Siebel

Deploying Siebel Open UI

February 2020

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Preface

This preface introduces information sources that can help you use the application and this guide.

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1 What's New in This Release

What's New in Deploying Siebel Open UI, Siebel CRM 20.2 Update

No new features have been added to this guide for this release. This guide has been updated to reflect only product name changes.

What's New in Deploying Siebel Open UI, Siebel CRM 20.1 Update

No new features have been added to this guide for this release. This guide has been updated to reflect only product name changes.

What's New in Deploying Siebel Open UI, Siebel CRM 19.10 Update

The following information lists the changes in this revision of the documentation to support this release of the software.

Topic	Description
Implementation Differences Related to Browsers	Modified topic. As of Siebel CRM 19.7 Update, multiple-tabbed browsing is supported for Siebel applications.

What's New in Deploying Siebel Open UI, Siebel CRM 19.1 Update

No new features have been added to this guide for this release. This guide has been updated to reflect only product name changes.

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2 Overview of Siebel Open UI

Overview of Siebel Open UI

This chapter provides an overview of Siebel Open UI, the user interface for Siebel CRM. It contains the following topics:

- *About This Guide*
- *About Siebel Open UI*
- *Related Information About Deploying Siebel Open UI*

About This Guide

This guide, *Deploying Siebel Open UI* , describes how to deploy Siebel Open UI for Siebel CRM.

> **Note:** In general, it is assumed that you have installed Siebel Innovation Pack 2017. For more information, see the *Siebel Installation Guide* .

This guide complements other documentation on the *Siebel Bookshelf* , such as *Configuring Siebel Open UI* and *Siebel Fundamentals Guide* . Use it also with the *Siebel Installation Guide* , *Siebel Deployment Planning Guide* , *Using Siebel Tools* , and other guides.

> **Note:** *Configuring Siebel Open UI* contains useful technical information about Siebel Open UI, most of which applies to those who are configuring their applications to take advantage of the many capabilities available in Siebel Open UI.

This guide provides information that applies to any customer deploying Siebel CRM for the current release. This guide also places the deployment tasks that you need to perform within the context of the overall deployment process. Most of the tasks are described in detail in other guides, particularly those relating to installation and deployment. (Fewer deployment tasks are covered than in previous updates of this guide, because only Siebel Open UI is supported in the current release.)

> **Note:** The term *drag* is used in this guide to describe how to move items from one place on the UI to another using a mouse or similar device. You move an item by first selecting the item and (with the mouse button depressed) then moving the item elsewhere on the UI (where you release the mouse button).

Related Topics

About Siebel Open UI

Related Information About Deploying Siebel Open UI

Related Books

Siebel Installation Guide

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Configuring Siebel Open UI

Siebel Fundamentals Guide

Siebel Deployment Planning Guide

Using Siebel Tools

Siebel Open UI Deployment Guide, 1499842.1 (Article ID) on My Oracle Support

About Siebel Open UI

To respond to the need for broad support of clients and devices for Siebel CRM, to ease the application deployment process, and to improve the application user's experience, Oracle provides a standards-based, open client for Siebel CRM, which is called Siebel Open UI.

This topic contains the following information:

- *Characteristics and Features of Siebel Open UI*
- *Siebel CRM Applications That You Can Deploy Using Siebel Open UI*

Related Topics

About This Guide

Related Information About Deploying Siebel Open UI

Deploying Siebel Open UI for Siebel CRM

Features of Siebel Open UI

Characteristics and Features of Siebel Open UI

Siebel Open UI is a standards-based, open client for Siebel CRM. Siebel Open UI provides a rich user interface experience in any modern browser, as noted in *Browser Standards and Performance Requirements*.

The following are some of the characteristics and features of Siebel Open UI:

- **Based on Web client standards.** The Siebel Open UI client is an open client based on Web client standards and is a type of rich Internet application. This client runs on any modern standards-compliant browser available on any computing device, but works best on personal computers or laptops. The application layout of tabs, forms,

and other user interface elements is determined by the form factor of the browser and the computing device. Using recent browser versions is strongly recommended for optimal functionality and performance.

The Siebel Open UI client is optimized for a broad variety of devices, including mobile devices and desktop computers.

Siebel Open UI uses versions of HTML, CSS (cascading style sheets), and JavaScript that are supported by recent versions of most modern browsers. For more information, see *Siebel Open UI Client Requirements* and related topics.

Siebel Open UI requires no browser configuration or special deployment steps on the client computer. Native browser features in the Siebel Open UI client include browser history, print and print preview, zoom, email links, find, and save page. For more information about the features of Siebel Open UI, see *Features of Siebel Open UI*.

- **Easy to use and configurable by users.** Many aspects of the user interface have been redesigned in Siebel Open UI. Several configuration and personalization options are available for users, including user preferences for left-hand navigation, tab navigation, and visual themes. For more information about using Siebel Open UI, see *Siebel Fundamentals Guide* .

- **Accessible.** Siebel Open UI supports Web client standards that are intended to make Web content and Web applications more accessible for people with disabilities and easier to use for all users. Accessibility is supported by keyboard shortcuts and navigation options. The accessibility features are available for any user, where the browser supports the necessary standards. For more information about accessibility for Siebel Open UI, see *Siebel Fundamentals Guide* .

- **Easy to deploy on the client.** Using the Siebel Open UI client requires only a suitable browser, a URL, and credentials to log in. No browser configuration or special deployment steps are required on the client computer. However, users can deploy the software modules Desktop Integration Siebel Agent (DISA) or the Outlook to Siebel Drag and Drop addin to extend Siebel application capabilities within the installed browser. For more information, see *Desktop Integration Siebel Agent Guide* . See also the *Siebel Installation Guide* .

- **Easy to deploy on the server.** No deployment tasks are required on the server for deploying Siebel Open UI. All Siebel CRM applications provided in the current release use Siebel Open UI.
  For existing applications that you are migrating to Siebel Open UI, some additional tasks might apply, depending on your deployment requirements. Some of these are noted in the *Siebel Installation Guide* . For more information about deploying Siebel Open UI, see *Deploying Siebel Open UI for Siebel CRM*.

