Accessibility Guide for Siebel Business Applications

Version 8.1

June 2009

ORACLE®

Contents

Appendix A: Accessibility Standards

Index

1 What's New in This Release

What's New in Accessibility Guide for Siebel Business Applications, Version 8.1

This guide has been updated to reflect product name changes.

2   Getting Started

This chapter provides information about the accessibility features available for Oracle's Siebel Business Applications. It includes the following topics:

System Requirements

Accessibility features in Siebel Business Applications are supported by a limited range of browsers. For more information about the system requirements, see *Siebel System Requirements and Supported Platforms* on Oracle Technology Network.

Accessibility and Siebel Business Applications

Siebel Business Applications are used by many users, such as employees, partners, distributors, vendors, and members of the public, in many related organizations. Not everyone has mobility in his or her hands, perfect eyesight, or other physical skills, which software designers too often take for granted.

The accessibility features in Siebel Business Applications aim to make aspects of navigating and using the application easier. The accessibility features in Siebel Business Applications allow the use of assistive-technology hardware and software, and fall into the following categories:

- Features used by third-party assistive-technology products. These features center on providing a user interface (UI), which consists of standard HTML elements that can be easily interpreted by other products.

- Keyboard shortcuts that make it easier to navigate Siebel Business Applications.

- Configuration changes that can be made to enhance the user experience, such as changing the font size or color. Both of these changes can be specified in the Siebel Business Application style sheets (.css files).

Discussion about accessibility, across the IT industry, can be found in several published books. This guide does not intend to duplicate those works. Accessibility standards and legislation exist, such as the World Wide Web Consortium (W3C), or Section 508 of the Rehabilitation Act (in the USA).

Oracle has created Oracle Global HTML Accessibility Guidelines (OGHAG), which combine guidelines of Section 508 and the World Wide Web Consortium's (W3C) Web Content Accessibility Guidelines version 1.0 level double-A (WCAG 1.0 'AA'). Both Section 508 and WCAG 1.0 are subject to interpretation and ongoing revisions. Several current standards from both Section 508 and WCAG 1.0, such as those that imply a ban on JavaScript, are outdated.

For more information about how Oracle addresses certain standards, see:

■ http://www.oracle.com/accessibility

■ Appendix A, "Accessibility Standards"

Who Should Use This Guide?

This guide is for end-users, administrators, and developers, and includes the following information:

■ Differences between standard-interactivity mode and high-interactivity mode

■ Keyboard shortcuts that are helpful when implementing the accessibility features

 NOTE: Keyboard shortcuts are available in both high interactivity and standard-interactivity mode. However, accessibility features are available only in standard-interactivity plus mode.

■ How to set up accessibility features in Siebel Business Applications

■ How to use accessibility features in Siebel Business Applications

■ How to customize accessibility features in Siebel Business Applications

NOTE: Most administrative tasks are performed from administration screens that are accessed from the Site Map.

Table 1 lists the most frequently used functions used by the different audiences of this guide.

Table 1.   Audience and Functions

Audience	Functions	Cross-Reference
Administrators	■ Configuring deployment options ■ Creating a second Application Object Manager on the same Siebel Server for use with standard-interactivity mode ■ Creating a virtual directory for use with standard-interactivity mode ■ Configuring server component parameters	■ "Process of Setting Up Accessibility Features" on page 14 ■ "Creating a Second Application Object Manager for Accessibility" on page 15 ■ "Adding a Virtual Directory" on page 15 ■ "Configuring Siebel Server Component Parameters for Accessibility" on page 16 ■ "Setting Row IDs for List Applets" on page 17 ■ "Modifying Font Size" on page 17 ■ "Adjusting Color and Contrast Settings" on page 18 ■ "Translating Accessibility Content" on page 22 ■ "Creating Summary and Label Text for Applets and Views" on page 22
End-users	■ Accessing and using assistive-technology tools ■ Setting user preferences ■ Navigating screens and views ■ Accessing keyboard shortcuts ■ Getting help and support	■ Accessing Screen Magnifiers on page 25 ■ Using Screen Readers on page 25 ■ Enabling and Disabling Confirmation Messages on page 26 ■ Navigating HTML Header Levels on page 27 ■ Navigating Screens and Views Using Keyboard Shortcuts on page 27 ■ Accessing Keyboard Shortcuts on page 28 ■ Troubleshooting Accessibility Features on page 29

Table 1.   Audience and Functions

Audience	Functions	Cross-Reference
Developers	■ Customizing accessibility features in Siebel Business Applications ■ Testing accessibility features ■ Adhering to guidelines and standards when implementing accessibility features	■ "Updating the List Applet Table" on page 29 ■ "Updating Unique Labels on Applet Mini-Buttons" on page 33 ■ "Configuring Keyboard Shortcuts" on page 33 ■ "Providing Alternative Text for Images" on page 34 ■ "Testing Accessibility Features" on page 34 ■ Appendix A, "Accessibility Standards"

About Standard Interactivity

Siebel Business Applications include accessibility features that allow the use of assistive-technology hardware and software. These accessibility features are available only in standard-interactivity mode. The standard interactive mode is based on the industry standard HTML tags. For more specific information about the browsers, Web servers, and platforms that are supported for use with standard-interactivity mode, see *Siebel System Requirements and Supported Platforms* on Oracle Technology Network.

The functionality in high-interactivity mode and standard-interactivity mode is different. The following functionality is not available in standard-interactivity mode:

■ Dynamic editing

■ Auto complete

■ Drag-and-drop function for attachments

■ Implicit save

■ Client-side validation

■ Extensible client framework

■ Graphical flow designer

   NOTE: Graphical flow designer is not available, but the workflow for a business process can be created in standard-interactivity mode using standard list and form applets.

Deployment of Accessibility Features in Standard-Interactivity Mode

The most convenient way for most customers to deploy accessibility features is to implement a mixed environment, where standard-interactivity and high-interactivity modes both reside on the same Siebel Server. A mixed-environment deployment on the same Siebel Server requires the creation of a separate instance of Application Object Manager. For information about setting up separate instances of Application Object Manager, see "Creating a Second Application Object Manager for Accessibility" on page 15.

If only a small number of users require accessibility features, an alternative to creating a separate instance of Application Object Manager is to install a Mobile Web Client and then distribute updates to those users. For more information about installing a Mobile Web Client, see *Siebel Installation Guide for Microsoft Windows*.

Customizing This Guide

This guide is available in Microsoft Word format to allow your organization to customize it for users with disabilities.

To request a copy of *Accessibility Guide for Siebel Business Applications* in Microsoft Word format, contact us either by email or postal mail.

■ Send postal mail to the following address:

> Oracle's CRM Technical Publications
>
> 500 Oracle Parkway
>
> Redwood Shores, CA 94065

■ Send email to the following address:

> siebeldoc_ww@oracle.com.

Finding More Information About Accessibility Features

The following sources provide additional information related to accessibility features.

Oracle Technology Network

Oracle Technology Network (OTN) provides access to the most-recent update of the *Siebel Bookshelf*. Additional information about how to use Siebel Business Applications accessibility features might also be available in Release Notes or Technical Notes on Oracle*MetaLink* 3.

Siebel Bookshelf

The following documents on the *Siebel Bookshelf* provide additional useful information for implementing accessibility features:

■ *Configuring Siebel Business Applications*

■ *Siebel Deployment Planning Guide*

■ *Developing and Deploying Siebel Business Applications*

■ *Siebel Fundamentals*

   Siebel Fundamentals includes a list of basic keyboard shortcuts. These keyboard shortcuts are available for general use in either high-interactivity or standard-interactivity mode, and can be used with accessibility features in addition to those described in "Accessing Keyboard Shortcuts" on page 28.

■ *Siebel Installation Guide for Microsoft Windows*

■ *Siebel System Administration Guide*

NOTE: The Siebel Bookshelf is available on Oracle Technology Network (OTN) and Oracle E-Delivery. It might also be installed locally on your intranet or on a network location.

