SIEBEL 7 eBusiness

Siebel Pharma Handheld Guide

Version 7.7

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1 What’s New in This Release

What’s New in Siebel Pharma Handheld

Table 1 lists changes described in this version of the documentation to support Release 7.7 of the software.

Table 1. New Product Features in Siebel Pharma Handheld, Version 7.7

Topic	Description
Enhanced Administration See “Application Administration” on page 35	New administration screens allow easier administration of your Siebel Pharma Handheld application.
Enhanced synchronization monitoring ability See “About Monitoring Synchronization Sessions for Siebel Handheld” on page 41	This new feature allows you to monitor various aspects of user synchronization sessions through Administration screens and views.

2 Overview of Siebel Pharma Handheld

This chapter includes the following topics:

About Siebel Handheld

Siebel Handheld provides a subset of functionality to that of the Siebel Web Client. The Siebel Handheld Client differs from the Siebel Web Client and the Siebel Mobile Web Client in that it uses a selected subset of views, accommodates smaller screen sizes, and has a reduced memory capacity. For a list of functional differences, see Chapter 3, "Application Development."

Some features that are available on the Siebel Mobile Web Client are not available on the Siebel Handheld. Scripting and Siebel engines (for example, Pricing and Reporting) are not supported on the handheld. For a list of features that are not supported, see "Unsupported Features for Siebel Handheld" on page 18.

Some supported features of the Siebel Handheld client are as follows:

- **Application Development with Siebel Tools:** Siebel Handheld applications can be configured in Siebel Tools using the Web Applet Designer. You can take your existing Siebel application and use this as the basis for the Siebel Handheld application, or you can create a new application by using the Siebel Tools application shipped on the Siebel Handheld application DVD. See Chapter 3, "Application Development," for more information.
- **Data filtering:** Filtering allows you to specify a subset of data to be used on the handheld device. Filtering is an important feature of a Siebel Handheld deployment because of the relatively large size of the average enterprise database in comparison to the relatively limited memory capabilities of handheld devices. It is important that you allocate sufficient time in the project plan to create and test the handheld filters. See "Application Development" on page 17 for more information.
- **Deployment options:** The Siebel Handheld application can be installed on Windows-powered devices in one of two ways. The first is to create a partnership between a desktop or laptop PC and the handheld device using Microsoft ActiveSync. The second is to install the Siebel Handheld application from external media, for example, a Cabinet (CAB) file. Handheld patches can be remotely deployed using PatchAgent. For more information, see Chapter 6, "Deployment of Siebel Handheld."

- **Patch Updates.** Siebel Handheld automatically applies the latest software patches to the handheld device when needed. Companion Sync allows users to Synchronize the Handheld Database to the local database on Companion PC and invokes Siebel Remote to synchronize the local database with the server database.
- **Backing Up and Restoring Data:** The Siebel Handheld application provides database backup functionality. A database restore utility is also included with the application. See Chapter 4, "Application Administration," and Appendix A, "Troubleshooting," for details.

Overview of Siebel Handheld Synchronization

The Siebel Handheld Synchronization (Sync) client synchronizes data between the Siebel Handheld database and the Mobile Web Client database or server database. The synchronization process does the following:

- Updates the Siebel server database with changes made to the Siebel Handheld database
- Updates the database on the handheld device with changes made to the Siebel server database
- Downloads metadata changes, such as object definitions for new or modified screens or views
- Allows users to select filters to limit the amount of data that is downloaded
- Automatically applies the latest software patches to the handheld device when needed

Siebel Handheld Synchronization Methods and Architecture

The following methods can be used to synchronize data on the handheld device with data in the Siebel server database: Companion Sync (CS), Direct Server Sync (DSS) and Direct Server Sync by means of Proxy (DSSvP). The architecture of these methods is discussed in the following sections.

Handheld Synchronization Servers

There are two types of synchronization servers: direct synchronization servers and companion synchronization servers. A direct synchronization server run on the Siebel application server can accept concurrent synchronization requests from multiple synchronization clients. When connecting to a direct synchronization server, the Siebel Handheld Sync client synchronizes its data with the server-side database. Companion Sync allows users to synchronize the Handheld Database to the local database on a companion PC device and invokes Siebel Remote to synchronize a local database with the server database.

In Direct Server Sync mode, the Siebel Handheld Synchronization client uses the HTTP protocol over a network connection to communicate with the handheld synchronization server. Users should configure their handheld devices for communication over the desired network.

A companion synchronization server runs on a companion personal computer with a Mobile Web Client installation and supports synchronization with a data source specified in a client configuration; the database resides on the companion PC.

Companion Sync

Companion Sync allows users to synchronize the Siebel Handheld application and database with a Siebel Remote database on a Mobile Web Client.

Microsoft ActiveSync is used to connect the handheld device and the companion PC through a serial or USB connection or through a network connection. The user launches Siebel Handheld Sync from companion PC or the device. The user can change the default filters using Siebel Handheld Sync.

Direct Server Sync

Direct Server Sync allows users to synchronize their Siebel Handheld application and database directly with the Siebel server. The user connects the handheld device to the Siebel application server through a network connection that uses the HTTP protocol. The connection runs through a IIS Web server to the Siebel Gateway Name server and application server, where the Sync server components are installed and running.

Direct Server Sync by Means of Proxy

Direct Server Sync by means of Proxy (DSSvP) allows users to synchronize their Siebel Handheld application and database directly with the Siebel server. The user connects the handheld device to the Siebel application server through ActiveSync and the network connection established by the companion PC. The connection runs through a IIS Web server to the Siebel Gateway Name server and application server, where the Sync server components are installed.

Overview of Siebel Handheld Client Application Configuration

The following provides an overview of the configuration process of the Handheld client. Complete the following steps to configure your handheld client application.

To configure the Siebel Handheld client

1. Define the user functionality.

   Determine which user interface elements (such as screens, views, toolbars, applets, find, and help) will be necessary for your Siebel Handheld Client end users. For more information, see "About Defining User Functionality in Siebel Handheld" on page 20.

2. Configure the Siebel Handheld Client user interface.

   The process for configuring user interface elements in the Siebel Handheld Client is the same as that for other Siebel clients. For more information, see "Configuring User Interface Elements in Siebel Handheld" on page 24 and *Configuring Siebel eBusiness Applications*.

3. Identify all eScript or VB script.

   Siebel Handheld applications do not currently support scripting, including eScript or VB script. Scripting used in your Siebel application may conflict with your Siebel Handheld application configuration.

4. Compile the new configuration.

   For more information, see "Compiling the Siebel Handheld Application" on page 29.

5. Test the new configuration.

   Test the configuration, repeating the previous steps, to address any configuration errors.

After completing the Siebel Handheld Client configuration, you are ready to install it on the handheld devices. To install the Siebel Handheld configuration on a handheld device, see the instructions in "Installing on the Siebel Handheld Application" on page 95.

3 Application Development

This chapter includes the following topics:

Overview of Siebel Handheld Architecture

The process for configuring a Siebel Handheld Client has a few differences, described in this chapter, from the process for configuring other types of Siebel clients.

NOTE: Readers should familiarize themselves with the Siebel client configuration process described in *Configuring Siebel eBusiness Applications* before attempting to configure the Siebel Handheld Client.

The five layers in the Siebel Handheld architecture are comparable to those used on the Siebel Web Client:

Application layer. The application layer starts and closes the application.

User Interface layer. The user interface layer renders the display and interacts with actions of the user.

Object Manager layer. The object manager layer provides a consistent object behavior and interaction between all business objects within the application.

Data Manager layer. The data manager layer maintains an object-oriented abstraction of the native data stored in the data repositories for the benefit of the object manager.

Database layer. The database layer includes the data that Siebel Handheld users access.

Your Administrator configures an application on the Siebel client using Siebel Tools and compiles the Siebel repository (.srf) file. During the synchronization process, information specific to the Siebel Handheld Client is extracted from the Siebel repository file. This information is used to create a repository metalanguage (.rml) file, that is downloaded to the handheld device. The repository metalanguage file has all of the layout information for the handheld device. For more information on Siebel Tools, see *Using Siebel Tools*.

Unsupported Features for Siebel Handheld

The differences between configuring user interface elements for the Siebel Web Client and the Siebel Handheld Client are shown in Table 2.

Table 2. Configuring Siebel Client User Interface Elements

Client	Siebel Tools	SWT Template Files	Specialized Algorithms
Siebel Web Client	Yes	Yes	No
Siebel Handheld Client	Yes	No	Yes

The following are not supported in Siebel Handheld applications:

- The following applet types are not supported:
  - Chart
  - Explorer
- More than two applets per view is not supported. A maximum of two applets may be displayed at one time.
- Group boxes are not supported. See "Group Boxes" on page 26 for information on how to accommodate this limitation.
- Alarm Manager is not supported. Therefore, if an alarm check box is added to an applet and the check box is selected, no alarm sounds.
- The base time zone is determined by the system settings on the server and cannot be changed on the handheld device.
- Alphabet tabs are not supported.
- Scripting is not supported. However, any scripts on the business components will be executed during synchronization.
- Siebel Workflow is not supported.
- Assessment creation is not supported.

See the following topics which outline, more specifically, other unsupported features.

Multi-Value Groups (MVG)

The Multi-Value Group applet is not supported on the Siebel Handheld Client; however, the Multi-Value Group relationship is supported. The Multi-Value Group (MVG) control button does not appear on fields in Siebel Handheld Client applications. Instead, MVGs can be implemented as parent-child views. As a result, MVG fields are not editable within the parent record. In the Siebel Web Client, addresses of accounts are added, deleted, or edited through the Business Address MVG applet. However, in the Siebel Sales Handheld Client, these functions must be done through a Business Address child applet with an Account applet as its parent.

On the handheld, all MVG fields are displayed as read-only fields with the primary record visible. If you have an application or business requirement that requires the user to view or update all the records in the MVG, you must configure a separate view for that MVG. For example, the Address field in the Accounts or My Accounts view is an MVG. In the Siebel Handheld Client that field is read-only and displays the primary record. In order for the handheld user to see and update the addresses, the new Address view is configured in Siebel Tools. This new Address view is visible in the Show drop-down list.

Functions

Siebel Handheld applications support most of the calculated fields and operations used in the Siebel Web applications with a few exceptions. See Table 3 for a list of the unsupported functions.

Table 3. Unsupported Functions

Function Name
BCHasRows
DockingNodeId
DockingNodeName
DockingNodeRoutId
EAILookupExternal
EAILookupSiebel
EXISTS
GetHQInstanceId
GetHQInstanceName
GetNumBCRows
GetProfileAttr
GetXAval
IsDocked

Table 3. Unsupported Functions

Function Name
LanguageName
LocaleName
LookupMessage
LookupTranslation
NOT
RepositoryId
RepositoryName
RowIdToRowNum
ToolsLanguage

The NOT key word is not supported on Booleans. Use the != operator instead. For example, "Active" != "Y".

The RowIdToRowNum function is supported differently in the handheld applications than in the Web applications. In Web applications, RowIdToRowNum converts a row Id to a numeric value. In the handheld applications, it returns the row ID itself.

Installing the Siebel Handheld Client

For information on installing the Handheld client, see Chapter 6, "Deployment of Siebel Handheld."

About Defining User Functionality in Siebel Handheld

The first step in configuring a Siebel Handheld Client is to determine which user interface elements are necessary. Siebel Handheld Client users have different requirements from Siebel Web Client users. Keep in mind the differences in display size, memory capacity, and input methods between handheld devices and larger computers, such as desktop computers.

The goal is to create applications that are easy for your end users to use and which take advantage of the strengths of the handheld device platform. Because of processing speed, memory limitations, and form factor differences, you should only include those user interface elements that are necessary for users to complete their job responsibilities.

Configuration Guidelines for Siebel Handheld

There are a few general guidelines you should bear in mind when configuring for the Siebel Handheld application. Use these guidelines when you design any new objects for the Siebel Handheld Client. This approach facilitates a logical separation of the Siebel Handheld Client user interface elements from the Siebel Web Client user interface elements.

- Identify User Activities

  To conserve memory (and thereby improve performance) and ease navigation, identify business processes that are required by end users and develop applications that support these processes. If more than one type of user needs a Siebel Handheld Client application, it is preferable to divide the application into multiple responsibilities rather than give all possible users access to all available screens and views. Responsibilities are fully configurable by the application developer.

- Limit the number of screens and views

  Limit the number of screens and views. Determine critical business processes that the handheld will support and only pick the views that are necessary and make sense based on business requirements.

- Limit the number of applets for each view

  Design each view so that it has one or, at most, two applets. Limiting the number of applets enhances performance, and enriches the user experience.

  NOTE: In some instances, Siebel Systems found it necessary to create a view with three applets in its handheld applications. For these views, a toggle button was added to the applet so that the user can easily navigate between the two child applets.

- Limit the number of columns and fields for each applet

  Design each applet so that it only contains columns and fields that are required for end-user tasks.

- Design applications that contain as few screen and view hierarchy levels as possible

  In a Web-based application, you may have views with many applets, and the user toggles between the applets. However, for handheld applications, create a larger number of views with fewer applets to allow users to quickly find information with a minimal amount of toggling.

- Design for the Handheld Screen

  Consider the following questions when designing your applets:

  - If you are using a list applet, how wide is that list applet going to be?
  - What are the most important fields and columns that a user needs to see at a glance before scrolling?
  - If you have a form applet that is a parent, for example, what fields do you really need in order to avoid scrolling?
  - Because there is less screen space on a handheld device than on a laptop or desktop, the most important data should be immediately visible.

About Creating Siebel Handheld Projects

The Siebel Handheld projects appear in the list of projects in Siebel Tools; when Project is selected in the Object Explorer, the list of projects is displayed in the Object List Editor.

Use a naming convention that allows you to easily identify applications, screens, views, and applets belonging to a particular Siebel Handheld application. This allows you to locate all the object definitions in a Siebel Handheld application by querying on the name in the Object List Editor. For example, all of the Siebel Handheld Client screens, views, applets, toolbars, and menus use either an SHCE prefix (for example, SHCE Sales Account List View) or a CE suffix. Use the Object List Editor to query for views that contain the prefix SHCE or the suffix CE; doing so displays all of the Siebel Handheld Client views.

If you create a new Siebel Handheld application, create a new suffix or prefix to identify the name of the application and each screen, view, and applet name. For example, you could use PPC_SHCE for an application.

Designing Screens and Views for Siebel Handheld

Each view in a Siebel Handheld application can display a maximum of two applets at a time, regardless of the number of applets in the view. If there are more than two applets in a view, the user can navigate to additional applets by toggling.

Screen Allocation

The amount of screen space available for applets is determined by the type of applets in the view. Two applets are stacked above one another. A parent form applet in a two-applet view displays multiple fields on a screen. Users use the scroll bar to navigate. The form applet dynamically resizes if there are fewer than five fields and, therefore, does not waste screen display space with empty lines. The maximum number of fields that are displayed at one time is configurable by setting the Max Parent Applet Size preference in the User Preferences dialog. See "Setting User Preferences in the Siebel Handheld Application" on page 110 for more information on this user preference.

Toggling Between Multiple-Applet Views

The Siebel Handheld Client application displays up to two applets at one time. If the view has only one applet, the applet takes up the entire display area. For views with two or more applets, the first two applets in the view are displayed, and the user toggles to see the other applets. The first applet is always displayed and the second applet changes as you toggle.

By default, the user toggles by choosing the View > Toggle menu item. In addition, it is recommended that you provide a toggle button as a visual cue to the end user that there are additional applets. Add a toggle button to each applet except the first applet. Identify the button with a Toggle caption and set methodInvoked to ToggleApplet.

Drill-down Only Views

Some views may be drill-down only views—that is, they can only be accessed by navigating from another view. These views should not be accessible through the Show drop-down list. However, when the end user navigates to the view, the view title appears in the Show drop-down list. To configure a drill-down only view, set the view title as you would for any other view and set the ScreenMenu property to FALSE. See *Configuring Siebel eBusiness Applications* for more information.

Applet Focus Behavior

When navigating between views, there may be instances when you need to override the default behavior for giving focus to an applet

The GotoView method is used to navigate from one view to another. A button control is added to the applet in the view you want to navigate from, the button's methodInvoked property is set to GotoView and the button's View property is set to the view that is to be created. When the GotoView method is executed, it builds the specified view. If the view includes a parent and child applet, GotoView gives focus to the child applet. This is the desired behavior in most instances when you are simply navigating from one view to another.

If the desired behavior is to navigate to a new view and, additionally, create a new record, then you must use the GotoViewNewRecord method. This method calls two methods; it calls GotoView, and then it calls NewRecord, which creates a new record in the new view.

In some instances the default behavior of these methods does not produce the intended behavior. For example, in the Orders view of the Service Requests screen, when you tap the Create New Order button, it takes you to the Order Details view, which contains a parent form applet (Service Request Order) and a child list applet (Service Order Entry Line Item). In this instance, when the Create New Order button's GotoViewNewRecord method is executed, you want a new order to be created. However, the default behavior is to give focus to the child applet rather than creating a new record in the parent applet. Therefore, you need to override the default behavior of GotoView with the control user property OverrideDefaultApplet, and set the value to the applet that you want to give focus. The valid values are 0 (parent) and 1 (child). For example, if you create a button labeled "Create Service Request Order," you would define user properties shown in Table 4:

Table 4.

Name	Value
View	SHCE Service Order Line Items View
OverrideDefaultApplet	0

Views with Associated Print Templates or Reports

Print templates are text files that you design and create for printing. After creating a print template, you associate it with an applet. When an end user chooses to print a view, the print template that is associated with the applet is automatically selected and used for printing. Follow these guidelines when creating print templates:

- Only one print template can be associated with an applet.

- The print template name for a particular display applet is registered in the Mail Template property in the Applet object associated with the applet.
- The template must be placed in the Templates directory.
- The template name that goes into the Mail Template property should not include a path name or extension. For example, if the full path of the template is \Program Files\Siebel Handheld\Templates\InvoiceTemplate.txt, you would enter only the root name InvoiceTemplate in the property field.
- The template file itself must have a .txt extension on the device.

For more information, see Appendix F, "Print Configuration Settings."

Configuring User Interface Elements in Siebel Handheld

When configuring user interface elements on the Siebel Handheld Client, also consider the processing speed and memory constraints of handheld devices. The constraint on processing speed affects the performance of a handheld device. The performance of a handheld device is also related to the number of screens and views downloaded to the handheld device. Because handheld devices are not meant to provide the same functionality as larger devices, such as laptops, the number of screens and views must be kept to a minimum on the handheld device.

Due to size constraints on handheld devices, the Siebel Handheld Client displays user interface elements differently from the Siebel Web Client. Consider these differences when configuring the Siebel Handheld Client application. For example, Siebel Handheld Client does not support an alphabetical index.

Configuring List Applets for the Handheld Client

You configure list applets and list columns for Siebel Handheld applications the same way you configure them for other Siebel applications.

Recommended Strategy for Configuring List Applets

The recommended strategy when configuring the Siebel Handheld Client is to use the list applets for record navigation and to rely on form applets to provide the record details.

The following are additional guidelines to follow when designing list applets:

- Configure specific list applets for your Siebel Handheld application, rather than reusing Siebel Web Client list applets.

- Remove all but the essential list columns. Because there is limited screen area to display list columns, omit all unnecessary columns to minimize horizontal scrolling.

  You may either remove the columns from the application or set the Show in List property on the column to FALSE.These two methods are different in the following ways. If the columns are removed from the application, these data won't be downloaded to the handheld device, which keeps the handheld data and a minimum and, in turn, optimizes synchronization performance. If the Show in List property on the column is set to FALSE, the data is still downloaded to the device but is not shown by default. This second approach, though without the synchronization optimization benefit, does allow convenience for the user who wants to customize visible columns. You should take these concerns into account when setting up users.
- Reorder the remaining list columns so that the most frequently used columns are furthest to the left.
- Reduce the default width of the list columns so that more columns can be viewed at one time.
- Use hyperlinks to ease navigation by enabling users to drill into a form applet.

These changes can minimize the amount of horizontal scrolling and column reordering that users must do. Limiting the number of list columns to those that are essential minimizes the amount of data downloaded to the device, resulting in faster synchronization times and more economical use of device memory.

NOTE: All required fields on form and list applets appear with an asterisk (*). If an administrator specifies that a field is required, the field appears with an asterisk in the user interface.

Use Siebel Tools to modify, or rearrange List Columns. For more information on the List Column options, see *Configuring Siebel eBusiness Applications*.

You may make columns available, but not visible by default, by setting the Show In List property of the column to FALSE. From the Siebel Handheld application, you can make the columns visible from the View > Columns Displayed menu option. In order for the change to be reflected in the application, you must compile the application and synchronize with the handheld device. In addition, you must delete the \Program Files\Siebel Handheld\siebel.ssf file on the handheld. If this file is not deleted, the change to the Show In List parameter is not reflected in the application.

Configuring Form Applets for the Handheld Client

The handheld uses a specialized algorithm to format and display form applets. Due to the display limitations on the device, only one pair of label and field controls are displayed on each row of the form, regardless of the layout shown within Siebel Tools.

Layout Sequence

When configuring for the handheld device, the Applet Web Template Items in the Applet Web Template determine the controls that appear on a form applet. The layout of form applets on the handheld device is determined by the HTML Sequence field set on control objects.

The HTML Sequence field determines the screen layout of a handheld device. Controls are ordered from top-to-bottom based on their HTML Sequence property values. Label and control pairs that do not fit on the same line as other label and control pairs wrap to the next line.

Labels

Keep field labels in applications short (approximately 12 characters or fewer, depending on the character width). Use abbreviations where possible. Labels that are too long are truncated.

Group Boxes

Group boxes are not supported and are not displayed in form applets, even if they are added in the Web Applet Designer. Therefore, reword the field labels to include group box information if necessary. For example, you may have two group boxes on the form, one labeled Ship To and another labeled Bill To. Each group box includes a field named Address. Because group boxes are not supported, the Ship To and Bill To labels are lost, and two fields with the identical Address label remain. Therefore, you must rename the Address labels "Ship To Addr" and "Bill To Addr," or some other label that distinguishes them.

Using Auto Pop-Up Lists in the Handheld Client

Sometimes when a user encounters a new view, he or she must perform an action, such as filling in a required field by selecting a value from a pop-up list. Rather than requiring the end user to tap the control to open the pop-up list, you can configure the view so that the pop-up list automatically opens when the end user gets to that view. To configure a pop-up list to open automatically, add the user property on the applet with Name set to AutoPopupField. Depending on the type of applet, this property is set differently:

- For list applets, set the AutoPopupField property to the Business Component field name.
- For form applets, set the AutoPopupField property to the name of the control.

About Home Page Applets in Siebel Handheld

To configure a Home Page applet, create an applet that has controls of HTML Type Button only. Use the following guidelines in creating your Home Page applets:

- Set the MethodInvoked property of these controls to GotoView. Then add a user property for the control, and set the Name parameter to "View" and set the Value parameter to the view name.
- Set the Caption field.
- Set the HTML Sequence field according to the order in which the buttons are laid out on the device. The buttons appear on the Home Page applet of the handheld device, laid out in rows of three buttons.
- Set the class property of the Applet to CSSFrameCEHome.

About Buttons in Handheld

Set the HTML Type field on buttons to Button, MiniButton, PushButton, or MiniButtonEditNew. All of these HTML Types map to the same button control on the handheld device.

Buttons with text labels on them are sized to the minimum width required to fit the text on the buttons.

NOTE: You cannot use scripting to augment the button functionality in handheld applications.

You may add buttons as long as the method invoked is supported by the class or superclass of the frame or business component. You may also remove buttons from an applet. Be careful when removing buttons because you may alter the behavior of your application in unintended ways.

About the Menu Bar in Handheld

The menu object definition in the Siebel repository that is implemented in handheld applications is named SHCE Generic. The default menu bar configuration for the Siebel Handheld Client includes the following menus: File, Edit, View, and Help. You may remove or rename menus on the menu bar, but you cannot add new menus. You may reorder the menu items by changing the Position property for the menu items. Generally, use the default menu bar configuration for all of your Siebel Handheld Client applications.

About Toolbars in Handheld

This section describes how to configure the toolbar for your application.

Table 6 shows the supported toolbar functions.

Table 6. Supported Toolbar Functions

Toolbar Functions
Back, Forward
New Record
New Query, Execute Query
Next Record, Previous Record, First Record, Last Record
Minimize/Maximize
Delete Record

The default toolbar can be configured in Siebel Tools by configuring the SHCE Main toolbar object. SHCE Main is the main toolbar that is downloaded to the handheld device. If a toolbar named SHCE Main does not exist in your repository, a default toolbar, *Main*, is downloaded instead.

The SHCE Main toolbar contains the default buttons for the device: Back, Forward, New Record, New Query, and Execute Query. Change the order of the buttons on the display by modifying the Position property of the toolbar items. Remove a toolbar button by deleting it or making it inactive.

You can add additional default buttons to the toolbar by creating toolbar items whose Command property matches the name of an active bitmap in the SHCE Command Icons bitmap category. Do not add bitmaps to the SHCE Command Icons bitmap category because only those commands, which are already provided, are supported on the device. No additional commands are supported. You can remove a bitmap or make a bitmap inactive if you do not want it to appear in the Customize Toolbar dialog box.

You can change the bitmap for a toolbar by reimporting the bitmap from the SHCE Command Icons bitmap category.

An end user can personalize the toolbar by selecting View > Toolbar.

For more information on toolbars, refer to *Configuring Siebel eBusiness Applications*.

About the Status Bar in Handheld

The status bar is located above the toolbar. The status bar displays the status of an applet with focus, including the applet title and record item count (for example, Contacts: 1 of 13).

About Hyperlinks in Handheld

Configuring a drilldown, or clicking a hyperlink or dynamic hyperlink in the Siebel Handheld Client, is performed the same way as with other Siebel clients. For more information on configuring drilldowns, see *Configuring Siebel eBusiness Applications*.

Preventing Synchronization Conflicts with Siebel Handheld

Because multiple users are synchronizing with the server, conflicts may occur when any single user synchronizes his handheld. For more information on how to configure your application to prevent synchronization conflicts, see Chapter 7, "Synchronization Conflict Handling and Recovery with Handheld."

Recommended Configuration Guidelines for Siebel Handheld

The Siebel Handheld Client application performs best if you use the following guidelines:

- Keep the number of views in your application to 30 or fewer.

- For optimal usability, limit each view to one or two applets.
- To minimize horizontal scrolling, limit the number of columns displayed in a list applet to no more than ten.
- There is no limit on the number of fields in form applets of single-applet views. However, to minimize scrolling, keep the number of fields to 20 or fewer.
- For each screen, create a view called My * or All * as a single list-applet view. For example, for the Activities screen, create a My Contacts view that has the Contacts list applet only.
- For each screen, create a single-applet More Info view. Create this applet as a form applet. For example, for the Contacts screen, create a More Info view that has the Contacts form applet only.
- Use a form applet for the parent for each parent-child view.
- In a multi-applet view, limit the number of fields in form applets to five or fewer. Add additional fields only if the field width is short—for example a check box field. Reduce the number of fields if the fields are multiline—for example, a Comments box that contains three lines of text.
- Do not include read-only check boxes in form applets. It is very difficult for users to discern that the check box is not editable.
- Limit the number of views within a screen to 12 or fewer so that the View drop-down list is not too long and unwieldy.
- Limit the number of screens to six or fewer so that the Screen drop-down list is not too long and unwieldy.
- Keep query names to about 15 characters or fewer, so that they fit in the Queries drop-down list. For example, North American Organization is too long for a query name, so you should change it to a shorter name, such as N. American Org. The number of characters is a general guide because characters vary in width (for example, W is wider than i).
- Keep screen names to about 15 characters or fewer, so that they fit in the Screen drop-down list. The number of characters is a general guide because characters vary in width.
- Keep view names to about 30 characters or fewer so that they fit in the View drop-down list. The number of characters is a general guide because characters vary in width.
- Limit the size of the dbfile.txt file to less than two megabytes (MB). The RDBMS on the handheld device is approximately three times the size of dbfile.txt. If the data files are so large that they cannot be imported into the database with the available memory, users cannot successfully synchronize their data.

Compiling the Siebel Handheld Application

Compiling the repository for the Siebel Handheld Client is identical to compiling on the Siebel Web Client *Using Siebel Tools*. Perform a full compilation the first time; subsequent compilations can be incremental, replacing only the projects that are affected. This assumes that you have organized all of your handheld object definitions in one project or a limited set of projects.

When you compile your application, a Siebel repository file (.srf) is created and put in the destination directory you specified during the compile procedure. Make this .srf file the source of repository information for the Siebel Handheld test client machine, defining all Siebel applications for that client, when you move it to your local \Siebel\objects directory.

It is strongly recommended that you make a backup of the existing .srf file in your local \Siebel\objects directory before overwriting it with the new one. That way, if you make an error or you want to revert to the original application, you have a backup that you can easily restore. For more information, see *Using Siebel Tools*.

Configuring Printing from the Siebel Handheld Application

Users may print from any view in the application. However, they are not necessarily printing what they see on their screen. They may print a portion of the data they view or data that is not viewable at the time.

A print template defines the document that is to be printed. After the template has been defined, it must be associated with an applet in a view.

This section provides information on the following topics:

- Defining documents
- Designing print applets
- Configuring applets for printing
- Creating print buttons
- Creating print templates

Defining Documents for Handheld

Defining documents for printing includes several steps:

- Determine the documents your users need to print.
- Determine the views from which they are most likely to print the documents.
- Lay out the document for printing.

Determining which documents users will need and the views from which they are most likely to print requires that you have a good understanding of the users' day-to-day work.

Whether the existing applets in a view include most of the required data or only a small portion is a secondary consideration. It is not likely that a printout of the existing applets, which are formatted for an electronic PDA interface, will provide an acceptable or usable printed document. In most instances, you need to create additional applets that are specifically used for printing data.

The printed document will be composed of several applets which are added to the view. The applets pull the data from the underlying business components. These applets, in turn, direct the data to the print templates discussed in Appendix E, "Print Tagging Language."

Designing Print Applets for Handheld

The print template references applets associated with the view and is how you specify what data appears in the printed document. For information on print templates, see "Creating Print Templates for the Handheld Application" on page 33. As you design your applets, you should be aware of the print specifications of the printers used in the field. Portable printers typically print on two-inch or four-inch wide paper. You need to design your applets so that the data fits within the limits of the paper width. Keep your documents simple so that they work with different sizes of paper. The following are some guidelines to use when designing your applets to accommodate the smaller paper sizes.

Form Applets

Data from only one business component can be displayed on each line in your document. When you design your form applets, keep in mind that you can display a maximum of two columns of data in form applets. You can specify that each column of data is preceded by an optional caption column. This means you can have up to four columns displayed in your document—two data columns and two caption columns. Alternatively, you may have no captions, and simply display one or two columns of data.

The ratio between caption and data columns is, respectively, 35 percent and 65 percent. This is a fixed relationship that cannot be customized in the template.

List Applets

When specifying the width of a column, you can either specify it with a unit of measurement or as a percentage of the total page width. For example, you can specify that the first column is 20 mm, and the second column is 40 mm. If the width of the paper you print to is narrower than 60 mm, the column widths automatically adjust to fit the printable width as a proportion of the specified width. Therefore, the first column will always be 33 percent, and the second column will be 67 percent of the paper width. The minimum width for a column is 8 mm, which includes a 3 mm gutter margin between columns.

You can specify any number of columns in your list applet. However, if the width of the column is less than 8 mm, the application ignores the column and does not print it.

On narrow paper widths, data from a field may not all fit on one line. Data that does not fit can be specified, in the Applet tag, to wrap to the next line and keep wrapping until the data in that field is completely displayed. The printable width of the page is equal to the paper width minus the left and right margins (PaperWidth – [LeftMargin + RightMargin]). These parameters are set in the setup.ini file. For more information on setting these parameters, see Appendix F, "Print Configuration Settings."

Configuring Applets for Printing for the Handheld Application

Configure print applets as you would any other applet using Siebel Tools. In addition, set the following properties for each applet in the view.

- Set the HTML Popup Dimension value to 0x0.

  The 0x0 setting hides the applet from the end user who should not see the applet that is used to generate the document. Exposing these applets would complicate a product that is tightly configured for an effective and efficient workflow on a small mobile device.

  NOTE: For compatibility with previous versions, Siebel Systems continues to support the name, Popup Dimension, for this property. However, it is recommended that you use HTML Popup Dimension.

- Set the name of the Mail Template to be the name of the print template file. For more information on the print template file, see "Creating Print Templates for the Handheld Application" on page 33. For more information on the Mail Template property, see "Views with Associated Print Templates or Reports" on page 23.

Configuring Print Buttons for the Handheld Application

While users can use the File > Print menu option to print a document, it is helpful to include a Print button on the applet to give users a visual reminder that it is possible to print from a particular view.

When you design your applets, keep the following in mind when deciding where to place the print button:

- Add the print button to the applet that is visible to the user. Do not add the print button to the print applet, which the user never sees.
- Consider what the desired behavior is when determining the placement of a print button.

  For example, in a parent-child view, you may want to add the print button to the parent applet to ensure that the print button is always enabled. This is not necessarily true if the print button is placed on the child list applet. If there are no items in the list applet, the print button is disabled, and the end user cannot print from that view. If you only want the end user to print when there are list items, then placing the button on the child list applet is appropriate.

To configure a print button

1. From Siebel Tools, add a control to the print applet and specify HTML Type = Button.
2. Set Method Invoked = Print.
3. Set the Display Name property of the button. Generally, this is set to Print.

Creating Print Templates for the Handheld Application

Once you have identified and created the necessary views, you are ready to create print templates. A print template is a text file that includes instructions for printing a document. It specifies the data to be printed, document layout options, and text formatting. These instructions are specified using a print tagging language that is described in Appendix E, "Print Tagging Language."

Configuring Business Object Filters in Siebel Handheld

You must configure the Business Object Filters for the Handheld application. These filters affect how data is synchronized between the handheld device and the Siebel database. For information about configuring the default Business Object Filters, see "Setting Business Object Filters for Siebel Handheld Users" on page 40.

Testing the Siebel Handheld Application

Before deploying your application to your end users, be sure to thoroughly test the application by synchronizing to a handheld device. The handheld configuration is downloaded to the device where you can test the functionality and verify that you have the desired behavior. Another equally important aspect of handheld testing is to check to see how much data is downloaded to the device. If too many records are downloaded, this increases the length of time it takes to synchronize the handheld and slows down the application performance. Check the server log file to see how many records are downloaded for each business component. You must set the LoggingLevels parameter to 25555 to capture this information in the log file.

For more information on the LoggingLevels parameter, see "Configuring Server Logging Levels" on page 74. For more information on the server log files, see "Direct Server Sync Log Files" on page 163 and "Companion Sync Log Files" on page 164.

4 Application Administration

This chapter includes the following topics:

Overview of Siebel Handheld Administration Screens

You Administer Siebel Handheld from a number of administration screens. You access the administration screens from the Site Map on the Siebel Mobile Web Client, and you access the Siebel server from the Siebel Connected Web Client.

The chapter is designed to show you how to administer Siebel Handheld. Key tasks are outlined that you can perform using the Mobile Administration screens. Your organization may follow a different task sequence according to its business requirements.

Following is a list of Administration screens you use when administering your handheld applications. You access these through either the Siebel Mobile Web Client, or through a direct server synchronization.