- **Configurable by developers.** You can configure Siebel Open UI by using the JavaScript application programming interface (API) or by customizing the cascading style sheets. You can perform configuration tasks using Siebel Tools or Siebel Web Tools, customize Siebel Web templates, and use your existing browser scripts. The Siebel Open UI client can also simplify integrating Siebel CRM with other applications. For information about configuring Siebel Open UI, see *Configuring Siebel Open UI* . See also *Using Siebel Tools* and *Configuring Siebel Business Applications* .
  The Siebel Mobile applications are built for specific use cases and are optimized for touch-based mobile devices. For information about configuring Siebel Mobile applications, see *Configuring Siebel Open UI* , *Siebel Mobile Guide: Connected* , and *Siebel Mobile Guide: Disconnected* .

In summary, the product changes for Siebel Open UI improve the usability, deployment, development, and integration options for Siebel CRM. You can expect many benefits by deploying Siebel CRM with Siebel Open UI. For more information, visit this site:

http://my.oracle.com/go/Siebel/

This topic is part of *About Siebel Open UI*.

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Related Topics

Siebel CRM Applications That You Can Deploy Using Siebel Open UI

Related Information About Deploying Siebel Open UI

Siebel CRM Applications That You Can Deploy Using Siebel Open UI

Siebel Open UI provides a single framework to meet the needs that are associated with a variety of use cases for Siebel CRM. You can deploy Siebel Open UI for all current Siebel CRM applications, whether employee applications, customer applications, or partner applications.

In an upgrade or migration case, existing applications that were deployed in high interactivity or standard interactivity for your prior release convert automatically to Siebel Open UI.

For support exceptions and other information about the applications and features that are available in Siebel Open UI, see *Siebel Open UI Deployment Guide*, 1499842.1 (Article ID) on My Oracle Support.

For more information about installing and configuring Siebel CRM, see the *Siebel Installation Guide* . See other applicable product-specific documentation.

This topic is part of *About Siebel Open UI*.

Related Topics

Characteristics and Features of Siebel Open UI

Related Information About Deploying Siebel Open UI

Migration Tasks for Siebel Open UI

Related Information About Deploying Siebel Open UI

For more information about installing, deploying, and configuring Siebel CRM and about Siebel Open UI, see the following related books and articles. Most of the books are found on the *Siebel Bookshelf* .

- For the latest information about the functionality that is available for Siebel Open UI, see *Siebel Open UI Deployment Guide*, 1499842.1 (Article ID) on My Oracle Support.

- For the browsers supported by Siebel Open UI, either by being listed as certified or because they support particular standards, and for support information for Siebel CRM in general, see the Certifications tab on My Oracle Support. For more information, see 1492194.1 (Article ID) on My Oracle Support. See also *Siebel Open UI Client Requirements* and related topics.

- For information about planning your deployment of Siebel CRM, see *Siebel Deployment Planning Guide* .

- For information about installing and configuring the current release, see the *Siebel Installation Guide* .

  For installing the current release, the installation guides describe new installation as well as migration installation for an existing deployment of a release prior to Siebel CRM 17.0. They also describe installing a

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new Siebel database, configuring the Siebel Enterprise Server modules and the Siebel Application Interface, and performing postinstallation tasks. See also *Install & Configure Advisor: Siebel Innovation Pack 2017 (17.0), 2277538.2 (Article ID)* on My Oracle Support.

- For information about Siebel CRM 19.x Update releases, see *Siebel CRM Update Guide and Release Notes* on My Oracle Support, 2382435.1 (Article ID), for each applicable release.

- For information about using the Incremental Repository Merge feature or about upgrading your Siebel database, see *Siebel Database Upgrade Guide* .

  You perform the necessary tasks after installing the current release and before performing any applicable configuration tasks. For more information about how upgrade tasks fit into your overall installation and deployment, see the *Siebel Installation Guide* .

- For information about configuring server components, such as Application Object Managers, see *Siebel System Administration Guide* .

- For information about configuring security for Siebel CRM, see *Siebel Security Guide* .

- For information about configuring Siebel Open UI for Siebel CRM, see *Configuring Siebel Open UI* . For additional information about configuring Siebel CRM, see *Configuring Siebel Business Applications* , *Using Siebel Tools* , *Siebel Developer's Reference* , and related guides.

- For information about using Siebel CRM applications, see *Siebel Fundamentals Guide* .

- For information about the Siebel Mobile applications, see *Siebel Mobile Guide: Connected* and *Siebel Mobile Guide: Disconnected* .

- For more information about Siebel Open UI as it pertains to particular Siebel application functionality, see other relevant guides on the *Siebel Bookshelf* .

Related Topics

About This Guide

About Siebel Open UI

3 Deploying Siebel Open UI for Siebel CRM

Deploying Siebel Open UI for Siebel CRM

This chapter provides information about how to deploy Siebel Open UI for Siebel CRM. It contains the following topics:

- *About Deploying Siebel Open UI*
- *Roadmap for Deploying Siebel Open UI in a New Deployment*
- *Roadmap for Deploying Siebel Open UI in an Existing Deployment*

About Deploying Siebel Open UI

Deploying Siebel Open UI for Siebel CRM is relatively straightforward. In most cases, you can migrate your Siebel CRM applications to Siebel Open UI without a significant development effort.

The tasks that you must perform, or can perform, depend on whether you are installing the current release in a new deployment or are installing it for an existing deployment. Separate roadmap topics are provided for these two cases. Use the correct roadmap for your installation case.

> **Note:** The roadmap topics are intended to clarify the sequence of tasks in each of these cases. The roadmaps do not cover all of the required tasks. The tasks that you must perform also depend on which RDBMS you are using for the Siebel database, which Siebel CRM products you are installing, your configuration requirements, and other considerations.

Most of the steps to install and deploy Siebel CRM are described in detail in the *Siebel Installation Guide* and are not specific to Siebel Open UI. See other documentation that is noted in the roadmap topics or in *Related Information About Deploying Siebel Open UI*.