System Requirements and Supported Platforms

Siebel System Requirements and Supported Platforms on Oracle Technology Network (OTN) describes the hardware and software requirements for Siebel Business Applications, Siebel Tools, Siebel Server, and ancillary and supported third-party software.

Technical Notes

Siebel Technical Notes on Oracle*MetaLink* 3 include information about specific topics related to implementation, configuration and usage of Siebel Business Applications. Support staff continue to revise and expand this collection of notes to include new information.

Release Notes

Siebel Release Notes on Oracle*MetaLink* 3 contain the most current information about known product anomalies and workarounds. It is important that you thoroughly review *Siebel Release Notes* on Oracle*MetaLink* 3 before installing and using Siebel CRM to ensure a smooth installation and upgrade process.

3 Setting Up Accessibility Features

This chapter provides information about how to set up and configure accessibility features for Siebel Business Applications. It includes the following topics:

Guidelines for Customizing UI Elements for Accessibility

When customizing screens, views, and applets for accessibility, it is important to understand the differences between standard-interactivity and high-interactivity functionality, and to also avoid conflicts between the code and assistive-technology applications. For a description of the differences between standard interactivity and high-interactivity modes, see "About Standard Interactivity" on page 10.

To create customizations that support accessibility features, consider the following guidelines:

- Define edit mode.

  For custom list applets, make sure to define an Edit Mode for each applet Web template, because the standard HTML document is not editable. A customer cannot perform an edit or query unless the Edit Mode template is included in the Siebel Repository.

- Register custom bitmaps and add alternative text.

  Register any custom bitmaps in Siebel Tools and add alternative text (Alt Text). For example, the Company Information bitmap on the screen must have alternative text associated with the bitmap, so that screen readers can identify and read the appropriate text for bitmaps or icons.

■ Do not use the carriage return HTML attribute.

   Do not use the value (wrap=hard) for the HTML Attribute property of the Control object type, because the attribute causes problems with screen readers.

■ Avoid creating DHTML, HTML image maps, and Java applets.

   DHTML, HTML image maps, and Java applets can be misread by screen readers and other assistive-technology software. Use standard HTML, if possible. If DHTML is necessary, full testing must be performed.

For more information about the configuration requirements and options, see *Configuring Siebel Business Applications*.

Process of Setting Up Accessibility Features

Complete the following tasks to enable accessibility features:

1 Determine which deployment approach to use.

   This guide assumes that most customer implementations will deploy high-interactivity mode and standard-interactivity mode in a mixed environment on the same Siebel Server.

2 Perform deployment tasks, based on the deployment approach selected.

   Unless a large number of users require accessibility features, customer sites typically deploy both high-interactivity and standard-interactivity modes on the same Siebel Server.

   If you are deploying high-interactivity and standard-interactivity modes on the same Siebel Server, you must perform the following tasks:

   a Define the second instance of Application Object Manager.

      For information about defining a second instance of Application Object Manager, see "Creating a Second Application Object Manager for Accessibility" on page 15.

   b Set up a virtual directory on the Web server or Siebel Web Server Extension (SWSE).

      Application Object Manager can support only one instance of the CFG file. If you are deploying a separate instance of Application Object Manager to support accessibility, then define the instance, and set up a virtual directory on SWSE. For information about setting up a virtual directory on a Web server (or SWSE), see "Adding a Virtual Directory" on page 15.

      NOTE: It is not necessary to define a second instance of Application Object Manager for Mobile Web Client deployments or for mixed-environment deployments where high interactivity and standard-interactivity mode do not reside on the same Siebel Server.

3 Modify the Server Configuration in the Siebel Business Application.

   The server parameters must be modified to set accessibility and standard-interactivity parameters, regardless of the deployment option chosen.

   ■ If you are deploying standard-interactivity mode on the same Siebel Server where high-interactivity mode is deployed, modify the server parameters associated with Application Object Manager as in Step 2.

■ If you are deploying standard-interactivity mode through a Mobile Web Client, perform this
  task in a client-side file associated with the appropriate application (such as, Siebel Call
  Center), and then distribute the server parameters to the Siebel Business Application
  installations on the client machines.

For information about the deployment options, see "Configuring Siebel Server Component
Parameters for Accessibility" on page 16.

Creating a Second Application Object Manager for Accessibility

After installing the Siebel Server and Web server, system administrators can configure a new
Application Object Manager, so that a Siebel Business Application with accessibility features can be
tested and deployed in standard-interactivity mode.

For help with creating a second instance of Application Object Manager on the same Siebel Server,
create a service request (SR) on Oracle*MetaLink* 3. Alternatively, you can phone Global Customer
Support directly to create a service request or get a status update on your current SR. Support phone
numbers are listed on Oracle*MetaLink* 3.

To create a second Application Object Manager

1 Using Siebel Server Manager, copy an existing Application Object Manager.

2 Rename the copy of Application Object Manager, for example, rename it *CallCenter_2.*

  See *Siebel System Administration Guide* for guidelines on creating defined components.

Configuring a Siebel Business Application for Accessibility

This topic describes how to set up a Siebel Business Application for accessibility.

To set up a Siebel Business Application for accessibility

■ Add a virtual directory named *application name_si* in the Web server.

Adding a Virtual Directory

Siebel Installation Guide for Microsoft Windows includes information about how to add a virtual
directory.

Configuring Siebel Server Component Parameters for Accessibility

You must manually change the OverwriteConfig parameter in the siebel.ini file before you begin to configure a Siebel Business Application for accessibility. The default value is set to No. You must set this parameter to Yes.

To configure Siebel Server component parameters for accessibility

1 Set up a Siebel Server.

For more information about how to set up a Siebel Server, see *Siebel System Administration Guide*.

2 Modify the following server component parameters:

```
HighInteractivity = FALSE
ApplicationStyle = EmployeeFacing
AccessibleEnhanced = TRUE
DisableSITabIndex = TRUE
EnableSIFocusTracking = TRUE
```

Table 2 on page 16 further describes the server component parameter values for standard-interactivity mode.

3 If you are deploying standard-interactivity mode and high-interactivity mode on the same Siebel Server, modify the parameters for Application Object Manager.

4 Restart the Siebel Server and Siebel Gateway Name Server.

Table 2. Server Component Parameter Values for Standard-Interactivity Mode

Configuration Parameter	Value	Comment
HighInteractivity	FALSE	Makes the Siebel Business Application work in standard-interactivity plus mode, instead of high-interactivity mode.
ApplicationStyle	Employeefacing	Switches off high-interactivity mode, making the Siebel Business Application work in standard-interactivity or standard-interactivity plus mode.
AccessibleEnhanced	TRUE	Turns on all features to increase accessibility, including directly associating labels with edit controls and tab order changes.
DisableSITabIndex	TRUE	The default tab order is from left to right, and from top to bottom.

Table 2.   Server Component Parameter Values for Standard-Interactivity Mode

Configuration Parameter	Value	Comment
EnableSIFocusTracking	TRUE	For keyboard shortcuts to work in Siebel Business Applications with standard-interactivity mode, the EnableSIFocusTracking parameter in the [InfraUIFramework] section of the application configuration file must be set to TRUE (this is the default setting).

Setting Row IDs for List Applets

List applets are displayed as HTML tables in standard-interactivity plus mode applications. Your screen reader determines the row header (ID) when you navigate between rows. However, the default row header might not be sufficient to help you identify each row uniquely. Oracle provides the capability to set row headers for list applets. List applet row headers are not preconfigured in the Siebel Business Application, but you can set your own row headers.

Siebel Business Applications use the first data column as the default row header when there is no row header provided in the user property for the RowID applet. The following options are available if you want to select a different row header:

■   **Option 1.** Contact your administrator to define the RowId user property.

   Your administrator adds a new applet user property, named RowId for the list applet. The RowId value must be equal to one of the displayed column names. For example, in the Contact List applet, if Last Name is selected as the row header, the user property value must be set to RowId is Last Name. In this example, Last Name is the list column name.

■   **Option 2.** From the Column Displayed window, select a column that you want to use as the row header, and assign the column as the first column for the list applet. This newly selected column now becomes the row header.

