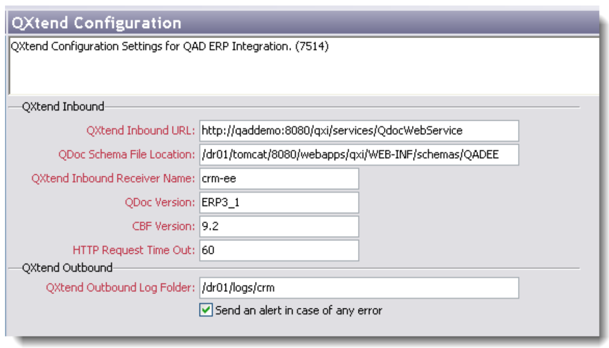
After you save the general integration settings on this tab, if you are using QAD Enterprise Applications – Enterprise Edition, see “QXtend Configuration” on page 119 to specify QXtend parameters. Otherwise see “Settings and Switches” on page 120 to specify control settings for each module that you want to integrate.

QXtend Configuration

QAD CRM uses QXtend to transfer data between data between QAD CRM and QAD Enterprise Applications – Enterprise Edition.

To access this option, go to Main Menu|QAD ERP Integration|Qxtend Configuration.

Fig. 12.2
Qxtend Configuration



QXtend Inbound URL. Enter QXtend WebService URL; for example:

http://<*hostname*>:<*tomcat_port*>/<*qxtend inbound webapp*>/services/QdocWebService

- Replace <*hostname*> with the machine name where Tomcat is installed.
- Replace <*tomcat_port*> with the Tomcat port number.
- Replace <*qxtend inbound webapp*> with the QXtend Inbound WebApp.

QDoc Schema File Location. Enter QDoc schema file location folder. QDoc schemas are a product of the QGen generate process; for example:

<*TOMCAT_HOME*>/webapps/<*qxtend inbound webapp*>/WEB-INF/schemas/QADEE

- Replace <*TOMCAT_HOME*> with the tomcat installation directory
- Replace <*qxtend inbound webapp*> with the QXtend Inbound WebApp

QXtend Inbound Receiver Name. Enter the QXtend Inbound receiver name you created for QAD CRM to QAD Enterprise Applications. The QAD CRM installation guide suggests receiver name as *CRMTOEESI*.

Enter *CRMTOEESI*, if you created an inbound receiver as suggested in the installation guide. Otherwise, enter the QAD CRM to QAD Enterprise Applications inbound receiver name.

QDoc Version. Enter ERP3_1.

CBF Version. Enter 9.2.

HTTP Request Time Out. Enter the time-out in milliseconds for attempts to send QDocs to the QXtend Inbound Web service.

QXtend Outbound Log Folder. Enter a temporary folder name of the machine where QXtend is installed; for example, `\tmp`. QAD CRM Service Interface layer creates log files when it receives the data from QXtend outbound.

Send an alert in case of any error. Select this check box if you want to be notified in case of any errors. When this is selected, QAD CRM Service Interface Layer returns error details to QXtend Outbound.

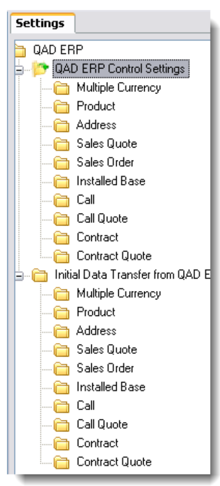
Debug Settings. Select Logging Level, if you want debug QAD CRM Integration QXtend inbound routines. QAD CRM creates log files in the Progress session temp folder.

After you save the QXtend configuration settings on this tab, use the Switches and Settings option to specify control settings for each module that you want to integrate.

Settings and Switches

The Settings and Switches option lets you define and maintain the control settings for particular modules that you want to include in the integration with QAD Enterprise Applications. To access this option, go to Main Menu|QAD ERP Integration|Settings and Switches|QAD ERP|QAD ERP Control Settings. This displays the list of functions and modules for which you can maintain and configure settings. Switches let you specify the direction in which the information is transferred—from QAD Enterprise Applications to QAD CRM or vice versa.

Fig. 12.3
Settings and Switches - QAD ERP Control Settings



Control Settings

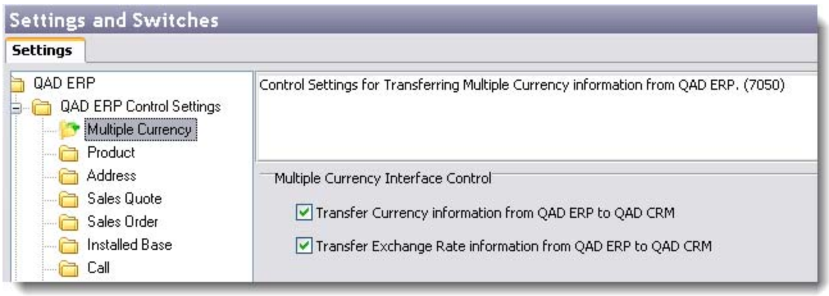
To define switches or control settings for a selected module, do the following:

1. In the Settings option, select in the left window pane the component whose switches you want to define. The detailed settings window for the selected option displays in the right window pane.
2. Specify the control setting details for the selected component.
3. Click Save to save any changes to the settings.

Multiple Currency

Use this option to define control settings for transferring multiple currency information from QAD Enterprise Applications.

Fig. 12.4
Multiple Currency



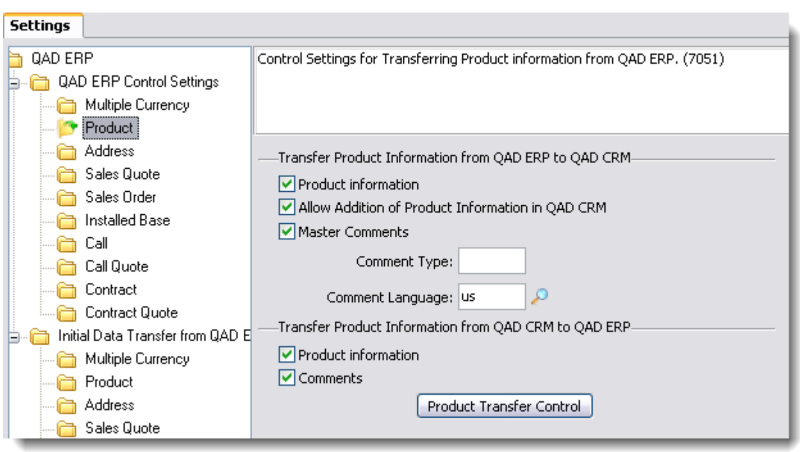
Transfer Currency information from QAD ERP to QAD CRM. Select this check box to enable the transfer of currency information from QAD Enterprise Applications.

Transfer Exchange Rate information from QAD ERP to QAD CRM. Select this check box to enable the transfer of exchange rate-related information from QAD Enterprise Applications.

Product

Use this option to define control settings for transferring product information to and from QAD Enterprise Applications.

Fig. 12.5
Product



From QAD Enterprise Applications to QAD CRM

Product Information. Select this check box to enable the transfer of product information from QAD Enterprise Applications.

Allow Addition of Product Information in QAD CRM. Select this check box to enable QAD CRM to add the product information received from QAD Enterprise Applications into its database.

Master Comments. Select this check box to transfer master comments from QAD Enterprise Applications. This option is enabled only when you select the Product Info check box.

Comment Type. Enter a comment type for the transaction.

Comment Language. Choose a comment language from the lookup.

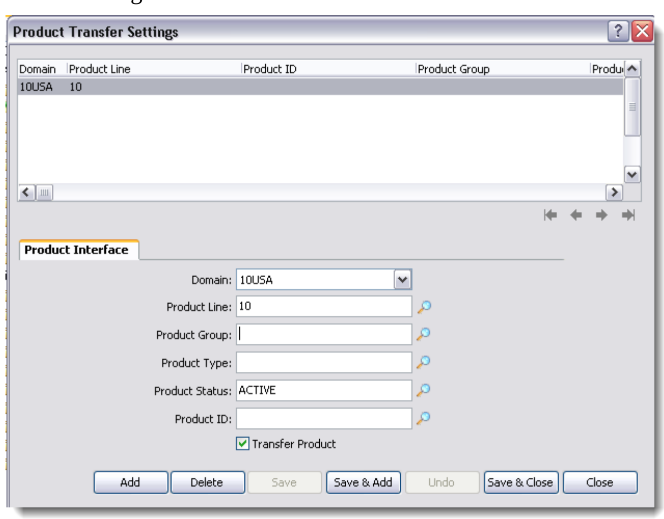
From QAD CRM to QAD Enterprise Applications

Product Information. Select this check box to enable transfer of product information from QAD CRM to QAD Enterprise Applications.

Comments. Select this check box to transfer comments from QAD CRM.

After completing the above settings, click the Product Transfer Control button. The Product Transfer Settings window displays. QAD CRM does not download all the Items from QAD Enterprise Applications. It downloads based on the parameters specified in the Product transfer control settings.

Fig. 12.6
Product Transfer Settings



The Product Transfer Settings window lets you provide details for each product that you want to include in the integration process. It also lets you maintain details for all existing product lines that participate in the integration.

Product Interface

Control Type. Enter the control type for the product selected.

Note This field is currently hard coded to Product and the system does not let you enter any data in this field.

Product Line. Use the lookup to enter the product line.

Product Group. Use the lookup to enter the product group.

Product Type. Use the lookup to enter the product type.

Product Status. Use the lookup to enter the product status.

Note This field is used in all the product transfer control conditions described below.

Product ID. Use the lookup to enter the product ID.

Transfer Product. Select this check box to include the products selected in the fields above.

The Product Transfer Settings window checks for product transfer control conditions in the following order:

1. Product ID with Product Status
2. Product Line, Product Group and Product Status
3. Product Line, Product Type and Product Status
4. Product Line and Product Status

The Product Status field is used by the system in all conditions.

Address

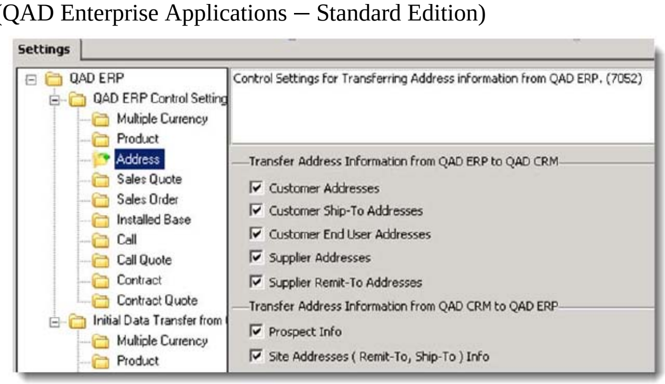
Use this option to define control settings for transferring address-related information to and from QAD Enterprise Applications.

When you click QAD ERP Control Settings|Address, a list of address check boxes displays. These address types are associated with both QAD Enterprise Applications and QAD CRM. Select those check boxes for which you want to activate data transfer between applications.

Note QAD CRM-QAD Enterprise Applications integration does not support QAD Enterprise Applications' Address Code Change function (2.11). If you change an address code using this function, the corresponding code will not be changed in QAD CRM.

QAD Enterprise Application – Standard Edition

Fig. 12.7
Address (QAD Enterprise Applications – Standard Edition)



From QAD Enterprise Applications to QAD CRM

Customer Addresses. Select this check box to enable the transfer of customers from QAD Enterprise Applications.

Customer Ship-To Addresses. Select this check box to enable the transfer of customer ship-to addresses from QAD Enterprise Applications.

Customer End User Addresses. Select this check box to enable the transfer of end users from QAD Enterprise Applications.

Supplier Addresses. Select this check box to enable the transfer of suppliers from QAD Enterprise Applications.

Supplier Remit-To Addresses. Select this check box to enable the transfer of supplier remit-to addresses from QAD Enterprise Applications.

From QAD CRM to QAD Enterprise Applications

Prospect Info. Select this check box to enable the transfer of customer/enduser/supplier addresses from QAD CRM.

When you create a new profile, QAD CRM does not send it to QAD Enterprise Applications automatically. This is because profile records can contain details of customers, suppliers, and competitors also. You have to manually select those prospect records that you wish to integrate with QAD Enterprise Applications as customers. The Send to QAD ERP option of QAD CRM sends information to the cm_mstr and ad_mstr tables of QAD Enterprise Applications.

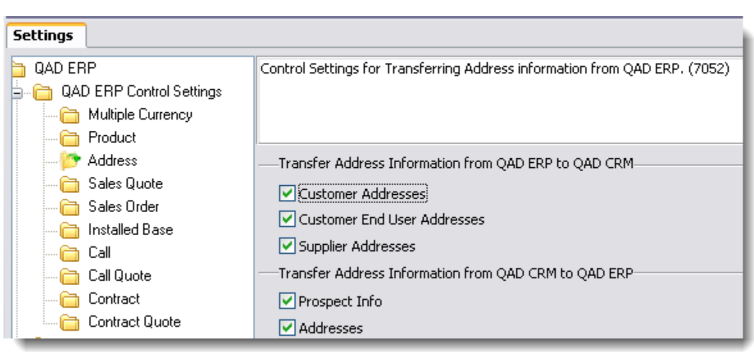
However, if this option is selected, QAD CRM automatically sends address information to QAD Enterprise Applications once the profile is linked to a customer/supplier/enduser.

Site Addresses (Remit-To, Ship-To) Info. Select this check box to enable the transfer of remit-to and ship-to addresses from QAD CRM. You cannot create a new ship-to/remit-to address in QAD Enterprise Applications.

However, if this option is selected, QAD CRM automatically sends the address information to QAD Enterprise Applications, if the address record is linked ship-to/remit-to address.

QAD Enterprise Applications – Enterprise Edition

Fig. 12.8
Address (QAD Enterprise Applications – Enterprise Edition)



From QAD Enterprise Applications to QAD CRM

Customer Addresses. Select this check box to enable the transfer of customers from QAD Enterprise Applications.

Customer End User Addresses. Select this check box to enable the transfer of end users from QAD Enterprise Applications.

Supplier Addresses. Select this check box to enable the transfer of suppliers from QAD Enterprise Applications.

From QAD CRM to QAD Enterprise Applications

Prospect Info. Select this check box to enable the transfer of customer/end user/supplier addresses from QAD CRM.

When you create a new profile, QAD CRM does not send it to QAD Enterprise Applications automatically. This is because profile records can contain details of customers, suppliers, and competitors also. You have to manually select those prospect records that you want to integrate with QAD Enterprise Applications as customers. The Send to QAD ERP option of QAD CRM sends information to the cm_mstr and ad_mstr tables of QAD Enterprise Applications.

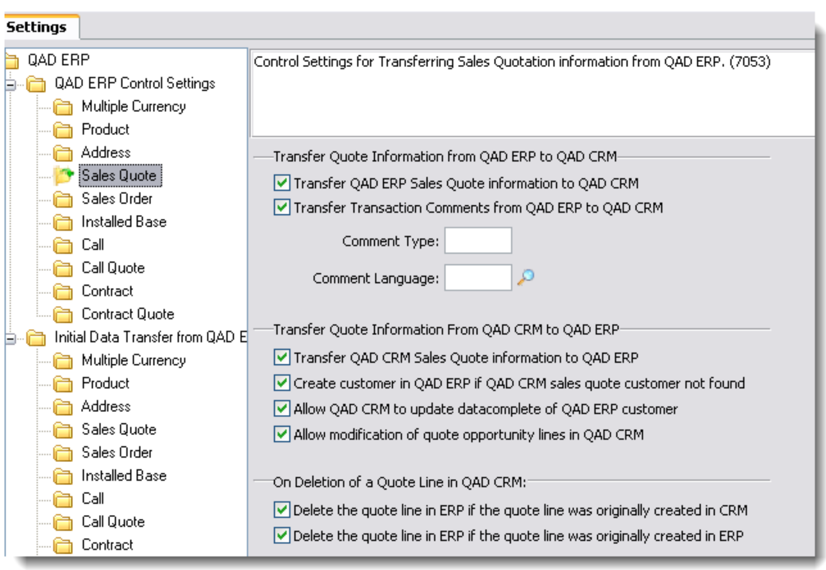
However, if this option is selected, QAD CRM automatically sends address information to QAD Enterprise Applications once the profile is linked to a customer/supplier/end user.

Addresses. Select this check box to enable the transfer of ship-to addresses from QAD CRM.

Sales Quote

Use this option to define control settings for transferring sales quotation information to and from QAD Enterprise Applications.

