



Siebel Installation Guide for UNIX

Siebel Innovation Pack 2016, Rev. A
July 2016

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What's New in This Release

Siebel Installation Guide for UNIX describes the installation and initial configuration of Oracle's Siebel Business Applications. The installation and configuration tasks are covered for Siebel Enterprise Server software, Siebel Web Server Extension (SWSE), Siebel Mobile Web Clients, Siebel Tools, and other installable Siebel modules.

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2016, Rev. A

Table 1 lists the changes in this revision of the documentation to support Siebel Innovation Pack 2016. The new features listed in this table are available only if you install and deploy Innovation Pack 2016.

NOTE: Siebel Innovation Pack 2016 is a continuation of the Siebel 8.1/8.2 release.

Table 1. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2016, Rev. A

Topic	Description
"Importing a Siebel Repository Manually into the Siebel Database" on page 126	Modified topic. Updated the information about how commits are performed when you import repository data.
"Configuring Support for CalDAV or CardDAV Publishing" on page 172	Renamed and modified topic. Enhanced the information about configuring support for CalDAV and CardDAV publishing.
"Creating the Siebel File System" on page 320	Modified topic. Removed the information about encryption for the Siebel File System, which is not supported.
"Guidelines for Configuring Settings in the init.ora File" on page 361	Modified topic. Added a recommendation for setting the parameter FILESYSTEMIO_OPTION for Oracle Database.
"Determining the Locations for the Siebel Media Files and the Siebel Image" on page 389	Modified topic. Updated the recommendations for specifying the locations of the Siebel media files (ZIP files and JAR files).

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2016

Table 2 lists the changes in this revision of the documentation to support Siebel Innovation Pack 2016. The new features listed in this table are available only if you install and deploy Innovation Pack 2016.

NOTE: Siebel Innovation Pack 2016 is a continuation of the Siebel 8.1/8.2 release. This innovation pack is also known as Siebel CRM version 16.0. The *Siebel Installation Guide* for the operating system you are using is for installing Siebel Innovation Pack 2016.

Table 2. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2016

Topic	Description
"Installation-Related Changes for Siebel Innovation Pack 2016" on page 25	New topic. Contains more information about some of the new features in Siebel Innovation Pack 2016.
"Configuring the Siebel Server" on page 87 "Enabling Siebel Open UI" (removed) "About ActiveX Controls for High Interactivity" (removed) "Postinstallation Tasks for High Interactivity Clients" (removed)	Removed and modified topics. Siebel Business Applications use Siebel Open UI. As of Siebel Innovation Pack 2016, the high interactivity and standard interactivity clients are no longer supported. After you migrate to the current release, applications previously deployed using high interactivity now automatically use Siebel Open UI. It is no longer necessary or possible to explicitly enable Siebel Open UI. Server parameters that applied only to high interactivity or standard interactivity no longer apply. New customer applications for Siebel Open UI take the place of some of the desupported standard interactivity applications.
"Additional Tasks for Migration Installations" on page 62 (new) "About the Siebel Enterprise Security Token" (removed) "Updating Web Server Static Files Using the Siebel Enterprise Security Token" (removed) "Restarting the Web Server" on page 166 (modified)	New, removed, and modified topics. For migration installations of Siebel Innovation Pack 2016, some manual migration tasks are required on the Siebel Server, the Siebel Web Server Extension (SWSE), Siebel Web Client, and Siebel Tools, due to product changes such as directory restructuring. For example, the webmaster directory on the Siebel Server has been removed. The virtual directories now map to public on the SWSE instead of language directories like public/ENU. The Siebel Enterprise Security Token is no longer applicable. You must reconfigure the SWSE after installing. Additional requirements apply.
"Roadmap for Installing Siebel Business Applications in a Migration Installation Case (Existing Installation)" on page 36 "About Configuring Siebel Business Applications" on page 69	Modified topics. Added a new requirement to upgrade the Oracle Database Client and other requirements for performing migration installations.
"Configuring the Siebel Gateway Name Server" on page 75	Modified topic. Added configuration settings for Siebel Cache Server (Oracle Coherence).
"Configuring the Siebel Enterprise" on page 78	Modified topic. Removed the information about configuration settings for Siebel Charts.
"Configuring the Siebel Server" on page 87	Modified topic. Added configuration settings for Siebel Cache Server (Oracle Coherence).

Table 2. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2016

Topic	Description
<p>"Configuring the Siebel Server" on page 87</p> <p>"Enabling and Disabling Server Component Groups" on page 146</p>	<p>Modified topics. Added anonymous user settings for the Siebel REST Server, which is the instance of Apache Tomcat that was installed with the Siebel Server. The Tomcat Proxy Object Manager component in the EAI component group is also new in this release. Updated the information about Siebel CRM product changes and server configuration requirements. See also <i>Siebel REST API Guide</i>.</p>
<p>"Applying the SWSE Logical Profile" on page 99</p>	<p>(Oracle Solaris only) Modified topic. As of Siebel Innovation Pack 2016, in the Siebel Web Server Extension Configuration Wizard task for applying the SWSE logical profile, you can specify whether you are using Oracle iPlanet Web Server or Apache Web Server.</p>
<p>"About Database Updates for the Current Release" on page 114</p>	<p>Modified topic. Updated topic for Siebel Innovation Pack 2016.</p>
<p>"Activating License Keys" on page 124</p>	<p>New topic. In Siebel Innovation Pack 2016, the license keys previously provided in seed data are inactive. A new utility is provided for activating or deactivating license keys.</p>
<p>"Setting Up Your Environment to Support Global Time Zone" on page 125</p>	<p>Modified topic. Oracle does not support new Siebel CRM deployments that do not use UTC.</p>
<p>"Obtaining Updated Siebel Repository Files"</p>	<p>Removed topic. For Siebel Innovation Pack 2016, updated Siebel Repository Files (SRF files) are provided with the release.</p>
<p>"Configuring Support for CalDAV or CardDAV Publishing" on page 172</p>	<p>New topic. Siebel Innovation Pack 2016 supports CalDAV and CardDAV publishing.</p>
<p>"Installing the Siebel Web Client" on page 177 (modified)</p> <p>"Installing Siebel Tools" on page 184 (modified)</p> <p>"Installing and Using Oracle Database XE for the Local or Sample Database" on page 191 (new)</p> <p>"Installing Siebel Web Clients and Siebel Tools in Unattended Mode" on page 195 (modified)</p> <p>"About the Siebel Network Image" on page 383 (modified)</p>	<p>Modified topics and new topic. In Siebel Innovation Pack 2016, Oracle Database XE is used for the local database or sample database for Siebel Web Client or for the local database for Siebel Tools. SAP SQL Anywhere is no longer available.</p> <p>The new topic about installing Oracle Database XE for the local or sample database contains updated information and replaces previous topics about installing the local database or sample database.</p>

Table 2. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2016

Topic	Description
"About the Workspaces Feature in Siebel Tools" on page 200	New topic. As of Siebel Innovation Pack 2016, Siebel Tools supports a new feature called workspaces, which provides a new way to manage the configuration of repository artifacts in Siebel Tools. This feature allows multiple developers to work against the same repository objects in the Siebel database.
"Installing Desktop Integration Siebel Agent on Client Computers" on page 201	New topic. Customers can install Desktop Integration Siebel Agent on user computers. This new software module enables users to use certain application features that formerly were based on Java applets.
"Installing Outlook to Siebel Drag and Drop on Client Computers" on page 201	New topic. Customers can install Outlook to Siebel Drag and Drop on user computers. This new addin for Microsoft Outlook enables users to drag and drop emails and attachments into Siebel Business Applications.
"Siebel Client Deployment Requirements When Using Firewalls or Proxy Servers" on page 203	New topic. This topic moved to this guide from <i>Siebel System Administration Guide</i> .
"Configuring Siebel Business Applications for Pop-Up Blocker Compatibility" on page 204	New topic. This topic moved to this guide from <i>Siebel System Administration Guide</i> .
"About Siebel QuickStart" "Enabling and Disabling Siebel QuickStart"	Removed topics. As of Siebel Innovation Pack 2016, Siebel QuickStart is no longer supported for the Siebel Mobile Web Client. The AutoStopDB configuration parameter also no longer applies.
"Installing Siebel Charts" "Uninstalling Siebel Charts"	Removed chapter and topic. In Siebel Innovation Pack 2016, jQuery Charts is enabled for charting functionality. Siebel Charts Server (Visual Mining NetCharts) is no longer provided.
"Creating the Siebel File System" on page 320	Modified topic. As of Siebel Innovation Pack 2016, the value of the Siebel File System parameter cannot exceed 2048 characters.

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. D

Table 3 lists the changes in this revision of the documentation to support Siebel Innovation Pack 2015, Patchset 5. The new features listed in this table are available only if you install and deploy Innovation Pack 2015, Patchset 5 or later. For more information, see *Siebel Patchset Installation Guide for Siebel CRM* on My Oracle Support, 1614310.1 (Article ID) on My Oracle Support. See also *Siebel Database Upgrade Guide*.

NOTE: Siebel Innovation Pack 2015 is a continuation of the Siebel 8.1/8.2 release.

Table 3. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. D

Topic	Description
<p>“Installation-Related Changes for Siebel Innovation Pack 2015” (removed for Siebel Innovation Pack 2016)</p> <p>“About Database Updates for the Current Release” on page 114 (new)</p> <p>“Obtaining Updated Siebel Repository Files” (removed for Siebel Innovation Pack 2016)</p>	<p>New and modified topics. Updated Siebel Repository files (SRF files) are available for download from My Oracle Support. These SRF files correspond to repository updates in the Siebel database for Siebel Innovation Pack 2015, Patchset 5 or later (version 15.5 or later).</p>

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. C

Table 4 lists the changes in this revision of the documentation to support Siebel Innovation Pack 2015, Patchset 5. The new features listed in this table are available only if you install and deploy Innovation Pack 2015, Patchset 5 or later. For more information, see *Siebel Patchset Installation Guide for Siebel CRM* on My Oracle Support, 1614310.1 (Article ID) on My Oracle Support.

NOTE: Siebel Innovation Pack 2015 is a continuation of the Siebel 8.1/8.2 release.

Table 4. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. C

Topic	Description
<p>"Installation-Related Changes for Siebel Innovation Pack 2015" (removed for Siebel Innovation Pack 2016)</p> <p>"About Siebel CRM Releases" on page 300</p> <p>Other topics</p>	<p>Modified topics. Siebel Innovation Pack 2015, Patchset 5 or later includes some optional features that involve changes to the Siebel Repository. For information about requirements for making these features available, see the linked topics.</p> <p>For the readme documents for individual Siebel Patchset releases, see <i>Siebel Patchset Installation Guide for Siebel CRM</i>, 1614310.1 (Article ID) on My Oracle Support.</p>
<p>"Installation-Related Changes for Siebel Innovation Pack 2015" (removed for Siebel Innovation Pack 2016)</p> <p>"Installing Oracle Database XE for the Local Database for Siebel Tools" (information reorganized for Siebel Innovation Pack 2016)</p> <p>"Installing and Using the Siebel Sample Database" (information reorganized for Siebel Innovation Pack 2016)</p> <p>"Verifying Installation for Oracle Database XE" on page 231 (new topic)</p> <p>"Uninstalling Oracle Database XE" on page 294 (new topic)</p> <p>"About the Siebel Network Image" on page 383</p> <p>Other topics</p>	<p>New and modified topics. When you install Siebel Innovation Pack 2015, Patchset 5 or later, you can install Oracle Database Express Edition (Oracle Database XE) for the local database for Siebel Tools or install it for the sample database for Siebel Web Client. Additional steps are necessary to prepare the local database for use by the Siebel Tools developer.</p> <p>For the readme documents for individual Siebel Patchset releases, see <i>Siebel Patchset Installation Guide for Siebel CRM</i>, 1614310.1 (Article ID) on My Oracle Support.</p>
<p>"Configuring IBM HTTP Server for Linux Operating Systems"</p> <p>"Configuring HP Apache Web Server for Optimal Performance"</p>	<p>Removed topics. Removed content specific to IBM HTTP Server and HP Apache Web Server. Siebel CRM supports Apache Web Servers generically.</p>

Table 4. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. C

Topic	Description
“Configuring the Default HTTP and HTTPS Ports for the Web Server” on page 170 “Installing the Web Server” on page 341	Modified topics. Removed content specific to IBM HTTP Server and HP Apache Web Server. Siebel CRM supports Apache Web Servers generically.
“Guidelines for Installing the Siebel Database in a Pluggable Database” on page 367	New topic. You can install the Siebel database in a multitenant environment with versions of Oracle Database that support this feature.

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. B

Table 5 lists the changes in this revision of the documentation to support this release of the software.

NOTE: Siebel Innovation Pack 2015 is a continuation of the Siebel 8.1/8.2 release.

Table 5. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. B

Topic	Description
“Installation-Related Changes for Siebel Innovation Pack 2015” (removed for Siebel Innovation Pack 2016) “Installing and Using the Siebel Sample Database” (information reorganized for Siebel Innovation Pack 2016) “About Siebel QuickStart” (removed for Siebel Innovation Pack 2016) “Verifying Installation for the Siebel Enterprise Server” on page 213 “Verifying Installation for Siebel Tools” on page 227	Modified topics. Notes have been added to this guide regarding a change in the software used with the local database used by Siebel Tools and by Siebel Remote, or used with the sample database used by Siebel Mobile Web Client.

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. A

Table 6 lists the changes in this revision of the documentation to support this release of the software.

NOTE: Siebel Innovation Pack 2015 is a continuation of the Siebel 8.1/8.2 release.

Table 6. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015, Rev. A

Topic	Description
Multiple topics	Modified topics. Updated the default installation paths for Siebel CRM modules. These paths reference the version number of the current release of Siebel CRM, version 15.0, as 15.0.0.0.0.
"Saving Component Job Definitions During an Upgrade"	Removed topic. Siebel EIM cannot be used to export data from the tables mentioned. For existing deployments, all Siebel Server component jobs must complete before you perform any migration installations or perform any database upgrade tasks.
"Verifying Installation for the Siebel Enterprise Server" on page 213	Modified topic. Verifying that you have successfully installed and configured the Siebel CRM software requires performing additional tasks such as logging into the Siebel applications.
"General Requirements for Installing and Configuring Siebel Enterprise Server Components" on page 328	Modified topic. For existing deployments, all Siebel Server component jobs must complete before you perform any migration installations or perform any database upgrade tasks.
"Requirements for Installing Siebel Tools" on page 355	Modified topic. Before you perform a migration installation of Siebel Tools in a deployment with multiple languages, the current language mode for Siebel Tools must correspond to the primary language of the Siebel database.
Chapter 13, "Creating the Siebel Installation Image on the Network"	Modified multiple topics. Clarified that you place the files for the Siebel Image Creator utility in the same directory as the JAR files. For the full requirements for running Siebel Image Creator, see "Preparing to Create a Siebel Installation Image" on page 389 .

What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015

Table 7 lists the changes in this revision of the documentation to support this release of the software.

NOTE: Siebel Innovation Pack 2015 is a continuation of the Siebel 8.1/8.2 release. This innovation pack, which is also known as Siebel CRM version 15.0, succeeds Siebel Innovation Pack 2014 (Siebel CRM version 8.1.1.14 and version 8.2.2.14). The *Siebel Installation Guide* for the operating system you are using is for installing Siebel Innovation Pack 2015.

Table 7. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015

Topic	Description
<p>"Installation-Related Changes for Siebel Innovation Pack 2015" (removed for Siebel Innovation Pack 2016)</p>	<p>New topic. Summarizes several important Siebel CRM product changes affecting this guide.</p>
<p>Multiple topics</p>	<p>Modified topics. Siebel Innovation Pack 2015 is provided as a single release, Siebel CRM version 15.0. Installation for this release is similar to that for previous releases. You can install Siebel CRM version 15.0 as a new installation or as a migration installation from a prior Siebel CRM version 8.1.1.x or version 8.2.2.x release.</p>
<p>"Installing Siebel Enterprise Server" on page 44 (modified) "Uninstalling Oracle LDAP Client" on page 286 (new) "Requirements for Installing Oracle LDAP Client" on page 331 (new) "About the Siebel Network Image" on page 383 (modified)</p>	<p>New and modified topics. You can now install Oracle LDAP Client with the Siebel Enterprise Server, when it is to be installed for use with a non-Oracle database.</p>
<p>"Configuring the Siebel Enterprise" on page 78 "Configuring the SWSE Logical Profile" on page 94 "About Configuring the Siebel Web Server Extension" on page 109 "General Requirements for Installing and Configuring Siebel Enterprise Server Components" on page 328</p>	<p>Modified topics. Secure Sockets Layer (SSL) is no longer supported for Siebel CRM. It is strongly recommended that you implement Transport Layer Security (TLS) encryption for all applicable services and communication paths in a Siebel CRM implementation.</p>
<p>"Enabling and Disabling Server Component Groups" on page 146</p>	<p>Modified topic. Updated the information about Siebel CRM product changes and server configuration requirements.</p>
<p>"Enabling Siebel Open UI" (removed for Siebel Innovation Pack 2016)</p>	<p>Modified topic. Updated the information about Siebel Open UI and migration installation.</p>
<p>"Enabling jQuery Charts" (removed for Siebel Innovation Pack 2016)</p>	<p>New topic. Optionally, you can use jQuery Charts instead of NetCharts Server, for deployments using Siebel Open UI.</p>
<p>"Creating the Siebel File System" on page 320</p>	<p>Modified topic. The current release supports the ability to encrypt Siebel File System attachment files.</p>

Table 7. What's New in Siebel Installation Guide for UNIX, Siebel Innovation Pack 2015

Topic	Description
"General Requirements for Installing and Configuring Siebel Enterprise Server Components" on page 328	Modified topic. CAUTION: Before starting a migration installation for Siebel Enterprise Server, you must back up the original key file (keyfile.bin). After the migration, copy back the original key file.
"Requirements for Installing Siebel Web Clients" on page 352	Modified topic. Added mention of a requirement for certain users running the Google Chrome browser.
"Guidelines for Setting IBM DB2 Configuration Parameters" on page 372	Modified topic. Updated settings for some of the listed IBM DB2 configuration parameters.
Chapter 13, "Creating the Siebel Installation Image on the Network"	Modified multiple topics. The version number of the current release, Siebel CRM 15.0, is used in example JAR file names and applicable directory names. You can now include the Oracle LDAP Client when you create the network image for Siebel Enterprise Server, when it is to be installed for use with a non-Oracle database. The former requirement from Siebel CRM version 8.2.2.x to include certain third-party JAR files when you create the network image does not apply in Siebel CRM version 15.0.

About the Microsoft Windows and UNIX Versions of This Guide

This book is published in separate versions for Microsoft Windows or UNIX operating systems:

- *Siebel Installation Guide for Microsoft Windows*
- *Siebel Installation Guide for UNIX*

NOTE: For operating system support details, including supported versions and product support exceptions, see the [Certifications tab on My Oracle Support](#).

In this guide, *Windows* refers to all of the Microsoft Windows operating system versions that are supported for server or client platforms (for applicable Siebel modules) for this release. The supported versions are listed in the [Certifications tab on My Oracle Support](#).

Supported UNIX operating systems include IBM AIX, HP-UX, Linux, and Oracle Solaris (for SPARC).

In *Siebel Installation Guide for UNIX*, supported Linux operating systems are usually discussed in generic terms and are not differentiated. However, some information in this guide applies only to particular Linux operating systems or particular Web servers running on Linux.

Both the Windows and UNIX versions of this guide contain instructions for installing client-based modules, such as Siebel Web Clients or Siebel Tools, on Microsoft Windows.

Siebel Installation Guide for UNIX does not contain instructions for installing Siebel Enterprise Server and Siebel Web Server Extension (SWSE) on Windows.

Siebel Installation Guide for UNIX does not contain information about either Microsoft SQL Server or Microsoft Internet Information Services (Microsoft IIS).

Siebel Installation Guide for Microsoft Windows does not contain information about UNIX-based Web servers.

NOTE: The *Siebel Installation Guides* for prior Siebel CRM version 8.1.1.x, version 8.2.2.x, and version 15.x releases are available on My Oracle Support, at 1461732.1 (Article ID).

Additional Information

The procedures in this guide assume that you do not use left-hand navigation. For information about implementing left-hand navigation, see *Siebel Fundamentals*.

For more information about third-party products, such as supported operating systems or RDBMS platforms, Web servers, and so on, see the Certifications tab on My Oracle Support (<https://support.oracle.com>).

For Siebel CRM version 8.1.1.9 and later, version 8.2.2.2 and later, version 15.0 and later, and version 16.0 and later, the system requirements and supported platform certifications are available from the Certifications tab on My Oracle Support. For more information, see 1492194.1 (Article ID) on My Oracle Support.

2

Overview of Installing Siebel Business Applications

This chapter provides an overview of installing Siebel Business Applications. It includes the following topics:

- [Installation-Related Changes for Siebel Innovation Pack 2016 on page 25](#)
- [Before You Install Siebel Business Applications on page 29](#)
- [Overview of Siebel Business Applications Server Architecture on page 31](#)
- [Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment on page 33](#)
- [Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\) on page 36](#)
- [Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\) on page 38](#)

Installation-Related Changes for Siebel Innovation Pack 2016

The *Siebel Installation Guide* for the operating system you are using, for Siebel Innovation Pack 2016, describes several product changes and requirements that affect your installation tasks and the overall flow of these tasks. See also all of the relevant references in [Chapter 1, “What’s New in This Release.”](#)

- **Documentation is for Siebel Innovation Pack 2016.** The *Siebel Installation Guide* for the operating system you are using is for installing the Siebel CRM software for Siebel Innovation Pack 2016. Siebel Innovation Pack 2016 is provided as a single release: Siebel CRM version 16.0. Installation for this version is similar to that for previous releases. You can install Siebel CRM version 16.0 as a new installation or as a migration installation.

As used in this guide, the term *current release* generally refers to Siebel CRM version 16.0. This term might also refer to functionality that changed relative to previous releases or other functionality that is available in the latest release.

Siebel CRM version 16.0 includes new functionality and the functionality from previous Siebel CRM version 8.1.1.x, version 8.2.2.x, and version 15.x releases.

Customers who had previously installed a Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x release can install Siebel CRM version 16.0 as a migration installation. When you migrate from one of these releases, you must also run Incremental Repository Merge, as described in *Siebel Database Upgrade Guide*. Additional requirements apply for the current release.

In release media or software contexts showing the Siebel CRM version number, the version is represented as version 16.0 or as the version of a Siebel Patchset release. When a Siebel Patchset release has been installed, the version number of the installed software increments to Siebel CRM version 16.1, 16.2, and so on. Therefore, the term current release might also apply to Siebel CRM version 16.x, such as version 16.1, 16.2, and so on.

Previous versions of the *Siebel Bookshelf* are still available. The *Siebel Installation Guides* for prior releases (Siebel CRM version 8.1.1.x, version 8.2.2.x, and version 15.x releases) are available on My Oracle Support, at 1461732.1 (Article ID). For detailed information about the installation features of prior releases, see these earlier guides.

- **Siebel Business Applications use Siebel Open UI only.** As of Siebel Innovation Pack 2016, the high interactivity client and the standard interactivity client are no longer supported. After you migrate to the current release, any applications that you had previously deployed using high interactivity now automatically use Siebel Open UI.

It is no longer necessary or possible to explicitly enable Siebel Open UI. Server parameters that applied only to high interactivity or standard interactivity no longer apply. New customer applications for Siebel Open UI are provided to take the place of some of the desupported standard interactivity applications.

Static Web server files are now stored in the *SWSE_ROOT/public* directory on the Siebel Web Server Extension (SWSE) and are no longer updated from the *SI_EBSRV_ROOT/webmaster* directory on the Siebel Server, which has been removed. The Siebel Enterprise Security Token, formerly used for manually updating static files from the Siebel Server to the SWSE, is no longer applicable. Several subdirectories of the *public* directory have been reorganized in the SWSE, Siebel Web Client, and Siebel Tools Client installations.

NOTE: For migration installations, it is strongly recommended that customers perform manual migration steps before and after migration installation, for files affected by these changes. Additional requirements apply.

- **Oracle Database XE is now installed for Siebel Tools and Siebel Mobile Web Client.** In Siebel Innovation Pack 2016, Oracle Database XE is installed and used in the following cases:
 - **Local database for Siebel Tools.** The Siebel Tools installer installs Oracle Database XE and provides the option to install the local database. Alternatively, the installer installs a database template, and you initialize the local database through the Siebel Remote server.
 - **Local database for Siebel Mobile Web Client.** The Siebel Web Client installer installs Oracle Database XE and a database template, and you initialize the local database through the Siebel Remote server.
 - **Sample database for Siebel Mobile Web Client.** The Siebel Web Client installer installs Oracle Database XE and provides the option to install the sample database.

NOTE: SAP SQL Anywhere is no longer provided for the local or sample database. The Siebel Sample Database is no longer provided through a separate installer.

For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

- **Desktop Integration Siebel Agent (DISA) is now available to extend application functionality in the browser.** In Siebel Innovation Pack 2016, new software is available for installation on user computers that enables users to use certain features in Siebel Business Applications that formerly were based on Java applets. In the current release, Desktop Integration Siebel Agent (DISA) supports inline editing of attachments, CTI hoteling, Send Email (F9) integration with Microsoft Outlook, and batch fulfillment printing. For more information, see [“Installing Desktop Integration Siebel Agent on Client Computers” on page 201](#).
- **Outlook to Siebel Drag and Drop is now available.** A new addin for Microsoft Outlook is provided in Siebel Innovation Pack 2016. Customers can now install the addin Outlook to Siebel Drag and Drop on user computers for use with employee applications. Installing this software enables users to drag one or more email messages or email attachments from a Microsoft Outlook client onto a Siebel attachment applet, which stores the files in the Siebel File System. For more information, see [“Installing Outlook to Siebel Drag and Drop on Client Computers” on page 201](#).
- **Siebel QuickStart for Mobile Web Client is no longer supported.** Siebel QuickStart, an application feature that preloads the Siebel application on a mobile user’s computer at startup time, is no longer supported, as of Siebel Innovation Pack 2016.
- **Apache Tomcat and Oracle Coherence are now installed with Siebel Enterprise Server.** As of Siebel Innovation Pack 2016, Siebel CRM software now automatically integrates with and manages the Web application server Apache Tomcat and Oracle Coherence.

Software for Oracle Coherence, which is Java-based in-memory data grid software that provides cache management for frequently used data, is installed with both the Siebel Gateway Name Server and the Siebel Server. Apache Tomcat, which supports Siebel REST services, is also installed with the Siebel Server. For more information about Siebel REST services, see *Siebel REST API Guide*. The Tomcat Proxy Object Manager component in the EAI component group is provided for managing Apache Tomcat.

The tasks for configuring the Siebel Gateway Name Server and the Siebel Server include new options for configuring the Siebel Cache Server (Oracle Coherence). The task for configuring the Siebel Server also includes a new option that pertains to Siebel REST services. For more information, see [“Configuring the Siebel Gateway Name Server” on page 75](#) and [“Configuring the Siebel Server” on page 87](#).

Apache Tomcat and Oracle Coherence are used to integrate Siebel Product Configurator with Oracle Advanced Constraint Technology. Oracle provides a developer preview option of this technology in Innovation Pack 2016. For more information, see 2112562.1 (Article ID) on My Oracle Support.

- **(Oracle Database only) Migration customers must upgrade the Oracle Database Client.** For deployments on Oracle Database in a migration installation case, you must upgrade the Oracle Database Client to a supported version for Siebel Innovation Pack 2016, as noted in the Certifications tab on My Oracle Support. Also update the Oracle Database Client path in the environment variables. Do this after performing the migration installations. For more information, see [“About Configuring Siebel Business Applications” on page 69](#). See also [“Additional Tasks for Migration Installations” on page 62](#).