The tasks for deploying Siebel Open UI are outlined in the following topics:

- *Roadmap for Deploying Siebel Open UI in a New Deployment*
- *Roadmap for Deploying Siebel Open UI in an Existing Deployment*

> **Note:** The tasks and requirements for performing a database upgrade, such as upgrading from Siebel CRM version 8.0.0.x, or for migrating from Siebel Cross-Industry Applications to Siebel Industry Applications, are outside the scope of this guide. Many of the tasks in the roadmaps for new or existing deployments also apply in these upgrade and migration cases. For more information about these upgrade and migration tasks, see *Siebel Database Upgrade Guide*.

Related Topics

Overview of Siebel Open UI

Features of Siebel Open UI

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Roadmap for Deploying Siebel Open UI in a New Deployment

To deploy applications using Siebel Open UI in a new Siebel CRM deployment of the current release, you perform the following tasks:

1. Review all of the applicable documentation and requirements.

   For more information, see *Overview of Siebel Open UI* including *Related Information About Deploying Siebel Open UI*. See also *About Deploying Siebel Open UI*.

2. Perform a *new installation* of Siebel CRM version 17.0. Use the documented methods for performing new installations of all applicable Siebel modules.

   You must install at least the Siebel Gateway, the Siebel Server and the Database Configuration Utilities, and the Siebel Application Interface. Also install Siebel Mobile Web Clients, Siebel Tools, and other modules, as needed. For more information about the requirements and tasks for new installations, see the *Siebel Installation Guide* .

3. Install the latest Siebel CRM 19.x Update release for all installed modules.

   See the *Siebel Installation Guide* . See also *Siebel CRM Update Guide and Release Notes* on My Oracle Support for the latest Siebel CRM 19.x Update release.

4. On the computer or operating system instance where you installed the Siebel Server and the Database Configuration Utilities, run the Siebel Database Configuration Wizard and install a new Siebel database.

   Your Siebel database will include all of the repository updates and seed data to support the functionality of the current release. For more information, see the *Siebel Installation Guide* .

5. Run the Siebel Management Console and configure the Siebel Gateway, and then configure the Siebel Enterprise.

   For more information, see the *Siebel Installation Guide* .

6. Run the Siebel Management Console and configure the Siebel Server.

   For more information, see the *Siebel Installation Guide* .

7. Run the Siebel Management Console and configure the Siebel Application Interface.

   You can configure all of the applications for which Application Object Manager components exist at the time that you configure the Siebel Application Interface. For more information, see the *Siebel Installation Guide* .

8. (Optional) As needed, perform configuration (customization) tasks for your Siebel Open UI applications. Publish and distribute updates to the Siebel runtime repository that include your own custom Siebel Repository content. Update the Siebel runtime repository for the Siebel Servers and Siebel Mobile Web Clients.

   For more information, see *Configuring Siebel Open UI* and *Using Siebel Tools* .

9. Make the URLs for the Siebel Open UI applications available to test users, who can help you to ensure the readiness for your company's specific functional requirements.

   Your deployment process probably will include multiple phases of testing.

Related Topics

About Deploying Siebel Open UI

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Roadmap for Deploying Siebel Open UI in an Existing Deployment

To deploy Siebel Open UI applications for the current release in an existing Siebel CRM deployment of a prior release, you perform the following tasks:

1. Review all of the applicable documentation and requirements.

   For more information, see *Overview of Siebel Open UI* including *Related Information About Deploying Siebel Open UI*. See also *About Deploying Siebel Open UI*.

2. Perform a *migration installation* of Siebel CRM version 17.0. Use the documented methods for performing migration installations for all applicable installed Siebel modules.

   Perform the migration installation for Siebel Application Interface (for an existing instance of Siebel Web Server Extension for a prior version), Siebel Gateway, Siebel Server, Siebel Mobile Web Clients, and Siebel Tools. For more information about the requirements and tasks for migration installations, see the *Siebel Installation Guide* .

3. Install the latest Siebel CRM 19.x Update release for all installed modules.

   See the *Siebel Installation Guide* . See also *Siebel CRM Update Guide and Release Notes* on My Oracle Support for the latest Siebel CRM 19.x Update release.

4. Run Incremental Repository Merge for the Siebel database.

   Your Siebel database will include all of the repository updates and seed data to support the functionality of the current release. For more information about the requirements and tasks for running Incremental Repository Merge, see *Siebel Database Upgrade Guide* .

5. Depending on your deployment strategy and requirements and on the specific products that you are using, determine which applications to deploy.

   For more information, see *Siebel CRM Applications That You Can Deploy Using Siebel Open UI*.

6. As needed, to deploy newer Siebel CRM applications for Siebel Open UI that did not exist when you originally configured your Siebel CRM environment, do the following:

   a. Reconfigure the Siebel Server or install and configure a new instance of Siebel Server.

   b. Configure the Siebel Application Interface or install and configure a new instance of Siebel Application Interface. (You must configure the Siebel Application Interface in all cases.)

   For example, you might need to perform these tasks to use Siebel Self Service or Siebel Partner Portal, if these applications did not exist when you initially configured the Siebel applications. For more information, see applicable product-specific documentation and the *Siebel Installation Guide* .

   For steps to deploy the Siebel Mobile applications, see also *Siebel Mobile Guide: Disconnected* or *Siebel Mobile Guide: Disconnected* .

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7. As needed, perform configuration (customization) tasks for your Siebel Open UI applications.

   For example, you might need to perform some of the tasks described in *Migration Tasks for Siebel Open UI*. See also *Configuring Siebel Open UI* and the *Siebel Installation Guide* .

8. Publish and distribute updates to the Siebel runtime repository that include your own custom Siebel Repository content. Also update the Siebel runtime repository for Siebel Mobile Web Clients.

   For more information, see *Using Siebel Tools* .

9. Make the URLs for the Siebel Open UI applications available to test users, who can help you to ensure the readiness for your company's specific functional requirements.

   Your deployment process probably will include multiple phases of testing.