Fig. 12.9
Sales Quote



From QAD ERP to QAD CRM

Transfer QAD ERP Sales Quote Information to QAD CRM. Select this check box to enable the transfer of sales quotation information from QAD Enterprise Applications.

Transfer Transaction Comments from QAD ERP to QAD CRM. Select this check box to enable the transfer of transaction comments from QAD Enterprise Applications.

Comment Type. Enter comment type for the transaction.

Comment Language. Choose a comment language from the lookup.

From QAD CRM to QAD ERP

Transfer QAD CRM Sales Quote information to QAD ERP. Select this check box if you want to transfer quote lines from QAD CRM to QAD Enterprise Applications.

Create customer in QAD ERP if QAD CRM sales quote customer not found. Select this check box if you want the details of the QAD CRM sales quote customer to get recorded automatically in QAD Enterprise Applications during the transfer of sales quote information. This option applies to those cases where a particular QAD CRM prospect does not exist in the QAD Enterprise Applications database.

Allow QAD CRM to update datacomplete of QAD ERP customer. This option applies to QAD Enterprise Applications – Enterprise Edition only. When you create a customer in QAD Enterprise Applications – Enterprise Edition, before you can create any transactional record against the customer (for example, a sales quote), you need to access the customer record in the Customer Data Maintenance screen and complete all the data. When you complete all the data, QAD Enterprise Applications sets the datacomplete flag. Once the datacomplete flag is true, you can create any transactional records against the customer.

Select this option if you want QAD CRM to assign the mandatory data from the customer template record and assign the datacomplete flag.

If this option is not selected, you will not be able to create sales quotes against a Profile record if it is not already linked to a customer.

Allow modification of quote opportunity lines in QAD CRM. Select this check box if you want QAD Enterprise Applications users to be able to modify quote opportunity lines in QAD CRM for quotes created in QAD Enterprise Applications.

On Deletion of a Quote Line in QAD CRM

Use these settings to control how sales quote data is synchronized when a sales quote line is deleted from QAD CRM, both for local and remote data synchronizations.

Sales quote lines with different origins—those originally created in QAD CRM and those originally created in QAD Enterprise Applications—are treated differently in QAD CRM:

- When you delete a sales quote line, only corresponding records with the same origin can be deleted in QAD Enterprise Applications through data synchronization. This precludes situations in which when you delete a sales quote line created in QAD CRM and a different sales quote line created in QAD Enterprise Applications that happens to have an identical ID number gets deleted by accident during data synchronization.
- When you delete a sales quote line in QAD CRM and reprice the quote, best pricing will only be applied to sales quote lines originally created in QAD Enterprise Applications but not to those originally created in QAD CRM.

Delete the quote line in ERP if the quote line was originally created in CRM. Select this option to delete the corresponding record in QAD Enterprise Applications when you delete a sales quote line originally created in QAD CRM; clear this option to retain the corresponding record in QAD Enterprise Applications on deletion of a sales quote line from CRM.

Select this option only if the Transfer QAD CRM Sales Quote Information to QAD ERP option is selected.

When this option is selected, if you delete a sales quote line but deletion of the corresponding record in QAD Enterprise Applications fails, the system restores the deleted sales quote line in QAD CRM and records the error. You can view the error details in the log file.

Delete the quote line in ERP if the quote line was originally created in ERP. Specify whether to delete the corresponding sales quote line in QAD Enterprise Applications on deletion of a sales quote line originally created in QAD Enterprise Applications and synchronized to QAD CRM; clear this option to retain the corresponding record in QAD Enterprise Applications on deletion of a sales quote line from CRM.

Select this option only if the Transfer QAD ERP Sales Quote Information to QAD CRM option is selected.

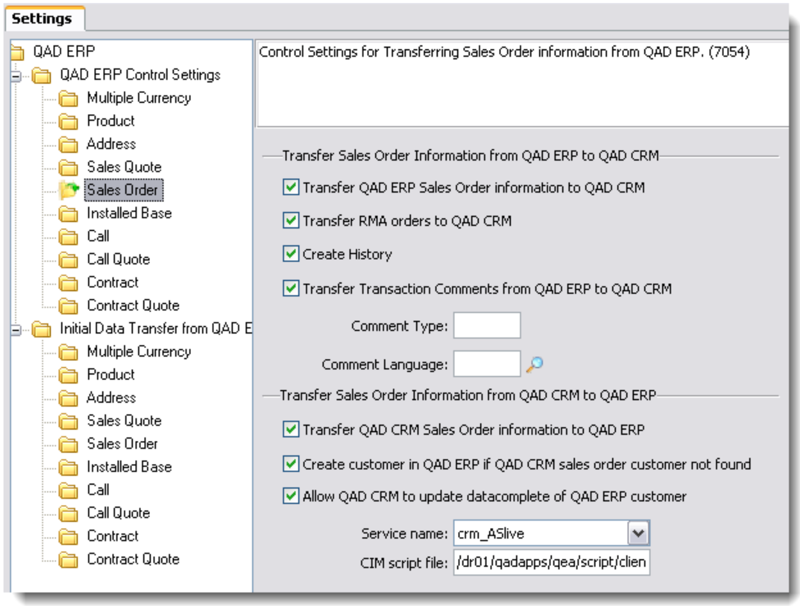
When this option is selected, if you delete a sales quote line but deletion of the corresponding record in QAD Enterprise Applications fails, the system restores the deleted sales quote line in QAD CRM and records the error. You can view the error details in the log file.

Important These settings only apply to sales quote line deletions but not opportunity or sales quote deletions. When you delete an opportunity or a sales quote (as opposed to a sales quote line) from QAD CRM, the system always deletes related sales quote lines in QAD CRM only and retains corresponding records in QAD Enterprise Applications.

Sales Order

Use this option to define control settings for transferring sales order information to and from QAD Enterprise Applications. QAD CRM uses CIM to create sales order information in QAD Enterprise Applications.

Fig. 12.10
Sales Order



From QAD Enterprise Applications to QAD CRM

Transfer QAD ERP Sales Order Information to QAD CRM. Select this check box to enable the transfer of sales order information from QAD Enterprise Applications.

Transfer RMA orders to QAD CRM. Select this check box if you want to transfer RMA orders from QAD Enterprise Applications.

Note RMA numbers uniquely identify a specific return material authorization (RMA) in QAD Enterprise Applications. An RMA is used to track items returned from a customer for repair or exchange as well as the items issued as replacements. The RMA serves both as an authorization for the customer to return the items and as an internal tracking number to ensure that they actually are received. All subsequent activity references this RMA number, including any returns to supplier, repair work orders, and billing. Reports and inquiries can also be selected by RMA number.

Create History. Select this check box to enable creation of history records in QAD CRM for all sales order related transactions.

Transfer Transaction Comments from QAD ERP to QAD CRM. Select this check box to enable transfer of transaction comments from QAD Enterprise Applications.

Comment Type. Enter a comment type for the transaction.

Comment Language. Choose a comment language from the lookup.

From QAD CRM to QAD Enterprise Applications

Transfer QAD CRM Sales Order Information to QAD ERP. Select this check box to enable the transfer of sales order information from QAD CRM to QAD Enterprise Applications.

Create customer in QAD ERP if QAD CRM sales order customer not found. Select this check box if you want the details of the QAD CRM sales order customer to get recorded automatically in QAD Enterprise Applications during the transfer of sales order information. This option applies to cases when a particular QAD CRM prospect does not exist in the QAD Enterprise Applications database. Such records get created with the use of specified templates. For details, see “Templates Records” on page 134.

Allow QAD CRM to update datacomplete of QAD ERP customer. This option applies to QAD Enterprise Applications – Enterprise Edition only. When you create a customer in QAD Enterprise Applications – Enterprise Edition, before you can create any transactional record against the customer (for example, a sales order), you need to access the customer record in the Customer Data Maintenance screen and complete all the data. When you complete all the data, QAD Enterprise Applications sets the datacomplete flag. Once the datacomplete flag is true, you can create any transactional records against the customer.

Select this option if you want QAD CRM to assign the mandatory data from the customer template record and assign the datacomplete flag.

If this option is not selected, you will not be able to create sales orders against a Profile record if it is not already linked to a customer.

Service Name. Select the CRM service name from the drop-down list. The service name you select here is used for CIM Load.

Note The Service Name mentioned here may or may not be the same as the one mentioned in the ERP Management Control option.

CIM Script File. Enter the path to the CIM script file. The information contained in this file helps set up database connections, allocate appropriate PROPATH, and select programs to run for the CIM load.

Note Sales Orders are transferred from QAD CRM to QAD Enterprise Applications using Computer Interface Method (CIM) load. CIM Data Load helps load legacy or non-Progress data from an external source into the QAD Enterprise Applications database for processing. Using CIM, data can be added using standard program validation. The import data can be in ASCII file format or acquired in real time. The CIM Data Load function takes information and loads it into the QAD Enterprise Applications database for later processing by the CIM Data Load Processor.

QAD CRM installers copies sample script file for Windows and Linux in the bin folder.

- `client_cim_win.bat` — You can use this file if QAD Enterprise Applications is installed on Windows.
- `client_cim_linux.sh` — You can use this file if QAD Enterprise Applications is installed on Linux/Unix.

Both are sample files. You need to modify them based on your configuration.

Note When QAD CRM creates a sales order in QAD Enterprise Applications, it does it in a two-step process:

a Checks to see if a sales quote exists in QAD Enterprise Applications for the current opportunity. This would be the case where the Opportunity had been previously advanced to the Quote stage in QAD CRM.

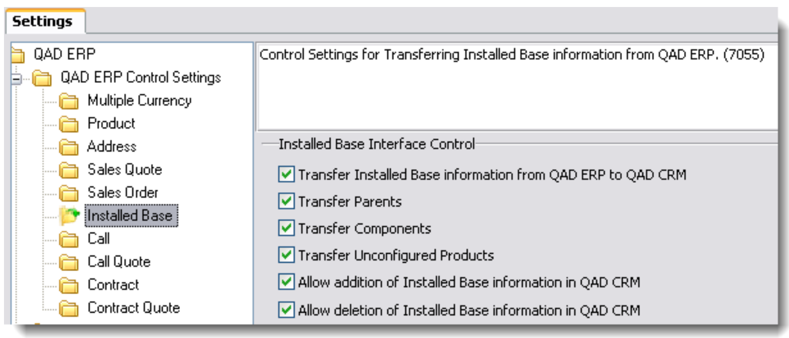
  If a sales quote does not exist, then one is created. This is the scenario where the quote stage has not been used in QAD CRM; for example, straight from Enquiry -> Order.

b A CIM file is built (including the Sales Quote number) and used to drive the Sales Quote Release to Order function.

Installed Base

Use this option to define control settings for transferring installed base information from QAD Enterprise Applications.

Fig. 12.11
Installed Base



Transfer Installed Base information from QAD ERP to QAD CRM.

Select this check box to enable the transfer of installed base information from QAD Enterprise Applications.

Note In QAD Enterprise Applications, whenever an installed base is created, depending on the system settings, the system creates multiple installed base records. For example, if the selected product is a configured product, the system will create installed base records for all the components of the configured product as well as its corresponding parent.

Transfer Parents. Select this check box to transfer installed base records where its product is classified as a parent.

Transfer Components. Select this check box to transfer installed base records where its product is classified as a component.

Transfer Unconfigured Products. Select this check box to transfer installed base records where its product is classified as unconfigured.

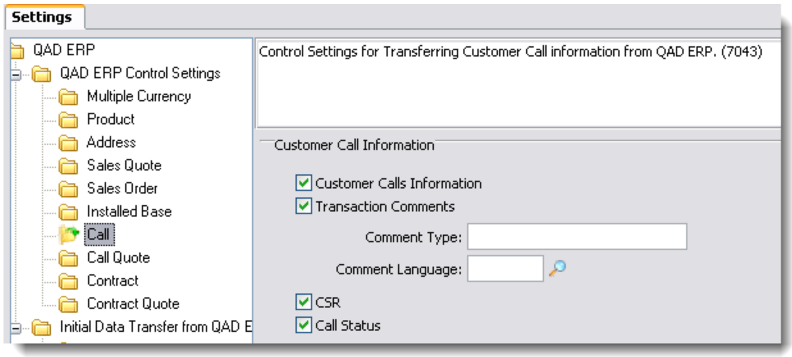
Allow addition of Installed Base information in QAD CRM. Select this check box to let QAD CRM create new installed base records whenever installed base information is transferred from QAD Enterprise Applications.

Allow deletion of Installed Base information in QAD CRM. Select this check box to let QAD CRM delete installed base records whenever the corresponding installed base record gets deleted in QAD Enterprise Applications.

Call

Use this option to define control settings for transferring customer call information from QAD Enterprise Applications. Call records in QAD Enterprise Applications are mapped to Issues in QAD CRM.

Fig. 12.12
Call



Customer Calls Information. Select this check box to activate the transfer of customer call information from QAD Enterprise Applications.

Note This is the main control that enables the transfer of calls. Clearing this check box makes the subsequent comments-related check boxes unavailable.

Transaction Comments . Select this check box to enable the transfer of transaction comments.

Comment Type. Enter a comment type for the transaction.

Comment Language. Choose a comment language from the lookup.

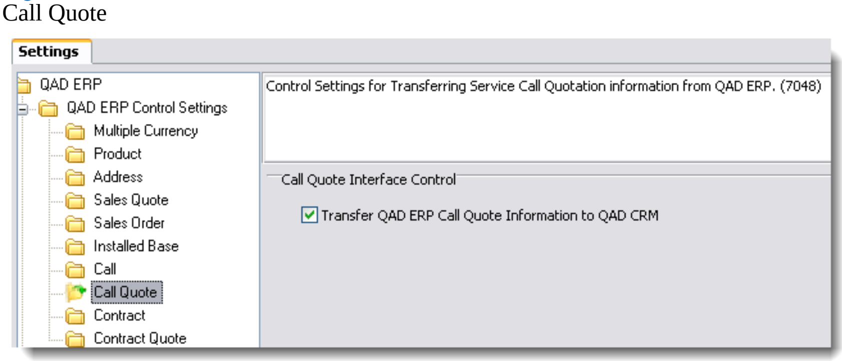
CSR. Select this check box to enable the transfer of engineer information from QAD Enterprise Applications. Engineer records are mapped to CSRs in QAD CRM.

Call Status. Select this check box to enable the transfer of call status information.

Call Quote

Use this option to define control settings for transferring service call quotation information from QAD Enterprise Applications. Call Quote records are mapped to Opportunity records in QAD CRM.

Fig. 12.13
Call Quote

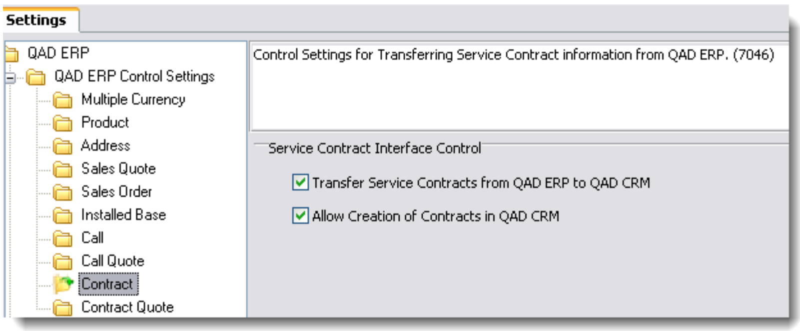


Select the Transfer QAD Enterprise Applications Call Quote Information to QAD CRM check box to activate the transfer of service call quotation information.

Contract

Use this option to define control settings for transferring service contract information from QAD Enterprise Applications.

Fig. 12.14
Service Contract



Transfer Service Contracts from QAD ERP to QAD CRM. Select this check box to enable the transfer of service contracts from QAD Enterprise Applications.

Allow Creation of Contracts in QAD CRM. Select this check box to enable contract creation in QAD CRM.

Contract Quote

Use this option to define control settings for transferring service contract quotation information from QAD Enterprise Applications.

Fig. 12.15
Service Contract Quotation

Select the Transfer Service Contract Quotation from QAD Enterprise Applications to QAD CRM check box to activate transfer of service contract quotations.

Initial Data Transfer

The initial data transfer between QAD Enterprise Applications and QAD CRM marks the success of their integration. The integration automatically synchronizes data between the two systems based on the configuration. However, the initial data transfer from QAD Enterprise Applications to QAD CRM must be initiated manually. To access this option, go to Main Menu|QAD ERP Integration|Settings and Switches|QAD ERP|Initial Data Transfer from QAD ERP.