- **Migration customers must perform additional migration tasks.** In the current release of Siebel CRM, some manual migration tasks are required on the Siebel Server, the Siebel Web Server Extension (SWSE), Siebel Web Client, and Siebel Tools, due to product changes such as directory restructuring. For example, the webmaster directory on the Siebel Server has been removed. The virtual directories now map to public on the SWSE instead of language directories like public/ENU. The Siebel Enterprise Security Token is no longer applicable. You must remove the SWSE configuration before installation, and you must reconfigure the SWSE after installing. Other requirements apply. For more information, see [“Additional Tasks for Migration Installations” on page 62](#).
- **(Oracle Solaris only) Apache Web Server is supported.** In the Siebel Web Server Extension Configuration Wizard task for applying the SWSE logical profile, you can specify whether you are using Oracle iPlanet Web Server or Apache Web Server. For more information, see [“Applying the SWSE Logical Profile” on page 99](#).
- **Enhanced support for CalDAV and CardDAV.** In Siebel Innovation Pack 2016, support for CalDAV and CardDAV is enhanced. For information about enabling this functionality, see [“Configuring Support for CalDAV or CardDAV Publishing” on page 172](#).
- **jQuery Charts is enabled for charting functionality.** As of Siebel Innovation Pack 2016, Siebel Charts Server (Visual Mining NetCharts) is replaced by jQuery Charts as the Siebel Charts solution. No separate installation or setup is required for using jQuery Charts, which is already enabled for new and existing customers. Charts are now rendered using the jQuery Charts engine, jqPlot. The EnableClientChart system preference is no longer used. Existing charts functionality in Siebel Business Applications is otherwise unchanged. For information about supported chart types in the current release, see 2109630.1 (Article ID) on My Oracle Support. For information about uninstalling Siebel Charts Server for prior Siebel CRM releases, see earlier updates of this guide, *Siebel Installation Guide* for the operating system you are using.
- **New License Key Activation utility is provided.** In Siebel Innovation Pack 2016, the license keys previously provided in seed data are inactive. (License keys entered by customers are not affected.) A new utility is provided for activating or deactivating license keys. You run the License Key Activation utility after installing a new database, running Incremental Repository Merge (for migration installations), or completing a full database upgrade. For more information, see [“Activating License Keys” on page 124](#).
- **Siebel Repository files are provided with the current release.** For Siebel Innovation Pack 2016, updated Siebel Repository files (SRF files) are provided with the release, in the usual manner for an Innovation Pack release. They are no longer provided through separate media for download from My Oracle Support, as they were for Siebel Innovation Pack 2015, Patchset 5 or later (version 15.5 or later).

- **Siebel Tools is enhanced with workspaces.** As of Siebel Innovation Pack 2016, Siebel Tools supports a new feature called workspaces, which provides a new way to manage the configuration of repository artifacts in Siebel Tools. This feature allows multiple developers to work against the same repository objects in the Siebel database. For more information, see [“About the Workspaces Feature in Siebel Tools” on page 200.](#)

NOTE: Workspaces are an alternative to using local databases to make changes to repository data. All Siebel Tools developers in a given Siebel development environment must either use a local database or use workspaces.

Workspaces is also a feature of Siebel Composer, which is a browser-based alternative to the traditional Siebel Tools client. When Siebel Composer is used, SRF files are not generated or used in the Siebel environment. Siebel Composer is provided as a developer preview in Innovation Pack 2016. For more information, see *Siebel CRM Composer Developer Preview Guide*.

Before You Install Siebel Business Applications

Before you install Siebel Business Applications, you must perform the preinstallation tasks. Many of these tasks are described in *Siebel Deployment Planning Guide*.

- 1 Review all documented hardware and software requirements.
For more information, see the Certifications tab on My Oracle Support. See also [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications.”](#)
- 2 Review the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet,”](#) and fill it in as you prepare for installing Siebel Business Applications.
- 3 Plan and prepare for your deployment.
- 4 Configure clustering for the server on which you will install the Siebel Gateway Name Server. Clustering is strongly recommended for production environments.
- 5 Determine your load-balancing strategy.

For more information, see [“Planning Siebel Server Load Balancing” on page 306](#) and [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140.](#)

- 6 Configure your RDBMS.

NOTE: You can configure the RDBMS at any point before you run the Siebel Database Configuration Wizard. Most of the database tasks described in this guide do not apply if you have an existing Siebel database, such as in an upgrade environment.

This task applies only for [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33.](#) For more information, see [“Planning RDBMS Installation and Configuration” on page 308](#) and [Chapter 12, “Configuring the RDBMS.”](#)

- 7 Obtain the Siebel media and create a Siebel installation image on the network, from which you will perform installations.

Obtain the media for the current release of Siebel Business Applications, Siebel CRM version 16.0. For more information, see [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)

- 8 Create directories for Siebel Business Applications software and directories for the Siebel File System.

For more information, see [“File and Directory Naming Conventions” on page 319](#) and [“Creating the Siebel File System” on page 320](#).

- 9 Create the required Siebel accounts.

For more information, see [“Creating the Siebel Service Owner Account” on page 324](#).

- 10 Determine whether you need to perform any manual migration tasks prior to performing migration installations for an existing deployment, as described in [“Additional Tasks for Migration Installations” on page 62](#).

This task applies only for [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)” on page 36](#).

Related Books

Siebel Deployment Planning Guide

Deploying Siebel Open UI

Siebel Security Guide

Siebel Performance Tuning Guide

Siebel System Administration Guide

Certifications tab on My Oracle Support

Install & Configure Advisor: Siebel Innovation Pack 2016 (16.0), 2124249.2 (Article ID) on My Oracle Support

Overview of Siebel Business Applications Server Architecture

Figure 1 on page 31 illustrates a simplified architecture for the server elements in your Siebel deployment, after you have initially installed and configured the software. For a more detailed illustration, see *Siebel Deployment Planning Guide*.

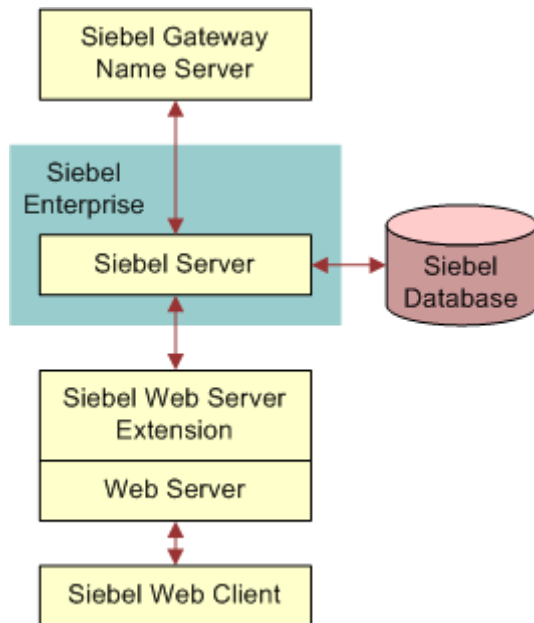


Figure 1. Simplified Architecture for a Siebel Deployment

The Siebel CRM installation and configuration process requires multiple tasks that you perform in a general sequence that depends on your installation case. For more information, see:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)
- [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)” on page 36](#)
- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)

Installation Guidelines

Follow these general guidelines for your installations:

- Before installing any Siebel module, review all documented requirements.
- You install Siebel Gateway Name Server once for each Siebel Enterprise.
- You install Siebel Database Configuration Utilities once, typically with the first Siebel Server installed.
- In general, you can install each item in sequence and perform its associated configuration tasks, or you can install all of the items and then perform the configuration tasks. However, some requirements apply to the sequence in which you must perform configuration tasks.
- Requirements associated with authenticating access to the Siebel Gateway Name Server can affect your overall installation and configuration process, particularly for a new deployment with no existing Siebel database. This issue affects the installation and configuration task sequence, as shown in the illustrations in the two roadmap topics that follow. For more information, see [“Requirements for Siebel Gateway Name Server Authentication” on page 333](#).
- Multiple instances of Siebel Server and Siebel Web Server Extension (SWSE) are typically installed for medium-sized or larger deployments.
- Special issues apply for migration installations of Siebel Innovation Pack 2016. For more information, see [“Additional Tasks for Migration Installations” on page 62](#).
- It is recommended that, after you install the current release for each applicable Siebel module, you install the latest Siebel Patchset release, where available. For more information, see [“About Siebel CRM Releases” on page 300](#).
- You must activate license keys for Siebel Innovation Pack 2016. You run the License Key Activation utility after installing a new database, running Incremental Repository Merge (for migration installations), or completing a full database upgrade.

Related Topics

[“Before You Install Siebel Business Applications” on page 29](#)

[Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications”](#)

Related Books

Siebel Deployment Planning Guide

Siebel Security Guide

Siebel System Administration Guide

Certifications tab on My Oracle Support

Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment

Use this roadmap to guide you in performing the installation and configuration tasks for deploying the current release of Siebel CRM, where there is no existing Siebel CRM installation and no existing Siebel database. The current release is Siebel CRM version 16.0 (Siebel Innovation Pack 2016).

Figure 2 on page 33 presents a simplified view of the installation and configuration tasks for Siebel CRM server-based modules that apply for a new deployment.

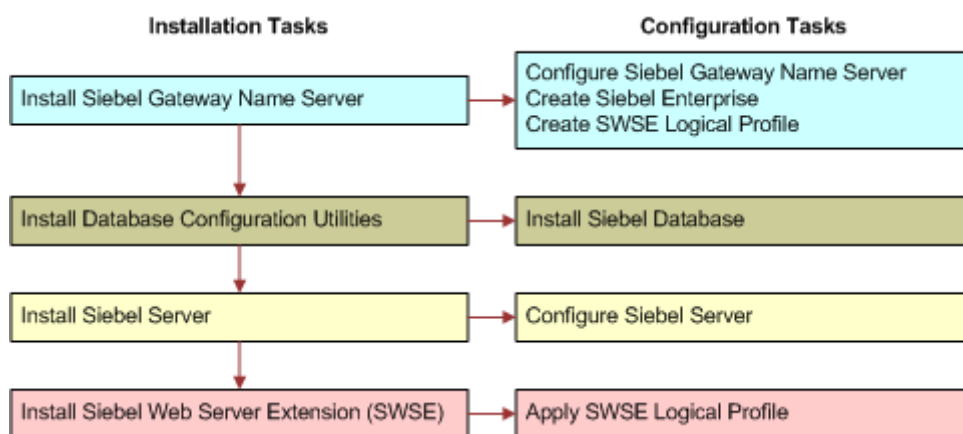


Figure 2. Installing and Configuring Servers for a New Deployment

A Siebel database must exist before you can configure the Siebel Server, in order to provide authentication for access to the Siebel Gateway Name Server. You install Database Configuration Utilities and the first Siebel Server on the same computer where you install Siebel Gateway Name Server.

NOTE: It is recommended that, for each applicable Siebel module, you install the latest Siebel Patchset release, where available. Install the patchset before you run any of the Siebel Configuration Wizards. For more information, see [“About Siebel CRM Releases” on page 300](#).

The installation process for Siebel Business Applications for a new deployment requires multiple tasks that you perform in the following general sequence:

- 1 Before performing installation and configuration tasks, review all documented requirements. See [“Before You Install Siebel Business Applications” on page 29](#).
- 2 Create the network images for all applicable releases of Siebel CRM:
 - Create a network image for the current release, Siebel CRM version 16.0.
 - Create a network image for the latest Siebel Patchset release, where available.See [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)

- 3 For the Siebel Enterprise Server, install the current release. Then install the latest Siebel Patchset release. Install the following Siebel Enterprise Server components:

- a Siebel Gateway Name Server
- b Siebel Server (install with the Siebel Gateway Name Server)
- c Database Configuration Utilities (install with the first Siebel Server)

See [Chapter 3, "Installing Siebel Enterprise Server Components and the Siebel Web Server Extension."](#)

- 4 Configure the following Siebel Enterprise Server modules, in the sequence shown:

- a Siebel Gateway Name Server
- b Siebel Enterprise on the Siebel Gateway Name Server computer

See [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension."](#)

- 5 Configure the RDBMS.

See [Chapter 12, "Configuring the RDBMS."](#)

- 6 Install the Siebel database.

This task installs a Siebel database for the current release. This database contains schema changes, Siebel Repository changes, and seed data for Siebel CRM functionality through the current release.

See [Chapter 5, "Installing the Siebel Database on the RDBMS."](#)

- 7 Activate the license keys.

See ["Activating License Keys" on page 124.](#)

- 8 Configure the Siebel Server, and perform the postinstallation tasks.

NOTE: For a new deployment, you installed a Siebel Server and the Database Configuration Utilities on the Siebel Gateway Name Server computer. Configuring and deploying this Siebel Server is optional. You must run the Database Configuration Wizard and install the Siebel database *before* you can configure this Siebel Server or any Siebel Server. For more information, see ["Requirements for Siebel Gateway Name Server Authentication" on page 333.](#) You must install and configure a Siebel Server before you can configure the Siebel Web Server Extension (SWSE).

See [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension,"](#) and [Chapter 6, "Additional Postinstallation and Configuration Tasks."](#)

- 9 For the Siebel Web Server Extension (SWSE), install the current release. Then install the latest Siebel Patchset release.

See [Chapter 3, "Installing Siebel Enterprise Server Components and the Siebel Web Server Extension."](#)

- 10 Configure the Siebel Web Server Extension in the following sequence:

- a Configure the logical profile for the SWSE on the Siebel Gateway Name Server computer.
- b Apply the SWSE logical profile on the Web server computer where you installed SWSE.

See [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension,"](#) and [Chapter 6, "Additional Postinstallation and Configuration Tasks."](#)

- 11 (Optional) If you are using Siebel load balancing, then generate the load balancing configuration file `lbconfig.txt` after installing and configuring participating Siebel Servers. Place the file in the SWSE logical profile directory, and reapply the logical profile.

For more information, see ["Process of Configuring Load Balancing for Siebel Business Applications" on page 140.](#)

- 12 For Siebel Mobile Web Clients or Developer Web Clients, install the current release. Then install the latest Siebel Patchset release.

NOTE: When you install the current release, Oracle Database XE is installed for use with the local database or sample database, for Siebel Mobile Web Client. You can optionally install the sample database with this client.

See [Chapter 7, "Installing Siebel Web Clients and Siebel Tools."](#)

- 13 For Siebel Tools, install the current release. Then install the latest Siebel Patchset release.

NOTE: When you install the current release, Oracle Database XE is installed for use with the local database. You can optionally install the local database with Siebel Tools.

See [Chapter 7, "Installing Siebel Web Clients and Siebel Tools."](#)

- 14 Verify the installation of Siebel Business Applications modules.

See [Chapter 8, "Verifying and Troubleshooting Your Installation."](#)

- 15 (Optional) Install additional Siebel modules.

- 16 (Optional) Install and configure additional Siebel Server instances or additional Web server and SWSE instances if they are required for your deployment.

- 17 Install any required third-party products.

See the Certifications tab on My Oracle Support. See also the *Siebel Business Applications Third-Party Bookshelf* in the product media pack on Oracle Software Delivery Cloud.

- 18 (Optional) Install Siebel Search software.

For specific guidelines and requirements about installing search software, see *Siebel Search Administration Guide*.

- 19 Perform any additional postinstallation tasks.

See [Chapter 6, "Additional Postinstallation and Configuration Tasks."](#)

Related Topics

["Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)" on page 36](#)

["Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)" on page 38](#)

Roadmap for Installing Siebel Business Applications in a Migration Installation Case (Existing Installation)

Use this roadmap to guide you in performing the installation tasks for deploying the current release of Siebel CRM, where there is an existing installation of a prior version. This is the migration installation case. Migration installation is a type of patch installation. The current release is Siebel CRM version 16.0 (Siebel Innovation Pack 2016).

Use this roadmap when you have an existing Siebel Business Applications installation of a prior release of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x. You must perform the migration installation tasks for your existing installed Siebel CRM software.

TIP: For the upgrade case, where you are upgrading to the current release from a Siebel CRM release prior to version 8.1.1 or version 8.2.2, see [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#) instead. In an upgrade case, you perform a full database upgrade instead of running Incremental Repository Merge. In general, this book uses the term *migration* to refer to a migration installation and uses the term *upgrade* to refer to a full database upgrade.

NOTE: It is recommended that, for each applicable Siebel module, you install the latest Siebel Patchset release after you install the current release. For more information, see [“About Siebel CRM Releases” on page 300](#).

This roadmap only summarizes the migration installation process and does not include all required tasks. For example, you must do the following tasks after performing the migration installation tasks. See also [“Additional Tasks for Migration Installations” on page 62](#).

- **(Oracle Database only) Upgrade the Oracle Database Client.** You must upgrade the Oracle Database Client to a supported version for Siebel Innovation Pack 2016, as noted in the Certifications tab on My Oracle Support. Also update the Oracle Database Client path in the defined environment variables. See [“About Configuring Siebel Business Applications” on page 69](#).
- **Run Incremental Repository Merge.** Customers must run Incremental Repository Merge. Before doing this, you must have installed at least one Siebel Server with Database Configuration Utilities and installed Siebel Tools. For more information about Incremental Repository Merge, see *Siebel Database Upgrade Guide*.
- **Reset passwords in siebns.dat and on the Siebel Server.** Customers must reset any passwords in the siebns.dat file on the Siebel Gateway Name Server that were previously encrypted using RC4 encryption. In the current release, such passwords are encrypted using AES instead of RC4. For more information about reencrypting these passwords, see *Siebel Security Guide*. See also [“Additional Tasks for Migration Installations” on page 62](#).

The installation process for Siebel Business Applications in a migration installation case requires multiple tasks that you perform in the following general sequence:

- 1 Before performing installation tasks, review all documented requirements and perform any necessary premigration tasks.

See [“Before You Install Siebel Business Applications” on page 29](#) and [“Additional Tasks for Migration Installations” on page 62](#).

- 2 Create the network images for all applicable releases of Siebel CRM:
 - Create a network image for the current release, Siebel CRM version 16.0.
 - Create a network image for the latest Siebel Patchset release, where available.See [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)
- 3 Remove the existing SWSE configuration on the Web server computer where you installed SWSE.

CAUTION: You must perform this task before you perform the migration installation for SWSE.

See [“Additional Tasks for Migration Installations” on page 62](#) and [“About Configuring Siebel Business Applications” on page 69](#).
- 4 For the Siebel Enterprise Server software, install the current release as a migration installation for each existing installation. Then install the latest Siebel Patchset release. Also perform any necessary postmigration tasks.

See [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#) See also [“Additional Tasks for Migration Installations” on page 62](#).
- 5 For the Siebel Web Server Extension (SWSE), install the current release as a migration installation for each existing installation. Then install the latest Siebel Patchset release. Also perform any necessary postmigration tasks.

See [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#) See also [“Additional Tasks for Migration Installations” on page 62](#).
- 6 Run Incremental Repository Merge.

See *Siebel Database Upgrade Guide*.
- 7 Activate the license keys.

See [“Activating License Keys” on page 124](#).
- 8 Create a new SWSE logical profile, and then apply the SWSE logical profile on the Web server computer where you installed SWSE.

See [“Additional Tasks for Migration Installations” on page 62](#) and [“About Configuring Siebel Business Applications” on page 69](#).
- 9 For Siebel Mobile Web Clients or Developer Web Clients, install the current release as a migration installation for each existing installation. Then install the latest Siebel Patchset release. Also perform any necessary postmigration tasks.

NOTE: When you install the current release, Oracle Database XE is installed for use with the local database or sample database, for Siebel Mobile Web Client. You can optionally install the sample database with this client.

See [Chapter 7, “Installing Siebel Web Clients and Siebel Tools.”](#) See also [“Additional Tasks for Migration Installations” on page 62](#).

- 10** For Siebel Tools, install the current release as a migration installation for each existing installation. Then install the latest Siebel Patchset release. Also perform any necessary postmigration tasks.

NOTE: When you install the current release, Oracle Database XE is installed for use with the local database. You can optionally install the local database with Siebel Tools.

See [Chapter 7, “Installing Siebel Web Clients and Siebel Tools.”](#) See also [“Additional Tasks for Migration Installations”](#) on page 62.

- 11** Verify the installation of Siebel Business Applications modules.

See [Chapter 8, “Verifying and Troubleshooting Your Installation.”](#)

- 12** Perform any additional postinstallation tasks.

See [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#)

Related Topics

[“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment”](#) on page 33

[“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)”](#) on page 38

Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case (Existing Database)

Use this roadmap to guide you in performing the installation and configuration tasks for deploying the current release of Siebel CRM, where there is an existing Siebel database and you are upgrading to the current release from a Siebel CRM release prior to version 8.1.1 or version 8.2.2. The current release is Siebel CRM version 16.0 (Siebel Innovation Pack 2016).

TIP: For the migration installation case, where you are upgrading to the current release from an existing installation of a prior release of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x, see [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)”](#) on page 36 instead. In a migration installation, you run Incremental Repository Merge instead of performing a full database upgrade. In general, this book uses the term *migration* to refer to a migration installation and uses the term *upgrade* to refer to a full database upgrade.

Figure 3 on page 39 presents a simplified view of the installation and configuration tasks for Siebel CRM server-based modules that apply in an upgrade installation case. You install Database Configuration Utilities with the first installed Siebel Server.

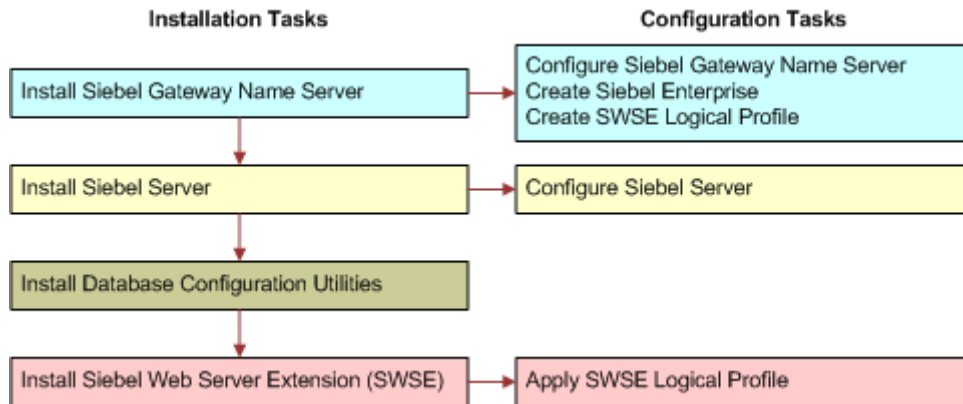


Figure 3. Installing and Configuring Servers in an Upgrade Case

NOTE: It is recommended that, for each applicable Siebel module, you install the latest Siebel Patchset release, where available. Install the patchset before you run any of the Siebel Configuration Wizards. For more information, see [“About Siebel CRM Releases” on page 300](#).

This roadmap only briefly mentions the database upgrade tasks. Before you upgrade, you must have installed at least one Siebel Server with Database Configuration Utilities and installed Siebel Tools. For more information about upgrading, see [“About Installing in Upgrade Environments” on page 302](#) and see *Siebel Database Upgrade Guide*.

The installation process for Siebel Business Applications in an upgrade installation case requires multiple tasks that you perform in the following general sequence:

- 1** Before performing installation and configuration tasks, review all documented requirements. See [“Before You Install Siebel Business Applications” on page 29](#).
- 2** Create the network images for all applicable releases of Siebel CRM:
 - Create a network image for the current release, Siebel CRM version 16.0.
 - Create a network image for the latest Siebel Patchset release, where available.See [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)
- 3** For the Siebel Enterprise Server, install the current release. Then install the latest Siebel Patchset release. Install the following Siebel Enterprise Server components:
 - a** Siebel Gateway Name Server
 - b** Siebel Server
 - c** Database Configuration Utilities (install with the first Siebel Server)

See [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)

- 4 For Siebel Tools, install the current release. Then install the latest Siebel Patchset release.
NOTE: When you install the current release, Oracle Database XE is installed for use with the local database. You can optionally install the local database with Siebel Tools.
See [Chapter 7, "Installing Siebel Web Clients and Siebel Tools."](#)
- 5 Run Incremental Repository Merge.
See *Siebel Database Upgrade Guide*.
- 6 Activate the license keys.
See ["Activating License Keys" on page 124](#).
- 7 Configure the following Siebel Enterprise Server modules, in the sequence shown:
 - a Siebel Gateway Name Server
 - b Siebel Enterprise on the Siebel Gateway Name Server computerSee [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension,"](#) and [Chapter 6, "Additional Postinstallation and Configuration Tasks."](#)
- 8 Configure the Siebel Server, and perform the postinstallation tasks.
NOTE: You must install and configure a Siebel Server before you can configure the Siebel Web Server Extension (SWSE).
See [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension,"](#) and [Chapter 6, "Additional Postinstallation and Configuration Tasks."](#)
- 9 For the Siebel Web Server Extension (SWSE), install the current release. Then install the latest Siebel Patchset release.
See [Chapter 3, "Installing Siebel Enterprise Server Components and the Siebel Web Server Extension."](#)
- 10 Configure the Siebel Web Server Extension (SWSE) in the following sequence:
 - a Configure the logical profile for the SWSE on the Siebel Gateway Name Server computer.
 - b Apply the SWSE logical profile on the Web server computer where you installed SWSE.See [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension,"](#) and [Chapter 6, "Additional Postinstallation and Configuration Tasks."](#)
- 11 (Optional) If you are using Siebel load balancing, then you also generate the load balancing configuration file `lbconfig.txt` after installing and configuring participating Siebel Servers. Place the file in the SWSE logical profile directory, and reapply the logical profile.
For more information, see ["Process of Configuring Load Balancing for Siebel Business Applications" on page 140](#).

- 12** For Siebel Mobile Web Clients or Developer Web Clients, install the current release. Then install the latest Siebel Patchset release.

NOTE: When you install the current release, Oracle Database XE is installed for use with the local database or sample database, for Siebel Mobile Web Client. You can optionally install the sample database with this client.

See [Chapter 7, “Installing Siebel Web Clients and Siebel Tools.”](#)

- 13** Verify the installation of Siebel Business Applications modules.

See [Chapter 8, “Verifying and Troubleshooting Your Installation.”](#)

- 14** Upgrade the Siebel database.

See [“About Installing in Upgrade Environments” on page 302](#) and see *Siebel Database Upgrade Guide*.

- 15** Activate the license keys.

See [“Activating License Keys” on page 124](#).

- 16** (Optional) Install additional Siebel modules.

- 17** (Optional) Install and configure additional Siebel Server instances or additional Web server and SWSE instances if they are required for your deployment.

- 18** Install or upgrade any required third-party products.

See the Certifications tab on My Oracle Support. See also the *Siebel Business Applications Third-Party Bookshelf* in the product media pack on Oracle Software Delivery Cloud.

- 19** (Optional) Install Siebel Search software.

For specific guidelines and requirements about installing search software, see *Siebel Search Administration Guide*.

- 20** Perform any additional postinstallation tasks.

See [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#)

Related Topics

[“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)

[“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)” on page 36](#)

3

Installing Siebel Enterprise Server Components and the Siebel Web Server Extension

This chapter explains how to install the Siebel Enterprise Server and the Siebel Web Server Extension (SWSE). Use the Siebel Enterprise Server installer to install Siebel Gateway Name Server, Siebel Server, Siebel Database Configuration Utilities, and EAI Connector support files. Both new installations and migration installations are described. This chapter includes the following topics:

- [About Installing Siebel Business Applications on page 43](#)
- [Installing Siebel Enterprise Server on page 44](#)
- [Installing the Siebel Web Server Extension on page 51](#)
- [Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode on page 58](#)
- [Additional Tasks for Migration Installations on page 62](#)

About Installing Siebel Business Applications

Before installing Siebel Enterprise Server components or Siebel Web Server Extension, review the following and perform any necessary preinstallation tasks:

- [“Before You Install Siebel Business Applications” on page 29](#)
- [“Additional Tasks for Migration Installations” on page 62](#)
- [“Installation and Configuration Methods by Deployment Type” on page 325](#)
- [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications”](#)

After installation, you configure server modules using the Siebel Configuration Wizards. Perform configuration after installing the current release (Siebel CRM version 16.0) and installing the latest Siebel Patchset release, where available.

The migration installation tasks are a new type of patch installation provided for Siebel Enterprise Server and SWSE installers. You perform migration installations using the same installers (for the current release) that you use for new installations. A migration installation applies settings from your existing installation to a new installation. The existing Oracle home name, installation location, installation languages, server configuration data, and other settings are used for the new installation. Before the new installation is performed, the existing installation is moved to a backup location and can no longer be used. Additional requirements apply for migration installations.

You must perform any necessary manual migration tasks prior to performing migration installations for an existing deployment, as described in [“Additional Tasks for Migration Installations” on page 62](#). For example, you must remove the configuration for the SWSE before you install the current release as a migration installation. If you are using data encryption, then you must back up the key file.