- **Application Administration:** This screen lists all the handheld applications available within your enterprise. From this view you can create new application settings and administer settings that have already been created. The following views are used by the synchronization engine to extract application definition and user data.
  - **Business Component Filters:** This view contains the synchronization filter settings for business components. If you wish to make other business components visible to your users, you change filter settings in this view.
  - **Business Object Filters:** This view is where you define data which is downloaded to the Handheld client upon synchronization.
  - **Settings:** This view allows you to define parameter settings for your application.
- **Barcode Administration:** This screen allows you to create new barcode definitions for your handheld applications. For more information on barcode administration, see *Siebel Sales Handheld Guide*.
- **Barcode Enabling:** This screen allows you to set which views in the Siebel Handheld application are enabled for barcode scanning. For more information on enabling barcode in your handheld application, see *Siebel Sales Handheld Guide*.
- **Conflict Administration:** This screen allows you access to all data conflict information created by handheld users who synchronize directly to the server. You can take action on particular conflicts and review audit trail information of all conflicts.
  - **Audit Trail:** This view, when enabled, allow you to obtain information about action taken on a particular data conflict.
  - **Business Component Detail:** This setting allows you to see business component information associated with a particular data conflict.
  - **Error Details:** This view allows you to get detailed information about specific data conflicts. You are also able to take particular action about any given conflict.
  - **Field Value:** This view shows the details of a conflict. This provides a more detailed view than the Error Details view.

- **Server Component Administration:** This screen allows you to manage server-level settings for synchronization components. These settings are used by the synchronization engine to extract application definition and user data.
- **Session Administration:** This screen contains a detailed information about user synchronization sessions. Use this view to monitor and investigate handheld user synchronization activities.
- **User Administration:** This screen allows you to manage user-specific settings, such as business object and business components filters, that filter the data that display to the user. The data sets contained in these user screens are used by the synchronization engine to extract application definitions and user data. The Siebel Handheld application is populated by these data when the user performs synchronization.
  - **User Business Component Filters:** This setting contains user-specific sync filter directives for business components.
  - **User Business Object Filters:** These settings contain user-specific queries for business objects. In this setting, you define a data set that is downloaded, at the time of sync, to the Handheld client.
  - **User Settings:** This setting allows you to control user-specific settings which override component and application settings.

Setting Up Users in Siebel Handheld

To set up users on a Siebel Handheld application, perform the following tasks:

- "Assigning User Responsibilities to Siebel Handheld Users" on page 37
- "Administering Siebel Handheld Views" on page 37
- "Setting Business Component Filters for Siebel Handheld Users" on page 39
- "Setting Business Object Filters for Siebel Handheld Users" on page 40

Assigning User Responsibilities to Siebel Handheld Users

You must create user accounts and assign responsibilities and passwords for each handheld user. The steps are the same as those for creating user accounts, assigning responsibilities and passwords for the Siebel Web Client. See *Applications Administration Guide* for more information on this topic.

Administering Siebel Handheld Views

There are two administrative tasks associated with handheld views:

- If you have added a new view or changed the name of a view, you must add the view or update the name of the view in the Application Administration screen.

- Add the default views in the Application Administration screens.

Adding Views to the Handheld Application

You add new views to the Siebel Handheld application from the Application Administration screen in any Siebel Web Client application. You must be logged on as an administrator. (If you are using the Siebel Mobile Web Client to log in as an administrator, you must also specify the /editseeddata parameter.)

To add new views to Siebel Handheld

1. Launch the Web Client application that uses the same database which the Siebel Handheld application will synchronize to (or will use to synchronize to).

   NOTE: If you launch the application from a mobile Web client, specify the /editseeddata parameter.

2. Choose Navigate > Site Map > Application Administration> Views.
3. Add the new views.
4. In the Responsibilities view, associate each view with the appropriate handheld responsibility.
5. Add appropriate users to the responsibility.

   NOTE: For more detailed instructions on adding views and associating views with responsibilities, see *Applications Administration Guide*.

Specifying Views for the Handheld Application

The Siebel Handheld application uses a small subset of views in the Siebel enterprise application. Because there are memory resource constraints on the handheld devices, it is recommended that you extract only those views that are used on the handheld.

There are two methods for specifying which views are extracted to the handheld. The first method is to compile an .srf of only those views that are relevant to the Siebel Handheld application. Or, alternatively, you may specify the handheld views in Administration-Mobile > Settings view.

The views are specified in the Administration-Mobile > Settings view. By default, all views for the Siebel Handheld application are listed here. Edit the list so that only those views which your application is using appear in the list.

The combination of the .srf file, the specified settings in the Settings view, and the user's responsibility determines which views are extracted. Siebel Server uses the information in the Settings view and the .srf file during synchronization in the following way:

- If no default views are specified, all the views in the .srf are extracted during synchronization. If the .srf contains only the handheld-specific views, then this is the same as listing each handheld view in the handheld configuration file.

- If default views are specified Application-Administration > Settings view, then only those views are extracted. If there are some views that do not match the views in the .srf file, these are ignored.
- If default views are specified in the Application-Administration > Settings view, but *none* of the views match those listed in the .srf file, then all the views in the .srf are extracted.

Setting Business Component Filters for Siebel Handheld Users

The Business Components View in the Application Administration screen contains the sync filter settings for business components. If you wish to add or remove business component filter settings for users, you do so in this view.

To add a business component filter setting

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Application Administration.
2. In the Application Administration screen, select the appropriate application, then click the Business Component view tab.
3. Click New, then enter the required information.

   Some fields in the Business Component view are described in the following table:

Field	Comments
Owner	A text box. Enter the Handheld application to which the business component will be associated. For example, Siebel <Application name> for CE.
Business Component	A text box. Enter the business component name. For example, Period.
Name	A text box. Enter the business component filter name. For example, Filter 1.
Query	A text box. Enter the syntax for the query. For example, [Start Date] <=Today()

To remove a business component filter setting

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Application Administration.
2. In the Application Administration screen, select the appropriate application, then click the Business Component Filters view tab.
3. Select the filter setting record wish to remove.
4. From the Business Component Filters menu, choose Delete Record.

Setting Business Object Filters for Siebel Handheld Users

The Business Components View in the Application Administration screen contains the sync filter settings for business objects. If you wish to add or remove business object filter settings for users, you do so in this view.

To add a business object filter setting

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile.
2. In the Application Administration screen, select the appropriate application, and then click the Business Object Filters view tab.
3. Click New, and then enter the required information.
4. The fields in the Business Object Filters view are described in the following table:

Field	Comments
Owner	A text box. Enter the Handheld application to which the business component will be associated. For example, Siebel <Application Name> for CE.
Default	Check the box to allow the filter to work by default.
Business Object	A text box. Enter the business object name. For example, Account.
Name	A text box. Enter the business object filter name. For example, BOFilter 1.
Query	A text box. Enter the syntax for the query. For example, All.

To remove a business object filter setting

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Application Administration.
2. In the Application Administration screen, select the appropriate application, and then click the Business Object Filters view tab.
3. Select the filter setting record wish to remove.
4. From the Business Object Filters menu, choose Delete Record.

About Monitoring Synchronization Sessions for Siebel Handheld

You monitor Handheld application synchronization sessions and synchronization conflicts from a number of screens within the Siebel Mobile Web Client, or if you are using DSS or DSSvP you do so directly on the Siebel server. Every time a user synchronizes with the server, a record is made.

The following topics relate to synchronization monitoring.

Monitoring Synchronization Sessions for Siebel Handheld

The Session Administration > Sync Status screen allows you to gather all data related to each sync session a user performs. The Sync Status screen contains two views: the Sync Sessions view, and the Extraction Info view. These views allow you to do the following:

- Sync Status Screen: Allows you to monitor each user sync session, and includes such data as: sync status, the date, type of sync and so on.
- Sync Sessions View: Allows you to gather further information on the status of each sync session, including conflicts during the sync, the size of the data extracted, and so on.
- Extraction Info View: Allows you a detailed look at all data extracted during the sync session, including business component information, the number of records extracted, the filters applied and so on.

To monitor synchronization sessions

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Session Administration.

   The Sync Status screen appears, with two subordinate views, Sync Sessions and Extraction Info.

Obtaining Error Details from Siebel Handheld Synchronization Sessions

This setting allows you to obtain details of sync errors that occur during individual sync sessions.

To obtain synchronization error details

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Conflict Administration.

   The Transactions screen appears.

2. In the Transactions screen, select the appropriate record, and then click the Error Details view tab.

3. In the Error Details list, select or query for the desired record.

Obtaining Business Component Information from Siebel Handheld Synchronization Conflicts

The Transactions view on the Conflict Administration screen allows you to obtain business component information related to synchronization errors that occur during individual sync sessions.

To obtain business component error details

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Conflict Administration.

   The Transactions screen appears.

2. In the Transactions screen, select the appropriate record, and then click the Business Components view tab.

Obtaining an Audit Trail for Siebel Handheld Synchronization Sessions

The Transactions view on the Conflict Administration screen allows you to obtain audit trail information for an action that was taken against a particular transaction.

To obtain synchronization error details

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Conflict Administration.

   The Transactions screen appears.

2. In the Transactions screen, select the appropriate record, and then click the Audit view tab.

Acting Upon Synchronization Errors in Siebel Handheld

Upon reviewing a synchronization error, you can act upon it by performing one of three different actions.

To act upon handheld sync transaction errors

1. From the application-level menu, select Navigate > Site Map > Administration-Mobile > Conflict Administration.

   The Transactions list appears. The transaction buttons are described in the following table:

Action	Result
Reapply	Reapplies the selected transaction with values listed in the view (or Field Value view).
Export	Exports the content of the transaction into a text file.
Ignore	Accepts the current status and does not act upon the error.

2. Click either Reapply, Export, or Ignore depending on your needs.

Administering Server Components for Siebel Handheld

You administer server components from the Administration-Mobile > Server Component screen. The component displayed is based on the application selected in the Application Administration view. The Server Component Administration screen is used for overriding application settings at the component level on a specific server. This screen is where you define server level settings, which override settings defined at the application level. The data entered here is used by the synchronization engine when the user synchronizes with the server.

The Server Component screen contains a list of server components associated with the application that was selected in the Application Administration screen. For each server component, the Settings view details the associated settings.

Process for Administering Siebel Pharma Handheld

Siebel administrators should see *Siebel Life Sciences Guide* for detailed information about managing samples. The following sections cover only those administration procedures that apply to the handheld version of Pharma.

The following sections cover the designated topics and procedures:

Managing Samples Records in Pharma Handheld

Administrators can manage samples inventory using either Siebel Pharma Handheld or Siebel Life Sciences, but should not use both. In order to keep samples inventories in sync, end users should be prevented from submitting a samples transaction on the server when the same record is still editable on their handheld device.

When a user submits a record, the status changes to Submitted and it becomes read-only, meaning no additional operations are allowed on the record. By updating a user property and writing two small Visual Basic scripts, you can specify that synchronized records are also read-only.

- First, the administrator changes the value of the user property "Update Status To Synchronized" to Y.

  Making this change invokes the UpdateStatusToSynchronized method on the Sample Txn business component.

- Then, the administrator writes a small Visual Basic script for this method to change the status on the Sample Txn to "Synchronized."
- Finally, the administrator writes another Visual Basic script to specify that the record becomes read-only when its status changes to "Synchronized."

  This prevents users from accidentally submitting the sample transactions on the server while the same record is still editable on their handheld device.

Administering Disclaimer Text in Siebel Pharma Handheld

Your legal department may require that a change be made to the disclaimer text that appears below the signature area on the Siebel Signature Capture display of Siebel PharmaPharma Handheld. Only one disclaimer can be active at a time.

To edit the disclaimer text

1. From the application–level menu, select View >Site Map > Samples Administration > Disclaimer Administration.

   The Disclaimer Administration view appears.

2. In the Disclaimers list, add a record.
3. Enter the new text in the Disclaimer field.

   The Status, Start Date, End Date, Created By, and Created fields are read-only.

4. Click Submit.

   The submitted disclaimer becomes active, and the status and date fields are updated. When sales representatives next synchronize, the disclaimer on their Pharma Handhelds is updated.

Configuring Distributor Names in Siebel Pharma Handheld

The name of the company appears by default on the Siebel Signature Capture display. You may need to change this name if, for example, there is a name change as a result of a merger between two companies.

In addition, a company may use a contract sales force to distribute some of its products. You can use the Distributor by Employee feature to customize the display to show the name of the contract distributor for the contract sales representatives and to show the name of the primary pharmaceutical company for its sales representatives.

To change the distributor name in the Siebel Signature Capture display

1. From the application–level menu, choose Navigate > Site Map > Application Administration > System Preferences.

   The System Preferences Administration view appears.

2. Find the Company Name system preference and change the value to the new company name.

   When the sales reps next synchronize their PDAs, the new company name is downloaded to their Siebel Pharma Handheld applications.

3. From the application–level menu, select Navigate > Site Map > User Administration > Employees.

   The Employees Administration view appears.

4. Select the employee from the Employees list.
5. In the More Info view, enter the account of the distributor in the External Account field. (The external account must already have been set up as an account.)

   If the External Account field is blank for an employee, the company name set in the System Preference Administration view, set in Step 2, is used.

6. Repeat Step 4 and Step 5 for each employee of the distributor.

Performing a Signature Audit in Siebel Pharma Handheld

The Siebel administrator is typically assigned responsibility for checking the validity of signatures recorded electronically. This is done using the Verify button in the Signature Audit Administration view. For more information about the logic behind the Verify button, see "Validation Logic of the Sign and Submit Buttons in Siebel Pharma Handheld" on page 51.

As the samples administrator, you should check Signature Audit Administration regularly and perform signature capture verification to make sure that signatures collected from each contact are consistent.

Users may see an error message if Signature Audit Administration tasks are performed on a desktop computer running multiple versions of Siebel Pharma. Make sure that only the latest version of Siebel Pharma is running, and uninstall all previous versions.

To verify signatures

1. From the application–level menu, select Navigate > Site Map > Samples Administration > Signature Audit Administration.
2. In the Sample Signatures list, create a query.
3. Visually compare the signatures for consistency.

Contact names are retained even if the Contact record is deleted. If a Contact record is deleted from Navigate > Site Map > User Administration > Persons, the contact name is removed from all applets with reference to that contact's name in the S_CONTACT table. Therefore, if the Contact Id is deleted from the S_ACT_SIGN table, the last name and first name fields appear empty in the Sample Signature form in the Signature Audit Administration view.

However, the Contact Full name is not affected by deleting a contact record because it is stored in a text field in the same table. In the Signatures applet, the control above the signature displays the full name of the contact at the time of the call (that is, no reference to the S_CONTACT table). Because the contact's name is not removed from this applet, a permanent and complete electronic record of calls captured with signatures recorded electronically is maintained.

Verifying Signature Capture in Siebel Pharma Handheld

Signature capture verification compares information captured at the time of signature (the signature event string) with the current call information (the current call string) to assess if the call information has been modified. Reasons the call information might be modified include:

- Re-creation of a sample receipt
- Sample adjustments
- Fraud

Signature capture verification is launched from the Verify button on the Signature Audit Administration view. For an example of signature audit administration, see "Performing a Signature Audit in Siebel Pharma Handheld" on page 46.

The Signature Key

When the signature is first created, a signature key is calculated from the signature and stored. When the signature is verified, this key is recalculated from the current signature and compared to the stored key. If the two keys do not match, the signature key checksum fails. A failed checksum indicates that the current signature has been altered since the time of capture. If the checksum fails, the signature is not displayed in the Signature Audit Administration view.

Outcomes of Checksums

The signature capture verification status (Passed, Adjusted, or Failed) is determined by the outcome of checksums: user property checksums, which compare text saved at the time of the signature capture with fields in the current call record and the signature key checksum. See Table 7 on page 47 for examples of checksum combinations.

NOTE: You may need to expose the Verification Status field using Siebel Tools. This is a configuration change that may need to be performed before implementation of Siebel Pharma Handheld. For more information, see the release notes documentation for Siebel Pharma Handheld.

Each user property checksum returns results for a different group of fields involved in the signature capture.

Table 7. Checksum Examples

If...	Then the verification status is set to...
All checksums pass	Passed
Any of the checksums fail	Failed
One or two checksums return Adjusted and the others pass	Adjusted

User Properties for Signature Capture Verification

In the default installation of Pharma Handheld, there are three user properties that set fields for the checksums (Checksum Field: 1, Checksum Field: 2, and Checksum Field: 3). These user properties and their default configurations are described in the following sections.

Using Siebel Tools, you can create additional checksums. For more information, see "Creating New Checksum Field User Properties" on page 51.

Checksum Field: 1—Signature Header Text

This checksum compares the signature header text recorded at time of signature with the similar string in the current call record. The three possible outcomes (Passed, Adjusted, and Failed) for this checksum depend upon the signature header text strings and the (signature) Status field.

Table 8. Checksum Status for Signature Header Text

The Checksum Status is...	If the signature event string...
Passed	Equals the current call string.
Adjusted	Is different from the current call string and the (signature) Status is Inactive.
Failed	Is different from the current call string and the (signature) Status is Active.

Checksum Field: 2—Signature Body Text

This checksum compares the signature body text recorded at the time of signature with the similar string in the current call information.

The outcome (Passed and Adjusted) for this checksum depends on whether the signature body text strings match.

Table 9. Checksum Status for Signature Body Text

The Checksum Status is...	If the signature event string...
Passed	Equals the current call string.
Adjusted	Is different from the current call string.

Checksum Field: 3—Sales Representative's Row Number

This checksum compares the identity of the call creator at time of signature with the identity of the current creator of the call. The employee's row number is used to identify the call creator.

An employee's row number can be obtained by selecting the employee in the Employees view (Navigate > Site Map > User Administration > Employees) and then selecting Help > About Record. The Employee's Row # appears in the About Record dialog box.

The outcome (Passed and Failed) for this checksum depends on whether the sales representative name text strings match.

Table 10. Checksum Status for Sales Representative's Row

The Checksum Status is...	If the signature event string...
Passed	Equals the current call string.
Failed	Is different from the current call string.

Configuring User Properties for Closing Inventory Periods in Siebel Pharma Handheld

The recommended process for closing an inventory period is:

1. Synchronize the handheld device with Siebel server immediately before closing the period.
2. Close the inventory period.
3. Synchronize the handheld device with Siebel server a second time, immediately after closing the inventory period.

End users must synchronize the handheld with Siebel server before closing the inventory period because there may be calls on the handheld that have not yet been synchronized with Siebel server. Only the current active period is downloaded to the handheld device. Therefore, after the current inventory period is closed, they must synchronize a second time in order to bring down the next active period.

To enforce this procedure, the inventory period closure logic has been added. When it is enabled, this logic goes into effect during the inventory period reconciliation. It ensures that the end user synchronizes his handheld with Siebel server before closing the inventory period, and it requires the end user to submit all outstanding calls (that is, when an electronic signature has been captured, but the call has not been submitted).

The following user properties have been created on the Pharma Inventory Period business component to support the inventory period closure logic:

- **Inventory Closure Validation.** The default value is N (No), and the Inventory Period Closure logic is not triggered. To activate the Inventory Period Closure logic, set this parameter to Y (Yes). Setting the parameter to Y forces the end user to synchronize the handheld with Siebel server prior to closing the inventory period.

- **Acceptable Period to Complete Synchronization.** The default value is 30 (minutes). When Inventory Closure Validation is set to Y, the Acceptable Period to Complete Synchronization user property determines a grace period during which the end user must synchronize the handheld before closing the inventory period. If the end user does not synchronize within the time period, he will not be permitted to close the inventory period.

  If Inventory Closure Validation is enabled and the Acceptable Period to Complete Synchronization user property is not created, the default value of 30 minutes is used.

After the end user successfully closes the inventory period, he sees a message that prompts him to synchronize the handheld device with Siebel server. Note, however, this step is not enforced. However, if the end user fails to synchronize a second time, the handheld device will not receive the current period, and this can potentially cause synchronization errors the next time the end user synchronizes.

NOTE: The same logic is enforced during inventory reconciliation.

Configuring User Properties for Signature Capture Verification in Siebel Pharma Handheld

Use Siebel Tools to edit the following user properties:

- Turn checksums on or off
- Add additional fields to checksums
- Remove fields from checksums
- Create new checksums of the same form as Checksum Field: 3

Editing Checksum Field: 1—Signature Header Text

This checksum compares the Signature Header Text field in the Pharma Call Signature business component with the concatenated text string of the Header Text Fields (Header Text Field: 1 to Header Text Field: 7) in the Pharma Professional Call business component.

In Siebel Tools, you can edit these user properties by adding, deleting, or editing the Header Text Fields in the Pharma Professional Call business component. The maximum allowed number of Header Text Fields is 20 (Header Text Field: 20).

Editing Checksum Field: 2—Signature Body Text

This checksum compares the signature body text in the Pharma Call Signature business component with the concatenated text string of the Signature Body Text Fields (Signature Body Text Field: 1 to Signature Body Text Field: 3) in the Pharma Call Sample Dropped business component.

In Siebel Tools, you can edit these user properties by adding, deleting, or editing the Signature Body Text Fields in the Pharma Call Sample Dropped Call business component. The maximum allowed number of Signature Body Text Fields is 10 (Signature Body Text Field: 10).

Editing Checksum Field: 3—Sales Representative's Row Number

This checksum compares the "Created by" field of the Pharma Call Signature business component with the "Created by" field of the Pharma Professional Call business component.

In Siebel Tools, you can edit these user properties by replacing "Created by" with any field found in both business components.

Creating New Checksum Field User Properties

In Siebel Tools, you can create user properties for up to 25 checksums that compare fields in the Pharma Call Signature business component with fields in the Pharma Professional Call business component.

Use Checksum Field: 3 as a template to create new user properties with the same format.

Name the new user property Checksum Field: *n*, where *n* is less than or equal to 25. See Table 11.

Table 11. Checksum Field User Properties

User Property Name	Value
Checksum Field: 3	"Created by", "Created by"
Checksum Field: *n*	*"field in Pharma Call Signature", "field in Pharma Professional Call"*

Validation Logic of the Sign and Submit Buttons in Siebel Pharma Handheld

You can edit the validation logic for the Signature and Submit buttons for professional and account calls.

Default Validation Logic Flowcharts

The default validation logic for the Signature and Submit buttons is shown in the following flowcharts:

- Signature button, Figure 1 on page 52
- Professional Call Submit button, Figure 2 on page 53
- Account Call Submit button, Figure 3 on page 54

Not all implementations of Pharma Handheld require the extensive validation as shown in the following flowcharts. Before most validation steps, the procedure consults a user property to determine if the field should be used during the validation. For example, if it is not necessary to validate the License Number field, the user property Validate License Number is set to false. The Signature button validation then skips the validation question "Is the License Number field populated?".

User Properties that can be used to alter validation logic are described in "Changing Validation Logic by Editing User Properties" on page 54.

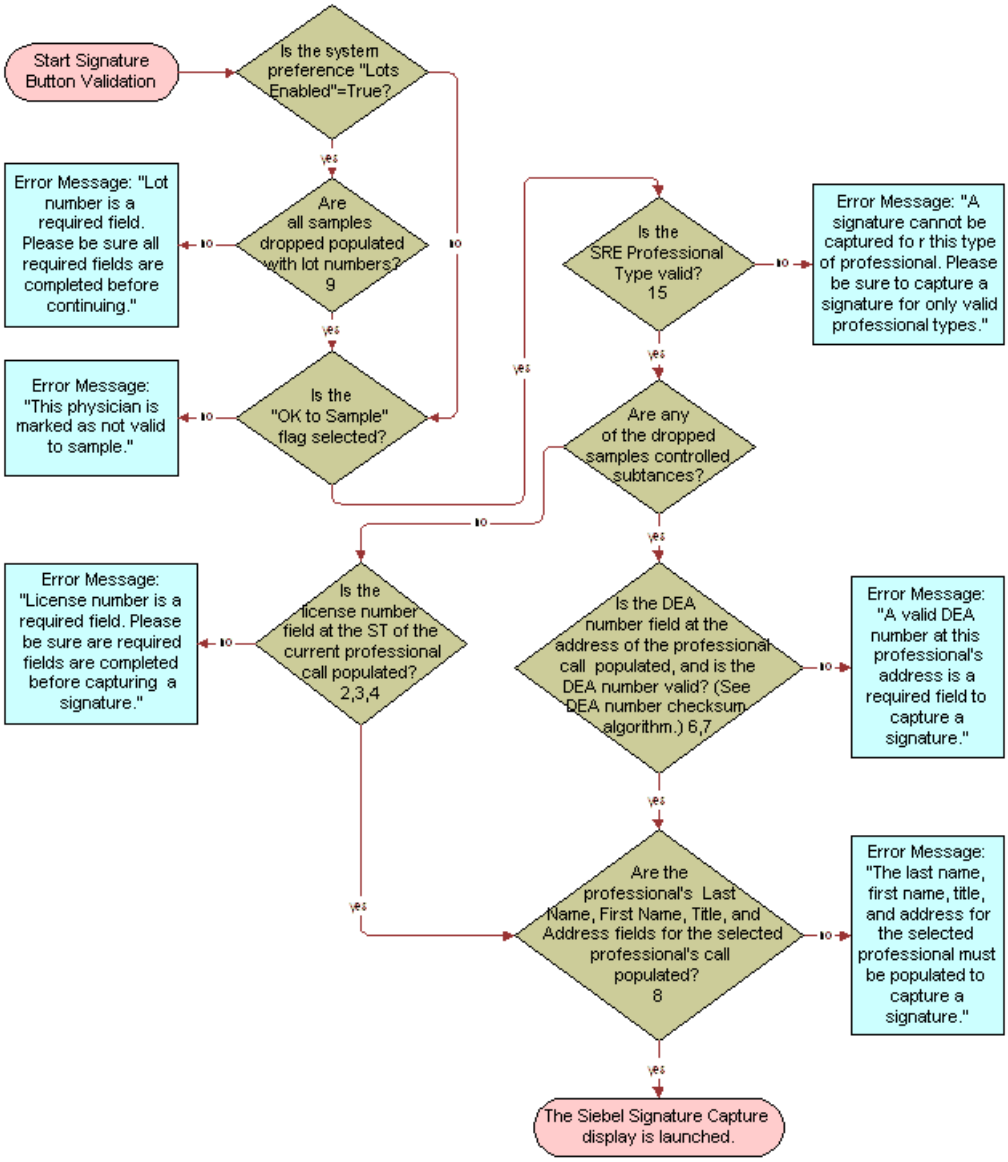


Figure 1. Default Validation Logic Flowchart for Signature Button

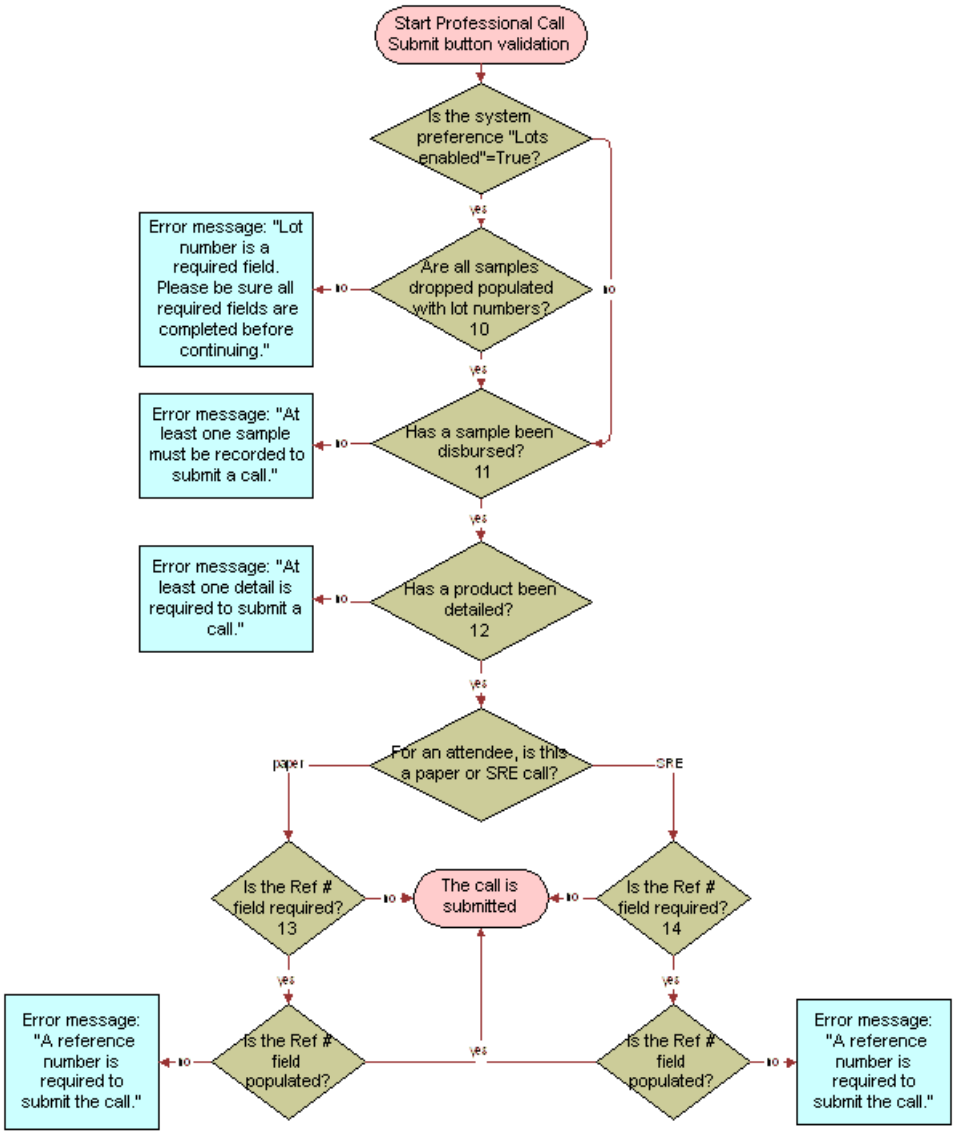
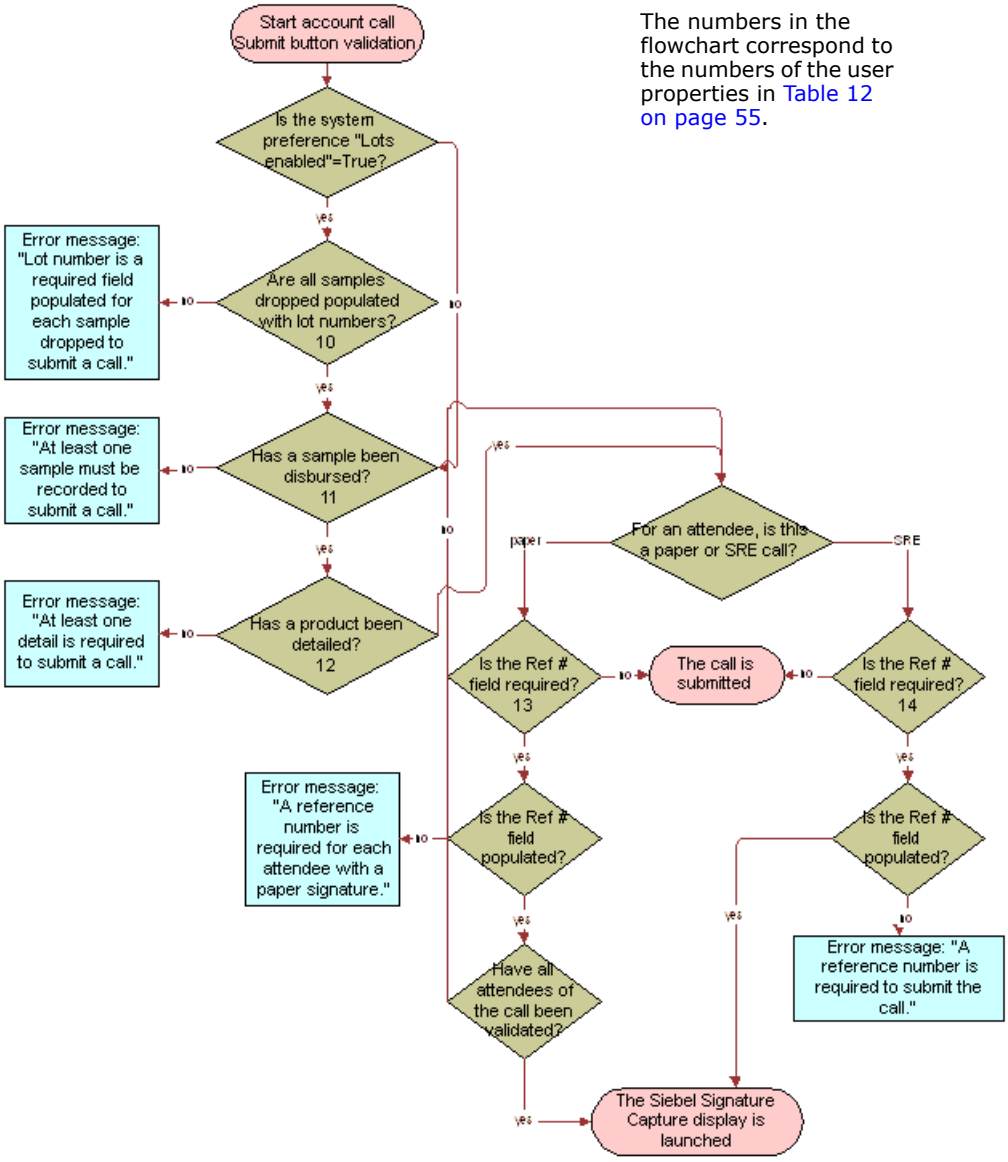


Figure 2. Default Validation Logic Flowchart for Professional Call Submit Button



The numbers in the flowchart correspond to the numbers of the user properties in Table 12 on page 55.

Figure 3. Default Validation Logic Flowchart for Account Call Submit Button

Changing Validation Logic by Editing User Properties

Validation logic uses user properties to determine whether a field should be used during validation.

Table 12 explains the user properties you can use to alter the validation logic of the Sign, Professional Call Submit, and Account Call Submit buttons.

Table 12. User Properties for Setting Sign and Submit Button Logic

Flowchart Reference	User Property	Action if Y...	Action if N...	Default Value
1	"Validate OK to Sample" Use to enforce confirmation that the OK to Sample flag is selected before launching the Signature Capture display.	Enforce the OK to Sample validation.	Skip the OK to Sample validation.	Y
2	"Validate License Number" Use to enforce validation that the License # is populated before launching the Signature Capture display.	Enforce the License Number validation.	Skip the License Number validation.	Y
3	"Validate License Number Status" Use to enforce validation that the License # status = Active before launching the Signature Capture display.	Enforce the License Number Status validation.	Skip the License Number Status validation.	N
4	"Validate License Number Expiration" Use to enforce validation that the Expiration date on the License # is later than Today before launching the Signature Capture display.	Enforce the License Number Expiration validation.	Skip the License Number Expiration validation.	N

Table 12. User Properties for Setting Sign and Submit Button Logic

Flowchart Reference	User Property	Action if Y...	Action if N...	Default Value
N/A	"Validate Address DEA Number" Use to enforce that the DEA number is valid (DEA # checksum algorithm) at the time the value is entered into the DEA # field on the Address child applet (on the handheld). This user property applies to both the laptop and the Siebel Handheld applications.	Enforce the Address DEA Number validation (field is populated *and* number is valid).	Skip the Address DEA Number validation (field is populated *and* number is valid).	Y
6	"Validate Signature DEA Number" Use to enforce that the DEA number is populated and that the value is valid (DEA # checksum algorithm) before launching the Signature Capture display.	Enforce the DEA Number validation in the Signature button (field is populated *and* number is valid).	Skip the DEA Number validation in the Signature button (DEA number is valid per the checksum routing *and* the field is populated).	Y
7	"Validate DEA Number Expiration" Use to enforce validation that the Expiration date on the DEA is later than Today before launching the Signature Capture display.	Enforce the DEA Number Expiration validation in the Signature button (expiration date is later than today).	Skip the DEA Number Expiration validation in the Signature button (expiration date is later than today).	N
8	"Validate Professional Profile" Use to validate if the professional's Last Name, First Name, Title, and Address fields are populated before launching the Signature Capture display.	Enforce the Professional Profile validation.	Skip the Professional Profile validation.	Y

Table 12. User Properties for Setting Sign and Submit Button Logic

Flowchart Reference	User Property	Action if Y...	Action if N...	Default Value
9	"Validate Sign Lot Number" Use to validate if the lot number is populated on launching the Signature Capture display.	Enforce the Signature button Lot Number validation.	Skip the Signature button Lot Number validation.	N
10	"Validate Submit Lot Number" Use to validate if the lot number is populated on submitting a call.	Enforce the Submit button Lot Number validation.	Skip the Submit button Lot Number validation.	Y
11	"Sample Disbursed Required" Use to require that at least one sample be disbursed before submitting the call.	Enforce that at least one sample be disbursed.	Do not require at least one sample disbursed.	N
12	"Must Detail Products" Use to require that at least one product be detailed before submitting the call.	Enforce that at least one product be detailed.	Do not require at least one product detailed.	N
13	"Paper Reference Number Required" Use to require a sample reference number for calls with paper signatures.	Enforce the Paper Reference Number required validation.	Skip the Paper Reference Number required validation.	Y
14	"SRE Reference Number Required" Use to require a sample reference number for signature recorded electronically (SRE) calls.	Enforce the SRE Reference Number required validation.	Skip the SRE Reference Number required validation. (If the Ref # field is blank, it will be populated with the Row ID of the call.)	N
15	"SRE Professional Type" Use to require that the professional type be valid for signature recorded electronically (SRE) calls.	The professional type (for example, "Physician") must match the value of this user property. If the value is null, all professional types are valid.		null

Table 12. User Properties for Setting Sign and Submit Button Logic

Flowchart Reference	User Property	Action if Y...	Action if N...	Default Value
N/A	Submit Confirmation Note: If this user property does not exist (for example, in the standard Siebel Pharma application), behavior is equivalent to "Submit Confirmation" = Y.	Confirmation message appears when the Submit button is tapped.	No confirmation message appears when Submit button is tapped.	Y
N/A	Submit On Sign OK Note: If this user property does not exist (for example, in the standard Siebel Pharma application), behavior is equivalent to "Submit On Sign OK" = N.	Tapping the OK button on the Siebel Signature Capture display for new professional calls invokes the submit method. The submit method is not invoked for account calls nor for re–created professional calls.	Tapping the OK button on the Siebel Signature Capture display closes the display. To submit the call, tap the Submit button.	N

Validating the DEA Number in Siebel Pharma Handheld

In the U.S., the DEA number is a federally authorized number for physicians at a specific address.