Before you can transfer data from QAD Enterprise Applications to QAD CRM, make sure you have properly configured both applications. For configuration details, see *QAD Customer Relationship Management Installation Guide*. You must also ensure that the QAD CRM and the QAD Enterprise Applications databases are connected.

When you initiate the first data transfer from QAD Enterprise Applications using the QAD CRM working environment, you should transfer the data in the following order:

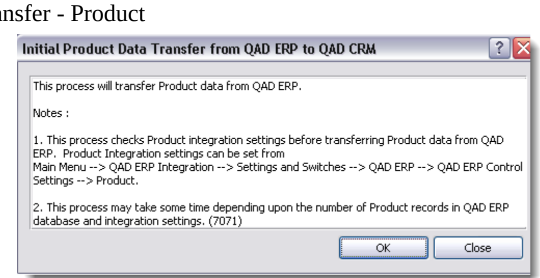
- Multiple Currency
- Product
- Address
- Sales Quote
- Sales Order
- Installed Base
- Call
- Call Quote
- Contract
- Contract Quote

To start the data transfer process, do the following:

1. Select a node under the Initial Data Transfer from QAD ERP option. A dialog box displays.
2. Select the check boxes in the dialog box, if any, based on your requirements.
3. Click OK to start the data transfer process from QAD Enterprise Applications to QAD CRM.

The Product Data node dialog box is displayed below as an example.

Fig. 12.16
Initial Data Transfer - Product



To determine the result of the initial data transfer, see the .txt files that are created in the <MFG/PRO installation>\log folder. These text files are created in either the `QADSFAandMAInstallation\test\log` or `QADSFAandMAInstallation\prod\log` directory depending upon the environment.

Templates Records

QAD CRM does not supply all the data necessary to create a customer/sales quote in QAD Enterprise Applications. The mechanism employed to provide the default values for the customer/sales quote being created is to use a template customer/sales quote record to copy those defaults from. This template will exist by domain, so each domain has its own template record.

QAD Enterprise Applications – Standard Edition

Customer Template Records

As a general rule, the customer in QAD Enterprise Applications is created by taking a copy of the predefined template and then overlaying the template values with the field values supplied by QAD CRM.

Create a customer template record against each integrated domain you specified in the ERP Management Control setting.

To create Customer template record:

- Log in to QAD Enterprise Applications – Standard Edition.
- Go to Customer Maintenance (2.1.1) and create a customer record with the following details:

  Customer: QADCRM

  Enter details for all required information fields.

Repeat the above steps by logging in to each integrated domain specified in the ERP Management Control settings.

Sales Quote Template Records

As a general rule, the sales quote in QAD Enterprise Applications is created by taking a copy of the predefined template and then overlaying the template values with the field values supplied by QAD CRM.

Create a sales quote template record against each integrated domain specified in the ERP Management Control setting.

To create sales quote template record.

- Log in to QAD Enterprise Applications – Standard Edition.
- Go to Sales Quote Maintenance (7.12.1) and create a sales quote record with the following details.

  Quote: QADCRM

  Sold-To: QADCRM

Enter details for all required information fields.

Repeat the above steps by logging in to each integrated domain specified in the ERP Management Control settings.

QAD Enterprise Applications – Enterprise Edition

Customer Template Records

As a general rule, the customer in QAD Enterprise Applications is created by taking a copy of the predefined template and then overlaying the template values with the field values supplied by QAD CRM.

The process is different from that for the Standard Edition. In Enterprise Edition, not only is a customer created but also a Business relation. The same template mechanism is employed for default data but in this case requires both a Business relation template and Customer template.

A Business relation is not domain-specific, but customers are. You need to create one Business relation template record for the entire system, and one customer template record against each integrated domain specified in the ERP Management Control settings.

To create a Business relation template record:

- Log in to QAD Enterprise Applications – Enterprise Edition.
- Go to Business Relation Create (36.1.4.3.1) and create a business relation record with the following details:

  Business Relation: QADCRM

  Enter details for all required information fields and select Save.

To create a customer template record:

- Log in to QAD Enterprise Applications – Enterprise Edition.
- Go to Customer Create (27.20.1.1, CreateBDebtor.Create) and create a customer/debtor record with the following details:

  Customer Code: QADCRM

  Business Relation: QADCRM

  Enter details for all required information fields and select Save.
- Go to Customer Data Maintenance (2.1.1) and enter QADCRM as customer and enter details for all required information.
- Repeat the customer creation process for each integrated domain specified in the ERP Management Control settings.

Sales Quote Template Records

As a general rule, the sales quote in QAD Enterprise Applications is created by taking a copy of the predefined template and then overlaying the template values with the field values supplied by QAD CRM.

Create a sales quote template record against each integrated domain you specified in the ERP Management Control setting.

To create a sales quote template record:

- Log in to QAD Enterprise Applications – Enterprise Edition.
- Go to Sales Quote Maintenance (7.12.1) and create a sales quote record with the following details.

  Quote: QADCRM

  Sold-To: QADCRM

  Enter details for all required information fields.

Repeat the above steps by logging in to each integrated domain specified in the ERP Management Control settings.

Autonumber Sequences

When QAD CRM creates customers/debtors in QAD Enterprise Applications, it uses autonumber sequences to allocate the next customer number. Autonumber sequences are enabled by default in QAD Enterprise Applications – Standard Edition. Enable the following autonumber sequences in QAD Enterprise Applications – Enterprise Edition:

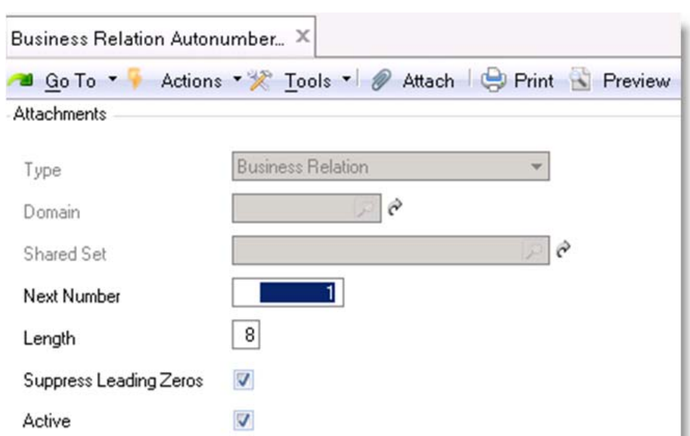
- Business relations
- Customer and customer ship-tos

The scope of each sequence is different. Business relation autonumbers are database wide, but customer autonumbers are at the shared set level.

Log in to QAD Enterprise Applications – Enterprise Edition.

Select Business Relation Autonumber Activate option from the menu.

Fig. 12.17
Business Relation Autonumber



Type. This field cannot be updated. It automatically displays the type of component that this autonumbering sequence applies to.

Next Number. Specify the next number in the sequence. The system will assign this number to the next record created, and will automatically increment the number for each subsequent record. The number you define must be greater than the number previously defined in the Next Number field.

If you enter a number that has already been assigned to a record, the system displays an error message.

Length. Specify the maximum allowed length for the generated number. The system uses this value to determine the number of leading zeros to add, when required, and to validate automatically generated numbers to ensure they do not become too long.

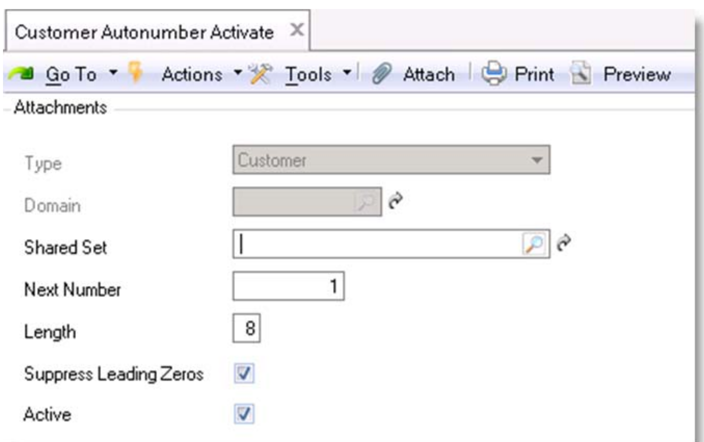
Suppress Leading Zeros. Select the field to prevent the system from adding leading zeros to generated numbers that are less than the maximum length.

Active. Select the field to enable autonumbering for the business relation.

To enable autonumber sequence for customers:

Select Customer Autonumber Activate (27.20.24.1) from the menu.

Fig. 12.18
Customer Autonumber Activate



Type. This field cannot be updated. It automatically displays the type of component that this autonumbering sequence applies to.

Shared Set. Specify the shared set that this numbering sequence applies to.

Next Number. Specify the next number in the sequence. The system will assign this number to the next record created, and will automatically increment the number for each subsequent record. The number you define must be greater than the number previously defined in the Next Number field.

If you enter a number that has already been assigned to a record, the system displays an error message.

Length. Specify the maximum allowed length for the generated number. The system uses this value to determine the number of leading zeros to add, when required, and to validate automatically generated numbers to ensure they do not become too long.

Suppress Leading Zeros. Select the field to prevent the system from adding leading zeros to generated numbers that are less than the maximum length.

Active. Select the field to enable autonumbering for the business relation.

Repeat the above steps for all the shared sets you want to participate in the integration.

Chapter 13

QAD Remote Sales Integration

This section describes how to set up nodes, configure settings and enable data synchronization for the QAD Customer Relationship Management (QAD CRM) application. It discusses the following topics:

Overview

Off-site personnel using QAD Remote Sales on their remote computers can synchronize data with the host database. This ensures on-site and off-site personnel have access to the latest information. It can be installed on the computer of a user working remotely from a stand-alone system. Data is stored in a local single-user database. This database is referred to as the Remote Node.

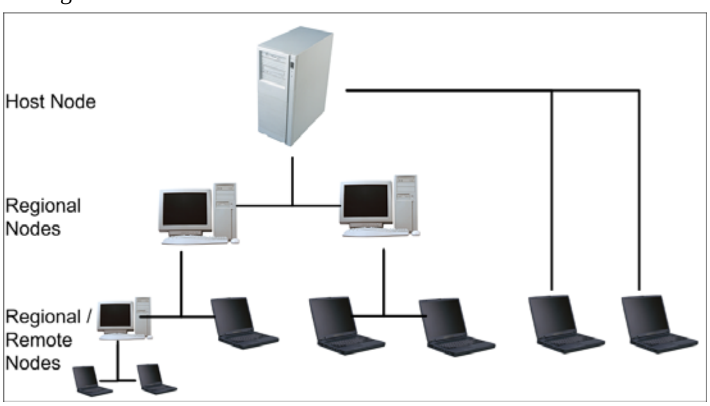
Understanding Nodes

A node is the database that the system uses. The QAD CRM central database is referred to as the *host* node. The QAD Remote Sales database is called the *remote* node. *Regional* nodes are typically QAD CRM databases installed in the regional offices of a company. They can synchronize data with their parent node and subordinate nodes within their region.

Note In this chapter, regional nodes are called remote nodes unless otherwise specified.

All nodes maintain details about other nodes. This assists them in identifying nodes.

Fig. 13.1
Understanding Nodes



Procedure Overview

You can synchronize data in QAD Remote Sales with data in the host database using Progress Appserver. VPN access to the office network is required.

To synchronize data:

1. Set up the host, regional, and remote nodes for data synchronization.
2. Set up the QAD AdminService.
3. Prepare regional and remote nodes for data synchronization.
4. Synchronize data using the AppServer method.

Node Setup: Host Node

To set up nodes, you must:

1 Enable data synchronization.

2 Configure the host node.

3 Create and set up regional and remote nodes.

4 Enable AppServer data synchronization.

5 Specify the data available to nodes.

Note You must log in as the QAD CRM administrator to set up nodes. The current node should be the host node. You can identify the current node from the status bar.

Enabling Data Synchronization

You typically enable data synchronization while configuring QAD CRM.

To enable and configure data synchronization from QAD CRM:

1 Choose Main Menu|Remote Sales Data Synchronization|Node Management Control. Then choose Node|Synchronization Settings.

2 Select the Enable Data Synchronization check box.

Note Make sure that these settings are enabled from a Host session of QAD CRM. Check the status bar to determine the current session.

3 In the No of Days Modified Records to be kept, enter `30`.

Configuring the Host Node

Configuring the host node includes maintaining the node and time zone details.

To configure the host node:

1 Choose Main Menu|Remote Sales Data Synchronization|Remote Node Setup.

2 Right-click the host node and choose Edit. The Node Details dialog box for the host node displays.

3 In the Details tab, edit the following as required:

Description. Enter a brief description of the host node.

Time Zone. Enter the time zone of the region where the host node is located.

Email ID. Enter the host node e-mail address.

4 Close the Node Details dialog box.

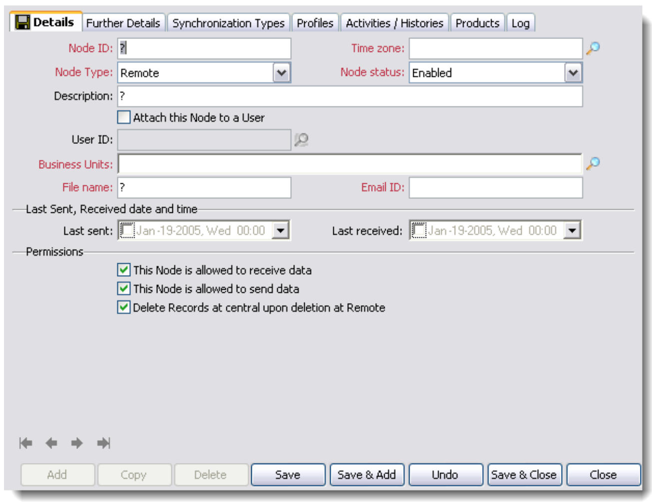
Setting Up Remote Nodes

To create a remote node in QAD CRM:

1 Choose Main Menu|Remote Sales Data Synchronization|Remote Node Setup.

2 Right-click the host or regional node and choose Add. The Node Details dialog box displays.

Fig. 13.2
Adding Details of a Remote Node



3 In the Node ID field, enter the node ID.

4 Specify the remote node details.

a Select Remote from the Node Type drop-down list.

b In the Description field, enter a brief description of the node.

c In the Time Zone field, specify the time zone of the remote node.

d Select the Attach this Node to a User check box. When attaching to a user, the system automatically assigns all the information to the node.

e A remote node can receive one or more than one business unit data from Host node. Enter required business units ids you want the remote node to receive.

f In the File name field, enter the name for the host node data subset file. For example, you can enter the name of the node.

Do not specify the extension; the data subset file is automatically saved in the required format (`.res`).

g In the Email ID field, enter the e-mail address of the node administrator or user.

h In the Permissions area, select the permissions you want to grant to the node.

5 Click Save.

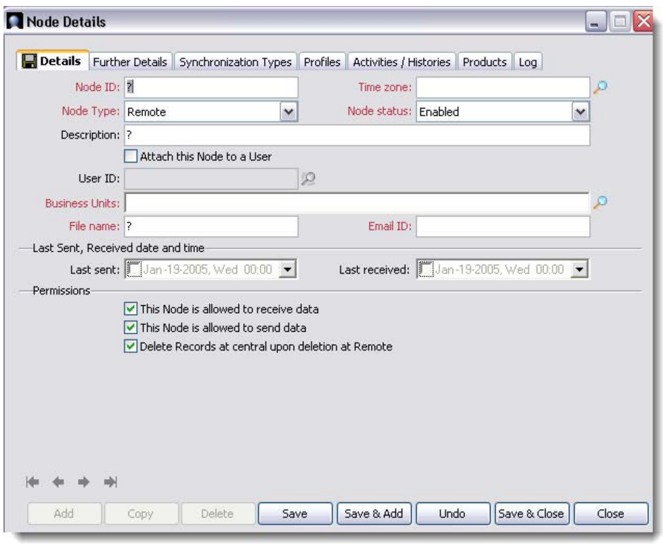
Setting Up Regional Nodes

To create a regional node:

1 Choose Main Menu|Remote Sales Data Synchronization|Remote Node Setup.

2 Right-click the host or regional node and choose Add. The Node Details dialog box displays.

Fig. 13.3
Adding Details of a Regional Node



3 Select Regional from the Node Type drop-down list.

4 Specify the required node details as described for the previous procedure. In the Description field, enter a brief description of the node.

Further Details

When a subscribed Profile or Product is not accessible to the node as a result of information change, specify the action the system will take. Select the appropriate option for Profile and Product as required.