   For more information about List Applet tables, see "Customizing Accessibility Features" on page 29.

Modifying Font Size

Oracle provides the capability to modify font sizes. The fonts are implemented using cascading style sheets in Siebel Business Applications. The font size can be changed by:

■   Creating a separate URL with Application Object Manager pointing a Siebel Business Application at a Web server that uses a different set of cascading style sheet files

■   Creating and deploying a new Siebel Business Application, and pointing a specific user group to the URL for this application

■ Implementing Siebel Web Engine (SWE) conditional tags with custom business services for the group of users requiring a larger font size

For more information on how to configure your SWE conditional tags with custom business services, see 476704.1 (Doc ID) on Oracle*MetaLink* 3. This document was previously published as Siebel Technical Note 381.

Adjusting Color and Contrast Settings

Oracle provides the capability to adjust color and contrast settings in Siebel Business Applications. Table 3 lists the values that meet the thresholds set out in the accessibility guidelines.

If you want to modify the default colors and contrasts, navigate to the client_root\PUBLIC\language_code\FILES directory, and then open the file, dCCmain.css. The file, dCCmain.css, is the cascading style sheet for Siebel Business Applications. For more information about modifying the screen bar and view bar colors of your Web Client, see *Developing and Deploying Siebel Business Applications*.

Table 3.   List of Color and Contrast Thresholds

Element	Background Color	Foreground Color	Suggested Background Color	Suggested Foreground Color	Measured Contrast Amount[1]
.NotSelected TR.AppletButtons, .NotSelected TD.AppletTitle	#FFFFFF	#658AC3	#FFFFFF	#333399	510/193
.Selected TR.AppletButtons .Selected TD.AppletTitle	#658AC3	#FFFFFF	#333399	#FFFFFF	510/193
.tier1Off A, .tier1Off A:visited, .tier1Off A:link, .tier1Off A:hover	#E0E5F5	#004784	#E0E5F5	#004779	506/174
TD.tier2On A, TD.tier2On A:visited, TD.tier2On A:hover	#D6D6EE	#6666CC	#D6D6EE	#000000	666/216
.tier3Off A, .tier3Off A:visited, .tier3Off A:hover	#E0E5F5	#004785	#E0E5F5	#004779	506/174
Header A:hover	#EFEFEF	#333399	#EFEFEF	#333370	503/182

Table 3.   List of Color and Contrast Thresholds

Element	Background Color	Foreground Color	Suggested Background Color	Suggested Foreground Color	Measured Contrast Amount[1]
.mceButtons, .mceBorder, .mceTitle	#6666CC	#FFFFFF	#004785	#FFFFFF	561/199
.LayoutStyleMax .AppletButtons, .LayoutStyleMax .AppletBorder	#D6D6EE	#F0F0F0	#333370	#F0F0F0	506/183
LayoutStyleMaxAppletTitle	#D6D6EE	#666699	#333370	#FFFFFF	510/193
LayoutStyleMinAppletTitle	#D6D6EE	#666699	#D6D6EE	#333370	503/174
.AppletStyle1 .AppletTitle, .AppletStyle1 TD .AppletTitle A, .AppletStyle1 TD .AppletTitle A:visited, .AppletStyle1 TD .AppletTitle A:hover	#D7E1F5	#003399	#D7E1F5	#003380	506/180
.AppletStyle2 .AppletTitle, .AppletStyle2 TD .AppletTitle A, .AppletStyle2 TD .AppletTitle A:visited, .AppletStyle2 TD .AppletTitle A:hover:	#D6D6EE	#003399	#D6D6EE	#003370	503/174
.AppletStyle3 .AppletTitle, .AppletStyle3 TD.AppletTitle A, .AppletStyle3 TD.AppletTitle A:visited, .AppletStyle3 TD.AppletTitle A:hover	#D7E1F5	#003399	#D7E1F5	#003380	506/180

Table 3.   List of Color and Contrast Thresholds

Element	Background Color	Foreground Color	Suggested Background Color	Suggested Foreground Color	Measured Contrast Amount[1]
.AppletStyle4 .AppletTitle, .AppletStyle4 TD.AppletTitle A, .AppletStyle4 TD.AppletTitle A: visited, .AppletStyle4 TD.AppletTitle A: hover	#D7E1F5	#003399	#D7E1F5	#003380	506/180
.AppletStyle5 .AppletTitle, .AppletStyle5 TD.AppletTitle A, .AppletStyle5 TD.AppletTitle A: visited, .AppletStyle5 TD.AppletTitle A: hover	#D7E1F5	#003399	#D7E1F5	#003380	506/180
.AppletStyle6 .AppletTitle, .AppletStyle6 TD.AppletTitle A, .AppletStyle6 TD.AppletTitle A: visited, .AppletStyle6 TD.AppletTitle A: hover	#FFFFFF	#6666CC	#FFFFFF	#004785	561/199
.AppletStyle7 .AppletTitle, .AppletStyle7 TD.AppletTitle A, .AppletStyle7 TD.AppletTitle A: visited, .AppletStyle7 TD.AppletTitle A: hover"	#D7E1F5	#003399	#D7E1F5	#003380	506/180

Table 3.   List of Color and Contrast Thresholds

Element	Background Color	Foreground Color	Suggested Background Color	Suggested Foreground Color	Measured Contrast Amount[1]
.NotSelected .AppletStyle8 TD.AppletTitle A, .NotSelected .AppletStyle8 TD.AppletTitle A:link, .NotSelected .AppletStyle8 TD.AppletTitle A:visited, .NotSelected .AppletStyle8 TD.AppletTitle A:hover	#FFFFFF	#658AC3	#FFFFFF	#333399	510/193
.AppletStyle8 .Selected TD.AppletTitle A, .AppletStyle8 .Selected TD.AppletTitle A:link, .AppletStyle8 .Selected TD.AppletTitle A:visited, .AppletStyle8 .Selected TD.AppletTitle A:hover	#658AC3	#FFFFFF	#333399	#FFFFFF	510/193
.AppletStylePopup .AppletButtons, .AppletStylePopup .AppletBorder, .AppletStylePopup .AppletBlank"	#658AC3	#FFFFFF	#333399	#FFFFFF	510/193
Anchor tag <a>	None	#6666CC	None	#000080	None
.loginFirstRow	#FFFFFFF	None	#6699CC	None	None
.loginFourthRow	#6699CC	None	#06399C	None	None

1. If the value in Measured Contrast Amount column is 510 / 193, this signifies that the difference between the background color and the foreground color is 510. The difference between the background brightness and the foreground brightness is 193.

Translating Accessibility Content

Oracle provides the capability to translate accessibility content to another language in a Siebel Business Application. ENU (English [U.S.]) is the current default language, but you can translate accessibility related text to the language of your choice.

Your administrator runs a Perl script to generate the user interface (UI) and XML files. For more information about generating the UI and XML files, see "Creating Summary and Label Text for Applets and Views" on page 22.

The XML files contain the following details for all views and applets used in Siebel Business Applications:

■ Applet label details

■ Applet summary details

■ View summary details

You can modify the summary and label text in the language of your choice.

The language dependent XML file is located in a language specific folder:

Siebel\ses\siebsrvr\bin\LANG_FOLDER\<<xml file>>

where:

LANG_FOLDER represents the three-letter language code for the language you want, for example, ENU denotes English (USA).

Creating Summary and Label Text for Applets and Views

Oracle provides the capability to create summary and label text for new or customized applets and views in Siebel Business Applications.

NOTE: You must have Perl 5.8.8 or higher installed. When Perl is installed, use Perl Package Manager (PPM) to install the database interface (DBI) (DBD::ODBC) and XML::Generator modules.

To create summary and label text for new or customized applets or views

1 Navigate to Administration - Application, Accessibility screen, and then to the following views:

■ Accessibility Applet Attributes

■ Accessibility View Attributes

2 Select the new or customized applet or view, and modify the summary and label text as required.

The summary and label text displays the applet or view name by default.