In Pharma Handheld, the DEA number is stored at the address level for each physician. Pharma Handheld can confirm that a valid DEA number is populated at the selected address for a professional call. Depending on how your Pharma Handheld application is configured, the valid DEA number check can be performed at the time of entering the DEA number, upon launching the Siebel Signature Capture display, or both.

If:

- The product dropped is a controlled substance *and*
- The user property "Validate Address DEA Number" or "Validate Signature DEA Number" is true

then Pharma Handheld checks the validity of the DEA number by executing the algorithm described in Table 13.

in

Table 13. The DEA Number Checksum Algorithm

Step	Algorithm	Example
1	The first two characters must be uppercase letters.	*BB*1388568
2	Sum the first, third, and fifth digits.	1 + 8 + 5 = *14*
3	Sum the second, fourth, and sixth digits.	3 + 8 + 6= *17*
4	Double the number obtained in step	2 × 17 = *34*
5	Sum the numbers from steps 2 and 4.	14 + 34 = *48*
6	If the last digit of the DEA number is the same as the last digit of the number obtained in step 5, the DEA number is considered valid.	The last digit of BB1388568 and 48 is the same, "8". This checksum indicates that the DEA number is valid.

Preparing Receipts for Calls in Siebel Pharma Handheld

As the Siebel administrator, you may be asked to print receipts for sample drops to a physician. From the Sample Event Administration view, you generate a list of sample drops and print receipts using the Sample Receipt report.

To print receipts for samples dropped

1. From the application-level menu, select Navigate > Site Map > Samples Administration > Sample Event Administration.
2. In the Sample Events list, create a query.
3. From the application-level menu, select Navigate > Site Map > Reports to open the Sample Events dialog box.
4. From the Select a Report drop–down list, select Sample Receipts and click Run.
5. To print the receipt, click the Print button in the Siebel Report Viewer window.

5 Data Filtering

The following topics are covered in this chapter:

Developing Data Filters for Handheld

The following general steps for are recommended for developing Handheld synchronization filters.

- Identify the screens and views of your application. Then identify the business components that are required to support each screen and view, noting the areas where each business component occurs. For example, identify the form, list, or pick applets that are based on each business component.
- Within Siebel Tools, establish the base parent-child relationships and any reverse relationships at the component level.
- Review the business components that occur in picklists and consider creating default sync filter declarations for those that will cause large numbers of records to synchronize to the device. These declarations are created and maintained in the Mobile Administration screens.
- For each business component, determine whether it is possible to apply a search specification to all instances of the business component within the Siebel Handheld application. Develop a set of suitable Query by Example (QBE) declarations in the Mobile Administration screens. Common examples of business components that are suitable for global QBEs include:
  - Employees (for large organizations)
  - Activities (for example, filter for current Activities, Activities of only certain kinds)
  - Accounts (for example, by geography)
  - Products (for example, active, orderable products)
  - Orders (for example, open, closed in last three months)
- Create appropriate business object synchronization filters for each business object and make sure that each business object includes a default filter. Default filters make sure that users avoid accidental download of an excessive number of records.

General and Default Business Object Filters

There are two types of synchronization filters in Siebel Handheld—general and default filters.

- **General sync filters.** Filters users select to specify the records users want downloaded to their Siebel Handheld application.
- **Default sync filters.** Filters displayed by default the first time the user taps the Select Filters button on the Handheld Sync user interface or if the user synchronizes without first selecting a filter.

There is no naming convention for Siebel Handheld Business Object Filters. The default filter for a business object is indicated by checking the Default flag in the Administration-Mobile > Application Administration > Business Object Filters view.

An asterisk (*) preceding a filter name indicates the filter could be used for sync, if selected, and does not display in the query list in the application. For example, "*No_Accounts."

General filters appear in the Set Filters dialog when users synchronize their data and, if selected, in the Siebel Handheld application in the Queries drop-down list.

An example of a general filter name is My Big Opportunities.

Default filters appear in the Set Filters dialog when users synchronize their data and, if selected, in the Siebel Handheld application in the Queries drop-down list. Default filters with the asterisk (*) prefix only appear in the Set Filters dialog; this filter does not show up in the application.

There should only be one default query for each business object. An example of a default filter isDef_Current Activities

CAUTION: Administrators must be sure to define a default filter for each business object in the Siebel Handheld application. If no filters are applied during the synchronization process, an unacceptably high volume of data will be downloaded to the handheld device.

Siebel Pharma Handheld Business Object Filters

The default Business Object Filters that are included in Siebel Pharma Handheld are designed to be placeholders for the PDQs that your users will need. Table 14 shows these PDQs.

Table 14. Default Business Object Filters for Pharma

Business Object	Business Object Filter Name	Business Object Filter Value
Account	Def_AccountSyncFilter	'Account'.Search = "[Account Status]=""Active"" AND [My Position Id] = PositionId()"
Action	Def_ActionSyncFilter	'Action'.Search = "([Due] >= Today() - 30) AND ([Due] <= Today() + 30)"

Table 14. Default Business Object Filters for Pharma

Business Object	Business Object Filter Name	Business Object Filter Value
Contact	Def_ContactSyncFilter	'Contact'.Search = "[My Position Id] = PositionId () AND [Status]=""Active"""
Pharma Account Call - CE	Def_Last45DaysandPlanned AcctCalls	'Pharma Account Call - CE'.Search = "([Start Date] >= Today() - 30 AND [Start Date] <= Today() + 7) AND [Account Status] = ""Active"" AND EXISTS ([Owned By Id] = PositionId())"
Pharma Professional Call - CE	Def_Last45DaysandPlanned ProfCalls	'Pharma Professional Call - CE'.Search = "([Start Date] >= Today() - 30 AND [Start Date] <= Today() + 30) AND [Contact Status] = ""Active"" AND EXISTS ([Owned By Id] = PositionId())"

Recommendation for Managing Handheld Business Object Filters

The following sections provide recommendations for creating and managing filters with various synchronization methods.

Companion Deployments

Administrators typically provide their users with an initial set of Handheld Business Object filters and instruct them how to manage the synchronization filters themselves later. They are maintained in the Administration-Mobile > Application Administration > Business Object Filters view. This view is hidden from mobile users so they cannot create their own Business Object Filters.

There are several sample Handheld Business Object Filters in the sample database, as well as in the Siebel 7.7 seed data.

Stand-Alone Deployments

For Direct Server Sync deployments, administrators can create user-specific business object and business component filters in the Administration-Mobile > User Administration view. For more information, see "Setting Business Component Filters for Siebel Handheld Users" on page 39 and "Setting Business Object Filters for Siebel Handheld Users" on page 40.

NOTE: These Business Object Filters are made available to all end users and, therefore, must be defined with the needs of all end users in mind.

Filtering Data for Pick Applets

Exercise caution when modifying filter for pick applets, and do so only with the support of a skilled Siebel configurator.

Use default Business Object declarations to force the extraction of data for a given business component in the context of a given Business Object and Visibility type. For more information on visibility designations, see "Designating Visibility" on page 67. The Default Business Object extractions are performed in the first phase of data extraction.

You will most often use these declarations to extract additional data that is not extracted as part of the user interface extraction. This may be useful for business components that are referenced programmatically by other business components, but are not exposed in the user interface. The default business object declarations are used to enforce the extraction of a subset of data to the handheld that would not have been otherwise extracted or, most commonly, to filter the data downloaded for dynamic picklists or pick applets.

All pick data is not downloaded to the device due to the memory constraints on the device. Only pick data for fields that are editable is downloaded. Therefore, if you are doing a query on a pick field, you may not be able to display the picklist. When viewing a record in an applet, if a pick field is read-only, its pick button will be disabled. If end users select a read-only field with a pick control, they receive the following error: "No data available in picklist because field is read-only."

Configuration Directives

These directives are located in the Mobile Administration > Application Administration > Settings view. Table 15 lists the configuration directives that are used to filter data:

Table 15. Configuration Directives

English LOV Display Name	Definition
Allow Remember Password	Enable option for end user to remember username and password.
Batch Download Stagger	Distributes extraction over a period of time.
Batch Initial Download	Sets base time for first poll.
Batch Poll Frequency	Sets polling frequency.
Client Sync Default	Default sync type for sync client.
DB Extract Thread Load	The load (or weight) assigned to each individual Database Extractor thread.
Database Extract Threshold	This is the minimum time the Database Extractor will continue extraction of business components before causing a handshake with the client.
Default BusComp User Props	Defines subset of user props extracted for a business component.
Default Business Object	Amends application definition to include additional business objects including "hidden" and RBOs.
Default Fields	Identifies fields from DefaultBusObj that will be extracted to device.
Default Insert Mode	Sets default for Insert Failure Mode.
Default Pick Mode	Sets default for Extended Pick.
Enable Batch Extraction	Enables Batch Sync.
Enable Sql Trace	Interweaves SQL tracing into handheld sync log file.
Extraction Expiration	Determines valid life span of extract.
Logging Levels	Sets logging levels (must be 5 octal digits).
Max Throttle Wait Time	This is the upper limit on the amount of time any individual throttling request will be allowed to wait.
Max Total Thread Loads	The maximum number of total thread loads that will be allowed to run across the scope defined by Thread Throttle Scope.
No Database BusComp	Define a business component that must be omitted from the device database and excluded from database extraction.

Table 15. Configuration Directives

English LOV Display Name	Definition
No Extract BusComp	Define a business component that must be excluded from database extraction.
Schema Change Notification	Define a Business Service which should receive the Handheld Schema Change Notification.
Thread Throttle Scope	Defines the scope of the thread throttling mechanism.
Transaction Thread Load	The load (or weight) assigned to each individual Transaction Processor thread.
Transaction Threshold	This is the minimum time the Transaction Processor will continue processing transactions before causing a handshake with the client.

CAUTION: Be extremely careful when modifying these declarations. The business objects that are required for internal application functioning differ by application.

Examples of Business Object Declarations

You can set the Default Business Object declarations in the Administration-Mobile > Application Adminitration > Settings screen, as described in the following examples.

The general format is as follows:

```
DefaultBusObjs22 = Opportunity | 3 | | Account | [Account Status]  = "Active" | Action
| [Start Date] >= Today () - 30 AND [Start Date] < Today () + 90
```

The example Default Business Object declaration results in an extraction of the Account and Action business components where they occur with visibility “3” using the business object filter indicated. They are not extracted in context of opportunities even though the Opportunity business object was identified. The business object filters are generally used only for extracting business components that do not correspond to any views or applets. Business object declarations identify specific business components within the business object to be extracted. The business object filters normally give a query based on the primary business component in the business object, but do not force extraction of any business components mentioned in the query, therefore, in order for a business component to be extracted from the business object it must be attached to an applet.

Note that there is no business object filter included in the example. A business object filter is only included when you want to force the use of a particular business object synchronization filter. See “General and Default Business Object Filters” on page 62 for more information on business object synchronization filters.

In the following example, the declaration is used to extract all of the Price List Line Items that will display within the Orders screen.

```
DefaultBusObjs13=  Order Entry (Sales)|0||Price List Item|
```

Note that this declaration lacks an associated business component statement. When this is the case, all of the records available to the user for the given visibility are extracted.

Another less common way to use the Default Business Object declarations is to set a single Handheld business object synchronization filter for the business objects that are synchronized.

Designating Visibility

It is very important that you use the correct visibility designation in the Default Business Object declarations. The visibility entered should be the visibility that governs the data displayed for the business component within the context of the Business Object specified in the declaration. In the previous Example 1, visibility code 3 is designated. This corresponds to All Visibility, which is the visibility that applies to the Account business component when it is used in a pick applet.

You determine the correct visibility to use by examining View and Business Component properties within Siebel Tools. When creating a Default Business Object declaration to restrict the volume of data extracted for a pick applet, begin by examining the Popup Visibility Type in Business Component Properties. Cross-reference the visibility type to the list below, and enter the appropriate visibility code in the declaration. If the Popup Visibility Type field on the Business Component is null, the default value is All. Table 16 summarizes popup visibility types and the corresponding visibility codes.

Table 16. Visibility Codes

Popup Visibility Type	Visibility Codes
Sales Representative	0
Manager	1
Personal	2
All	3
None	4
Organization	5
Contact	6

NOTE: Do not use the Group, Catalog, or Sub Organization Popup Visibility Types. These are not supported in the CE handheld applications.

Overriding the Popup Visibility

If the Popup Visibility Type setting is not sufficiently restrictive (for example, All visibility), this can lead to a large number of records being extracted when the picklist is processed during synchronization. Making the Popup Visibility Type more restrictive reduces the number of records extracted for picklists. The OverridePopupVisibility user property for an applet overrides the Popup Visibility Type on a business component. Use this property when the desired visibility differs from the business component's Popup Visibility Type, and you do not want to change the Popup Visibility Type. If several picklists use the same business component, you can also use the OverridePopupVisibility user property to vary the visibility of the picklists in the different applets.

There are two considerations you should keep in mind if multiple applications are sharing the same repository. First, changing the Popup Visibility Type has a global effect for all instances where the business component is used. If multiple applications share the same repository and use the same business components, changing the Popup Visibility Type for a common business component could have an undesirable effect for another application. Second, if multiple applications share the same applet, the picklist in each applet shares the same visibility as defined by OverridePopupVisibility property. This is because the OverridePopupVisibility property is set on the containing applet.

In Siebel Tools, navigate to Applet > Applet User Properties, and define the OverridePopupVisibility user property on the applet containing the control that opens the pick applet. See Table 17 for a description of the syntax. Assign a value to this property using the syntax shown, where <buscomp field n> is the underlying business component field of an applet control or column, and <visibility type> is the code corresponding to the desired visibility of the picklist's business component. (See Table 16 for a list of the visibility codes.) Because the name of the OverridePopupVisibility parameter must be unique, append a unique number to the name of the parameter for any other picklists, for example, OverridePopupVisibility1, OverridePopupVisibility2, and so on.

Table 17. OverridePopupVisibility Syntax

Name	Value
OverridePopupVisibility	<buscomp field 1>, <visibility type>
OverridePopupVisibility1	<buscomp field 2>, <visibility type>
OverridePopupVisibility<n>	<buscomp field n + 1>, <visibility type>

NOTE: If OverridePopupVisibility is used, then the picklist and pick applet search specifications are ignored during synchronization when the records for the picklist are extracted.

6 Deployment of Siebel Handheld

This chapter includes the following topics:

Scripting in the Siebel Handheld Client

The Siebel Handheld Client does not execute Siebel Visual Basic (VB) or Siebel eScript scripting.

The Siebel Web Client application runs Siebel VB or Siebel eScript scripts and specialized business component logic at synchronization time, rather than in real time on the handheld device. This has significant consequences in applets and controls, because scripts attached to applets and controls are ignored.

Be aware of the following additional issues with respect to scripts and validation:

- **Deactivating scripts.** *Do not* deactivate existing scripts in Siebel Tools to make the handheld device or the synchronization process accept data it is excluding. The script is probably used by the Siebel Web Client, and you can cause damage elsewhere.
- **Calls to user interface methods.** When a business component script makes a call to a user interface method (such as MsgBox), the script cannot be executed, and the record update, deletion, or addition is rejected during synchronization. Strictly speaking, a script attached to a business component should not interact with the user interface, but it is nevertheless a common practice.

Any Siebel Visual Basic code should be restricted to the business component level. Applet-level Siebel Visual Basic will not be executed and, therefore, should not be written for the Siebel Handheld Client application. As a substitute to using Siebel Visual Basic on the Siebel Handheld Client application, for real-time execution, use the following business component user properties:

- BC/Field Read Only Field...for making fields or business components read-only dynamically.
- Pickmap for fields on the picklist.

Do not use message boxes or prompts on the Siebel Visual Basic code used in conjunction with the Siebel Handheld Client application business components. If the business component is shared between the Siebel Handheld Client application and a laptop, use the following construct to determine if the code is being executed in real time on the laptop or during synchronization:

```
'ActiveViewName is only available when the script is called real time on the laptop

If (TheApplication.ActiveViewName<>"") then

MsgBox"....."

End If
```

Overview of Server Installation in Support of the Siebel Handheld Client

This section provides an overview of important factors to consider when planning Direct Server Synchronization (DSS) infrastructure. One aspect of successful planning and execution of a Siebel Handheld DSS deployment is to understand hardware and network requirements. While these factors are generally applicable to all deployments, there are unique aspects to each customer configuration and implementation strategy. Therefore, it is highly recommended that customers conduct detailed configuration, sizing, and production readiness reviews with Siebel Expert Services. This is especially important for complex deployments, such as those supporting large numbers of users over wide geographic areas.

You can also improve the performance and scalability of DSS deployments by working with the Siebel application server component parameters. For more information about the Siebel application server, see "Optimizing Server Process Management" on page 75.

NOTE: The recommendations in this chapter are general ones and are intended to raise your awareness of the key factors in handheld synchronization, performance, and scalability. These factors must be confirmed for your actual environment, and the usage patterns in your enterprise should be taken into consideration.

Server Topology Overview

The diagram in Figure 4 shows the servers and components that are required to deploy Direct Server Sync. The components are the Siebel database, Siebel server, Siebel Web engine, and Siebel Handheld. The synchronization components are the Siebel Sync engine which resides on Siebel server and the Sync client on Siebel Handheld.

CAUTION: Companion Sync uses Siebel Remote to complete the synchronization process to the Siebel server from the laptop. The remote mobile user's routing model must be set to Handheld User. Otherwise, sync will fail. For more information, see *Siebel Remote and Replication Manager Administration Guide*.

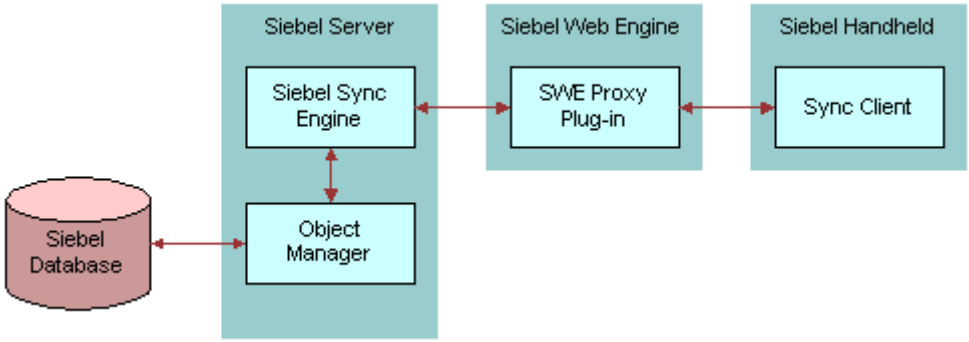


Figure 4. DSS Servers and Components

You can improve performance by properly selecting the machine that each server runs on (Web server, Siebel server, database server). For example, increasing the memory and number of spindles improves the database server performance, and increasing the number of CPUs and the amount of memory improves the performance of the application server.

Recommended Hardware and Network Configuration

There are many factors to take into account when designing and implementing your server and network hardware and architecture, and sizing your database. The critical factor in sizing a handheld implementation is the expected peak synchronization load. Specific application variables to consider in calculating this load are: the number of concurrent users, number of transactions, and size of the data file. These variables should be considered within the context of the hardware specifications, including memory and processor speed.

The following resources are available as you plan your Siebel Handheld implementation:

- Refer to Microsoft and manufacturer documentation for comprehensive information on server hardware and registry parameters.
- Refer to Siebel Technical Note 405, *Siebel Handheld Synchronization* for specific recommendations on the following topics:
  - Server Architecture
  - Server Hardware and Registry Parameters

- Database Server Sizing
- Database Tuning
- Dial-Up and Network
- Wireless
- VPN (Virtual Private Networks)

- The Expert Services Handheld Review Package assists customers with planning their hardware and network for handheld implementations. Contact Siebel Expert Services for more information about this program.

Process of Server Installation for Siebel Handheld Direct Server Sync

The server components that are required for Siebel Handheld are installed when you install the Siebel server. See the Siebel Server installation guide for your operating system for details on installing and configuring Siebel server. The Siebel server installer copies the necessary DLLs to create an Object Manager for Direct Server Sync and creates and configures a Server Component and Component Group. The rest of this subsection describes which options you must select to correctly install the software, along with creating or configuring additional Object Managers.

This process includes the following tasks:

- "Installing the DSS Components Using the Siebel Server Installer" on page 72
- "Editing the DSS Object Manager Configuration File" on page 73
- "Configuring Server Logging Levels" on page 74
- "Optimizing Server Process Management" on page 75

Installing the DSS Components Using the Siebel Server Installer

Install the Siebel server, following the instructions in the Siebel server installation guide for the operating system you are using. When you reach the Setup Type screen in the Installer wizard, you are presented with three installation options:

- **Typical.** This setup option installs all Siebel server components except those displayed.
- **Compact.** This setup option installs only those components necessary to run the Siebel server, but no additional components or help.
- **Custom.** This setup option lets you customize your installation by choosing the specific components you want to install.

To install the Direct Server Sync components with your Siebel Server installation

1. In the Setup Type screen, choose the Custom setting, and then click Next.

   NOTE: At this screen, you may also choose a different directory for your Siebel server installation.

2. Choose from the following components:

   - Object Manager Component
   - Handheld Synchronization
   - Siebel Data Quality Connector
   - Remote Search Support
   - Siebel Java Integrator

   The listed Custom Installation options are all selectable.

   NOTE: You must enable Handheld Synchronization to enable Direct Server Sync for your DSS installation.

3. Click Next.

   Continue with the installation in *Siebel Installation Guide for Microsoft Windows: Servers, Mobile Web Clients, Tools*.

The install wizard automatically installs and configures the DSS components. In addition, the installer creates a configuration file that includes the parameters necessary to properly run the DSS server components and the Business Component filters file.

Editing the DSS Object Manager Configuration File

You must edit the configuration (.cfg) file associated with the DSS server components that you installed and configured to reflect your company's environment.

To edit your configuration file

1. In Windows Explorer, navigate to the directory where the Siebel server is installed and locate the configuration file associated with the DSS server component. By default, this directory is C:*Siebel Root*\ siebsrvr\BIN\ENU.

   NOTE: By default, the name of the DSS Object Manager configuration file is phce.cfg, but you can change the name of this file.

2. Create a backup copy of the configuration file and name it phce.cfg.bak.

   This step allows you to recover the original version of the file if you encounter errors.

3. Open the configuration file using a text editor.

4 Enter parameter values appropriate for your deployment.

The following table shows the parameters in the .cfg file that may need to be edited to reflect your environment. All other parameters in this section should not require change.

	Parameter	Default Value	Description
[Siebel] section	ApplicationName	Siebel PharmaCE	The Siebel Handheld application. This value must match the name of the application as it is specified in Siebel Tools.
	ApplicationTitle	Siebel Pharma CE	The name of the Siebel Handheld application as shown on the Title bar on the browser. This parameter is only used if the Siebel Tools application developed for the handheld is run on the Web client.
	ApplicationSplash Text	Siebel Pharma CE	The Siebel Handheld application name as shown on the splash screen. This parameter is only used if the Siebel Tools application developed for the handheld is run on the Web client.
	ComponentName		Required for Direct Server Sync, it is entered in the registry on the handheld device.

5 Save your changes.

6 Restart the component or server.

Configuring Server Logging Levels

To set the logging level, two things need to be done. Logging level must be a number 0-5.

To configure server logging levels

1 Log into Server Manager from a (m:\siebel\bin\w32ud) prompt.

2 Run the following:

```
change evtloglvl HandheldSyncLog=[LogLevel] for comp [OMName], where [LogLevel] = an
integer between 1 - 5 (5 enables all logging) and [OMName] = the OM name (for example,
<ApplicationName>CEObjMgr_enu).
```

Optimizing Server Process Management

Several parameters are outlined below that help optimize server processing for Direct Server Sync. To set these parameters, log into a Siebel client as a user with Administrative responsibility and navigate to Servers > Components > Component Parameters through the Screens menu. Select the SalesCE ObjManager (or the appropriate Siebel Handheld application) and update the following parameters to optimize threads per process. For further information and assistance, see Technical Note 405, *Siebel Handheld Synchronization,* and contact Siebel Expert Services about the Siebel Expert Services Handheld Review Package.

- **Max tasks.** This parameter determines the maximum number of threads that can run concurrently for a given component. The value of this parameter should equal the maximum expected peak number of concurrent synchronizations.
- **Min MT servers.** This parameter determines how many multithreaded server processes are started by default for the Siebel Object Manager.
- **Max MT Servers.** This parameter defines the maximum number of processes supported by the instance of the Siebel Object Manager. The value for this parameter should be the same as Min MT servers and should be set so that threads per process (Max Tasks/Max MT Servers) is optimized.

About Siebel Handheld Synchronization Performance and Scalability

There are a number of factors that affect the performance and scalability of handheld synchronization. It is very important that administrators and those involved in the design and deployment of Siebel Handheld understand the impact of usage parameters on synchronization performance and scalability. For more information, see Technical Note 405, *Siebel Handheld Synchronization* for application-specific variables affecting synchronization and data from synchronization scalability tests.

Using Multiple Synchronization Servers

As you scale your deployment, you may need to use multiple synchronization servers to accommodate all of your users. Your end users must be manually assigned to a particular server. Resonate products cannot be used for load balancing. Refer to Technical Note 405, *Siebel Handheld Synchronization* and to your hardware manufacturer's documentation for more information on scaling deployments.

Synchronization Security

The synchronization data stream can be secured using SSL (Secure Sockets Layer).

Siebel Mobile Web Client Installation

You must edit the configuration (.cfg) file associated with syncmanager.exe (the Companion Sync executable) that was installed with the Siebel Mobile Web Client to reflect your user's environment. It may not be practical to individually edit each Companion Sync user's .cfg file; therefore, it is recommended that you create one edited file and distribute it to all your users with Siebel Anywhere. See *Siebel Anywhere Administration Guide* for more information.

Process for Installing the Siebel Handheld Application

Before you deploy the Siebel Handheld application, there are several tasks you need to perform. This process includes the following tasks:

- "Editing the Handheld Application Installation Configuration File" on page 76
- "Enabling Handheld User Database Backup" on page 78
- "Deploying Patches to the Handheld Application with Direct Server Sync" on page 83
- "Deploying Handheld Application Patches with Companion Sync" on page 84
- "Creating Handheld Application Upgrade Kits to Remotely Deploy Patch Files" on page 85
- "Downloading Patches to the Handheld Device" on page 85

Editing the Handheld Application Installation Configuration File

The Siebel Handheld application setup.ini file configures the Siebel Handheld Client application installer. Before you deploy a custom-configured Siebel Handheld application, you must update the parameters in the setup.ini file so that the correct values are written to the device registry before distributing the client installer to end users.

The setup.ini file resides in the Siebel Handheld application directory (for example, the Pharma Handheld directory) on the Siebel Handheld DVD-ROM. To modify this file, create a Siebel Handheld installation directory on the network, or create and duplicate a custom DVD-ROM for distribution to end users. This installation directory must include the same files and directory structure as the original DVD-ROM. Then, modify the setup.ini file in the custom installation directory.

NOTE: If you wish to set up parameter values other than default values, add the parameter to the setup.ini file and add the proper values.

Table 18 lists the parameters that you may need to modify in the setup.ini file, their default value, and a description of the parameter.

Table 18. Siebel Handheld setup.ini Parameters

Parameter	Default Value	Description
Version	7.7	Version of the desktop Siebel application against which the Siebel Handheld version synchronizes.
Application Title	Siebel PharmaCE	The Siebel Handheld application. This value must match the name of the application as it is specified in Siebel Tools.
ApplicationName	Siebel Pharma CE	The Siebel Handheld application. This value must match the name of the application as it is specified in Siebel Tools.
ApplicationSplashText	Pharma CE Handheld	The Siebel Handheld application name as shown on the splash screen.
MultiCurrency	True	Required for the application to handle multiple currencies.
SyncURL	http://*Web Server Name or IP address/ Virtual Directory Name*	Required for Direct Server Sync or Companion Server Sync. This value is entered in the registry on the handheld. See "Changing the SyncURL on Siebel Handheld Devices" on page 81 for more information on this parameter.
[EndUserLocalization] Section		
User DefinedLang	Y	
LogUserDefinedLangErrors	N	
[Printing] Section		See Appendix F, "Print Configuration Settings,"for more information on the parameters used to configure printing.
[Backup] Section		Enables handheld database backups. See "Editing the Database Backup Parameters" on page 79 for more information on settings for the parameters in this section of the setup.ini file.
[ApplicationLocation] Section		Specifies where the Siebel Handheld application and database are installed. See "Setting up Siebel Handheld Application Installation on a CompactFlash Card" on page 80 for more information on the parameters in this section of the setup.ini file.

Table 18. Siebel Handheld setup.ini Parameters

Parameter	Default Value	Description
InternetOptionReceiveTimeout	600000	Length of time to receive data (except data extraction) from the server before the handheld client times out. This parameter only applies to synchronizations using Direct Server Sync. In milliseconds. The default value, 600000, is 10 minutes.
InternetOptionSendTimeout	600000	Length of time to send data to the server in a single call the handheld client times out. This parameter only applies to synchronizations using Direct Server Sync. In milliseconds. The default value, 600000, is 10 minutes.
InternetOptionDataExtractionTimeout	900000	Length of time to extract data from the server to the handheld device the handheld client times out. This parameter only applies to synchronizations using Direct Server Sync.
[Logging] Section		
TXNErrorLevel	1	This level controls the extent of transaction error information received from the server
DefaultLogLevel	2	This is for logging messages
MaxLogFileSize	2000	This is for the maximum log file size in KB
MaxSavedLogFiles	3	Determines the number of log files to save.

Enabling Handheld User Database Backup

Siebel Systems provides a way to automatically back up a snapshot of the user's database and current settings, and to restore those settings in the event of a total device failure. The backup functionality automatically copies all the necessary files to a single compressed file. Each time the user backs up, the backup process creates a new copy of the file and deletes older backups. The backup process must close the application in order to copy the RDBMS and handheld configuration files. After the files are copied, it automatically restarts the application.

The backup feature must be enabled in the application. (For more information on enabling the backup feature, see "Setting Up Database Backups.") If the backup feature is enabled, a backup is created during every synchronization. This way, the user retains an up-to-date snapshot of the database, and older backup versions are removed.

When the database backup feature is enabled, a database backup occurs automatically at the end of each synchronization. This makes the overall time to synchronize somewhat longer. The size of the database and the speed of the CompactFlash card also affect the time it takes to complete synchronization.

NOTE: Backups should not be used as a replacement for synchronization.

Setting Up Database Backups

In order to back up the database:

- Provide users with an external memory card.
- Install the Siebel Handheld application with the backup functionality enabled.
- Instruct users to back up their database on a regular basis.

Backing Up to External Media

It is recommended that you back up to external media—for example, a CompactFlash card.

Backing up data to a directory in memory is an option, if external media is not available on the handheld device. However, if the handheld device is damaged, the backup in memory may not be retrievable. Also, when backup data is stored in memory, the amount of memory available to run the application decreases, and application performance may suffer.

Editing the Database Backup Parameters

Before users can back up the database on their handheld devices, you must first enable the Backup menu item on the Siebel Handheld application. This requires editing the setup.ini file to enable backup.

The following is an example of the default settings for the backup parameters:

```
[Backup]
BackupLocation  = \Storage Card\Siebel Backup
BackupEnabled   = N
```

- BackupEnabled = [Y/N] The default is N (No). Change this setting to Y (Yes) to enable the Backup menu item and to trigger a backup to occur automatically after each synchronization.

  If the product is installed with Backup = N, the backup menu item is disabled. You need to change the parameter, then reinstall the product in order to enable the menu item.

- BackupLocation = [Backup location] The default is an external storage card. Specify the location where you want the data backed up. It is recommended that you do not back up to internal RAM because this may have a negative effect on the performance of the application. However, if you back up to RAM, then specify the directory location where you want the data backed up.

For more information on the setup.ini file, see Chapter 8, "Installing the Handheld Application."

Restoring from a Backup

For information on restoring a database from a backup, see "Backing Up and Restoring Data with the Siebel Handheld Client" on page 110.

Installing Print Templates in the Siebel Handheld Install Directory

If your application allows printing, you must include all print templates in the template subdirectory of the Siebel Handheld Install directory. The print templates are language-specific, so copy the templates to the template subdirectory within the language directory of the language you are deploying (for example, ...\ENU\Template). If the template includes double byte characters, such as Japanese string, you must save the template files as Unicode (UTF16) files. For supported language codes, see *System Requirements and Supported Platforms* on Siebel SupportWeb.

See Appendix F, "Print Configuration Settings"for more information about Printing.

Setting up Siebel Handheld Application Installation on a CompactFlash Card

The default, when installing Siebel Handheld applications, is to install both the application and the database into RAM on the device. In most instances, there is sufficient available memory, and end users are satisfied with the application performance. There are situations, however, where you may need to optimize the application performance. You can improve performance by installing the Siebel Handheld application on an external storage device.

To improve the performance of the application, it is recommended that you install the application binary files on a CompactFlash card. By doing so, you can free up program memory. Installing the data on the CompactFlash card is not recommended because performance likely degrades.

You can specify, in the application's setup.ini file, where the application files and database files are to be installed. By default, this is set to the handheld device. In the ApplicationLocation section of the setup.ini file, there are two parameters. The following shows the default settings for these parameters:

```
[ApplicationLocation]
ApplicationBinariesLocation  =  Device
ApplicationDataLocation      =  Device
```

- ApplicationBinariesLocation = Device. The default is Device. To improve application performance, set this to CF (CompactFlash).
- ApplicationDataLocation = Device. The default is Device. It is recommended that you always install the data files on the device.

After you have edited the setup.ini file, follow the instructions for installing the Siebel Handheld application on the client.

Setting the Siebel Handheld Application Restart Parameter

Because of the limited memory on handheld devices, users may find that the performance of the application degrades during the course of a handheld session. This is more likely to occur if the user is making many customer visits and carrying out transactions that involve intensive processing. To minimize the effects of these occurrences, the application can be restarted to release application memory that is not actively being used. The memory that becomes available allows for better performance in the next handheld session.