Fig. 13.4
Further Details

AppServer Synchronization

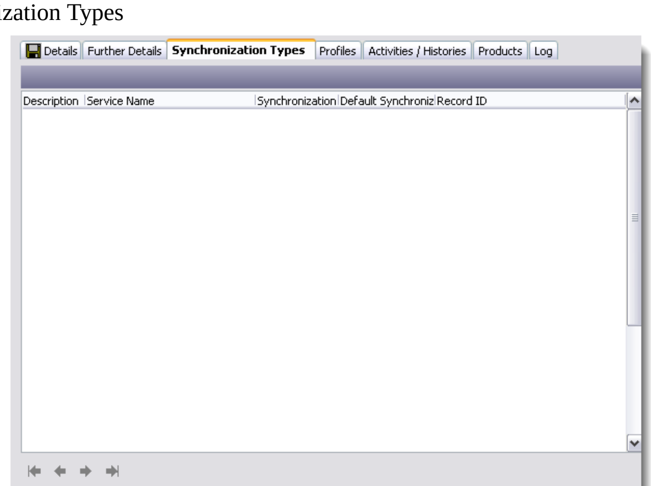
This section explains the AppServer method of data synchronization, and lists the procedure for setting up nodes using this method of synchronization.

Setting Up Nodes for AppServer Synchronization

To provide regional and remote nodes access to AppServer data synchronization method:

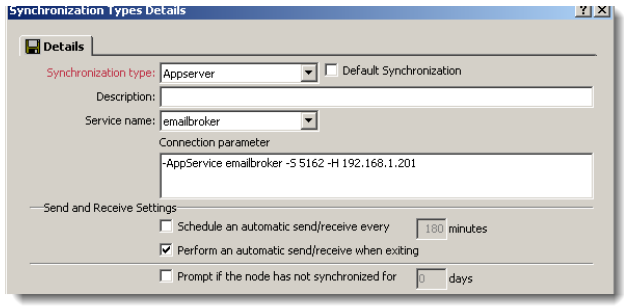
1. Choose Main Menu|Remote Sales Data Synchronization|Remote Node Setup.
2. Right-click the regional or remote node and choose Edit. The Node Details dialog box displays.
3. Click the Synchronization Types tab. The Synchronization Types browser displays.

Fig. 13.5
Synchronization Types



4 Right-click in the Synchronization Types browser area and choose Add. The Synchronization Type Details dialog box displays.

Fig. 13.6
Enabling AppServer Method



5 From the Synchronization Type drop-down list, select Appserver.

6 In the Description field, enter a brief description of the method.

7 Select the service name from the drop-down list. This must be defined before setup. You can define services from Settings|System|Appserver Service Maintenance.

8 Schedule an automatic send/receive every <n> minutes. You can specify how often the Remote node connects to the host node when you are connected to the Office network.

9 Perform an automatic send/receive when editing. Select this option if you want the system to do a send and receive when you close your QAD CRM session. The system synchronizes if you are connected to the Office network.

10 Prompt if the node has not synchronized for <n> days. When you use this method, the system displays a pop-up message when you have not replicated for the specified number of days.

11 Click Save and Close.

Note You cannot add multiple records for the same synchronization type. You can only edit an existing AppServer data synchronization record. To do this, right-click the record in the Synchronization Types browser and choose Edit. To delete the record, choose Delete from the right-click menu.

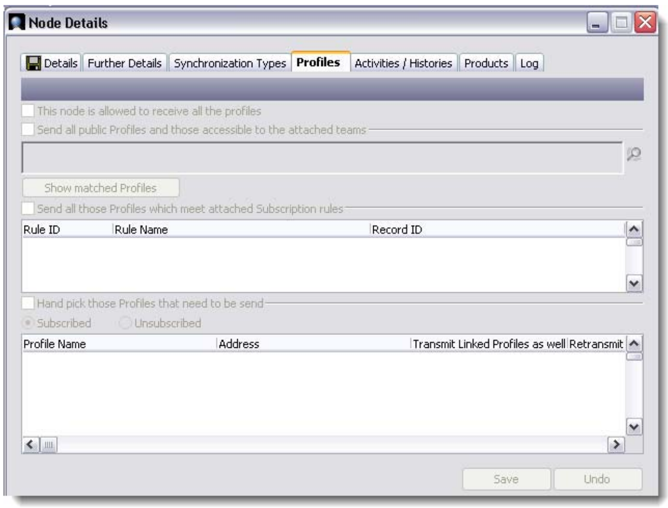
For details on enabling AppServer synchronization from regional and remote nodes, see Synchronizing Data Using the AppServer.

Specifying Profile Records

To specify conditions for a node to access profile records during synchronization:

1 In the Node Details dialog box, click the Profiles tab.

Fig. 13.7
Node Details - Profiles



2 If you want the remote node to access all profiles, select the This Node Is Allowed To Receive All The Profiles check box. Then click Save. Skip the following steps.

3 To specify the teams whose profiles the node can access:

a Select the Send all public profiles and those accessible to the attached teams check box.

b In the field for teams, use the lookup to enter the teams whose profiles the node can access.

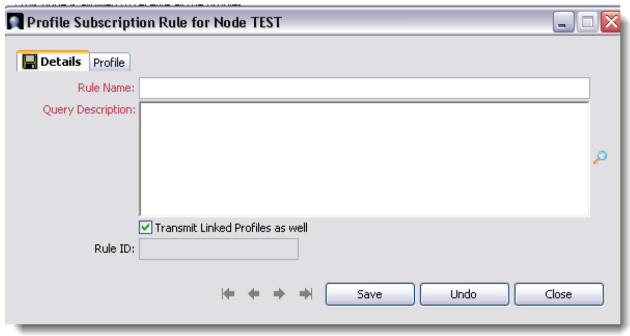
c Choose the option to subscribe profiles by defining the rules that match other conditions, but do not belong to the teams.

Note that in addition to profiles associated with teams, you can specify other conditions to select profiles, as described in subsequent steps.

4 To specify a subscription rule for selecting profiles, select the Send all those profiles that meet attached subscription rules check box. Then do the following:

a Right-click the rule area and choose Add. The Profile Subscription Rule dialog box displays.

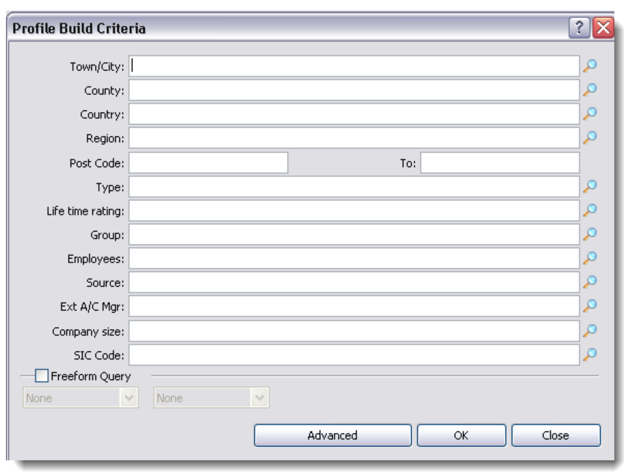
Fig. 13.8
Add a Rule for Selecting Profiles



b In the Rule Name field, enter a descriptive name for the rule.

c Click the lookup button next to the Query Description field. The Profile Build Criteria dialog box displays.

Fig. 13.9
Profile Build Criteria



d Specify the conditions for selecting profiles. Click OK.

e To select all profiles linked with the profiles that comply with the condition, select the Transmit Linked Profiles as well check box.

f Click Save.

To view the profiles that comply with the rules, click the Profile tab. Then select Subscribed.

g Click Close. If profile records match the conditions, the Select an option dialog box displays.

h Choose the option to subscribe or unsubscribe the matched profile records as required and click OK.

In the Node Details dialog box, the rule displays in the list of rules.

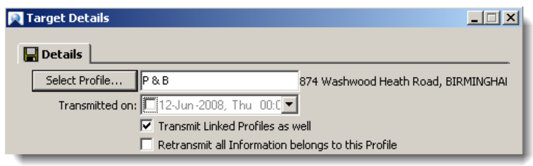
5 To build a list of custom profiles for the node:

a Select the Hand pick those profiles that need to be sent check box.

b To subscribe a profile record, right-click the profile area and choose Subscribe.

c Select the profile record and click Save. Then click Close.

Fig. 13.10
Target Details



d To build a profile list based on your criteria, right-click the profile area and choose Build.

e Specify your criteria and click Save. You can subscribe to all profiles linked to the profiles that match the criteria.

Note Once the selected profiles display, you can unsubscribe them, move them to a different node, and retransmit them even if they have not been modified, or detach them from the node. You can select multiple profiles from the lists profiles. To access these options, select the profiles, right-click, and choose the option.

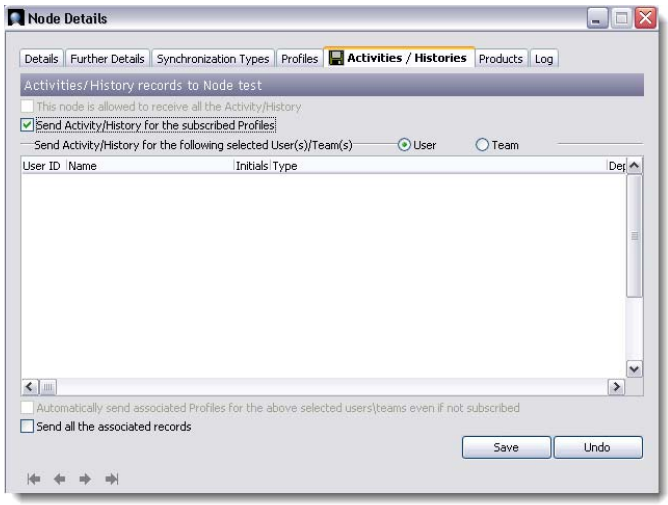
6 Click Save in the Node Details dialog box.

Specifying Activity and Transaction History Records

To specify conditions for a node to access activity and transaction history records during synchronization:

1 In the Node Details dialog box, click the Activity/History tab.

Fig. 13.11
Node Details - Activity/History



2 If you subscribe to all profiles for the node, the option labeled This node is allowed to receive all the Activity/History is enabled.

Select this option to provide the node access to synchronize all activity and transaction history records.

3 If you subscribe to selective profiles, the Send Activity/History for the subscribed profiles option becomes available.

Select this option to provide the node access to the activities and transaction history records of these profiles.

See “Specifying Profile Records” on page 146 for details on specifying profiles.

4 If you want the node to receive relevant profile details when activity records are created by certain users or teams—regardless of whether the profile records associated with the activity records are subscribed or not—do the following:

   a Select User or Team.

   b Right-click the record list area and choose Attach.

   c Select the users or teams. You can select multiple records.

   d Click OK. The user or team records appear in the record list area.

   e Select the Automatically send associated Profiles even if not subscribed check box.

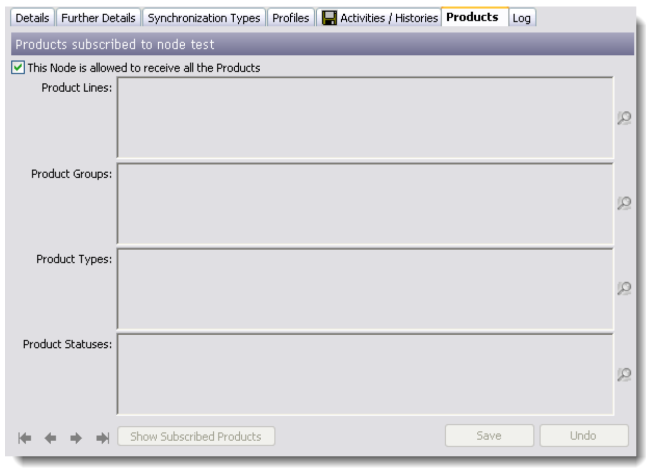
5 If you want the node to receive profile associated records, select the Send All The Associated Records check box and then click Save.

Specifying Product Records

To specify conditions for a node to access product records during synchronization:

1 In the Node Details dialog box, click the Products tab.

Fig. 13.12
Node Details - Products



2 If you want the remote node to access all the Products, select the This Node Is Allowed To Receive All The Products check box. Then click Save. Skip the following steps.

3 If you do not want to send all the Products to the Remote Node and subscribe based on certain condition, select the following fields:

Product Lines. Use the lookup to enter the product lines.

Product Groups. Use the lookup to enter the product groups.

Product Types. Use the lookup to enter the product types

Product Statuses. Use the lookup to enter the product statuses.

4 Select Save.

Log

Select this tab to see status of the Data Synchronization. QAD CRM keeps track of all the synchronization activities.

Preparing Regional and Remote Nodes

Before creating data subsets for QAD Remote sales, verify that QAD Remote Sales is installed and running.

To prepare regional and remote nodes:

1 Create data subsets for nodes.

2 Load data subsets on nodes.

3 Enable data synchronization from regional and remote nodes.

For details on loading the data subset file and enabling the remote nodes to support data synchronization, refer to *QAD Customer Relationship Management Installation Guide*.

Creating Data Subsets for Remote Nodes

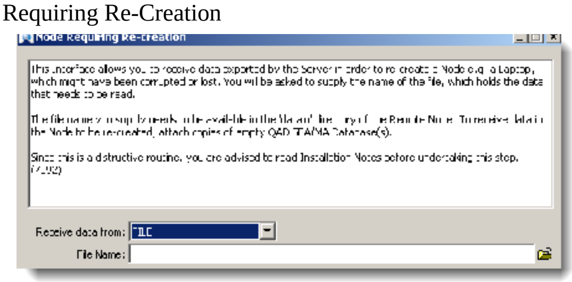
Before creating data subsets, ensure that you have specified the criteria for choosing the data that nodes can synchronize. This data is extracted from the host node to create the data subset.

To extract a host data subset for a regional or remote node:

1 Log on to QAD CRM with administrator privileges. The current node must be the host node.

2 Choose Main Menu|Remote Sales Data Synchronization|Extract Data to Recreate a Node. The Node Requiring Re-creation dialog box displays.

Fig. 13.13
Node Requiring Re-Creation



3 In the Node ID field, enter the regional or remote node for which you want to create the data subset.

The file name specified while creating the node displays in the File Name field.

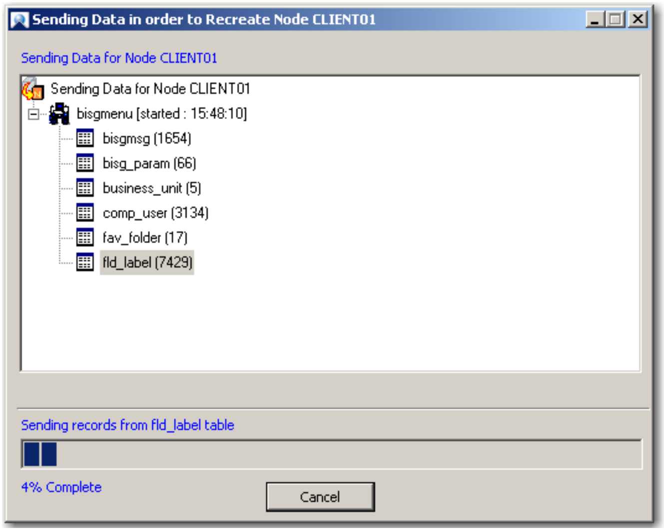
4 To change the file name of the host node data subset, change the name in the File Name field.

5 Click OK.

The system starts extracting data from the host node and adding it to the data subset file. The data subset file in the `.res` format is stored in `*QADCRMInstallDir*\prod\dataout`.

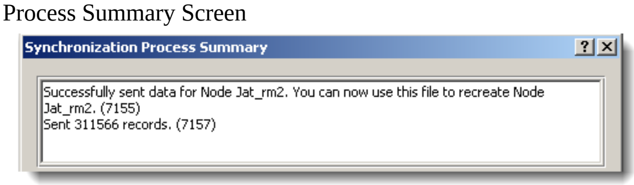
After the data subset creation, the Creation Process Summary message displays. Click the information icon to view details.

Fig. 13.14A
Creating Host Data Subset for a Node



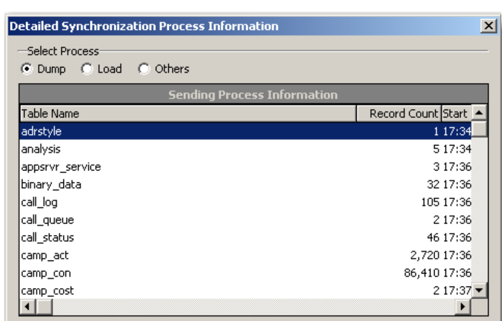
After the data subset creation, the Creation Process Summary message displays.