Related Topics

[“Installation-Related Changes for Siebel Innovation Pack 2016” on page 25](#)

[Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

Installing Siebel Enterprise Server

This topic provides instructions for installing the Siebel Enterprise Server components, using the GUI installation method, as part of standard Siebel Business Applications deployment. The Siebel Enterprise Server installer verifies that you have the required software at the necessary version levels for installing Siebel Business Applications software.

NOTE: This topic includes instructions for installing Siebel Enterprise Server as a new installation or as a migration installation. For an existing installation, you perform a migration installation instead of a new installation.

If you are installing from a remote computer, or using X-connectivity software to access a UNIX computer from a Windows computer, then see also [“Installing Siebel Business Applications from a Remote Server Computer” on page 317](#).

This topic contains the following information:

■ [“Installing Siebel Enterprise Server as a New Installation” on page 44](#)

■ [“Installing Siebel Enterprise Server as a Migration Installation” on page 48](#)

Related Topics

[“About Installing Siebel Business Applications” on page 43](#)

[“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#)

[Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[Chapter 6, “Additional Postinstallation and Configuration Tasks”](#)

[“Verifying Installation for the Siebel Enterprise Server” on page 213](#)

[Chapter 10, “Uninstalling Siebel Business Applications”](#)

[Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications”](#)

[“Requirements for Installing Oracle LDAP Client” on page 331](#)

Related Books

Siebel Security Guide

Siebel Global Deployment Guide

Installing Siebel Enterprise Server as a New Installation

Use the following procedure to install Siebel Enterprise Server as a new installation for Siebel CRM version 16.0. This topic is part of [“Installing Siebel Enterprise Server” on page 44](#).

NOTE: Use this procedure only when Siebel Enterprise Server is not already installed. Where an earlier version of Siebel Enterprise Server is already installed, you perform a migration installation instead, as described in “Installing Siebel Enterprise Server as a Migration Installation” on page 48.

This task is a step in:

- “Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33
- “Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case (Existing Database)” on page 38

To install Siebel Enterprise Server as a new installation

- 1 Review “About Installing Siebel Business Applications” on page 43.

For example, if you are installing a Siebel Server that will communicate with an existing installation of Siebel Gateway Name Server on another computer, then make sure that the Siebel Gateway Name Server is running.

- 2 (AIX only) Verify that the login ID performing the installation has permission to run `sl i bcl ean` by asking the administrator to change the permission as follows:

```
chmod 6555 /usr/sbi n/sl i bcl ean
```

- 3 (AIX only) Execute the following command:

```
/usr/sbi n/sl i bcl ean
```

- 4 Log on to the server, using the Siebel service owner account that you recorded in the copy that you made earlier of the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

- 5 Open a new shell, and navigate to the Siebel image location for the current release. Then navigate to the directory where the installer is located. For example, for Oracle Solaris, navigate to `Siebel_Image/Solaris/Server/Siebel_Enterprise_Server/Disk1/instal`.

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as `/Siebel_Instal_Image/16.0.0.0`.

- 6 Verify the permissions to the directory into which you will install the Siebel Enterprise Server. You must have write and execute permission.

- 7 To start the Siebel Enterprise Server installer, enter the following command:

```
./runInstalIer -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see “Requirements Specific to UNIX or Linux Operating Systems” on page 335.
- *inventory_location* is the full path of the `oralnst.loc` file (for example, `/export/home/oralnst.loc`), which points to the OUI inventory location. Use the `-invPtrLoc` option if you want to specify an inventory pointer file other than the default.

Optionally, for an unattended installation, you can append the flags described in [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode”](#) on page 58.

The Siebel Enterprise Server installer displays the Welcome screen.

8 Click Next.

The Oracle Configuration Manager screen appears, which prompts for email contact information.

9 Enter your My Oracle Support credentials and click Next.

Oracle Configuration Manager software is installed on the target computer. For more information, see [“About Oracle Configuration Manager”](#) on page 303.

The Select Installation Task screen appears. The New Installation task is selected by default.

10 To perform a new installation of Siebel Enterprise Server software where no existing installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x is present, click Next.

The New Installation Details screen appears.

11 Enter a name for your installation and specify the installation location, and then click Next. (Note the installation name and location for future reference.) Note the following:

- The default installation name (Oracle Home Name) is SES_HOME. If you have an existing installation, then you must specify a new name for the new installation.
- The default installation path (Oracle Home Location) for a new installation is /siebel/16.0.0.0/ses or a similar value. Accept the default path or specify a different fully qualified path by typing it directly or by clicking Browse. If you have an existing installation, then you must specify a new path for the new installation.

For more information about Oracle home and installation path requirements, see [“File and Directory Naming Conventions”](#) on page 319.

The Select Siebel Enterprise Server Components screen appears.

12 Choose the Siebel Enterprise Server components that you want to install. Choose one or more of the following options, and click Next:

- Gateway Name Server
- Siebel Server
- Database Configuration Utilities
- EAI Connector

Install all of the Siebel Enterprise Server components that you might need on this server computer.

You can install the Database Configuration Utilities only with a Siebel Server. In other words, you cannot install Database Configuration Utilities unless you are also installing Siebel Server.

For more information about different ways of deploying Siebel Enterprise Server components, see [“Installation and Configuration Methods by Deployment Type”](#) on page 325.

NOTE: You cannot use this installer again later to add components to this installation.

The Enterprise Security Authentication Profile screen appears.

- 13** If you plan to use Lightweight Directory Access Protocol (LDAP) for authentication with a database other than Oracle Database, then select the Lightweight Directory Access Protocol (LDAP) Client check box, and click Next.

NOTE: Do not install Oracle LDAP Client through the Siebel Enterprise Server installer if you are using Oracle Database.

For information about requirements for installing the Oracle LDAP Client, see [“Requirements for Installing Oracle LDAP Client” on page 331](#). See also *Siebel Security Guide*.

The Select Languages screen appears. All of the languages that were included in the Siebel network image for Siebel Enterprise Server are available for selection.

- 14** Select the languages that you want to install, and click Next. You must select at least one language in order to proceed.

To select a language, you click the name of the language in the Available box and then use the arrow controls to move it into the Selected box.

You specify languages to install in order to run Siebel Business Applications using these languages. The files that are specific to the languages chosen in this step will be copied to your computer.

If you install the software with a single language, then this language serves as the primary (base) language, in which your server messages and log files will display. If you install the software with multiple languages, then when you configure the Siebel Server you can specify which installed languages to deploy and which installed language is the primary language.

NOTE: You can add languages to an existing installation by running the installer in unattended mode (silent mode). For more information about installing and deploying languages, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

- 15** In the Summary screen, review the information presented.

This screen displays the location where the Siebel Enterprise Server software will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the Siebel Enterprise Server software, click Install. You can also click Install after saving a response file.
- To save a response file to use for an unattended installation later, click Save Response File, and then save the file from the dialog box that appears. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#).

The Installation Progress screen appears. The Siebel Enterprise Server software is installed into the directory that you specified in [Step 11 on page 46](#).

- 16** When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results.

17 To close the installer, click Close.

The Siebel Enterprise Server installation is now finished.

18 After installing the Siebel Enterprise Server software:

- Verify the Siebel Enterprise Server installation, as described in [“Verifying Installation for the Siebel Enterprise Server” on page 213](#).
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Start the Siebel Enterprise Configuration Wizard so that you can configure the components that you installed, as described in [Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#)

19 Repeat this procedure on each computer where you are installing the Siebel Enterprise Server software.

Installing Siebel Enterprise Server as a Migration Installation

Use the following procedure to install Siebel Enterprise Server as a migration installation for Siebel CRM version 16.0. Migration installation is a type of patch installation.

NOTE: Use this procedure only when an earlier version of Siebel Enterprise Server is already installed (Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x). Otherwise, you must follow the steps in [“Installing Siebel Enterprise Server as a New Installation” on page 44](#) instead.

During a migration installation, the original Siebel Enterprise Server installation directory is renamed from *Original Name* to *Original Name_pre16.0*. For example, if the original installation directory name was *ses*, then this directory is renamed to *ses_pre16.0*. The new Siebel Enterprise Server installation directory is named *Original Name*, such as *ses*. Retain the original installation directory, in case you choose to perform a rollback uninstallation later. For more information, see [“Rolling Back the Siebel Enterprise Server” on page 285](#).

NOTE: Before performing a migration installation, review the information in [“About Installing Siebel Business Applications” on page 43](#).

This topic is part of [“Installing Siebel Enterprise Server” on page 44](#).

This task is a step in [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)” on page 36](#).

To install Siebel Enterprise Server as a migration installation

1 Review [“About Installing Siebel Business Applications” on page 43](#).

- 2 Perform any premigration tasks that might be necessary, as noted in [“Additional Tasks for Migration Installations”](#) on page 62.

CAUTION: For example, you must remove the configuration for the SWSE before you install the current release as a migration installation. If you are using data encryption, then you must back up the original key file.

If you are installing a Siebel Server that will communicate with an existing installation of Siebel Gateway Name Server on another computer, then make sure that the Siebel Gateway Name Server is running on that computer.

- 3 (Optional) Shut down the Siebel CRM modules to be updated on this computer.

For example, stop the services for the Siebel Gateway Name Server, Siebel Server, and Oracle Configuration Manager. Also shut down any running instances of the Siebel Server Manager (srvrmgr). If you do not shut down the Siebel Gateway Name Server, Siebel Server, and Oracle Configuration Manager modules, then the installer shuts them down.

NOTE: Also stop the service for Siebel Management Agent, if it is running. This module was installed with Siebel Server for Siebel CRM version 8.1.1 or version 8.2.2 through version 8.1.1.11 or version 8.2.2.4. For Siebel Innovation Pack 2014 and later, Siebel Management Agent and Siebel Management Server are no longer provided or supported.

- 4 (AIX only) Verify that the login ID performing the installation has permission to run `sl i bcl ean` by asking the administrator to change the permission as follows:

```
chmod 6555 /usr/sbin/sl i bcl ean
```

- 5 (AIX only) Execute the following command:

```
/usr/sbin/sl i bcl ean
```

- 6 Log on to the server, using the Siebel service owner account that you recorded in the copy that you made earlier of the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

- 7 Open a new shell, and navigate to the Siebel image location for the current release. Then navigate to the directory where the installer is located. For example, for Oracle Solaris, navigate to `Siebel_Image/Solaris/Server/Siebel_Enterprise_Server/Disk1/install`.

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as `/Siebel_Install_Image/16.0.0.0`.

- 8 Verify the permissions to the directory into which you will install the Siebel Enterprise Server. You must have write and execute permission.

- 9 To start the Siebel Enterprise Server installer, enter the following command:

```
./runinstaller -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems”](#) on page 335.

Installing Siebel Enterprise Server Components and the Siebel Web Server Extension ■ Installing Siebel Enterprise Server

- *inventory_location* is the full path of the oraInst.loc file (for example, /export/home/oraInst.loc), which points to the OUI inventory location. Use the -invPtrLoc option if you want to specify an inventory pointer file other than the default.

Optionally, for an unattended installation, you can append the flags described in [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#).

The Siebel Enterprise Server installer displays the Welcome screen.

10 Click Next.

The Oracle Configuration Manager screen appears, which prompts for email contact information.

11 Enter your My Oracle Support credentials and click Next.

Oracle Configuration Manager software is installed on the target computer. For more information, see [“About Oracle Configuration Manager” on page 303](#).

The Select Installation Task screen appears.

12 To perform a migration installation of the Siebel Enterprise Server software where an existing prior installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x is present, choose Migration Installation, and click Next.

The Installation Migration Details screen appears.

13 Confirm or select the name and location of your existing installation, and then click Next. Do the following:

- Confirm the existing installation name, or select it from the drop-down list.
- Confirm the existing installation location, or select it from the drop-down list.

For more information about Oracle home and installation path requirements, see [“File and Directory Naming Conventions” on page 319](#).

14 In the Summary screen, review the information presented.

This screen displays the location where the Siebel Enterprise Server software will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the Siebel Enterprise Server software, click Install. You can also click Install after saving a response file.
- To save a response file to use for an unattended installation later, click Save Response File, and then save the file from the dialog box that appears. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#).

The Installation Progress screen appears. The Siebel Enterprise Server software is installed into the directory that you specified in [Step 13 on page 50](#).

15 When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results. This screen also shows the new location of the original installation, which the installer moved before it performed the new installation.

- 16 Review the report that is generated about any conflicts between your customized files and the files that are delivered by the Siebel Enterprise Server installer. As needed, copy any of your customized files from the original installation to the new migrated installation.

Conflicts are identified in the file `overwrittenfiles_timestamp.log`, which is created in the `ORACLE_HOME/cfgtoollogs/oui` directory (in the new Siebel Enterprise Server installation).

- 17 To close the installer, click Close.

The Siebel Enterprise Server installation is now finished.

After the migration process is complete, then the installer starts the services for the Siebel Gateway Name Server, Siebel Server, and Oracle Configuration Manager. Note that the software that runs is part of the new installation you are migrating to, not part of the original installation.

- 18 After installing the Siebel Enterprise Server software:

- Verify the Siebel Enterprise Server installation, as described in [“Verifying Installation for the Siebel Enterprise Server”](#) on page 213.
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#) See also [“Additional Tasks for Migration Installations”](#) on page 62.

- 19 Repeat this procedure on each computer with a Siebel Enterprise Server installation to be migrated.

Installing the Siebel Web Server Extension

This topic provides instructions for installing the Siebel Web Server Extension (SWSE) on your Web server computer, using the GUI installation method, as part of standard Siebel Business Applications deployment.

NOTE: This topic includes instructions for installing the SWSE as a new installation or as a migration installation. For an existing installation, you perform a migration installation instead of a new installation.

The installation program sets up the Siebel directory structures and copies the required files and components to the target location on the Web server.

If you are installing from a remote computer, or using X-connectivity software to access a UNIX computer from a Windows computer, then see also [“Installing Siebel Business Applications from a Remote Server Computer”](#) on page 317.

The SWSE installer verifies that you have the required software at the necessary version levels for installing Siebel Business Applications software.

This topic contains the following information:

- [“Installing the Siebel Web Server Extension as a New Installation” on page 52](#)
- [“Installing the Siebel Web Server Extension as a Migration Installation” on page 55](#)

Related Topics

- [“About Installing Siebel Business Applications” on page 43](#)
- [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#)
- [Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)
- [Chapter 6, “Additional Postinstallation and Configuration Tasks”](#)
- [“Verifying Installation for the Siebel Web Server Extension” on page 222](#)
- [Chapter 10, “Uninstalling Siebel Business Applications”](#)
- [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications”](#)

Related Books

- Siebel Security Guide*
- Siebel Global Deployment Guide*

Installing the Siebel Web Server Extension as a New Installation

Use the following procedure to install the Siebel Web Server Extension (SWSE) as a new installation for Siebel CRM version 16.0.

NOTE: Use this procedure only when SWSE is not already installed. Where an earlier version of SWSE is already installed, you perform a migration installation instead, as described in [“Installing the Siebel Web Server Extension as a Migration Installation” on page 55](#).

This topic is part of [“Installing the Siebel Web Server Extension” on page 51](#).

This task is a step in:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)
- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)

To install the SWSE as a new installation

- 1 Review [“About Installing Siebel Business Applications” on page 43](#).
- 2 Install or create an instance of the Web server, and record the port number at which it is listening. For more information, see [“Installing the Web Server” on page 341](#).

- 3 (AIX only) Verify that the login ID performing the installation has permission to run `sl i bcl ean` by asking the administrator to change the permission as follows:

```
chmod 6555 /usr/sbin/sl i bcl ean
```

- 4 (AIX only) Execute the following command:

```
/usr/sbin/sl i bcl ean
```

- 5 Open a new shell and navigate to the Siebel image location for the current release. Then navigate to the directory where the installer is located. For example, for Oracle Solaris, navigate to `Siebel_Image/Solaris/Server/Siebel_Web_Server_Extension/Disk1/install`.

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as `/Siebel_Install_Image/16.0.0.0`.

- 6 Verify the permissions to the directory into which you will install the SWSE. You must have read, write, and execute permission.

- 7 To start the SWSE installer, enter the following command:

```
./runinstaller -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see ["Requirements Specific to UNIX or Linux Operating Systems"](#) on page 335.
- *inventory_location* is the full path of the `oralnst.loc` file (for example, `/export/home/oralnst.loc`), which points to the OUI inventory location. Use the `-invPtrLoc` option if you want to specify an inventory pointer file other than the default.

The SWSE installer displays the Welcome screen.

- 8 Click Next.

The Oracle Configuration Manager screen appears, which prompts for email contact information.

- 9 Enter your My Oracle Support credentials and click Next.

Oracle Configuration Manager software is installed on the target computer. For more information, see ["About Oracle Configuration Manager"](#) on page 303.

The Select Installation Task screen appears. The New Installation task is selected by default.

- 10 To perform a new installation of Siebel Web Server Extension software where no existing installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x is present, click Next.

The New Installation Details screen appears.

11 Enter a name for your installation and specify the installation location, and then click Next. (Note the installation name and location for future reference.) Note the following:

- The default installation name (Oracle Home Name) is EAPPWEB_HOME. If you have an existing installation, then you must specify a new name for the new installation.
- The default installation path (Oracle Home Location) for a new installation is `/siebel/16.0.0.0/sweapp` or a similar value. Accept the default path or specify a different fully qualified path by typing it directly or by clicking Browse. If you have an existing installation, then you must specify a new path for the new installation.

For more information about Oracle home and installation path requirements, see ["File and Directory Naming Conventions" on page 319](#).

CAUTION: Do not specify the Web server installation directory as the directory in which to install SWSE. Doing this results in configuration errors later.

The Select Languages screen appears. All of the languages that were included in the Siebel network image for SWSE are available for selection.

12 Select the languages that you want to install, and click Next. You must select at least one language in order to proceed.

To select a language, you click the name of the language in the Available box and then use the arrow controls to move it into the Selected box.

You specify languages to install in order to run applications using these languages. The files that are specific to the languages chosen in this step will be copied to your computer.

If you install the software with a single language, then this language serves as the primary (base) language, in which your server messages and log files will display. If you install the software with multiple languages, then when you configure the SWSE you can specify which installed languages to deploy and which installed language is the primary language.

You must install and deploy on the SWSE the superset of all of the languages required by the Application Object Managers that connect to it. It is strongly recommended that you install and deploy, or at least install, all of the languages that are installed in the Siebel Enterprise Server.

NOTE: You can add languages to an existing installation by running the installer in unattended mode (silent mode). For more information about installing and deploying languages, see ["Installing and Deploying Siebel Business Applications with Multiple Languages" on page 150](#).

For a new installation, the Cryptographic Seed screen appears.

13 (New installation only) Enter the cryptographic seed that you will use for your SWSE installation.

The cryptographic seed is a random number (random seed) that is used in generating a random cryptographic key for encrypting session IDs.

14 In the Summary screen, review the information presented.

This screen displays the location where the SWSE software will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the SWSE software, click Install. You can also click Install after saving a response file.

- To save a response file to use for an unattended installation later, click Save Response File, and then save the file from the dialog box that appears. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58.](#)

The Installation Progress screen appears. The SWSE software is installed into the directory that you specified in [Step 11 on page 54.](#)

- 15** When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results.

- 16** To close the installer, click Close.

The SWSE installation is now finished.

- 17** After installing the SWSE software:

- Verify the SWSE installation, as described in [“Verifying Installation for the Siebel Web Server Extension” on page 222.](#)
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Configure the SWSE logical profile and then apply it to the SWSE, as described in [“Process of Configuring the Siebel Web Server Extension” on page 93.](#) You must have already configured the Siebel Enterprise Server components.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#)

- 18** Repeat this procedure on each computer where you are installing the SWSE software.

Installing the Siebel Web Server Extension as a Migration Installation

Use the following procedure to install the Siebel Web Server Extension (SWSE) as a migration installation for Siebel CRM version 16.0. Migration installation is a type of patch installation.

NOTE: Use this procedure only when an earlier version of SWSE is already installed (Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x). Otherwise, you must follow the steps in [“Installing the Siebel Web Server Extension as a New Installation” on page 52](#) instead.

During a migration installation, the original SWSE installation directory is renamed from *Original Name* to *Original Name_pre16.0*. For example, if the original installation directory name was sweapp, then this directory is renamed to sweapp_pre16.0. The new SWSE installation directory is named *Original Name*, such as sweapp. Retain the original installation directory, in case you choose to perform a rollback uninstallation later. For more information, see [“Rolling Back the Siebel Web Server Extension” on page 289.](#)

NOTE: Before performing a migration installation, review the information in [“About Installing Siebel Business Applications” on page 43.](#)

This topic is part of [“Installing the Siebel Web Server Extension”](#) on page 51.

This task is a step in [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)”](#) on page 36.

To install the SWSE as a migration installation

- 1 Review [“About Installing Siebel Business Applications”](#) on page 43.
- 2 Perform any premigration tasks that might be necessary, as noted in [“Additional Tasks for Migration Installations”](#) on page 62.
CAUTION: For example, you must remove the configuration for the SWSE before you install the current release as a migration installation.
- 3 (Optional) Stop the Oracle Configuration Manager service for the existing installation of SWSE. If you do not shut down this service, then the installer shuts it down.
- 4 Stop the Web server by running one of the following commands:
 - `ompmctl stopall` – for Oracle HTTP Server (on supported Linux operating systems)
 - `stopapa` – for other Apache-based Web servers (on supported operating systems)
 - `stop` – for Oracle iPlanet Web Server (on Oracle Solaris)
- 5 (AIX only) Verify that the login ID performing the installation has permission to run `sl i bcl ean` by asking the administrator to change the permission as follows:

```
chmod 6555 /usr/sbin/sl i bcl ean
```
- 6 (AIX only) Execute the following command:

```
/usr/sbin/sl i bcl ean
```
- 7 Open a new shell and navigate to the Siebel image location for the current release. Then navigate to the directory where the installer is located. For example, for Oracle Solaris, navigate to `Siebel_Image/Solaris/Server/Siebel_Web_Server_Extension/Disk1/install`.
In this path, `Siebel_Image` is the directory for your version-specific Siebel network image, such as `/Siebel_Install_Image/16.0.0.0`.
- 8 Verify the permissions to the directory into which you will install the SWSE. You must have read, write, and execute permission.
- 9 To start the SWSE installer, enter the following command:

```
./runInstaller -jreLoc jre_location -invPtrLoc inventory_location
```

where:
 - `jre_location` is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems”](#) on page 335.

- *inventory_location* is the full path of the oraInst.loc file (for example, /export/home/oraInst.loc), which points to the OUI inventory location. Use the -invPtrLoc option if you want to specify an inventory pointer file other than the default.

The SWSE installer displays the Welcome screen.

10 Click Next.

The Oracle Configuration Manager screen appears, which prompts for email contact information.

11 Enter your My Oracle Support credentials and click Next.

Oracle Configuration Manager software is installed on the target computer. For more information, see [“About Oracle Configuration Manager” on page 303](#).

The Select Installation Task screen appears.

12 To perform a migration installation of the SWSE software where an existing prior installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x is present, choose Migration Installation, and click Next.

The Installation Migration Details screen appears.

13 Confirm or select the name and location of your existing installation, and then click Next. Do the following:

- Confirm the existing installation name, or select it from the drop-down list.
- Confirm the existing installation location, or select it from the drop-down list.

For more information about Oracle home and installation path requirements, see [“File and Directory Naming Conventions” on page 319](#).

14 In the Summary screen, review the information presented.

This screen displays the location where the SWSE software will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the SWSE software, click Install. You can also click Install after saving a response file.
- To save a response file to use for an unattended installation later, click Save Response File, and then save the file from the dialog box that appears. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#).

The Installation Progress screen appears. The SWSE software is installed into the directory that you specified in [Step 13 on page 57](#).

15 When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results. This screen also shows the new location of the original installation, which the installer moved before it performed the new installation.

- 16** Review the report that is generated about any conflicts between your customized files and the files that are delivered by the SWSE installer. As needed, copy any of your customized files from the original installation to the new migrated installation.

Conflicts are identified in the file `overwrittenfiles_timestamp.log`, which is created in the `ORACLE_HOME/cfgtoollogs/oui` directory (in the new SWSE installation).

- 17** To close the installer, click Close.

The SWSE installation is now finished.

After the migration process is complete, then the installer restarts the service for the Oracle Configuration Manager. Note that the software that runs is part of the new installation you are migrating to, not part of the original installation.

- 18** Restart the Web server.

After the migration process is complete, then the installer starts the services for the Oracle Configuration Manager. Note that the software that runs is part of the new installation you are migrating to, not part of the original installation.

- 19** After installing the SWSE software:

- Verify the SWSE installation, as described in [“Verifying Installation for the Siebel Enterprise Server” on page 213](#).
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#) See also [“Additional Tasks for Migration Installations” on page 62](#).

- 20** Repeat this procedure on each computer with an SWSE installation to be migrated.

Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode

The installer programs for Siebel Enterprise Server and Siebel Web Server Extension support an optional *unattended installation*, which is an installation that has been preconfigured to require no user input when the installation program runs. You can save a response file in a regular installer session. Then you can run the installer at the command line with certain flags appended to the installer command to execute the response file. Together, these tasks constitute installing in unattended mode.

You can perform unattended installations for better performance when installing software on multiple server computers. Or, you might perform unattended installations if user input during an installation is not allowed in your environment, as might be the case in some secure environments. An unattended installation prepackages all of the required parameters so that you only have to execute a command to perform the installation.

You can use unattended mode to perform a new installation or migration installation of the current release, or to add languages to an existing installation of the current release. To add languages, you must use this method.

CAUTION: Unattended installations provide no direct feedback or error notification. Therefore, you must test your settings in a development environment before system-wide deployment in a production environment. It is strongly recommended that you become thoroughly familiar with GUI installation and configuration for any Siebel modules for which you intend to perform unattended installation or configuration.

This topic contains the following information:

- [“Guidelines for Installing Servers in Unattended Mode” on page 59](#)
- [“Saving an Installation Response File” on page 60](#)
- [“Editing an Oracle-Provided Installation Response File” on page 61](#)
- [“Performing an Installation in Unattended Mode” on page 61](#)

Related Topics

- [“About Installing Siebel Business Applications” on page 43](#)
- [“Installing Siebel Enterprise Server” on page 44](#)
- [“Installing the Siebel Web Server Extension” on page 51](#)
- [“About Configuring Siebel Business Applications” on page 69](#)
- [“Installing and Deploying Additional Languages” on page 158](#)
- [“Verifying Installation for the Siebel Enterprise Server” on page 213](#)
- [“Verifying Installation for the Siebel Web Server Extension” on page 222](#)
- [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications”](#)

Guidelines for Installing Servers in Unattended Mode

Review the following guidelines for installing Siebel Enterprise Server or Siebel Web Server Extension in unattended mode:

- **Keep track of the response file results.** Because the unattended installation session is controlled by the response file, you must keep careful track of the result each response file will yield when you perform an unattended installation.

For example, depending on your selections when you generated a response file for Siebel Enterprise Server, the unattended installation performed with this file might install any or all of the Siebel Enterprise Server components: Siebel Gateway Name Server, Siebel Server, Siebel Database Configuration Utilities, or EAI Connectors.

- **Create the response file on a computer similar to the target computer.** When you run the installer as described in [“Saving an Installation Response File” on page 60](#), installer validations are done as if you were performing a real installation. It is strongly recommended that you run the installer on a computer that has similar resources and configuration settings as the target computer on which the installation will be performed, as described in [“Performing an Installation in Unattended Mode” on page 61](#). Unattended installations must meet all of the documented requirements, including those described in [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications.”](#)
- **Validate the installation.** Validate each installation after it has completed, as described in [“Verifying Installation for the Siebel Enterprise Server” on page 213](#) and [“Verifying Installation for the Siebel Web Server Extension” on page 222](#).

To install Siebel Enterprise Server components or Siebel Web Server Extension and the specified Siebel language packs using unattended mode, perform the following tasks:

- [“Saving an Installation Response File” on page 60](#)
- [“Editing an Oracle-Provided Installation Response File” on page 61](#)
- [“Performing an Installation in Unattended Mode” on page 61](#)

Saving an Installation Response File

Perform the following steps to save an installation response file to be used in an unattended installation of Siebel Enterprise Server or SWSE.

NOTE: If you are adding languages to an existing installation of the current release, then do not use this procedure. Instead, follow the procedure in [“Editing an Oracle-Provided Installation Response File” on page 61](#).

To save an installation response file

- 1 Navigate to the Siebel image location where the installer is located.
- 2 Start the installer for Siebel Enterprise Server or Siebel Web Server Extension (SWSE).
For information about starting these installers, see [“Installing Siebel Enterprise Server” on page 44](#) and [“Installing the Siebel Web Server Extension” on page 51](#).
- 3 Provide input to the installer wizard, as in a normal GUI installation.
- 4 In the Summary screen, click Save Response File.
- 5 Specify the location of the response file, for example, `/usr/tmp/sesinstall.rsp`, and save the file.

A response file is generated that includes data that is derived from the input that you made during the installer session.

- 6 After the response file is saved, click Cancel.

The installer session ends.

In addition to saving the response file at the location that you specified at the command line, the installer creates the Siebel installation directory at the location that you specified in the installer session (for example, `/usr/tmp/sesinstall.rsp`). Although the Siebel module is not installed (because you clicked Cancel), this directory contains a subdirectory called `inventory`, which includes information about the product inventory.

See [“Performing an Installation in Unattended Mode” on page 61](#) for information about performing a Siebel Enterprise Server or SWSE installation in unattended mode, using the response file that you just generated.

Editing an Oracle-Provided Installation Response File

If you are adding languages to an existing Siebel Enterprise Server or SWSE installation, then you must edit an Oracle-provided installation response file instead of saving a response file from the installer. For detailed information about the task of adding languages, see [“Installing and Deploying Additional Languages” on page 158](#).

Performing an Installation in Unattended Mode

Perform the following steps to perform an unattended installation of Siebel Enterprise Server or Siebel Web Server Extension.

First, you must save an installation response file as described in [“Saving an Installation Response File” on page 60](#) or prepare an installation response file for adding languages as described in [“Editing an Oracle-Provided Installation Response File” on page 61](#). Then you run the installer command as shown in the following procedure. For detailed information about the task of adding languages, see [“Installing and Deploying Additional Languages” on page 158](#).

To perform an installation in unattended mode

- 1 (For add language operations only) Uninstall any Siebel Patchset release that you have installed on top of the current release, for each installed Siebel module for which you are adding languages.
- 2 Navigate to the Siebel image location where the installer is located.
- 3 Place the response file that you previously generated or edited into the correct Siebel image directory for the Siebel module (where the installer program is located), so that the file can be read when you run the installer.

NOTE: Always back up any existing valid response file before replacing it with a new file.

- 4 Open a new shell.

- 5 Run a command like the following to start the Siebel Enterprise Server or Siebel Web Server Extension installer:

```
./runInstaller -silent -responseFile path_to_installation_response_file -  
invPtrLoc inventory_location
```

where:

- *path_to_installation_response_file* is the full path and name of a response file to be executed (for example, /usr/tmp/sesinstall.rsp).
- *inventory_location* is the full path of the oralnst.loc file (for example, /export/home/oralnst.loc), which points to the OUI inventory location. Use the -invPtrLoc option if you want to specify an inventory pointer file other than the default.

This command runs the installer in unattended mode and specifies the location of the response file to be executed. No installer screens are displayed, and no further user input is prompted for after the installer starts. The installation result depends on the content of the specified response file.

- 6 Validate the installation after it has completed.

For more information, see [“Verifying Installation for the Siebel Enterprise Server” on page 213](#) and [“Verifying Installation for the Siebel Web Server Extension” on page 222](#).

- 7 (For add language operations only) Reinstall any previously installed Siebel Patchset release that you uninstalled in [Step 1 on page 61](#). Then validate the installation again.

Additional Tasks for Migration Installations

Certain product changes have been made in Siebel Innovation Pack 2016 that can affect migration installations for existing customers. All customers performing migration installations must review the information in this topic before installing, to make sure that they can successfully migrate all custom files and settings to the current release and to avoid any of the issues described here.

These product changes affect some of the files and directories of installations of Siebel Server, Siebel Web Server Extension (SWSE), Siebel Web Client, and Siebel Tools. Also affected are some of the configuration settings for these modules. Many of the product changes described in this topic were made as part of consolidating support for Siebel Open UI and desupporting high interactivity and standard interactivity.

This topic describes specific product changes, describes how these changes might affect migration installations, and provides steps you can take to avoid any issues and complete the migration successfully. Some of the tasks you perform before installation, but most of them you would perform after installation. Additional migration considerations are also provided.

Migration Issues and Solutions in Siebel Innovation Pack 2016

Many product and support changes for Siebel Innovation Pack 2016 make it necessary for you to perform certain migration-related tasks. Issues and possible solutions are provided for some items. Review all items before proceeding. This list is not comprehensive. Many of the tasks are interrelated and are not necessarily presented in the order in which you would perform them. Various dependencies apply that might not be explained.

- **Synchronize local databases before migrating or doing other premigration tasks.** Siebel Mobile Web Client users might need to synchronize their local database changes with the server, through Siebel Remote, as described in *Siebel Remote and Replication Manager Administration Guide*. Or, Siebel Tools developer users might need to check in any changes made to objects in the existing local database, as described in *Using Siebel Tools*.

- **Remove the Siebel Web Server Extension (SWSE) configuration before migrating, and then reconfigure SWSE after migrating.** In Siebel Innovation Pack 2016, the virtual directories, which formerly mapped to `publ i c / l a n g _ c o d e` (such as ENU), now map directly to `publ i c`. However, the existing virtual directories on the Web server that were configured for a prior release are not updated automatically when you migrate the SWSE. In order to correct this problem after the migration installation, you must reconfigure the SWSE. For more information, see [“About Configuring Siebel Business Applications” on page 69](#).

CAUTION: You must remove the configuration for the SWSE before you install the current release as a migration installation.

- **When data encryption is enabled, you must back up the original key file (keyfile.bin) before performing a migration installation for Siebel Enterprise Server, and then copy it back after migrating.** For more information, see [“General Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

CAUTION: If data migration is enabled, then the migration installation overwrites your existing key file. If you have not backed up your existing key file and copied it back after the migration, then the encrypted columns will be inaccessible after the migration.

- **Preserve premigration installation.** You might want to preserve your premigration installations, in case you need to roll back to your prior version after doing the migration installations and making the manual migration changes described here. It is recommended that you manage your migration tasks to make sure that you have not permanently deleted, moved, or renamed files or directories in these installations. Also keep track of changed requirements, so that you can restore the overall environment if you roll back. Additional requirements apply for rollbacks. For more information, see [Chapter 10, “Uninstalling Siebel Business Applications.”](#)
- **Move files and directories: The webmaster directory has been removed.** On the Siebel Server, the `SI EBSRVR_ROOT/webmaster` directory has been removed. The files it contained are now located in the `SWSE_ROOT/publ i c` directory on the SWSE, although several subdirectories have been reorganized. This change involves certain types of files that customers often create or modify, and so it changes where you would access and update such files.

The Siebel Enterprise Security Token, formerly used to update files from `SI EBSRVR_ROOT/webmaster` on the Siebel Server to `SWSE_ROOT/publ i c` on the SWSE, is no longer applicable.

Issue. Custom files located in *SI EBSRVR_ROOT/webmaster* directory cannot automatically migrate from the Siebel Server to the SWSE during migration installation. Where custom files exist, the *SI EBSRVR_ROOT/webmaster* directory and applicable subdirectories automatically migrate instead to the new installation of Siebel Server, where they are not used.

Solution. Customers can migrate their custom files manually from the Siebel Server to the SWSE using one of two overall approaches.

- Before doing the migration installations, manually update the SWSE from the Siebel Server, using the Siebel Enterprise Security Token, as documented for prior releases, and perform any other premigration tasks. Reorganize the files and directories in *SWSE_ROOT/public* on the migrated SWSE to incorporate your custom files and to conform to the changes described in this topic. Then perform the migration installations. Finally, remove all extraneous files and directories in *SWSE_ROOT/public* on the migrated SWSE and remove *SI EBSRVR_ROOT/webmaster* on the migrated Siebel Server. Details of reorganizing files and folders are provided after this item.
- Alternatively, perform any premigration tasks, perform the migration installations, and then manually copy the relevant files and directories from *SI EBSRVR_ROOT/webmaster* to the migrated SWSE. Details of reorganizing files and folders are provided after this item.
- **Move files and directories: Files and directories have changed in the public directory on SWSE.** On the SWSE, in the *SWSE_ROOT/public* directory, changes affect subdirectories and files as follows. Note that the virtual directories, which formerly mapped to *public/lang_code* (such as ENU), map directly to *public* for Siebel Innovation Pack 2016. Because of this change, you must also reconfigure the SWSE, as noted earlier in this topic.
 - *lang_code/build_number*, where *lang_code* is an installed Siebel language (such as ENU) and *build_number* is one of the build numbers for the installed Siebel software. The *appl et* subdirectory has been removed. The *scri pts* subdirectory has moved to *SWSE_ROOT/public*. And the *build_number* directory has been removed.
 - *lang_code/files*. This directory has moved to *SWSE_ROOT/public*.
 - *lang_code/fonts*. This directory has moved to *SWSE_ROOT/public*.
 - *lang_code/html templ ates*. This directory has moved to *SWSE_ROOT/public*.
 - *lang_code/i mages*. This directory has moved to *SWSE_ROOT/public*.
 - *lang_code/webedi tor*. This directory has been removed.
 - *lang_code/default. htm*. This file has moved to *SWSE_ROOT/public*.
 - *lang_code/bl ank. htm*. This file has moved to *SWSE_ROOT/public*.
 - *lang_code/wai t. htm*. This file has been removed.
 - *lang_code/*. pcd*. These files have been removed.
 - *lang_code/*. mani fest*. The variable string `%BuildNumber%` has been removed from the *.tmanifest* files, from which the *.manifest* files are generated.

Issue. After a migration installation of SWSE, duplicate directories will exist, because some of the directories provided in Siebel Innovation Pack 2016 will be in new locations relative to those seen for the files and directories that migrated from the prior release. As described earlier, if you did not manually update the files from the Siebel Server to *SWSE_ROOT/public* before doing the migration installation, then the migrated custom files might not represent the latest files. Your custom files will be in the wrong locations and cannot be used until you have moved them to the new locations.

Solution. Whichever method you use, you must reorganize the files and directories in *SWSE_ROOT/public* on the migrated SWSE installation to incorporate your custom files and to conform to the changes described in this topic. Finally, remove all extraneous files and directories in *SWSE_ROOT/public* on the migrated SWSE and remove *SI EBSRVR_ROOT/webmaster* on the migrated Siebel Server, as noted.

- **Move files and directories: Files and directories have changed in the public directory on Siebel Web Client and Siebel Tools.** On Siebel Web Client and Siebel Tools installations, in the *SIEBEL_CLIENT_ROOT/public* directory and the *SIEBEL_TOOLS_ROOT/public* directory, similar changes have been made as those on the SWSE, for applicable directories and files.

Issue. After a migration installation of Siebel Web Client or Siebel Tools, duplicate directories will exist, because some of the directories provided in Siebel Innovation Pack 2016 will be in new locations relative to those seen for the files and directories that migrated from the prior release. Your custom files will be in the wrong locations and cannot be used until you have moved them to the new locations.

Solution. Reorganize the files and directories in *SIEBEL_CLIENT_ROOT/public* and *SIEBEL_TOOLS_ROOT/public* on the migrated installations to incorporate your migrated custom files and to conform to the changes described in this topic for SWSE. Finally, remove all extraneous files and directories in *SIEBEL_CLIENT_ROOT/public* and *SIEBEL_TOOLS_ROOT/public*.

- **Move files and directories: Files and directories have changed in the webtempl directory on Siebel Server, Siebel Web Client, and Siebel Tools.** On Siebel Server, Siebel Web Client, and Siebel Tools installations, in the *webtempl* directory, the *oui webtempl* and *oui webtempl /custom* directories are no longer used. Only Web templates for Siebel Open UI are valid. Only the *webtempl* and *webtempl /custom* directories are needed in Siebel Innovation Pack 2016, and contain standard Web templates and custom Web templates, respectively.

Issue. After a migration installation of Siebel Server, Siebel Web Client, or Siebel Tools, your custom Web template files for Siebel Open UI will be in the wrong locations and cannot be used until you have moved them to the new locations.

Solution. In *SI EBSRVR_ROOT*, *SIEBEL_CLIENT_ROOT*, and *SIEBEL_TOOLS_ROOT*, move the migrated files from *webtempl /oui webtempl /custom* into *webtempl /custom*. Then remove the directories *webtempl /oui webtempl /custom* and *webtempl /oui webtempl*.

- **(Oracle Database only) Upgrade the Oracle Database Client.** For deployments on Oracle Database in a migration installation case, after migrating, you must upgrade the Oracle Database Client to a supported version for Siebel Innovation Pack 2016, as noted in the Certifications tab on My Oracle Support. You must also update the Oracle Database Client path in the defined environment variables. For more information, see [“About Configuring Siebel Business Applications” on page 69](#).

Using Oracle Database XE for Siebel Mobile Web Client or Siebel Tools also requires a valid Oracle Database Client, as noted in [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

- **Edit configuration files for Siebel Web Client.** After doing a migration installation for Siebel Web Client for Siebel Innovation Pack 2016, you must edit all applicable migrated configuration files, such as uagent.cfg for Siebel Call Center. In the [Siebel] section of each applicable configuration file, update the value of the WebClientSiteDir parameter to remove the language element. For example, for a value like C:\Siebel\CLI\ent\publ\c\enu, update the parameter value to C:\Siebel\CLI\ent\publ\c.
- **Remove obsolete parameters.** Several parameters for server components or in configuration files are now obsolete in Siebel Innovation Pack 2016. To reduce confusion after migration installations, you might choose to delete some of the parameters that no longer apply, such as HighInteractivity and EnableOpenUI. For more information about obsolete parameters, see *Siebel System Administration Guide*.
- **Reset passwords in siebns.dat and on the Siebel Server.** After doing a migration installation of Siebel Innovation Pack 2016, you must reset any passwords in the siebns.dat file on the Siebel Gateway Name Server that were previously encrypted using RC4 encryption. In the current release, such passwords are encrypted using AES instead of RC4. For more information about reencrypting these passwords, see *Siebel Security Guide*. Furthermore, the Siebel Server system service and server components do not work after a migration installation until you have updated them to use AES password encryption. Make these changes in coordination, as described in [“Updating the Siebel Server System Service and Server Components to Use AES Password Encryption” on page 66](#).

Updating the Siebel Server System Service and Server Components to Use AES Password Encryption

The Siebel Server system service and server components do not work after a migration installation until you have performed steps to update them to use AES password encryption, as described in the following procedure. The examples in the procedure are for UNIX operating systems, but the same issue applies on Microsoft Windows.

To update the Siebel Server system service and server components to use AES password encryption

- 1 Unset any SIEBEL* environment variables.
- 2 Source the siebenv script from the Siebel Gateway Name Server installation directory, as follows:

```
.. /siebenv.sh
```
- 3 Start the Siebel Gateway Name Server and make sure that it is running.

- 4 Write down the old encrypted password from the current siebns.dat file. For example:

```
[/enterpri ses/esi a81/parameters/Password]
Persi stence=ful l
Type=stri ng
Val ue="9ntkU0Uf"
Length=16
```

- 5 Run a command like the following, using the old encrypted password value:

```
.. /ses/si ebsrvr/li b/spu 9ntkU0Uf
```

This command obtains a reencrypted value for the password, such as in the following output:

```
ENPVR6S/HKgBncoAAA==
```

- 6 Delete the current svc* and osdf* files from the *SI EBSRVR_ROOT*/sys directory.
7 Source the siebenv script from the *SI EBSRVR_ROOT* directory.
8 Change directory to the *SI EBSRVR_ROOT*/bi n directory and then run a command like the following:

```
siebctl -S siebsrvr -i esi a81:svr1 -a -g "-g l ocal host: 2320 -e esi a81 -s svr1  
-u SADMIN -ep ENPVR6S/HKgBncoAAA=="
```

Note that the new encrypted string from [Step 5 on page 67](#) is used.

- 9 Run the following command using the old encrypted password value, like the following:

```
.. /ses/si ebsrvr/li b/gpu -g l ocal host: 2320 -e esi a81 -u SADMIN -p 9ntkU0Uf
```

- 10 Customers who have overridden the user name or password at the component definition level must change the passwords again through srvmgr in order to use the new encrypted password value. For example:

```
change param password=<pwd_val ue> for compdef <comp_name>
change param password=<pwd_val ue> for comp <comp_name> server <server_name>
```

- 11 Update old encrypted passwords in the current siebns.dat file on the Siebel Gateway Name Server to use AES encryption.

For more information, see *Siebel Security Guide*.

- 12 Restart both the Siebel Gateway Name Server and the Siebel Server.

Related Topics

["About Installing Siebel Business Applications" on page 43](#)

["About Configuring Siebel Business Applications" on page 69](#)

["About Installing the Siebel Web Client or Siebel Tools" on page 175](#)

["Installing and Using Oracle Database XE for the Local or Sample Database" on page 191](#)

[Chapter 10, "Uninstalling Siebel Business Applications"](#)

4

Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension

This chapter explains how to configure Siebel Enterprise Server components and the Siebel Web Server Extension. It includes the following topics:

- [About Configuring Siebel Business Applications on page 69](#)
- [Starting a Siebel Configuration Wizard on page 71](#)
- [Configuring the Siebel Gateway Name Server on page 75](#)
- [Configuring the Siebel Enterprise on page 78](#)
- [Installing the Siebel Database on page 86](#)
- [Configuring the Siebel Server on page 87](#)
- [Process of Configuring the Siebel Web Server Extension on page 93](#)
- [More Information About Using the Siebel Configuration Wizards on page 102](#)

About Configuring Siebel Business Applications

The main Siebel Enterprise Server components that you can install are Siebel Gateway Name Server, Siebel Server, and Database Configuration Utilities. After installing one or more of these modules, or also installing the Siebel Web Server Extension (SWSE), you configure them by using one of the Siebel Configuration Wizards, as described in this chapter.

The Siebel Configuration Wizard framework supports configuration tasks for the Siebel Enterprise Server components, the Siebel database, and the SWSE. Multiple configuration wizards are provided for these modules, supporting different configuration tasks. Within each task, most of the screens provide explanatory information about the settings you are prompted to make. Some configuration wizard tasks can be run multiple times, while others must be run only once.

The Configuration Wizard automatically runs in the language that you are currently using, if the language is supported for this purpose. Make sure that you have the correct language set at the operating system level. For more information, see [“About The Language in Which Siebel Installers and Wizards Run” on page 311](#).

Keep track of which configuration tasks you have performed and which you have not yet performed. Some tasks to configure Siebel Business Applications modules or to remove configuration data have dependencies on other tasks having been performed. Removing existing configuration data is required before uninstalling particular modules.

For most Siebel CRM releases, after you perform a migration installation of the current release for Siebel Enterprise Server or SWSE, you do not have to run the Siebel Configuration Wizards again. However, new parameters are sometimes added that optimize installation and performance or enable new functionality. Also, requirements vary for different releases. In particular, after performing migration installations for Siebel Innovation Pack 2016, you must reconfigure the Siebel Web Server Extension. If you do have to run the Configuration Wizards for any reason, then you must run the wizards that were installed for the current release.

The Configuration Wizard displays in its title bar the name *Siebel Configuration Wizard*. The options that it displays depend on which module you are configuring. (Sometimes this guide refers to the Siebel Configuration Wizard to mean any or all of the Configuration Wizards. Or, depending on the context, this guide might instead refer to a wizard using a more specific name, such as the Siebel Server Configuration Wizard.)

The Configuration Wizard displays fields and selectable options, such as check boxes or radio buttons. Where it is available, you can click Help to display help text with more information about the settings. Which options appear, and some of the default values, depend on prior selections. Wizard tasks might branch in several different ways. The sequence of items listed in the tables in this chapter might not correspond to specific wizard tasks.

The Siebel Configuration Wizards support the initial configuration of Siebel Business Applications and also let you modify settings for an existing Siebel Enterprise. To reconfigure an existing Siebel Server, you can remove an existing Siebel Server configuration and then recreate it. Alternatively, to modify settings for an existing Siebel Enterprise or Siebel Server, you can use Siebel Server Manager. For more information, see *Siebel System Administration Guide*.

NOTE: You cannot operate any Siebel Enterprise Server components until you have configured them. Also, you must be running the Siebel Gateway Name Server in order to configure the Siebel Enterprise or the Siebel Server.

The Siebel Configuration Wizards also support removing configuration data, which is a necessary part of uninstalling the Siebel Business Applications software.

NOTE: For deployments on Oracle Database in a migration installation case, you must upgrade the Oracle Database Client to a supported version for Siebel Innovation Pack 2016, as noted in the Certifications tab on My Oracle Support. Do this after performing the migration installations.

Requirement to Reconfigure SWSE for Migration Installations

As part of performing the migration installation to the current release, you must reconfigure the Siebel Web Server Extension (SWSE). For each SWSE, do the following:

- 1 Perform any necessary premigration tasks, as noted in [“Additional Tasks for Migration Installations”](#) on page 62.

CAUTION: In particular, you must remove the existing SWSE configuration on the Web server computer where you installed SWSE. You must do this before you perform the migration installation for SWSE. Otherwise, the virtual directories cannot be cleaned up adequately. For more information, see [“Removing the SWSE Configuration”](#) on page 279.

- 2 Install Siebel Enterprise Server and SWSE as a migration installation.

- 3 Perform any necessary postmigration tasks, as noted in [“Additional Tasks for Migration Installations” on page 62](#). For example, you must do the following:
 - (Oracle Database only) Upgrade the Oracle Database Client to a supported version for Siebel Innovation Pack 2016.
 - (Oracle Database only) Update the Oracle Database Client path in the defined environment variables.
 - Reorganize files and directories on Siebel Enterprise Server and SWSE.
 - Create a new SWSE logical profile. For more information, see [“Configuring the SWSE Logical Profile” on page 94](#).
 - Apply the new SWSE logical profile on the Web server computer where you installed SWSE. For more information, see [“Applying the SWSE Logical Profile” on page 99](#).
 - Restart the Web server. For more information, see [“Restarting the Web Server” on page 166](#).

Related Topics

[“Installation-Related Changes for Siebel Innovation Pack 2016” on page 25](#)

Chapter 3, [“Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[“About Installing Siebel Business Applications” on page 43](#)

[“Additional Tasks for Migration Installations” on page 62](#)

[“Starting a Siebel Configuration Wizard” on page 71](#)

[“More Information About Using the Siebel Configuration Wizards” on page 102](#)

Chapter 11, [“Requirements for Installing and Configuring Siebel Business Applications”](#)

[“Process of Removing Configuration Data” on page 279](#)

Starting a Siebel Configuration Wizard

Use the following procedure to start a Siebel Configuration Wizard. You start the wizard from the command line. For more information about the command-line syntax elements, see [“Siebel Configuration Wizard Syntax Elements” on page 105](#).

Related Topics

[“About Configuring Siebel Business Applications” on page 69](#)

[“More Information About Using the Siebel Configuration Wizards” on page 102](#)

As part of the following procedure, depending on which Configuration Wizards you are running, you must enter the necessary commands to source one of the following environment setup files, as appropriate, to configure or validate the environment.

- **cfgenv.csh or cfgenv.sh.** Before you run the Siebel Enterprise Configuration Wizard, the Siebel Server Configuration Wizard, or the SWSE Configuration Wizard, you must source either `cfgenv.csh` (for C shell) or `cfgenv.sh` (for Bourne or Korn shell). These environment files are located in the installation directory for the installed module. For example for Siebel CRM version 16.0, modules might be installed in `/siebel/16.0.0.0/ses/gtwysrvr`, `/siebel/16.0.0.0/ses/siebsrvr`, or `/siebel/16.0.0.0/sweapp`. For more information, see the topics for performing the individual configuration tasks.
- **siebenv.csh or siebenv.sh.** These files are created for two different Siebel Enterprise Server components: Siebel Gateway Name Server and Siebel Server.
 - After you run the Siebel Enterprise Configuration Wizard to configure the Siebel Enterprise, you must source either `siebenv.csh` (for C shell) or `siebenv.sh` (for Bourne or Korn shell). These environment files are created in the `$SIEBEL_GATEWAY_ROOT` installation directory. For more information, see [“Configuring the Siebel Enterprise” on page 78](#).
 - After you run the Siebel Server Configuration Wizard to configure the Siebel Server, you must source either `siebenv.csh` (for C shell) or `siebenv.sh` (for Bourne or Korn shell). These environment files are created in the `$SIEBSRV_ROOT` installation directory. For more information, see [“Configuring the Siebel Server” on page 87](#).
- **dbenv.csh or dbenv.sh.** Before you run the Database Configuration Wizard, you must source either `dbenv.csh` (for C shell) or `dbenv.sh` (for Bourne or Korn shell). Before you can source one of these files, you must create them by running the script `CreateDbSrvrEnvScript`. These environment files are created in the `$SIEBSRV_ROOT` installation directory. For more information, see [“Installing the Siebel Database” on page 118](#).

To start a Siebel Configuration Wizard

- 1 Open a shell window.
- 2 Source an environment setup file, as appropriate for the module you are configuring,
 - Before you run the Siebel Enterprise Configuration Wizard, the Siebel Server Configuration Wizard, or the SWSE Configuration Wizard, source either `cfgenv.csh` (for C shell) or `cfgenv.sh` (for Bourne or Korn shell). For more information, see the topics for performing the individual configuration tasks.
 - Before you run the Siebel Database Configuration Wizard, source either `dbenv.csh` (for C shell) or `dbenv.sh` (for Bourne or Korn shell). For more information, see [“Installing the Siebel Database” on page 118](#).
- 3 Navigate to the `config` subdirectory of the installed Siebel module that you want to configure within your `$SIEBEL_ROOT` directory. For Siebel CRM version 16.0:
 - For configuring the Siebel Gateway Name Server or the Siebel Enterprise, navigate to a directory like the following on the Siebel Gateway Name Server computer: `/siebel/16.0.0.0/ses/config`. Also navigate to this directory if you are configuring an SWSE logical profile.

- For configuring the Siebel Server or the Siebel database, navigate to a directory like the following, on the Siebel Server computer: `/siebel/16.0.0.0/ses/config`.
- For configuring the Siebel Web Server Extension (SWSE), navigate to a directory like the following, on the Web server computer: `/siebel/16.0.0.0/sweapp/config`.

To start the Configuration Wizard to configure in GUI mode, go to the next step. Use the same commands if you are generating a response file for unattended configuration. To perform an unattended configuration, go to [Step 5 on page 73](#).

- 4 Enter a command similar to the following to start the Configuration Wizard:

```
install_path/config/config -mode mode_name
```

where:

- *install_path* is the installation path for the installed Siebel module
- *mode_name* specifies the Configuration Wizard to run, and is one of the following:
 - enterprise is for the Siebel Enterprise Configuration Wizard (includes tasks for configuring Siebel Gateway Name Server, Siebel Enterprise, and SWSE logical profile)
 - siebsrvr is for the Siebel Server Configuration Wizard
 - dbsrvr is for the Siebel Database Configuration Wizard
 - swse is for the Siebel Web Server Extension Configuration Wizard

Example commands follow for the modules listed.

Siebel Enterprise Configuration Wizard:

```
/siebel/16.0.0.0/ses/config/config -mode enterprise
```

Siebel Server Configuration Wizard:

```
/siebel/16.0.0.0/ses/config/config -mode siebsrvr
```

Siebel Database Configuration Wizard:

```
/siebel/16.0.0.0/ses/config/config -mode dbsrvr
```

Siebel Web Server Extension Configuration Wizard:

```
/siebel/16.0.0.0/sweapp/config/config -mode swse
```

For an unattended configuration, go to the next step. Otherwise, go to [Step 6 on page 74](#).

- 5 For an unattended configuration, you save and later execute separate response files for configuring the Siebel Gateway Name Server, Siebel Enterprise, SWSE logical profile, Siebel database, Siebel Server, or Siebel Web Server Extension. Do one of the following:
- If you are generating a response file, then go to [Step 6 on page 74](#) and continue the configuration process. In the summary screen, choose the option to save a configuration file, then cancel the wizard. Then, to perform the unattended configuration of the same component, restart the wizard as described in the next paragraph.

- If you are executing a response file that you saved in a previous configuration session, then start the wizard using the `-responseFile` option, specifying the name of the response file to execute. Use a command similar to the following:

```
install_path/config/config -mode mode_name -responseFile file_name
```

where:

- *install_path* is the installation path for the installed Siebel module (see examples in [Step 4 on page 73](#))
- *mode_name* specifies the Configuration Wizard to run (see examples in [Step 4 on page 73](#))
- *file_name* is the name of the response file that you are executing

If you are generating a response file, then go to the next step. If you are executing a response file, then the Configuration Wizard runs in unattended mode and completes configuration.

- 6 Respond to each prompt in the Configuration Wizard that you are running, then click Next to go to the next screen or to complete the configuration.
 - For configuring the Siebel Gateway Name Server, see [“Configuring the Siebel Gateway Name Server” on page 75](#).
 - For configuring the Siebel Enterprise, see [“Configuring the Siebel Enterprise” on page 78](#).
 - For installing the Siebel database, see [“Installing the Siebel Database” on page 86](#).
 - For configuring the Siebel Server, see [“Configuring the Siebel Server” on page 87](#).
 - For configuring the Siebel Web Server Extension (SWSE), see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

NOTE: You can click Cancel to exit the Configuration Wizard before you complete the configuration.

After you specify or confirm all of your selections, the summary screen appears.

- 7 In the summary screen, do one of the following:
 - Click Next again to complete the configuration. Go to the next step.
 - Optionally, save a response file in this screen, to use in an unattended configuration, then click Cancel to exit the Configuration Wizard without completing configuration.
- 8 After configuration is complete, click Exit to exit the Configuration Wizard.

To help you to verify that the configuration completed successfully, the log file is referenced at the end of the configuration task.
- 9 After you run the Siebel Enterprise Configuration Wizard or the Siebel Server Configuration Wizard, source either `siebenv.csh` (for C shell) or `siebenv.sh` (for Bourne or Korn shell). For more information, see [“Configuring the Siebel Enterprise” on page 78](#) and [“Configuring the Siebel Server” on page 87](#).

Configuring the Siebel Gateway Name Server

After you install the Siebel Gateway Name Server, you run the Siebel Configuration Wizard (Siebel Enterprise Configuration) to configure the Siebel Gateway Name Server.

This task is a step in:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)
- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)

Related Topics

[“About Configuring Siebel Business Applications” on page 69](#)

[“Starting a Siebel Configuration Wizard” on page 71](#)

[“More Information About Using the Siebel Configuration Wizards” on page 102](#)

[“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#)

To configure the Siebel Gateway Name Server

- 1 Open a shell window on the computer on which you installed the Siebel Gateway Name Server.
- 2 Source the `cfgenv.csh` or `cfgenv.sh` environment setup file.

Navigate to the `$SIEBEL_GATEWAY_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step before each time that you run the Siebel Enterprise Configuration Wizard.

C shell

```
source cfgenv.csh
```

Bourne or Korn shell

```
./cfgenv.sh
```

TIP: Make sure that there is a space between the initial period and `./cfgenv.sh`.

In this path, `$SIEBEL_GATEWAY_ROOT` is the location of the Siebel Gateway Name Server root directory. For example, for Siebel CRM version 16.0, the directory might be `/export/home/siebel/16.0.0.0.0/ses/gtwysrvr`.

- 3 Start the Siebel Enterprise Configuration Wizard.

For more information, see [“Starting a Siebel Configuration Wizard” on page 71](#).

Enter a command similar to the following:

```
install_path/config/config -mode enterprise
```

In this path, *install_path* is the installation path for the installed Siebel Enterprise Server software.

- 4 Choose Create New Configuration, then Configure a New Gateway Name Server.
- 5 Provide input as described in [Table 8 on page 77](#). Click Next to go to the next screen.

Where it is available, click Help to display help text with more information about the settings.

NOTE: You can click Cancel to exit the Configuration Wizard before you complete the configuration.

After you specify or confirm all of your selections, the summary screen appears.

- 6 In the summary screen, do one of the following:
 - Click Next again to complete the configuration. Go to the next step.
 - Optionally, save a response file in this screen, to use in an unattended configuration, then click Cancel to exit the Configuration Wizard without completing configuration.
- 7 After configuration is complete, click Exit to exit the Configuration Wizard.

To help you to verify that the configuration completed successfully, the log file is referenced at the end of the configuration task.

Configuration Settings for the Siebel Gateway Name Server

Table 8 on page 77 describes the settings that are requested in the Siebel Configuration Wizard for configuring the Siebel Gateway Name Server. Where it is available, you can click Help to display help text with more information about the settings.

Table 8. Settings for Configuring the Siebel Gateway Name Server

Setting in Siebel Configuration Wizard	Description
Gateway Name Server TCP/IP Port	Specify the port number that this Siebel Gateway Name Server uses for connections from Siebel Server or other components. The default port number is 2320.
Language for Server Messages and Logs	The primary language, which is used for server messages and log files. Language support must be present on the server on which you have installed the software. See also “Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150. NOTE: This option does not appear for a single-language installation. In this case, the installed language is used as the primary language.
Min heap size for Siebel Cache Server process	Specify the minimum heap size for the Oracle Coherence process. The default size is 256 MB. The Siebel Cache Server configuration settings are for the Oracle Coherence software that was installed with the Siebel Gateway Name Server. See also “Configuring the Siebel Server” on page 87.
Max heap size for Siebel Cache Server process	Specify the maximum heap size for the Oracle Coherence process. The default size is 512 MB. This option is part of Siebel Cache Server Configuration.
Port for the Siebel Cache Server	Specify the port number for Oracle Coherence. The default port number is 2322. This option is part of Siebel Cache Server Configuration.
Port for the TcpProxyService	Specify the port number for the TCP proxy service for Oracle Coherence. The default port number is 2323. This option is part of Siebel Cache Server Configuration.
Cluster Name	Specify the cluster name for Oracle Coherence. This option is part of Siebel Cache Server Configuration. The default cluster name is SiebelCluster.
JRE Management Configuration File	Specify the location of the JRE management configuration file for Oracle Coherence. This option is part of Siebel Cache Server Configuration. The default file location is <code>\$I_EBSRVR_ROOT/jre8/lib/management/management.properties</code> .
Autostart Gateway Name Server System Service	Specify whether to start the Siebel Gateway Name Server automatically when the operating system starts.

Configuring the Siebel Enterprise

The task for configuring the Siebel Enterprise lets you configure authentication using Siebel security adapters, TLS encryption, and related settings. Many of the security settings also apply to configuring the SWSE logical profile. For detailed information about the security settings in the Configuration Wizards, see *Siebel Security Guide*.

NOTE: After you initially configure the Siebel Enterprise, you can use this wizard to modify many of the configuration settings for an existing Siebel Enterprise. You can also configure many of these settings in the Siebel Server Configuration Wizard, to override Siebel Enterprise-level settings for the current Siebel Server. In addition, you can modify the Siebel Enterprise configuration by using Siebel Server Manager. For more information, see *Siebel System Administration Guide*.

This task is a step in:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)
- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)

Related Topics

[“About Configuring Siebel Business Applications” on page 69](#)

[“Starting a Siebel Configuration Wizard” on page 71](#)

[“More Information About Using the Siebel Configuration Wizards” on page 102](#)

[“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#)

To configure the Siebel Enterprise

- 1 Open a shell window on the computer on which you installed the Siebel Gateway Name Server.
- 2 Source the `cfgenv.csh` or `cfgenv.sh` environment setup file.

Navigate to the `$SIEBEL_GATEWAY_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step before each time that you run the Siebel Enterprise Configuration Wizard.

C shell

```
source cfgenv.csh
```

Bourne or Korn shell

```
./cfgenv.sh
```

TIP: Make sure that there is a space between the initial period and `./cfgenv.sh`.

In this path, `$SIEBEL_GATEWAY_ROOT` is the location of the Siebel Gateway Name Server root directory. For example, for Siebel CRM version 16.0, the directory might be `/export/home/siebel/16.0.0.0/ses/gtwysrvr`.

- 3 Start the Siebel Enterprise Configuration Wizard.

For more information, see [“Starting a Siebel Configuration Wizard” on page 71](#).

Enter a command similar to the following:

```
install_path/config/config -mode enterprise
```

In this path, *install_path* is the installation path for the installed Siebel Enterprise Server software.

- 4 Choose Create New Configuration, then Configure a New Enterprise in a Gateway Name Server.
- 5 Provide input as described in [Table 9 on page 80](#). Click Next to go to the next screen.

Where it is available, click Help to display help text with more information about the settings.

NOTE: You can click Cancel to exit the Configuration Wizard before you complete the configuration.

After you specify or confirm all of your selections, the summary screen appears.

- 6 In the summary screen, do one of the following:
 - Click Next again to complete the configuration. Go to the next step.
 - Optionally, save a response file in this screen, to use in an unattended configuration, then click Cancel to exit the Configuration Wizard without completing configuration.
- 7 After configuration is complete, click Exit to exit the Configuration Wizard.
- 8 Source the siebenv.csh or siebenv.sh environment setup file.

Navigate to the `$SIEBEL_GATEWAY_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step after each time that you run the Siebel Enterprise Configuration Wizard.

C shell

```
source siebenv.csh
```

Bourne or Korn shell

```
./siebenv.sh
```

TIP: Make sure that there is a space between the initial period and `./siebenv.sh`.

In this path, `$SIEBEL_GATEWAY_ROOT` is the location of the Siebel Gateway Name Server root directory. For example, for Siebel CRM version 16.0, the directory might be `/export/home/siebel/16.0.0.0.0/ses/gtwysrvr`.

Configuration Settings for the Siebel Enterprise

[Table 9 on page 80](#) describes the settings that are requested in the Siebel Configuration Wizard for configuring a new Siebel Enterprise or modifying an existing Siebel Enterprise. Where it is available, you can click Help to display help text with more information about the settings.

For requirements and restrictions for these parameters, see [“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#). For additional information about many of these parameters, see *Siebel System Administration Guide* and *Siebel Security Guide*.

Parameters that are set as a result of configuring the Siebel Enterprise are set at the Siebel Enterprise level or set for named subsystems such as for a data source or security adapter.

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Gateway Name Server Authentication User Account Name	Specify the user name for the account, usually a database account, that you are using for Siebel Gateway Name Server authentication. For more information about this account and the associated requirements, see “Requirements for Siebel Gateway Name Server Authentication” on page 333 . NOTE: The first time that you configure a Siebel Enterprise (before authentication settings have been propagated to the Siebel Gateway Name Server), the user account name and password fields have no effect.
Gateway Name Server Authentication User Account Password	Specify the password for the account that you are using for Siebel Gateway Name Server authentication.
Gateway Name Server Host Name	Specify the host name of the computer on which the Siebel Gateway Name Server is installed. For more information, see “Restrictions on Host Names for Siebel Gateway Name Server and Siebel Server” on page 317 .
Gateway Name Server TCP/IP Port	Specify the port number that the Siebel Gateway Name Server uses for connections from Siebel Server or other components. The default port number is 2320. Use the port number that you specified when you configured the Siebel Gateway Name Server.
Siebel Enterprise Name	Specify the name that you want for the Siebel Enterprise. For more information, see “Restrictions on Names for Siebel Enterprise and Siebel Server” on page 318 .
Enterprise Description (EnterpriseDesc)	Provide a short description for the Siebel Enterprise.
Primary Siebel File System (FileSystem)	Specify the location or locations of the Siebel File System. For more information, see “Creating the Siebel File System” on page 320 .

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Database Platform	The RDBMS options for the Siebel database are: <ul style="list-style-type: none"> ■ Oracle Database Enterprise Edition ■ IBM DB2 UDB for Linux UNIX Windows ■ IBM DB2 UDB for z/OS ■ Microsoft SQL Server
Microsoft SQL Server Host Name	(Microsoft SQL Server only)
Microsoft SQL Server Database Name	(Microsoft SQL Server only)
Database Table Owner (TableOwner)	(Oracle Database, DB2, or DB2 for z/OS only)
IBM DB2 Database Alias	(DB2 only)
Current IBM DB2 SQL ID / Group Name	(DB2 for z/OS only)
Oracle SQLNet Connect String	(Oracle Database only)
Siebel Database User Account Name	(For all database platforms)
Siebel Database User Account Password	(For all database platforms)

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Enterprise Security Authentication Profile	<p>The options are:</p> <ul style="list-style-type: none"> ■ Database Authentication (default). Corresponds to SecAdptMode parameter value DB. ■ Lightweight Directory Access Protocol (LDAP) Authentication. Corresponds to SecAdptMode parameter value LDAP. ■ Custom Security Authentication, using the Security SDK. Corresponds to SecAdptMode parameter value CUSTOM. ■ Active Directory (ADSI) Authentication (Windows only). Corresponds to SecAdptMode parameter value ADSI. <p>Database authentication is enabled by default. After you configure a different security adapter, that adapter is not yet enabled for use.</p> <p>If you enable a security adapter after configuring it, then manually set the parameter SecAdptMode using one of the listed values. For example, do so for an Application Object Manager component for which you are enabling a security adapter, such as the security adapter for LDAP.</p> <p>NOTE: Although database authentication is supported for development environments only, it is strongly recommended that you keep database authentication enabled for the Siebel Enterprise. As applicable for your deployment, enable any non-database security adapter for individual servers or components only, using Server Manager.</p> <p>If, later in the same Configuration Wizard session, you select the option Propagate Authentication Settings to the Gateway Name Server, then the settings are also propagated for Siebel Gateway Name Server authentication. For more information, see “Requirements for Siebel Gateway Name Server Authentication” on page 333. For more information about all of the authentication options, see <i>Siebel Security Guide</i>.</p>

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Security Adapter Name (named subsystem)	<p>In general, it is recommended that you accept the default security adapter name. The default name depends on the type of security adapter that you are configuring. Default names are as follows:</p> <ul style="list-style-type: none"> ■ DBSecAdpt ■ LDAPSecAdpt ■ CUSTOMSecAdpt ■ ADSISecAdpt <p>If you enable a security adapter after configuring it, then manually set the parameter SecAdptName to the same name. For example, do so for an Application Object Manager component for which you are enabling a security adapter, such as the security adapter for LDAP. For more information about all of the authentication options, see <i>Siebel Security Guide</i>.</p>
Security Authentication Library CRC Checksum (CRC)	<p>LDAP, ADSI, or custom authentication only.</p> <p>NOTE: This option does not apply to database authentication. The same is true for <i>all of the remaining authentication settings, except those for Siebel Gateway Name Server authentication</i>.</p>
Directory Server Domain Name (ServerName)	LDAP or ADSI authentication only.
LDAP Port Configuration (Port)	LDAP authentication only. The default port numbers are 389 or 636 (secure).
Network TCP/IP Port Number (Port)	LDAP authentication only.
Siebel Username Attribute (UsernameAttributeType)	LDAP or ADSI authentication only.
Siebel Password Attribute (PasswordAttributeType)	LDAP authentication only.
Credentials Attribute (CredentialsAttributeType)	LDAP, ADSI, or custom authentication only.
LDAP Roles Attribute (optional) (RolesAttributeType)	LDAP, ADSI, or custom authentication only.

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Shared Database Account Distinguished Name (SharedCredentialsDN)	LDAP, ADSI, or custom authentication only.
Store shared database user credentials as parameters	LDAP or ADSI authentication only.
Shared Database Account	LDAP or ADSI authentication only.
Shared Database Account Password	LDAP or ADSI authentication only.
Siebel Application Distinguished Name (DN) (ApplicationUser)	LDAP, ADSI, or custom authentication only.
Application Password (ApplicationPassword)	LDAP or ADSI authentication only.
Configure Web Single Sign-On (Web SSO) (SingleSignOn)	LDAP or ADSI authentication only.
User Specification (UserSpec)	LDAP or ADSI authentication only.
Shared Secret (TrustToken)	LDAP or ADSI authentication only.
TLS Database Certificate File (SslDatabase)	LDAP authentication only.
Hash User Passwords (HashUserPwd)	LDAP, ADSI, or custom authentication only.
Hash Database Passwords (HashDBPwd)	LDAP, ADSI, or custom authentication only.
Salt User Passwords (SaltUserPwd)	LDAP, ADSI, or custom authentication only.
Salt Attribute (SaltAttributeType)	LDAP, ADSI, or custom authentication only.

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Security Adapter Mapped User Name (UseAdapterUserName)	LDAP, ADSI, or custom authentication only.
Siebel User ID Attribute (SiebelUsernameAttributeType)	LDAP, ADSI, or custom authentication only.
Base Distinguished Name (DN) (BaseDN)	LDAP or ADSI authentication only.
Propagate Change (PropagateChange)	LDAP or ADSI authentication only.
Propagate Authentication Settings to the Gateway Name Server	Select this option to propagate authentication settings that you made to the Siebel Gateway Name Server. NOTE: The first time that you specify the Siebel Gateway Name Server authentication settings at the start of the task, you must select this check box. Subsequently, select this box only when you are changing existing settings.
Microsoft SQL Server Port Number	(Microsoft SQL Server only) This option appears only when database authentication for Siebel Gateway Name Server authentication is used, and you are propagating authentication settings to the Siebel Gateway Name Server.
Additional Tasks for Configuring the Enterprise	The items listed represent categories of additional optional selections for creating a new Siebel Enterprise. ■ Enterprise Network Security Encryption Type ■ Data Quality Products and Connectors
Tasks for Modifying Enterprise Configurations	The items listed represent categories of optional selections for modifying an existing Siebel Enterprise. ■ Enterprise Network Security Encryption Type ■ Data Quality Products and Connectors ■ Enterprise Security Authentication Default
Siebel Data Quality Matching	Appears only if you selected Data Quality Products and Connectors in a prior screen. Choose None or Siebel Data Quality Connector.

Table 9. Settings for Configuring the Siebel Enterprise

Setting in Siebel Configuration Wizard (Parameter)	Description
Security Encryption Level or Type (Crypt and ConnType)	This setting and all of the remaining items appear only if you selected Enterprise Network Security Encryption Type in a prior screen. Secure options are: <ul style="list-style-type: none"> ■ SISNAPI Without Encryption ■ SISNAPI Using RSA Encryption Algorithm ■ SISNAPI Using TLS 1.2
Certificate File Name (CertFileName)	This item and all of the remaining items appear only if you selected one of the TLS options in Security Encryption Level or Type. For more information, see <i>Siebel Security Guide</i> .
Certificate Authority (CA) Certificate File Name (CACertFileName)	For more information, see <i>Siebel Security Guide</i> .
Private Key File Name (KeyFileName)	For more information, see <i>Siebel Security Guide</i> .
Private Key File Password (KeyFilePassword)	For more information, see <i>Siebel Security Guide</i> .
Enable Peer Authentication (PeerAuth)	For more information, see <i>Siebel Security Guide</i> .
Validate Peer Certificate (PeerCertValidation)	For more information, see <i>Siebel Security Guide</i> .

Installing the Siebel Database

If you do not have an existing Siebel database, then you have to use the Siebel Database Configuration Wizard to install this database. This task is described in [Chapter 5, “Installing the Siebel Database on the RDBMS.”](#)

Before you install the Siebel database, you must review the guidelines described for your RDBMS in [Chapter 12, “Configuring the RDBMS.”](#)

This task is a step in [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#). When you are following the task sequence in this roadmap, you must perform the Siebel database tasks before you can configure the Siebel Server, as described in the following topic.

Related Topics

[“About Configuring Siebel Business Applications” on page 69](#)

[“Starting a Siebel Configuration Wizard” on page 71](#)

[“More Information About Using the Siebel Configuration Wizards” on page 102](#)

Chapter 5, “Installing the Siebel Database on the RDBMS”

[“Requirements for Installing and Configuring the Siebel Database” on page 350](#)

Chapter 12, “Configuring the RDBMS”

Configuring the Siebel Server

Running the Siebel Server Configuration Wizard assumes that you have performed all of the prerequisite configuration tasks: configuring the Siebel Gateway Name Server and the Siebel Enterprise and installing the Siebel database.

After you have installed Siebel Server and performed the prerequisite tasks, you run the Siebel Server Configuration Wizard to perform the Create New Configuration task as shown. This wizard includes the tasks described in this topic.

NOTE: If you do not yet have a Siebel database, then you must configure the RDBMS and install the Siebel database before you can configure the Siebel Server: the case that corresponds to the first roadmap topic identified in the following list.

This task is a step in:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)
- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)

NOTE: Run the Siebel Server Configuration Wizard without using the flag for skipping validation, so that the wizard validates that the Siebel Gateway Name Server is running. If it is not running, then the wizard does not let you proceed with the configuration.

Related Topics

[“About Configuring Siebel Business Applications” on page 69](#)

[“Starting a Siebel Configuration Wizard” on page 71](#)

[“More Information About Using the Siebel Configuration Wizards” on page 102](#)

[“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#)

To configure the Siebel Server

- 1 Open a shell window on the computer on which you installed the Siebel Server.

- 2 Source the `cfgenv.csh` or `cfgenv.sh` environment setup file.

Navigate to the `$SIEBSRV_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step before each time that you run the Siebel Server Configuration Wizard.

C shell

```
source cfgenv.csh
```

Bourne or Korn shell

```
./cfgenv.sh
```

TIP: Make sure that there is a space between the initial period and `./cfgenv.sh`.

In this path, `$SIEBSRV_ROOT` is the location of the Siebel Server root directory. For example, for Siebel CRM version 16.0, the directory might be `/export/home/siebel/16.0.0.0/ses/siebsrvr`.

- 3 Start the Siebel Server Configuration Wizard.

For more information, see [“Starting a Siebel Configuration Wizard” on page 71](#).

Enter a command similar to the following:

```
install_path/config/config -mode siebsrvr
```

In this path, `install_path` is the installation path for the installed Siebel Server software.

- 4 Choose Create New Configuration.
- 5 Provide input as described in [Table 10 on page 89](#). Click Next to go to the next screen. Where it is available, click Help to display help text with more information about the settings.

NOTE: You can click Cancel to exit the Configuration Wizard before you complete the configuration.

After you specify or confirm all of your selections, the summary screen appears.

- 6 In the summary screen, do one of the following:
 - Click Next again to complete the configuration. Go to the next step.
 - Optionally, save a response file in this screen, to use in an unattended configuration, then click Cancel to exit the Configuration Wizard without completing configuration.
- 7 After configuration is complete, click Exit to exit the Configuration Wizard.

To help you to verify that the configuration completed successfully, the log file is referenced at the end of the configuration task.

- 8 Source the `siebenv.csh` or `siebenv.sh` environment setup file.

Navigate to the `$SIEBSRV_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step after each time that you run the Siebel Server Configuration Wizard.

C shell

```
source siebenv.csh
```

Bourne or Korn shell

```
./siebenv.sh
```

TIP: Make sure that there is a space between the initial period and ./siebenv.sh.

In this path, \$SIEBSRVR_ROOT is the location of the Siebel Server root directory. For example, for Siebel CRM version 16.0, the directory might be /export/home/siebel/16.0.0.0/ses/siebsrvr.

Configuration Settings for the Siebel Server

Table 10 on page 89 describes the settings that are requested in the Siebel Configuration Wizard for configuring the Siebel Server. Where it is available, you can click Help to display help text with more information about the settings.

For requirements for and restrictions on these parameters, see “Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328. For additional information about many of these parameters, see *Siebel System Administration Guide* and *Siebel Security Guide*.

NOTE: After you have already configured a Siebel Server, you can modify its configuration using Siebel Server Manager, as described in *Siebel System Administration Guide*.

Table 10. Settings for Configuring the Siebel Server

Setting in Siebel Configuration Wizard (Parameter)	Comment or Description
Gateway Name Server Authentication User Account Name	Specify the user name for the account that you are using for Siebel Gateway Name Server authentication.
Gateway Name Server Authentication User Account Password	Specify the password for the account that you are using for Siebel Gateway Name Server authentication.
Gateway Name Server Host Name	Specify the host name of the computer on which the Siebel Gateway Name Server is installed.
Gateway Name Server TCP/IP Port	Specify the port number that the Siebel Gateway Name Server uses for connections from Siebel Server or other components. The default port number is 2320. Use the port number that you specified when you configured the Siebel Gateway Name Server.
Siebel Enterprise Name	Specify the name of the Siebel Enterprise that you previously configured.

Table 10. Settings for Configuring the Siebel Server

Setting in Siebel Configuration Wizard (Parameter)	Comment or Description
Siebel Server Name (Server)	Represents the name of the Siebel Server configuration instance, as it is stored in the Siebel Gateway Name Server. For more information, see "Restrictions on Names for Siebel Enterprise and Siebel Server" on page 318.
Siebel Server Description (ServerDesc)	Provide a short description for the Siebel Server.
Enable Component Groups	Specify one or more component groups to enable for this Siebel Server. For more information about component groups, see <i>Siebel System Administration Guide</i> .
Language for Server Messages and Logs (Lang)	<p>The primary language, which is used for server messages and log files. Language support must be present on the server on which you have installed the software. See also "Installing and Deploying Siebel Business Applications with Multiple Languages" on page 150.</p> <p>NOTE: This option does not appear for a single-language installation. In this case, the installed language is used as the primary language.</p>
Deployed Languages	<p>Specifies the installed languages that you want to deploy. Application Object Manager components are created for each of these languages.</p> <p>NOTE: This option does not appear for a single-language installation. In this case, the installed language is automatically deployed when you configure the Siebel Server.</p> <p>After initially configuring the Siebel Server, you can deploy languages that you installed but did not deploy by running the Siebel Server Configuration Wizard again and choosing the task Add Language Support for the Siebel Server.</p> <p>For more information, see "Installing and Deploying Siebel Business Applications with Multiple Languages" on page 150 and "Enabling and Disabling Language-Specific Application Object Managers and Adding Languages" on page 147.</p>

Table 10. Settings for Configuring the Siebel Server

Setting in Siebel Configuration Wizard (Parameter)	Comment or Description
Siebel Connection Broker Port (PortNumber)	<p>Specify the TCP/IP port number for the Siebel Connection Broker component (alias SCBroker). The default port number is 2321.</p> <p>NOTE: This port number is used for all of the communications between SCBroker and other components, including the Web server and SWSE. Make sure that the port number that you specify for SCBroker is not occupied by any other applications, other Siebel components (such as Siebel Gateway Name Server), or other Siebel Server instances. You also specify this port number when you configure the SWSE, as described in “Applying the SWSE Logical Profile” on page 99.</p> <p>For more information about the SCBroker component, see <i>Siebel Deployment Planning Guide</i> and <i>Siebel System Administration Guide</i>.</p> <p>If you want to change an SCBroker port number later, then use Siebel Server Manager to specify a value for the Static Port Number parameter (alias PortNumber).</p>
Network TCP/IP Port for Synchronization Manager (SyncPort)	Specify the TCP/IP port number for the Synchronization Manager component, which is part of Siebel Remote. The default port number is 40400.
Additional Tasks for Configuring the Siebel Server	<p>Specify subtasks for additional configuration of the Siebel Server. Options include:</p> <ul style="list-style-type: none"> ■ Server-Specific Security Encryption Settings. Use this task to configure TLS communications between this Siebel Server and other servers. ■ Server-Specific Security Authentication Profile Assignment. Use this task to assign an existing security adapter to this Siebel Server or to specific components.
Certificate File Name (CertFileName)	For the Server-Specific Security Encryption Settings task.
Certificate Authority (CA) Certificate File Name (CACertFileName)	For the Server-Specific Security Encryption Settings task.
Private Key File Name (KeyFileName)	For the Server-Specific Security Encryption Settings task.

Table 10. Settings for Configuring the Siebel Server

Setting in Siebel Configuration Wizard (Parameter)	Comment or Description
Security Adapter Name (SecAdptName and SecAdptMode)	For the Server-Specific Security Authentication Profile Assignment task. Specify the existing security adapter you are assigning to this Siebel Server or to individual server components.
Security Authentication Scope for Server	For the Server-Specific Security Authentication Profile Assignment task. Options are: <ul style="list-style-type: none"> ■ Set this configuration for the entire Siebel Server (server level) ■ Set this configuration for specific Object Managers (component level)
Select Object Managers for Security Adapter	For the Server-Specific Security Authentication Profile Assignment task. The option appears if you specify that you want to configure security for individual Application Object Managers or other server components. Optionally, you can configure these components using Server Manager.
Siebel Cache Server Host Name	Specify the host name of the computer on which you installed the Siebel Gateway Name Server and the Oracle Coherence server. The Siebel Cache Server configuration settings are used by the Oracle Coherence client software that was installed with this Siebel Server. See also “Configuring the Siebel Gateway Name Server” on page 75.
Port for the Siebel Cache Server	Specify the port number for the Oracle Coherence software that was installed with the Siebel Gateway Name Server. This option is part of Siebel Cache Server Configuration.
Port for the TcpProxyService	Specify the port number for the Oracle Coherence software that was installed with the Siebel Gateway Name Server. This option is part of Siebel Cache Server Configuration.

Table 10. Settings for Configuring the Siebel Server

Setting in Siebel Configuration Wizard (Parameter)	Comment or Description
Cluster Name	Specify the cluster name for the Oracle Coherence software that was installed with the Siebel Gateway Name Server. This option is part of Siebel Cache Server Configuration. The default cluster name is SiebelCluster.
Anonymous User Login Name Anonymous User Password	Specify anonymous user settings for the Siebel REST Server, which is the instance of Apache Tomcat that was installed with this Siebel Server. Specify an existing database user and password that will serve as the anonymous user for Apache Tomcat. For example, you can use the same anonymous user specified as the contact user in the SWSE logical profile, such as GUESTCST. The anonymous user you specify is saved in the file <code>\$SI_EBSRVR_ROOT/Apache/Tomcat//si_ebsrvr.properties</code> , for each Tomcat node.

Process of Configuring the Siebel Web Server Extension

To configure the Siebel Web Server Extension (SWSE), perform the following tasks:

- 1 [“Configuring the SWSE Logical Profile” on page 94](#)
- 2 [“Applying the SWSE Logical Profile” on page 99](#)

This process is a step in:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)
- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)
- [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)” on page 36 \(applying SWSE logical profile only\)](#)

Related Topics

- [“Additional Tasks for Migration Installations” on page 62](#)
- [“About Configuring Siebel Business Applications” on page 69](#)
- [“Starting a Siebel Configuration Wizard” on page 71](#)
- [“More Information About Using the Siebel Configuration Wizards” on page 102](#)
- [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#)
- [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#)

Configuring the SWSE Logical Profile

This procedure describes how to configure an SWSE logical profile. The same steps apply whether you are configuring the first SWSE logical profile, reconfiguring the same profile with different settings, or configuring any additional profile. This task is a step in [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

Related Topics

[“Configuring the SWSE Logical Profile” on page 94](#)

To configure the SWSE logical profile

- 1 Open a shell window on the computer on which you installed the Siebel Gateway Name Server.
- 2 Source the `cfgenv.csh` or `cfgenv.sh` environment setup file.

Navigate to the `$SIEBEL_GATEWAY_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step before each time that you run the Siebel Enterprise Configuration Wizard.

C shell