The application prompts the user to periodically restart the application. A dialog box appears with the message "For optimal application performance it is advised that you Restart your Siebel application by selecting File > Restart." The user can restart the application or ignore the message.

The application prompts the user after a specified number of visits, which is indicated by the number of times the user taps the End Visit button. The frequency with which this message appears is set with the PressureThreshold parameter in the setup.ini file. The default is:

```
PressureThreshold = 29
```

The message is triggered when the user taps the End Visit button N + 1 times, where N is the number specified by the parameter. For example, using the default value of 29, the message appears after the 30th time (29 + 1) that the user taps the End Visit button.

If the user restarts the application after the message appears, the application resets a counter to 0. If the user ignores the message and does not restart the application, the counter is not reset and, therefore, the message does not reappear.

Changing the SyncURL on Siebel Handheld Devices

Once the Siebel Handheld application is installed, the SycnURL cannot be changed. If you need to change the SyncURL, contact Siebel Technical Support.

Installing the Siebel Handheld Application from External Media

You may create an image of the Handheld Installer that can be loaded onto external media such as a CompactFlash card. When you create a stand-alone installer platform, a Cabinet file (CAB) is created in a location that you specify. The CAB file name should be siebel.pocketpc_arm.CAB. You can copy the CAB file to a CompactFlash card, insert the card into the handheld device, and single-click on the file to install the Siebel Handheld application on the device.

NOTE: When installing the application on the device, the end user is asked if he or she wants to install the application in the default directory. Regardless of the user's answer, the application is always installed in the directory specified by the setup.ini file. Therefore, the only way to change the directory the application is installed in is to modify the parameters in the ApplicationLocation section of the setup.ini file.

Creating a Stand-Alone Installer

Users who synchronize in DSS mode may not have a PC, and so may not be able to create a partnership and synchronize using Microsoft ActiveSync. You can install the application for each user through a standard partnership, or you can configure a stand-alone installer as shown in the following pages.

During the installation, the InstallShield Wizard screen prompts you by asking, Would you like to deploy a CAB file to enable rapid installation for additional devices? You can configure a stand-alone installer by selecting Yes.

You are prompted to select a language for the application and to specify a location for the CAB file. The installer creates the CAB file in the location you specify.

The CAB file is a self-extracting file that includes all the files needed to install the Siebel Handheld application on the handheld device. When you single-click the file, the CAB file installs the application.

Distributing Siebel Handheld Application Patches

The Siebel Handheld patch delivery mechanism, PatchAgent, is a tool that automates the deployment of patches to handheld devices as part of the synchronization process. It allows administrators to distribute patches to end users with minimal involvement by the users.

During synchronization the PatchAgent executable is called, and if it detects a handheld patch, it automatically installs the patch on the handheld device. In order for PatchAgent to detect and deploy the patch, the patch files must be created and placed in the directory where PatchAgent expects to find the files.

Deploying Patches to the Handheld Application with Direct Server Sync

In order to set up patch deployment for Direct Server Sync users, you need to patch the Siebel server and patch one handheld client which serves as the "model" from which patch files are pulled. Then the patch files are then packaged and placed in the location on the server where PatchAgent expects to find the files. The next time the end user synchronizes with Siebel server, the patch is installed onto his or her device.

For more information on how the patch process works with synchronization, see "Downloading Patches to the Handheld Device" on page 85.

To set up patch deployment

1. On Siebel server, verify that the following directories exist. If they do not, create the directories.
   - C:\patch\AppBinDir
   - C:\patch\WinDir

   NOTE: You may specify a drive other than C:. However, the directory names must be specified as shown.
2. Apply the patch to Siebel server.
3. Apply the patch to one handheld client.
4. Contact Siebel Technical Support to obtain the list of files to copy from the handheld directory (My Device\Program Files\Siebel Handheld) to the Siebel server directory (C:\patch\AppBinDir).
5. Contact Siebel Technical Support to obtain the list of files to copy from the handheld directory (My Device\Windows) to the Siebel server directory (C:\patch\WinDir).
6. From the DOS prompt, change directory to *Siebel Root*\SWEApp\BIN.
7. Execute the following command to stage the patch files and the patchlist.txt in the correct location on the server:

   C:*Siebel Root*\SWEApp\BIN>createpatchlist /s c:\patch /t c:*Siebel Root*\sweapp\cepatch

   /s – source directory. The directory where the patch files were moved.

   /t – target directory. The directory where PatchAgent checks for the patch files.

   NOTE: You may specify a drive other than C:. However, the location of the source and target directories must be specified exactly as shown.

   After the patch files have been moved and the patch list created, the following message appears: "Patch List has been successfully created in *Siebel Root*\SWEApp\cepatch files transferred successfully."

The patch files are now ready to be deployed to Direct Server Sync end users.

Deploying Handheld Application Patches with Companion Sync

In order to set up patch deployment for Companion Sync users, you need to create a "model" of a patched Siebel Mobile Web Client and a patched handheld client. Then you pull the designated patch files and place them in the correct directory on the end user's Mobile Web Client. You may use Siebel Anywhere to create upgrade kits to automate this process of distributing patch files to your end user's Mobile Web Client. The next time the end user uses Companion Sync to synchronize their handheld device with the Siebel Mobile Web Client, the patch is installed on the device.

For more information on how the patch process works with synchronization, see "Downloading Patches to the Handheld Device" on page 85.

To set up patch deployment

1. On Siebel server, verify that the following directories exist. If they do not, create the directories.
   - C:\patch\AppBinDir
   - C:\patch\WinDir
2. Apply the patch to Siebel server.
3. Apply the patch to Siebel Mobile Web Client.

   This Mobile Web Client serves as the model from which the patch files can be pulled.
4. Apply the patch to one handheld client.

   This handheld client serves as the model from which the patch files can be pulled.
5. Contact Siebel Technical Support to obtain the list of files to copy from the model handheld directory (My Device\Program Files\Siebel Handheld) to the Siebel server directory (C:\patch\AppBinDir).
6. Contact Siebel Technical Support to obtain the list of files to copy from the model handheld directory (My Device\Windows) to the Siebel server directory (C:\patch\WinDir).
7. From the DOS prompt, change directory to C:*Siebel Root*\SWEApp\BIN.
8. Execute the following command to move the patch files to the correct location and generate a patchlist.txt file:

   C:*Siebel Root*\SWEApp\BIN>createpatchlist /s c:\patch /t c:*Siebel Root*\sweapp\cepatch_xxx (where xxx is the language [enu, esn, and so on])

   /s – source directory. The directory where the patch files were moved.

   /t – target directory. The directory where PatchAgent checks for the patch files.

   NOTE: You may specify a drive other than C:. However, the location of the source and target directories must be specified exactly as shown.

   After the patch files have been moved and the patch list created, the following message appears: "Patch List has been successfully created in *Siebel Root*\SWEApp\cepatch_xxx files transferred successfully."

9 Create the following directory on the end user's Mobile Web Client: *Siebel Root*\client\cepatch_xxx (where xxx is the language [enu, esn, and so on]), and push the files from the *Siebel Root*\SWEApp\cepatch_xxx directory on Siebel server to the *Siebel Root*\client\cepatch_xxx on the Mobile Web Client.

NOTE: Siebel Anywhere upgrade kits can be used to carry out this step.

Creating Handheld Application Upgrade Kits to Remotely Deploy Patch Files

NOTE: This step is optional. Additionally, you must have a license for Siebel Anywhere to remotely distribute patches to end users.

You may use Siebel Anywhere upgrade kits to remotely distribute self-extracting zip files to your end users' PCs. You can use self-extracting zip files to create new directories and immediately extract files into the directories. Create one upgrade kit for each of the following:

- Create the Siebel Mobile Web Client upgrade kit (Siebel Client Revisions).

  Create a single, self-extracting zip file that includes the upgraded .exe and .dll files in the *Siebel Root*\client\BIN directory on the model Mobile Web Client. Contact Siebel Technical Support to obtain the list of files to include. Configure the zip file to self-extract in the *Siebel Root*\client\BIN directory on the end user's Mobile Web Client.

- Create the Siebel Handheld upgrade kit (Siebel Client Revisions).

  Create a self-extracting zip file that includes the files in the *Siebel Root*\SWEApp\cepatch directory on the server. Configure the zip file to self-extract in the \client\cepatch directory on the end user's Mobile Web Client.

- Create any other upgrade kits as needed (for example, the Siebel Customer Repository File).

Refer to *Siebel Anywhere Administration Guide* for information on creating upgrade kits.

NOTE: If there are read-only files on the Mobile Web Client, the end user may need to change the file attributes to read-write before receiving and installing the upgrade kits. Contact Siebel Technical Support for the list of files whose attributes need to be changed. You may use Siebel Anywhere to distribute a batch script that makes this change.

Downloading Patches to the Handheld Device

Patches are downloaded as part of the synchronization process. Once the patch is staged, the patch is downloaded the next time the end user synchronizes the handheld with Siebel server. The end user synchronizes as he normally would using Direct Server Sync or Companion Sync. First, any transactions are uploaded from the handheld device. Then:

- If a patch needs to be applied to the handheld, the synchronization process terminates, and the patch process is started, which downloads the patch.

- If no patch needs to be applied, the synchronization process continues until the process is complete.

After a successful patch installation, Siebel Handheld Sync will launch automatically and continue the extraction.

If the patch files are not successfully downloaded, the end user is prompted to restart the patch process. The end user must locate and launch patchagent.exe manually. Then, once the patch is successfully installed, the end user is prompted to complete the synchronization.

7 Synchronization Conflict Handling and Recovery with Handheld

This chapter includes the following topics:

Preventing Synchronization Transaction Conflicts with Siebel Handheld

When multiple end users synchronize with a remote database, transaction conflicts may occur which can result in data loss. The Extended Pick and Extended Insert functionality minimizes synchronization conflicts. If transaction conflicts are unavoidable, then Siebel Handheld Journaling captures the transaction information so that the data can be recovered. The combination of Extended Pick, Extended Insert, and journaling eliminates the potential for data loss.

There are two features that minimize synchronization transaction conflicts.

- Extended Pick processing
- Extended Insert processing

The next several sections describe these features in detail.

Extended Pick Processing in Siebel Handheld

The handheld is used to capture and record transactions entered by the handheld user. During synchronization, these transactions are processed on the server. A situation may arise in which a transaction fails when it is applied to the Siebel server (through Direct Server Sync) or Siebel Mobile Web Client (through Companion Sync)—both of which are referred to as "server." For example, a Siebel Pharma Handheld user creates a professional call activity for one of his contacts. However, since he last synchronized with the server, the contact involved in this transaction was deleted from the server database. When he tries to synchronize his handheld, the server does not find his contact, and the call activity for the contact cannot be inserted into the server database. To generalize this example, any transaction that involves data selected through picklists or pick applets fails on the server if that pick data is not present at the time of synchronization.

With many handheld users synchronizing with Siebel server and modifying data at different times, this scenario is not uncommon.

The following describes how a pick transaction is recorded on the handheld device and processed on the server during synchronization. Assume that the handheld user wants to create a new call activity for the contact. In order to do this, the user inserts a new record in the Professional Call screen and "picks" the desired contact. When the contact is selected on the handheld, the Row Id of the contact (Contact Id) is recorded. However, on the handheld, the application does not record any of the pick map fields associated with the contact; only the Contact Id is recorded. When the user synchronizes his handheld, that Contact Id is used to locate the contact record in the server database. The Contact Id is then used to retrieve all of the fields used in the pick map for the Contact Id (Last Name, First Name, Middle Initial, Address, City, State, Zip Code, and so on).

In order to minimize pick processing failures, the handheld must record the pick row Id and all of the pick map data that is required for a successful transaction. This data must be recorded at the time of the pick, so that it can be passed to the server for processing. This enhanced functionality is called Extended Pick processing. Now, when the user synchronizes, the transaction is processed on the server as follows:

- The synchronization process first looks for the pick record on the server database. For example, to add an activity it looks for the contact and, if it finds the contact, it retrieves the necessary data and adds the activity. This is the default behavior.
- If the server does not find the pick map record in the database and extended pick processing is enabled, it retrieves the pick record Id and pick map data from the handheld transaction and applies the data directly to the server.

Enabling Extended Pick Processing in Siebel Handheld

You can enable Extended Pick processing through the Application Administration screen in the Mobile Web Client. The parameter is as follows:

DefaultHandheldSyncPickMode

This parameter, when enabled, applies globally throughout the application. When enabled, every handheld pick transaction is subject to pick processing.

To enable extended pick processing

1. From the application-level menu, choose Navigate > Site Map > Administration-Mobile > Application Administration.

2 Click the Settings view tab, then Query on the following value:

DefaultHandheldSyncPickMode

If there is no such record, a new record with that value should be created. See Table 19 for the values to enter.

Table 19. Business Component User Property Parameters

Business Component User Property	Mode Value	Description
DefaultHandheldSyncPickMode	NoFail	Turns Extended Pick processing ON.
	FailOnError	Turns Extended Pick processing OFF This is the default behavior if the parameter is not specified in the Settings view.

- Business component user property.

  The user property is defined on specific business components. The syntax for setting Extended Pick on a business component and the parameter values (Table 20) follow:

  HandheldSyncPickMode=*Fieldname*|*Mode*

Table 20. Business Component User Property Parameters

Business Component User Property	Parameter	Value	Description
HandheldSyncPickMode	*Fieldname*	—	Specify the field name as defined in Siebel Tools.
	Mode	NoFail	Turns Extended Pick processing ON.
		FailOnError	Turns Extended Pick processing OFF.

You may apply Extended Pick processing to multiple fields in a single business component, using the following syntax:

HandheldSyncPickMode=*Fieldname1*|*Mode1, Fieldname2*|*Mode2*

The setting on the business component takes precedence over the setting defined in the Settings view. For example, you can use the business component setting to nullify the global application of Extended Pick. See "Recommended Extended Pick Processing Settings" on page 90 for an example. Conversely, you can enable Extended Pick processing on specific business components if the setting in the Settings view has disabled the functionality.

Table 21 shows the combined effect of the settings in the Application-Mobile > Settings View and on a business component.

- The DefaultHandheldSyncPickMode setting is omitted from application settings.

- If there is no setting on a particular business component, the setting defined in the Settings view applies.
- If there is no setting defined in the Settings view, or on the business component, the default behavior is for Extended Pick to be turned OFF.

Table 21. Combined Effect of Extended Pick Settings

Business Component Setting DefaultHandheldSyncPickMode=	Application Settings Value DefaultHandheldSyncPickMode=		
	NoFail	**FailOnError**	**Omitted**
NoFail	NoFail	NoFail	NoFail
FailOnError	FailOnError	FailOnError	FailOnError
Omitted	NoFail	FailOnError	FailOnError

Recommended Extended Pick Processing Settings

It is recommended that you use the Extended Pick processing settings in the following way:

- Turn Extended Pick processing off globally. This is specified in the configuration (.cfg) file.
- Activate Extended Pick processing on the following fields for critical business components:
  - **Pharma Professional Call - CE**. Last Name|NoFail, Address|NoFail, Contact Id|NoFail, Contact Address Id|NoFail
  - **Pharma Call Products Detailed - CE.** Name|NoFail
  - **Pharma Call Sample Dropped - CE.** Name|NoFail, Lot Name|NoFail
  - **Pharma Account Call - CE.** Account Name|NoFail, Address|NoFail, Account Id|NoFail, Account Address Id|NoFail
  - **Pharma Promotional Items Dropped - CE (Name).** Name|NoFail

The Pharma Handheld application is shipped with these recommended settings.

NOTE: When Extended Pick processing is enabled, any update conflicts that occur for that pick field are resolved using the "Client Wins" conflict resolution directive. For fields that do not have Extended Pick processing enabled or that are not pick fields, this does not apply. Please make a note of this behavior when using this feature.

Extended Insert Processing in Siebel Handheld

When the server executes an insert transaction and the insert fails, there are two ways the insert failure can be handled:

- A record is logged that indicates the insert failed, and synchronization continues. This is the default insert behavior. The Conflict Administration screen can be used to recover the data.

- The insert failure is logged, including details of the failure, and synchronization is interrupted. This is the extended insert behavior. Extended insert behavior guarantees that, should an insert fail, data loss does not occur since synchronization is stopped until the circumstances causing the failure are resolved.

NOTE: If Extended Insert processing takes place, synchronization is interrupted. The synchronization process continues to fail until the problem is resolved. End users must contact their system administrators to recover from the failure. The recovery effort may involve modifying transactions queued for processing, modifying data on the server, or reentering transactions through the Siebel Handheld application.

Enabling Extended Insert Processing

You can, optionally, have a setting with the following setting name:

DefaultHandheldInsertMode.

This parameter, when enabled, applies globally throughout the application. When enabled, every failed insert interrupts synchronization.

You can enable Extended Insert processing through the Settings view in the Administration-Mobile screen.

Table 22 shows the settings for this parameter.

Table 22. Extended Insert Processing Parameter Setting

Parameter	*Mode* Value	Description
DefaultHandheldInsertMode	NoFail	Disables Extended Insert processing.
	FailOnError	Enables Extended Insert processing.

- Business component user property.

  The user property is defined on specific business components. The setting in the business component takes precedence over the setting defined in the Settings view. Table 23 shows the syntax for setting the Extended Insert on a business component and the parameter values.

  HandheldInsertFailMode=*Mode*

Table 23. Business Component User Property Parameter

Business Component User Property	Parameter	Value	Description
HandheldInsertFailMode	*Mode*	NoFail	Disables Extended Insert processing.
		FailOnEr or	Enables Extended Insert processing.

Table 24 shows the combined effect of the setting in the Settings view and the setting on a business component.

- The business component setting always takes precedence over the settings defined in the Administration-Mobile > Settings view.
- If there is no setting on a particular business component, the Applications Settings value applies.
- If there is no setting in either the Settings view or on the business component, the default behavior is for Extended Insert to be disabled.

Table 24. Combined Effect of Extended Insert Settings

Business Component Setting **HandheldInsertFailMode=**	**Application Settings Value** **DefaultHandheldInsertMode=**		
	NoFail	**FailOnError**	**Omitted**
NoFail	NoFail	NoFail	NoFail
FailOnError	FailOnError	FailOnError	FailOnError
No Setting on Business Component	NoFail	FailOnError	NoFail

Recommended Extended Insert Processing Settings

It is recommended that you use the Extended Insert processing settings in the following way:

- Turn Extended Insert processing off globally. This is specified in the configuration (.cfg) file.
- Activate Extended Insert at the business component level for the following critical business components:
  - Pharma Professional Call - CE
  - Pharma Call Products Detailed - CE
  - Pharma Call Sample Dropped - CE
  - Pharma Account Call - CE
- Follow the recommendations for Extended Insert processing in conjunction with the recommendations for Extended Pick processing.

NOTE: When Extended Pick processing is not enabled, the likelihood of a pick failure resulting in an insert failure increases. Therefore, it is recommended that Extended Pick be used in conjunction with the FailOnError setting for Extended Insert.

Recovering Error Data in Siebel Handheld

Synchronization errors are captured to the database, and can be accessed through the Conflict Administration screens. This mechanism is always enabled.

To access error data

1. From the application-level menu, choose Navigate > Site Map > Administration-Mobile > Conflict Administration.
2. Click the Error Details view tab.

8 Installing the Handheld Application

This chapter includes the following topics:

Preparing To Upgrade From a Previous Siebel Handheld Release

Siebel Handheld 7.7 does not support upgrades from previous releases of Siebel Handheld applications. To upgrade your existing application and to migrate your data and settings to Siebel 7.7 use the following process.

- Back up the handheld device by synchronizing to your database. See, "Synchronizing Data on the Siebel Handheld Device" on page 112.
- Uninstall your Siebel Handheld application. See, "Uninstalling the Siebel Handheld Application" on page 99.
- Then install the new version of your Siebel Handheld application. See "Installing on the Siebel Handheld Application" on page 95.

Installing on the Siebel Handheld Application

There are two ways to install software onto any Windows-powered handheld device. The first is to create a partnership between a desktop or laptop PC and the handheld device using Microsoft ActiveSync. The second is to install the application from type of external media. See "Reinstalling the Siebel Handheld Application" on page 98 for more information.

NOTE: It is important to remember that end users must synchronize their handheld devices to download the application configuration and populate the database before they can use the application. Therefore, an administrator may install the application for an end user, but the synchronization must occur using the end user's name and password.

Installing Handheld for Companion Sync Users

Before you install and use Companion Sync (CS) with the Siebel Handheld application, you must first install the Siebel Mobile client on your PC. The Mobile Client Installer copies the Companion Sync files to your personal computer.

NOTE: Users can only use Companion Sync to synchronize their Siebel Handheld application to a personal computer that already has the Siebel Mobile client installed.

To install the Siebel Handheld application and Siebel Handheld Sync using CS

1. Using Microsoft ActiveSync, establish a partnership between the handheld device and the personal computer.
2. On the PC, network, or DVD, locate the folder where the Siebel Handheld Application folder is installed. In this folder, double-click setup.exe.
3. Choose the language you want to use for the installation and click OK.

   The Welcome Screen appears.
4. Click Next.

   The Synchronization Options screen appears.
5. Choose the Companion Sync option and click Next.
6. Select the desired language of the Siebel Handheld application and click Next.

   A window appears showing the setup status, followed by several DOS windows, and the Add/Remove Programs dialog box.
7. At the Installing Applications dialog box, click Yes to install in the default directory.

   NOTE: The default directory in the Applications dialog is the directory specified by the system administrator in a setup file. So that the application works correctly, the Siebel Installer installs the application in the default directory. Therefore, even if you specify a different location for the application, the application is installed in the default location.

   The Siebel Handheld application is installed on the handheld device. During the installation, the Installing Applications dialog box displays a progress bar.

   It may take several minutes to install on the handheld device. When the application has been downloaded to the handheld device, the Application Downloading Complete dialog box appears on the PC.
8. Click OK.

   A message appears informing you that setup has finished installing the Siebel Handheld application on your computer.
9. Click Finish.

   The Siebel Handheld icon appears in the Start > Programs screen on the handheld device.

After installing the Siebel Handheld application and Siebel Handheld Sync, you must perform an initial synchronization before you can use the application. If you are installing the application for the first time on the device, synchronize the Siebel Remote database with Siebel Server, then synchronize the Siebel Handheld and Siebel Remote databases. See "Synchronizing Data on the Siebel Handheld Device" on page 112 for the procedure for synchronizing your data.

See Chapter 5, "Data Filtering," for more information on using Companion Sync and setting filters.

Installing Handheld for Direct Server Sync Users

Most DSS users do not have access to a PC for creating a partnership with their handheld device. In this case, the administrator has to create partnerships with each user's device and install the application. Siebel Handheld applications can be installed in DSS mode using the Siebel Installer as described in this section.

To install the Siebel Handheld application using DSS

1. Using Microsoft ActiveSync, establish a partnership between the handheld device and the PC.
2. On the PC network or DVD-ROM, locate the folder where the Siebel Handheld Application folder is installed, then double-click setup.exe.

   The installation process begins.
3. From the Choose Setup Language window, choose the language you want to use for the installation and click OK.
4. At the Synchronization Options screen, choose the Direct Server Sync option and then click Next.

   The next screen displays and asks, "Would you like to deploy a CAB file to enable rapid installation for additional devices?"

   NOTE: If you want to create a stand-alone installer, choose Yes, and then click Next. See "Reinstalling the Siebel Handheld Application" on page 98 for details.
5. To install the application on the device, click Next.
6. Select the desired language of the Siebel Handheld Application, and click Next.

   A window appears showing the setup status, followed by several DOS windows.

7 The Add/Remove Programs dialog appears. This is followed by the Installing Applications dialog that asks if you want to install in the default directory. Click Yes to install the Siebel Handheld application on the handheld device.

NOTE: The default directory in the Applications dialog is the directory specified by the system administrator in a setup file. So that the application works correctly, the Siebel Installer installs the application in the default directory. Therefore, even if you specify a different location for the application, the application is installed in the default location.

The Siebel Handheld installation automatically installs SSCE Service Pack 1 and overwrites existing files on your system. A message may appear asking if you want to replace existing files. Respond by tapping "Yes to All."

During the installation, the Installing Applications dialog box displays a progress bar. It may take several minutes to install on the handheld device. When the application has been downloaded to the handheld device, the Application Downloading Complete dialog box displays on the PC.

8 Click OK.

A window appears informing you that setup has finished installing the Siebel Handheld application on your computer.

9 Click Finish.

The Siebel Handheld and Siebel Handheld Sync icons appear in the Startup screen on the handheld device.

After installing the Siebel Handheld application and Siebel Handheld Sync, you must perform an initial synchronization before the application can be used. Refer to "Synchronizing Data on the Siebel Handheld Device" on page 112 for the procedure for synchronizing your data.

See Chapter 5, "Data Filtering," for more information on using Direct Server Sync and setting filters.

Reinstalling the Siebel Handheld Application

Follow the steps below to reinstall or upgrade your Siebel Handheld application.

To reinstall or upgrade the Siebel Handheld application

1 Before you reinstall the current application, you must first uninstall the current application on your device. See "Uninstalling the Siebel Handheld Application" on page 99 for more information.

2 Once you have uninstalled the application, you may then reinstall the application or install the newer version. See "Installing on the Siebel Handheld Application" on page 95, and follow the instructions for installing the Siebel Handheld application.

3 Synchronize your Siebel Handheld application. See "Synchronizing Data on the Siebel Handheld Device" on page 112 and follow the instructions for synchronizing your data.

NOTE: If you are using Companion Sync to synchronize your data, synchronize the Siebel Handheld database with the Siebel Remote database.

Uninstalling the Siebel Handheld Application

Uninstalling the application deletes the database files as well as the application files.

CAUTION: Before you uninstall your application, you must synchronize your database to save any changes to your data since the last synchronization. If you do not synchronize before uninstalling, these changes will be lost. See "Synchronizing Data on the Siebel Handheld Device" on page 112 and follow the instructions for synchronizing your data.

To uninstall the Siebel Handheld application

1. Select Start > Settings.
2. Select the System tab and tap Remove Programs.
3. From Remove Programs, select the Siebel Handheld application and tap Remove.

   NOTE: A dialog box appears saying that a file cannot be deleted. This occurs because a file may still reside in memory. Ignore this message and tap OK to delete all application and database files. No additional steps are required to remove the application and database files.

9 Working with Siebel Handheld Applications

This chapter includes the following topics:

Components of the Siebel Handheld Interface

The components of the handheld interface include the Screens menu, Show drop-down list, application-level menu, Queries drop-down list, toolbar, and status bar.

Figure 5 shows the components of the Siebel Handheld application.

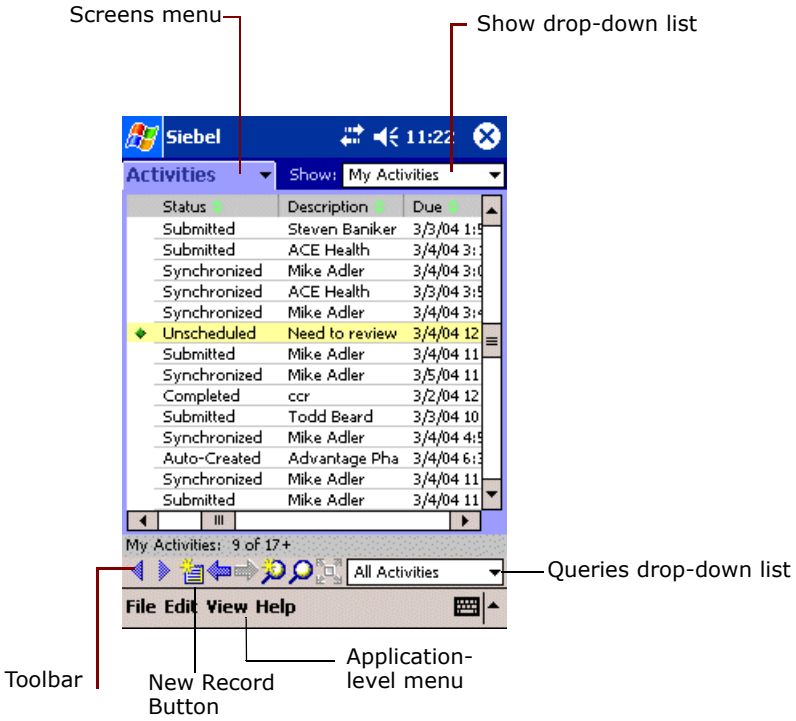


Figure 5. Siebel Handheld Screen Components

Screens Menu

The screens menu is the first level of navigation in the Siebel Handheld application. When you launch the Siebel Handheld application for the first time, this tab is labeled Screens unless you have configured a start up view to appear. When you tap the screens menu, a drop-down list of all available screens appears. Tap the desired screen in the list to navigate to it.

For information about configuring a start up view, see "Setting User Preferences in the Siebel Handheld Application" on page 110.

Show Drop-Down List

The Show drop-down list is the second level of navigation in the Siebel Handheld application. This is where you choose views for the selected screen.

Application-Level Menu

The application–level menu consists of the File, Edit, View, and Help menus. Tap a menu to select a menu option. The options that are available in each menu vary depending on the task you are performing.

Queries Drop-Down List

Up to two predefined queries (PDQs) are displayed in the Queries drop-down list. The list displays the query chosen when you synchronized (or the default filter if you did not change the Set Filters selection) and the All Records query, if it is defined. For more information, see Chapter 5, "Data Filtering."

Siebel Toolbar

The Siebel toolbar has buttons for frequently used functionality like record navigation and querying. You can configure your toolbar and specify which buttons are displayed. See "Configuring User Interface Elements in Siebel Handheld" on page 24.

- Tap the New Record button to add a new record to the active list or form.
- Tap the Back button to navigate to the previous view.
- Tap the Forward button to navigate to the view you were in before you selected the Back button.
- Tap the Record Navigation buttons to move through records in a form or a list.
- Tap the New Query button to begin a new query in a form or a list.
- Tap the Execute Query button to run the query you just created.
- Tap the Maximize Minimize Applet button to expand the active applet so that it is the only applet displayed and takes up the entire screen display. This allows you to see more columns or more rows of data at one time. Tap again and the screen displays two applets.

Customizing the Toolbar

You can customize which buttons appear on your toolbar by selecting View > Customize Toolbar from the application menu.

To add and remove buttons from the toolbar, drag and drop the desired buttons between the Choose Toolbar Buttons dialog box and the toolbar.

Minimize Button

The Minimize button appears in the upper right corner of your window. When you tap the Minimize button, the application minimizes, but does not close. To reopen the minimized application, from the Start menu, tap the Siebel Handheld icon. To close (exit) the application, choose File > Exit.

Do not confuse the Minimize button that appears in the upper right corner with the Maximize Minimize Applet button that appears on the Toolbar.

Status Bar

The status bar appears at the bottom of the application window. It provides information about the current view.

Navigating the Siebel Handheld Interface

Navigating the Siebel Handheld application is achieved through the screens menu, the Show drop-down list, drilling down, drilling across, toolbar buttons, and toggling.

Screens Menu

The screens menu provides the first level of navigation. Here you select the screen you want to work in. For more information about the screens menu, see "Components of the Siebel Handheld Interface" on page 101.

Show Drop-Down List

The Show drop-down list is the second level of navigation. After you have selected a screen from the screens menu, select a view from the Show drop-down list. Views in the Show drop-down list are specific to each screen.

For example, in the Activities screen you can pick the My Activities view from the Show drop-down list.

More Info View

To view all of the information available for a record, make sure it is selected, and choose More Info from the Show drop-down list.

NOTE: Not all screens have a More Info view.

Expandable Fields

Due to the limited screen size on the handheld, it is not always easy to view the data in a field without scrolling or resizing the field width. Therefore, some fields that could contain large amounts of text are expandable—that is, the data can be viewed in a text box. An ellipsis (...) appears in the field to indicate that the field is expandable. When you tap the ellipsis, a text box opens showing the data in that field. When you step off the field, the text box closes.

In form applets, an ellipsis is always visible in those fields that are expandable. However, in list applets, due to space constraints, the ellipsis is not always visible in expandable fields. When you tap on an expandable field in a list applet, the ellipsis appears. Once the ellipsis appears, you tap the ellipsis to open the text box.

URLs in Applet Fields

Tapping on a field that contains a URL value launches the URL in Microsoft Internet Explorer.

Navigating a List of Records in the Siebel Handheld Application

Within the view you select from the Show drop-down list, you can view detailed information on a record. When records are displayed in a list, you can drill down or drill across the record to get additional details.

Drilling down occurs when you tap a hyperlink in a record and are taken to another view within the current screen. For example, if you are in the Accounts screen, and tap the Account Name hyperlink, you navigate to the details for that account. You do not leave the Accounts screen; you just move deeper into it.

NOTE: Hyperlinks are indicated by blue underlined text as long as they are set up this way in User Preferences. For more information see "Setting User Preferences in the Siebel Handheld Application" on page 110.

Drilling across a record occurs when you tap a hyperlink in a record and are taken to another view in a different screen. For example, tapping a hyperlink in the Accounts column of a contact record in the Contacts screen takes you to the record for that account in the Accounts screen.

Dynamic drilldown occurs when you tap a hyperlink in a record and are taken to another screen or just another view. Where you navigate to depends on the content in the drilldown field. For example, tapping a hyperlink in the Activity field in the Activities screen can take you to different places. If you tap an Account Call activity, you navigate to the Account Call screen. If you tap a Visit activity, you navigate to the Activities More Info view.

History Arrows

To navigate back to views you have recently displayed, tap the Back button. After you have used the Back button, you can use the Forward button to navigate back to your original screen and view.

NOTE: The History arrows only allow you to navigate between views. These arrows do not allow you to recover data that may have been entered or deleted in another view.

Record Navigation Buttons

Use the Record Navigation buttons to move back and forth though a set of records. The navigation buttons are described in Table 25.

Table 25. Record Navigation Buttons

Button	Description
	Navigates back to the previous record in the list or form.

Table 25. Record Navigation Buttons

Button	Description
	Navigates forward to the next record in the list or form.
	Navigates back a view based on the navigation history. You can define which views are part of the history. If a view is set to not be recorded as part of the history, the back button won't go back to that view.

Entering Data with the Siebel Handheld Application

There are several different methods for entering data in the Siebel Handheld application. Tap the up arrow next to the Input Panel button to select a method. See the user guide for your device for information on using the different input methods.

Working with Columns in the Handheld Client

Data is displayed in lists and forms in your Siebel Handheld application. You can organize and work within it in a number of ways to better suit your needs.

There are several ways in which to organize columns in a list. You can:

- Sort data by up to three columns
- Resize columns
- Change the order in which the columns appear
- Show and hide columns
- Lock columns for horizontal scrolling

You can sort records in a list by tapping in the column header of the column in which you want to sort the records. If the green column sort indicator points up, the column is sorted in ascending order. If it points down, the column is sorted in descending order.

If you need to sort by more than one column, you can open the Sort Order dialog box to sort up to three columns at one time. Open the Sort Order dialog box by choosing View > Advanced Sort from the application-level menu.

Resize columns by tapping and dragging the divider between the column headings until the column is the desired size.

You can change the order of columns using the Columns Displayed dialog box. Open the Columns Displayed dialog box by choosing View > Columns Displayed.

Show and hide columns using the Columns Displayed dialog box. In the Available columns list, select the items you want to show and tap the arrow to move the selected items to the Selected columns list. To hide columns, select the items and tap the arrow to move the selected items to the Available columns list.

Lock or unlock columns by tapping and holding the column header.

Finding and Querying Data in the Siebel Handheld Application

You can search for data using the Find or Query functionality in your Siebel Handheld application.

About Find in Handheld

Use Find to do a simple search for a record. You can access Find by choosing Edit > Find View > Find... from the application-level menu. This launches the Find dialog box, in which you can enter your search criteria. The asterisk wildcard function (*) can be used in the search criteria. Figure 6 shows an example of the Find dialog window with the following fields: Look In, Last Name, Type, Last Call Date, Primary Specialty, and Rep Specialty.