Fig. 13.15
Replication Process Summary Screen



6 Click the information icon on the Replication Process Summary dialog to view the details.

Fig. 13.16
Detailed Synchronization Process Information



Loading Data Subsets on Nodes

1 Copy the data subset file of the node in `.res` format from:

`QADCRMInstallDir\prod\dataout`

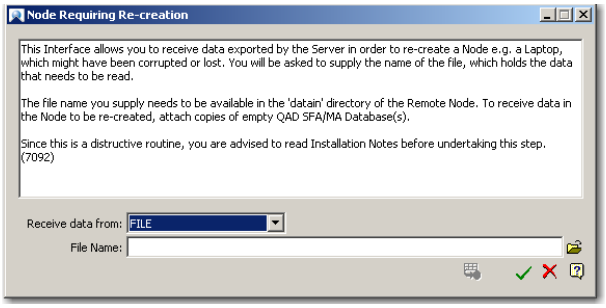
to this directory where QAD Remote Sales is installed:

`QADCRMInstallDir\datain`

2 Log in as `demo` in QAD Remote Sales.

3 Choose Main Menu|Remote Sales Data Synchronization|Load Data to Recreate Current Node. The Node Requiring Re-Creation dialog box displays.

Fig. 13.17
Node Requiring Re-Creation



4 From the Receive data from drop-down list, choose File.

5 In the File Name field, specify the full path and name of the `.res` file you copied in the step 1.

6 Click OK. The system starts loading the data into the personal database. The system displays warning messages before loading the data. Select Yes to these messages.

7 Restart QAD Remote Sales.

Enabling Data Synchronization from Regional and Remote Nodes

To enable data synchronization from regional and remote nodes:

1 Log on to QAD CRM and select Main Menu|Remote Sales Data Synchronization|Node Management Control|Synchronization Settings.

2 Select the Enable Data Synchronization check box.

3 In the No of Days Modified Records to be kept field, type `30`.

4 Restart QAD Remote Sales.

Synchronizing Data Using the AppServer

See “Setting Up Nodes for AppServer Synchronization” on page 144.

To synchronize data using the AppServer method:

1 Choose Main Menu|Remote Sales Data Synchronization|Synchronize Data with Host Computer. The Synchronize Data with the Host Computer dialog box displays.

Fig. 13.18
Initiating AppServer Data Synchronization

2 Click Test Connection.

If the AppServer connection parameters are set correctly, a message displays confirming this. Click OK.

The connection may fail if:

- The computer network at the office is down.
- Your computer has a firewall that does not allow the connection to take place.
- The network connection that your laptop is using is slow or down.
- The connection parameters are incorrect.
- The AppServer is not running.

Restore the connection. Repeat steps 1 and 2.

3 Click Start. The data synchronization starts and the synchronization status displays in the progress window.

Once the data is synchronized, the Replication Process Summary message displays. Click the information icon to view replication details.

Viewing Synchronization Log

To view the synchronization log of the remote, regional, or host node:

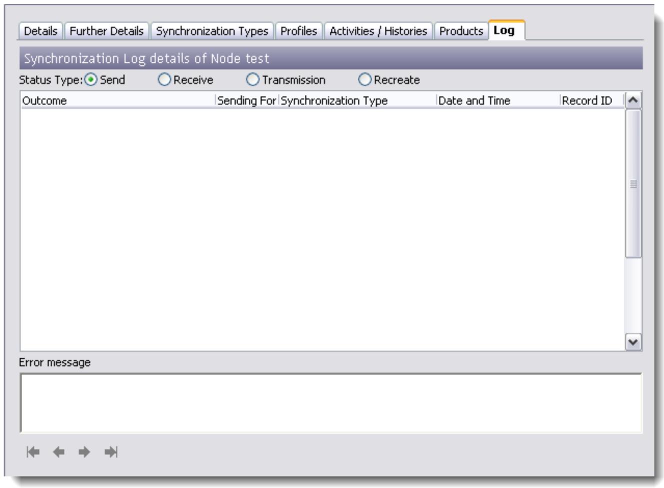
1 Choose Main Menu|Remote Sales Data Synchronization|Remote Node Setup.

2 Right-click the node and choose Edit.

3 Click the Log tab.

4 Select the status type and view the log.

Fig. 13.19
Viewing Log



QAD AdminService and Data Synchronization

QAD AdminService disables the node if a remote node failed to synchronize data for the period specified in QAD CRM.

To manually enable a disabled node for data synchronization:

1 Log in to QAD CRM with administrator privileges.

2 Choose Main Menu|Remote Sales Data Synchronization|Remote Node Setup.

3 Right-click the disabled node and choose Edit. The Node Details dialog box displays. Display the Details tab if it is not already displayed.

4 Select Enabled from the Node Status drop-down list.

5 Click Save.

QAD Remote Sales Limitations

QAD Remote Sales is designed for the sales people who spend more time out of the office with customers and prospects. The QAD Remote Sales functions need network access, and the following administrative functions are not supported:

- Real-time Information
  QAD Remote Sales stores all the modifications in the local database. The user needs to replicate to see up-to-date information.
- Customer Console
  This function requires an office network connection. You cannot run this function if you are not connected to the office network.
- Sales Order
  This function requires access to QAD ERP. You cannot create a sales order in QAD ERP from QAD Remote Sales.

- Attachments
  QAD Remote Sales does not synchronize attachments.
- Remote Node Setup
  This cannot be done in QAD Remote Sales.
- QAD ERP Integration Setup
  This cannot be done in QAD Remote Sales.
- Exchange Server Integration Setup
  This cannot be done in QAD Remote Sales.
- QAD AdminService Setup
  This cannot be done in QAD Remote Sales.
- Attach/Detach Users to Business Unit
  This cannot be done in QAD Remote Sales.
- Update Team Details
  This cannot be done in QAD Remote Sales.
- Attach/Detach User to a Team
  This cannot be done in QAD Remote Sales.
- Delete User
  This cannot be done in QAD Remote Sales.

Chapter 14

Data Management

This section describe show to import data using GDI (Generic Data Import) module of the QAD CRM. It discusses the following topics:

Overview

GDI provides you the option to import information from various external sources into the QAD CRM databases.

Generic Data Import

For your business generation requirements, you may want to import information from various external sources into the system databases. For example, you may purchase a database from a vendor that contains information on various projects or prospects and would like to integrate it into the system database. Importing such information may be crucial to your organization and instrumental in increasing profitability.

The Generic Data Import (GDI) option provides you with powerful functionality to not only import strategic information into databases, but to also specify your data import preferences. You can access this option from Generic Data Import.

Using GDI, you can:

- Set default field values to store in tables while importing data.
- Map fields.
- Import the specified data into tables.
- Specify additional details for importing data.

Understanding the Generic Data Import Process

GDI gives you the flexibility to import information from various sources into the system, including migrating data from other database tables. However, this module requires source data to be in ASCII-formatted files, with `.txt` or `.csv` file extensions.

If your source database files are not in ASCII format, it is recommended that you first convert them. Use a delimiter to separate field values in the source data files.

You can import two types of data in tables using GDI:

- External Data: Data received from external sources like vendors.
- Internal Data: Data originally intended to be part of the system database, but being uploaded at a later date.

Data Import Table Types

GDI supports data import into the following types of tables:

Table 14.1
Tables Supported for Data Import

Data Import Tables	Purpose
Users	Maintains information about all system users.
Prospect	All the profile organizations registered with the system are stored in this table.
Contact	Details of all the contact persons of profiles are stored in this table.

Data Import Tables	Purpose
Product	Details of all products registered with the system are stored here.
Product Line	Details of all product lines for products are stored here.
Opportunity	Maintains information about all opportunities.
Opportunity Line	All the opportunity lines related to an opportunity are stored in this table.
Installed Base	Details of all the installed bases are recorded in this table.
Analysis	Maintains details of analysis codes for various modules.
Site Address	Records site addresses of construction projects.
Profile Hierarchy	Details of profile organization hierarchy are stored here.
Literature	Records details of marketing literature.
Quote Header	Details of quotes sent to profile organizations are stored here.
Order Header	Details of all orders are stored here.
Sic Code	Details of Standard Industry Codes (SIC) that categorize various types of industries are stored in this table.

You can choose Multiple as the import option when the data file you import from contains more than one table.

Import File Format

For successful file import through GDI, the content of a data file that is to be imported must be in a specific format. This is because the system identifies table names, field names, and data in the file by its format.

It is recommended that before starting the import process, you open the data file and check the format of its content. The file should have the following data format:

```
[Table Name]

Field Name 1, Field Name 2, Field Name 3

Data 1, Data 2, Data 3

Data 4, Data 5, Data 6
```

In this format:

- Table name can be enclosed in [ ]; for example, [prospect].
- Field name can be any text separated by a delimiter.
- Data delimiter is a specific character that delimits or separates the data to be imported in the tables. It can be a space, a comma, a semicolon, or any other special character. You must specify the delimiter used in the data file before you import the data. In the example, comma (,) is used as the delimiter.
- Data is the content that should be exported to system tables from the data file. These information units can be enclosed in quotes, especially when field values contain space characters. Empty quotes ("") represent an empty field value for its record.
- End of a record is marked by paragraph character. It is inserted using the Carriage Return, or the Enter key on the keyboard.

- End of table indicates the end of the data to be imported. It is marked by a full-stop.

Multiple Tables Import

Sometimes, a file may contain multiple tables. The system can import data from multiple tables with in data files, provided they are being imported in the specific tables that support this feature. Following is an example of a file with two tables—prospect and contact_crm.

```
[prospect]

sht, twn, nme, sort_name, ctry, grp, grp_sub, type, status, acnt_mngr,
inside_rep, record_id

"0001030","London","Gardiner & Theobald","Gardiner & Theobald","England
(U K)","","","Contractor,Customer,Supplier","balbeer","sandeep","000-
3945-43109-0x0000a701"

"0001032","Oxfordw","Ridge Management","Ridge
Management","England","","","","balbeer","sandeep","000-3945-43110-
0x0000a70e"

"0001033","London","John Shreeves &
Partners","","","","","","balbeer","sandeep","000-3945-43110-0x0000a720"

"0001036","Birmingham","Couch Perry &
Wilkes","","","","","","balbeer","sandeep","000-3945-43110-0x0000a732"

.

[contact_crm]

show_as, sht, middle_name, position, fore, twn

"Mr John Dudd","0001037","S", "Technical Director","John","London"

"Mr Eric Lindley","0001038","D","Consultant","Eric","Sheffield"

"Mr Alan J Young","0001057","J","Snr Manager","Alan","New York"

"Ms Jane Young","0001224","J","Business Analyst","Jane","London"

.
```

In the above example:

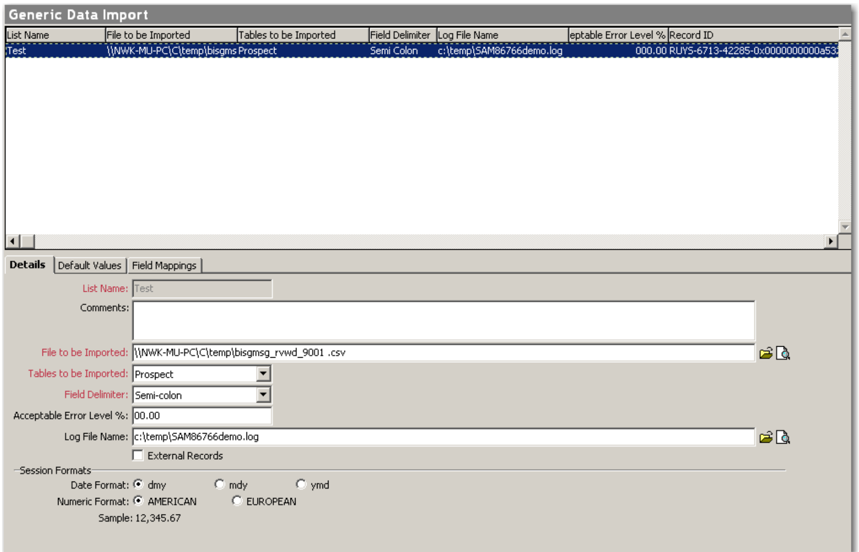
- Since each record in the [prospect] table is long and cannot fit in a visible line, it is carried on to the next line. However, each record ends with a “paragraph end” character.
- In data files with multiple tables, the main or primary table should be placed before the dependant table. As in the above example, the Prospect table is placed before the Contact_crm table as the Prospect table is the primary table. Data in the Contact_crm table depends on the Prospect table as each contact record is typically linked to a prospect record.

Note If the records that you want to import already exist in a system table, they will be overwritten by the import process.

Manage Data Import

You can manage data import records from the GDI option. Right-click in the browser area and add, edit, copy, or delete a data import record from the list displayed.

Fig. 14.1
Generic Data Import



Details

Use the Details tab to record specifications for importing data from a file into a table.

List Name. Enter a list name you want to give to the import record. Typically, this is the name of the source from where the data file was acquired. You should specify the same list name each time you import data from this source. The system uses this name for mapping fields and importing data.

Comments. Enter additional information about the file you will import.

File to be Imported. Enter the name and the full path to the data file you want to import. Click the Open Folder icon next to this text box to select the file from your computer or network. To open the data file and view its contents, click the View icon next to this text box.

Note It is recommended that you view the contents of the import file to ensure that its data is in the required format.

Tables to be Imported. Select the system table where you want export the data. If the import file contains multiple tables, select Multiple.

Field Delimiter. Select the field delimiter used in the import file for separating field data. If the delimiter is not in the list, select Others. A text box displays. In this text box, type the delimiter.

Acceptable Error Level%. Enter the numeric error acceptance percentage that is permissible for the data import process. Set it high—like 80%—if you want to continue the import process even when it encounters some errors, and low—like 10%—when you want the process to stop if it encounters errors.

Log File Name. Enter the name and the full path of the log file that should contain the error logs, if any, of the import process. Click the Open Folder icon to select the file from your computer or network. When the log file is ready after the import process ends, you can view it by clicking the View icon.

External Records. Select this check box if the import data file contains data from an external source.

Date Format. Select the appropriate date format from the radio buttons.

Numeric Format. Select the numeric format. You can choose from the American and European formats. The sample of the selected numeric format displays.

Default Values

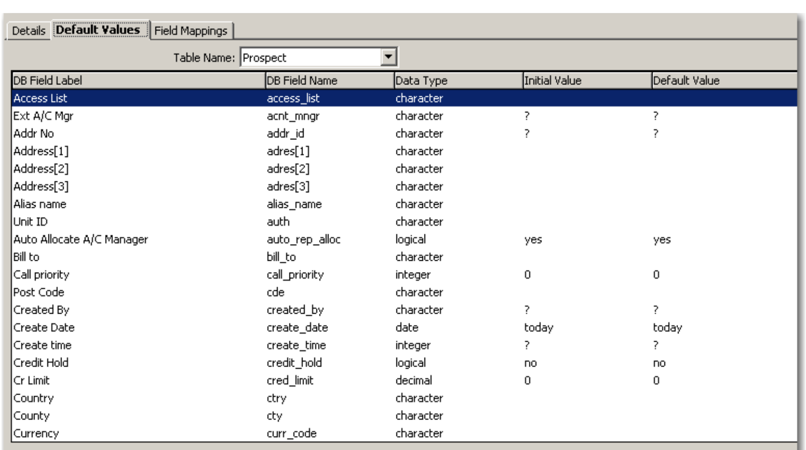
Default data value for a field is the data that is automatically entered in the field during data import. GDI gives you the flexibility to specify default data values for fields.

Using the Default Values tab you can manipulate the data values that will be entered into table fields while importing data. See the examples below to help understand this feature.

Example While importing project data from a file you acquired from a vendor, you want to specify the name of the vendor in a field named Source Information. You can include the vendor name by setting the default value for Source Information before starting the import process.

Example You receive a list of prospects and their addresses from an external source. You want to allocate account managers to them right away. Instead of going and adding this information to each prospect record in the data file, you add this information in the Default Values tab by setting the default value for the relevant field. During the import, this information gets updated directly in the database.