Related Topics

About Deploying Siebel Open UI

Roadmap for Deploying Siebel Open UI in a New Deployment

Siebel Open UI Client Requirements

Migration Tasks for Siebel Open UI

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4 Features of Siebel Open UI

Features of Siebel Open UI

This chapter provides detailed information about the features provided by Siebel Open UI. It contains the following topics:

- *Siebel Open UI Client User Experience*
- *Siebel Open UI Features*
- *Siebel Open UI Deployment and Integration Features*
- *Siebel Open UI Client Requirements*
- *Siebel Open UI Server Deployment Characteristics*
- *Migration Tasks for Siebel Open UI*
- *Integrations Related to Siebel Open UI*

Siebel Open UI Client User Experience

Siebel Open UI uses modern capabilities that are provided through HTML, CSS, and JavaScript or through native browser features.

> **Note:** Review all relevant aspects of the user experience to help you to support your users on Siebel Open UI.

For more information about the features available in Siebel Open UI, see *Siebel Open UI Deployment Guide*, 1499842.1 (Article ID) on My Oracle Support and see other relevant guides on the *Siebel Bookshelf* .

This topic contains the following information:

- *Modern Technologies and Design*
- *Modern Controls*
- *Native Browser Features*
- *Optimizing the User Experience Through Design*
- *Configuring and Extending the User Interface*

Modern Technologies and Design

The following are some of the modern design features that are made possible by the modern technologies used in the Siebel Open UI client:

- The application layout of tabs, forms, and other user interface elements is determined by the form factor of the browser and the computing device.
- Personalization options are provided for left-hand or tab navigation.

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- The user interface is fully accessible without configuration.

- Native browser features in the Siebel Open UI client include browser history, print and print preview, zoom, email links, find, and save page. See *Native Browser Features*.

- Siebel Open UI supports visual themes for the user interface.

This topic is part of *Siebel Open UI Client User Experience*.

Modern Controls

The following are some of the modern controls that are provided in the Siebel Open UI client:

- Grid with ability to support forms

- Map integration ability (requires configuration)

- URL integration ability

- Date and time fields

- Keyboard use only or tablet use only

- WAI-ARIA navigation model for accessibility (uses tab navigation). For more information, see *Siebel Open UI Client Requirements*.

- Calculator

- Calendar

- Lists and forms with image support

- Multiple file upload or download control

- Analogous picklists and MVGs

- New menus and toolbars

- User preferences for left-hand and tab navigation that help users to tailor the user experience to their needs

- Visual themes with which users can specify overall look and feel

This topic is part of *Siebel Open UI Client User Experience*.

Native Browser Features

The following are some of the native browser features that are used in the Siebel Open UI client:

- Browser history management

- Print and print preview

- Zoom

- Email links

- Find

- Save page

This topic is part of *Siebel Open UI Client User Experience*.

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Optimizing the User Experience Through Design

Siebel Open UI enables you to implement highly tuned design patterns and helps you to envision the design possibilities and simplification they can bring to your Siebel implementation. Siebel Open UI allows for a highly optimized user experience through its rich extensibility features, when combined with design best practices.

Oracle's UX Direct program provides tools and resources to help you get started with implementing a user-centered design for your Siebel Open UI applications. For more information about UX Direct, see the following sites:

https://blogs.oracle.com/uxdirect

This topic is part of *Siebel Open UI Client User Experience*.

Configuring and Extending the User Interface

The following are some of the development features of the Siebel Open UI client that make it possible for you to extend the client user interface:

- JavaScript application programming interface (API)
- Customizable cascading style sheets
- Existing configuration options for Siebel CRM

To help you to achieve the best possible user experience, Siebel Open UI provides a fully published JavaScript API to build powerful Siebel CRM solutions. This API enables you to extend the capabilities of the features provided by Oracle. The JavaScript API supports simple validations as well as more complex capabilities, such as the replacement of entire user interface components that must be rendered in special ways. The implementation of cascading style sheets (CSS) for Siebel Open UI simplifies branding the user experience. You can manipulate any aspect of colors, fonts, layout, and styling for your Siebel CRM applications.

You can continue to use the tools that you are accustomed to, or you can use the new Web development extensibility features to build application features that were previously unachievable using traditional means.

This topic is part of *Siebel Open UI Client User Experience*.

Siebel Open UI Features

For specific features, Siebel Open UI deviates from the way Siebel CRM has worked in past releases. The following product differences must be considered when you implement Siebel Open UI.

- **Escape key and undo.** Pressing the Escape key once performs a single undo operation. Pressing the Escape key multiple times might generate multiple results, depending on the user's previous activity, including which user interface elements the user has interacted with.

- **Double-clicking.** Double-clicking has been eliminated from the Siebel Open UI client, to improve usability. Double-clicking causes difficulties for novice users and presents drawbacks to accessibility. It also conflicts with the single-click interaction style of the Web and of many mobile devices, and it is not common to all operating systems.

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- **Right-clicking.** Right-clicking has been eliminated from the Siebel Open UI client to improve usability. Right-clicking lacks good usability characteristics. It is not discoverable, it does not meet accessibility requirements, and it is difficult to implement on mobile devices.

- **Logout on exit.** Automatic logout upon closing the browser cannot be supported in a standards-based implementation, due to Web browser and W3C limitations. This action cannot directly communicate to the server that the user has disconnected. For this reason, the behavior of Siebel Open UI applications has been updated. It is recommended to set session time-out intervals as short as possible while maintaining usability. Also train users to log out of the application explicitly.

- **Implicit commit on the browser Back button.** An implicit commit of data record changes when a user clicks the browser Back button cannot be supported in a standards-based implementation, due to Web browser and World Wide Web Consortium (W3C) limitations. Users must commit changes through supported methods. Sometimes, a highlight indicates data that has not yet been committed.

- **Scrollbars.** Horizontal scrollbars are not used in the Siebel Open UI client, because they tend to deteriorate usability. However, to emulate specific behaviors, you can add horizontal scrollbars by using CSS changes. For long lists, use the forward and backward buttons in place of vertical scrollbars. Using refined queries displays a smaller result set and enhances usability.

- **Pick lists and LOVs.** Pick lists and LOVs do not select a new value until a unique match is made. Where you use auto-fill but an exact match is not made, the value reverts to the original. Selecting from an LOV does not include double-quotes.