NOTE: There may be a slight variation in your version of Siebel software, and the Find dialog box may not look exactly as shown here.

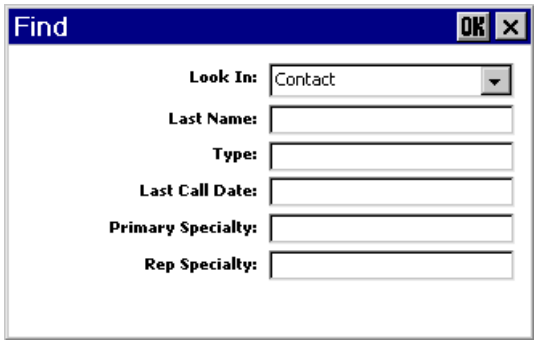


Figure 6. Find Dialog Box

About Queries in Handheld

Use Query to locate a number of records containing a specific set of criteria. There are a number of ways in which to perform query tasks in your Siebel Handheld application.

Creating a Query

To begin a query, you can choose Edit > Query > New from the application-level menu, or you can tap the New Query button on the toolbar. Both provide you with a blank form or list where you can enter your query criteria, depending on where you are in the application when you invoke the command. The asterisk wild card function (*) can be used in the search criteria.

Executing a Query

After you have created the query, you can execute it by choosing Edit > Query > Run from the application-level menu or by tapping the Execute Query button in the toolbar.

Refining a Query

You can refine your current query by choosing Edit > Query > Refine from the application-level menu.

Printing with the Siebel Handheld Application

You may print from any view in the Siebel Handheld application that has been configured to support printing. When you print from the handheld, a document that has been configured for the view is printed. You can print directly to a printer, or, if you are not connected to a printer at the time, you can queue your print jobs and wait until you have access to a printer to print your documents.

NOTE: When you print from a view, you are not necessarily printing what is visible on the screen at the time. Every field on the screen may not be relevant for the document. The document may contain only a portion of what is in the view, and it may also contain data that is not viewable at the time. A separate applet, which often cannot be viewed in the user interface, is configured specifically for printing.

The print templates used to generate the printed are installed during the time of setup.

For a list of supported printers, see the system requirements and supported platforms documentation for your application, see *System Requirements and Supported Platforms* on Siebel SupportWeb.

Print from the Siebel Handheld application by choosing File > Print. If you are connected to a printer, the print job runs. If you are not connected to a printer, the print job is sent to a print queue. View the print queue by choosing File > Print Queue.

Exporting Data with the Siebel Handheld Application

You may export data from any view in your application in HTML format or as tab delimited text and save it to a file. This file can be viewed in applications such as Microsoft Pocket Word, Microsoft Pocket Excel, and Internet Explorer.

To export data, select File > Export... to open the Export dialog box.

In the Export dialog box, you may specify the following:

- **Format.** Specify either HTML or Tab delimited text file.
- **Export.** Select Only active applet to export only the data in the active applet. Select All applets in view to export the data in all visible applets.
- **Output file name.** By default, the file is saved in the temp directory with the filename "output." You may tap Browse to specify a different location or filename.
- **Paste Output to Clipboard.** Select the checkbox to save the data to the clipboard.
- **Open file.** Select the checkbox to automatically open the file. When you tap OK in the Export dialog box, the data is exported to the specified file, and the file is automatically opened.

  NOTE: You must specify a valid output format for the application. See Table 26 for the correct formats to specify for the supported applications.

Table 26. Export Data Options

To export data to	Do the following
Microsoft Word	Set Format to "Tab delimited text file."
Microsoft Excel	Select the "And paste output to clipboard" check box. The Output format may be set either to HTML or "Tab delimited text file." Paste the data from the clipboard into an Excel spreadsheet.
Microsoft Internet Explorer	Set Format to HTML.

Calendar and Calendar Views in the Siebel Handheld Application

To view your calendar, choose Calendar from the screens menu.

You can view your calendar in a monthly, a weekly, or a daily format. To navigate within the calendar, select the calendar view you want to see from the Show drop-down list.

Customizing the Calendar

You can customize aspects of your calendar from the User Preferences view. For more information, see "Setting User Preferences in the Siebel Handheld Application" on page 110.

Setting User Preferences in the Siebel Handheld Application

You can customize aspects of your Siebel Handheld application from the User Preferences dialog box. Access the User Preferences dialog box by choosing View > User Preferences from the application-level menu.

In the User Preferences dialog box you can:

- Set a default startup screen.
- Set number of maximum history threads to be saved.
- Set the maximum percentage of the display area that the parent applet can take up.
- Change font size.
- Customize list spacing, column width settings, and grid lines.
- Customize your calendar's default view, start time, time slot interval, and default appointment duration.
- Specify screen aesthetics such as alternating colors for rows and showing drilldown sources as hyperlinks.

Backing Up and Restoring Data with the Siebel Handheld Client

It is recommended that you back up your data to an external device—for example, a CompactFlash card or a Secure ID card. If the handheld device is damaged, the backup may not be retrievable. If you store your backups in RAM, depending on the size of your application and data extract, you may decrease the amount of memory available for the application, and your application performance may suffer.

Automatic Backup After Synchronization

The automatic backup feature must be enabled in the application by your System Administrator. If the backup feature is enabled, a backup is automatically created at the end of every synchronization. This way, you have an up-to-date snapshot of the database. You must never synchronize your data to the handheld device and then restore the database using an older copy of the database. If you do, the next time you synchronize, the application tries to rewrite changed transactions. This can cause data integrity problems. Therefore, when the database backup feature is enabled, a database backup occurs automatically at the end of each synchronization. Keep in mind that this makes the overall time to synchronize somewhat longer. The size of the database and the speed of the CompactFlash card also affect the time it takes to complete synchronization.

Backing Up Data

The following procedure describes how to back up the database on the handheld device.

To back up the database

1. From the application-level menu, choose File > Backup.

   NOTE: If the Backup menu item is disabled, contact your system administrator to have backup enabled in your application.

   A dialog box appears, telling you that backing up the data will restart the application and prompts you to confirm that you want to continue.

2. Tap Yes to start the backup.

   A status dialog box appears indicating that the backup is in progress and may take a few minutes. The Handheld configuration files and data is copied to the backup location specified in the setup.ini file. Typically, the backup location is a CF or SD card. In some cases, the location is a directory in memory.

   A dialog box appears telling you whether the backup succeeded and asks if you want to return to the application.

3. Tap Yes to return to the application.

NOTE: If the backup fails, consult your system administrator.

Restoring Data from a Backup

In order to restore the application to its previous state, the user should contact the system administrator. Any work performed on the handheld device since the last backup will be lost.

To restore the database

1. Remove the external flash card from the damaged device and place it in a new handheld device where the application has been installed.
2. Navigate to the \Program Files\Siebel Handheld folder.
3. Start the restore by tapping the BackupUtility file twice.

   A dialog box appears, asking you to confirm that you want to restore the device from a previous backup.

4. Tap Yes.

   A status dialog box appears, indicating that the restore is in progress. The backup utility restores the files to the state when the backup was performed. A dialog box appears telling you if the restore was successful. If successful, it asks you to confirm that you want to restart the Siebel Handheld application.

5. Tap Yes to start using the application.

Synchronizing Data on the Siebel Handheld Device

You must synchronize the data on your handheld device:

- After you install or upgrade the Siebel Handheld application.
- Before uninstalling the Siebel Handheld application.
- On a regular basis to keep your data synchronized with Siebel Server and Siebel Mobile Web Client.

The sections that follow describe how to synchronize using Companion Sync (CS), Direct Server Sync (DSS) and Direct Server Sync via Proxy (DSSvP), and provide some troubleshooting tips.

Using Siebel Handheld Synchronization with the Handheld Client

Siebel Handheld Synchronization differs depending on whether users synchronize through Companion Sync or Direct Server Sync. The following procedures show how to launch and use Handheld Synchronization for each method.

NOTE: A given user can only synchronize using one method. For example, it is not possible to install a Siebel Handheld application that a particular user will synchronize both to the Siebel Mobile Web Client database through Companion Sync and also to the Siebel Server database directly through Direct Server Sync.

Using Companion Synchronization with the Handheld Client

End users that synchronize their data using Companion Sync must follow a three-step process to synchronize their handheld, remote, and server databases. Immediately before and after every Siebel Remote sync, you must perform a Companion Sync. This process can be time consuming for the end user and difficult for the administrator to enforce.

Integrated Sync eliminates the need for you to initiate three separate sync sessions for each Siebel Remote sync. Integrated Sync is a one-button process that automatically initiates each of the following synchronization steps:

1. Handheld Upload and Processing—Handheld transactions are uploaded to the companion PC and processed.

2 Siebel Remote Synchronization—The Siebel Mobile Client is synchronized with Siebel server. Transactions on the mobile client database are uploaded to Siebel server, and changes to Siebel server are downloaded to the mobile client database.

NOTE: If there is a handheld patch staged on the server, synchronization terminates and the patch is installed. After the patch installation is completed, the handheld user is prompted to synchronize again (using either Integrated Sync or Companion Sync) to complete the data extraction and download (that is, Step 3). It is critical that the handheld user synchronize a second time after the patch installation is completed. If he fails to do so, he is not able to start the Siebel Handheld application.

3 Handheld Data Extract and Download—Data is extracted from the mobile client database to the handheld device database.

You may use Companion Sync to synchronize your handheld with Siebel Mobile Client as many times as you wish between Integrated Sync sessions. However, it is recommended that you conduct Integrated Sync sessions frequently so that the Siebel Remote synchronization process does not take long periods of time to complete and update conflicts are minimized.

Synchronizing the Handheld Client for Companion Sync Users

When you synchronize, you have the option of either doing an Integrated Sync or Companion Sync. To do an Integrated Sync, select Perform Remote Sync when the Siebel Handheld Sync dialog box appears.

NOTE: You must close your Siebel Handheld application before synchronizing your application.

To perform Companion Sync

1 From the companion PC, establish a Microsoft ActiveSync connection to the handheld device.

2 From the device, verify that the Siebel Handheld application is closed.

NOTE: On the Pocket PC 2003 operating system, the Minimize button (the button with the "X" in the top right corner of the application) minimizes but does not close the application. To close out the Handheld application in preparation for synchronization, you must use the File > Exit command.

3 From the companion PC, choose Start > Programs > Siebel Handheld Sync.

The Siebel Handheld Sync dialog box appears.

a Enter your user name and password.

b By default, Perform Remote Sync is selected. To perform an Integrated Sync, accept the default setting.

If you want to do Companion Sync only, then unselect the Perform Remote Sync box.

Selecting Bypass Set Filters skips the step of selecting the filters and immediately starts the synchronization process. If you select Bypass Set Filters, then the filters that you selected the last time you synchronized are used. If this is the first time you are synchronizing, then the default filters are used.

4 Tap Login.

5 Tap Set Filters.

The Filters dialog box appears.

6 From the Filter list box, select the screen for which you want to choose a filter.

7 From the Choose drop-down box, select the filter you want to associate with the screen you selected in Step 6.

NOTE: Tap Default Filters to restore the filter selection to the default setting.

8 Tap OK and tap Start to begin synchronization.

a The Siebel Handheld Sync dialog box appears. If "Perform Remote Sync" was selected, this is followed by the Siebel Remote dialog box. When synchronization has successfully completed, the Finished dialog box appears.

b If a handheld patch needs to be installed, the synchronization process is interrupted and the patch is installed. After the patch is installed, you must restart Siebel Handheld Sync to complete the data extract process. If you fail to do this, you cannot start your application.

c The Finished dialog box appears indicating that the synchronization has successfully completed.

9 Tap OK to exit Siebel Handheld Sync.

NOTE: If synchronization errors occur, an error dialog box appears.

Using Direct Server Synchronization with the Handheld Client

There are two methods for synchronizing between the handheld device and the Siebel application server:

- Direct Server Sync (DSS) provides synchronization between the Siebel Handheld application and the Siebel application server.
- Direct Server Sync via Proxy (DSSvP) provides synchronization between the Siebel Handheld application and the Siebel application server, using the desktop or companion PC to provide the network connection between the handheld device and the server.

NOTE: You must close your Siebel Handheld application before you synchronize with the Siebel application server.

To synchronize with the Siebel application server

1. If you are synchronizing using DSS, create a direct network connection through a modem or a direct LAN connection.

   If you are synchronizing using DSSvP, establish an ActiveSync connection between the handheld device and the PC.

2. From the device, verify that the Siebel Handheld application is closed.
3. From the device, choose Start > Programs > Siebel Handheld Sync.

   The Siebel Handheld Sync dialog box appears.

4. Enter your user name and password.

   Selecting Bypass Set Filters skips the step of selecting the filters and immediately starts the synchronization process. If you select Bypass Set Filters, then the filters that you selected the last time you synchronized are used. If this is the first time you are synchronizing, then the default filters are used.

5. Tap Login.

   The Siebel Handheld Sync dialog box appears.

6. Tap Set Filters.

   The Filters dialog box appears.

7. From the Filter list box, select the screen for which you want to choose a filter.
8. From the Choose drop-down box, select the filter you want to associate with the screen you selected in Step 6.

   NOTE: Tap Default Filters to restore the filter selection to the default setting.

9. Tap OK, and then tap Start to begin synchronization.

   NOTE: If a handheld patch needs to be installed, the synchronization process is interrupted and the patch is installed. After the patch is installed, you must restart Siebel Handheld Sync to complete the data extract process. If you fail to do this, you cannot start your application.

   The Finished dialog box appears indicating the synchronization has successfully completed.

10. Tap OK to exit Siebel Handheld Sync.

    NOTE: If synchronization errors occur, an error dialog box appears.

Synchronization Troubleshooting with the Siebel Handheld Client

This section lists potential error messages that are associated with synchronization. In addition, this section explains how to fix transaction errors.

General Synchronization Errors

There are a number of different errors that can occur when synchronization does not complete successfully, for example:

- Faulty wire connection
- Server crash
- Insufficient memory
- Login error

When these errors occur, the user should exit Siebel Handheld Sync and launch the application again.

NOTE: When you restart Siebel Handheld Sync, you may see an error message that says that another instance of syncmanager.exe is running. You are asked whether you want to terminate the first instance or not, and you should choose Yes.

Transaction Conflicts

Transaction conflicts are minimized when customers adhere to the standard configuration practices outlined in this document. However, even when proper configuration practices are followed, conflicts can occur for a variety of reasons. For example, if a field value is updated on both the handheld client and the server between synchronization events, a transaction update conflict occurs. In this instance, the user is presented with an error dialog after synchronization has completed.

A transaction consists of one or more smaller transactions called mini-transactions. For example, if you update several fields in a record, the update to the record counts as a single transaction, and each update to a field is a mini-transaction. The Siebel Handheld application behaves in the same way as the Siebel Web application in that if any part of the transaction fails, the entire transaction fails. Assume, for example, that you update four fields in a record. If, during synchronization, three fields update correctly and one field fails to be updated, none of the fields in the record is updated.

Improving Siebel Handheld Application Performance

If you find that the performance of the Siebel Handheld application is very slow or begins to degrade, the following can help to improve the application performance:

- Verify that your device meets the minimum memory requirements. See *System Requirements and Supported Platforms* on Siebel SupportWeb.
- When you run the Siebel Handheld application, it is recommended that you do not run any other applications. By doing so, you maximize the amount of memory that is available to run the application.
- Increase the amount of memory that is allocated for running applications.
- Installing the binaries to a CompactFlash card. For more information, see "Setting up Siebel Handheld Application Installation on a CompactFlash Card" on page 80.

To increase application memory

1. From the Start menu, select Settings.
2. Select the System tab and tap Memory.
3. Move the slider bar so that more memory is allocated to Program Memory, then tap OK.

10 Using Pharma Handheld

Topics Included In This Chapter

Managing Contacts with Siebel Pharma Handheld

A *contact* is typically a physician, nurse, pharmacist or other medical professional. In a more general sense, a contact is any individual a pharmaceutical company deems significant to their business process, such as a formulary director, contracts administrator, or medical education event speaker.

Sales representatives use Pharma Handheld to add and update contact profile information which may include adding new contacts, creating new contact addresses, tracking affiliations between contacts and accounts, recording the best times to call on a contact, transcribing relevant notes, and viewing prescription data.

This section describes how to manage contact information using all of the views accessible from the Contacts screen's Show drop-down list, except for Calls and Activities. The following contact management procedures are included in this section:

For information on the Calls and Activities views, see "Creating Contact Calls in Pharma Handheld" on page 133 or "Creating General Activities in Siebel Pharma Handheld" on page 144.

Adding Contacts in Pharma Handheld

Using the Contacts screen and the My Contacts view, you can add contacts and update contact information directly in Pharma Handheld.

To add contacts

1. Navigate to the Contacts screen.

   The My Contacts list appears.
2. On the toolbar, tap the New Record icon.
3. Complete the Last Name, First Name, Main Phone, Type, and Title fields for the new record.

To add additional contact information

1. Navigate to the Contacts screen

   The My Contacts list appears.
2. Select a record, and from the Show drop-down list, choose More Info.
3. Add or edit information in the available fields.

   The fields are described in the following table.

Field	Comments
Address	Read only. A contact can have more than one address. One address must be specified as primary. Addresses are entered using the Addresses view. For more information on adding addresses, see "Adding Contact Addresses in Pharma Handheld" on page 121.
Last Call Date	Read only. The date of the most recent call that has been submitted.
OK to Sample	Checking this box indicates that it is permissible to drop samples off with this contact.
Primary Specialty	Read-only. Siebel administrators define this value.
Rep Specialty	The specialty or area of expertise associated with this contact within the contact's organization.
Route	Allows users to select when to visit an account from a predefined route schedule.
Title	Must be filled in before a contact can sign for receipt of samples.
Type	Indicates the type of contact.

Adding Contact Addresses in Pharma Handheld

Contact addresses are entered in the Addresses view. Since a contact can have multiple addresses, and multiple contacts may share an address, take care when editing an address as the changes may affect more than one contact.

When entering addresses, specify one address as the primary. Each sales representative can specify a different primary address for an assigned contact. For example, one representative might specify a private office as the primary address, while another representative might designate a hospital department as the primary address.

The More Info form only displays the primary address, not all the addresses associated with the contact.

To add contact addresses

1. Navigate to the Contacts screen

   The My Contacts list appears.

2. Select a record, and from the Show drop-down list, select Addresses.
3. Tap the list of addresses to select it.
4. On the toolbar tap the New Record icon.
5. In the Addresses list, do one of the following:
   - Tap New to add a record, and then complete the necessary fields.
   - Tap an existing address in the list, and then tap OK.
6. In the Address list, tap the check box in the record's Primary field to designate the record as the contact's primary address.

   A check mark appears in the box to designate the primary address.

Adding and Editing License Information in Pharma Handheld

Using the License Numbers view, you can add the contact's professional license number, such as a state medical license number or a physician investigator's AMA number.

Before a physician can sign for samples dropped, you must enter the physician's license numbers and additional license information. The contact must have a valid license number for the state corresponding to the address where samples are disbursed.

To add and edit license information

1. Navigate to the Contacts screen

   The My Contacts list appears.

2 Select a contact, and from the Show drop-down list, select License Numbers.

The License Numbers view appears.

3 Tap the License Numbers list to select it, and then do one of the following:

- On the toolbar, tap the New Record button, and then complete the fields for State, Licence number, License Expiration Date, and license Status.
- Tap a License Number record to select it, and then edit the information in the fields.

Specifying the Best Time to Call on a Contact in Pharma Handheld

Using the Best Time to Call view, you can enter the best times to call on a contact based on a selected address. You can then query for contacts available during a specific time period.

To specify the best times to call on contacts

1 Navigate to the Contacts screen.

The My Contacts list appears.

2 Select a contact, and from the Show drop-down list, select Best Times to Call.

3 Tap the Best Times to Call list to select it.

4 On the toolbar, tap the New Record button.

5 Complete the fields for the new record, as described in the following table.

Field	Comments
Address	Indicates which contact address pertains to this best time to call information. Select the address from the Pick Location dialog box, and tap OK. The Pick Location dialog box displays all addresses associated with that contact.
Start Day	Indicates the day that the contact is available for a call at that address.
Start Time	Indicates the start time for the selected day that the contact is available for a call.
End Time	Indicates the end time for contact availability.
Comments	Text field for information about time period constraints and other relevant notes.

Adding Private or Shared Notes About a Contact in Pharma Handheld

Using the Private Notes and Shared Notes views you can create and update notes on contacts. Private notes are visible only to the creator of the note; shared notes are available to other sales representatives calling on the contact.

To add notes about contacts

1. Navigate to the Contacts screen, and select a contact from the My Contacts list.
2. From the Show drop-down list, select one of the following:
   - **Private Notes.** Limits access to the note to the person creating it.
   - **Shared Notes.** Allows all account team members to access the note.
3. Tap the Private Notes or Shared Notes list to select it.
4. On the toolbar, tap the New Record button.

   A new row appears in the list.
5. Complete the necessary fields for the record.

   Tap in the Note field, and then tap the ellipsis (...) to view the entire note while you are entering text.

Indicating Affiliations Between Contacts and Accounts in Pharma Handheld

Using the Affiliations view, you can associate a contact with an account. One reason to establish these affiliations is for call reporting purposes. Affiliations between accounts and contacts also can be established using the Accounts screen.

To specify affiliations between contacts and accounts

1. Navigate to the Contacts screen, and select a contact from the My Contacts list.
2. From the Show drop-down list, select Affiliations.

   The Account Affiliations view appears.
3. Tap the Account Affiliations list to select it, and then tap the New Record button.

4 Complete the necessary fields for the new record.

Some of the fields are automatically populated based on the chosen Account. Other fields are described in the following table.

Field	Comments
Account	The account to be affiliated with the selected contact. Select a predefined account from the Pick Account list, and then tap OK.
Comments	Text field for user comments.
Direct	If a check mark appears in this field, profile data for the contact is routed to members of the team assigned to the affiliated account. If no check mark appears in this field, the profile data is routed only to the members of the team assigned to the contact. Tap the check box to specify a direct affiliation between a contact and an account.
Primary	If a check mark appears in this field, the account is the primary affiliation for the contact. Tap the check box to display a check mark.
Start Date	The beginning date on which the contact became affiliated with this account.

Viewing Prescription Data in Pharma Handheld

Using the Rx Data view, you can view prescription data to better target medical professionals. Data about physicians and prescribed drugs helps pharmaceutical companies define their market for better strategic business planning and national account management. Prescription data can be analyzed to measure market potential, target customers, align sales territories, and track market shifts.

To view prescription data

1 Navigate to the Contacts screen, and select a contact from the My Contacts list.

2 From the Show drop-down list, select Rx Data.

The Rx data associated with the contact appears in the RX Data list.

3 In the list, review the prescription data on a market-by-market basis.

Managing Accounts with Siebel Pharma Handheld

An *account* is any health care business that generates sales for your company or that could potentially generate business. Typical examples of accounts include hospitals, clinics, HMOs, wholesalers, group purchasing organizations (GPOs), and pharmacies. An account can also be any organization with which multiple contacts are associated, such as a group practice or an assisted-living facility.

Sales representatives in the field use Pharma Handheld to add and update account profile information. Representatives use Pharma Handheld to add new accounts, create new account addresses, record the best times to call on an account, and record relevant notes. Sales representatives can also view sales data on Pharma Handheld to help them evaluate the business potential of accounts.

This section describes how to manage account information using all of the Accounts views accessible from the Show drop-down list, except the Calls and Activities views. For information on those views, see "Creating Account Calls in Pharma Handheld" on page 140 or "Creating General Activities in Siebel Pharma Handheld" on page 144.

The following account management procedures are included in this section:

Adding Accounts in Pharma Handheld

Accounts are businesses and organizations that either currently generate sales for your company or have the potential to do so. You can add or edit accounts using the My Accounts view.

NOTE: Only a Siebel administrator can delete an account.

To add an account

1. Navigate to the Accounts screen.

   The My Accounts list appears.

2. On the toolbar, tap the New Record button, then complete the necessary fields for the new record.

3. To enter information in additional fields, select More Info from the Show drop-down list.

   Some of the fields are described in the following table.

Field	Comments
Account	Account name. Tapping the account name hyperlink opens the Call Activities view.
Address	The account can have more than one address. One address must be specified as primary. Account addresses must be entered in the Addresses view. For more information on adding addresses, see "Adding Account Addresses in Pharma Handheld" on page 126.

Field	Comments
Site	A unique location identifier that distinguishes this account from any other accounts with the same name.
Mkt Potential	Used to evaluate the business potential of the account.

Adding Account Addresses in Pharma Handheld

Addresses for accounts are entered in the Addresses view. Since an account can have multiple addresses, care should be taken when editing an account address, as changes affect all accounts associated with the address.

When entering account addresses, designate one address as the primary. Each sales representative assigned to an account can specify a different primary address. For example, one representative might specify a private office as the primary address, while another representative might specify a hospital department as the primary address.

The More Info form displays the primary address, not all the addresses for the contact.

To add account addresses

1. Navigate to the Accounts screen.

   The My Accounts list appears.

2. Select a record, and from the Show drop-down list, select Addresses
3. Tap the Addresses list to select it, then on the toolbar, tap the New Record button.
4. In the Add Address dialog box, do one of the following:
   - Tap New to create a new address record, and then complete the fields.
   - Select an existing address from the list, and then tap OK.
5. In the Primary field, tap the check box to display a check mark if this is the account's primary address.

Specifying Best Times to Call Accounts in Pharma Handheld

Use the Best Times to Call view to specify appropriate time periods for account calls.

To specify best times to call accounts

1. Navigate to the Accounts screen.

   The My Accounts list appears.

2 Select an account, then from the Show drop-down list, select Best Times to Call.

3 On the toolbar, tap the New Record button.

4 Complete the necessary fields for the new record.

The fields are described in the following table.

Field	Comments
Start Day	Indicates the days that the contact is available for a call.
Start Time	Indicates the time that the contact is available for a call.
End time	Indicates end of available time period.
Comments	Text field for schedule information.

Adding Notes About Accounts

Using the Private Notes and Shared Notes views, you can create and update private and shared account notes. Private notes are visible only to the note creator; shared notes are available to other sales representatives calling on the account.

To add account notes

1 Navigate to the Accounts screen.

The My Accounts list appears.

2 Select an account from the My Accounts list.

3 From the Show drop-down list, select one of the following:

- **Private Notes.** Limits access to the note to the person creating it.
- **Shared Notes.** Allows all account team members to access the note.

4 Tap the Notes list to select it.

5 On the toolbar, tap the New Record button, then complete the fields for the new record.

Tap in the Note field, and then tap the ellipsis (...) to view the entire note while you are entering text.

Indicating Affiliations Between Accounts and Professionals in Pharma Handheld

For accounts where you have contact with multiple professionals, you can indicate the affiliation of those professionals with the account by using the Affiliations view. Creating affiliations between accounts and contacts promotes efficiency in call reporting.

To indicate affiliations between accounts and contacts

1. Navigate to the Accounts screen

   The My Accounts list appears.

2. Select an account from the My Accounts list, and from the Show drop-down list, select Affiliations.
3. Tap the Contact Affiliations list to select it.
4. On the toolbar, tap the New Record button.
5. Complete the necessary fields for the new record.

   Some of the fields are described in the following table.

Field	Comments
Last Name	The contact affiliated with this account. Tap the field, select the contact from the Pick Contact list, and then tap OK.
Start Date	The beginning date on which the account became affiliated with this contact.
Direct	Tap the check box to display a check mark. If a check mark appears in this field, profile data for that person is routed to all members of the team assigned to the affiliated account. If no check mark appears in this field, the profile data is routed only to members of the team assigned to the person.

Viewing Sales Data in Pharma Handheld

Sales data can be analyzed to measure market potential, target customers, align sales territories, and track market shifts. Sales data is typically syndicated information that is loaded periodically by the Siebel administrator.

You can review this information using the Sales Data view.

To view sales data

1. Navigate to the Accounts screen.

   The My Accounts screen appears.

2. Select an account from the My Accounts list, and from the Show drop-down list, select Sales Data.
3. Review the data in the list on a product-by-product basis.

Planning and Recording Calls in Siebel Pharma Handheld

Planning calls in Pharma Handheld consists of configuring personal lists and creating account and contact calls. Recording calls involves entering information on products detailed, samples and promotional items dropped, and decision issues that occurred during the call.

About Personal Lists

Personal lists allow for faster call reporting by limiting the number of products that appear in drop-down lists in the Call Products Detailed, Samples Dropped, and Promotional Items Dropped views.

About Contact and Account Calls

Contact and account calls are types of activity records, although contact and account calls cannot be created from the Activities view.

Contact calls can be created by tapping the New Call or Auto Call button from the My Contacts view, by creating a new record from the Contacts screen's Calls view, or by creating a new record from the Contact Calls screen.

Account calls can be created by tapping the New Call or Auto Call button from the Accounts screen, by creating a new record from the Accounts screen's Calls view, or by creating a new record from the Account Call screen.

- **Contact call.** Used to track a planned or past call activity with a contact. You can record details about contact calls such as the products detailed, the samples and promotional items dropped, and decision issues discussed. Before you can record details about a contact call, you must set up personal lists.
- **Account call.** Used to track a planned or past call activity at an account. You can record products detailed, attendees, promotional items dropped, and decision issues discussed.

About Auto Call, Smart Call, and Auto Update

Pharma Handheld provides several features to manage contact and account call records:

- **Smart Call.** Specifying a Smart Call template for the call record associates a prepopulated call template with this call.

  A Smart Call is a template that you can apply to contact calls and account calls to simplify and speed up the call-reporting process. A Smart Call defines a set of information about the products detailed, the samples distributed, and the issues discussed on a call. Smart Call templates are created in Siebel Pharma, not in the handheld application.

  Smart Calls can be also used for calls related to a particular campaign or promotional effort, or for everyday call reporting. They are intended for situations where sales representatives report details about a number of calls that are identical in content (the same products are detailed in the same order, the same samples are dropped, and so on). After you apply a Smart Call template to a call, you can make additional edits in any fields in the Contact Call screen's Details view.

- **Auto Call**. Selecting the Auto Call button creates a new call and populates the record with items from the personal lists.

  Auto Call is designed to help minimize the time in front of a physician by pre-populating the call with products from your personal list. Apply Auto Call as a part of the call planning process. Once the call has been created, you can access auto-created calls to record call information directly on the handheld in front of a physician.

  Auto Call speeds up call reporting because you do not have to individually select the products and samples while recording the call. After selecting Auto Call, the Status field in the Contacts view displays Auto-Created.

- **Auto Update.** Selecting Auto Update deletes from the database unused auto-created call records.

Business Scenarios for Calls and Lists in Pharma Handheld

The following scenarios depict typical work sequences followed by sales managers and representatives using Siebel Pharma and Pharma Handheld. Your company may follow a different sequence according to its business requirements.

Scenario for Setting Up Personal Lists

A sales representative has recently joined a pharmaceutical company that uses Pharma Handheld in the field. During her sales training, the representative's sales manager tells her that before she can record calls within the system, she must first set up her personal lists. The sales manager explains that personal lists allow faster call reporting by limiting the number of products that appear in the application's drop-down lists. The sales manager then demonstrates how to add products to the sales representative's Details, Samples Dropped, and Promotional Items views. Following her manager's instruction, the sales representative updates her personal lists and is ready to record call details.

Scenario for Planning Calls in Siebel Pharma and Recording Calls in Siebel Pharma Handheld

A sales representative for a pharmaceutical company wants to set up visits to her customers over the next few days. To do so, she first uses Siebel Pharma on her laptop to plan contact calls. Then she synchronizes the data with Siebel Pharma Handheld on her handheld device, which she carries with her to record call details.

To plan her calls, she begins by analyzing the physicians' prescribing habits. She then queries on geographical location, specialties, and time lapse since she last called on them to determine which physicians she should call on.

Using Siebel Pharma, she applies a Smart Call template to those calls so that information about the samples products is automatically copied into the call records. She has now prepopulated the calls with the details that she wants to speak about with each physician as well as the samples she wants to drop off.

The sales representative synchronizes her handheld so that she can carry these details with her and record her progress throughout the day. The information she has available on her handheld includes previous calls and other activities, notes, and physician prescription history.

Before meeting with the physician, she goes to the samples closet in his office and drops off the samples. She records the lot numbers on her handheld device.

When she meets with the doctor, she describes the samples she has left for him, explains the benefits of key products, and discuss the doctor's concerns. He expresses interest in additional product samples so she records additional samples to the contact call. She then captures the doctor’s signature on the handheld device.

After the meeting, the sales representative records the information on the products detailed and promotional items and issues discussed. After she has reviewed the information and verified that it is accurate, she submits the call.

Scenario for Planning and Recording Calls in Pharma Handheld

That same day, another sales representative sets off to visit several clinics. Unlike the first sales representative, this representative does not schedule his calls on his laptop beforehand for two reasons. First, he plans to call on group practices with many physicians, and he cannot be sure which physician will be signing for the samples. Secondly, he prefers to enter sample information manually rather than using a Smart Call template.

Before he enters the first clinic, he queries for physicians associated with that address. Seven names appear. When he walks in, he encounters one of the doctors so he selects that physician’s record and adds a new call. While speaking with the doctor about the benefits of the product, the sales representative hands him some samples and records the samples dropped information. He then obtains the doctor’s signature on the handheld device. After adding a comment about the call and recording products detailed, the sales representative submits the call.

Call Management Procedures in Siebel Pharma Handheld

This section provides the following procedures related to planning, recording, and submitting calls.

- Updating personal lists:
  - To create personal lists on page 132
- Creating, recording, and submitting contact calls:
  - To add a contact call from the Contacts view on page 133
  - To add a contact call from the Contact Calls view on page 135
  - To apply a Smart Call template on page 135
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Creating Personal Lists in Pharma Handheld

Personal lists determine which products appear in the drop-down lists of the Call Products Detailed, Samples Dropped, and Promotional Items Dropped views. Limiting the number of products in the lists allows for faster call reporting.

Before you *can record call details, you must* configure personal lists of the products you promote, the products you distribute as samples, and the products you provide as promotional items. In addition, you must specify at least one product in a personal list or the corresponding drop-down list will be empty when you try to enter call details.

Setting up personal lists is a one-time setup procedure. After you have completed this task, you do not need to repeat it. You can revise personal lists at any time to delete or add products as necessary.

To create personal lists

1. Navigate to the Personal Lists screen.
2. From the Show drop-down list, select Details, Promotional Items, or Samples to include that item on this personal list.
3. On the toolbar, tap the New Record button.

4 In the new row, complete the necessary fields.

Some of the fields are described in the following table.

Field	Comments
Order	Enter a number that indicates where this product should appear in the drop-down list. This field appears in the Details list, Samples list, and Promotional Items list. For example, if you want a product in the Details list to appear first, enter 1. If this field is null for *all* products in the list, the products will appear in alphabetical order. If this field is null for some products but not for others, records with a null Order field appear at the beginning of the list, in alphabetical order.
Product	The products being detailed during contact and account calls. This field appears in the Personal Lists, Details view.
Promotional Item	The promotional items being dropped during contact and account calls. This field appears in the Personal Lists, Promotional Items view.
Sample	The products to be dropped as samples during contact and account calls. This field appears in the Personal Lists, Samples view.

Creating Contact Calls in Pharma Handheld

You can create contact calls and update contact call details using Pharma Handheld. Because contact calls are a type of activity, they also appear in the Calendar view.

As a shortcut for creating contact calls, you optionally may apply a Smart Call to the new record or auto-create a record to populate it with predefined data. For more information, see "About Auto Call, Smart Call, and Auto Update" on page 129. Before you can enter information about products detailed, samples, and promotional items dropped during a contact call, you must set up personal lists. For more information, see "Creating Personal Lists in Pharma Handheld" on page 132.

To add a contact call from the Contacts view

1 Navigate to the Contacts screen.

The My Contacts list appears.