Fig. 14.2
Default Values



DB Field Label	DB Field Name	Data Type	Initial Value	Default Value
Access List	access_list	character		
Ext A/C Mgr	acnt_mngr	character	?	?
Addr No	addr_id	character	?	?
Address[1]	adres[1]	character		
Address[2]	adres[2]	character		
Address[3]	adres[3]	character		
Alias name	alias_name	character		
Unit ID	auth	character		
Auto Allocate A/C Manager	auto_rep_alloc	logical	yes	yes
Bill to	bill_to	character		
Call priority	call_priority	integer	0	0
Post Code	cde	character		
Created By	created_by	character	?	?
Create Date	create_date	date	today	today
Create time	create_time	integer	?	?
Credit Hold	credit_hold	logical	no	no
Cr Limit	cred_limit	decimal	0	0
Country	ctry	character		
County	cty	character		
Currency	curr_code	character		

To set the default data value for a table field, do the following:

1 Select the data import record from the GDI browser and click the Default Values tab.

2 Select the relevant system table from the Table Name dropdown. All the fields in the selected table are listed, including the field label, field name, data type, initial value, and default value.

3 Select the field record whose default data value you want to specify.

4 Right-click and select Set Default Value. The Default Value field of the selected record becomes editable.

5 Enter the default value in the Default Value column for the selected field record and press Enter.

6 Click Save to save the record.

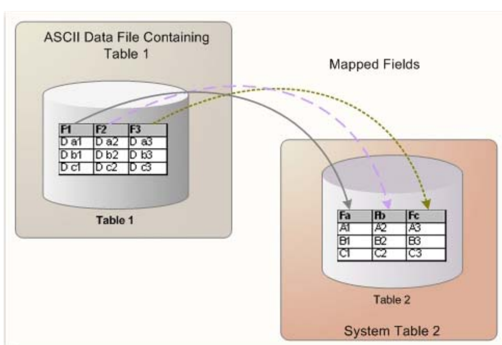
Note If the field for which you specify a default value already has a value assigned to it in the import data file, the default data value will be overwritten by the value in the data file. For example, assuming you specify the default data value for the field `prospectsource` as `ABC`, and the data file has the value `DUN BRD` for the same field (or the field mapped to `prospectsource`). In such a case, the GDI process will assign the value `DUN BRD` to the `prospectsource` field.

Field Mappings

Field mapping is a powerful functionality that provides you the flexibility to map data according to your requirements. Field maps determine which field information from the data file table must go in the field in the system table.

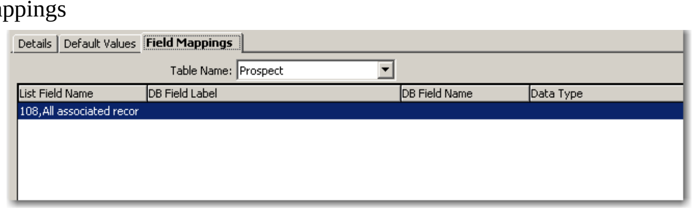
Before you can map fields, you must specify the system table to import information from the data file table. The GDI function automatically maps fields in the data file table to its corresponding system table.

Fig. 14.3
Field Mapping Process



However, at times you may want to change these maps. For example, while specifying details for importing a data file to the system table, the GDI process may map the field `P_name` to the table field `Sort Name`. You can correct this by mapping `P_name` to `Profile Name`.

Fig. 14.4
Field Mappings



To change the mapping of a data field to the field in a system table, do the following:

1 Select the data import record from the List screen and click the Field Mapping tab. The list of mapped fields in the data file table and the table displays. The system automatically creates these maps if the label of the field matches the column header.

2 Select the relevant table from the Table Name drop-down. All the fields in the selected table are listed under the DB Field Label Column. The corresponding data fields are listed under the List Field Name column.

3 Select the field record for which you want to change the mapping.

4 Right-click and select Map this Field. The DB Field Label value changes into a dropdown listing the system table fields.

5 Select the relevant field from the dropdown and press Enter.

6 Click Save to save the record.

7 To change more field maps, repeat steps 3-5 and save the changes.

Make sure you save the data import record before starting the import process using GDI.

Data Import Process

You can import data using GDI after you have created a data import record, specified default data values, and mapped fields in the data file table to the system table. Before you start importing data, make sure you have saved the information you specified in all the screens of the Generic Data Import module.

To start the data import process, do the following:

1 Select the data import record from the GDI browser.

2 Right-click and select Start Import.

GDI starts importing data from the specified data file into the specified system table. If the data file has multiple tables, the module imports data into the corresponding tables.

When the data import ends, the system displays a confirmation message. To confirm that the data was successfully imported, open the appropriate module and look for the imported data.

You can also check the log file associated with the import record to see if the process encountered any errors. Errors recorded during import are shown in the specified log file in the following format:

```
Record Number <Line where error occurred>, Invalid <Field name> <error
number>

...
```

The log file is saved at the location specified in the Details tab.

Chapter 15

Microsoft Exchange Server Integration

This section describes how to integrate Microsoft Exchange Server with QAD Customer Relationship Management (QAD CRM). It discusses the following topics:

Overview

QAD CRM can be integrated with Microsoft Exchange Server 2007 or 2010. When integrated, you can store references to e-mail messages sent and received from Microsoft Exchange Server, as well as synchronize details of contact persons, activities, and tasks between the two systems. If required, QAD CRM can be integrated with Microsoft Exchange Server 2007 and Microsoft Exchange Server 2010 at the same time.

Integrating Microsoft Exchange Server and QAD CRM requires you to:

1 Configure the servers.

   a Configure Microsoft Exchange Server.

   b Configure QAD AdminService.

   The QAD CRM installation process installs QAD AdminService when you install QAD CRM on a Windows 2000/2003/2008 server. QAD AdminService can be configured to periodically synchronize data between the two systems.

   c Configure QAD CRM. QAD AdminService uses these settings to synchronize data.

The system sets up integration automatically and synchronizes data in the background. The data synchronization is flexible and safe. You can specify information, conditions, and schedule for it.

Synchronization events are recorded in the event log by the system. The system sends synchronization errors to the administrator through e-mail for correction.

Integration Prerequisites

Before performing the integration:

1 Refer to *QAD Customer Relationship Management Installation Guide* for details on which versions of Microsoft Exchange Server are supported.

2 Refer to *QAD Customer Relationship Management Installation Guide* for details on which versions of Microsoft Outlook are supported.

3 Create a mailbox in Microsoft Exchange Server for all the QAD CRM users that you plan to configure for Microsoft Exchange Server integration.

4 Install and configure QAD AdminService. For details, refer to *QAD Customer Relationship Management Installation Guide*. For configuration details, see Chapter 10, “QAD AdminService,” on page 97.

5 Ensure that Progress AppServer is configured and running. QAD AdminService synchronizes data between QAD CRM and Microsoft Exchange Server using Progress AppServer.

6 Install and configure QAD CRM.

7 Enable e-mail authentication if you plan to use Exchange Server Proxy. QAD CRM can communicate with Microsoft Exchange Server over the Internet by nesting Remote Procedure Calls (RPC) with HTTP packets, if you do not have direct access to Exchange Server. To use

this feature, e-mail address authentication is mandatory; users should be able to log on using an e-mail address instead of domain/username. Ensure that e-mail authentication is enabled if you plan to use this feature.

8 Get the Microsoft Outlook client ready. Microsoft Outlook is an essential component for Exchange Server integration, and it is required on your local client PC for sending e-mail. Exchange Server can also be accessed using other email clients, such as Outlook Express, Mozilla Thunderbird, Lotus Notes, and mobile devices that support Exchange integration as well as Outlook Web Access (OWA).

Setting Up Microsoft Exchange Server

QAD CRM can be integrated with Microsoft Exchange Server 2007 or 2010. As part of the integration steps, you must set up a user with a mailbox using Active Directory Users and Computers. Make sure that this user has the same Email ID as the one specified in the Administrator Email IDs field under menu Settings|System|AdminService|Settings.

Fig. 15.1
AdminService - Settings

Use the following steps to set up Microsoft Exchange Server for integration with QAD CRM.

Note If there is no mention of a version number, Microsoft Exchange Server refers to both Microsoft Exchange Server 2007 and Microsoft Exchange Server 2010.

1 Create a user in Microsoft Exchange Server named *`AdminServiceUser`* with a mailbox, where *`AdminServiceUser`* is the Adminservice user ID.

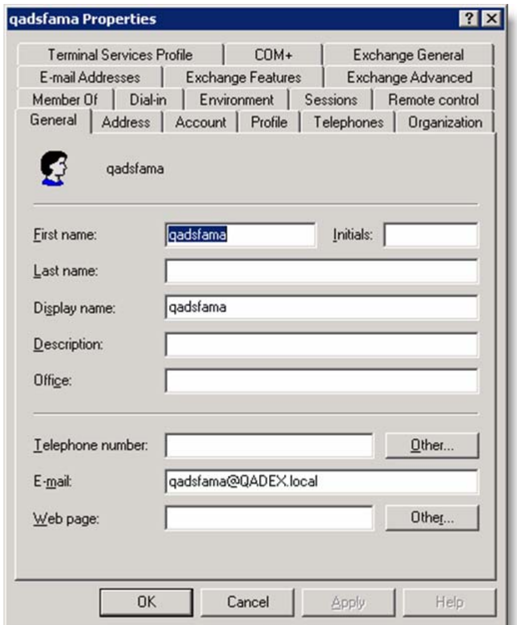
   a Choose Start|All Programs|Administrative Tools|Active Directory Users and Computers.

   b Right-click the User node in the left pane and choose New|User.

   c Enter *`AdminServiceUser`* in the First Name and User logon name fields. Click Next.

   d Right-click *`AdminServiceUser`* and then choose Properties to verify the following information:

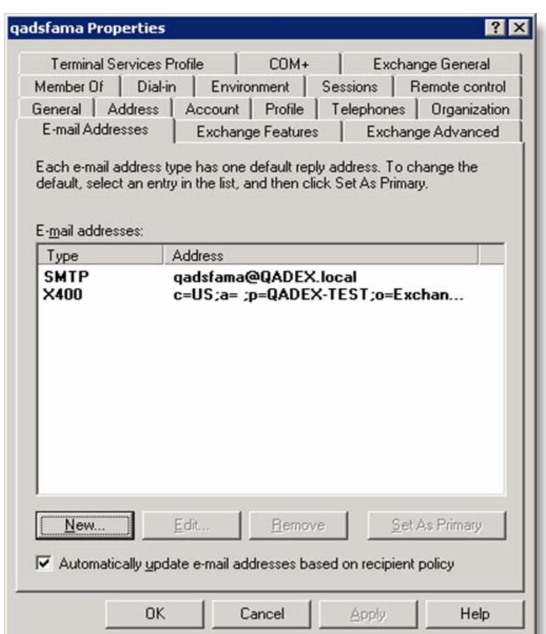
Fig. 15.2
Properties - General Tab



- The e-mail address of `AdminServiceUser`. It should be `AdminServiceUser@yourdomain`. For example, if `AdminServiceUser` is admin and the domain name is test.com, then the e-mail address should be admin@test.com.

- The e-mail address of `AdminServiceUser` on the E-mail Addresses tab. Information may vary depending on your installation. If the e-mail address entries are missing, click New to create them.

Fig. 15.3
Properties - E-mail Addresses Tab



Configuring the Integration

You enable and configure the integration from QAD CRM. To configure the integration, you must log in as `AdminServiceUser` or another QAD CRM user with administrator authority.

Note After configuring the integration, restart your system to make the changes take effect.

Enabling the Integration

To enable the integration and specify the direction of data flow for synchronization:

1 Log on to QAD CRM as user *`AdminServiceUser`* to define the exchange configuration for a CRM user who runs predefined jobs, such as Activity Reminder.

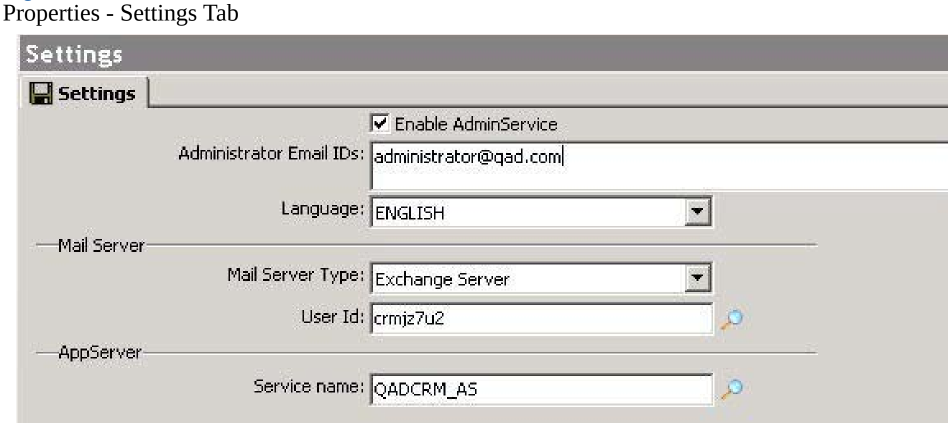
To do this, choose Settings|Organization|Users, select a CRM user ID, and click the Exchange Server Settings tab to specify values for the following fields:

- Windows user name
- Windows password
- Domain
- Email

Click Autodiscover to allow CRM to complete the exchange configuration.

2 From the application menu, choose Settings|System|AdminService|Settings.

Fig. 15.4
Properties - Settings Tab



3 Choose Main Menu|Settings|Mail Server Integration|Settings and Switches. On the Settings tab, ensure that you select the Enable AdminService option, which is required for CRM and Microsoft Exchange integration.

Administrator Email ID. Specify the e-mail address of the administrator who monitors and receives e-mail notifications from the CRM system.

Language. Choose the language that you plan to use with CRM.

Mail Server Type. It is recommended that you set this to be *Exchange Server*, although CRM does provide an SMTP configuration option that enables certain e-mail automation functions for customers who do not use Microsoft Exchange Server.

User ID. With the recommended Mail Server Type set to *Exchange Server*, you must specify a CRM user ID that has been configured with exchange integration. The Exchange e-mail account of this user ID will be used to perform predefined tasks such as Activity Reminder.

Service Name. Specify the correct Progress AppServer that has been configured for this CRM system.

Maintaining Exchange Server Settings

The Exchange Server integrated with QAD CRM enables the following data to be shared between CRM and Microsoft Outlook:

- Activities (of type appointment, meeting, telephone, letter, and task)
- Contacts
- E-mail

For each of these integration areas, the system administrator can set system-wide policies that dictate what type of data updates are enabled.

For Activity Synchronization, the user must be authorized by the system administrator to synchronize activities. The system administrator can manage the list of Authorized Activity Synchronization users on the Activity tab in Settings|Mail Server Integration|Settings And Switches.

To maintain Exchange Server settings, the CRM system administrator must enable the Exchange Server integration first. Then the CRM users can maintain their own Exchange Server settings.

For the system administrator, go to Settings|Mail System Integration|Settings and Switches and complete the following fields, which are required for the integration configuration.

Important Most of the following fields are case-sensitive. Ensure that you enter the values in the appropriate case.

Enable Integration with Exchange Server. Check this field to enable the integration.

Windows User Name. Enter your Windows logon ID.

Windows Password. Enter your Windows login password. Whenever the Windows login password is changed, you need to update this field.

Domain. Enter the domain that you log on to. This field is not required if your Exchange Server is hosted externally.

Email. Enter your full e-mail address.

Autodiscover. If your Exchange Server has Autodiscover enabled, this can be used to automatically populate the Exchange Server location URL and the mailbox details.

Mailbox. If the mailbox names are not automatically populated by Autodiscover, manually enter your mailbox names.

Exchange Server Location. If not automatically populated by Autodiscover, manually enter the URL that identifies the location of your Exchange Server.

Test Account Settings. When all mandatory fields are entered, click this to send test e-mail to the specified mailbox to ensure that the integration is successful. The test e-mail is sent in the following format:

Subject: QAD CRM test message

Body: This is an email message sent automatically by QAD CRM while testing the Microsoft Exchange settings for your account.

Upon a successful integration, a message appears on the screen to indicate that the integration is successful.

Important If any of the information associated with the mandatory fields is changed, such as the Windows logon password and domain, you must manually update the corresponding fields to ensure that the integration configuration is valid.

Last Synchronization date and time. The last synchronization date and time for the objects identified. These values are initially blank for each user; they are updated during the synchronization. These fields are helpful in determining when an integration problem might have occurred—when the integration was stopped or disabled.

Setting Up E-mail Integration

Users can send e-mail messages from their QAD CRM client using any messaging client installed on their computer. If integration is enabled, the system uses Microsoft Outlook as the default messaging client.