3   In Siebel Tools, navigate to the folder \Reppatch\Accessibility\script where the following scripts are located:

■   genAccessibilityXML.pl

■   app_tree.pl

■   sqlstmt.pl

4   For all databases, excluding Oracle databases, edit app_tree.pl and genAccessibilityXML.pl Perl scripts, and change *Oracle* in DBI->Connect(" ") to *ODBC*. For example:

`.$dbh = DBI ->connect("dbi:ODBC:$ODBCConnection", $userid, $passwd)`

NOTE: If you are connecting to an SQL server database, add the following line to app_tree.pl: `$dbh ->(odbc_SQL_ROWSET_SIZE) = 2`

5   At the command prompt, execute the following script:

`perl genAccessibilityXML.pl "<Application Name>" <LOCALE_CODE> <CONNECTSTRING/ TABLEOWNER> <USERID> <PASSWD>`

6   Copy the generated .XML file to the following location:

`Siebel \ses\siebsrvr\bin\LANG_FOLDER\<<xml file>>`

where:

LANG_FOLDER represents the three-letter language code for the language you want, for example, ENU denotes English (USA).

NOTE: The .XML filename must be the same as the value in the AccessibilityXMLFileName user property for the Siebel Business Application in which you are generating the new or customized applet. For more information about the user property, AccessibilityXMLFileName, see "Updating Unique Labels on Applet Mini-Buttons" on page 33.

4 Using Accessibility Features

This chapter provides information about using the accessibility features with Siebel Business Applications. It includes the following topics:

Accessing Screen Magnifiers

Users with low vision often use screen magnification utilities to enlarge selected text and other on-screen items for easier viewing. Magnifier utilities are supplied with several operating systems such as Magnifier from Microsoft. To open Magnifier, click Start, point to All Programs, point to Accessories, point to Accessibility, and then click Magnifier.

Magnification utilities can also be accessed from most Web-based browsers, applications, such as Microsoft Word, or can be purchased from third-party vendors.

NOTE: Most magnification utilities work with Siebel Business Applications. However, browser-based magnification does not work because the default Siebel Business Application style sheets (.css files) override browser settings.

Using Screen Readers

The accessibility features in Siebel Business Applications allow screen reader programs (such as, Freedom Scientific JAWS or Window-Eyes from GW Micro, Inc.) to read fields, articulate messages and alerts, provide query results, and describe the options in drop-down lists in Oracle's Siebel Business Applications.

If the user wants to read the contents of fields in the application, the user can press the arrow keys to navigate from field to field. Then, the screen reader provides an audible description of the field's contents. If the user wants to read and edit the contents of a form's fields, the tab key is used for navigation, because screen readers support edits in tab mode. The screen reader provides an audible message when a blank or read-only data field is encountered.

A message window also appears after each page refresh. When a message occurs, the focus of the application changes to the message, and the message is automatically read by the screen reader. When the user acknowledges the message by pressing ENTER, the application's focus returns to the last active screen or view.

Disabling Message Broadcasts

Oracle recommends that you disable Message Broadcasting for your Siebel Business Application. Inform your administrator when you have disabled this feature for your username so that they can use an alternative method to notify you of system information.

To disable message broadcast

1   Navigate to User Preferences, and then to the Message Broadcasting view.

2   Clear the Show check box.

3   Click Save.

4   Log out and log in again for this change to take effect.

Enabling and Disabling Confirmation Messages

Some assistive-technology programs do not inform users when a page or screen load is complete. Users of standard-interactivity plus mode can enable confirmation messages to display after each new screen load. The default value is set to disable this feature.

To enable the confirmation message

1   Navigate to User Preferences, and then to Accessibility view.

2   From the Confirmation Message drop-down list, choose True.

3   Click Save.

4   Navigate to different screen and note that a confirmation message is displayed each time a new screen load.

Use the following procedure to disable the confirmation message.

To disable the confirmation message

1   Navigate to User Preferences, and then to Accessibility view.

2   From the Confirmation Message drop-down list, choose False.

3   Click Save.

4   Navigate to a different screen and note that there is no confirmation message displayed after a screen load.

Navigating HTML Header Levels

Oracle provides the capability to navigate HTML header levels in Siebel Business Applications. Table 4 lists the HTML header level markups associated with Siebel Business Applications.

Table 4.   HTML Header Level Markup Associations

HTML Header Level	Association
H1	Application-level menu items, such as File, Edit, View, Navigate, Query, Tools and Help. Currently, H1 level headers are not used.
H2	Content applets, such as forms, list applets, and so on.
H3	Application toolbar, such as Site map, How Do I…, Search, Tasks, and so on. Currently, H3 level headers are not used.
H4	All the site map screen links, such as Accounts, Activities, Administration-Alert are also associated with H4 HTML header level. Currently, H4 level headers are not used.

NOTE: The HTML header markups are not configurable.

Navigating Screens and Views Using Keyboard Shortcuts

Using the CTRL+SHFT+T keyboard shortcut, you can navigate to a Home Page screen, and after the page is displayed, press the TAB key to navigate forward, and press SHIFT+TAB to navigate backwards through the associated views.

The steps in the following procedure provide an example of the keyboard shortcuts required to navigate screens and views.

To navigate from one screen to another

1   Press CTRL+SHIFT+T.

2   Press the TAB key until the screen reader reads the target screen.

    For example, the screen reader identifies the Service screen.

3   Press ENTER to display the Service Home Page.

4   Navigate to My Service Request Link.

5   Press ENTER.

6   Press CTRL+ALT+T to navigate to the view tabs.

7   Press the TAB key to navigate to the target view, for example, the Activities view.

Use the following procedure to find out the number of records returned by a query.

To find out the number of records returned by a query

■ Press CTRL+SHIFT+3 to find out the number of records returned by a query.

Use the following procedure to access the record count option.

To access the Record Count option

1 Press CTRL+SHIFT+M.

2 Press ALT+Down arrow to scroll to Record Count.

For more information about using queries and keyboard shortcuts, see *Siebel Fundamentals*.

Use the following procedure to call the browse functionality.

To call the Browse functionality

1 From the Add Attachment dialog, tab to the Browse button.

2 Press the SPACEBAR to open the Choose File dialog.

3 Tab to the Add or Cancel buttons, and press ENTER to continue.

Accessing Keyboard Shortcuts

Keyboard shortcuts can be implemented at various levels:

■ By screen reader programs (such as Freedom Scientific JAWS or Window-Eyes from GW Micro, Inc.)

■ By the browser

■ By both configurable and nonconfigurable keyboard shortcuts that are available with Siebel Business Applications.

For more information about the available keyboard shortcuts, see *Siebel Fundamentals*. The keyboard shortcuts are also available from the Help menu in Siebel Business Applications. In the help window, click the Contents hyperlink that appears at the start and end of each HTML page that makes up the help system. You can also use the Web browser's functionality to navigate in the help system and to print topics.

NOTE: The keyboard shortcuts described in *Siebel Fundamentals* and in the online help come with the Siebel Business Application provided by Oracle. If your Siebel administrator has reconfigured these shortcuts, your keyboard shortcuts will be different. Contact your Siebel administrator if you encounter any difficulties using your shortcuts.

Troubleshooting Accessibility Features

Consider the following when troubleshooting the accessibility features:

■ Ensure that all server component parameters, as outlined in *"Configuring Siebel Server Component Parameters for Accessibility" on page 16*, are correctly set.

■ Request that your administrator:

■ Change the keyboard shortcut default values if you experience keyboard shortcut conflicts.

■ Add any labels that might be missing.

Default is represented on a label as *DFLT.*

■ Some tools, such as the screen reader, cannot handle the amount of data displayed if a large number of views are listed. For example, the number of screens available to you from the site map depends of your access privileges. If there are too many links, the screen reader becomes difficult to use as the text becomes distorted.

■ When logging a defect, ensure that you provide as much detail as possible about your Siebel Business Application and screen from the Help, About View window.