2 Select a contact in the Contacts list.

NOTE: If you are using the Auto Call feature, you can select several contacts from the list. Selecting the Auto Call button creates new calls for the selected contacts. Users should be advised that selecting more than one contact at a time to generate Auto Calls affects performance.

3 In the Contacts list, do one of the following:

- Tap the Auto Call button to populate the new call with items from your Personal List and then select Calls from the Show drop-down list.

  After selecting Auto Call, the Status field in the Contacts Calls view displays "Auto-Created."

- Tap the New Call button and complete the fields in the new form.

  Some of the fields are described in the following table.

Field	Comments
Last Name	The contact to be visited during this call.
Ref #	A reference number for this call. This reference number becomes the transaction number (Transaction # field) for a samples transaction corresponding to this call.
Smart Call	Smart Call is a prepopulated call template that can be associated with this call. Make a selection from the Pick Smart Call dialog box.
Status	The status of this call. The default value is Planned. After synchronization, this value changes to Synchronized for calls that have not been submitted. You cannot select the value Submitted. To change the status of the call to Submitted, you must submit the call.
Paper Sign	Indicates that the contact provided a paper signature for a sample disbursement.
Remake Receipt	Used to create an updated sample receipt and signature in the event that the original call information was incorrect. For example, if Dr. Smith mistakenly signs for the receipt of samples on a request form having a different physician's name (such Dr. Jones), then the sample form is inaccurate. In this example, the sales representative must change the name on the original call to the correct physician (Dr. Smith) and have Dr. Smith sign again. Using the Remake Receipt check box, the sales representative can capture a second signature on the corrected sample form. Pharma Handheld automatically tracks the appropriate audit trail information required by the FDA in the remake receipt functionality.

4 To specify which products to detail during the call:

a From the Show drop-down list, select Details.

b Tap the Contact Call Details list to select it, add a new record, and complete the necessary fields.

5 To specify which samples to drop off during the call:

a From the Show drop-down list, select Samples Dropped.

b Tap the Samples Dropped list to select it, add a new record, and complete the necessary fields.

6 To specify which products are promotional items:

a From the Show drop-down list, select Promotional Items.

b Tap the Promotional Items list to select it, add a new record, and complete the necessary fields.

7 To specify which issues were discussed during a call:

a From the Show drop-down list, select Issues.

NOTE: Decision issues are the objections a contact may raise when evaluating a product before making a prescribing decision.

b Tap the Issues list to select it, add a new record, and complete the necessary fields.

For more information on how to enter information, see "Recording Contact Calls in Siebel Pharma Handheld" on page 136.

NOTE: If you applied a Smart Call to the call, you may only need to verify that the information in the four lists is accurate.

To add a contact call from the Contact Calls view

1 Navigate to the Contact Call screen, and tap the Contact Call form to select it.

2 On the toolbar, tap the New Record button.

3 Complete the necessary fields.

To add a contact call from the Calendar screen

1 Navigate to Calendar screen.

2 Navigate to the Daily view for the day you want to schedule your call.

3 Highlight time frame for the Contact Call you want to schedule.

4 Click New Call button.

5 The Contact Call Screen appears with Date/Time field prepopulated with the date/time you selected.

6 Complete the necessary fields.

To apply a Smart Call template

1 Navigate to the Contact Call screen, and tap the Contact Call form to select it.

2 On the toolbar, tap the New Record button.

3 In the new record, complete the necessary fields.

4 In the Smart Call field, tap the drop-down list arrow.

The Pick Smart Call list appears.

5 Select a Smart Call template, and tap OK.

To delete unused records created from the Auto Call button

1 Using the Sign button:

- From the parent Contact Call form, tap the Sign button.

  Selecting the Sign button deletes all dropped records from unused samples, making sure that the physician only signs for samples that he or she was actually given. To delete detailed records for unused products, select the Submit button.

2 Using the Auto Update button:

- From the My Contacts view, tap the Auto Update button.

  For example, suppose you have used the Auto Call button to create three contact calls, but were unable to visit one of the physicians. Selecting Auto Update deletes the unused record.

  NOTE: Performance is affected if users select Auto Update when they have more than one unused auto-created call. It is recommended that users have no more than three unused auto-created calls when using the Auto Update feature.

Recording Contact Calls in Siebel Pharma Handheld

Contact calls are used to track a planned or past call activity with a contact. You can enter contact call details directly in Pharma Handheld.

To record a contact call, users must complete the following tasks, which are included below:

- Enter information on products detailed.
- Enter information about samples dropped.
- Enter information about promotional items dropped (optional).
- Record any decision issues (optional).
- Capture signatures.
- Submit the call.

The next sections explain how to perform each of these tasks. If you have not yet set up your personal lists, you must do so before you can proceed with the next steps. For more information, see "Creating Personal Lists in Pharma Handheld" on page 132.

To record information about products detailed

1 Navigate to the Contact Call screen, and select the desired contact call.

  NOTE: If you have not yet set up your personal lists, you must do so before you can proceed with the next step.

2 From the Show drop-down list, select Details.

  The Product Details view appears.

3 Tap the Product Details list to select it.

4 On the toolbar, tap the New Record button to add a record for each product discussed during the call.

5 Complete the fields for each record.

Some of the fields are described in the following table.

Field	Comments
Indication	The purpose or therapeutic area for which a drug is designed.
Priority	Priority of this product relative to others discussed during the call.
Name	The name of the product detailed during the call. The products appearing in this drop-down list are based on the products added to your Personal list. For more information on adding products to your personal lists, see "Creating Personal Lists in Pharma Handheld" on page 132

To record information about samples dropped

1 Navigate to the Contact Call screen, and select the desired contact call.

2 In the Contact Call form, enter a reference number (if required) in the Ref # field.

3 From the Show drop-down list, select Samples Dropped.

The Samples Dropped list appears.

4 Tap the Samples Dropped list to select it, and then add a record and complete the fields for each product dropped during the call.

Some of the fields are described in the following table.

Field	Comments
Lot #	The lot number (if applicable) of the products dropped during the call. If tracking samples by lot number, select a lot number in the Pick Lot dialog box.
Name	The name of the products dropped during the call. The products appearing in this drop-down list are based on the products available in your samples inventory. For more information on samples, see "Managing Samples in Siebel Pharma Handheld" on page 147.
Quantity	The quantity of samples dropped during the call.

NOTE: If the samples you dropped do not appear in the Name field drop-down list, you may need to acknowledge the receipt of the samples within the system. Go to the Samples Receipts screen and submit any records with a status of In Progress. For more information, see "Acknowledging Receipt of a Samples Transfer in Pharma Handheld" on page 155. If the samples you dropped still do not appear, contact your samples administrator.

To record information about promotional items dropped

1. Navigate to the Contact Call screen, and select the desired contact call.
2. From the Show drop-down list, select Promotional Items.

   The Promotional Items view appears.
3. In the Promotional Items list, add a record for each item dropped during the call, and complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Name	The promotional item dropped during the call. The items appearing in this drop-down list are based on items added to your Personal Promotional Items list. For more information, see Creating Personal Lists in Pharma Handheld on page 132.
Quantity	The quantity of the promotional item dropped during the call.

To record information about decision issues discussed during the call

1. Navigate to the Contact Call screen, and select the desired contact call.
2. From the Show drop-down list, select Issues.

   The Professional Issues view appears.
3. Tap the Issues list to select it.
4. On the toolbar, tap New Record to add a record for each issue discussed during the call.
5. Complete the necessary fields for each new record.

   NOTE: Decision issues are the objections a contact may raise when evaluating a product before making a prescribing decision.

You can use Pharma Handheld to electronically capture signatures. For the application to accept a signature:

- Make sure the title field for the contact from Contacts, My Contacts view is populated.
- Make sure the contact’s license number appears in the License # field of the Contact view. Licenses are associated with the contact's address.

To capture a signature

1. Navigate to the Contact Call screen, and select the desired parent Contact Call form.

2 Tap the Sign button to launch the Signature Capture view.

The Signature Capture view contains the company name, samples recorded when the call gets submitted, a disclaimer (as set up by the administrator on the Web client), and contact information.

If you want to invert the signature display, tap the Signature Flip button instead of the Sign button. Inverting the signature display allows you to extend the handheld device toward the contact for a signature without turning the device around.

3 In the Signature Capture view, have the contact sign on the white surface.

4 Perform one of the following actions:

- Tap OK to submit the record.
- Tap Cancel to abort the procedure.
- Tap Clear to erase the signature area.
- Tap Change Contact to select the correct contact whose signature you are capturing.

NOTE: The application automatically locks the keyboard hot keys when the Signature Capture view is displayed.

Changing Contacts While in Signature Capture View

Sales representatives may find themselves in a position where they will need to switch contacts in order to get a required signature. You can change a contact within the signature capture screen.

To change contact while in Signature Capture view

1 In signature capture screen, tap the Change button.

2 From the Pick Contact list, select the desired contact.

NOTE: By default only the contacts that are affiliated to the accounts this contact is affiliated to will show on the pick applet. Users can select All Contacts button to show all contacts regardless of their affiliation

3 Tap Pick and Sign.

The signature capture view appears with the new contact information just selected.

4 Tap OK to commit the signature.

To submit a completed contact call

1 Navigate to the Contact Call screen, and select the desired contact call.

NOTE: You cannot submit a call with a future date.

2 Verify that the information for the Contact Call is accurate and complete. For more information, see:

- To record information about products detailed on page 136

- To record information about samples dropped on page 137
- To record information about promotional items dropped on page 138
- To record information about decision issues discussed during the call on page 138

NOTE: After you submit a call, you cannot modify any fields except the Comment field.

3 If you dropped samples when making the call, verify that you entered a samples reference number in the Ref # field in the Contact Call form.

CAUTION: If you are a mobile user, submit your calls *before* connecting to the server, and then synchronize. Mobile users should *not* submit calls while connected to the server or they run the risk of introducing errors into their inventory counts.

4 Contact Call form, tap Submit.

If the call passes all of the validations, the application:

- Creates a samples disbursement transaction with a line item for each dropped sample recorded for the call.
- Submits a disbursement transaction to update the samples inventory. If the submission of the disbursement transaction is successful, the application changes the call's Status field to Submitted.
- Sets appropriate fields in the call record to read-only.

For more information on submitting records, see "How Siebel Samples Management Works with Calls" on page 149.

Creating Account Calls in Pharma Handheld

Account Calls are used to track a planned or past call activity at an account. You can enter account call details directly in Pharma Handheld.

For more information on entering call details, see "Recording Account Calls in Siebel Pharma Handheld" on page 142.

NOTE: Before users can enter information about products detailed and attendees associated with an account call, they must set up their personal lists. For more information, see "Creating Personal Lists in Pharma Handheld" on page 132.

To add an account call from the Accounts view

1 Navigate to the Accounts screen.

2 In the Accounts list, do one of the following:

- Select the Auto Call button to populate the new call with items from the Personal Lists, and then select Calls from the Show drop-down list.

  NOTE: When you select Auto Call in the My Accounts view, the application populates the product Details list for all attendees associated with the account call. When you select Auto Call in the Account Calls, Attendees view, the application populates the Samples Dropped list for the selected attendees.

  After selecting Auto Call, the Status field in the Accounts view displays "Auto-Created."

- Tap the New Call button and complete the fields in the new form.

  Some of the fields are described in the following table.

Field	Comments
Name	The account to be visited during this call. Make a selection from the Pick Account dialog box.
Site	A unique location identifier that distinguishes this account from any other accounts with the same name.
Smart Call	The Smart Call template to be associated with this call. Make a selection from the Pick Smart Call dialog box. A Smart Call is a template that you apply to contact calls that defines information about the products detailed, samples and promotional items distributed, and issues discussed on a call. After you apply a Smart Call template to a call, you can make additional edits.
Status	The status of this call. The default value is Planned. You cannot select the value Submitted. To change the status of the call to Submitted, you must submit the call. For more information, see "To submit a completed account call" on page 143.

3. From the Show drop-down list, select the following and add records, if necessary:
   - Details
   - Attendees
4. From the parent Account Call form, select the Submit button.

For more information entering information in the Details and Attendees lists and submitting a call, see "Recording Account Calls in Siebel Pharma Handheld" on page 142.

To add an account call from the Account Call view

1. Navigate to the Account Call screen.
2. On the toolbar, tap the New Record button.
3. In the Account Call form, complete the necessary fields.

To delete unused account call records created with the Auto Call button

1. Navigate to the Accounts screen.

   The My Accounts screen appears.

2. Tap the Auto Update button.

   NOTE: Performance will be affected if you select Auto Update when you have more than one unused auto-created call. Users are advised to have no more than three unused auto-created calls when using the Auto Update feature.

To delete unused attendee calls created with the Auto Call button

1. Navigate to the Account Call screen, and from the Show drop-down list, select Attendees.
2. Tap the Auto Update button.

   NOTE: Performance will be affected if you select Auto Update when you have more than one unused auto-created call. Users are advised to have no more than three unused auto-created calls when using the Auto Update feature.

Recording Account Calls in Siebel Pharma Handheld

Account calls are used to track a planned or past call activity with an account. You can enter account call details directly in Pharma Handheld.

To record an account call, users must complete the following procedures:

- Enter information on products detailed.
- Enter attendee information (the names of contacts met and any samples dropped).
- Enter information about any activities related to the call (optional).
- Submit the call.

The next sections explain how to perform each of these tasks. You must set up your personal lists before you can complete this procedure. For more information, see "Creating Personal Lists in Pharma Handheld" on page 132.

To enter products detailed information for an account call

1. Navigate to the Account Call screen, and select the desired account call.
2. From the Show drop-down list, select Details.

3 In the Details list, add a record for each product detailed during the call, and complete the necessary fields.

Some of the fields are described in the following table.

Field	Comments
Indication	The purpose or therapeutic area for which a drug is designed.
Priority	Priority of this product relative to others discussed during the call.
Name	The product detailed during the call. The products appearing in this drop-down list are based on the products added to your Personal List.

To enter attendee information for an account call

1 Navigate to the Account Call screen, and select the desired account call.

2 From the Show drop-down list, select Attendees.

3 Tap the Attendee list, to select it.

4 On the toolbar, tap the New Record button to add a new record for each attendee.

NOTE: The pick list will, by default, only show contacts that are affiliated to the chosen Account. To show all contacts regardless of affiliation, tap the All Contacts button in the Pick Contact list.

5 Complete the fields for each attendee.

a In the Last Name field, tap the drop-down list arrow.

b From the Pick Contact dialog box, select those contacts you want to add as attendees.

The application creates an attendee call record (similar to a contact call) for each contact you include as an attendee of the account call. These attendee call records are child records of the account call and can be accessed by going to the Account Call and finding the associated attendee. Drilling down on the attendee last name hyperlink enable you to navigate to and access the appropriate attendee call details view.

6 To create an attendee call, do one of the following:

- Select the Auto Call button to populate the attendee call with items from the personal lists, and then select Calls from the Show drop-down list.

  After selecting Auto Call, the Status field in the Accounts view displays “Auto-Created.”

- Drill down on the Last Name hyperlink and complete the fields in the Contact Calls details.

NOTE: You must set up your personal lists before you can complete the next step. For more information, see “Creating Personal Lists in Pharma Handheld” on page 132.

To submit a completed account call

1 Navigate to the Account Call screen, and select the desired account call.

NOTE: You cannot submit a call with a future date.

2 Verify that the information for the Account Call is accurate and complete.

For more information, see:

- To enter products detailed information for an account call on page 142
- To enter attendee information for an account call on page 143

CAUTION: If you are a mobile user, submit your calls *before* connecting to the server, and then synchronize. Mobile users should *not* submit calls while connected to the server or they run the risk of introducing errors into their inventory counts.

3 In the Account Call form, select Submit.

For more information on the validation process when a user selects the Submit button, see "Validation Logic of the Sign and Submit Buttons in Siebel Pharma Handheld" on page 51.

If the call passes all of the validations, the application:

- Creates a samples disbursement transaction with a line item for each dropped sample recorded for the call.
- Submits a disbursement transaction to update the samples inventory. If the submission of the disbursement transaction is successful, the application changes the call's Status field to Submitted.
- Sets many fields in the call record to read-only.

NOTE: If attendees are recorded in an account call, an attendee call is created for each attendee, and the process described above is performed for each attendee call. Attendee calls are the same as contact calls except that they do not appear in the Activities view and they are submitted automatically when the account call is submitted.

Creating General Activities in Siebel Pharma Handheld

Sales representatives use general activities to manage time and schedule demands and to keep their manager informed of their workload. A general activity in Pharma Handheld is used to track non-call tasks such as to-do items, personal events, and correspondence.

In a typical scenario, a sales manager for a pharmaceutical company uses the Activities screen to create and track the activities on which she plans to spend her time during the next month. After scheduling a contact call with a customer, she uses the Calendar to review scheduled activities for the upcoming weeks.

This section provides procedures for adding activities from the Activities and Calendar views.

Adding General Activities From Activities in Pharma Handheld

All activities with valid dates and times appear in the Pharma Handheld Calendar views as well as in the Activities views. The Calendar views provide a visual representation of each user's scheduled activities.

NOTE: The Planned Start and Duration fields in general activities and appointments must contain entries in order for the appointments and activities to appear in the correct time period in the Daily Calendar view. While the Planned Start field is visible in the Activities screen's My Activities view, this field is not visible in the Contacts screen's Activities and Accounts > Activities views. The Planned Start field can be exposed during application configuration.

To add a general activity from the Activities view

1. Navigate to the Activities screen.

   The My Activities list appears.

2. On the toolbar, tap the New Record button.

3. In the new row, complete the necessary fields.

   NOTE: Select More Info from the Show drop-down list to edit additional fields for each record.

   Some of the fields are described in the following table.

Field	Comments
Activity	Activities entered here are set as "General" and are not editable. Calls created from the New Call button are set as "Contact Call" or "Account Call" depending on whether these calls were created for a contact or an account. Previously created Contact Calls and Account Calls are displayed on the Activities view.
Activity Type	The type of activity. The values displayed in this drop-down list depend on the value of the Activity field. For example, the activity types that you can select for a contact call are different from those that you can select for a general activity.
Assigned To	The sales representative responsible for the activity. The Assigned To field in all Activities views (Activities, My Activities list; Activities, More Info form; Contacts, Activities list; and Accounts, Activities list) is read-only.
Duration	The length of time, in minutes, that you expect the activity to take.
Last Name	The last name of the contact associated with the activity. The Last Name field on the Activities, My Activities view and the Accounts, Activities view is read-only.

Adding General Activities Using Calendar in Pharma Handheld

General activities and appointments must have the Planned Start and Duration fields populated in order to be displayed in the correct time slot on the Daily Calendar view.

To add a general activity in the Calendar view

1. Navigate to the Calendar screen.
2. From the Show drop-down list, select Daily, Weekly, or Monthly.
3. For Weekly or Monthly, select the day and time on which you want to schedule a general activity.
4. On the toolbar, tap the New Record button or double-tap on a row.
5. In the new record, complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Account	Complete this field if the activity is related to a particular account.
Planned Start	If you started from the Daily Calendar view, this date reflects the time selected when you created the new appointment. If you started from the Weekly Calendar or Monthly Calendar view, the first time slot of the day is supplied.
Type	The type of activity. The values displayed in this drop-down depend on the kind of activity.
Repeat	Checking this box allows you to set the end date of a repeating appointment (Until). If you do not select a value, 12 more appointments will be scheduled.

6. To specify contact participants:
   - **a** From the Show drop-down list, select Contact Participants.
   - **b** Tap the Contacts list to select it.
   - **c** On the toolbar, tap the New Record button.
   - **d** In the Add Contacts dialog box, select participants and then tap OK.
7. To specify employee participants:
   - **a** From the Show drop-down list, select Employee Participants.
   - **b** Tap the Employee Participants list to select it.
   - **c** On the toolbar, tap the New Record button.
   - **d** In the Add Employees dialog box, select participants, and then tap OK.

Managing Samples in Siebel Pharma Handheld

Most pharmaceutical manufacturers provide free samples to health care professionals in an effort to influence the prescribing habits of physicians and accounts across the United States and the world. In the United States, samples distribution is regulated by the FDA and must be reconciled at least once a year.

Pharma Handheld maintains a samples transaction record for samples transfer, receipt, disbursement, order, and inventory adjustment. The application assigns each samples transaction record a unique identifier for tracking purposes. Depending on the type of transaction, you can display this identifier as a transaction number, an order number, an invoice number, or a transfer number.

This section describes managing and maintaining an electronic inventory of samples and promotional items within Pharma Handheld. As part of managing samples, you can track an electronic inventory of samples stock, create request orders and transfers for samples, and acknowledge receipt of sample transfers directly in Pharma Handheld. You can use either Siebel Pharma or Siebel Pharma Handheld to manage your samples, however you cannot use both applications to handle samples transactions. Reconciling inventory must be performed in Siebel Pharma. This section includes the following topics on managing samples in Pharma Handheld.

Keeping Server and Handheld Samples Records in Sync

Administrators can manage samples inventory using either Siebel Pharma Handheld or Siebel Pharma, but should not use both. In order to keep samples inventories in sync, end users should be prevented from submitting a samples transaction on the server when the same record is still editable on their handheld device.

When a user submits a record, the status changes to Submitted and it becomes read-only, meaning no additional operations are allowed on the record. By updating a user property and writing two small Visual Basic scripts, you can specify that synchronized records are also read-only.

- First, the administrator changes the value of the user property "Update Status To Synchronized" to Y.

  Making this change invokes the UpdateStatusToSynchronized method on the Sample Txn business component.

- Then, the administrator writes a small Visual Basic script for this method to change the status on the Sample Txn to "Synchronized."
- Finally, the administrator writes another Visual Basic script to specify that the record becomes read-only when its status changes to "Synchronized."

  This prevents users from accidentally submitting the sample transactions on the server while the same record is still editable on their handheld device.

Scenario for Managing Samples in Pharma Handheld

This scenario is an example of a workflow performed by an end user. Your company may follow a different workflow according to its business requirements.

Near the end of the quarter, a sales representative in the U.S. prepares for FDA-mandated inventory reconciliation. She is required to take a physical inventory of her samples and make sure the quantities match the electronic inventory. To do so, she needs to make sure that all her sample transactions are up-to-date for the current period before submitting the inventory count.

The sales representative remembers that she made a sample disbursement mistake earlier in the day. She accidentally had a physician sign for 10 samples when she really only dropped off five. Therefore, she needs to make a samples adjustment for this transaction.

In Pharma Handheld, she finds the sample transaction record. Then, she selects the adjust quantity feature, which automatically shifts the transaction status to "In Progress" for the new adjustment record and to "Adjusted" for the already-submitted sample transaction. When she submits the adjustment record, Pharma Handheld updates her inventory to reflect the lower quantity that was disbursed and changes the sample quantity for the actual call from ten to five.

The sales representative also had some samples that had expired, which she physically mailed back to her samples administrator. She now has to record this transaction into her electronic inventory. In the Samples Transfer view, she creates a new record. Then she adds three new sample line item records and selects the Submit button. This changes the status to submitted, locks the records, and updates the handheld inventory to reflect the transfer.

The sales representative is now ready for the actual inventory count. While physically standing in her personal samples closet with her handheld device, she opens the Samples Inventory Count view. From this view, she sees the products listed in her personal inventory according to the electronic count. She goes down the list, product by product, lot by lot, counting each product and lot number combination.

She enters the actual quantity that she finds into Pharma Handheld and notices that the application automatically updates the difference field to reflect discrepancies between the on-hand and electronic inventory. When she is finished, she verifies that the differences are zero. She is now ready to submit her inventory count. Submitting causes a new inventory period to open, displaying the current date and time.

How Siebel Samples Management Works with Calls

This section describes how Siebel Samples Management works with the Contact Call Detail and Account Call Detail views. For more information on recording calls, see "Planning and Recording Calls in Siebel Pharma Handheld" on page 129.

When you select the Submit button in either the Contact Call and Account Call forms, the application verifies that:

- The call's date and time is the same as or earlier than the current date and time. A call cannot be submitted with a future date.

If dropped samples are recorded for the call, the application checks that:

- The Ref# field is not empty. This is controlled by the user properties setting. If the user property for reference number required is set to Y, then the application displays an error message if this field is not populated by the user. Otherwise, the application will automatically populate this field.
- The samples exist in the inventory for the period indicated by the call's date and time.
- The period into which the samples will be recorded is an unreconciled period. If it is a reconciled period, a warning message appears.
- A valid lot number has been specified for dropped samples tracked by lot number.

If the call passes these checks, the application:

- Creates a samples disbursement transaction with a line item for each dropped sample recorded for the call.
- Submits a disbursement transaction to update the samples inventory. If the submission of the disbursement transaction is successful, the application changes the call's Status field to Submitted.
- Converts many fields in the call record to read-only.

  An administrator can change the fields that become read-only after a call is submitted.

  NOTE: If attendees are recorded in an account call, an attendee call is created for each attendee, and the process described above is performed for each attendee call. Attendee calls are the same as contact calls except that they do not appear in the Activities view and they are submitted automatically when the account call is submitted.

About Pharma Handheld Inventory Periods

Siebel Samples Management provides three types of inventory periods for maximum flexibility. These period types are described in Table 27.

Table 27. Samples Inventory Periods

Period Type	Description
Active	The current period; it shows no end date and it is not reconciled. You can enter any type of samples transaction, including adding new products; inventory counts will be adjusted accordingly.
Inactive	A past, unreconciled period; it shows an end date but has not been reconciled yet. Except for adding new products into inventory, you can enter any type of samples transaction.
Reconciled	A past, inactive period; reconciled periods will not display on the handheld application.

About Establishing an Initial Inventory Count in Pharma Handheld

Establishing an initial master inventory is only necessary if you are manually entering and tracking samples. Either an administrator or an end user may establish an inventory. However, because Siebel Samples Management routes and maintains transactions by Employee ID, only the user who creates an inventory (the initial inventory count) can create or manipulate that inventory.

Before adding products to the master inventory, you must verify that the products are correctly defined for inventory tracking. In particular, make sure that the products are Orderable and have either Inventory or Lot # tracking.

NOTE: End users do not need to perform the procedures described in this section if their initial counts consist only of samples transfers routed to them by their samples administrator. Instead, they should simply acknowledge the receipt of those shipments. For more information, see "To acknowledge receipt of a samples transfer" on page 155. However, end users do need to perform the procedures described in this section if their initial counts contain any records that they entered manually. End users who enter records manually must submit those counts and reconcile the initial inventory period.

To establish an initial master inventory:

- **Count products on hand.** Establish an inventory count by physically counting the products currently on hand. This process creates a list of the products in your inventory and an inventory period solely for your initial count.
- **Add products and submit count.** Add products to the inventory and submit an initial count. (See "To add products to inventory and submit an initial count" on page 151.)

- **Submit adjustments.** Create and submit adjustments for the initial count. For more information, see "To create and submit initial count adjustments" on page 151.
- **Reconcile.** Reconcile the initial inventory period using Siebel Pharma. For more information, see *Siebel Life Sciences Guide*.

To add products to inventory and submit an initial count

1. Navigate to the Samples Adjustments screen.

   The Inventory Count list appears.

2. On the toolbar, tap the New Record button to add a new row.
3. Complete the necessary fields.

   NOTE: Some of the fields are described in the following table. Users cannot sort on the Difference and On Hand Qty fields in the Inventory Count applet.

Field	Comments
Count	The amount of your initial inventory.
Difference	Shows a negative number after you enter a value in the Count field.
Lot	The lot number for this sample.
Sample	The name of the sample to be added.

4. Tap Submit.

   The Difference field is cleared for all records. The application transfers the number you entered in the Count field to the On Hand Quantity field and clears the Count field.

   Once you submit an initial count, the Siebel Samples Management deactivates the inventory period into which you entered your initial counts and creates a new active inventory period. You can view this change using the My Samples History filter.

5. From the Show drop-down list, select Samples History.

   The Samples History view appears. The inventory period into which you entered your initial counts becomes inactive—a date and time appear in the End Date field, and there is no check mark in the Active field. In addition, a new active period has been opened.

   NOTE: You cannot submit an adjustment transaction if the product is not currently active. Siebel Samples Management considers a product inactive if the administrator has made it inactive, or the product does not exist in the inventory count list.

To create and submit initial count adjustments

1. Navigate to the Samples Adjustments screen.
2. From the Show drop-down list, select Adjustments.

   The Samples Adjustments list appears.

3 On the toolbar, tap the New Record button add a new record.

The Sample Adjustment Details form and list appear.

4 Complete the necessary fields.

Some of the fields are described in the following table.

Field	Comments
Txn. #	Transaction Number. The application automatically generates an unique identifier. You can change this value.
Txn. Date	Transaction Date. The date of the adjustment transaction. Make sure that this date falls within the valid date ranges for the appropriate Inventory Period.
Adj. Reason	Adjustment Reason. Select Initial Count from the drop-down list.
Status	The application automatically changes this field value to Submitted when you submit the adjustment.

5 From the Show drop-down list, select the Adj. Details view.

6 On the toolbar, tap the New Record button.

7 Complete the necessary fields.

Repeat the previous steps to enter a line item for each sample needing adjustment.

8 Tap Submit.

The values in the Transaction Status field (in the Samples Adjustment form) and the Item Status fields (in the Line Items list) change to Submitted.

NOTE: You must reconcile adjustments using Siebel Pharma. For more information, see *Siebel Life Sciences Guide*.

About Pharma Handheld Samples Views

Pharma Handheld contains these main screens related to sample management:

- **Samples.** Navigate to this screen to display a history of samples and an inventory list.
- **Samples Adjustments.** Navigate to this screen to adjust sample transaction records, such as correcting quantities dropped off, or to display your on-hand inventory count.
- **Samples Receipts.** Navigate to this screen to acknowledge the receipt of a samples transfer or to display a list of receipts, and to review receipt details.
- **Samples Transfers.** Navigate to this screen to create a transfer, to display a list of transfers to or from your inventory, and to review transfer details.
- **Samples Orders.** Navigate to this screen to create an order for samples, to display a history of orders, and to review order details.

Creating a Samples Order in Pharma Handheld

You can request additional samples by creating a samples order using Pharma Handheld.

After synchronizing, Siebel Pharma routes the samples order to the samples administrator. The samples administrator then creates a samples transfer that is routed back to the requestor. After the requestor acknowledges receipt of the transfer, Siebel Samples Management automatically enters the new inventory into their inventory counts.

To create a samples order

1. Navigate to the Samples Orders screen.

   The Orders list appears.

2. On the toolbar, tap the New Record button.

3. In the new record, complete the necessary fields.

   The application automatically sets the Order Date field to a date and time in the active period. It also automatically generates values for the Order # field, but it can be edited. You might want to edit this value to have the items appear in a particular order (other than the order in which you entered them).

   NOTE: It is not necessary to change the Order Type field. You can include both samples and promotional items in a single order.

4. Drill down on the Order # hyperlink.

5. Tap the Samples Order Details list to select it.

6. On the toolbar, tap the New Record button.

7. Complete the necessary fields for the new record.

   Some of the fields are described in the following table.

Field	Comments
Sample	The product to be ordered. Tap the arrow in the Sample field, choose the product from the Pick Product list, and then tap OK.
Quantity	The sample quantity that you are ordering.
Item Status	Initially set to In Progress. The application automatically changes this field value to Submitted when you submit the transaction.

8. Repeat the previous steps to enter a line item for each product or promotional item you want to order.

9. Tap Submit.

   NOTE: You cannot modify or delete an order after it has been submitted.

   The values of the Status field (in the form) and the Item Status field (in the list) change to Submitted.

Creating a Samples Transfer in Pharma Handheld

You can create a samples transfer to exchange samples between one another or to return samples to the home office.

After the samples transfer is submitted into the system, the recipient receives a samples transfer. After the recipient acknowledges the receipt of the transaction, the application enters the new inventory into his or her inventory count.

NOTE: Samples returns are defined as transfer transactions for which corresponding received shipment transactions have *not* been created. Returned samples are subtracted from the sender's inventory counts but are *not* added to the master inventory, as they are typically expired or damaged products.

To create a samples transfer

1. Navigate to the Samples Transfers screen.

   The Transfers list appears.

2. On the toolbar, tap the New Record button.

3. In the new row, complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Transfer #	The application automatically generates a unique identifier. You can change this value.
Transfer Date	The application automatically generates a date and time value that falls in the active period.
Transfer Type	Select the appropriate value: ■ Transfer Out - Indicates you are transferring samples to another employee. ■ Return - Indicates you are returning samples to the home office. Samples are typically returned because they are expired or damaged products that should be destroyed. Transfers with the Transfer Type field set to Return do not generate shipment transactions (because there is no recipient), and they are *not* added to the master inventory counts.
Status	The application automatically changes this field value to Submitted when you submit the transaction.
Transfer Lst Name	Transfer Last Name. The employee to whom you are transferring the samples. If the value of the Transfer Type field is Transfer Out, then you must complete this field. Leave this field empty if the value of the Transfer Type field is Return.

4. Drill down on the Transfer # hyperlink.

5 Tap the Sent Samples Details list to select it.

6 On the toolbar, select the New Record button.

7 In the new row, complete the necessary fields.

Some of the fields are described in the following table.

Field	Comments
Sample	The samples being transferred.
Quantity	The quantity that you are transferring.
Lot #	The lot number for this samples transfer.
Item Status	The application automatically changes this field value to Submitted when you submit the transaction.

8 Repeat the previous steps to enter a line item for each product or promotional item you are transferring.

9 Tap Submit.

NOTE: You cannot modify or delete a transfer transaction after it has been submitted. The transaction will appear in the Samples History list as part of the Inventory List view.

Acknowledging Receipt of a Samples Transfer in Pharma Handheld

Siebel Samples Management supports two ways of electronically moving samples inventory:

- By creating a samples transfer (see "Creating a Samples Transfer in Pharma Handheld" on page 154.)
- By creating a samples order (see "Creating a Samples Order in Pharma Handheld" on page 153.)

In either case, the application creates a samples transfer transaction and routes it to the recipient for acknowledgement. After the recipient submits a receipt, the application transfers the new inventory into the recipient's active inventory period. You can then view the new inventory in the Samples History view.

To acknowledge receipt of a samples transfer

1 Navigate to the Samples Receipts screen.

2 In the Samples Receipts view, drill down on the Invoice # hyperlink.

The Receipts Details view appears. In the form, samples transfers that have not been acknowledged as received show an Invoice Status value of In Progress. Those that have been acknowledged as received show an Invoice Status value of Submitted.

3. In the Receipts Details list, modify the Received Quantity field if the value does not accurately reflect the quantity received.
4. Tap Submit.

   NOTE: The samples transfer quantities do not appear in end users' inventory counts until they submit a samples receipt. However, after the samples receipt has been submitted, it cannot be modified or deleted.

   The values in the Invoice Status field (Received Samples list) and the Item Status field (Line Items list) change to Submitted.
5. To verify the submitted transfer was recorded:
   - **a** Navigate to the Samples screen.
   - **b** From the Show drop-down list, select Samples History.

     The Samples History view appears.
   - **c** Highlight the appropriate inventory period to view the line items of the received transfers.

Adjusting a Samples Transaction

You can adjust inventory counts of samples stock by making adjustments to past samples transactions directly in Pharma Handheld. Common reasons for adjusting past transactions include product loss or expiration, counting mistakes, or data entry errors. End users can add products or adjust quantities for any type of samples transaction (disbursement, transfer, order, and so on).

NOTE: End users cannot add a product to your inventory that did not exist when the original transaction was created.

The inventory list view displays all the samples for the selected inventory period.

To add a product to a samples transaction

1. Navigate to the Samples screen.

   The Samples History list appears.
2. In the Inventory Periods list, select the period containing the transaction.
3. In the Sample History list, select the transaction you would like to update.

   You can identify the transaction record in the Samples History list by the Transaction Date, Last Name, or Transaction # field values.

   NOTE: To make it easier to find a transaction, sort the records in the Samples History list by the field you are using to identify the transaction. For example, if you know the Transaction #, sort the list by that field to locate the records you are looking for.
4. In the Samples History list, tap Add, and then tap OK.