To set up e-mail reference synchronization in the system:

1 Choose Main Menu|Settings|Mail Server Integration|Settings and Switches.

2 Enable the option called Enable Email Integration under the Settings tab.

3 Click the Emails tab.

Fig. 15.5
Settings and Switches - Emails

4 You can create a history record in the CRM system whenever an e-mail message is sent from Microsoft Outlook and moved or copied from the Sent folder to the folder named *QADCRMHistory*. To do so, select Create History whenever an email message is sent from Microsoft Outlook.

5 To create a history record in the system when an e-mail message is received in specified mailboxes:

   a Select Create History when email is received for the specified mailboxes.

   b Enter the mailbox names.

   Use this option to create mailboxes for specific tasks. For example, you can create a Support mailbox to receive e-mail messages from customers requesting support.

6 To create history records from e-mail messages received in a specific mailbox:

   a Select the Mailbox for Scanning Visit Reports check box.

   b Enter the mailbox name.

      Users, typically sales personnel, can compose an e-mail message detailing an activity and send it to this mailbox with this subject:

      Visit Report — <*contact e-mail address*>

      QAD AdminService scans such e-mail messages, extracts the contents, and creates a history record.

      For more information about how to submit visit reports to QAD CRM, or synchronize e-mail with QAD CRM from a mobile device, see the following sections in the *QAD Customer Relationship Management User Guide*:

      - "Managing Customer Visit Reports"
      - "Synchronizing E-mails"

7 Click Save.

Setting Up Activity Integration

The system supports the following activity types:

- Telephone
- Letter
- E-mail
- Appointment
- Script
- Task

Microsoft Exchange Server supports these item types:

- Appointment
- Meeting
- Task

For synchronization, system activity types must be appropriately mapped to Microsoft Exchange Server activity types. The appointment and task type activities of both systems are mapped by default and cannot be changed. You must map other activity types, as well as set up activity synchronization.

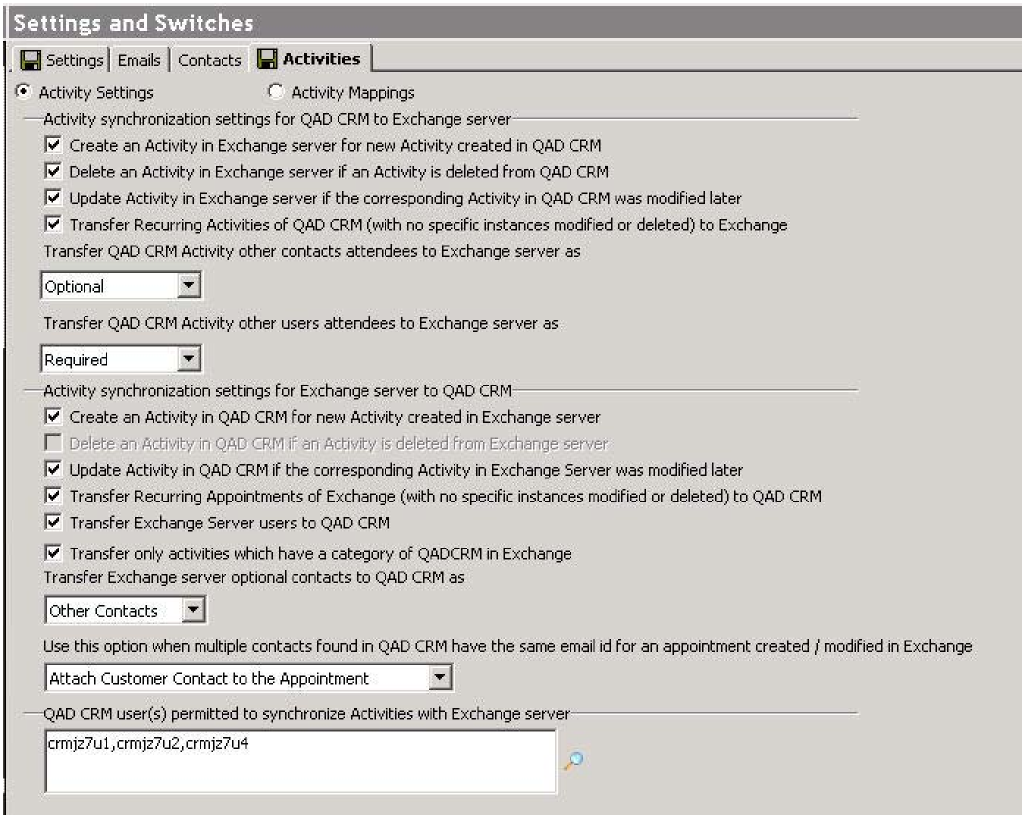
Setting Up Activity Synchronization

To set up activity details synchronization in the system:

1 Choose Main Menu|Settings|Mail Server Integration|Settings and Switches.

2 Click the Activities tab.

Fig. 15.6
Settings and Switches - Activities Tab



3 Select Activity Settings, if this option is not selected.

4 To enable activity synchronization from the system to Microsoft Exchange Server, select the required options in this area:

Activity synchronization settings for QAD CRM to Exchange Server. Available options are:

- Create an Activity in Exchange Server for new Activity created in QAD CRM.
- Delete an Activity in Exchange Server if an Activity is deleted from QAD CRM.
- Update Activity in Exchange Server if the corresponding Activity in QAD CRM was modified later.
- Transfer Recurring Activities of QAD CRM (with no specific instances modified or deleted) to Exchange Server.
- Transfer QAD CRM Activity other contacts attendees to Exchange Server. Select No Transfer, Optional, or Required depending on how you want other contact attendees to be mapped in Exchange Server.

- Transfer QAD CRM Activity other users attendees to Exchange Server. Select No Transfer, Optional, or Required depending on how you want other users attendees to be mapped in Exchange Server.

5 To enable activity synchronization from Microsoft Exchange Server to the system, select the required options in this area:

Activity synchronization settings for Exchange Server to QAD CRM. The available options are:

- Create an Activity in QAD CRM for new activities created in Exchange Server.
- Update Activity in QAD CRM if the corresponding activity in Exchange Server was modified later.
- Transfer Recurring Appointments of Exchange (with no specific instances modified or deleted) to QAD CRM.
- Transfer Exchange Server users to QAD CRM.
- Transfer only activities that have a category of QADCRM in Exchange.
- Transfer Exchange Server optional contacts to QAD CRM. Select No Transfer, Other Contacts, or Associates depending on how you want to map optional contacts in a CRM activity record.
- Use this option when multiple contacts found in QAD CRM have the same e-mail ID for an appointment created/modified in Exchange. Select Do Not Attach the Contact to the Appointment or Attach Customer Contact to the Appointment.
- Select the QAD CRM users that are permitted to synchronize activities with the Microsoft Exchange Server. Not all the user IDs are displayed; only users with correct Exchange Server configurations are displayed here.

6 Click Save.

Mapping Activity Types

You can map QAD CRM activity types Letter, Appointment, and Telephone to Microsoft Outlook appointments. You can map QAD CRM tasks to Microsoft Outlook tasks.

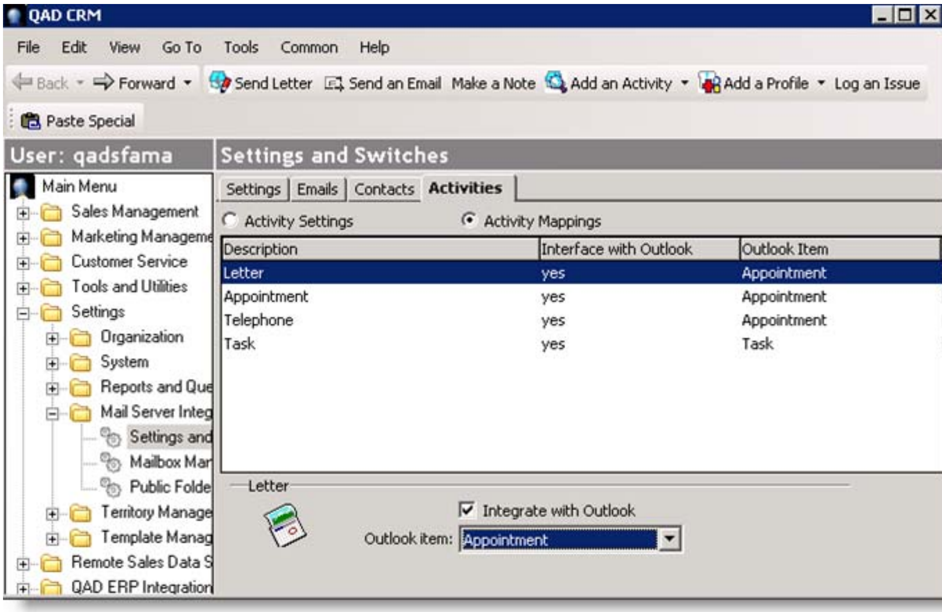
To map system activity types to Microsoft Exchange Server activity types:

1 Choose Main Menu|Settings|Mail Server Integration|Settings and Switches.

2 Click the Activities tab.

3 Select Activity Mappings.

Fig. 15.7
Settings and Switches - Activity Mappings



4 Select the system activity type you want to map to Microsoft Exchange Server activity type.

5 Select the Interface with Outlook check box.

6 From the Outlook Item drop-down list, select the Microsoft Exchange Server activity type to which you want to map the selected activity type.

7 Repeat steps 4–6 to map other activity types to Exchange Server activity types.

8 Click Save.

Note Appointment and Task are mapped by default and cannot be changed.

Setting Up Contact Integration

The contact synchronization options that are available depend on the options you select while enabling contact integration.

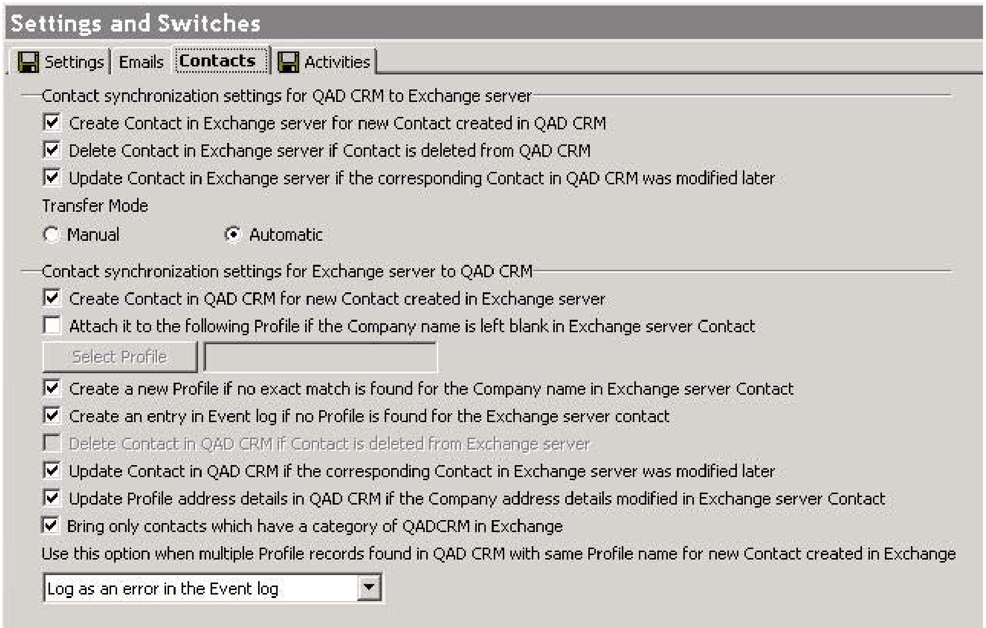
To set up contact details synchronization from the system:

1 Choose Main Menu|Settings|Mail Server Integration|Settings and Switches.

2 Click the Contacts tab.

QAD

Fig. 15.8
Settings and Switches - Contacts Tab



3 To enable contact synchronization from the system to Microsoft Exchange Server, select the required options in this area:

Contact Synchronization settings for QAD CRM to Exchange Server. Available options are:

- Create Contact in Exchange Server for new Contact created in QAD CRM.
- Delete Contact in Exchange Server if Contact is deleted from QAD CRM.
- Update Contact in Exchange Server if the corresponding Contact in QAD CRM was modified later.
- Transfer Mode. You can select either Manual or Automatic. For more information about how to synchronize contacts, see the section “Synchronizing Contacts” in *QAD CRM User Guide*.

4 To enable contact synchronization from Exchange Server to the system, select the required options in this area:

Contact Synchronization settings for Exchange Server to QAD CRM. The available options are:

- Create Contact in QAD CRM for new Contact created in Exchange Server.
- Attach it to the following profile if the company name is left blank in the Exchange Server Contact. If you select this option, you must enter the profile ID in the input box below this option. During contact synchronization, this profile is attached to the contacts in Exchange Server that have no company reference.
- Create a new profile if no exact matchis found for the company name in Exchange Server Contact.
- Create an entry in event log if no profile is found for the Exchange Server Contact.
- Update Contact in QAD CRM if the corresponding Contact in Exchange Server was modified later.

- Update Profile address details in QAD CRM if the Company address details were modified in Exchange Server Contact.
- Bring Only Contacts which have a category of QADCRM in Exchange. It is recommended that you enable this, so that only Exchange Contacts intended for integration with CRM (and thus tagged with the QADCRM category) are brought to CRM.
- Use this option when multiple Profile records are found in QAD CRM with same Profile name for new Contact created in Exchange. You can select either Log as an Error in the Event log or Attach Contact to the Customer Profile.

5 Click Save.

How Contact Synchronization Works

In the system, contacts are associated with profile records. The profile name must match the company field of the contact record of Microsoft Exchange Server.

During contact details exchange between Microsoft Exchange Server and QAD CRM, QAD AdminService first determines if the company name matches a profile name in the system. If it does, QAD AdminService updates the record.

If QAD AdminService finds multiple profile instances, it composes and delivers an e-mail message with the matching records to the user who created the contact record. The records in this e-mail message are hyperlinked. After receiving a message, the user can click the profile record to use for synchronization.

If QAD AdminService cannot find a profile record that matches the company, it creates an entry in the event log. Users can attach a profile to such contacts from the event log facility of the system.

To attach a profile to a contact from the event log in the system:

1 Choose Main Menu|Tools and Utilities|Event Log.

2 Expand Contact Synchronization.

3 Right-click the event log record and choose Attach.

4 Find and select the profile or add a new profile. Then click OK.

Synchronizing Microsoft Outlook contacts to QAD CRM

If you system is configured to synchronize data categorized in QADCRM, you may need to create a QADCRM category first. For information about how to create the QADCRM category in Microsoft Outlook, see the MS Outlook Help or the section “Configuring Microsoft Outlook” in *QAD CRM User Guide*.

For information about how to synchronize contacts, see the section “Synchronizing Contacts” in *QAD CRM User Guide*.

Configuring Microsoft Outlook

Microsoft Outlook users need to perform some minor configurations in their Microsoft Outlook client. For instructions, see the section “Configuring Microsoft Outlook” in *QAD CRM User Guide*.

Section 3

Appendix

This section provides reference information that you may need when setting up and using QAD CRM.

Appendix A

QAD CRM APIs

This section introduces QAD CRM APIs used to interact with QAD CRM through QXtend Web Service.

Overview

QAD CRM Inbound (`qadcrminbound.p`) and Outbound (`qadcrmoutbound.p`) APIs allow you to interact with QAD CRM through the QXtend Web Service. QAD CRM Inbound APIs are defined to set and update data within QAD CRM. QAD CRM Outbound APIs are defined to query data from QAD CRM through the QXtend Web Service.

QAD CRM Inbound APIs

QAD CRM Inbound APIs have been developed to maintain various business objects in QAD CRM. The business objects are maintained based on an operation specific to the API. The API returns a Response Dataset with key data including the CRM Table Name and Record ID.

- Profile
- Contact
- Site Address (Other Addresses)
- Activity
- Opportunity (Sales Quote and Sales Order)
- Proftrnx (Profile History)
- ReplChng (Data Replication)

The API supports the following operations:

- Operation = A (Add/Create)
- Operation = M (Modify—Modify record only if it exists.)
- Operation = R (Delete)
- Operation = S (Synchronize—Add record if it does not exist; modify the record if it exists.)
- Operation = U (Do not modify. Do not do anything to the record.)