Customizing Accessibility Features

This topic describes the following changes that might be required if you want to modify the preconfigured accessibility features:

■ *"Updating the List Applet Table"*

■ *"Updating Unique Labels on Applet Mini-Buttons" on page 33*

■ *"Configuring Keyboard Shortcuts" on page 33*

■ *"Providing Alternative Text for Images" on page 34*

Updating the List Applet Table

This topic describes the changes that you must make if you create a new .swt file and new list applets. The list applets are displayed as HTML tables in standard-interactivity plus mode applications. In the current implementation of the list applet, summary attribute, row, and column identifiers are missing by default. It is difficult for users with disabilities to identify and understand the functionality of the list applet without a summary attribute. To help users to identify the list applet cell, you set the row and column identifiers.

Data Table Summary

You can provide an overview for a list applet table by adding an extra attribute, named summary, to the <table> element. The HTML <table> tags are used in .swt files. The place holder for the summary tag must be added in the .swt file for all the list applets as follows:

```
<table valign="top" width="100%" cellpadding="2" cellspacing="1" border="0"
summary="swe:this.ListSummary">
```

The following sample code shows the HTML <table> element with the summary attribute:

```
<TABLE class="GridBack" cellSpacing="0" cellPadding="0" border="0"
summary="<overview of the table>">

    <TR>

        <TD></TD>

        <TD></TD>

    </TR>

</TABLE>
```

Data Table Cells

You can associate row and column header identifiers with each cell in the list applet by adding an extra attribute scope = "col" to column header and scope = "row" to row header. The <th> and <td> elements for the <table> elements are in the .swt files.

Add the scope attribute for the column header to the .swt file as follows:

```
<th align="swe:this.TextAlignment" width="swe:this.HtmlWidth" class="Header"
scope="col" abbr="swe:this.HeaderAbbr">
```

Add the scope attribute for the row header to the .swt file as follows:

```
<td align="swe:this.TextAlignment" class="Row" scope="swe:this.RowScope">
```

The list applet row IDs are not available in the preconfigured application, but you can add one if you want. For more information about the list applet IDs, see .

The following sample code shows the HTML <td> and <th> element with the scope attribute:

```
<TABLE class="GridBack" cellSpacing="0" cellPadding="0" border="0"
summary="<overview of the table>">

    <tr>

        <th scope="col">Name</th>

        <th scope="col">Phone#</th>

        <th scope="col">Fax#</th>

        <th scope="col">City</th>

    </tr>

    <tr>

        <td scope="row">Joel Garner</td>

        <td>412-212-5421</td>

        <td>412-212-5400</td>

        <td>Pittsburgh</td>

    </tr>

    <tr>

        <td scope="row">Clive Lloyd</td>

        <td>410-306-1420</td>

        <td>410-306-5400</td>

        <td>Baltimore</td>

    </tr>

</TABLE>
```

Data Table Headers

You can add short descriptions about the column header by adding an abbr attribute to the <th> element. The abbr attribute shows the exact column header. Using the abbr attribute, you disable the short link in the list applet column header. The <th> elements for the <table> elements are in the .swt files.

Add the abbr attribute to the .swt file for all the list applet column headers as follows:

```
<th align="swe:this.TextAlignment" width="swe:this.HtmlWidth" class="Header"
scope="col" abbr="swe:this.HeaderAbbr">
```

The following sample code shows the HTML <th> element with the abbr attribute:

```
<TABLE class="GridBack" cellSpacing="0" cellPadding="0" border="0"
summary="<overview of the table>">

    <tr>

        <th scope="col" abbr="Name">Name xyz</th>

        <th scope="col" abbr="Phone#">Phone# xyz</th>

        <th scope="col" abbr="Fax#">Fax# xyz</th>

        <th scope="col" abbr="City">City xyz</th>

    </tr>

    <tr>

        <td scope="row">Joel Garner</td>

        <td>412-212-5421</td>

        <td>412-212-5400</td>

        <td>Pittsburgh</td>

    </tr>

</TABLE>
```

Layout Tables

The layout tables are used to display data other than list applets. In the HTML source code, there is no difference between data tables (list applets) and layout tables.

You can differentiate a data table (list applet) from a layout table by adding two extra attributes (summary="" and datatable="0") to the HTML <table> element.

The following sample code shows the HTML <table> element with the summary="" and datatable="0" attributes:

```
<TABLE class="GridBack" cellSpacing="0" cellPadding="0" border="0" datatable="0"
summary="">

    <TR>

        <TD></TD>

        <TD></TD>

    </TR>

</TABLE>
```

The layout tables added in the .swt files must have the summary="" and datatable="0" attributes.

Updating Unique Labels on Applet Mini-Buttons

Context-based applet labels are shown with the applet mini-buttons. These unique applet labels are listed in a XML file. The XML file contains the following information for all the views and applets used for a particular application:

■ Applet label details

■ Applet summary details

■ View summary details

This information is used to display and associate label and summary details with applets and views.

Table 5 lists the applications where you must add the application-level AccessibilityXMLFileName user property to.

Table 5.   List of Applications to Add the AccessibilityXMLFileName User Property

Siebel Business Application	Value
Siebel Universal Agent	Accessibility_Callcenter.xml
Siebel eMarketing	Accessibility_eMarketing.xml
Siebel eSales	Accessibility_eSales.xml
Siebel eService	Accessibility_eService.xml
Siebel Public Sector	Accessibility_PublicSector.xml
Siebel Sales	Accessibility_Sales.xml
Siebel Service	Accessibility_Service.xml

The AccessibilityXMLFileName user property is preconfigured for every applet. If you create a new applet, the label is automatically added. You can change the label in the .XML file. For more information about updating summary and label text, see "Creating Summary and Label Text for Applets and Views."

Configuring Keyboard Shortcuts

Administrators can configure new keyboard shortcuts, or can change the existing ones. Basic and extended keyboard shortcuts are supported. For more information about the available keyboard shortcuts, see *Siebel Fundamentals*. The keyboard shortcuts are also available from the Help menu in Siebel Business Applications.

Providing Alternative Text for Images

Oracle provides the capability of providing alternative text for all images by adding meaningful text in the .swt file or in the bitmap file.

All decorative images, including images used for creating space or divisions in screens, must specify an empty alt attribute (alt=""). Nondecorative images, such as charts or screen captures, must have meaningful text specified in the alt attribute. For more information about the standards and guidelines to use for providing alternative text for images, see Appendix A, "Accessibility Standards."

Testing Accessibility Features

When developing or customizing accessibility features for Siebel Business Applications, developers must focus on the HTML output to ensure compatibility with other assistive-technology programs. Whenever possible, developers should also involve persons with disabilities in the testing and evaluation process of the new feature to gain a much greater understanding of the accessibility issues. Consider the following when testing accessibility features and the resultant HTML output:

■ Test the accessibility features with Internet Explorer Developer toolbar.

■ Use the View - Source browser menu item to view the source of your page. Note that functions implemented by JavaScript, such as keyboard shortcuts, will not appear in the source page.

■ Test that the HTML meets the guidelines as outlined in Appendix A, "Accessibility Standards".

■ Test the accessibility features with an assistive-technology aid to simulate real-world usage.

   Choose up to three assistive technology packages that are industry standards.

■ Test the accessibility features without using the monitor or mouse.

■ If possible, employ a user with the targeted disability and a suitable assistive-technology program, such as a screen reader or magnifier, to perform a standard acceptance test on the application. If no one is readily available, contact the national association for the targeted disability in your country.

A   Accessibility Standards

This appendix outlines different accessibility laws and guidelines that Siebel Business Applications are capable of meeting. It also contains information for developers who are using and customizing Siebel Business Applications.

NOTE: The information contained in this appendix must not be taken as a statement of conformance. For information pertaining to the latest statements of conformance for each Oracle product, visit Oracle's Program Web site at http://www.oracle.com/accessibility.

This appendix includes the following topics:

- "Section 508 Accessibility" on page 35
- "Web Content Accessibility Guidelines" on page 36
- "Voluntary Product Accessibility Template" on page 36
- "Accessibility Standards for Implementing Accessibility Features" on page 37

Section 508 Accessibility

In 1998, the United States Congress amended the Rehabilitation Act to require Federal agencies to make their electronic and information technology accessible to people with disabilities. Inaccessible technology interferes with an individual's ability to obtain and use information quickly and easily. Section 508 was enacted in the U.S. to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals. A U.S. government agency called the *Access Board* developed accessibility standards for the various technologies covered by the law. These standards have been folded into the Federal government's procurement regulations.