- **Shuttle applets and MVGs.** Shuttle applets and MVGs have been redesigned for improved usability and to make them more consistent with pick lists.

- **Images and screens.** The look and feel of the following features has changed:

  - Login and logout pages have an updated look.
  - Task bar icons are more modern, with higher resolution and color depth.
  - Buttons have been updated, with higher resolution and color depth.
  - The Oracle logo font and color have changed.
  - The tab bar has no images, for consistency.
  - Check boxes have an updated look.
  - New columns-displayed icons have been added.

- **Attachments.** Attachment files stored in the Siebel File System cannot be edited on the fly in Siebel Open UI. That is, attachment documents cannot be opened, edited, and saved directly back to the Siebel application. Users must download an attachment document into a secure location specified by the browser, edit and save the document, and then upload the document. This behavior is standard for true Web-based applications.

  Where Desktop Integration Siebel Agent is deployed on the user computer, however, attachment files can be saved directly to the Siebel application. For more information, see *Desktop Integration Siebel Agent Guide* . See also the *Siebel Installation Guide* .

  For more information about issues in using the Siebel File System in Siebel Open UI applications, see *Migration Options for Siebel File System Features in Siebel Open UI*.

- **Auditing for the print feature.** Siebel Open UI uses the browser's native print features, rather than using proprietary printing features. Use external audit capabilities to audit printing by users of Siebel CRM. Siebel Open UI does not support print audit features.

- **Signature captures.** Store signature captures as images for Siebel Open UI applications, to avoid integration issues for external components trying to display signatures. The previous encryption algorithm for signature

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captures is not supported. For more information about configuring an integration for signature capturing, see *Configuring Siebel Open UI* .

This topic is part of *Siebel Open UI Client User Experience*.

Siebel Open UI Deployment and Integration Features

This topic describes some of the deployment and integration features of the Siebel Open UI client. It contains the following information:

- *Siebel Architecture Layers*
- *Standard-Based Web Client*
- *Benefits for Deployments and Integrations*
- *Summary of Key Deployment and Migration Tasks*

Siebel Architecture Layers

The Siebel application architecture consists of multiple layers:

- Data layer (database tables and columns)
- Objects layer (business objects and business components)
- User interface layer (views, applets, controls)
- Physical user interface layer: the presentation model and the physical user interface renderer

You can use Siebel Tools or Siebel Web Tools to configure the data layer, the objects layer, and the user interface layer. Bindings between the user interface layer and the physical user interface layer were also created in Siebel Tools or Siebel Web Tools. Siebel Open UI provides the ability to fully modify the physical user interface layer.

This topic is part of *Siebel Open UI Deployment and Integration Features*.

Standard-Based Web Client

The Siebel Open UI client is a true standards-based Web client, requiring only a URL and credentials and a standards-compliant browser. No browser configuration is required. The Siebel Open UI client runs on any modern standards-compliant browser on any computing device, but works best on personal computers or laptops. (The Siebel Mobile applications, which use Siebel Open UI, are optimized for touch-based mobile devices.)

This topic is part of *Siebel Open UI Deployment and Integration Features*.

Benefits for Deployments and Integrations

The Siebel Open UI client provides the following benefits for deployments and integrations:

- Supports full extension of the presentation model and the physical user interface renderer to meet any Siebel CRM use case

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- Hierarchical, embeddable presentation model

- Application-focus state management capabilities

- Full branding capabilities

- Partial refresh

- iFrame-based portal integrations

- Full support for Siebel Remote and Siebel Mobile Web Client deployments

This topic is part of *Siebel Open UI Deployment and Integration Features*.

Summary of Key Deployment and Migration Tasks

You can deploy Siebel CRM using Siebel Open UI or migrate your existing Siebel CRM applications to use Siebel Open UI without a significant development effort. Some of the key tasks are summarized in this topic.

The specific tasks that you must perform differ for new and existing deployments and differ based on the Siebel applications that you are deploying. For detailed roadmaps of the tasks that you must perform to deploy Siebel CRM using Siebel Open UI, see:

- *Roadmap for Deploying Siebel Open UI in a New Deployment*

- *Roadmap for Deploying Siebel Open UI in an Existing Deployment*

This topic is part of *Siebel Open UI Deployment and Integration Features*.

Siebel Open UI Client Requirements

This topic describes Siebel Open UI client requirements in detail.

This topic contains the following information:

- *Siebel CRM Releases Supporting Siebel Open UI*

- *Browser Standards and Performance Requirements*

- *Browser Capability Check*

- *Browser Limitations Affecting Siebel Open UI*

- *Hardware Requirements for Siebel Open UI*

Siebel CRM Releases Supporting Siebel Open UI

For the purposes of this guide, it is assumed that you are deploying Siebel Open UI for the current release, Siebel Innovation Pack 2017 (Siebel CRM version 17.0). After installing the software, install the latest Siebel Patchset release, where available. Specific Siebel Open UI requirements differ relative to prior Siebel CRM releases.

For detailed roadmaps of many of the tasks that you perform to deploy Siebel CRM using Siebel Open UI, see *Deploying Siebel Open UI for Siebel CRM*.

This topic is part of *Siebel Open UI Client Requirements*.

Browser Standards and Performance Requirements

Siebel Open UI performs best on modern browsers that comply with W3C standards. Siebel Open UI is built on the HTML 5 standards. Oracle is committed to supporting Web standards to ensure that users have a problem-free experience when using Siebel Open UI applications.

For the current release, Siebel Open UI supports Web browsers for Siebel CRM applications if they conform to the following browser standards:

- **HTML.** Browsers must support HTML 5 to take full advantage of the features in Siebel Open UI. For an overview of HTML 5 browser compliance, see:

  http://html5test.com/results/desktop.html

- **Cascading style sheets (CSS).** Browsers must support CSS 3.0.

- **JavaScript.** Browsers must support JavaScript (ECMA-262 and later). The performance of the chosen browser and computing device has a large impact on Siebel Open UI client performance. Any browser or device that can meet a .4 second or less SunSpider JavaScript benchmark generally yields acceptable performance for Siebel Open UI. This figure is a guideline only and requires user acceptance testing as validation. This benchmark test is available here:

  http://www.webkit.org/perf/sunspider/sunspider.html

  See also *Performance for Siebel Open UI Client*.