API Name and Program

- Maintain Profile (`ip_MaintainProspect` in `qadcrminbound.p`)
- Maintain Activity (`ip_MaintainActivity` in `qadcrminbound.p`)
- Maintain Activity Recurrence (`ip_MaintainActivityRecurrence` in `qadcrminbound.p`)
- Maintain Opportunity (`ip_MaintainOpportunity` in `qadcrminbound.p`)
- Maintain Proftrnx (`ip_MaintainProftrnx` in `qadcrminbound.p`)
- Maintain Replchng (`ip_MaintainReplchng` in `qadcrminbound.p`)

Input/Output Signature

The Input/Output Signature is the same for all the QAD CRM Inbound APIs

```
procedure ip_MaintainProspect:

define input parameter p_ih_phEventMessage   as handle  NO-UNDO.
define output parameter p_oh_phEventResponse as handle  NO-UNDO.

...

end procedure.
```

Schema definition

- `P_ih_phEventMessage`
  For `MaintainProspect`, refer to `maintainProfile–CRM_1.xsd`
- `p_oh_phEventResponse`
  For `MaintainProspect`, refer to `maintainProfileResponse–CRM_1.xsd`)


```
<?xml version="1.0" encoding="UTF-8" ?>
- <xsd:schema targetNamespace="urn:schemas-qad-com:xml-services" xmlns:xsd=
"http://www.w3.org/2001/XMLSchema" xmlns:qsvc="urn:schemas-qad-com:xml-services"
xmlns:lang="EN" xmlns:prodata="urn:schemas-progress-com:xml-prodata:0001"
attributeFormDefault="qualified" elementFormDefault="qualified">
    + <xsd:element name="ds_maintainresponse">
    - <xsd:complexType name="Tt_maintainresponseResponseType">
        - <xsd:sequence>
            <xsd:element name="tt_table_name" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_record_id" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_result" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_char1" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_char2" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_char3" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_char4" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_char5" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_dec1" type="xsd:decimal" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_dec2" type="xsd:decimal" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_date1" type="xsd:date" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_date2" type="xsd:date" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_log1" type="xsd:boolean" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_log2" type="xsd:boolean" minOccurs="0" maxOccurs="1"
            nillable="true" />
          </xsd:sequence>
      </xsd:complexType>
</xsd:schema>
```

Example for Setting Profile Data in QAD CRM

Generating Proxy Class Files

Ensure that the schema files `maintainProfile_CRM_1.xsd` and `maintainProfileResponse_CRM_1.xsd` are available in the same folder as the `wsdl` file.

1. Open a Visual Studio Command Prompt and enter the following command:

```
wsdl /language:c# /out:<FolderPath>\MaintainProfile.cs
<FolderPath>\maintainProfile-CRM_1.wsdl
```

   The command generates the `MintainProfile.cs` file.

2. Import the generated .cs file into the Visual Studio Project. The generated code contains methods needed to call QXtend from a C# client.

Using Proxy Class Files

- Create class variables for QDoc Web Service, Request, and Respond.

```
class MaintainProfileProxy : MaintainItem
{
    #region Member variables

    private QdocWebService _qxtendService = new QdocWebService();
    private MaintainProfileType _request = new MaintainProfileType();
    private MaintainProfileResponseType _response;

    #endregion

    #region Constructors & Finalizers

    /// <summary>
    /// Initializes new instance of MaintainProfileProxy type.
    /// </summary>
    /// <param name="connectionPoolName">Connection pool name.</param>
    /// <param name="username">QAD CRM user username.</param>
    /// <param name="password">QAD CRM user password.</param>
    internal MaintainProfileProxy(string connectionPoolName, string username, string password)
    {
        InitializeSOAPEnvelope(connectionPoolName);
        CreateSessionContext(username, password);
```

- Initialize the values in the SOAP Message Envelope, create a procedure named `InitializeSOAPEnvelope`, and then call the procedure from the constructor.

```
private void InitializeSOAPEnvelope(string connectionPoolName)
{
    // Initializes the QXtend Service required SOAP envelope settings
    // QXtend currently only requires the reply to & to components to
    // be able to process the request
    ReplyToType replyTo = new ReplyToType();
    ToType qxtendReceiver = new ToType();
    _qxtendService.ReplyTo = replyTo;
    _qxtendService.To = qxtendReceiver;

    // Set the values for the sender & receiver id's as there are
    // required entries for QXtend to process correctly
    //            replyTo.Address = "urn:services-qad-com:";
    replyTo.Address = "urn:services-qad-com:9869376d-ce46-4ddf-bca4-49d85f3c2330";
    qxtendReceiver.Text = new String[] { string.Format("urn:services-qad-com:{0}", connectionPoolName) };

    MessageIDType messId = new MessageIDType();
    messId.Text = new String[] { string.Format("urn:services-qad-com::{0}", connectionPoolName) };

    //Ensure that response details are not suppressed.
    ReferenceParametersType refParams = new ReferenceParametersType();
    refParams.suppressResponseDetail = false;
    _qxtendService.ReferenceParameters = refParams;

    _qxtendService.MessageID = messId;
}
```

- Create the session context entries required to call the QXtend Web Service and a procedure named `CreateSessionContext`.

```
private void CreateSessionContext(string username, string password)
{
    // Builds the default session context information
    // the session context is used to controll the processing of QXtend
    // these are only the session context entries that are required to
    // process a request. if domain is left blank then the default domain
    // on the connection pool is used.
    TtContext context1 = new TtContext();
    context1.propertyQualifier = "QAD";
    context1.propertyName = "Datasource";
    context1.propertyValue = "<DataSource>";

    TtContext context2 = new TtContext();
    context2.propertyQualifier = "QAD";
    context2.propertyName = "version";
    context2.propertyValue = "CRM_1";

    TtContext context3 = new TtContext();
    context3.propertyQualifier = "QAD";
    context3.propertyName = "username";
    context3.propertyValue = username;

    TtContext context4 = new TtContext();
    context4.propertyQualifier = "QAD";
    context4.propertyName = "password";
    context4.propertyValue = password;

    // Create the session context array holding all of the context antries
    // and assign it to the request object so that it is used when processing
    // a request to QXtend.
    _request.dsSessionContext = new TtContext[] { context1, context2, context3, context4 };
}
```

- Call the `CreateSessionContext` procedure from the Constructor.

```
internal MaintainProfileProxy(string connectionPoolName, string username, string password)
{
    InitializeSOAPEnvelope(connectionPoolName);
    CreateSessionContext(username, password);
}
```

The following code shows how to call CRM API using QXtend.

```
public override void  SetProspects()
{
   DataTable ProfilteItems = null ;
   string operation;
   operation = "M";   // To Update prospect data

   // Prepare Profile data needs to be transferred (Updated) in QAD CRM
   // < Start preparing Profile data

   // End >
   Tt_prospectType[] prospects = InitializeData(ProfilteItems, operation);
    Dictionary<string, string[]> response = new Dictionary<string, string[]>();

    foreach (Tt_prospectType prospect in prospects)
    {
       _request.dsprospect = new Tt_prospectType[] { prospect };

        try
        {
            _response = _qxtendService.maintainProfile(_request);
        }
        catch (SoapException ex)
        {
            _log.Error(ex.Message, ex);
            throw new DataLayerException(ex.Message, ex);
        }

        // Process Response Details returned from QAD CRM

    }

}
```

QAD CRM Outbound APIs

QAD CRM Outbound APIs are developed to query the following data from QAD CRM and return a Response Dataset with CRM data based on the query specified within the `tt_4gl_query` field.

- Activity (`to_do`)
- Activity Recurrence details (`schedule_val`)
- Profile (`prospect`)
- Contact (`contact_crm`)
- Contact Email details (`email_adr`)
- Other Addresses (`site_adr`)
- Opportunity (`opportunity`)
- Issue Details (`call_log`)
- Contract (`contract_hdr`, `contract_line`)
- Campaign Targets (`camp_cont`)
- CRM Message (`bisgmsg`)
- CRM Settings (`bisg_param`)
- Lookup Values (`lkup_val`)
- Object Labels (`obj_label`)
- Field Labels (`fld_label`)
- CRM Users (`users`)
- Replication change (`repl_chng`)
- DB Sequence

API Names and Programs

- Query Profile Contact (`ip_queryProfileContact`)
- Query Profile Contact Multiple (`ip_queryProfileContactMultiple`)
- Query Profile, Contact and Addresses (`ip_queryProfileContactSiteadr`)
- Query Profile Contact object (`ip_queryProfileContactObject`)
- Query Profile Contact Email (`ip_queryProfileContactEmail`)
- Query Activity (`ip_queryActivity`)
- Query Activity Multiple (`ip_queryActivityMultiple`)
- Query Activity Recurrence (`ip_queryActivityRecurrence`)
- Query CRM Messages (`ip_queryBisgmsg`)
- Query CRM Settings (`ip_queryBisgparam`)
- Query Lookup Values (`ip_queryLkupval`)
- Query Field Labels (`ip_queryFldlabel`)
- Query Object Labels (`ip_queryObjlabel`)
- Query Sequence Value(`ip_queryNextSequenceValue`)
- Query Users (`ip_queryUsers`)

- Query Replication data (`ip_queryReplChng`)

Input/Output Signature

The Input/Output Signatures are the same for all the QAD CRM Outbound APIs.

```
procedure ip_queryProfileContact:

define input parameter p_ih_phEvent_Message  as handle  NO-UNDO.
define output parameter p_oh_phEventResponse as handle  NO-UNDO.

...

end procedure.
```

Schema definition

- `p_ih_phEventMessage`
  The Schema Definition of the first parameter `p_ih_phEventMessage` is the same for all Outbound APIs. Refer to `queryActivity-CRM_1.xsd`.
- `p_oh_phEventResponse`
  For `ip_QueryActivity`, refer to `queryActivityResponse-CRM_1.xsd`.

```
<?xml version="1.0" encoding="UTF-8" ?>
- <xsd:schema targetNamespace="urn:schemas-qad-com:xml-services" xmlns:xsd=
"http://www.w3.org/2001/XMLSchema" xmlns:qsvc="urn:schemas-qad-com:xml-services"
xmlns:lang="EN" xmlns:prodata="urn:schemas-progress-com:xml-prodata:0001"
attributeFormDefault="qualified" elementFormDefault="qualified">
    - <xsd:element name="dsqueryrequest">
            - <xsd:complexType>
                - <xsd:sequence>
                    <xsd:element name="tt_queryrequest" type="qsvc:Tt_queryrequestType"
                    minOccurs="0" maxOccurs="unbounded">
                </xsd:sequence>
            </xsd:complexType>
        </xsd:element>
</xsd:complexType>
    - <xsd:complexType name="Tt_queryrequestType">
        - <xsd:sequence>
            <xsd:element name="tt_query_name" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_4gl_query" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_exclusion_field1" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_field2" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_field3" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_field4" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_field5" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_value1" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_value2" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_value3" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_value4" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_exclusion_value5" type="xsd:string" minOccurs="0"
            maxOccurs="1" nillable="true" />
            <xsd:element name="tt_operator1" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
```

```
            <xsd:element name="tt_operator2" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_operator3" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
            <xsd:element name="tt_operator4" type="xsd:string" minOccurs="0" maxOccurs="1"
            nillable="true" />
        </xsd:sequence>
      </xsd:complexType>
</xsd:schema>
```

Example for Setting Query Activity Data from QAD CRM

Generating Proxy Class Files

Make sure that the schema files `QueryActivity_CRM_1.xsd` and `QueryActivityResponse_CRM_1.xsd` are available in the same folder as the `wsdl` file.

1 Open a Visual Studio Command Prompt and enter the following command:

```
wsdl /language:c# /out:<FolderPath>\QueryActivity.cs <FolderPath>\queryActivity-
CRM_1.wsdl
```

The command generates the `QueryActivity.cs` file.

2 Import the generated .cs file into the Visual Studio Project. The generated code contains methods needed to call QXtend from a C# client.

Using Proxy Class Files

- Create class variables for QDoc Web Service, Request, and Respond.

```
class QueryActivityProxy : QueryItem
{
    #region Member variables

    private QdocWebService _qxtendService = new QdocWebService();
    private QueryActivityType _request = new QueryActivityType();
    private QueryActivityResponseType _response;
    private string _connPoolName;
    private string _userName;
    private string _password;
    private string _conectionpoolName = string.Empty;
    #endregion

    #region Constructors & Finalizers

    /// <summary>
    /// Initializes new instance of MaintainActivityProxy type.
    /// </summary>
    /// <param name="connectionPoolName">Connection pool name.</param>
    /// <param name="username">QAD CRM user username.</param>
    /// <param name="password">QAD CRM user password.</param>
    /// <param name="itemsMap">Fields mapping list.</param>
    internal QueryActivityProxy(string connectionPoolName, string username, string password, List<FieldMapItem> itemsM
        : base(itemsMap)
    {
```

- Initialize the values in the SOAP Message Envelope, create a procedure named `InitializeSOAPEnvelope`, and then call the procedure from the constructor.

```
private void InitializeSOAPEnvelope(string connectionPoolName)
{
    // Initializes the QXtend Service required SOAP envelope settings
    // QXtend currently only requires the reply to & to components to
    // be able to process the request
    ReplyToType replyTo = new ReplyToType();
    ToType qxtendReceiver = new ToType();
    _qxtendService.ReplyTo = replyTo;
    _qxtendService.To = qxtendReceiver;

    // Set the values for the sender & receiver id's as there are
    // required entries for QXtend to process correctly
    //              replyTo.Address = "urn:services-qad-com:";
    replyTo.Address = "urn:services-qad-com:9869376d-ce46-4ddf-bca4-49d85f3c2330";
    qxtendReceiver.Text = new String[] { string.Format("urn:services-qad-com:{0}", connectionPoolName) };

    MessageIDType messId = new MessageIDType();
    messId.Text = new String[] { string.Format("urn:services-qad-com::{0}", connectionPoolName) };

    //Ensure that response details are not suppressed.
    ReferenceParametersType refParams = new ReferenceParametersType();
    refParams.suppressResponseDetail = false;
    _qxtendService.ReferenceParameters = refParams;

    _qxtendService.MessageID = messId;
}
```

- Create the session context entries required to call the QXtend Web Service and a procedure named `CreateSessionContext`.

```
private void CreateSessionContext(string username, string password)
{
    // Builds the default session context information
    // the session context is used to controll the processing of QXtend
    // these are only the session context entries that are required to
    // process a request. if domain is left blank then the default domain
    // on the connection pool is used.
    TtContext context1 = new TtContext();
    context1.propertyQualifier = "QAD";
    context1.propertyName = "Datasource";
    context1.propertyValue = "<DataSource>";

    TtContext context2 = new TtContext();
    context2.propertyQualifier = "QAD";
    context2.propertyName = "version";
    context2.propertyValue = "CRM_1";

    TtContext context3 = new TtContext();
    context3.propertyQualifier = "QAD";
    context3.propertyName = "username";
    context3.propertyValue = username;

    TtContext context4 = new TtContext();
    context4.propertyQualifier = "QAD";
    context4.propertyName = "password";
    context4.propertyValue = password;

    // Create the session context array holding all of the context antries
    // and assign it to the request object so that it is used when processing
    // a request to QXtend.
    _request.dsSessionContext = new TtContext[] { context1, context2, context3, context4 };
}
```

- Call the `CreateSessionContext` procedure from the Constructor.

```
internal QueryActivityProxy(string connectionPoolName, string username, string password, List<FieldMapItem> itemsM
    : base(itemsMap)
{
    _connPoolName = connectionPoolName;
    _userName = username;
    _password = password;
    InitializeSOAPEnvelope(connectionPoolName);
    CreateSessionContext(username, password);
}
```

The following code shows how to call CRM API using QXtend.

```
public override void GetItems(string query)
{

    InitializeSOAPEnvelope(_conectionpoolName);
    Tt_queryrequestType request = new Tt_queryrequestType();
    // Prepare Query Request data
    // ..

    request.tt_query_name = "queryActivity";
    _request.dsqueryrequest = new Tt_queryrequestType[] { request };
    request.tt_4gl_query = query;
    List<string> users = new List<string>();
    List<string> contacts = new List<string>();
    try
    {

        _response = _qxtendService.queryActivity(_request);

        // Process Response data <activity>
        if (_response.result == "success")
        {

            if (_response.dstodo != null)
            {
                foreach (Tt_to_doResponseType activity in _response.dstodo)
                {
                    //<
                    // .. Process activity record
                    //>
                }
            }
        }
    }
    catch
    {  // Exception handling
    }
}
```

Product Information Resources

QAD offers a number of online resources to help you get more information about using QAD products.

QAD Forums (community.qad.com)
Ask questions and share information with other members of the user community, including QAD experts.

QAD Knowledgebase (knowledgebase.qad.com)*
Search for answers, tips, or solutions related to any QAD product or topic.

QAD Document Library (www.qad.com/documentlibrary)
Get browser-based access to user guides, release notes, training guides, and so on; use powerful search features to find the document you want, then read online, or download and print PDF.

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*Log-in required

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