The law applies to all U.S. government agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508, agencies must give disabled employees and members of the public access to information that is comparable to the access available to others.

NOTE: Section 508 is undergoing review to address recent internet technology developments. It is recommended that you review the laws and regulations to further your understanding about Section 508 and how you can support implementation. For more information about Section 508, visit the Section 508 Web site at http://www.section508.gov/. For more information about the Access Board, visit the United States Access Board Web site at http://www.access-board.gov/.

Web Content Accessibility Guidelines

The Web Content Accessibility Guidelines (WCAG) explain how to make Web content accessible to people with disabilities. Web content generally refers to the information in a Web page or Web application, including text, images, forms, sounds, and such. WCAG is part of a series of accessibility guidelines, including the Authoring Tool Accessibility Guidelines (ATAG) and the User Agent Accessibility Guidelines (UAAG). WCAG technical documents are developed by the Web Content Accessibility Guidelines Working Group (WCAG WG), which is part of the World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI).

Version 1.0 of the Web Content Accessibility Guidelines was approved in May 1999. This version is stable and it is the recommended version to use for reference. WCAG 2.0 is being developed to apply broadly to different technologies now and in the future; be easier to use and understand; and to be more precise when testing with automated testing tools and human evaluation.

NOTE: Because of the nature of the W3C specification development process, WAI cannot be certain when the final version of WCAG 2.0 will be available. WCAG 1.0 will remain the latest approved version until WCAG 2.0 is complete. For the latest information about WCAG, visit the Web Accessibility Initiative Web site at http://www.w3.org/WAI/.

Voluntary Product Accessibility Template

The accessibility status of each Oracle product is reported in a Voluntary Product Accessibility Template (VPAT). The VPAT was created by a partnership of the Information Technology Industry Council (ITI) and the U.S. General Services Administration (GSA) to create a simple document that could be used by U.S. government contracting and procurement officials to evaluate a product with respect to the provisions contained in Section 508.

Because products are on different release cycles, or might have been recently acquired, not all Oracle products meet all of the guidelines. For more information about Voluntary Product Accessibility Templates, visit Oracle's Accessibility Program Web site at http://www.oracle.com/accessibility for the current status of any particular product of interest.

The United States Access Board interprets paragraphs (a) through (k) of section 1194.22 as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

Accessibility Standards for Implementing Accessibility Features

Table 6 lists the Section 508 and WCAG reference standards for you to refer to when implementing accessibility features.

NOTE: For brevity, a reference such as 1194.22(I) refers to provision 1194.22(I) in Section 508 standards (which can be found at Part 1194 of Title 36 of the Code of Federal Regulations), and a reference, such as WCAG 1.0 #6.3 refers to standard 6.3 of WCAG 1.0.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.21(a)	6.4, 9.2, 9.5	**Keyboard:** When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Siebel Business Applications provide keyboard shortcuts available in both high-interactivity and standard-interactivity mode. For more information, see "Accessing Keyboard Shortcuts" on page 28.	Developers can define their own keyboard shortcuts in Siebel Tools.
1194.21(e)	14.3	**Consistency:** When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Siebel Business Applications implement accessibility features in the core code of the UI controls, and through cascading style sheets (.css files). Core and custom development teams use these controls and style sheets to create or modify application pages and ensure consistency.	When adding additional functionality through scripting or custom compiled code (for example, C++), ensure consistency of style by following similar accessibility consistency standards in your code. Because there are multiple style sheets for the Siebel Business Applications, you must coordinate the changes made in one style sheet with changes made in another to ensure consistency.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.21(g), 1194.21(j)	2.2	**Contrast:** Applications shall not override user selected contrast and color selections and other individual display attributes. When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Colors are specified in the cascading style sheets (.css files). Siebel Business Application pages are tested for a contrast ratio of 5:1. Where necessary, modified color values that can be used in the style sheets are provided. For more information, see "Adjusting Color and Contrast Settings" on page 18.	You can modify color and contrast settings to any value that meets the contrast ratio requirements. An algorithm for calculating the contrast ratio is available from the Web Accessibility Initiative Web site at http://www.w3.org/WAI/. You can use calculators (available on the internet) to automatically examine your Web page and determine whether the contrast ratios are adequate.
1194.21(h)	7.2, 7.3	**Pausing:** Ensure that moving, blinking, scrolling, or auto-updating objects or pages may be paused or stopped.	Siebel Business Applications do not use moving or blinking images except in the information bar, which is displayed at the bottom of the user's screen (when enabled).	Do not customize or add scripts to include moving, blinking, or scrolling information.
1194.22(a)	1.1	**Images (decorative):** Provide content that, when presented to the user, conveys essentially the same function or purpose as auditory or visual content.	Siebel Business Application Web pages are tested for null alt tags on spacer images.	If you want to add new spacer images as a result of custom development, ensure to tag them with a null alt tag.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(a)	1.1	**Images (non-decorative and complex):** A text equivalent for every non-text element shall be provided (for example, use the alt, or longdesc attributes, or in element content).	Siebel Business Applications permits reference to external images and other information services, such as Oracle Business Intelligence, which might display visual information, such as charts or graphs, using the symbolic URL feature and other methods. For more information, see Oracle Business Intelligence documentation on OTN.	If you include charts, you must provide a meaningful alt tag on the image. However, in practice it is more useful to reference a table of information instead of a text representation of the same information.
1194.22(a)	5.5	**Data table summary:** Ensure that tables have necessary markup to be transformed by accessible browsers and other user agents. Provide summaries for tables. For example, in HTML, use the summary attribute of the TABLE element.	Siebel Business Applications rarely uses data tables, except where Oracle Business Intelligence information is incorporated within Siebel Business Applications.	If data is presented in a table, add meaningful text in an HTML SUMMARY or CAPTION attribute.
1194.22(a)	12.1	**Page title:** Provide context and orientation information to help users understand complex pages or elements. Title each frame to facilitate frame identification and navigation. For example, in HTML use the title attribute on FRAME elements.	Siebel Business Applications development team has added a TITLE element to each Siebel Business Application view with the appropriate text.	If you create a new view, ensure that you add an HTML TITLE element, which contains the relevant text.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(a)		**Objects and Applets:** Each embedded object must have meaningful text associated with it. An OBJECT element must specify the title attribute; an APPLET element must specify the alt attribute.	Siebel Business Applications provide the capability to create summary and label text for new or customized applets and views in Siebel Business Applications. For more information, see "Creating Summary and Label Text for Applets and Views" on page 22.	Siebel Business Applications provide ALT text for images shipped with the product. Using Siebel Tools, developers can add and modify ALT text for images displayed.
1194.22(a)		**Layout table summary:** Provide a text equivalent for every non-text element. For example, use the alt, or longdesc attributes, or in element content.	Siebel Business Applications rarely uses layout tables. Any layout tables that are present in Siebel Business Applications are modified to have a null SUMMARY tag.	Ensure that layout tables have a null SUMMARY tag.
1194.22(a), 1194.21(d)	1.1	**Images:** Provide content that, when presented to the user, conveys essentially the same function or purpose as auditory or visual content. Provide sufficient information to assistive technology about a user interface element including the identity, operation and state of the element. When an image represents a program element, the information conveyed by the image must also be available in text.	Siebel Business Applications use icons in various places to indicate a functional element. These icons have ALT attributes with meaningful text. For more information, see "Providing Alternative Text for Images" on page 34.	Ensure that icons have ALT attributes with meaningful text.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(a), 1194.22(i)	12.1	**Frame title:** Provide context and orientation information to help users understand complex pages or elements. Title each frame to facilitate frame identification and navigation. For example, in HTML use the title attribute on FRAME elements.	Siebel Business Applications do not use FRAME or IFRAME in its products in standard-interactivity mode.	If you add frame title constructs during custom development, add a TITLE attribute and meaningful text to each one.
1194.22(b)	1.3	**Audio description:** Until user agents can automatically read aloud the text equivalent of a visual track, provide an auditory description of the important information of the visual track of a multimedia presentation.	Oracle Siebel SimBuilder training component provides audio or video capabilities.	If you add audio or video, you must adhere to the listed guidelines and standards.
1194.22(b)	1.4	**Captions (pre-recorded):** For any time-based multimedia presentation, such as a movie or animation, synchronize equivalent alternatives with the presentation. For example, provide captions or auditory descriptions of the visual track.	Oracle Siebel SimBuilder component provides synchronized media.	If you add prerecorded synchronized media, then you must provide captions.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(c), 1194.21(i)	2.1	**Color or font style:** Ensure that text and graphics are understandable when viewed without color. Design Web pages so that all information conveyed with color is also available without color, for example, from context or from markup language.	Siebel Business Applications provides the capability to adjust color and contrast settings. For more information, see "Adjusting Color and Contrast Settings" on page 18.	Do not introduce any element of color where the color itself conveys meaning, and is the only means of knowing the status. A common example is adding red, green, and yellow indicators on each record to show status. If you use color indicators, you must also indicate the status by textual means, such as displaying the status in the field, for example, the word *critical.*
1194.22(d)	6.1	**Style sheet:** Organize documents so they may be read without style sheets. For example, when an HTML document is rendered without associated style sheets, it must still be possible to read the document. When content is organized logically, it will be rendered in a meaningful order when style sheets are turned off or not supported.	Siebel Business Applications use style sheets throughout the user interface, but only for items, such as the font family, font size, color, and element positioning. Likewise the HTML generated by Siebel Business Applications development refers only to the structure of the elements.	Do not add additional elements to the style sheets that might break the rule, or to encode style properties inside the code.
1194.22(e)	1.2	**Image maps (server-side):** Provide redundant text links for each active region of a server-side image map.	Siebel Business Applications do not use image maps.	If you introduce image maps on the server-side, ensure to follow this requirement