- **WAI-ARIA.** For users that require accessibility features, browsers must support WAI-ARIA (Web Accessibility Initiative: Accessible Rich Internet Applications) and WAI-ARIA-compliant technologies such as screen readers. For more information, see *Siebel Fundamentals Guide* .

Oracle tests Siebel Open UI internally against W3C standards and validates using commonly used enterprise browsers from Apple, Google, Microsoft, and Mozilla. For more information about the browser standards supported by Siebel Open UI, and for particular browser versions that are certified as supporting those standards, see the Certifications tab on My Oracle Support.

General performance comparison information for a variety of browsers and hardware are provided in *Siebel Open UI Deployment Guide*, 1499842.1 (Article ID) on My Oracle Support. This data provides a means of comparing relative computing performance in a normalized manner.

This topic is part of *Siebel Open UI Client Requirements*.

Browser Capability Check

A browser capability check is performed when a user accesses a login page for a Siebel application that is deployed using Siebel Open UI. The results are displayed in the form of a list of HTML 5 features that Siebel Open UI requires, along with an indication of whether the browser passes or fails the check for each feature. When an HTML feature is not supported by the browser, dependent Siebel Open UI features might not be available. Customers or users can use the information provided and make decisions about how to proceed. Customers that want to disable this feature can do so by using available customization methods.

This topic is part of *Siebel Open UI Client Requirements*.

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Browser Limitations Affecting Siebel Open UI

For certain browsers, some, but not all, of the known limitations that are related to the standards and key performance indicators required by Siebel Open UI are listed as follows. For other browsers, use the links to review the level of support provided by the browsers for each functional area.

- **Google Chrome (all versions), Apple Safari (all versions).** Accessibility features are supported only in browsers supporting WAI-ARIA. Browsers listed with partial support at the following link are not recommended for accessibility:

  http://caniuse.com/wai-aria

- **Microsoft Internet Explorer and Edge (all versions), Apple Safari 3.2 (and earlier).** These browsers implement resizing for textarea controls using CSS for notes fields using vertical scrollbars, if at all. Other browsers implement textarea resizing as resizable text boxes in multiple dimensions, leading to a better user experience. Review the following:

  http://caniuse.com/css-resize

- **Microsoft Internet Explorer 11 (and earlier) and Edge.** Drag and drop features are supported only in applicable HTML 5 browsers. Review the results of the following search:

  http://caniuse.com/#search=drag

- **Microsoft Internet Explorer 9 (and earlier).** For these browsers, users might experience session time-out issues with Single Sign-On, related to supporting XMLHttpRequest. Review the following:

  http://caniuse.com/xhr2

Using browsers that are not fully compliant with HTML 5 or other requirements might limit user functionality across the application.

This topic is part of *Siebel Open UI Client Requirements*.

Hardware Requirements for Siebel Open UI

Siebel Open UI has no specific hardware requirements for the client, beyond the minimum requirements posted by the vendors of the browser, device, or operating system that it runs on. Running modern browsers on newer hardware improves performance. It is recommended that you perform acceptance testing against the actual environment that is used, if possible.

> **Note:** Customers are strongly advised to carefully choose browsers and to perform acceptance testing against all applicable performance success criteria. Using modern browsers or improved hardware can help you to resolve performance issues.

This topic is part of *Siebel Open UI Client Requirements*.

Siebel Open UI Server Deployment Characteristics

This topic describes some of the characteristics of the server environment in a Siebel Open UI deployment. It contains the following information:

- *Security for Siebel Open UI Deployments*
- *Firewall and Proxy Server or Reverse Proxy Server Requirements*
- *Client-Server Communication and Network Characteristics*
- *Performance for Siebel Open UI Client*
- *Tuning Configured Applications for Virtual Screen Space*
- *Implementation Differences Related to Browsers*

Security for Siebel Open UI Deployments

Siebel Open UI is the most secure Siebel CRM client to date, with the following characteristics:

- **Limited attack surface.** Siebel Open UI uses only three technologies to render the client code: HTML, CSS, and JavaScript. Because of the small set of underlying technologies that are used to render the client and the absence of third-party plug-ins such as ActiveX and Java, Siebel Open UI provides the smallest possible attack surface.

- **Transparent technology.** Because the Siebel Open UI client is built entirely on standards, a variety of modern inspection tools can be used to validate the security compliance of your implementations.

- **Compatibility with Data Execution Prevention features and virtualization.** Because the Siebel Open UI client is a scripted client, it is fully compatible with Data Execution Prevention features for software or hardware, and compatible with virtualization features. The Siebel Open UI client supports a variety of techniques for implementing secure environments.

- **Secure sessions and limited concurrency.** The Siebel CRM server environment provides sophisticated session security for a secure user experience. To protect data integrity and system security, concurrent browser sessions are not supported for Siebel CRM applications. When this condition is detected, the application provides options for how to proceed.

- **FIPS-140-2.** Siebel Open UI supports the FIPS-140-2 standard, with applicable configuration.

- **Common Criteria Certification.** The Siebel CRM applications meet Common Criteria Certification, to Evaluation Assessment Level 2. For more information, see the following:

  http://www.commoncriteriaportal.org/files/epfiles/st_vid3026-vr.pdf

Oracle tests JavaScript controls from third parties according to the same rigorous standards as those for testing Oracle code. Because all of the client code is standards-based and well-understood by inspection tools, thorough testing is simplified. Oracle uses industry-leading Web application security assessment solutions to validate that the Siebel Open UI client is secure. Oracle also validates security through its security-architecture teams and its internal oversight organizations and works with the ethical hacking community to put code to the practical test of security.

Oracle takes part in Open Web Application Security Project (OWASP). Developer training provided by Oracle Software Security Assurance (OSSA) is in line with the guidelines and recommendations provided by OWASP documentation. All Oracle product development teams are mandated to follow OWASP guidelines, policies, and secure coding standards.