5 In the new row, complete the necessary fields.

When you add a record, the application adds a new line-item record for the transaction in the Samples History list and sets the line-item record's Item field Status to In Progress. With the exception of the Item Status value, the new record is a copy of the record selected in the previous step.

Some of the fields are described in the following table.

Field	Comments
Item Status	The application automatically changes this field value to Submitted when you submit the adjustment. For any row that shows an item status of Submitted, you can also see one or more rows with the identical sample name and transaction number but with an item status of In Progress or Adjusted. Valid values include: ■ In Progress - Indicates that the adjustment record has not yet been submitted, so it can still be modified. However, the record's data is not reflected in the inventory count. ■ Submitted - Indicates that the record has been submitted and therefore cannot be modified. Since it has been submitted, the record's data is reflected in the inventory count. ■ Adjusted - Indicates that a previously submitted record has been superseded by a subsequent adjustment record. The record cannot be modified.
Lot #	The correct lot number for this sample. Select the Add button to update this field.
Sample	Verify that the correct product name is selected. Select the Add button to update this field.
Transaction #	The transaction number or, in the case of samples disbursements, the reference number. The Transaction # value corresponds to the Ref # value displayed in the Contact Call Detail view.
Transaction Type	Displays the type of transfer. Valid values include Transfer Out and Transfer In.

To adjust a quantity in a samples transaction

1 Navigate to the Samples screen.

The Samples History screen appears.

2 In the Inventory Periods list, select the period containing the transaction.

The samples for the selected period are displayed in the list below.

3. In the Samples History list, select the transaction you would like to update.

   You can identify the transaction record in the Samples History list by the Transaction Date, Last Name, or Transaction # field values.

4. Tap Adjust Qty and then tap OK.

   The application copies the line-item record for the transaction in the Samples History list and sets the line-item record's Item Status field to In Progress.

5. In the Samples History list, enter the correct quantity in the Quantity field.
6. Tap Submit, and then tap OK.

The application adds the new item with an Item Status of Submitted and changes the original item record (whose quantity you adjusted) to an Item Status of Adjusted. The new quantity is reflected in the on-hand quantities in the Inventory Count view.

Setting Up MedEd Events in Siebel Pharma Handheld

This section describes how a pharmaceutical company can use Pharma Handheld to plan a medical education (MedEd) event. A MedEd event refers to a promotional or educational event attended by physicians and medical professionals. An event functions as a forum for exchanging information on a particular disease, illness, therapeutic class or product. A medical education event can be as simple as a lunch-and-learn in a physician's office or as complex as a seminar series or national sales meeting.

Sales representatives in the field can use Pharma Handheld to view and create MedEd events and invite contacts to MedEd events. The following section provides instructions for MedEd procedures.

- Creating a MedEd Event in Pharma Handheld on page 158
- Inviting Professionals to MedEd Events Using Pharma Handheld on page 159

Creating a MedEd Event in Pharma Handheld

You can create MedEd events directly in Pharma Handheld.

To create a MedEd event

1. Navigate to the MedEd screen.
2. From the Show drop-down list, select My MedEd Events.
3. On the toolbar, select the New Record button.

4 In the new list, complete the necessary fields.

Some of the fields are described in the following table.

Field	Comments
Budget	The amount of money budgeted for the event.
CME Credit	Number of CME (Continued Medical Education) credits that can be earned at the event.
Created By	User name for the person who created the MedEd event.
End Date	Date and time that the event ends. Set the time fields before selecting a calendar day.
Start Date	Date and time that the event starts. Set the time fields before selecting a calendar day.
Event Status	Indicates whether the event is active, cancelled, completed, in progress, inactive, or planned.
Type	The category of medical education event being offered.

Inviting Professionals to MedEd Events Using Pharma Handheld

When you have scheduled a MedEd event and have decided what sessions will be offered, you can invite health care professionals to attend.

To invite a contact to a MedEd event

1 Navigate to the MedEd screen.

2 From the Show drop-down list, select Invitees.

3 Tap the Contacts list to select it.

4 On the toolbar, select the New Record button.

5 In the new row, complete the fields.

Some of the fields are described in the following table.

Field	Comments
First Name	Completed based on the last Name selection.
Last Name	The contact/invitee. Select from the Pick Contact list.
Invitee Status	Indicates whether the invitee has confirmed attendance, is on a wait list, and so on. Pending is the default value.
Role	Describes the selected contact's role at the session.

Creating Expense Reports in Siebel Pharma Handheld

You can track expenses and create expense reports using Pharma Handheld.

To create an expense report

1. Navigate to the Expense Reports screen.
2. From the Show drop-down list, select My Expense Reports.
3. On the toolbar, tap the New Record button.
4. In the new row, complete the necessary fields.
5. From the Show drop-down list, select More Info to view additional fields.

   NOTE: You must complete the Submit To field or you will get an error message and your expense report will not be saved.

To add detailed line items

1. Navigate to the Expense Reports screen.
2. From the Show drop-down list, select My Expense Reports.
3. In the Expense Reports list, drill down on the Name hyperlink.
4. Tap the Line Items list to select it.
5. On the toolbar, tap the New Record button.
6. In the new row, complete the necessary fields.

   You can enter Line Items whose Start or End Date is outside of the Expense Report period.
7. Repeat Step 4 through Step 6 to add line items.

A Troubleshooting

This appendix addresses some of the common issues faced while deploying Siebel Handheld. The appendix presents troubleshooting tips in three areas:

- Installation
- Performance
- Log Files

The audience for this appendix is Siebel database administrators, system administrators, and application administrators.

Installation

Siebel Handheld supports a specific and limited set of devices, handheld OS, desktop OS, server OS, server databases, and languages. This range of devices and platform support varies widely across the range of Siebel Handheld releases and must be carefully checked to confirm support. See *System Requirements and Supported Platforms* on Siebel SupportWeb for your Siebel application for information on supported Handheld OS, desktop OS, server OS, and server databases.

Client Installation, Backup, and Restore

If you run into problems while installing the Siebel Handheld application on client devices from a desktop PC, refer to the following checklist. Most installation problems are covered by this checklist.

- Is the device certified and supported? Refer to the system requirements and supported platforms documentation for the Siebel Handheld application.
- Confirm that the device has 64 MB of RAM with the majority of it available for the Siebel Handheld application.

- Is an ActiveSync connection running (green icon)? If not, check your computer to make sure that the serial or USB port is activated and functioning correctly.
- If previous versions of Siebel Handheld were installed on the device, did you uninstall the application? See "Uninstalling the Siebel Handheld Application" on page 99.

Siebel Handheld binaries may also be installed to a CompactFlash card to conserve (RAM) memory. The application will still be loaded into memory when it executes. To install on the CompactFlash card, set the ApplicationBinariesLocation and ApplicationDataLocation parameters in the setup.ini file. See "Setting up Siebel Handheld Application Installation on a CompactFlash Card" on page 80.

Siebel Handheld (application only - no data) may also be backed up to a CompactFlash card to aid in deployments. Using the built-in backup utility that comes with Compaq (QUtilities) and HP Jornada (HP Backup) devices, a backup image may be created which can then be restored onto other devices. The initial backup image should be made of a device that has *not* done an initial synchronization. An initial synchronization will still be required by each user to receive the configuration and data.

It is also possible to back up Siebel Handheld on a PC using the Backup/Restore feature within ActiveSync.

Synchronization

Synchronization problems can be caused by incorrect settings in the Siebel Handheld setup.ini or .cfg files. Be sure that application names, data sources, and SRFs are correct.

Make sure to set the URL setting (DSSURL) in the client setup.ini for direct server synchronization installations. Be sure to list the views (DefaultViews) in the application .cfg file. Also, do not forget to grant the user visibility to these views in the Application Administration > Responsibilities view.

NOTE: Check the log files and confirm the accuracy of the generated connect string.

Companion Sync Checklist

Use the following checklist to troubleshoot problems you encounter using Companion Sync.

- Is the latest version of ActiveSync (v.3.5 or later) installed and running?
- Is ActiveSync connected (green icon)?
- Do you have the correct data source defined in the handheld .cfg file?
- If you have problems logging in, check to make sure that you can use the same credentials to log into the desktop client.
- Remember to keep a 1:1 ratio of users to devices. Only a single user may log in to sync each device. Failure to do so causes data corruption.

Direct Server Sync Checklist

Use the following checklist to troubleshoot problems you encounter using Direct Server Sync.

- Did you install all client and server components successfully?
- Is there a PDA OM running on the Siebel Server?
- Did you bounce the IIS, SWE, and Siebel Server after installation?
- Do you have network access to the URL for DSS? Can you ping the IIS server from inside and, if applicable, from outside the firewall?
- Can you successfully run a SWE command?
- Do you have the correct DSS URL defined in the setup.ini file?
- Is the network connection working from the device? Try Pocket Internet Explorer.
- If you have problems logging in, check to make sure that you can use the same credentials to log into the desktop client.
- Remember to keep a 1:1 ratio of users to devices. Only a single user may log in to sync each device. Failure to do so causes data corruption.

Re-synchronizing Problems

Generally if, for whatever reason, synchronization is terminated, the end user is prompted with a message and the synchronization process ends. In this situation the synchronization session is allowed to close. However, if the connection with the server is unintentionally broken, the session may not have a chance to close before the connection is broken. Therefore, if the end user tries to immediately synchronize again, he may get an error message and may not be able to synchronize. Should this occur, the end user should wait for a period of time (generally, 15 minutes) to allow the session to time out and terminate. Once the session terminates, the end user should be able to synchronize again.

Log Files

This section discusses issues related to log files.

Direct Server Sync Log Files

To assist Siebel Technical Support, collect the following files when logging a Siebel Handheld service request. The following files are found on the machine where Siebel Server is installed:

- All server sync user files in the *Siebel Root*\siebsrvr\hhsync*application directory**user id**node id* directory.
- Server NT application event log extract.
- Server NT system event log extract.

- All files in the *Siebel Root*\siebsrvr\log directory including CompName_task.log.

  where CompName is the name of an application server component, and task is a Siebel task number. Each sync session is assigned a new Siebel task, so there will be many of these. An example "CompName" value is "SalesCE_enu" (note that language is part of the component name itself).
- All files from all subdirectories under the *Siebel Root*\siebsrvr\logarchive directory.
- Server perfmon log files (showing memory, network, disk performance), if available.

The following files are found on the machine where the Web Server (that is, IIS) is installed:

- SWE log files from *Siebel Root*\eappweb\log (all files).
- IIS server NT application event log extract.
- IIS server system event log extract.
- IIS server perfmon log files (showing memory, network, disk performance), if available.

Companion Sync Log Files

To assist Siebel Technical Support, collect the following log files when logging a Siebel Handheld service request. The following files are found on the companion PC where Siebel Mobile Web Client is installed:

- Client Siebel Handheld Sync log file: \log\syncmanager_log.txt.
- All files in the *Siebel Root*\client\hhsync*application directory**user id**node id* directory.
- NT application event log extract.
- NT system event log extract.
- All files in the *Siebel Root*\client\log directory.
- Perfmon log files (showing memory, network, disk performance), if available.

Handheld Device Logs

The following log files are found in the /Program Files/Siebel Handheld directory on the handheld device:

- **dbimport_log.txt**—This file is a log of the database objects that were imported during synchronization. The file is located in the \Program Files\Siebel Handheld directory on the handheld client.
- **sql_stmt_log.txt**—This file logs all SQL statements generated by the application. You must set a parameter in the setup.ini file to turn this log on. The log file is located in the \Program Files\Siebel Handheld directory on the handheld client. See "Deployment of Siebel Handheld" on page 69 for more information about setting the parameter.

- **ssa_errors_log.txt**—This file is a log of all system error messages. You must set a parameter in the setup.ini file to turn this log on. The log file is located in the \Program Files\Siebel Handheld directory on the handheld client. See "Deployment of Siebel Handheld" on page 69 for more information about setting the parameter.
- **syncmanager_log.txt**—This file contains all of the messages displayed on the Sync Manager dialog box as well as some basic information about synchronization, such as data source and connect string. You can set the logging level for this file using the SyncLogReportingLevel parameter in the setup.ini file.

  For Direct Server Sync deployments, the file is located in the \Program Files\Siebel Handheld directory on the handheld client. For Companion Sync deployments, the file is located in the *Siebel Root*\client\log on the companion PC.

Logging Handheld Synchronization Errors

Siebel Handheld Sync logs all the strings that the user sees in the sync message window as well as many informational messages that do not get displayed in the UI. These informational messages are used to help track down where an error occurred. Siebel Handheld Sync determines which messages get logged based on a value stored in the registry under the key SyncLogReportingLevel. The values range from 0 to 4; 0 logs all error messages and strings that the user sees, and 4 logs all data that Siebel Handheld Sync sends and receives.

If Siebel Handheld Sync fails for some reason, check the syncmanager_log.txt file immediately after the failure. If you need more detail, increase the logging level and run Siebel Handheld Sync again. Use the LoggingLevels parameter in the setup.ini file to change the logging level. Furthermore, each time a user synchronizes, the syncmanager_log.txt file is overwritten with the new data.

SQLTrace

Use SQLTrace for diagnostic purposes if you encounter serious configuration errors or performance problems and cannot otherwise diagnose the problem. The problem may quickly become apparent in the log entries from SQL tracing.

To enable SQL tracing

1. Log into srvrmgr from a (m:\siebel\bin\w32ud) prompt.
2. Run: `change evtloglvl ObjMgrSqlLog=4 for comp [OMName]`, where [OMName] = the OM name (for example, <ApplicationName>CEObjMgr_enu).
3. Log enties are written to <OMName>ObjMgr_enu as described in "Log Files" on page 163.

   NOTE: SQL tracing only logs SQL statements for one user at time. SqlTrace is applied to the first user who synchronizes after tracing is enabled.

   CAUTION: When SQL tracing is enabled, synchronization is severely and adversely affected. Therefore, it is recommended that you turn SQL tracing on for a limited time to diagnose a specific problem, then turn SQL tracing off.

End User Error Messages

End users may encounter error messages when they synchronize their data. For more information on these messages, see "Synchronization Troubleshooting with the Siebel Handheld Client" on page 115.

Web Server Timeout Errors

If synchronization times are long due to the size of the database file or the speed of the network connection, your end users may encounter Web server timeout errors and synchronization failures. First try to resolve this problem by reducing the size of your extract and configuring your server performance. If after doing this, your end users continue to experience timeout errors, then increase the timeout parameter on IIS for the default Web Server.

Follow the procedure for your platform to change the timeout parameter.

To change the timeout parameter on Windows 2000

1. From the Start menu, select Programs > Administrative Tools > Internet Services Manager.
2. From the Internet Information Services window, select the local machine, right-click on the Default Web Site, and select Properties from the pop-up list.
3. From the Web Site Properties window, select the Web Site tab.
4. Under the Connections heading, locate the Connection Timeout property and increase the number of seconds.
5. Click OK.

To change the timeout parameter on Windows NT

1. From the Start menu, select Programs > Windows NT 4.0 Option Pack > Microsoft Personal Web Server >Internet Service Manager.
2. Under Internet Information Server, right-click on the Default Web Site and select Properties from the pop-up list.
3. From the Web Site Properties window, select the Web Site tab.
4. Under the Connections heading, locate the Connection Timeout property and increase the number of seconds.
5. Click OK.

Performance

This section discusses ways you can optimize your client performance, server performance, and network performance.

Client Performance

Client performance is affected primarily by the device capability (minimum 206 MHz processor and 64 MB RAM), configuration, and the quantity of data loaded onto the device. In general, screen-to-screen and view-to-view navigation times of 3 to 4 seconds or less should be considered normal.

It is strongly recommended that customers follow these general guidelines to optimize the performance of their handheld applications:

- Keep configuration under 30 views.
- Keep RML file size under 1.75 MB.
- Keep database files (dbfile.txt) under 2 MB.

  Use filters as outlined in the Siebel 2000 Handheld Synchronization Technical Note.
- Keep the number of records for each business component under 2,500.
- Avoid installing other applications on the device at the same time.
- Users should synchronize their data frequently.

Additional configuration information can be found in the Siebel Technical Note 405, *Siebel Handheld Synchronization*.

The Professional Services Mobile eBusiness Competency group has a Siebel Handheld Quickstart program that is mandatory for all new Siebel Handheld customers to assess their configuration and deployment.

The Siebel Handheld client will benefit from periodic closing and restarting the application to release memory consumed by the handheld operating system. Use File > Exit in the menu to exit from the Siebel Handheld application.

If an external VGA driver is or has been loaded on the device in the past and is no longer needed, be sure to unload it, because it is known to have significant performance impacts on handheld devices.

Server Performance

Server performance affects the performance and scalability of Direct Server Sync processes. Customers should engage Expert Services to do a Scalability Review. The following guidelines are general in nature and pertain to the Siebel Handheld sync components running on a Siebel Server:

- Use Performance Monitor to track memory and processor performance on the Siebel server.
- Make sure that the Servers (IIS, GW, OM and DB) are on the same high speed LAN segment.
- Siebel Handheld Sync components will stress Siebel Server and database performance because of the intensive interactions during large concurrent synchronizations.
- Estimate that 64 MB is used per Siebmtsh.exe instance.
- To calculate the theoretical maximum concurrent users:
  - Numusers=Server_Memory*threads_per_process_ratio/64 MB.

- Optimize the Threads per Process Ratio (Max Tasks/Max MT Servers) per Technical Note 405, *Siebel Handheld Synchronization*.
- Set Max Tasks=Max. number of concurrent users (for example, 150).
- Set MinMTServers=MaxMTServers (for example, 30 for 5:1 ratio, if this is determined to be appropriate).

To optimize and tune a Siebel DB server:

- Use Performance Monitor to track memory and processor performance on the DB server.
- Turn on SQL tracing and search for long-running SQL calls.
- Estimate 64 MB of RAM for each concurrent user.
- Consider creating indexes to tune the queries (only performed with the assistance of Siebel Expert Services).
- Consider using a RAID 0+1 disk array with an expanded number of spindles to optimize database performance.

NOTE: Make sure that DB Server settings are set to recommended values. Timeouts should be set at the Siebel Server. Be careful that the timeout is set longer than the longest SQL query.

Network Performance

The condition of the network affects Direct Server Sync performance and scalability. In general, a low-latency, high-bandwidth network is preferred with dedicated rather than shared network connections. The following are general network considerations:

- Make sure there is adequate bandwidth throughout the entire round-trip of network packets and estimate where bottlenecks will occur due to high concurrent load. For example, if 50 users are concurrently synchronizing 1 MB each, 50 MB of data must pass through the network. If this data is passing through a single leased 56 KB per second line, then this data will minimally take 500,000 KB/56 KB/sec=8928 seconds=148 minutes. In reality, a 56 KB per second line will offer only 30-40 KB per second average throughput, which causes further bandwidth constraints. Check the total available bandwidth of network providers (private or public ISP).
- Verify that you have low latency lines with ping round trips of less than 1 second (1000 ms) with no dropped packets.
- Verify if roundtrips occur with less than 10 hops.
- Check the actual throughput of network connections by performing simple file transfers with no Siebel software.
- Nonvalidated VPN software from third parties accounts for 30 to 60 percent of additional packet overhead because of the encryption.

Network problems can usually be resolved by working with network providers to size network connections and optimize network routing. Consider the use of burst networks, quality of service contracts, private networks, and dedicated modem banks directly into a high-speed LAN environment. Noisy phone lines in some countries may benefit from the use of an external modem card from Xircom or Pretec instead of the built-in modem on the HP Jornada 720.

Siebel Services

You may wish to consult experts who have experience designing and configuring handheld applications, and who are knowledgeable about optimizing the performance of the applications.

Siebel Professional Services

To make deployment planning and implementation successful, Siebel Handheld customers are encouraged to engage the Siebel Mobile eBusiness Competency group. The Siebel Professional Services team has developed a Siebel Handheld Quickstart solution which defines the strategy, approach, and roadmap for successful Siebel Handheld deployments. Working directly with experienced handheld experts from the Mobile eBusiness Competency, customers can develop a complete deployment strategy, approach, and roadmap to facilitate their handheld implementation in a short time period.

Siebel Expert Services

All Siebel Systems customers should work with Siebel Expert Services to conduct detailed configuration and hardware sizing reviews. This helps customers make sure they have implemented the most effective and efficient solutions possible. Siebel Handheld customers benefit by making sure Siebel Handheld applications are configured according to best practices and that server environments are properly designed.

B Screens and Views

Siebel Handheld Client supports a subset of the screens and views supported by the Siebel Web Client application. Other screens and views can be configured for your Siebel Handheld Client application if they are based on currently supported classes. Application developers and application administrators will find the information in this appendix useful.

If you configure screens and views based on unsupported classes, you may see anomalous results. For information on how to determine the classes used by other screens and views, see *Object Types Reference*.

Screens and Views

The screens and views shipped with the Siebel Pharma Handheld sample application are shown in Table 28.

Table 28. Siebel Pharma Handheld Screens and Views

Screen	View Name on UI
Contacts	My Contacts
Contacts	More Info
Contacts	Private Notes
Contacts	Shared Notes
Contacts	License Numbers
Contacts	Activities
Contacts	Calls
Contacts	Affiliations
Contacts	Best Time to Call
Contacts	Addresses
Contacts	Rx Data
Accounts	My Accounts
Accounts	Shared Notes
Accounts	More Info
Accounts	Private Notes
Accounts	Activities

Table 28. Siebel Pharma Handheld Screens and Views

Screen	View Name on UI
Accounts	Best Times to Call
Accounts	Addresses
Accounts	Calls
Accounts	Affiliations
Accounts	Sales Data
Activities	My Activities
Activities	More Info
Calendar	Daily
Calendar	Weekly
Calendar	Monthly
Calendar	Contact Participants
Calendar	Employee Participants
Calendar	Add/Modify Activity (note: not displayed from the drop-down menu)
Contact Call	Details
Contact Call	Promotional Items
Contact Call	Issues
Contact Call	Samples Dropped
Account Call	Details
Account Call	Attendee
Home Page	Home Page
Personal Lists	Details
Personal Lists	Promotional Items
Personal Lists	Samples
Med Ed	My Med Ed Events
Med Ed	Invitees
Expense Reports	My Expense Reports
Expense Reports	More Info
Expense Reports	Expense Items
Samples	Samples History
Samples	Inventory List

Table 28. Siebel Pharma Handheld Screens and Views

Screen	View Name on UI
Samples Adjustments	Inventory Count
Samples Adjustments	Adjustments
Samples Adjustments	Adj. Details
Samples Receipts	Receipts
Samples Receipts	Receipt Details
Samples Transfers	Transfers
Samples Transfers	Transfer Details
Samples Orders	Orders
Samples Orders	Order Details

C Business Components and Classes

Siebel Handheld Client supports a subset of the business components and classes supported by the Siebel Web Client application. This appendix lists the supported business components, business component classes, and applet classes.

"Supported Business Components for Siebel Pharma Handheld" on page 175

"Business Component Classes" on page 178

"Applet Classes" on page 179

Supported Business Components for Siebel Pharma Handheld

Table 29 lists the supported Business Components for Siebel Pharma Handheld.

Table 29. Siebel Pharma Handheld Business Components

Supported Business Components
Account
Account Contact Affiliation
Account Note
Account Private Note
Action
Action Contact
Action Employee
Admin SEA Field
CSLS Contact Best Times - CE
CUT Address - CE
CUT Address for Account/Contact
CUT Address Inter Table - CE
Com Organization
Contact
Contact Account Affiliation

Table 29. Siebel Pharma Handheld Business Components

Supported Business Components
Contact (All)
Currency
Database Version
Decision Issue
Employee
Employee (MM)
Expense
Expense Item
Expense Item Type
Internal Division
Internal Product
LS Product Indiction
Language Def
List of Values
List of Values Child
List of Values Dynamic
Opportunity
Order Entry - Order Types
Order Entry - Orders
Period
Pharma Account Call - CE
Pharma Address Inter Table - CE
Pharma Area
Pharma Call Decision Issue
Pharma Call Decision Issue - CE
Pharma Call Products Detailed
Pharma Call Products Detailed - CE
Pharma Call Sample Dropped - CE
Pharma Call Signature
Pharma GA Markets
Pharma GA Rx Consumption

Table 29. Siebel Pharma Handheld Business Components

Supported Business Components
Pharma Internal Product
Pharma Inventory Period
Pharma Inventory Period - CE
Pharma ME Event
Pharma ME Event Professional Invitee Inter Table
Pharma Personal Inventory - CE
Pharma Personal Products - CE
Pharma Personal Promotional Items - CE
Pharma Personal Samples - CE
Pharma Product Issue
Pharma Professional Addresses - CE
Pharma Professional Call - CE
Pharma Professional Note
Pharma Professional Position
Pharma Professional Primary Specialty
Pharma Professional Private Note
Pharma Professional State Licenses
Pharma Professional Items Dropped - CE
Pharma Sales Consumption
Pharma Sample And Promo Order
Pharma Sample And Promo Order Item
Pharma Sample Order And Adjustment
Pharma Sample Order And Adjustment Item
Pharma Sample Stocked Lots
Pharma Sample Stocked Products
Pharma Sample Transaction History Item - CE
Pharma Samples
Pharma Signature Disclaimer
Pharma Template Call

Table 29. Siebel Pharma Handheld Business Components

Supported Business Components
Picklist Generic
Picklist Hierarchical
Position
Price List
Query List
Retail Outlet Best Call Time
SIS HH Contact Activity
Shift
Shift Exception
System Preferences
Time Expense Map
Time Zone

Business Component Classes

Table 30 lists the supported Business Component classes for Siebel Pharma Handheld.

Table 30. Siebel Pharma Handheld Business Component Classes

Supported Business Component Classes	
CSSBCAccountSIS	CSSBCPosition
CSSBCAutoProduct	CSSBCPriceList
CSSBCBase	CSSBCProdRev
CSSBCBSampleLot	CSSBCProductDetailed
CSSBCContactSIS	CSSBCPromoItemsDropped
CSSBCDivision	CSSBCSample
CSSBCDocInvoice	CSSBCSampleDropped
CSSBCExpitm	CSSBCSampleInventory
CSSBCExprpt	CSSBCStateModel
CSSBCFINOppty	CSSBCStateModelState
CSSBCFINSActivity	CSSBCStateTransition
CSSBCHHInventoryPeriod	CSSBCUser

Table 30. Siebel Pharma Handheld Business Component Classes

Supported Business Component Classes	
CSSBCHHPharmaCall	CSSBusComp
CSSBCHHSample	CSSCommandShell
CSSBCHHSampleItem	CSSExpenseAutoGenService
CSSBCInventoryPeriod	CSSOMAlarmMgr
CSSBCLineItem	CSSPreferencesService
CSSBCPeriod	CSSQueryExporter
CSSBCPharmaAddress	CSSSIABCOrder
CSSBCPharmaCall	CSSSISOMPricerService
CSSBCPharmaCallComponent	CSSSMCacheService
CSSBCPharmaDisclaimer	CSSTimeSheetAutoGenService
CSSBCPharmaSign	

Applet Classes

You may create additional screens and views for your handheld application. Any new screens and views must be based on classes and business components that are supported for the Pharma Handheld application. Refer to Table 31 for the supported applet classes.

Table 31. Siebel Pharma Handheld Applet Classes

Applet Classes
CSSDurationFrameList
CSSFrame
CSSFrameAcctCall
CSSFrameBase
CSSFrameCECalAddModify
CSSFrameCEGridDay
CSSFrameCEGridMonth
CSSFrameCEGridWeek
CSSFrameCEHome
CSSFrameCEMultPart
CSSFrameList
CSSFrameListBase

Table 31. Siebel Pharma Handheld Applet Classes

Applet Classes
CSSFrameListExpitm
CSSFrameListPharmaActivity
CSSFrameListSample
CSSFrameListSampleItem
CSSFrameNewCall
CSSFramePopupCurrency
CSSFrameProfCall
CSSFrameSISAction
CSSFrameSample
CSSSWEFrameListPick
CSSSWEFrameListTargetAssoc
CSSSWEFrameListVisibilityAssoc
CSSSWEFrameListVisibilityPick
CSSSubmitFrame

Siebel Pharma Handheld Objects That Should Not Be Modified

Refer to *Configuring Siebel eBusiness Applications* for guidelines on modifying existing objects.

There are certain objects in the Siebel Pharma Handheld Client which should *not* be changed. Table 32 lists these objects.

CAUTION: If these objects are changed, the behavior of the Siebel Pharma Handheld application cannot be predicted

Table 32. Siebel Pharma Objects that Should Not Be Modified

Type of Object	Objects
Business Objects	Action - Account - CE
	Action - Asset - CE
	Action - Contact - CE
	Action - Internal Product - CE
	Action - Service Request - CE
	Asset - Contact - CE
	Asset - FS Inventory Location - CE
	FS Activity Rec Parts & Tools - Order - CE
	FS InvLoc Product - Internal Product - CE
	FS Part Browser - FS Inventory Location - CE
	Line Items - Action - CE
	Line Items - Internal Product - CE
	Order - Asset - CE
	Order - Service Request - CE
	Service Request - Account - CE
	Service Request - Asset - CE
	Service Request - Contact - CE
	Service Request - Internal Product - CE
Business Components	Action - CE
	Service Request - CE
	Hidden Picklists BusComp - CE

D User Properties

This appendix documents the handheld-specific user properties and methods for the Siebel Handheld application.

Global User Properties

The following user properties apply to all business components.

Table 33. User Properties

Name	Description
HandheldSyncPickMode	User property on a field of a business component. When set to NoFail, turns Extended Pick processing ON. See "Extended Pick Processing in Siebel Handheld" on page 87 for more information.
HandheldSyncInsertMode	User property on a business component. When set to FailOnError, enables Extended Insert processing. See "Extended Insert Processing in Siebel Handheld" on page 90 for more information.

CUT Address – CE Business Component

Table 34. User Properties for CUT Address – CE Business Component

CUT Address – CE Business Component		
User Property	**Value**	**Description**
Propagate Address BC Fields	City,Postal Code,State,Street,Address,Country, Phone#	Specifies the fields that must be updated in the S_ADDR_PER table that are propagated to the inter table. Fields are separated by commas.
Propagate Address Fields To Parent BC	City|City CE, Postal Code|Postal Code CE, State|State CE,Street Address|Street Address CE,Country|Country CE	Specifies the source and destination fields that are propagated to the parent business component. Source and destination fields are separated by a vertical bar (|) and the pairs of fields are separated by commas. In the example City|City CE, "City" is the source field and "City CE" is the destination field.

Pharma Account Call – CE Business Component

Table 35. User Properties for Pharma Account Call – CE Business Component

Pharma Account Call – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Cascading Fields	,*Field name*,	,Start Date,Start Time,Account Id,Address,Account Address Id,Account State,Duration Minutes,Brick Id,	Specifies fields that must be cascaded to the attendee call. These fields have to be made force active in the child business component. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Must Detail Products	Y or N	Y	Specifies whether a product must be detailed or not before the call can be submitted.
OnlySubmitBy Position	Y or N	Y	Specifies whether the position that entered the record is the only position that can submit the call.
Read Only If Status Synchronized	Y or N	N	Specifies whether the record is Read Only if the call status is "Synchronized."
SubCall Component CE	,*Business Component Name*,	Pharma Professional Call - CE	Child business component to which the changes are cascaded. Use business component names as defined in Siebel Tools.
Submit At Handheld Sync	Y or N	Y	Y indicates call should be submitted at sync to create samples transactions and update sample inventory. N will not create any sample transactions.
Template Components	,*Business Component Name*,	Pharma Call Products Detailed - CE	Specifies the business components that need to be copied from the call template when a smart call is applied to a call. Use business component names as defined in Siebel Tools.

Table 35. User Properties for Pharma Account Call – CE Business Component

Pharma Account Call – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Update After Submit	,*Field name*,	,Comment,	Specifies fields that are editable after the call is submitted. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Update Status To Synchronized	Y or N	Y	Specifies whether the status of calls downloaded to the handheld is updated to "Synchronized." When the status is "Synchronized," the calls are read-only on the server.
Validate Product Property	Y or N	N	If set to Y, it throws an error during submit if product detail priority is not in a sequential order starting with 1.

Pharma Address Business Component

Table 36. User Properties for Pharma Address Business Component

Pharma Address Business Component		
User Property	**Value**	**Description**
Propagate Address BC Fields	City,Postal Code,State,Street Address,Country	Specifies the fields that must be updated in the S_ADDR_PER table that are propagated to the inter table. Fields are separated by commas.
Propagate Address Fields To Parent BC	City|City, Postal Code|Postal Code, State|State,Street Address|Street Address, Country|Country	Specifies the source and destination fields that are propagated to the parent business component.
Update Inter Table BC Fields	DEA#,DEA Expr	Specifies list of fields that must be updated in the inter table (S_CON_ADDR).
Validate DEA Number	Y or N	Whenever a DEA# is entered, the field value is set only when it is a valid number.

Pharma Professional Call – CE Business Component

Table 37. User Properties for Pharma Professional Call – CE Business Component

Pharma Professional Call – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Attendee Call Read Only	*,Start Date,Start Time,Call Status,SubType,Address,Duration Minutes,*	,Start Date,Start Time,Call Status,Sub Type,Address,Duration Minutes,Last Name, (default)	Specifies read-only fields when the call is an attendee call. Use the field names as they are defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Electronic Signature Read Only	*,Field name,*	,Last Name,Address,Chosen Template,Start Date,CallStatus,Paper Signature,	Specifies fields that are read-only after a signature is taken. Use the field names as they are defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Must Detail Products	Y or N	N	Specifies whether a product must be detailed before the call is submitted.
OnlySubmitBy Position	Y or N	Y	Specifies whether the position that entered the record is the only position that can submit the call.
Paper Reference Number Required	Y or N	Y	Specifies whether the reference number is required or not in order to submit a call with a paper signature.
Paper Signature Read Only	*,Field name,*	,Call Status,Signature Captured,	Specifies fields that are read-only when Paper Signature is true. Use the field names as they are defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Read Only If Status Synchronized	Y or N	N	Specifies whether the record is Read Only if the call status is "Synchronized."

Table 37. User Properties for Pharma Professional Call – CE Business Component

Pharma Professional Call – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
SRE Professional Types	*Professional Type*	No default	Specifies a list of professions. Add a comma to the beginning and end of the professional type. An example would be: ,Physician,Central Lab Technician,
SRE Reference Number Required	Y or N	N	Specifies whether a reference number is required before the call can be submitted.
Sample Disbursed Required	Y or N	N	Specifies whether samples must be dropped when the call is submitted.
Template Components	,*Business Component Name*,	Pharma Call Products Detailed - CE,Pharma Call Sample Dropped - CE	Specifies the business components that need to be copied from the call template when a smart call is applied to a call. Use business component names as defined in Siebel Tools.
Update After Recreate Receipt	,*Field name*,	,Last Name,Address,Start Date,Comment,Signature Captured,	Specifies fields that are editable when Recreate Receipt is selected. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Update After Submit	,*Field name*,	,Comment,	Specifies fields that are editable after the call is submitted. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Update Status To Synchronized	Y or N	Y	Specifies whether the status of calls downloaded to the handheld is updated to "Synchronized." When the status is "Synchronized," the calls are read-only on the server.
Validate DEA Number	Y or N	Y	Specifies whether the DEA Number must be validated before the user can sign and submit the call.
Validate DEA Number Expiration	Y or N	Y	Specifies whether DEA Expiration Date must be validated before the user can sign and submit the call.

Table 37. User Properties for Pharma Professional Call – CE Business Component

Pharma Professional Call – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Validate License Number	Y or N	Y	Specifies whether License Number must be validated before the user can sign and submit the call.
Validate License Number Expiration	Y or N	Y	Specifies whether License Number Expiration must be validated before the user can sign and submit the call.
Validate License Number Status	Y or N	Y	Specifies whether License Number Status must be validated before the user can sign and submit the call.
Validate OK to Sample	Y or N	Y	Specifies whether it is OK to drop a sample to a contact the call.
Validate Product Priority	Y or N	N	If set to Y, it throws an error during submit if product detail priority is not in a sequential order starting with 1.
Validate Professional Profile	Y or N	Y	
Validate Sign Lot Number	Y or N	Y	Specifies whether Lot Number is required before the user can sign.
Validate Submit Lot Number	Y or N	Y	Specifies whether Lot Number is required before the user can submit the call.