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(f)	9.1	**Image maps (client-side):** Provide client-side image maps instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Siebel Business Applications do not use image maps.	If you introduce image maps on the client-side, ensure to follow this requirement.
1194.22(g)	5.1	**Data table headers:** For data tables, identify row and column headers. For example, in HTML, use TD to identify data cells and TH to identify headers.	Siebel Business Applications implement list applets in HTML as nested tables. Both row and column headers are added to each cell in the List applet, so that a screen reader user can know where they are at all times. For information about how to configure the column to use as the row header, see "Updating the List Applet Table" on page 29. **NOTE:** Default values are provided for both row and column headers if they are not specified.	You must always specify the column that is best suited as the row header, because the default value might not be appropriate or usable.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(g)	5.4	**Layout table headers:** If a table is used for layout, do not use any structural markup for the purpose of visual formatting. For example, in HTML, do not use the TH element to cause the content of a (non-table header) cell to be displayed centered and in bold.	Siebel Business Applications rarely uses layout tables.	If you use layout table headers, do not use the TH element.
1194.22(h)	5.2	**Data table cells:** For data tables that have two or more logical levels of row or column headers, use markup to associate data cells and header cells.	Siebel Business Applications List applets are implemented in HTML as nested tables. Row and column headers are provided for each cell in a List applet so that screen reader users always know where their cursor is located in the application.	Developer can define a row ID as the list applet user property for identifying which column to pick for the row identifier. If the user property is not defined, the first visible column in the list is used.
1194.22(i), 1194.22(a)	12.2	**Frame description:** Describe the purpose of frames and how frames relate to each other if it is not obvious by frame titles alone. For example, in HTML, use the longdesc attribute, or a description link.	Siebel Business Applications do not use Frames in standard-interactivity mode.	If you choose to use frames in a custom application, then either choose meaningful and relevant frame titles, or explain the use of the frame in a LONGDESC HTML tag. **NOTE:** The contents of the LONGDESC tag is not held inline. It must be downloaded from a file when selected, so performance will be slower than using other HTML tag types.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(j), 1194.21(k)	7.1	**Flashing:** Ensure that moving, blinking, scrolling, or auto-updating objects or pages may be paused or stopped. Avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Siebel Business Applications do not provide flashing effects.	Do not introduce flashing effects in custom code. If you have to do so, then do not use a frequency rate between 2 and 55 Hz.
1194.22(k)	6.2	**Alternate means:** Ensure that equivalents for dynamic content are updated when the dynamic content changes. Provide a text-only page, with equivalent information or functionality, to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. Update the content of the text-only page whenever the primary page changes.	Some graphical approaches are not usable by screen reader users. In such cases, a comparable alternative is documented in the administrator's documentation for that product on Oracle*MetaLink* 3.	In developing a custom application, ensure that all functionality of the application is accessible. If it is not possible temporarily, document what alternative means to use to accomplish the same task. The alternative means must give the same results without significant extra work for the end user.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(l)	6.3, 6.5, 8.1	**JavaScript:** Make programmatic elements such as scripts and applets directly accessible or compatible with assistive technologies.	Siebel Business Applications use JavaScript in standard-interactivity plus mode to implement the configurable keyboard shortcuts. For more information about keyboard shortcuts, see "Configuring Keyboard Shortcuts" on page 33. **NOTE:** Accessibility standards are changing, and it is expected that JavaScript will not be singled out for special treatment in future revisions.	Features implemented using JavaScript must be accessible.
1194.22(m)	8.1	**Plug-ins:** When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with Section 1194.21(a) through (l).	Siebel Business Applications do not supply content that requires extra, external plug-ins. However, users might often add content that does require external plug-ins, for example, a file attachment to an SR. Siebel Business Applications applet accessibility is described in "Setting Row IDs for List Applets" on page 17 and in the VPAT documents.	If you add features that use other file types, such as .wav for movies, then ensure that the content is accessible, or that you provide an alternative means of performing the same function.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(m)	11.4	**Electronic documents:** Use W3C technologies (according to specification) and follow accessibility guidelines. Where it is not possible to use a W3C technology, or doing so results in material that does not transform gracefully, provide an alternative version of the content that is accessible.	The electronic documents guideline primarily refers to support of PDF forms in Siebel Public Sector (see 1194.22(m)), and support of Microsoft Office files in exported data or in the Proposal Generator product. These formats are accessible as supplied by Siebel Business Applications.	Ensure that the external files remain accessible when modifying the external file formats used by Siebel Business Applications, or when introducing new external file formats.
1194.22(m)		**Link to Plug-in:** When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).	Siebel Business Applications do not use other file formats as standard. Links to plug-ins are not provided.	If you add PDF, Flash, or other content that requires a plug-in to display correctly, you must also provide a link to obtain that plug-in. **NOTE:** The link to the plug-in and the download process must be accessible.
1194.22(n)	12.4	**Labels:** Associate labels explicitly with their controls. For example, in HTML, use LABEL and its FOR attribute.	Some customized Siebel Business Applications are modified to use the FOR attribute with TITLE. For example, Siebel Business Applications provide address applets tailored to each country that is the target for a language pack.	Use the FOR attribute with TITLE.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(o)	3.5	**Section headings:** Provide a method that permits users to skip repetitive navigation links. Use header elements to convey document structure and use them according to specification. For example, in HTML, use H2 to indicate a subsection of H1. Do not use headers for font effects.	Siebel Business Applications implement H2 tags for each applet. For more information about HTML header level markups associated with Siebel Business Applications, see "Navigating HTML Header Levels" on page 27.	Implement header tags to separate major content areas on the page. For Siebel Business Applications, the major content areas are the menus and applets. If you introduce a new level, tag the first item with an appropriate header tag.
1194.22(p)	7.4	**Auto-updating:** Content that automatically updates at a regular frequency can be paused by the user unless it is part of an activity where the changes are essential. Consider providing a mechanism for the user to control the frequency.	Siebel Business Applications do not refresh content automatically, but only when the screen content is committed or renewed.	Ensure that automatic update processes can be paused, such as RSS feeds, or links to external services, such as content management, news stories, or exchange rate information.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
1194.22(p)		**Timing adjustable:** When a timed response is required, alert the user and give sufficient time to indicate more time is required.	Siebel Business Applications provide one optional time limit, for logging out after a period of inactivity, which is optional and configurable.	You might be required to add time limits, usually for inactivity, for test purposes, for real-time reservation systems, or for financial trading systems. If you add time limits, then provide a feature where the user is warned some minutes before the time limit expires. Also, provide the option to extend the time (unless this is not acceptable due to the nature of the business application).
	3.2	**Parsing:** Create documents that validate to published formal standards. Include a document type declaration (DTD) at the beginning of a document that refers to a published DTD (for example, the strict HTML 4.0 DTD).	Siebel Business Applications development uses HTML that is complete and matches specifications.	Development of accessibility features must conform fully with HTML specifications.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
	3.4	**Resize text:** Use relative rather than absolute units in markup language attribute values and style sheet property values. If absolute units are used, validate that the rendered content is usable.	Siebel Business Applications provide the capability to modify font sizes. For more information, see "Modifying Font Size" on page 17.	Test custom applications with a font size up to 200 percent larger than normal. Look for clipping of the top of characters, which makes the string unreadable, or for field text boxes that are no longer long enough to display a meaningful entry. Meeting this requirement also helps Asian language users, who regularly want to increase the font size when using an application because of the complexity of the language characters.
	3.6	**Lists:** Mark up lists and list items properly. For example, in HTML, nest OL, UL, and DL lists properly.	Siebel Business Applications generally uses List applets and they are implemented as HTML tables. Service request or activity notes are implemented as one field for each entry, so these notes do not constitute a list for each summary definition.	Be careful when adding lists of additional information, such as project checklists, loan requirements, or activities completed.
	3.7	**Quotations:** Mark up quotations. Do not use quotation markup for formatting effects such as indentation. For example, in HTML, use the Q and BLOCKQUOTE elements to markup short and longer quotations, respectively.	Siebel Business Applications do not provide quotations as outlined in the Summary column.	Adhere to this standard if you are implementing auditing applications or clinical patient applications that provide a quotation to a client.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
	4.1	**Language of parts:** Clearly identify changes in the natural language of a document's text and any text equivalents For example, in HTML use the lang attribute. In XML, use xml:lang.	Siebel Business Applications provide the user interface in one language at one time. Administrators can configure the ResourceLanguage OM parameter, which will cause MLOVs and other resources to appear in a language different from the user interface language. However, configuring the ResourceLanguage OM parameter is a rare occurrence.	Ensure that where different languages are shown on the same page at the same time, the entries are prefixed by a LANG attribute. Possible business reasons for displaying multiple languages might be for displaying legal requirements, such as ISO regulations, or displaying product descriptions that have not been translated into the local user interface language.
	4.2	**Abbreviations:** Specify the expansion of each abbreviation or acronym in a document where it first occurs.	Siebel Business Applications use abbreviations with professional users who want and need the abbreviations relevant to their business. Oracle provides a separate list of abbreviations used in Siebel Business Applications upon request.	If you are configuring partner or public access applications, adhere to this guideline.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
	5.3	**Meaningful sequence:** When the sequence in which content is presented affects its meaning, a correct reading sequence an be programmatically determined.	Siebel Business Applications allow the tab order for form applet fields to be specified using Siebel Tools.	You must specify the desired tab order for each set of fields on a form applet. Fields that logically make sense to fill out together must be filled out sequentially. For example, in several cases, Siebel Business Applications display the parts of a postal address in different rows in a form applet, yet the logical way to fill them is to fill (for the U.S.) name, line_1 address, line-2 address, followed by city, state, and country. This meaningful sequence forms a logical grouping.
	7.5	**Redirection:** Until user agents provide the ability to stop auto-redirect, do not use markup language to redirect pages automatically. Instead, configure the server to perform redirects.	Siebel Business Applications do not redirect pages in the basic product.	If you want to redirect pages, configure the server to send HTTP redirection headers.
	9.4	**Focus order:** Create a logical tab order through links, form controls, and objects. For example, in HTML, specify tab order through the tabindex attribute, or ensure a logical page design.	Siebel Business Applications allow the tab order for form applet fields to be specified using Siebel Tools.	You must specify the desired tab order for each set of fields on a form applet.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
	10.1	**Pop-ups:** Until user agents allow users to turn off spawned windows, do not cause pop-ups or other windows to appear and do not change the current window without informing the user. For example, in HTML, avoid using a frame whose target is a new window.	Siebel Business Application secondary windows are displayed only in response to an explicit user action.	Use the standard framework guidelines to implement secondary windows.
	10.5	**Link separation:** Until user agents (including assistive technologies) render adjacent links distinctly, include non-link, printable characters (surrounded by spaces) between adjacent links.	Siebel Business Applications visually separates adjacent links.	If you add links to a page, ensure that links are visually separated.
	13.1	**Link purpose:** Clearly identify the target of each link. Link text should be meaningful enough to make sense when read out of context, either on its own, or as part of a sequence of links. Link text should also be terse.	The purpose of links provided in Siebel Business Applications can be deduced from both the title and the link context.	If you add links, ensure that the purpose of each link can be determined from the link text.