This topic is part of *Siebel Open UI Server Deployment Characteristics*.

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Related Topics

Implementation Differences Related to Browsers

Related Books

Siebel Security Guide

Firewall and Proxy Server or Reverse Proxy Server Requirements

When deploying Siebel CRM across a firewall, make sure that the firewall supports the HTTP 1.1 protocol. Using HTTP 1.0, although it is supported, results in reduced performance. If the firewall or proxy server does not fully support HTTP 1.1, then make sure of the following:

- HTTP compression is disabled.

- The firewall proxy is able to handle cookie wrapping or other proxy-specific features that enable cookie handling and forwarding.

- Headers passed to the Siebel Application Interface do not contain HTTP 1.1 protocol content. You can automate this by setting the proxy server to strip out HTTP 1.1 header content.

This topic is part of *Siebel Open UI Server Deployment Characteristics*.

Related Books

Siebel Installation Guide

Siebel Security Guide

Client-Server Communication and Network Characteristics

In support of reduced network traffic, the Siebel Open UI client supports the following new features:

- **Partial refresh.** This feature allows only distinct regions of the UI to be refreshed, rather than the entire screen. This feature saves network bandwidth.

- **Push notifications.** This feature eliminates polling for Siebel Communications Server messages, such as for computer telephony integration (CTI) and other types of messages.

These features improve bandwidth requirements and in some cases reduce power consumption on mobile devices, by reducing chattiness. Siebel CRM can run on modern wired or wireless networks, and it supports use over low-bandwidth connections.

This topic is part of *Siebel Open UI Server Deployment Characteristics*.

Related Books

Siebel CTI Administration Guide

Performance for Siebel Open UI Client

The Siebel Open UI client uses interpreted JavaScript to render the client, which performs extremely well on modern browsers. Features such as partial refresh supporting greater granularity and efficient updating of user interface regions, and improved asynchronous operation, improve performance characteristics in specific use cases of the client.

In order to work on a variety of platforms, Siebel Open UI runs on code that is interpreted or JIT (just-in-time) compiled in the browser. Differences in performance depend on customization of the interface when you run cross-platform code that is inherent to Siebel Open UI.

This topic is part of *Siebel Open UI Server Deployment Characteristics*.

Related Topics

Siebel Open UI Client Requirements

Client-Server Communication and Network Characteristics

Tuning Configured Applications for Virtual Screen Space

A Web application can render content beyond the limits of the data displayed on the screen, effectively increasing the amount of work done to render content without any user benefit. It is recommended to build user interfaces that render only content in the visible area of the user interface. Large rendered surfaces, the interpreted nature of the application, and the ability to adjust application functionality can compound and reduce the performance and response times of the user interface. It is recommended that you review the deployment with a focus on optimized content.

In light of these considerations, review the following recommendations:

- **Minimize the number of applets in a view.** It is recommended both from a performance and usability perspective not to add more applets to a screen than the typical user can view or work with without scrolling. Scrolling interrupts work and does not work well on some mobile devices, and the content that is not displayed still must be rendered when the screen is refreshed.

- **Minimize the number of displayed columns in a list view.** Consider limiting and setting reasonable defaults for the number of columns available for list views. For most computer desktops, no more than seven columns should be displayed by default, as a rule of thumb. Even hidden components have to be processed by the rendering engine.

This topic is part of *Siebel Open UI Server Deployment Characteristics*.

Related Books

Siebel Performance Tuning Guide

Implementation Differences Related to Browsers

Siebel Open UI tries to hide specific differences in rendering between browsers within the user interface, but some browser-specific differences exist. Customers are encouraged to identify differences in rendering and to choose browsers based on the best usability offered. Examples are provided in this topic.

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This topic is part of *Siebel Open UI Server Deployment Characteristics*.

Use of Popup Blockers

Siebel Open UI is compatible with popup blocker use. Make sure that Siebel application servers and third-party iFrames are whitelisted or excluded from blocking by popup blockers. For more information about configuring Siebel CRM for popup blocker compatibility, see the *Siebel Installation Guide* .

Impact of Browser Dynamic Patching of Browsers

Two basic strategies exist for managing your browser version:

- **Lock browsers to specific versions.** Although locking your browser version mitigates the risks of introducing regressive interactions into the Siebel CRM environment, this approach introduces the risks of not patching imperfect browser code and does not help in addressing functional and security fixes in browsers.

- **Dynamically update browsers.** It is strongly recommended to mitigate browser-related functional and security risks by allowing browsers to update dynamically. If regressive interactions occur, then Oracle and the browser vendors are committed to addressing these in a timely manner.

Validation Services for Standards Compliance

To validate Siebel application pages and the browser you are using against W3C standards, you can use any of several validation services, including the following:

- W3C markup validation:

  http://validator.w3.org/
- HTML 5 validation:

  http://html5.validator.nu/
- CSS validation:

  http://jigsaw.w3.org/css-validator/
- Lint, JSLint and derivative programs:

  http://www.jslint.com/

Multiple Browser Tabs and Sessions

As of Siebel CRM 19.7 Update, you can enable multiple active Siebel application sessions, each in a browser tab, for each browser instance. Multiple tab browsing can be useful for:

- Support of cut and paste operations between records for contacts, accounts, service requests, and so on, performed by an employee or partner user.

- Support for starting a Siebel application in a new browser tab using a bookmarked URL.

- Improving user experience by limiting error messages seen by users, who may not be aware of any configured limitations to the number of sessions.

- Support of portal applications that include multiple Siebel portlets.

By default, users can open multiple Siebel application sessions only by launching multiple browser instances. Unless configured otherwise, Siebel CRM supports a single active Siebel application session for each browser instance in its

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own memory space. For that browser instance, multiple Web pages can be opened in a single browser, but only one tab can have a live connection to a Siebel application at a given time.

In Siebel CRM 19.7 Update and later, you can enable multiple tabs for Siebel applications by setting the EnableMultiTab parameter to True for the Siebel Application Object Manager component. Additionally, you can limit the number of tabs allowed per browser instance by setting Maximum Possible Tabbed Sessions in the Application Interface profile. For example, to support users accessing the Siebel application in two tabs, but no more, set Maximum Possible Tabbed Sessions to a value of 2.