Pharma Address Inter Table – CE Business Component

Table 38. User Properties for Pharma Address Inter Table – CE Business Component

Pharma Address Inter Table – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Validate DEA Number	Y or N	Y	Specifies whether the DEA number must be validated. An example of a valid DEA number is: AA1234563.

Pharma Call Decision Issue – CE Business Component

Table 39. User Properties for Pharma Call Decision Issue – CE Business Component

Pharma Call Decision Issue – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Template Fields	,*Field name*,	Name	Specifies the fields that need to be copied from the call template when a smart call is applied. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.

Pharma Call Products Detailed – CE Business Component

Table 40. User Properties for Pharma Call Products Detailed – CE Business Component

Pharma Call Products Detailed – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Max Auto Generated Priority	number	3	Maximum number of priorities that are automatically generated.
Skip Conflict Resolution for Duplicate Records	Y or N	Y	Specifies the behavior of Object Manager when it encounters a duplicate record during synchronization. If Y, the Object Manager drops the record from the handheld client and keeps the record on the server.
Template Fields	,*Field name*,	Name,Priority,Indication	Specifies the fields that are copied from the call template when a smart call is applied. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.

Pharma Inventory Period – CE Business Component

Table 41. Pharma Inventory Period – CE Business Component

Pharma Inventory Period – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Maximum Periods	*Number*	2	Specifies the number of unreconciled periods, including the active period.

Pharma Call Sample Dropped – CE Business Component

Table 42. User Properties for Pharma Call Sample Dropped – CE Business Component

Pharma Call Sample Dropped – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Signature Body Text Field: 1	*Field name*	Quantity	Field name that must appear in the signature body text.
Signature Body Text Field: 2	*Field name*	Name	Field name that must appear in the signature body text.
Signature Body Text Field: 3	*Field name*	Vendor Name	Field name that must appear in the signature body text.
Skip Conflict Resolution For Duplicate Records	Y or N	Y	Specifies the behavior of Object Manager when it encounters a duplicate record during synchronization. If Y, the Object Manager drops the record from the handheld client and keeps the record on the server.

Table 42. User Properties for Pharma Call Sample Dropped – CE Business Component

Pharma Call Sample Dropped – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Template Fields	,*Field name*,	,Name,Lot Name,Quantity,	Specifies the fields that need to be copied from the call template when a smart call is applied. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.
Update After Recreate Receipt	,Field Name,	,Name,Quantity,	Fields that are updateable after Recreate Receipt.

Pharma Promotional Items Dropped

Table 43. User Properties for Pharma Promotional Items Dropped – CE

Pharma Promotional Items Dropped – CE Business Component			
User Property	**Value**	**Default Value**	**Description**
Template Fields	,*Field name*,	,Name,Quantity,	Specifies the fields that need to be copied from the call template when a smart call is applied. Use field names as defined in Siebel Tools. Add a comma to the beginning and end of the field name.

E Print Tagging Language

This chapter describes the print tagging language that is used to create print templates for your handheld device.

The audience for this appendix is Siebel application developers.

"Overview of Siebel Handheld Print Tagging Language" on page 193

"Using Variables in Print Templates" on page 209

"Using Variables in Print Templates" on page 209

Overview of Siebel Handheld Print Tagging Language

You can create the print template file in any text editor.

- Tags are enclosed in angle brackets and identified with the keyword TAG, followed by a colon.

  For example: <TAG: ....>

- Parameters are specified with a keyword, followed by an equals sign. Arguments are in uppercase, surrounded by quotation marks.

  For example, Font = "FONT FACE"

- Values are in uppercase and lowercase, surrounded by quotation marks.

  For example: Font = "Helvetica"

- Tags may appear in any order in the file. The only required tag is the Title tag.
- Variables within a print template must be uniquely named. Variable names must be one-word strings and spaces are not allowed.

The following tags are used to specify the format of the print output, which applets are included, and the query that is executed:

- Applet—Specifies which applets are used in the document.
- Comment—Adds comments that do not appear in the final document.
- Divider—Adds visual lines to visually separate different parts of the document.
- Footer—Adds information such as page numbers, date, and time.
- Format—Specifies characteristics such as font, boldface, italics, and underline.
- Header—Adds information such as page numbers, date, and time.

- Page Break—Specifies a break in the text, forcing the text that follows to appear on the next page.
- Picture—Adds graphic images to the document.
- Title—Specifies a name for the template that appears in the print job list.

In addition, you may add static text in the print template.

The following print tags allow you to calculate additional information and add it to your reports:

- GetTotal—Calculates the total for a column of data.
- GetField—Gets the value of a field.
- GetCount—Calculates the number of records.

You can also calculate dates and times using the GetDate and GetTime tags, and you can retrieve the value of the registry using GetRegistry.

All of this information is stored in variables that you specify. In addition, you can assign any value to a variable using the SetVariable tag. You can present this information in your report using the Cell and EndofLine tags to create tables of information. See "Using Variables in Print Templates" on page 209 for an example of how variables can be used to present information in print templates.

Applet

Description

Specifies the applet to be printed.

Usage

Any data that appears in your document must be generated from the applets in the view. Therefore, you must create applets that will produce the data required for your document.

Use the Applet tag to specify any number of list or form applets within the template and to locate the applet in your document. In the form view, a maximum of two fields per row are supported.

Syntax

<TAG:Applet Name="APPLET NAME" Query="QUERY STRING" Caption="CAPTION" Headerdivider="HEADERDIVIDER" Recorddivider="RECORDDIVIDER" Wrap="WRAP">

Parameter	Description
TAG:Applet	(Required) Applet tag indicator.
APPLET NAME	(Required) Applet name as defined in Siebel Tools.

Parameter	Description
QUERY STRING	(Optional) Specifies the query string directly set to the business component supporting the document. If the query string is not specified, the currently active query string in the view is applied to expose the relevant records.
CAPTION	(Optional) Specifies whether the captions in the form applets are suppressed. Valid values are TRUE (default) and FALSE. This parameter does not apply to list applets. Column headings in list applets are always enabled.
HEADERDIVIDER	(Optional) Specifies whether a divider is printed below the column heading in list applets. Valid values are TRUE and FALSE (default). This parameter does not apply to form applets.
RECORDDIVIDER	(Optional) Specifies whether a horizontal divider is printed between records in list applets. Valid values are TRUE and FALSE (default). This parameter does not apply to form applets.
WRAP	(Optional) Specifies whether text field values are word wrapped. Valid values are TRUE and FALSE (default). This parameter does not apply to numeric fields.

Example

<TAG:Applet Name="Order List" Headerdivider="TRUE">

Cell

Description

Prints the string stored in STRING or VARIABLE NAME at the specified location on the current line.

Usage

Use the Cell tag to create cells of data in a row in a table. Use it with the EndOfLine tag. If the data exceeds the width of the cell specified by Startat and Endat, it wraps to the next line.

Syntax

<TAG:Cell Startat="START" Endat="END" Name="STRING" Variable="VARIABLE NAME" Align=ALIGNMENT"

Parameter	Description
TAG:Cell	(Required) Required tag indicator.
START	(Required) Specifies the starting point of the cell, expressed as a percentage of the printable page width. For example, if START =10, then the cell starts at the point that is 10% from the left edge of the printable width.
END	(Required) Specifies the end point of the cell, expressed as a percentage of the printable page width. For example, if END=50, then the cell ends at the point that is 50% from the left edge of the printable width.
STRING	(Optional) String value. If Variable is not specified, then String is a required parameter.
VARIABLE NAME	(Optional) Name of variable where the value is stored. If String is not specified, then Variable is a required parameter.
ALIGNMENT	(Optional) Specifies the alignment of the string. Valid values are LEFT (default), CENTER, and RIGHT.

Example

```
<TAG:Divider Weight="3" Startat="20" Endat="80">
<TAG:Cell Startat="0" Endat="50" name="TOTAL:" Align="RIGHT">
<TAG:Cell Startat="50" Endat="100" Variable="vvv1total" Align="RIGHT">
<TAG:EndOfLine>
<TAG:Cell Startat="0" Endat="50" name="TOTAL Defective:" Align="RIGHT">
<TAG:Cell Startat="50" Endat="100" Variable="vvvDefectiveTotal" Align="RIGHT">
<TAG:EndOfLine>
<TAG:Cell Startat="0" Endat="50" name="TOTAL Good:" Align="RIGHT">
<TAG:Cell Startat="50" Endat="100" Variable="vvvGoodTotal" Align="RIGHT">
<TAG:EndOfLine>
<TAG:Cell Startat="0" Endat="50" name="Defective Count:" Align="RIGHT">
<TAG:Cell Startat="50" Endat="100" Variable="vvvDefectiveCount" Align="RIGHT">
<TAG:EndOfLine>
<TAG:Cell Startat="0" Endat="50" name="Good Count:" Align="RIGHT">
```

```
<TAG:Cell Startat="50" Endat="100" Variable="vvvGoodCount" Align="RIGHT">
<TAG:EndOfLine>
<TAG:Cell Startat="50" Endat="100" Variable="vvv3reg">
<TAG:EndOfLine>
<TAG:Cell Startat="50" Endat="100" Variable="vvv5str">
<TAG:EndOfLine>
<TAG:Cell Startat="0" Endat="30" Variable="vvv4date">
<TAG:Cell Startat="30" Endat="70" Variable="vvv4longdate">
<TAG:Cell Startat="70" Endat="100" Variable="vvv8time">
<TAG:EndOfLine>
```

Comment

Description

Adds code comments to the print template.

Usage

Use to add explanatory notes or documentation to explain and maintain the print template. Comment tags are ignored during printing and do not appear in the printed document.

Syntax

<REM: COMMENT>

Parameter	Description
REM	(Required) Comment tag indicator.
COMMENT	(Optional) Comment text.

Example

<REM: Quotation Print Template. This template includes four applets.>

Divider

Description

Renders a horizontal line across the width of the page.

Usage

Use to visually separate the different sections of your document. The Divider tag can be used between other tags; therefore, you may add a line between two applets. However, you cannot embed a Divider within an applet.

Syntax

<TAG:Divider Weight="WEIGHT" Startat="START" Endat="END">\

Parameter	Description
TAG:Divider	(Required) Divider tag indicator.
WEIGHT	(Optional) Specifies line thickness. Valid values are 1–5. The default value is 1, which produces a line 0.2 mm wide. Increasing the value by 1 increases the width by 0.2 mm. A 5 produces a line that is 1 mm wide.
START	(Optional) Percentage that specifies the starting point of the line. The default is 0%, the farthest left point.
END	(Optional) Percentage that specifies the end point of the line. The default is 100%, the farthest right point.

Example

<TAG:Divider Weight="2" Startat="20" Endat="80">

EndOfLine

Description

Specifies the end of a row and advances to the next line.

Usage

Use to create rows of data in a table. Used with the Cell tag.

Syntax

<TAG:EndOfLine>

Example

```
<TAG:Cell Startat="0" Endat="50" Name="TOTAL:" Align="RIGHT">
<TAG:Cell Startat="50" Endat="100" Variable="vvv1total" Align="RIGHT">
<TAG:EndOfLine>
```

Footer

Description

Adds footer information such as page numbers, the current date, and the current time.

Usage

You may, for example, always want the text "Thank you for your business!" to appear on the bottom of your receipts. If so, you may include this text in a Footer tag.

The Footer tag may be specified anywhere in the template file; however, it will always appear at the very bottom of your document. Only one Footer tag is applied to the document. If you have multiple Footer tags in the file, only the last Footer tag is used; any other Footer tags are ignored.

If you include a Footer tag in your template, then you must set the BottomMargin in setup.ini to a minimum of 20.

The footer has three sections, Left, Center, and Right, which are used to position the information in the footer.

The text in the footer is formatted in 10 point, Helvetica font. If Helvetica is not available on your system, the default font is used. You cannot customize text formatting of the Footer tag. The Format tag does not affect the formatting of the footer.

Syntax

<TAG:Footer Left="DATA" Center="DATA" Right="DATA">

Parameter	Description	
TAG:Footer	(Required) Footer tag indicator.	
DATA	(Optional) Static text or one of the following data tags:	
	Data tag	**Description**
	<page>	Page number
	<date>	Date of the printing
	<time>	Time of the printing

Example

<TAG:Footer Left="<date>" Right="<page>"

Format

Description

Specifies the characteristics of the text—the typeface or font, whether the text is in boldface, italics, or underlined, and the text alignment.

Usage

The font specification specifies the characteristics of all text that follows the tag until the next Format tag.

The text alignment tag (Align) behaves somewhat differently. When the applet is rendered, the field alignment specification takes precedence over the Align parameter.

Syntax

<TAG:Format Face="FONT FACE" Size="FONT SIZE" Bold="BOLD" Italic="ITALIC" Underline="UNDERLINE" Align="TEXT ALIGNMENT">

Parameter	Description
TAG:Format	(Required) Format tag indicator.
FONT FACE	(Required) Specifies the typeface of the text. Any typeface installed on the handheld device may be specified. There is no default for this parameter.
FONT SIZE	(Required) Specifies the text size. Any installed font size for an installed typeface on the handheld device may be specified. There is no default for this parameter.
BOLD	(Optional) Specifies whether the text is in bold. Valid values are TRUE or FALSE (default). If TRUE, text is set to bold.
ITALIC	(Optional) Specifies whether the text is in italic. Valid values are TRUE or FALSE (default). If TRUE, text is set to italic.
UNDERLINE	(Optional) Specifies whether the text is underlined. Valid values are TRUE or FALSE (default). If TRUE, text is set to underline.
TEXT ALIGNMENT	(Optional) Specifies the text alignment. Valid values are LEFT (default), RIGHT, and CENTER.

Example

<TAG:Format Face="Helvetica" Size="10">

GetCount

Description

Calculates the number of records in the selected rows and assigns this value to a variable.

Usage

Use GetCount to calculate the number of records and print this value in your report.

Syntax

<TAG:GetCount Appletname="APPLET NAME" Query="QUERY STRING" Variable="VARIABLE NAME">

Parameter	Description
TAG:GetCount	(Required) Required tag indicator.
APPLET NAME	(Required) Name of the applet.
QUERY STRING	(Optional) Search specification for the rows to be included in the row set. If not specified, the current search specification is used. The syntax for the query string is: Field Name|Query Statement. You may specify one or more query strings separated by a vertical bar (|). For example, Query="Name|LIKE 'Sieb*'"|"Location|LIKE 'H*'"
VARIABLE NAME	(Required) Name of variable where the value is stored.

Example

<TAG:GetCount Appletname="CS HH Product Bucket List Applet" Query="Status|Good" Variable="StatusGood">

GetDate

Description

Gets the current date, offsets the date by the number of days specified in Dayoffset, and stores the result in a variable.

Usage

Use GetDate to print a specific date in your report.

Syntax

<TAG:GetDate Dayoffset="NUMBER OF DAYS" Variable="VARIABLE NAME" Logformat="DATE FORMAT">

Parameter	Description
TAG:GetDate	(Required) Required tag indicator.
NUMBER OF DAYS	(Optional) Number of days by which the current date is offset. For example, –100 subtracts 100 days from the current date; 100 adds 100 days to the current date. The default is 0.
VARIABLE NAME	(Required) Name of variable where the value is stored.
DATE FORMAT	(Optional) TRUE prints the date in long date format (for example, Monday, February 11, 2002). FALSE prints the short date format (for example, 2/21/02). The default is FALSE.

Example

<TAG:GetDate Longformat="TRUE" Variable="LongDate">

GetField

Description

Gets the value of the specified column of the first row of selected rows and assigns the result to a variable.

Usage

Use GetField to print a value without developing a print applet. Design the query and sort strings so that the desired record is the first record in the selected rows. GetField only allows you to get the value in the first record.

Syntax

<TAG:GetField AppletName="APPLET NAME" Fieldname="FIELD NAME" Query="QUERY STRING" Sort="SORT STRING" Variable="VARIABLE NAME">

Parameter	Description
TAG:GetField	(Required) Required tag indicator.
APPLET NAME	(Required) Name of the applet.
FIELD NAME	(Required) Name of the field or column.
QUERY STRING	(Optional) Search specification for the rows to be included in the total. If not specified, the current search specification is used.

Parameter	Description
SORT STRING	(Optional) Sort specification. If not specified, the current sort specification is used. The syntax is: Field Name [ASC][DESC]. The default is ASC (Ascending). For example: Sort="Account DESC, Date". In the example, the Account field is sorted in descending order, then the date field is sorted in ascending order.
VARIABLE NAME	(Required) Name of variable where the value is stored.

Example

<TAG:GetField AppletName="CS HH Product Bucket List Applet" Fieldname="Quantity" Variable="ProdBucketListField">

GetRegistry

Description

Gets a value in the registry for Siebel Handheld and assigns it to a variable.

Usage

Use GetRegistry to print the contents of the registry key in your report.

Syntax

<TAG:GetRegistry Name="REGISTRY NAME" Variable="VARIABLE NAME">

Parameter	Description
TAG:GetRegistry	(Required) Required tag indicator.
REGISTRY NAME	(Required) Value the registry.
VARIABLE NAME	(Required) Name of variable where the value is stored.

Example

<TAG:GetRegistry Name="InstallDir" Variable="Registry">

GetTime

Description

Gets the current time, offsets the time by the number of seconds specified in Secondoffset, and assigns the result to a variable.

Usage

Use GetTime to print a specific time in your report.

Syntax

<TAG:GetTime Secondoffset="NUMBER OF SECONDS" Variable="VARIABLE NAME">

Parameter	Description
TAG:GetTime	(Required) Required tag indicator.
NUMBER OF SECONDS	(Optional)Number of seconds by which the current time is offset. For example, –100 subtracts 100 seconds from the current time; 100 adds 100 seconds to the current time. The default is 0.
VARIABLE NAME	(Required) Name of variable where the value is stored.

Example

<TAG:GetTime Secondoffset="3600" Variable="Time">

GetTotal

Description

Calculates the total for the specified column for all selected rows and assigns the value to a variable.

Usage

Use GetTotal to calculate a column total and display the total in your report.

Syntax

<TAG:GetTotal AppletName="APPLET NAME" FieldName="FIELD NAME" Query="QUERY STRING" Variable="VARIABLE NAME">

Parameter	Description
TAG:GetTotal	(Required) Required tag indicator.
APPLET NAME	(Required) Name of the applet.

Parameter	Description
FIELD NAME	(Required) Name of the field or column. Specify a field or column with numeric data. If you specify a field with non-numeric data, a 0 is assigned to the variable.
QUERY STRING	(Optional) Search specification for the rows to be included in the total. If not specified, the current search specification is used. The syntax for the query string is: Field Name|Query Statement. You may specify one or more query strings separated by a vertical bar (|). For example, Query="Name|LIKE 'Sieb*'"|"Location|LIKE 'H*'"
VARIABLE NAME	(Required) Name of variable where the value is stored.

Example

<TAG:GetTotal AppletName= "CS HH Product Bucket List Applet" Fieldname="Quantity" Variable="ProdBucketListTotal">

Header

Description

Adds header information such as page numbers, the current date, and the current time.

Usage

You may always want the current date and time to appear on your invoices. If so, you may include this information in a Header tag.

The Header tag may be specified anywhere in the template file; however, it always appears at the very top of your document. Only one Header tag is applied to the document. If you have multiple Header tags in the file, only the last Header tag is used; any other Header tags are ignored.

If you include a Header tag in your template, then you must set TopMargin in setup.ini to a minimum of 20.

The header has three sections, Left, Center, and Right, which are used to position the information in the header. The Left parameter aligns the text with the left margin, and the Right parameter right aligns the text with the right margin. The Center parameter centers the text in the header.

The text in the header is formatted in 10 point, Helvetica font. If Helvetica is not available on your system, the default font is used. You cannot customize text formatting of the Header tag. The Format tag does not affect the format of the header.

Syntax

<TAG:Header Left="DATA" Center="DATA" Right="DATA"

Parameter	Description	
TAG:Header	(Required) Header tag indicator.	
DATA	(Optional) Static text or one of the following data tags:	
	Data tag	**Description**
	<page>	Page number
	<date>	Date of the printing
	<time>	Time of the printing

Example

<TAG:Header Center="Company Confidential">

Page Break

Description

Forces text that follows the tag to appear on the next page.

Usage

Use this for multipage documents or forms.

Syntax

<TAG:PageBreak>

Parameter	Description
TAG:PageBreak	(Required) Page break tag indicator.

Example

<TAG:PageBreak>

Picture

Description

Specifies graphic files included in the print template.

Usage

Use to add graphic images, such as a company logo, to your documents.

The supported file formats are BMP and JPG.

Graphics files are located in the \Program Files\Siebel Handheld\templates directory on the handheld device. Specify the full path name of the file for the Name parameter.

Scaling or graphics operations, such as inverse image, are not supported.

The Alignment and Position parameters are used together to place the graphic. Alignment specifies the left edge, the center, or the right edge of the graphic. Position is distance, specified in millimeters, from the left edge of the paper.

- If Alignment ="Left" and Position="30", then the left edge of the graphic is set 30 millimeters from the left edge of the paper.
- If Alignment = "Center" and Position = "30", the center of the graphic is set 30 millimeters from the left edge of the paper.
- If Alignment = "Right" and Position = "30", the right edge of the graphic is set 30 millimeters from the left edge of the paper.

If Position is not specified, it defaults to 0. Depending on the Alignment setting, the graphic is left-aligned (Alignment = "Left"), the graphic is right-aligned (Alignment = "Right"), or the graphic is centered (Alignment ="Center")

Syntax

<TAG:Picture Name="FILE NAME" Alignment="ALIGNMENT" Position="POSITION">

Parameter	Description
TAG:Picture	(Required) Picture tag indicator.
FILE NAME	(Required) Specifies the full path and name of the graphics file.
ALIGNMENT	(Optional) Specifies the left edge, the center, or the right edge of the graphic. Used with the Position parameter to specify the horizontal position of the graphic. Valid values are LEFT (default), CENTER, and RIGHT.
POSITION	(Optional) Specified in millimeters, it is the distance from the left edge of the paper. Used with the Alignment parameter to specify the horizontal position of the graphic. The default is 0.

Example

<TAG:Picture Name="\Program Files\Siebel Handheld\templates\logo.bmp" Alignment="Right" Position="88">

SetVariable

Description
Sets a value to a variable.

Usage
Use SetVariable to assign a value to a variable. You can then print the value by specifying the variable in the Cell tag.

Syntax
<TAG:SetVariable Name="VALUE" Variable="VARIABLE NAME>

Parameter	Description
TAG:SetVariable	(Required) Required tag indicator.
VALUE	(Required) A value.
VARIABLE NAME	(Required) Name of variable where the value is stored.

Example
<TAG:SetVariable="100" Variable="TotalQuantity">

Static Text

You may add static text anywhere in your template by using the current Format settings. The text goes across the entire page width. If it exceeds the width of the page, it wraps to the next line.

Example
This quote is valid for 60 days from the date on this quotation.

Title

Description
Name used to identify the template.

Usage
The Title tag is a required tag in your print template file.

When you print your document, this title appears in the print job list. This title does not appear on the document that is printed. Use static text to add the document title to your template.

Syntax

<TAG:Title Title="TITLE">

Parameter	Description
TAG:Title	(Required) Title tag indicator.
TITLE	(Required) Title text. May be between 1–255 characters.

Example

<TAG:Title Title="Quotation">

Using Variables in Print Templates

The following example shows how to use variables in a print template.

```
<TAG:Title Title="Inventory Report">

<REM: **********Variable Assignment Examples**************>

<TAG:SetVariable name="THIS IS VARIABLE" variable="VarStr">
<TAG:GetRegistry name="InstallDir" variable="VarReg">
<TAG:GetDate dayoffset="10" variable="VarDate">
<TAG:GetDate longformat="TRUE" variable="VarLongDate">
<TAG:GetTime secondoffset="-3600" variable="VarTime">
<TAG:GetTotal appletname="CS HH Product Bucket List Applet" fieldname="Quantity"
variable="VarTotal">
<TAG:GetTotal appletname="CS HH Product Bucket List Applet" fieldname="Quantity"
query="Status|Good" variable="VarGoodTotal">
<TAG:GetTotal appletname="CS HH Product Bucket List Applet" fieldname="Quantity"
query="Status|Defective" variable="VarDefectiveTotal">
<TAG:GetField appletname="CS HH Product Bucket List Applet" fieldname="Quantity"
variable="VarQuantityField">
<TAG:GetCount appletname="CS HH Product Bucket List Applet" query="Status|Good"
variable="VarGoodCount">
<TAG:GetCount appletname="CS HH Product Bucket List Applet" query="Status|Defective"
variable="VarDefectiveCount">

<REM: **********Variable Assignment Examples End************>

<REM: Inventory Print Template. This template includes 3 applets. The ENU template>

<TAG:Format Face="Helvetica" Size="16" Align="Center">
[Distributor Name
Street Address
City, Country Postal Code
Phone Number   Fax Number]
```

```
<TAG:Format Face="Helvetica" Size="20" Bold="TRUE" Align="Center">
Inventory Report
<TAG:Format Face="Helvetica" Size="8" >
<TAG:Applet Name="CS HH Inv Loc Print Applet" Caption="TRUE" Wrap="TRUE">
<TAG:Applet Name="CS HH Product Bucket List Applet" Line="FALSE" Headerdivider="TRUE"
Recorddivider="FALSE" Wrap="TRUE">

<REM: *************Variable Usage Example***************>

<TAG:Divider Weight="3" startat="20" endat="80">
<TAG:Cell startat="0" endat="50" name="TOTAL:" Align="RIGHT">
<TAG:Cell startat="50" endat="100" variable="VarTotal" Align="RIGHT">
<TAG:EndOfLine>
<TAG:Cell startat="0" endat="50" name="TOTAL Defective:" Align="RIGHT">
<TAG:Cell startat="50" endat="100" variable="VarDefectiveTotal" Align="RIGHT">
<TAG:EndOfLine>

<TAG:Cell startat="0" endat="50" name="TOTAL Good:" Align="RIGHT">
<TAG:Cell startat="50" endat="100" variable="VarGoodTotal" Align="RIGHT"
<TAG:EndOfLine>

<TAG:Cell startat="0" endat="50" name="Defective Count:" Align="RIGHT">
<TAG:Cell startat="50" endat="100" variable="VarDefectiveCount" Align="RIGHT">
<TAG:EndOfLine>

<TAG:Cell startat="0" endat="50" name="Good Count:" Align="RIGHT">
<TAG:Cell startat="50" endat="100" variable="VarGoodCount" Align="RIGHT">
<TAG:EndOfLine>

<TAG:Cell startat="50" endat="100" variable="VarReg">
<TAG:EndOfLine>

<TAG:Cell startat="50" endat="100" variable="VarStr">
<TAG:EndOfLine>

<TAG:Cell startat="0" endat="30" variable="VarDate">
<TAG:Cell startat="30" endat="70" variable="VarLongDate">
<TAG:Cell startat="70" endat="100" variable="VarTime">
<TAG:EndOfLine>

<REM: ***********Variable Usage Example End***************>

<TAG:Divider Weight="2">
<TAG:Format Face="Helvetica" Size="12" Align="LEFT">
Warehouse Signature
<TAG:Divider Weight="2">
<TAG:Format Face="Helvetica" Size="12" Align="RIGHT">

Rep Signature
```

F Print Configuration Settings

You configure printing attributes in the setup.ini file. This appendix describes the printing parameters for Siebel application developers and application administrators.

Overview of Siebel Handheld Print Configuration Settings

The administrator sets up the default printer setting in the setup.ini file located in the setup directory.

There are a number of parameters to specify printing on the handheld. The parameters specify the following:

- Printer attributes (printer model, port, baud rate, and printer handshake).
- Printing attributes (portrait or landscape orientation, print density and quality, use of compression techniques, and advancing continuous–feed paper).
- Dimensions of the paper (U.S. or European standard paper sizes or custom–size paper).
- Margin settings of the pages (left, right, top, and bottom margins).

These parameters are specified in the [Printing] section of the setup.ini file located in the setup directory. The file contains default settings for all the printing parameters. Review the settings in the file to verify that these settings will work for your printing environment. If necessary, edit the settings as required. You may use any text editor to edit the file.

See Appendix E for a list of the printing parameters and valid values.

The parameters are set using the following syntax:

PARAMETER_NAME = VALUE

For example: PrinterType = 1

The parameters are listed below in alphabetical order by the parameter name.

MarginBottom

Use the MarginBottom parameter to specify the dimensions of the bottom margin of your page. Specify the margin in millimeters using a whole number; decimal fractions are not valid. The default is 5 millimeters.

The data specified in the Footer tag of the print template is printed in the margin specified by MarginBottom. Therefore, if the print template includes a Footer tag, you must specify a wide enough bottom margin to accommodate the footer. MarginBottom should be set to a minimum of 20 millimeters. For more information, see "Footer" on page 199.

MarginLeft

Use the MarginLeft parameter to specify the width of the left margin of your page. Specify the margin in millimeters using a whole number; decimal fractions are not valid. The default is 5 millimeters.

MarginRight

Use the MarginRight parameter to specify the width of the right margin of your page. Specify the margin in millimeters using a whole number; decimal fractions are not valid. The default is 5 millimeters.

MarginTop

Use the MarginTop parameter to specify the dimensions of the top margin of your page. Specify the margin in millimeters using a whole number; decimal fractions are not valid. The default is 5 millimeters.

The data specified in the Header tag of the print template is printed in the margin specified by MarginTop. Therefore, if the print template includes a Header tag, you must specify a wide enough top margin to accommodate the footer. MarginTop should be set to a minimum of 20 millimeters. For more information, see "Header" on page 205.

PaperHeight

If the paper that your printer uses is not one of the supported standard sizes, then set PaperSize to 5 (custom paper dimensions). Then, specify the height of the paper, in millimeters, using the PaperHeight parameter. You must use a whole number; decimal fractions are not valid. The default is 280 millimeters. If you specify a value of 1–4 for PaperSize, the PaperHeight parameter is ignored.

Use the PaperWidth parameter to specify the width of the paper.

PaperSize

Specify one of the standard paper sizes or specify a custom paper size. (See Table 44.) If you specify custom paper size (5), you must also specify the PaperWidth and PaperHeight parameters. The default is custom paper dimensions.

See also PaperWidth and PaperHeight.

Table 44. Paper Dimensions

Value	Description
1	Letter size (8.5" x 11.5")
2	A4 (210 mm x 297 mm)
3	B5 (176 mm x 250 mm)
4	Legal size (8.5" x 14")
5 (default)	Custom paper dimensions (Specify PaperWidth and PaperHeight parameters.)

PaperWidth

If the paper that your printer is printing to is not one of the supported standard sizes, then set PaperSize to 5 (custom paper dimensions). Then, you must specify the width measurement of the paper, in millimeters, using the PaperWidth parameter. You must use a whole number; decimal fractions are not valid. The default is 5 millimeters. If you specify a value of 1–4 for PaperSize, the PaperWidth parameter is ignored.

Use the PaperHeight parameter to specify the length of the paper.

PrinterBaudrate

Use PrinterBaudrate to specify the speed of the data transmission for the printer. (See Table 45.)

Table 45. Printer Baud Rate

Value	Description
0	Always use 0 for LPT or Network printer ports or for COM ports that communicate with the printer at 4800 baud
1 (default)	9600 baud
2	19200 baud
3	38400 baud
4	57600 baud
5	115200 baud

PrinterCompressed

Use PrinterCompressed to specify the data compression mode. (See Table 46.) For the printers supported in this release, always set PrinterCompressed to 1.

Table 46. Data Compression

Value	Description
0	No compression techniques used
1 (default)	Use any known compression

PrinterDensity

Use the PrinterDensity parameter to get a lighter or darker output from the printer. Start with the default setting, 2, which corresponds to the printer manufacturer's default. As you get feedback from the field, you may need to adjust this setting.

The valid values are 0–4 where 0 is the lightest print density, 4 is the heaviest print density, and 2 is average print density.

PrinterDither

Use to specify the method by which different colors are represented. (See Table 47.) For the printers supported in this release, PrinterDither should always be set to 0.

Table 47. Print Dithering

Value	Description
0 (default)	Use color diffusion
1	Use dithering

PrinterDraftMode

Use PrinterDraftMode to specify the quality of the printing. (See Table 48.) For the printers supported in this release, PrinterDraftMode should always be set to 0.

Table 48. Print Quality

Value	Description
0 (default)	Use the highest quality printing
1	Use a lower quality printing if available

PrinterFormFeed

Use PrinterFormFeed to specify how paper advances to the next page. (See Table 49.) If using sheets of paper, set PrinterFormFeed to 0.

Specify 1 or 2 for continuous–feed paper:

- Set PrinterFormFeed to 1 if you do not need to conserve paper or if you want pages of uniform length. The printer scrolls to the length specified by the PageHeight parameter and trims the page there.
- Set PrinterFormFeed to 2 to conserve paper or if it does not matter if your pages are of varying length. In this case, the printer scrolls 25 millimeters beyond the last printed line and trims the page there. The scroll distance, 25 mm, is not customizable.

For both values, 1 and 2, the page length never exceeds PageHeight.

Table 49. Printer Form Feed

Value	Description
0 (default)	Printer sends a form feed command to the printer at the end of each page. Use this setting for sheet paper.
1	Printer scrolls the page to the length specified by the PaperHeight parameter.
2	Printer scrolls the page 25 millimeters past the last printed line of the page.

PrinterHandshake

Use PrinterHandshake to define the serial port handshake. (See Table 50.) The PrinterHandshake parameter applies only when the printer port is a Com1 or Com2 port. If PrinterPort is set to Com1 or Com2, then set PrinterHandshake to 1.

Table 50. Printer Handshake

Value	Description
0	Uses Xon/Xoff
1 (default)	Uses hardware control lines
2	No handshaking of serial port

PrinterOrientation

Specify whether the paper is to be oriented vertically (portrait) or horizontally (landscape). (See Table 51.) Not all printers can print in landscape orientation. Therefore, you will need to check the specifications for your printer.

Table 51. Paper Orientation

Value	Description
1 (default)	Portrait (vertical)
2	Landscape (horizontal)

PrinterPort

Specify the port to which the printer is connected with the PrinterPort parameter. (See Table 52.)

If PrinterPort is an LPT port or a network path (2 or 9), then the PrinterBaudrate must be set to 0.

Table 52. Printer Port

Value	Description
0	Com1: serial port
1	Com2: serial port
2	LPT: parallel port
3 (default)	IR Infrared port
4	Com3: serial port

Table 52. Printer Port

Value	Description
5	Com4: serial port
6	Com5: serial port
7	Com6: serial port
8	Print to file OUTPUT.PRN
9	Print to network address
10	Bluetooth BlueCard solution by Wireless Solutions
11	Socket PNC Bluetooth card support
12	Bluetooth BlueCard solution by Anycom
13	Com7: serial port
14	Com8: serial port

PrinterType

Specify the type of printer using the PrinterType parameter. See Table 53 for the list of supported printers.

Table 53. Printer Type

Value	Description
6	Pentax PocketJet 200
14 (default)	O'Neil microFlash2i and microFlash4t printers
108	O'Neil microFlash8i printer

Default Printing Settings

The following are the printing parameters from the setup.ini file. The values shown are the default settings.

```
[Printing]

PrinterType= 14
PrinterPort= 3
PrinterBaudrate= 1
PrinterHandshake= 1
PrinterOrientation= 1
PrinterDensity= 2
PrinterCompressed= 1
PrinterDither= 0
```

```
PrinterDraftMode= 0
PrinterFormFeed= 0
PaperSize= 5
PaperWidth= 115
PaperHeight= 280
MarginLeft= 5
MarginRight= 5
MarginTop= 5
MarginBottom= 5
```

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