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
	13.10	**ASCII art:** Do not use ASCII characters to render drawings or figures.	Except for the product logo (which is replaceable), Siebel Business Applications do not use ASCII characters to render drawings or figures unless there is an alternative label which conveys the same information.	If you introduce any form of icon, especially one with text, ensure that the text is kept in a separate text field, and not held within a graphic.
	13.3	**Site layout:** Provide information about the general layout of a site (for example, a site map or table of contents).	Siebel Business Applications provide a site map as a standard feature, showing the application components to which the user has access.	Siebel Business Applications site map is automatically extended to include custom applications and their views to which the user has access. Note that some screen readers have a limit to the number of entries they can handle on one screen. Ensure that you test the Site Map before you make the Siebel Business Application available.
	13.4	**Consistent navigation:** Use navigation mechanisms in a consistent manner.	The navigation mechanisms used in Siebel Business Applications are same throughout all components. The navigation varies only by the type of control employed, such as a list applet, form applet, tree applet, or shuttle applet.	Implement the Siebel Business Applications navigation paradigms in your custom applications to prevent user confusion. For more information about Siebel Business Applications navigation and query behavior, see *Siebel Fundamentals.*

Table 6.   Accessibility Standards: Section 508 and WCAG 1.0

Section 508	WCAG 1.0	Summary	Implementation in Siebel Business Applications	Developer Notes
	13.7	**Multiple Ways:** If search functions are provided, enable different types of searches for different skill levels and preferences.	Siebel Business Applications provide more than one way to locate a page, such as using the Site Map, tabs, and by drilling down on relevant data items. However, in accordance with the guideline, a user cannot navigate directly to a page in the middle of a task-based UI or workflow process, because this action is out of context.	You are strongly encouraged to maintain the same look-and-feel as Siebel Business Applications for locating information.
	14.1	**Clear language:** Use the clearest and simplest language appropriate for a site's content.	Siebel Business Applications adhere to language style standards and guidelines that apply to Oracle's Siebel CRM Applications, technical documents, including commonly used terms, phrases, and abbreviations.	It is important to choose terminology that is appropriate. For example, the term *service request* might be used to mean a request to perform service on a machine in the Field Service application. In Siebel CRM, a service request is a specific Siebel object that is used for any customer-generated request. Reusing terms in a different context might be ambiguous.

Index

Q

query
number of records returned   28
record count   28

R

record
count option, accessing   28
query, number of records   28

S

screen magnifiers, accessing   25
screen readers, using   25
set up, for accessibility features   14
setting row IDs for List Applets   17
shortcuts, keyboard   28

Siebel Server, configuring for accessibility   16
standard interactivity
about   10
enabling accessibility features   11
second application object manager   15
standard-interactivity mode   10
summary text, creating for applets and views   22

U

using screen readers   25

V

virtual directory, adding   15