Note: Multiple tab browsing impacts scalability, as each browser session consumes server memory. For example, increasing the available sessions from a single session to two sessions per user (as in the example) can double the amount of Application Object Manager resources required. For portal applications, it is recommended to review the maximum number of Siebel portlets and active sessions used in the portal to establish the number of sessions needed in support of the portal for each user. It is recommended to carefully review resource availability and to configure Siebel CRM to limit the number of tabs and sessions that users can run, using the described settings.

For more information about supporting multiple tabs, see *Configuring Siebel Open UI* . See also *Siebel System Administration Guide* and the *Siebel Installation Guide* .

Language Support

In general, language support for Siebel Open UI is similar to language support provided in previous versions on the traditional clients. For Siebel language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support. See also *Siebel Global Deployment Guide* and the *Siebel Installation Guide* .

This topic is part of *Siebel Open UI Server Deployment Characteristics*.

Migration Tasks for Siebel Open UI

This topic provides information about some of the migration tasks that you might need to perform when you are deploying Siebel Open UI. It contains the following information:

- *Migrating Browser Scripting*
- *Migration Options for Siebel File System Features in Siebel Open UI*
- *Migration Options for Siebel Calendar Features*

Related Books

Configuring Siebel Open UI

Migrating Browser Scripting

It is not necessary to change your existing client-side browser scripting to run Siebel Open UI. However, to make sure that your applications work the same in multiple browsers, you must make sure that no browser-specific JavaScript is implemented in your existing browser scripts.

Specific methods in Siebel CRM have been enhanced or changed for a variety of reasons, including security. These methods, which apply to all user interfaces, include the following:

- **WriteRecord.** For more information, see 1551530.1 (Article ID) on My Oracle Support.

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- **SetProfileAttr.** This method has been disabled for HTTP calls, for security reasons. By default, a browser script that references SetProfileAttr will not work. You can override this change, although doing so reintroduces the security vulnerability. Any decision to override must be done after careful consideration of the risks. To activate access to SetProfileAttr, set the server parameter EditProfileAttr to True.

This topic is part of *Migration Tasks for Siebel Open UI*.

Migration Options for Siebel File System Features in Siebel Open UI

W3C-based client applications typically run inside of a Web browser container and, for security reasons, are limited in their interactions with client-side applications and files on user computers. Conforming to a Web-standards approach dictates or suggests specific recommendations for designers of hosted deployments involving Siebel Open UI applications and documents or templates that use either structured or unstructured data.

Current Siebel CRM features for correspondence, for example, also force a change in the interaction between the user and the Siebel Open UI client, regarding legacy client-side proprietary document formats and applications.

For example, if a user tries to drag an email from Microsoft Outlook into the Siebel client, in order to save it as an attachment in the Siebel File System, then this operation cannot be completed. Such applications typically use different drag-and-drop methods and storage structures than those of the operating system itself. Before the user can save an item (such as an email message) into the Siebel application as an attachment in the Siebel File System, the user must save it as a file in a local or network directory.

Consider the following recommendations to make it easier to manage data and user interactions of these types:

- In the current release, where Desktop Integration Siebel Agent is deployed on the user computer, users can save attachment files directly to the Siebel application. Where the Outlook to Siebel Drag and Drop addin is deployed, users can drag email messages or attachments into the Siebel application. For more information, see *Desktop Integration Siebel Agent Guide* . See also the *Siebel Installation Guide* .

- Where possible, integrate Siebel Open UI applications with true W3C-compliant client applications or hosted applications, such as Microsoft Outlook Web Access. Such applications can be integrated by using Web services on the back end or by using the JavaScript API on the client side, depending on the business requirements. Integrating with true Web-based client components can simplify many deployment challenges.

- Application designers might consider moving content that currently uses attachments based on proprietary document formats and applications into structured or unstructured data fields that use Web-centric formats such as XML or HTML. This approach:

  - Allows content to be formatted using Siebel Document Server or Oracle Business Intelligence Publisher.
  - Supports audit trails and approvals as content is changed and added by users.
  - Can make it unnecessary to manage content in documents. However, separate physical documents can be created as needed when content creation or revision is complete.
  - Can make it easier to search the modified content.

- Users must have locally available a directory, on the network or on the local computer (for example, a laptop), in which they can store modified files or content dragged from applications like Microsoft Outlook. Then they can save such files into the Siebel application as attachments in the Siebel File System.

This topic is part of *Migration Tasks for Siebel Open UI*.

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Related Topics

Siebel Open UI Features

Migration Options for Siebel Calendar Features

The Siebel Open UI calendar has been enhanced to provide additional capability. Workaround options are available to allow you to retain legacy calendar behavior in the Siebel Open UI client. For more information about these options, see *Configuring Siebel Open UI* .

This topic is part of *Migration Tasks for Siebel Open UI*.

Integrations Related to Siebel Open UI

This topic provides information about certain types of integrations in relation to Siebel Open UI. It contains the following information:

- *Siebel Open UI and Oracle User Productivity Kit*
- *Siebel Open UI and Intelligent Advisor*

Siebel Open UI and Oracle User Productivity Kit

Integrations for Oracle User Productivity Kit (UPK) support the Siebel Open UI client. If you are running Siebel Open UI applications, then you can record Oracle UPK content against Siebel Open UI and you can display this content in a context-sensitive manner. Oracle UPK can be an alternative to iHelp in Siebel Open UI environments. For more information about supported browsers, see Resources, then Technical Specifications in the following site, and then review the target applications technical specifications.

http://www.oracle.com/us/products/applications/user-productivity-kit/overview/

This topic is part of *Integrations Related to Siebel Open UI*.

Siebel Open UI and Intelligent Advisor

Integrations for Intelligent Advisor with the Siebel Mobile Web Client and Siebel Remote support Siebel Open UI. For information about the versions of Intelligent Advisor supported for such integrations, see the Certifications tab in My Oracle Support.

This topic is part of *Integrations Related to Siebel Open UI*.

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