```
source cfgenv.csh
```

Bourne or Korn shell

```
./cfgenv.sh
```

TIP: Make sure that there is a space between the initial period and `./cfgenv.sh`.

In this path, `$SIEBEL_GATEWAY_ROOT` is the location of the Siebel Gateway Name Server root directory. For example, for Siebel CRM version 16.0, the directory might be `/export/home/siebel/16.0.0.0/ses/gtwysrvr`.

- 3 Start the Siebel Enterprise Configuration Wizard.

For more information, see [“Starting a Siebel Configuration Wizard” on page 71](#).

Enter a command similar to the following:

```
install_path/config/config -mode enterprise
```

In this path, `install_path` is the installation path for the installed Siebel Gateway Name Server software.

- 4 Choose Create New Configuration, then Configure a New Siebel Web Server Extension Logical Profile.
- 5 Provide input as described in [Table 11 on page 95](#). Click Next to go to the next screen.

Where it is available, click Help to display help text with more information about the settings.

NOTE: You can click Cancel to exit the Configuration Wizard before you complete the configuration.

After you specify or confirm all of your selections, the summary screen appears.

- 6 In the summary screen, do one of the following:
 - Click Next again to complete the configuration. Go to the next step.
 - Optionally, save a response file in this screen, to use in an unattended configuration, then click Cancel to exit the Configuration Wizard without completing configuration.
- 7 After configuration is complete, click Exit to exit the Configuration Wizard.

To help you to verify that the configuration completed successfully, the log file is referenced at the end of the configuration task.

Configuration Settings for the SWSE Logical Profile

Table 11 on page 95 lists the settings requested in the Siebel Configuration Wizard for configuring the SWSE logical profile. Where it is available, you can click Help to display help text with more information about the settings.

In the table, parameters might be identified by name and by the section of the eapps.cfg file in which they appear. For example, `[/SiebelApp_lang]` might be `[/callcenter_deu]`, which is the Siebel Call Center application for German.

See also the topics in [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

Table 11. Settings for Configuring the SWSE Logical Profile

Setting in Siebel Configuration Wizard	Parameter in eapps.cfg File	Comment or Description
Siebel Enterprise Name	<code>[/SiebelApp_lang]</code> ConnectionString	Part of the ConnectString value represents the Siebel Enterprise name.
Siebel Web Server Extension Logical Profile Name	Not applicable	<p>By default, this location is the <code>admin/Websvr</code> directory under the home directory of the installed Siebel Enterprise Server component (such as Siebel Gateway Name Server).</p> <p>For example, for Siebel CRM version 16.0 on UNIX, the default SWSE logical profile location is <code>/siebel/16.0.0.0/ses/gtwysrvr/admin/Websvr</code>.</p> <p>You specify this location later when you configure the SWSE, as described in “Applying the SWSE Logical Profile” on page 99.</p>

Table 11. Settings for Configuring the SWSE Logical Profile

Setting in Siebel Configuration Wizard	Parameter in eapps.cfg File	Comment or Description
Language for Server Messages and Logs	[swe] Language	The primary language, which is used for server messages and log files. Specify the same primary language that you selected when configuring the Siebel Enterprise Server software. See also “Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150. NOTE: This option does not appear for a single-language installation. In this case, the installed language is used as the primary language.
Collect Application-Specific Statistics	[swe] AllowStats	Indicates whether to collect application-specific statistics.
Compression Type	[/SiebelApp_lang] ConnectionString	Specify the type of compression to use for communications between the SWSE and the Siebel Servers. Part of the ConnectString value represents the compression type. Possible values are None or ZLIB.
HTTP 1.1-Compliant Firewall / Enable Web Compression	[defaults] DoCompression	For more information, see “Enabling HTTP Compression for Siebel Business Applications” on page 169.
Login Session Timeout Value	[defaults] GuestSessionTimeout	The total number of seconds that a guest session can remain inactive before the guest user is logged out and the session is closed. Default value: 300 (in seconds)
Active Session Timeout Value	[defaults] SessionTimeout	The total number of seconds that a session can remain inactive before the user is logged out and the session is closed. Default value: 900 (in seconds)
HTTP Port Number	[defaults] HTTPEndPoint	Specify the port number that this Web server uses for Web browser connections. Default value: 80

Table 11. Settings for Configuring the SWSE Logical Profile

Setting in Siebel Configuration Wizard	Parameter in eapps.cfg File	Comment or Description
HTTPS Port Number	[defaults] HTTPSPort	Specify the port number that this Web server uses for secure Web browser connections. Default value: 443
FQDN	[defaults] EnableFQDN FQDN	If you specify a fully qualified domain name, then the value is stored in the FQDN parameter, and EnableFQDN is set to TRUE. For more information, see “Configuring Siebel Business Applications for Pop-Up Blocker Compatibility” on page 204.
Employee User Login Name and Password	[defaults] AnonUserName AnonPassword	The Siebel user ID that starts the anonymous session from which an end user is shown the login page for an employee application. The employee applications use these parameters, which are defined in the [defaults] section. The EncryptedPassword parameter specifies whether passwords are encrypted in the eapps.cfg file. For more information about anonymous users, see “Requirements for Configuring Anonymous Users for the Siebel Web Server Extension” on page 347.
Password Encryption	[defaults] EncryptedPassword	Specifies whether to encrypt all of the passwords stored in the eapps.cfg file. By default, EncryptedPassword is TRUE. For more information about managing encrypted passwords, see <i>Siebel Security Guide</i> .

Table 11. Settings for Configuring the SWSE Logical Profile

Setting in Siebel Configuration Wizard	Parameter in eapps.cfg File	Comment or Description
Contact User Login Name and Password	[/SiebelApp_lang] AnonUserName AnonPassword	<p>The Siebel user ID that starts the anonymous session from which an end user is shown the login page for a customer application. This anonymous user must have access to any public view in the Siebel application.</p> <p>For customer applications only, these parameters are defined in application-specific sections of the eapps.cfg file. These values override the values defined in the [defaults] section, which are used by employee applications.</p> <p>The EncryptedPassword parameter specifies whether passwords are encrypted in the eapps.cfg file.</p> <p>For more information about anonymous users, see “Requirements for Configuring Anonymous Users for the Siebel Web Server Extension” on page 347.</p>
Web Server-Specific Statistics: Default Statistics Page for Web Server	[defaults] statspage	<p>The default value is _stats.swe. It is recommended that you change the default value, so that the Web server statistics are saved into a different file name.</p>
Select the Connection Protocol and Encryption	Not applicable	<p>Specify if you are using TLS (Transport Layer Security) for communication between Siebel Servers and the SWSE.</p> <p>Choices are TCP/IP (no encryption, the default) or TLS.</p> <p>TLS settings for SWSE must be compatible with those for Siebel Servers that connect to this Web server.</p> <p>The wizard prompts for remaining parameters related to TLS only if you select one of these options.</p> <p>For more information about TLS and the related parameters defined in the [ConnMgmt] section of the eapps.cfg file, see <i>Siebel Security Guide</i>.</p>

Table 11. Settings for Configuring the SWSE Logical Profile

Setting in Siebel Configuration Wizard	Parameter in eapps.cfg File	Comment or Description
Deploy TLS in the Enterprise	Not applicable	Specify if you are using TLS (Transport Layer Security) for communication between Siebel Servers and the SWSE.
Certificate File Name	[ConnMgmt] CertFileName	For more information, see <i>Siebel Security Guide</i> .
Certification Authority (CA) Certificate File Name	[ConnMgmt] CACertFileName	For more information, see <i>Siebel Security Guide</i> .
Private Key File Name and Password	[ConnMgmt] KeyFileName KeyFilePassword	For more information, see <i>Siebel Security Guide</i> .
Enable Peer Authentication	[ConnMgmt] PeerAuth	For more information, see <i>Siebel Security Guide</i> .
Validate Peer Authentication	[ConnMgmt] PeerCertValidation	For more information, see <i>Siebel Security Guide</i> .

Applying the SWSE Logical Profile

This procedure describes the steps for applying a logical profile to a specific installed instance of SWSE. You perform the same procedure for each SWSE. This task is a step in [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

NOTE: When the SWSE and the Web server are on a different computer from the Siebel Gateway Name Server (as is typical), then, after creating the profile as described in [“Configuring the SWSE Logical Profile” on page 94](#), you must either copy the profile directory to the Web server computer or provide remote access to the directory for the task described in this topic. For example, on Windows you might map the profile directory to the applicable drive on the remote computer.

This task is required both for new installations of the current release and for migration installations from any applicable release prior to Siebel Innovation Pack 2016. For more information, see [“Additional Tasks for Migration Installations” on page 62](#) and [“About Configuring Siebel Business Applications” on page 69](#).

Related Topics

- [“Additional Tasks for Migration Installations” on page 62](#)
- [“About Configuring Siebel Business Applications” on page 69](#)
- [“Configuring the SWSE Logical Profile” on page 94](#)

To apply the SWSE logical profile

- 1 Determine which SWSE logical profile to use for this installed instance of SWSE.

- 2 Verify access to the logical profile directory, if it is located on a remote computer.
- 3 If you will be using load balancing, then make sure that you created the `lbconfig.txt` file and placed it in the SWSE logical profile directory.

For more information, see [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#).

- 4 Open a shell window on the computer on which you installed the SWSE.
- 5 Source the `cfgenv.csh` or `cfgenv.sh` environment setup file.

Navigate to the `$SWSE_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step before each time that you run the SWSE Configuration Wizard.

C shell

```
source cfgenv.csh
```

Bourne or Korn shell

```
./cfgenv.sh
```

TIP: Make sure that there is a space between the initial period and `./cfgenv.sh`.

In this path, `$SWSE_ROOT` is the location of the Siebel Web Server Extension root directory. For example, for Siebel CRM version 16.0, this directory might be `/export/home/siebel/16.0.0.0.0/sweapp`.

- 6 Start the Siebel Web Server Extension Configuration Wizard.

For more information, see [“Starting a Siebel Configuration Wizard” on page 71](#).

Enter a command similar to the following:

```
install_path/config/config -mode swse
```

In this path, `install_path` is the installation path for the installed Siebel Web Server Extension software.

- 7 Choose Apply an SWSE Logical Profile.
- 8 Provide input as described in [Table 12 on page 101](#). Click Next to go to the next screen. Where it is available, click Help to display help text with more information about the settings.

NOTE: You can click Cancel to exit the Configuration Wizard before you complete the configuration.

After you specify or confirm all of your selections, the summary screen appears.

- 9 In the summary screen, do one of the following:
 - Click Next again to complete the configuration. Go to the next step.
 - Optionally, save a response file in this screen, to use in an unattended configuration, then click Cancel to exit the Configuration Wizard without completing configuration.

10 After configuration is complete, click Exit to exit the Configuration Wizard.

To help you to verify that the configuration completed successfully, the log file is referenced at the end of the configuration task.

Configuration Settings for the SWSE

Table 12 on page 101 lists the settings requested in the SWSE Configuration Wizard for configuring the SWSE: applying the SWSE logical profile. Where it is available, you can click Help to display help text with more information about the settings.

Table 12. Settings for Configuring the SWSE

Setting in SWSE Configuration Wizard	Comment or Description
Deployed Languages	<p>Specifies the installed languages that you want to deploy on the Web server and the SWSE.</p> <p>Each language that you select must be an installed language. For each deployed language and each application, a separate section is created in the eapps.cfg or eapps_sia.cfg file. For example, Siebel Call Center uses the sections named [/callcenter_lang]. Part of the ConnectString value represents the three-letter code for the deployed language.</p> <p>NOTE: This option does not appear for a single-language installation. In this case, the installed language is automatically deployed when you configure the SWSE.</p> <p>After initially configuring the SWSE, you can deploy languages that you installed but did not deploy by running the SWSE Configuration Wizard again and choosing the task Add Language Support for the SWSE Configuration.</p> <p>For more information, see “Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150.</p>
Select a Load Balancer	<p>Specify whether you are using Siebel native load balancing, third-party load balancing, or no load balancing. Specify no load balancing for a deployment with a single Siebel Server. For more information, see “Process of Configuring Load Balancing for Siebel Business Applications” on page 140.</p>
Siebel Server Host Name (Siebel Server)	<p>The host name of the Siebel Server computer. Specify this for a deployment with a single Siebel Server.</p>
Siebel Connection Broker Port	<p>The Siebel Connection Broker (SCBroker) port number on the Siebel Server computer, as you specified in “Configuring the Siebel Server” on page 87. Specify this port number for a deployment with a single Siebel Server. The default port number for SCBroker is 2321.</p>

Table 12. Settings for Configuring the SWSE

Setting in SWSE Configuration Wizard	Comment or Description
Host Name or Virtual IP Address for Third-Party Load Balancer	A host name or virtual IP address for use with a third-party load balancer.
Network Port Number for Third-Party Load Balancer	A network port number for use with a third-party load balancer.
Siebel Web Server Extension Logical Profile Location	The location of the SWSE logical profile that you created in “Configuring the SWSE Logical Profile” on page 94 .
Web Server Type	(Oracle Solaris only) Specify the Web server type for this installed instance of SWSE: either Oracle iPlanet Web Server or Apache Web Server.
Web Server Instance Location	The location of the Web server instance for this installed instance of SWSE.
Restart Web Server	Indicate whether to restart the Web server now to complete the changes. If you do not choose to restart your Web server processes at this time, then you must do so before making Siebel Business Applications available to your users through their browsers. For more information about stopping and restarting the Web server, see “Requirements for Stopping and Starting the Web Server” on page 347 .

More Information About Using the Siebel Configuration Wizards

This topic includes the following information about using the Siebel Configuration Wizards:

- [“Where to Find Configuration Tasks” on page 103](#)
- [“Siebel Configuration Wizards Associated with Installable Components” on page 104](#)
- [“Siebel Configuration Wizard Syntax Elements” on page 105](#)
- [“Options for Configuring the Siebel Gateway Name Server, the Siebel Enterprise, and the SWSE Logical Profile” on page 106](#)
- [“Options for Configuring the Siebel Server” on page 107](#)
- [“Options for Configuring the Siebel Web Server Extension” on page 107](#)
- [“About Configuring the Siebel Web Server Extension” on page 109](#)

Related Topics

[“About Configuring Siebel Business Applications” on page 69](#)

[“Starting a Siebel Configuration Wizard” on page 71](#)

[Chapter 5, “Installing the Siebel Database on the RDBMS”](#)

[Chapter 6, “Additional Postinstallation and Configuration Tasks”](#)

[“Process of Removing Configuration Data” on page 279](#)

[Chapter 12, “Configuring the RDBMS”](#)

Where to Find Configuration Tasks

The configuration tasks for Siebel Business Applications are described in the following locations, as shown in [Table 13](#). This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102](#).

Table 13. Where to Find Configuration Tasks

Module to Configure	Where Documented
Siebel Gateway Name Server	“Configuring the Siebel Gateway Name Server” on page 75
Siebel Enterprise	“Configuring the Siebel Enterprise” on page 78
Siebel database	“Installing the Siebel Database” on page 86
Siebel Server	“Configuring the Siebel Server” on page 87
Siebel Web Server Extension (SWSE)	“Process of Configuring the Siebel Web Server Extension” on page 93

Siebel Configuration Wizards Associated with Installable Components

Table 14 lists the Siebel Configuration Wizards that are associated with selected installable server-based components in Siebel Business Applications. This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102.](#)

Table 14. Configuration Wizards for Siebel Business Applications Components

Installed Component	Associated Siebel Configuration Wizard
Siebel Enterprise Server: Siebel Gateway Name Server	<p>The Siebel Enterprise Configuration Wizard (or Siebel Configuration Wizard) is the wizard associated with this component. Use this wizard to configure the Siebel Gateway Name Server, the Siebel Enterprise, and the SWSE logical profile.</p> <p>Run the Siebel Enterprise Configuration Wizard on the Siebel Gateway Name Server computer. (You installed this component using the Siebel Enterprise Server installer.)</p>
Siebel Enterprise Server: Database Configuration Utilities	<p>The Siebel Database Configuration Wizard is the Configuration Wizard associated with this component. Use this wizard to install the Siebel database. Also use it to perform other tasks to set up the database to support your installed Siebel Business Applications and languages.</p> <p>Run the Siebel Database Configuration Wizard on the Siebel Server computer. (You installed Siebel Database Configuration Utilities using the Siebel Enterprise Server installer.)</p>
Siebel Enterprise Server: Siebel Server	<p>The Siebel Server Configuration Wizard is the wizard associated with this component. Use this wizard to configure the Siebel Server.</p> <p>Run the Siebel Server Configuration Wizard on the Siebel Server computer. (You installed this component using the Siebel Enterprise Server installer.)</p>
Siebel Web Server Extension (SWSE)	<p>The Siebel Web Server Extension Configuration Wizard (or SWSE Configuration Wizard) is the Configuration Wizard associated with this component. Use this wizard to configure the physical SWSE.</p> <p>Before configuring the SWSE, you must have created an SWSE logical profile using the Siebel Enterprise Configuration Wizard. Run this wizard on the Siebel Gateway Name Server computer. (You installed this component using the Siebel Enterprise Server installer.)</p> <p>Then run the SWSE Configuration Wizard on the Web server computer. (You installed the SWSE using the SWSE installer.)</p>

Siebel Configuration Wizard Syntax Elements

This topic describes the command-line syntax for starting the Siebel Configuration Wizards. This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102](#). The command-line syntax for starting the Configuration Wizard includes the following elements:

- **-mode *mode_name***. Specifies the Siebel Configuration Wizard that you are running. The command must be executed within an installed instance of the applicable Siebel module. For all of the supported modes, you can optionally save a response file for later unattended configuration. The supported modes are as follows:
 - **enterprise**. Starts the Siebel Enterprise Configuration Wizard (to configure Siebel Gateway Name Server, Siebel Enterprise, or SWSE logical profile). These configuration tasks are performed from the Siebel Gateway Name Server installation.
 - **siebsrvr**. Starts the Siebel Server Configuration Wizard. This configuration task is performed from the Siebel Server installation.
 - **dbsrvr**. Starts the Siebel Database Configuration Wizard. This configuration task is performed from the Siebel Server installation where you also installed Siebel Database Configuration Utilities.
 - **swse**. Starts the Siebel Web Server Extension Configuration Wizard. This configuration task is performed from the Siebel Web Server Extension (SWSE) installation.
- **-responseFile *file_name***. Specifies the name of a response file that you are executing, for an unattended configuration. The response file would have been saved in a previous configuration session. In unattended mode, wizard screens that would normally display are not displayed, because the applicable data is already stored in the response file. Unattended configuration can be invoked from an unattended installation session.
- **-skipValidation**. Specifies that no validation should be performed of user input. You can use this flag when saving a response file for an unattended configuration, or when previewing wizard screens.
- **-verbose**. Specifies that more details should be included in configuration log files.

NOTE: Using the **-verbose** option is recommended in order to log information about certain issues that might affect your configuration tasks. For example, various 32-bit libraries are required for successful configuration. When you use the **-verbose** option to generate a finer level of granularity in log messages, the Configuration Wizard might log, for example, that a particular required 32-bit library is missing. For more information about required libraries, see the Certifications tab on My Oracle Support.

Options for Configuring the Siebel Gateway Name Server, the Siebel Enterprise, and the SWSE Logical Profile

After you install Siebel Gateway Name Server (using the Siebel Enterprise Server installer), you run the Siebel Configuration Wizard (Siebel Enterprise Configuration). This wizard includes the following tasks. Perform the tasks under Create New Configuration in the order shown. This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102](#).

■ Create New Configuration

- **Configure a New Gateway Name Server.** Configures the Siebel Gateway Name Server that you have installed. For more information about these settings, see [“Configuring the Siebel Gateway Name Server” on page 75](#).
- **Configure a New Enterprise in a Gateway Name Server.** Creates a new Siebel Enterprise configuration. The configuration is stored on the Siebel Gateway Name Server. For more information about these settings, see [“Configuring the Siebel Enterprise” on page 78](#).

NOTE: Before you perform this task, the Siebel Gateway Name Server must have already been installed and configured, and must be running, unless you run the wizard with the flag to skip validation.

- **Configure a New Siebel Web Server Extension Logical Profile.** Creates and saves an SWSE logical profile in a location that you designate. The logical profile stores settings that might apply to one or multiple SWSE installations. The logical profile also includes editable files that automatically create the Siebel application virtual directories on the Web server when you apply the SWSE logical profile.

When you configure an installed instance of SWSE, you apply an SWSE logical profile. This task updates the eapps.cfg file on the SWSE with settings from the SWSE logical profile and other settings specific to this SWSE instance. It also creates the virtual directories on the Web server. For more information about creating and applying the SWSE logical profile, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

■ Modify Existing Configuration

- **Modify an Existing Enterprise.** Modifies the configuration settings for a Siebel Enterprise that you previously configured. For more information about these settings, see [“Configuring the Siebel Enterprise” on page 78](#).

NOTE: Before you perform this task, the Siebel Gateway Name Server must have already been installed and configured, and must be running, unless you run the wizard with the flag to skip validation. The Siebel Enterprise configuration that you are modifying must already exist.

Alternatively, you can modify the configuration settings for an existing Siebel Enterprise by using Siebel Server Manager, as described in *Siebel System Administration Guide*.

Options for Configuring the Siebel Server

Running the Siebel Server Configuration Wizard assumes that you have performed all of the prerequisite configuration tasks: configuring the Siebel Gateway Name Server, Siebel Enterprise, and SWSE logical profile; and installing the Siebel database. This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102](#).

After you have installed Siebel Server and performed the prerequisite tasks, you run the Siebel Server Configuration Wizard to perform the Create New Configuration task as shown. This wizard includes the following tasks.

After you have already configured a Siebel Server, you can modify the Siebel Server configuration using Siebel Server Manager, as described in *Siebel System Administration Guide*.

- **Create New Configuration.** Creates a new Siebel Server configuration. The configuration information is stored on the Siebel Gateway Name Server. For more information about these settings, see [“Configuring the Siebel Server” on page 87](#).

NOTE: Before you perform this task, the Siebel Gateway Name Server must have already been installed and configured, and must be running, unless you run the wizard with the flag to skip validation.

- **Add Language Support for the Siebel Server.** Deploys any additional installed languages for a Siebel Server that you previously configured. This task applies only if *both* of the following are true:
 - You have already initially configured the Siebel Server (Create New Configuration task).
 - You have already installed on the Siebel Server the new languages that you want to add as deployed languages.

In the screen where you specify languages to deploy, specify only the new languages that you want to deploy. See also [“Configuring the Siebel Server” on page 87](#).

Perform this task in conjunction with related language deployment tasks, such as to install and deploy languages on the SWSE. For more information, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

NOTE: Before you perform this task, the Siebel Gateway Name Server must have already been installed and configured, and must be running, unless you run the wizard with the flag to skip validation. The Siebel Server configuration that you are modifying must already exist.

NOTE: If you add (install) languages before you have configured the Siebel Server, then do not perform this task. Instead, use the task Create New Configuration, and specify all of the applicable languages that you want to deploy on this Siebel Server.

Options for Configuring the Siebel Web Server Extension

Running the SWSE Configuration Wizard is done on each Siebel Web Server Extension (SWSE) instance, after SWSE installation. This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102](#).

Running this wizard assumes that you have performed all of the prerequisite configuration tasks: configuring the Siebel Gateway Name Server, Siebel Enterprise, SWSE logical profile, and Siebel Server. You would also have installed the Siebel database using the Database Configuration Wizard.

After you install SWSE, you run the SWSE Configuration Wizard to apply the SWSE logical profile that you previously created. For detailed information about creating and applying the SWSE logical profile, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

The SWSE Configuration Wizard includes the following tasks:

- **Apply an SWSE Logical Profile.** Specifies the location of an SWSE logical profile that you previously created using the Siebel Configuration Wizard and applies the settings to this installed instance of SWSE, along with other settings that you specify using this task. This task updates the SWSE configuration files, `eapps.cfg` file and `eapps_sia.cfg`.

The `eapps.cfg` and `eapps_sia.cfg` files are located in `SWSE_ROOT\bin`. In this path, `SWSE_ROOT` is the SWSE installation directory.

Applying an SWSE logical profile also creates (or recreates) on the Web server the virtual directories required for Siebel Business Applications.

On Microsoft Windows (with Microsoft IIS Web server), batch files create the virtual directories for Siebel Business Applications. These batch files are located in the SWSE logical profile directory. Before configuring the SWSE, you can edit these batch files to remove entries for virtual directories that you do not need. For more information about using Microsoft IIS, see *Siebel Installation Guide for Microsoft Windows*.

If you are using Siebel native load balancing, then generate the configuration file `lbconfig.txt` and place it in the SWSE logical profile location before you apply the logical profile. Perform these tasks as a second phase of SWSE configuration: after the initial SWSE configuration to get the system up and running and after installing and configuring all of the Siebel Servers that will participate in load balancing. For more information about configuring load balancing, see [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#).

- **Add Language Support for the SWSE Configuration.** Deploys any additional installed languages for an SWSE that you previously configured. This task applies only if *both* of the following are true:
 - You have already initially configured the SWSE (Apply an SWSE Logical Profile task).
 - You have already installed on the SWSE the new languages that you want to add as deployed languages.

In the screen where you specify languages to deploy, specify only the new languages that you want to deploy. See also [“Applying the SWSE Logical Profile” on page 99](#).

Perform this task in conjunction with related language deployment tasks, such as to install and deploy languages on the Siebel Server. For more information, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

NOTE: If you add (install) languages before you have configured the SWSE, then do not perform this task. Instead, use the task Apply an SWSE Logical Profile, and specify all of the applicable languages that you want to deploy on this SWSE.

About Configuring the Siebel Web Server Extension

As described in [“Process of Configuring the Siebel Web Server Extension” on page 93](#), you configure the Siebel Web Server Extension (SWSE) in two phases: creating the SWSE logical profile on the Siebel Gateway Name Server computer and configuring the installed instance of SWSE on the Web server computer. This topic is part of [“More Information About Using the Siebel Configuration Wizards” on page 102](#).

You can use the same SWSE logical profile with multiple SWSE instances. You can also create multiple SWSE logical profiles for use with sets of SWSE instances with different configuration requirements. It is strongly suggested that you retain all of the SWSE logical profiles and note the SWSE instances to which you applied each profile.

To change a setting that was specified in the SWSE logical profile, perform the SWSE logical profile configuration task again, specifying the same or a different name. If you configure an SWSE logical profile and specify the location of an existing logical profile, then the existing profile is replaced with the new one. You must reapply the logical profile to each applicable SWSE.

About SWSE Configuration and the eapps.cfg File

It is possible to manually edit settings in the eapps.cfg file. However, doing so might cause this file to become out of sync with the SWSE logical profile. If the SWSE logical profile is recreated or reapplied, then your manual changes to the eapps.cfg file might be lost.

About SWSE Configuration and Encryption Type

If you create the SWSE logical profile directly after configuring the Siebel Enterprise, then the profile derives the encryption type from temporary data defined during the previous task, unless you skip validation in the Siebel Configuration Wizard.

If you create the SWSE logical profile without validating the user input in the Configuration Wizard, then the encryption type is set to None in the ConnectString parameters in the eapps.cfg and eapps_sia.cfg files. The connect string value *None* is compatible with Siebel Enterprise configuration encryption type choices of SISNAPI Without Encryption or SISNAPI Using TLS 1.2. For more information about validation in the Configuration Wizard, see [“Starting a Siebel Configuration Wizard” on page 71](#).

NOTE: If you configured the Siebel Enterprise with the encryption type set to SISNAPI Using RSA Encryption Algorithm, then it is strongly recommended not to create the SWSE logical profile with validation skipped, so that the encryption settings are compatible between the Siebel Servers and the SWSE (as is required).

For more information about encryption type and Transport Layer Security (TLS) settings, see *Siebel Security Guide*.

Related Topics

[“Process of Configuring the Siebel Web Server Extension” on page 93](#)

5

Installing the Siebel Database on the RDBMS

This chapter describes running the Database Configuration Wizard to install the Siebel database and related tasks. This chapter is written for administrators who run the Database Configuration Wizard and for database administrators (DBAs) who perform related tasks on the relational database management system (RDBMS). It includes the following topics:

- [About Installing the Siebel Database on page 111](#)
- [Creating Table Owner and Administrator Accounts on page 114](#)
- [Installing the Stored Procedures and User-Defined Functions on IBM DB2 on page 117](#)
- [Installing the Siebel Database on page 118](#)
- [Activating License Keys on page 124](#)
- [Setting Up Your Environment to Support Global Time Zone on page 125](#)
- [Populating the Siebel File System on page 126](#)
- [Importing a Siebel Repository Manually into the Siebel Database on page 126](#)

NOTE: If your database is IBM DB2 for z/OS, then see *Implementing Siebel Business Applications on DB2 for z/OS* instead of this chapter. See also the relevant information in “Planning RDBMS Installation and Configuration” on page 308.

About Installing the Siebel Database

CAUTION: In an upgrade environment, or in another environment where you have an existing Siebel database, you generally *do not perform any of the tasks mentioned in this chapter*. For more information, see “About Installing in Upgrade Environments” on page 302 and “Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case (Existing Database)” on page 38.

The *Siebel database* on the RDBMS stores the data used by Siebel Business Applications. Siebel Server components (particularly Application Object Managers supporting Siebel Web Clients), Siebel Tools, and Siebel Developer Web Clients connect directly to the Siebel database and make changes in real time.

Siebel Mobile Web Clients download a subset of the server data to use locally. The mobile user periodically synchronizes the local database with the Siebel database through the Siebel Remote components on the Siebel Server. The synchronization process updates both the local database and the Siebel database.

The *Siebel Database Configuration Utilities* (also called the *Siebel Database Server*) refers to a set of files that you install on a Siebel Server computer, using the Siebel Enterprise Server installer. These files are accessed when you run the Database Configuration Wizard and the Siebel Upgrade Wizard in order to install and configure the Siebel database on the RDBMS.

NOTE: In the Database Configuration Wizard, the main task that you perform is called *installing* the Siebel database. Additional tasks described in this chapter are sometimes referred to by using the general phrase *configuring* the Siebel database.

For instructions on installing Database Configuration Utilities, Siebel Server, and other Siebel Enterprise Server components for the current release, Siebel CRM version 16.0, see [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)

NOTE: This chapter assumes that you have already created the database instance. It also assumes that you have already installed the Database Configuration Utilities on the same computer as a Siebel Server, and in the same top-level installation directory. You install the Database Configuration Utilities only once, on a single Siebel Server computer. It is recommended that you install the Siebel Server and the Database Configuration Utilities at the same time.

For a new deployment, you must install a Siebel Server and the Database Configuration Utilities on the same computer as the Siebel Gateway Name Server. For more information, see [“Requirements for Siebel Gateway Name Server Authentication” on page 333](#). For information about the tasks that you must perform in the RDBMS before you install the Database Configuration Utilities, see [Chapter 12, “Configuring the RDBMS.”](#)

The Database Configuration Utilities installed software has no run-time role in managing database operations for users running Siebel Business Applications. Some of the tasks that you can perform with the Database Configuration Wizard are for upgrades only, and are described in *Siebel Database Upgrade Guide*. For more information about the wizards provided for configuring Siebel Business Applications software, see [Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)

NOTE: After performing a new database installation, you must activate the license keys, as described in [“Activating License Keys” on page 124](#). Then run the Configuration Wizards as described in this book.

This topic includes the following information:

- [“About Installing a Database” on page 113](#)
- [“About Adding a Language to an Existing Database” on page 113](#)
- [“About Database Updates for the Current Release” on page 114](#)

Related Topics

[“Installation-Related Changes for Siebel Innovation Pack 2016” on page 25](#)

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[“Activating License Keys” on page 124](#)

[Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[Chapter 12, “Configuring the RDBMS”](#)

About Installing a Database

When you choose Install Database from the Siebel Database Operation screen in the Database Configuration Wizard, the utility performs several tasks within the database instance that you have already created.

The Database Configuration Wizard is available on the computer on which you installed the Siebel Server and the Database Configuration Utilities.

Before installing the Siebel database, review all of the applicable requirements. The Install Database operation does the following:

- 1 Creates the Siebel schema. Tables and indexes are created in their respective specified tablespaces.
- 2 Inserts Siebel seed data specific to your database. Seed data is inserted for the primary language only. This task also installs views, packages, and procedures for your database.
- 3 Imports the Siebel Repository. The Repository is imported for the primary language only.
- 4 Sets system preferences.

This topic is part of [“About Installing the Siebel Database” on page 111](#).

About Adding a Language to an Existing Database

Adding a language to an existing Siebel database installs seed data to support that language. After the database is initially installed with the primary language, each additional language must be installed separately using an add-language operation.

To add a new language to previously installed Siebel Business Applications, you must have installed its Siebel language pack on the installed Siebel Server, using the Siebel Enterprise Server installer. See also [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

After adding a language, you must import the Siebel Repository for this language. For more information, see [“Importing a Siebel Repository Manually into the Siebel Database” on page 126](#).

After you have added a language to the Siebel database, your seed data is multilingual. You must enable the multilingual list of values (MLOV) capability for Siebel Business Applications, and you must enable individual LOVs associated with the language. For more information, see:

- *Configuring Siebel Business Applications*
- *Siebel Global Deployment Guide*
- For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

This topic is part of [“About Installing the Siebel Database” on page 111](#).

About Database Updates for the Current Release

If you have installed the current release as a new installation, then you use the Database Configuration Wizard task to install a new Siebel database. This database contains schema changes, Siebel Repository changes, and seed data for Siebel CRM functionality through the current release.

If you install the current release as a migration installation, then you must use the Incremental Repository Merge feature to update your existing Siebel database to the current release level. For information about using Incremental Repository Merge, see *Siebel Database Upgrade Guide*.

In general, it is recommended to install the latest Siebel Patchset release before you install a new Siebel database or run Incremental Repository Merge. For more information, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

This topic is part of [“About Installing the Siebel Database” on page 111](#).

Related Topics

[“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)

[“About Siebel CRM Releases” on page 300](#)

Related Books

Siebel Database Upgrade Guide

Siebel Patchset Installation Guide for Siebel CRM, 1614310.1 (Article ID) on My Oracle Support

Creating Table Owner and Administrator Accounts

Create the table owner and administrator accounts according to the guidelines provided for each database platform identified in this topic. These accounts are created by updating and running the grantusr.sql script. Record all of the relevant data, such as the table owner name and password, in the worksheets provided in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

NOTE: For each applicable database platform, if you are planning to use Siebel Marketing, then also grant DROP TABLE, DROP INDEX, CREATE TABLE, and CREATE INDEX rights at the database level within the OLTP schema to the table owner or the database user ID used for Siebel Marketing. For more information, see *Siebel Marketing Installation and Administration Guide*.

CAUTION: It is strongly recommended not to change the name of the Siebel administrator account, SADMIN. This account must be created so that you can log in to Siebel Business Applications as the Siebel administrator. For information about changing the password for this account, see *Siebel Security Guide*.

NOTE: Before you execute grantusr.sql, confirm that this script will create all of the users that must be created before you install the Siebel database. Optionally, you can also modify the script to define the anonymous users that you will specify when configuring the Siebel Web Server Extension. For more information, see [“Requirements for Configuring Anonymous Users for the Siebel Web Server Extension” on page 347](#).

This topic contains the following information:

- [“Running the grantusr.sql Script on an Oracle Database” on page 115](#)
- [“Running the grantusr.sql Script on IBM DB2” on page 116](#)

Running the grantusr.sql Script on an Oracle Database

Before you install the Siebel database, your DBA must review, modify, and execute the grantusr.sql script.

The administrator executes grantusr.sql against the database instance to create the Siebel table owner account, the Siebel administrator account (default: SADMIN), the LDAPUSER account, and the role sse_role and to grant them appropriate privileges. The script also creates the default tablespace. The grantusr.sql script is located in the *DBSRVR_ROOT/oracle* subdirectory.

After executing grantusr.sql, the DBA must manually create all of the additional tablespaces (for data or indexes) that you require in your Siebel database. To do this, use commands similar to the existing ALTER USER command defined in grantusr.sql for creating the default tablespace. Use commands similar to the following:

```
ALTER USER TABLE_OWNER quota unlimited on tablespace_name;
```

where:

- *TABLE_OWNER* is the name of the Siebel table owner account.
- *tablespace_name* is the name that you are using for each particular tablespace. If it is necessary, then the quota value can be adjusted to an appropriate value for each tablespace.

The grantusr.sql script performs the following functions:

- Creates the role sse_role and grants CREATE SESSION privilege to this role.
- Creates the Siebel table owner account and grants other appropriate privileges to this account.
- Creates the accounts SADMIN (the Siebel administrator) and LDAPUSER and grants the role sse_role to them.
- Creates the default tablespace.

Passwords are prompted for by the script, rather than defined within the script.

The length and allowable characters for the user name and password depend on the rules of your underlying RDBMS platform. For more information, see Oracle Database documentation.

This topic is part of [“Creating Table Owner and Administrator Accounts” on page 114](#).

To run the grantusr.sql script on an Oracle Database

- 1 Execute the grantusr.sql script from SQL*Plus, using an account with DBA privileges, and using the following command:

```
@/$SIEBEL_ROOT/dbsrvr/oracle/grantusr.sql
```

NOTE: You must specify the full path to the grantusr.sql file.

- 2 Enter the tablespace name listed in [Appendix A, "Siebel Deployment Planning Worksheet."](#)

Running the grantusr.sql Script on IBM DB2

Before you install the Siebel database, your DBA must manually create the Siebel table owner account, the Siebel administrator account (default: SADMIN), and the sse_role group. The DBA must then add the Siebel administrator account to the sse_role group at the operating system level.

You can add users to the sse_role group and permit them to use administrative commands to start, stop or otherwise administer the Siebel Server or components. However, you must change the permissions on the directory to enable write access, using the following command:

```
chmod -R 775 $SIEBEL_ROOT
```

NOTE: On Oracle Solaris, the sse_role group cannot be created using `admintool`, due to the use of an underscore in the name. Instead, use the command `groupadd sse_role` to create the sse_role group. Ignore the warning: `groupadd: sse_role name should be all lower case or numeric.`

Before you install the Siebel database, execute the grantusr.sql script against your database server to grant the appropriate privileges to these users. The grantusr.sql script is located in the `DBSRVR_ROOT/db2udb` subdirectory.

Your DBA must review and execute this script, which performs the following functions:

- Grants the appropriate permissions to the Siebel table owner account that will own all of the database objects for your Siebel deployment.
- Creates a role (sse_role) with CREATE SESSION privileges.

You cannot create the LDAPUSER account by running grantusr.sql. This account must belong to the sse_role group and must be created by the DBA or the UNIX network administrator, as appropriate. For more information about authentication using the LDAP security adapter, see *Siebel Security Guide*.

This topic is part of ["Creating Table Owner and Administrator Accounts"](#) on page 114.

To run the grantusr.sql script on IBM DB2

- 1 Execute the grantusr.sql script, using an account with DBA privileges.

The usual DB2 System Administration account is called `db2inst1` for this procedure.

- 2 Enter the following commands:

```
db2 connect to DB2database_alias user instance_owner_username using password  
db2 -vf $SIEBEL_ROOT/dbsrvr/db2udb/grantusr.sql
```

where:

- *DB2database_alias* is the DB2 alias that you use
- *instance_owner_username* is the login ID of the database instance owner
- *password* is the password for the database instance owner

- `$SIEBEL_ROOT` is the full path to the Siebel root directory

The script prompts you for the default tablespace in which your Siebel objects are to be created.

- 3 Enter the tablespace name that you recorded in the copy that you made of [Appendix A, "Siebel Deployment Planning Worksheet."](#)

The length and allowable characters of the account names and passwords depend on the rules of your underlying RDBMS platform. For more information, see IBM DB2 documentation.

Before you install the Siebel database, see ["Installing the Stored Procedures and User-Defined Functions on IBM DB2"](#) on page 117.

Installing the Stored Procedures and User-Defined Functions on IBM DB2

On IBM DB2, after installing the Database Configuration Utilities, you must copy stored procedures and user-defined functions (UDFs) from the Database Configuration Utilities installation to the DB2 database server.

Any method that transfers the necessary files to the correct location on the database server is acceptable. To copy the stored procedure code, complete the procedure that follows. Use the steps appropriate to the operating systems for the Database Configuration Utilities and the RDBMS. For information about how to perform basic IBM DB2 tasks, see the *Quick Beginnings* guide from IBM.

To copy and install the stored procedures and user-defined functions

- 1 Log on to the Siebel Server computer on which you installed the Database Configuration Utilities.
- 2 Navigate to the following subdirectory in the Database Configuration Utilities installation directory:

```
DBSRVR_ROOT/db2udb/siebpoc/DBSRVR_OS
```

where:

- `DBSRVR_ROOT` is the Database Configuration Utilities component subdirectory of your Siebel Business Applications installation directory (`$SIEBEL_ROOT/dbsrvr`)
 - `DBSRVR_OS` is the string corresponding to the operating system your database server (RDBMS) runs on, such as AIX, HPUX, LINUX, or SOLARIS
- 3 Copy the file `siebpoc` to the `function` subdirectory within the DB2 instance directory on the RDBMS computer where DB2 is installed.

For example, on AIX, this location might be `$INST_HOME/sql/lib/function`.

Permissions for `siebpoc` must be `-rw-r---` (read-write for the owner, read for the group, and neither read nor write for all others). The owner of the file must be the instance owner, and the group must be the group to which the instance owner belongs.

For a 64-bit DB2 database, do one of the following instead:

- For a 64-bit DB2 database running on Itanium architecture, copy the file `siebproc64` to the `SQLLIB/FUNCTION` directory, and rename it to `siebproc`.
- For a 64-bit DB2 database running on X64 architecture, copy the file `siebprocEMT64` to the `SQLLIB/FUNCTION` directory, and rename it to `siebproc`.

- 4 Proceed to [“Installing the Siebel Database” on page 118](#).

Installing the Siebel Database

This topic describes how to install the Siebel database on the RDBMS. This task is a step in [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#). (Also perform all of the other applicable tasks in this chapter.)

To install Siebel database components

- 1 Review [“About Installing the Siebel Database” on page 111](#).

See also the referenced information such as the relevant information about the Siebel Configuration Wizards in [Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)

- 2 Before you run the Database Configuration Wizard for the first time, run the `CreateDbSrvrEnvScript` script to generate the environment setup files `dbenv.csh` and `dbenv.sh`.

`CreateDbSrvrEnvScript` is located in the directory `$SIEBELSRVR_ROOT/install_scripts/install`. Run `CreateDbSrvrEnvScript` from this location by using the following command:

```
./CreateDbSrvrEnvScript Siebel_Root_Parent_Directory LANG DB_Platform
```

where:

- `Siebel_Root_Parent_Directory` is the top-level Siebel Enterprise Server installation directory.
- `LANG` is the three-letter code for the primary language for the Siebel database that you will install; for example, `ITA` for Italian.
- `DB_Platform` is Oracle, Db2Udb, or Db2.390.

For example:

```
./CreateDbSrvrEnvScript /siebel ITA Oracle
```

The `dbenv.csh` and `dbenv.sh` environment setup files are created in the Siebel Server installation directory.

- 3 Open a shell window.

- 4 Navigate to the `$SIEBSRVR_ROOT` directory and source the environment file by using one of the following commands, depending on the type of shell that you use. Perform this step each time that you run the Database Configuration Wizard. You must have created this file first, by using the script `CreateDbSrvrEnvScript`, as described in [Step 2 on page 118](#).

C shell

```
source dbenv.csh
```

Bourne or Korn shell

```
./dbenv.sh
```

TIP: Make sure that there is a space between the initial period and `./dbenv.sh`.

In this path, `$SIEBSRVR_ROOT` is the location of the Siebel Server root directory. For example, for Siebel CRM version 16.0, the directory might be `/export/home/siebel/16.0.0.0/ses/siebsvr`.

- 5 Verify whether the values for `SIEBEL_ROOT` and `LANGUAGE` are correctly set or are empty by entering:

```
env
```

If the variables are incorrect or missing, then reset them using one of the following commands, as appropriate to the shell that you use.

For example, for Siebel CRM version 16.0, the `SIEBEL_ROOT` value might resemble `/export/home/siebel/16.0.0.0/ses/siebsvr`, while the value for `LANGUAGE` might be `ENU`, `FRA`, `JPN`, `CHS`, or another code representing the language in which you are running the Database Configuration Wizard.

C shell

```
setenv SIEBEL_ROOT New_Value
```

```
setenv LANGUAGE New_Value
```

Bourne or Korn shell

```
export SIEBEL_ROOT=New_Value
```

```
export LANGUAGE=New_Value
```

- 6 Navigate to the `config` subdirectory of the `$SIEBEL_ROOT` directory. For example, for Siebel CRM version 16.0, navigate to a location like `/siebel/16.0.0.0/ses/config`.
- 7 Start the Database Configuration Wizard, as described in [“Starting a Siebel Configuration Wizard” on page 71](#). Enter a command similar to the following:

```
install_path/config/config -mode dbsvr
```

In this path, `install_path` is the installation path for the installed Siebel Enterprise Server software.

The Database Configuration Wizard validates the existence of the `$SIEBEL_ROOT` directory.

- 8 Specify the following, and click Next:

Siebel Server Directory. Accept the default path, or click Browse to select a different Siebel Server installation location. The location that you specify is the `$SIEBSRVR_ROOT` installation directory. For example, this directory might be `/export/home/siebel/16.0.0.0.0/ses/siebsrvr`.

Siebel Database Server Directory. Accept the default path, or click Browse to select a different location. The location that you specify is the Siebel Database Configuration Utilities installation directory (the `DBSRVR_ROOT` directory). For example, this directory might be `/export/home/siebel/16.0.0.0.0/ses/dbsrvr`.

- 9 On the RDBMS Platform screen, select one of the following platforms, and click Next:

IBM DB2 UDB for Linux UNIX Windows
IBM DB2 UDB for z/OS
Oracle Database Enterprise Edition

- 10 On the Siebel Database Operation screen, select Install Database from the list, and click Next.

- 11 On the Select Installation Operation screen, select Install Siebel Database to install a new Siebel database, or select Add a Language to an Existing Siebel Database, and then click Next.

The Install Siebel Database option creates the Siebel schema and inserts seed data and Siebel Repository data for the primary language at the end of the Configuration Wizard session.

If you instead selected Add a Language to an Existing Siebel Database, then go to [Step 15 on page 121](#). You must have included the language when you installed the Siebel Server and Database Configuration Utilities. For more information, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

- 12 On the next screen, confirm that you want to install a new Siebel database, or indicate that you already have a Siebel database.

- 13 On the Siebel User/Role Creation screen, confirm that you (or a database administrator) have already run the `grantusr.sql` script to set up table owner and administrator accounts.

NOTE: The table owner and administrator accounts must be in place or you will not be able to complete the installation of the tables, indexes, and seed data in the Siebel database. For more information, see [“Creating Table Owner and Administrator Accounts” on page 114](#).

- If you already ran `grantusr.sql`, then select the corresponding option, and click Next.
- If you did not already run `grantusr.sql`, then exit the Database Configuration Wizard, and run the script now. When the script has finished executing, restart the Database Configuration Wizard.

- 14 On the Database Encoding screen, identify the appropriate database encoding method, and click Next:

UNICODE Database
Non-UNICODE Database

CAUTION: Choose the correct option for your database to prevent installing the wrong data types. The database cannot create Unicode data types on a non-Unicode page setting, so check this setting carefully before choosing this option.

NOTE: Before you select languages in the next two steps, review the information about code pages in [“Planning RDBMS Installation and Configuration” on page 308](#).

- 15** On the Base Language screen, specify which language serves as the primary language (base language) for the Siebel database.

NOTE: If you installed a single Siebel language pack on the Siebel Server where you also installed Database Configuration Utilities, then that language is assumed for a new database installation. Neither the Base Language nor the Language Selection screen appears. Go to [Step 17 on page 121](#).

The languages listed in this screen are those for which you previously installed Siebel language packs on the Siebel Server where you also installed Database Configuration Utilities. Do one of the following, and click Next:

- If you are installing a new Siebel database, then specify the language that will be the primary language. Seed data and Siebel Repository data will be installed for this language. Go to [Step 17 on page 121](#). (The Language Selection screen does not appear in this case.)
- If you are adding a language to an existing Siebel database, then specify the language that you already installed as the primary language. Go to the next step to specify the additional language to install, from the Language Selection screen.

- 16** (Add Language case only) On the Language Selection screen, select the language that you want to install in the Siebel database, for an Add Language operation.

NOTE: This screen does not appear for a new database install case. Go to the next step.

The languages listed in this screen are those for which you previously installed Siebel language packs on the Siebel Server where you also installed Database Configuration Utilities.

Select the language that you want to add. Seed data will be installed for this language. You must import the Siebel Repository for this language separately (using the Add Language to an Existing Repository task), as described in [“Importing a Siebel Repository Manually into the Siebel Database” on page 126](#).

Some of the remaining screens do not apply for an add-language operation. Go to the next applicable step.

- 17** On the ODBC Data Source Name screen, indicate the name for the ODBC data source, such as si eb16_DSN, and click Next.

For more information about the ODBC data source, see [“Planning RDBMS Installation and Configuration” on page 308](#).

- 18** Specify the following, and click Next:

Database User Name. Type the user name of the Siebel administrator; for example, sadmi n.

Database Password. Type the password for the Siebel administrator.

Database Password (confirm). Retype the password to confirm it.

19 Specify the following, and click Next:

Database Table Owner. Type the name of the Siebel database table owner or the account that will own the Siebel objects.

Database Table Owner Password. Type the password for the Siebel database table owner.

Database Table Owner Password (confirm). Retype the password to confirm it.

20 (IBM DB2 only) Specify the following, and click Next:

Index Table Space Name. Type the name for your index tablespace; for example, SBL_INDX. (Tablespace names must not contain spaces; underscores are allowed.)

4K Table Space Name. Type the name for your 4-KB tablespace; for example, TBS_4K. (Tablespace names must not contain spaces; underscores are allowed.)

16K Table Space Name. Type the name for your 16-KB tablespace; for example, TBS_16K. (Tablespace names must not contain spaces; underscores are allowed.)

32K Table Space Name. Type the name for your 32-KB tablespace; for example, TBS_32K. (Tablespace names must not contain spaces; underscores are allowed.)

21 (Oracle Database only) Specify the following, and click Next:

Index Table Space Name. Type the name for your index tablespace; for example, INDEX01. (Tablespace names must not contain spaces; underscores are allowed.)

Table Space Name. Type the name for your tablespace; for example, DATA01. (Tablespace names must not contain spaces; underscores are allowed.)

22 (Oracle Database only) On the Siebel License Key Option screen, specify that you will provide the license key data later, and click Next.

In the current release, the license keys for Siebel CRM base applications must be activated using the License Key Activation utility, as described in [“Activating License Keys” on page 124](#).

23 (Oracle Database only) On the Oracle Parallel Index screen, specify the statement describing your database environment, and click Next:

- Does not use the Oracle Parallel Indexing option
- Uses the Oracle Parallel Indexing option

If you have a single-CPU environment, then choose the first option. If you have a multiple-CPU environment, then choose the first or second option, depending on whether you are running your Oracle Database with parallel indexing on.

24 Specify the following, and click Next:

Security Group ID / Grantee. Type the name for your security group. Specify SSE_ROLE.

25 On the Log Output Directory screen, accept the default log directory or enter a new directory name, and click Next.

By default, logging occurs in the `$SI_EBSRVR_ROOT/Log/operation/output` directory. In this path, *operation* corresponds to the operation that you are performing, such as *install* for an Install Database operation or *install_lang* for an Add Language operation.

Click Help to view the following message, which asks if you are ready to apply configuration changes to the Siebel database now, using the Siebel Upgrade Wizard, or will do so later:

Configuration is complete: your output will be saved under \$Siebel Root/siebsrvr/bin/master_<process>.ucf. Would you like to deploy the process you configured to the database now or later?

NOTE: Check the *Siebel Release Notes* on My Oracle Support for the current release. If this document describes any tasks that you must perform to modify the generated SQL files, then modify the generated SQL files as necessary before you execute the SQL in the Siebel Upgrade Wizard.

26 Choose one of the following, and click Next:

- **Yes apply configuration changes now.** Choose this option if you want the generated SQL files to be executed in the Siebel Upgrade Wizard.
- **No I will apply configuration changes later.** Choose this option if you do *not* want the generated SQL files to be executed in the Siebel Upgrade Wizard. In this case, you must run the Upgrade Wizard manually at a later time in order to execute the generated SQL files.

If you choose to apply configuration changes later, then the command line to apply the configuration later is:

```
$SIEBEL_ROOT/siebsrvr/bin/srvrupgwi z /m master_operation.ucf
```

For the purposes of this procedure, *operation* is either *install* or *install_lang*.

27 Review the values that you entered on the previous screens in the Database Configuration Wizard:

- If you have to change any values, then click Back and Next to access the screens on which to change entries, and then to return to this screen.
- Alternatively, you can click Cancel to cancel the Database Configuration Wizard session, then restart the wizard and enter different values.
- When you have verified your input, click Next. Doing so generates SQL files that you will then apply to the database. When all of the SQL files have been generated, a message appears, stating The configuration changes were applied successfully. Click OK.

If you chose No in [Step 26 on page 123](#), then the Siebel Upgrade Wizard does not appear. You must run it manually, after reviewing the generated SQL files.

If you chose Yes in [Step 26 on page 123](#), then the Siebel Upgrade Wizard appears.

NOTE: When you run the Siebel Upgrade Wizard, if a program or system error occurs, then you can rerun the wizard, starting at the point at which the wizard failed. For more information, see *Siebel Database Upgrade Guide*.

When the Siebel Upgrade Wizard finishes running, the Siebel Upgrade Wizard Complete screen appears. You have now finished installing the Siebel database components.

28 After the Siebel Upgrade Wizard has finished running, click Exit to exit the Database Configuration Wizard.

Related Topics

[“About Installing the Siebel Database” on page 111](#)

[“Verifying Installation for the Siebel Database” on page 220](#)

[“Troubleshooting Installation for the Siebel Database” on page 242](#)

Activating License Keys

In Siebel Innovation Pack 2016, the license keys for Siebel CRM base applications that were previously provided in seed data in the Siebel database are inactive. License keys entered by customers are unchanged. A new utility is provided for activating or deactivating the license keys that you require. You run the License Key Activation utility after installing a new Siebel database, running Incremental Repository Merge (for migration installations), or completing a full database upgrade.

You can find license key information for Siebel Business Applications at Oracle’s license codes site. For the Siebel license keys, see

<http://licensecodes.oracle.com/siebel.html>

The License Key Activation utility is supported on all operating systems and databases for Siebel Business Applications.

To start the License Key Activation utility

- 1 On the computer where you installed Siebel Server, navigate to the following location:

```
SI EBSRVR_ROOT\bin
```

- 2 Run the following program, according to your operating system:

- Microsoft Windows: `licensekeymodule.bat`
- UNIX: `licensekeymodule.sh`

- 3 Enter valid data for the following fields:

- **Siebel Server Location.** The installation path for this Siebel Server.
- **ODBC DSN.** The ODBC data source for the Siebel database.
- **Table Owner.** The table owner for the Siebel database.
- **Username.** The user name for logging into the Siebel database.
- **Password.** The password for this user.
- **DB Platform.** The RDBMS platform, either ORACLE, DB2UDB, DB2390, or MSSQL.
- **Log folder.** The folder in which the log file `licenseKeys.log` is created. This log file shows database connection information for troubleshooting purposes, and lists all of the license keys that were activated or deactivated in each session.

- 4 Click Login.

The license key activation screen appears, which lists Siebel CRM license keys.

- 5 For each license key module whose activation status you want to change, click the Active Flag check box to activate or deactivate this license key.
- 6 To apply your selections to the Siebel database, click Apply. Or, to reset any changes you have made in this screen, or since you last clicked Apply, click Reset.
CAUTION: After you have clicked Apply, the Reset button does not reset activation settings to their original state. However, you can change the activation status and click Apply again.
- 7 To exit the utility, click the X in the top right corner.

Related Books

Siebel Database Upgrade Guide

Setting Up Your Environment to Support Global Time Zone

Global deployments typically span multiple time zones, making it difficult to manage time-sensitive information that must be exchanged among customers and employees working around the world. You can use the Global Time Zone feature to monitor the transfer of tasks between sites in different time zones.

The Global Time Zone feature converts and stores date and time data, using the Universal Time Coordinated (UTC) standard. UTC is equivalent to Greenwich Mean Time, but without daylight savings time.

CAUTION: Oracle does not support new Siebel CRM deployments that do not use UTC. For existing deployments, if you do not want to deploy with UTC or are not ready to do so, then you must review the documentation for this feature, which is primarily located in *Siebel Global Deployment Guide*.

Make sure that the time is synchronized on all of your computers, by using a common NNTP server for time synchronization.

If you intend to operate your deployment with the Global Time Zone feature enabled, then you can optionally set the operating system of your database servers to UTC time, or its equivalent.

For restrictions on using the Global Time Zone feature on IBM DB2 for z/OS, see *Implementing Siebel Business Applications on DB2 for z/OS*.

NOTE: The Global Time Zone parameter (Universal Time Coordinated system preference) is enabled (set to TRUE) by default. If you do not want to enable the Global Time Zone feature, then you must reset this system preference to FALSE by navigating to the Administration - Application screen, and then the System Preferences view.

Populating the Siebel File System

After you complete installing Database Configuration Utilities and installing the Siebel database, you must populate the Siebel File System. Specific files needed to use the Siebel File System, such as correspondence templates and Siebel Marketing files, are provided with the Database Configuration Utilities software. A subdirectory called `files` is created when you install the Database Configuration Utilities.

The Siebel administrator must populate the `att` directory in the File System with these files after installing the Database Configuration Utilities, and before running the Siebel Web Client.

For detailed information about creating the Siebel File System, including setting the necessary permissions, see [“Creating the Siebel File System” on page 320](#).

To populate the Siebel File System directory

- 1 Copy the appropriate files from the `files` subdirectory of the Database Configuration Utilities software to the `att` subdirectory of the Siebel File System.
- 2 Verify that the files are in the correct location.

Importing a Siebel Repository Manually into the Siebel Database

Installing the Siebel database as described in [“Installing the Siebel Database” on page 118](#) automatically imports the Siebel Repository for the primary language (only). For each nonprimary language in a multilingual deployment, a separate step to manually import the Siebel Repository is needed.

The content in this topic is provided for customers with multilingual deployments or who have some reason to manually import a Siebel Repository.

You can import the Siebel Repository using the Database Configuration Wizard. This task populates the Siebel Repository tables in the Siebel database with new object definitions. You import the Siebel Repository separately for each nonprimary language in a multilingual deployment. This task does not apply to the Siebel Repository for the primary language.

Regardless of how many Siebel Business Applications that you are using (for example, Siebel Call Center, Siebel Sales, Siebel Service, and Siebel Marketing), you load the Siebel Repository tables only once for each language.

NOTE: When you import data into the Siebel Repository tables, a commit is performed once for each table into which Siebel Repository data is imported. Alternatively, you can adjust the commit frequency by including the command-line option `/z size_of_array` when the `repimexp` utility is invoked. The transaction will not be committed until all of the data in the array has been inserted. (However, if the table contains fewer records than the specified array size would allow, then the transaction is committed after all of the data has been inserted.)

Some steps in the procedure in this topic pertain to the task of adding a language to an existing Siebel Repository, also using the Database Configuration Wizard. By adding a new language to a Siebel Repository, you populate rows of localized user interface strings for Siebel Repository objects, which allows Siebel Business Applications to display the UI in the new language.

In order to add a new language to an existing Siebel Repository, you must have installed its Siebel language pack on the Siebel Server using the Siebel Enterprise Server installer. Also, you must have added the language to the Siebel database. For more information, see [“Installing the Siebel Database” on page 118](#) and [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

To import the Siebel Repository

- 1 Start the Database Configuration Wizard, as described in [“Installing the Siebel Database” on page 118](#). Respond to the wizard prompts in the same way that you did for that procedure, up to the Siebel Database Operation screen.
- 2 On the Siebel Database Operation screen, select Import/Export Repository, and click Next.
- 3 On the Select Repository Operation screen, choose one of the following options:

Import Repository. This option imports the Siebel Repository for the first time with a primary (base) language. Click Next and go to the next step. *This task does not apply if you are importing Siebel Repository data into an existing Siebel Repository for any nonprimary language.*

Add Language to an Existing Repository. This option adds a new language to your existing Siebel Repository (imports Siebel Repository data for that language). Click Next and go to [Step 6 on page 127](#).

Export Repository. This option exports the Siebel Repository data into a platform-independent file that can be sent to Oracle Global Customer Support for analysis, if needed. *This task is not described in this book.* For more information, see *Using Siebel Tools* and other documentation.

- 4 On the Import Selection screen, specify that you want to import the standard Siebel Repository for the current release, and click Next.
- 5 On the Language Selection screen, specify the language. For an import Siebel Repository operation, this is the primary language (base language), the first language installed in [“Installing the Siebel Database” on page 118](#). For an Add Language operation, this is the language that you want to add to the Siebel Repository.

The languages listed in this screen are those for which you previously installed Siebel language packs on the Siebel Server.

- 6 On the ODBC Data Source Name screen, indicate the name for the ODBC data source, such as si eb16_DSN, and click Next.

For more information about the ODBC data source, see [“Planning RDBMS Installation and Configuration” on page 308](#).

- 7 On the Database User Name screen, indicate the following about your database, and click Next:

Database User Name. Type the user name of the Siebel administrator, for example, `sadmin` for Oracle Database and IBM DB2.

Database Password. Type the password for the Siebel administrator.

Database Password (confirm). Retype the password to confirm it.

- 8 On the Database Table Owner screen, indicate the following about your database, and click Next:

Database Table Owner. The Siebel database table owner, or the account that will own the Siebel objects.

Database Table Owner Password. Type the Siebel database table owner password.

Database Table Owner Password (confirm). Retype the password to confirm it.

- 9 On the Import Repository Name screen, type the following values, and click Next:

Import Repository Name. Accept the default name (Siebel Repository) or type another valid name.

Repository File Name/Localized Repository File Name. If you are importing your Siebel Repository for the first time, then this field is named *Repository File Name*. If you are adding a language to an existing Siebel Repository, then this field is named *Localized Repository File Name*. Accept the default installation path and file name for this Siebel Repository, or type another valid installation path.

For Oracle Database, go to the next step. For IBM DB2, go to [Step 11 on page 128](#).

- 10 (Oracle Database only) In the Oracle Parallel Index screen, specify the appropriate environment for your installation, and click Next:

■ I am not running with Parallel Indexing On

■ I am running with Parallel Indexing On

If you have a single-CPU environment, then choose the first option. If you have a multiple-CPU environment, then choose the first or second option, depending on whether you are running your Oracle Database with parallel indexing on.

- 11 In the Log Output Directory screen, accept the default log directory, or enter a new directory name, and click OK.

By default, logging occurs in the `$SIEBSRVR_ROOT/Log/operation/output` directory. In this path, *operation* corresponds to the operation that you are performing, such as *imprep* for Import Repository or *imprep_lang* for Add Language to an Existing Repository.

The Configuration Parameter Review screen appears.

- 12 Review the configuration values that you entered on the previous Configuration Wizard screens:

■ If you want to change any values, then click Previous or Next to access the screens on which to change entries, and then to return to this screen.

- When you have verified the configuration values, click Finish. A message box appears with the prompt:

To apply the configuration now, press OK.

To apply the configuration later, press Cancel.

The command line to apply the configuration later is

```
$SIEBEL_ROOT/siebsrvr/bin/srvrupgwi z /m master_operation.ucf
```

For the purposes of this procedure, *operation* is either *imprep* or *imprep_lang*.

The Siebel Upgrade Wizard appears, displaying the items to be executed or imported.

NOTE: If a program or system error occurs and you have to rerun the Siebel Upgrade Wizard, then you can do so starting at the point at which the wizard failed. For more information, see *Siebel Database Upgrade Guide*.

- 13** To begin, click OK.

A window appears, displaying information about Siebel Upgrade Wizard activities to import the Siebel Repository. The Upgrade Wizard displays a message when the operation is complete.

Related Topics

[“About Installing the Siebel Database” on page 111](#)

[“Verifying Installation for the Siebel Database” on page 220](#)

[“Troubleshooting Installation for the Siebel Database” on page 242](#)

Related Books

Using Siebel Tools

Siebel Database Upgrade Guide

6

Additional Postinstallation and Configuration Tasks

This chapter describes some additional tasks that you might have to perform to complete configuring your Siebel Business Applications. It includes the following topics:

- [Starting the Siebel Gateway Name Server on page 131](#)
- [Configuring the Siebel Gateway Name Server for Automatic Start on page 132](#)
- [Configuring the Siebel Server for Automatic Start on page 136](#)
- [Managing Environment Variables on page 139](#)
- [Process of Configuring Load Balancing for Siebel Business Applications on page 140](#)
- [Preparing to Run Siebel Server Components on page 145](#)
- [Installing and Deploying Siebel Business Applications with Multiple Languages on page 150](#)
- [Additional Tasks for the Siebel Web Server Extension and the Web Server on page 163](#)
- [“Configuring Support for CalDAV or CardDAV Publishing” on page 172](#)

Starting the Siebel Gateway Name Server

If, during configuration of the current release, Siebel CRM version 16.0, you selected manual start for the Siebel Gateway Name Server, then you must make sure that the Siebel Gateway Name Server is started when you do any of the following:

- Create and configure the Siebel Enterprise
- Configure a new Siebel Server
- Operate any of the Siebel applications
- Remove the configuration of a Siebel Server (such as when you are uninstalling) or the Siebel Enterprise

NOTE: It is recommended that you review the Siebel Gateway Name Server log files, which are found in the `$SIEBEL_GATEWAY_ROOT/Log` directory.

Related Topics

- [“Installing Siebel Enterprise Server” on page 44](#)
- [“Configuring the Siebel Gateway Name Server for Automatic Start” on page 132](#)
- [“Configuring the Siebel Server for Automatic Start” on page 136](#)
- [“Verifying Installation for the Siebel Enterprise Server” on page 213](#)
- [“Verifying That the Siebel Gateway Name Server Has Started” on page 237](#)

To verify that the Siebel Gateway Name Server has started

- Navigate to the `$SIEBEL_ROOT/gtwysrvr` directory and source the following environment setup file. Use one of the following commands, depending on the type of shell that you use:

C shell

```
source siebenv.csh
```

Bourne or Korn shell

```
./siebenv.sh
```

TIP: Make sure that there is a space between the initial period and `./siebenv.sh`.

This step sets the Siebel environment variables and path information required to use Siebel utilities.

To configure the Siebel environment shell script to source automatically whenever a Siebel administrator logs on, specify the shell as the default for administrator accounts. Then, add this command to the startup file for the administrator's account.

To verify that the Siebel Gateway Name Server started successfully and is running

- 1 Enter the following command:

```
list_ns
```

If the Siebel Gateway Name Server is running, then you receive a response like the following, which shows the pid (process ID) of the running process:

```
started at Fri May 01 20:06:55 2015, pid: 4024, autostart: yes
```

If the Siebel Gateway Name Server is stopped, then you receive a response like this:

```
stopped at Fri May 01 20:06:55 2015, autostart: no
```

- 2 If the Siebel Gateway Name Server is stopped, then do the following:
 - Execute the `start_ns` command to start the Siebel Gateway Name Server. For more information, see *Siebel System Administration Guide*.
 - Execute `list_ns` to verify that it is operating correctly.

Configuring the Siebel Gateway Name Server for Automatic Start

If, during the installation, you selected automatic restart of the Siebel Gateway Name Server, then you have to complete the procedure that follows to configure the Siebel Gateway Name Server to start automatically. You run the Siebel Gateway Name Server service as the same nonroot user who installed the software.

After making the changes described in this topic for your operating system, the Siebel Gateway Name Server starts automatically when you restart your server and stops automatically when you shut down the server.

NOTE: Remember that the Siebel Gateway Name Server must be the first service to start, and the last to shut down, among all of the servers in the Siebel Enterprise that are served by that Siebel Gateway Name Server.

This topic includes the following subtopics:

- [“Configuring the Siebel Gateway Name Server for Automatic Start on AIX” on page 133](#)
- [“Configuring the Siebel Gateway Name Server for Automatic Start on HP-UX” on page 134](#)
- [“Configuring the Siebel Gateway Name Server for Automatic Start on Linux or Oracle Solaris” on page 135](#)

Related Topics

- [“Installing Siebel Enterprise Server” on page 44](#)
- [“Starting the Siebel Gateway Name Server” on page 131](#)
- [“Verifying Installation for the Siebel Enterprise Server” on page 213](#)
- [“Verifying That the Siebel Gateway Name Server Has Started” on page 237](#)
- [“Setting Permissions and Ownership” on page 316](#)

Configuring the Siebel Gateway Name Server for Automatic Start on AIX

Use the procedure in this topic to configure the Siebel Gateway Name Server to start automatically on AIX.

This topic is part of [“Configuring the Siebel Gateway Name Server for Automatic Start” on page 132](#).

To configure the Siebel Gateway Name Server to start automatically on AIX

- 1 Log on as root to the computer on which the Siebel Gateway Name Server was installed.
- 2 Execute the following command on a single line:

```
mki tab "sieb_gtwyns: 2: wait: su - $SIEBEL_ACCOUNT -c \"\${SIEBEL_HOME}/bin/siebel_server start\""
```

where:

- `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications
 - `$SIEBEL_HOME` is the installation directory for the Siebel Gateway Name Server
- 3 Verify if the file `/etc/rc.shutdown` exists. If it does not exist, then create it and change the permissions:

```
touch /etc/rc.shutdown
```

```
chmod 744 /etc/rc.shutdown
```

- 4 Edit the file `/etc/rc.shutdown` and add the following command:

```
/usr/bin/su - SIEBEL_ACCOUNT -c "$SIEBEL_HOME/bin/siebel_server stop"
```

where:

- `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications
 - `$SIEBEL_HOME` is the installation directory for the Siebel Gateway Name Server
- 5 Save and close the file.

Configuring the Siebel Gateway Name Server for Automatic Start on HP-UX

Use the procedure in this topic to configure the Siebel Gateway Name Server to start automatically on HP-UX.

This topic is part of [“Configuring the Siebel Gateway Name Server for Automatic Start”](#) on page 132.

To configure the Siebel Gateway Name Server to start automatically on HP-UX

- 1 Log on as root to the computer on which the Siebel Gateway Name Server was installed.

- 2 Copy the file `siebel_server` to the `/sbin/init.d` directory, as follows:

```
cp $SIEBEL_ROOT/bin/siebel_server /sbin/init.d
```

In this command, `$SIEBEL_ROOT` is the full path to the Siebel root directory.

- 3 Using any text editor, edit `/sbin/init.d/siebel_server`. Replace `$SIEBEL_GATEWAY_ROOT` with the path to the Siebel Gateway Name Server installation directory.

- 4 Set the appropriate permissions by executing the following command:

```
chmod 755 /sbin/init.d/siebel_server
```

- 5 Create a soft link to `/sbin/rc3.d/S720siebel_server` from `/sbin/init.d/siebel_server` by executing the following command:

```
ln -s /sbin/init.d/siebel_server /sbin/rc3.d/S720siebel_server
```

- 6 Create a soft link to `/sbin/rc2.d/K320siebel_server` from `/sbin/init.d/siebel_server` by executing the following command:

```
ln -s /sbin/init.d/siebel_server /sbin/rc2.d/K320siebel_server
```

- 7 Create or edit `/sbin/init.d/siebel_server_nonroot` to add the following line:

```
/usr/bin/su - SIEBEL_ACCOUNT -c "/sbin/init.d/siebel_server $1"
```

In this command, `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications.

- 8 Remove `/sbin/rc3.d/S720siebel_server` and `/sbin/rc2.d/K320siebel_server`, if they already exist.

- 9 Execute the following commands:

```
chmod 755 /sbin/init.d/siebel_server_nonroot
```

```
ln -s /sbin/init.d/siebel_server_nonroot /sbin/rc3.d/S720siebel_server
```

```
ln -s /sbin/init.d/siebel_server_nonroot /sbin/rc2.d/K320siebel_server
```

Configuring the Siebel Gateway Name Server for Automatic Start on Linux or Oracle Solaris

Use the procedure in this topic to configure the Siebel Gateway Name Server to start automatically on either Linux or Oracle Solaris.

This topic is part of [“Configuring the Siebel Gateway Name Server for Automatic Start”](#) on page 132.

To configure the Siebel Gateway Name Server to start automatically on Linux or Oracle Solaris

- 1 Log on as root to the computer on which the Siebel Gateway Name Server was installed.

- 2 Copy the file `siebel_server` to the `/etc/init.d` directory, as follows:

```
cp $SIEBEL_HOME/bin/siebel_server /etc/init.d
```

In this command, `$SIEBEL_HOME` is the full path to the Siebel root directory.

- 3 Using any text editor, edit `/etc/init.d/siebel_server`. Make sure that `$SIEBEL_GATEWAY_ROOT` points to the path to the Siebel Gateway Name Server installation directory.

- 4 Set the appropriate permissions by executing the following command:

```
chmod 755 /etc/init.d/siebel_server
```

- 5 Create a soft link to `/etc/rc3.d/S72siebel_server` from `/etc/init.d/siebel_server` by executing the following command.

```
ln -s /etc/init.d/siebel_server /etc/rc3.d/S72siebel_server
```

- 6 Create a soft link to `/etc/rc2.d/K32siebel_server` from `/etc/init.d/siebel_server` by executing the following command:

```
ln -s /etc/init.d/siebel_server /etc/rc2.d/K32siebel_server
```

- 7 Create or edit `/etc/init.d/siebel_server_nonroot` to add the following line:

```
/usr/bin/su - SIEBEL_ACCOUNT -c "/etc/init.d/siebel_server $1"
```

In this command, `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications.

- 8 Remove `/etc/rc3.d/S72siebel_server` and `/etc/rc2.d/K32siebel_server`, if they already exist.

- 9 Execute the following commands:

```
chmod 755 /etc/init.d/siebel_server_nonroot
```

```
ln -s /etc/init.d/siebel_server_nonroot /etc/rc3.d/S72siebel_server
```

```
ln -s /etc/init.d/siebel_server_nonroot /etc/rc2.d/K32siebel_server
```

Configuring the Siebel Server for Automatic Start

If, during the installation, you selected automatic restart of the Siebel Server, then you must complete the procedure that follows to configure the Siebel Server to start automatically.

This topic includes the following subtopics:

- [“Configuring the Siebel Server for Automatic Start on AIX” on page 136](#)
- [“Configuring the Siebel Server for Automatic Start on HP-UX, Linux, or Oracle Solaris” on page 137](#)

Related Topics

[“Installing Siebel Enterprise Server” on page 44](#)

[“Verifying Installation for the Siebel Enterprise Server” on page 213](#)

[“Verifying That the Siebel Gateway Name Server Has Started” on page 237](#)

Configuring the Siebel Server for Automatic Start on AIX

Use the procedure in this topic to configure the Siebel Server to start automatically on AIX.

This topic is part of [“Configuring the Siebel Server for Automatic Start” on page 136](#).

To configure the Siebel Server to start automatically on AIX

- 1 Navigate to `$SIEBEL_ROOT/bin`.

In this path, `$SIEBEL_ROOT` is the installation directory for the Siebel Server.

- 2 Using any text editor, open the file `siebel_server`. Edit the database environment variable as follows:

Oracle Database

- a Uncomment the line `#ORACLE_HOME=.`
- b Enter the location for `$ORACLE_HOME`.
- c Uncomment the line `#export ORACLE_HOME`.

- d Add the following two lines:

```
TNS_ADMIN=$tns_admin  
export TNS_ADMIN
```

Ask your database administrator for the value of `$tns_admin`.

IBM DB2

- Add a line to execute `db2profile`, for example:

```
./home/db2v8aix/sql/lib/db2profile
```

Ask your database administrator for the location of `db2profile`.

- 3 Save and close the file.
- 4 Log on as root and execute the following command on a single line:

```
mki tab "start_server: 2: wait: su - $SIEBEL_ACCOUNT -c \"\${SIEBEL_ROOT}/bin/siebel_server start\""
```

where:

- `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications
- `$SIEBEL_ROOT` is the installation directory for the Siebel Server

- 5 Verify whether or not the file `/etc/rc.shutdown` exists. If it does not exist, then create it and change the permissions:

```
touch /etc/rc.shutdown  
chmod 744 /etc/rc.shutdown
```

- 6 Edit the file `/etc/rc.shutdown`. Add the following command:

```
/usr/bin/su - $SIEBEL_ACCOUNT -c "\${SIEBEL_ROOT}/bin/siebel_server stop"
```

where:

- `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications
- `$SIEBEL_ROOT` is the installation directory for the Siebel Server

- 7 Save and close the file.

Configuring the Siebel Server for Automatic Start on HP-UX, Linux, or Oracle Solaris

Complete one of the procedures that follow to configure the Siebel Server to start automatically as a nonroot user.

This topic is part of [“Configuring the Siebel Server for Automatic Start”](#) on page 136.

Configuring the Siebel Server to Start Automatically on HP-UX

Use the procedure that follows to configure the Siebel Server to start automatically on HP-UX.

To configure the Siebel Server to start automatically on HP-UX

1 Log on as root.

2 Create or edit `/sbin/init.d/siebel_server_nonroot`. Add the following line:

```
/usr/bin/su - SIEBEL_ACCOUNT -c "/sbin/init.d/siebel_server $1"
```

In this command, `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications.

3 Remove `/sbin/rc3.d/S720siebel_server` and `/sbin/rc2.d/K320siebel_server`, if they already exist.

4 Execute the following commands:

```
chmod 755 /sbin/init.d/siebel_server_nonroot
```

```
ln -s /sbin/init.d/siebel_server_nonroot /sbin/rc3.d/S720siebel_server
```

```
ln -s /sbin/init.d/siebel_server_nonroot /sbin/rc2.d/K320siebel_server
```

Configuring the Siebel Server to Start Automatically on Linux or Oracle Solaris

Use the procedure that follows to configure the Siebel Server to start automatically on Linux or Oracle Solaris.

To configure the Siebel Server to start automatically on Linux or Oracle Solaris

1 Log on as root.

2 Create or edit `/etc/init.d/siebel_server_nonroot`. Add the following line:

```
/usr/bin/su - SIEBEL_ACCOUNT -c "/etc/init.d/siebel_server $1"
```

In this command, `SIEBEL_ACCOUNT` is the nonroot user account installing Siebel Business Applications.

3 Remove `/etc/rc3.d/S72siebel_server` and `/etc/rc2.d/K32siebel_server`, if they already exist.

4 Execute the following commands:

```
chmod 755 /etc/init.d/siebel_server_nonroot
```

```
ln -s /etc/init.d/siebel_server_nonroot /etc/rc3.d/S72siebel_server
```

```
ln -s /etc/init.d/siebel_server_nonroot /etc/rc2.d/K32siebel_server
```

Managing Environment Variables

There are several environment variables that must be properly set for optimal functioning of the Siebel Server, as shown in [Table 15 on page 139](#). These include:

- Siebel environment variables
- UNIX operating system environment variables

NOTE: For information about tuning the UNIX kernel and other parameters for Siebel Server optimization, see *Siebel Performance Tuning Guide*.

Table 15. Setting and Managing Environment Variables

Environment Variable	Purpose	Recommended Siebel Value
ODBCINI	Tells the ODBC driver manager which file to open to look for the ODBC data source and driver information. Set within the environment setup files, siebenv.csh (for C shell) and siebenv.sh (for Bourne or Korn shell), which are created during Siebel Enterprise Server and Siebel Server configuration. This variable always points to <code>\$SIEBEL_HOME/sys/.odbc.ini</code> .	Do not modify.
SIEBEL_UNIXUNICODE_DB	Controls the ODBC driver manager responsible for connection to the RDBMS. Reset, if necessary, within each environment setup file before sourcing it.	Set to ORACLE or DB2. This value is set automatically.
LANG	Language environment variable within the environment setup file. Sets the database server client environment appropriate to the language of installation. For more information about specifying locales, see “Specifying the Locale for Siebel Business Applications” on page 313 and “Specifying the Locale for Your UNIX Operating System” on page 314 .	Set this to the language in which your database runs.

The Siebel environment variables `$SIEBEL_HOME` and `$SIEBEL_ROOT` must be set to enable execution of the Siebel Gateway Name Server and Siebel Server management utilities documented in *Siebel System Administration Guide*.

During Siebel Enterprise Server and Siebel Server configuration, the script files siebenv.csh (for C shell) and siebenv.sh (for Bourne or Korn shell) are automatically created in the `$SIEBEL_ROOT` directory. When sourced, these shell scripts set the environment variables.

If you have configured your Siebel Server to start manually, then you must source either `siebenv.csh` or `siebenv.sh` before starting the server. For this reason, you might want to add a call to the appropriate `siebenv.*` file to the logon files of all of the Siebel administrator UNIX accounts, so that these variables are set automatically whenever a Siebel administrator logs on.

NOTE: If you want to change the default settings of these environment variables, then you must do so before you start the Siebel Server.

Tuning UNIX Operating Systems for Siebel Business Applications

There are several UNIX system environment variables that you must set for proper functioning of the Siebel Server.

For detailed information about tuning the UNIX kernel and other configurable parameters for Siebel Server optimization, see *Siebel Performance Tuning Guide*.

Related Topics

[“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#)

[“Specifying the Locale for Siebel Business Applications” on page 313](#)

[“Specifying the Locale for Your UNIX Operating System” on page 314](#)

Process of Configuring Load Balancing for Siebel Business Applications

This topic describes configuring load balancing for Siebel Business Applications. Both Siebel native load balancing and third-party load balancing are supported. You perform this task before configuring the Siebel Web Server Extension (SWSE).

NOTE: This topic describes the initial configuration of load balancing. For more information about planning and managing load balancing for your deployment, see [“Planning Siebel Server Load Balancing” on page 306](#), *Siebel Deployment Planning Guide*, and *Siebel System Administration Guide*. For more information about third-party load balancing options, see the Certifications tab on My Oracle Support.

To configure load balancing, perform the following tasks:

- 1 [“Generating the Load Balancing Configuration File \(lbconfig.txt\)” on page 141](#)
- 2 [“Setting Up a Third-Party HTTP Load Balancer” on page 142](#)
- 3 [“Setting the Load Balancer Connection Timeout Interval” on page 144](#)
- 4 [“Monitoring Servers with Siebel Native Load Balancer or Third-Party HTTP Load Balancers” on page 144](#)

Related Topics

[“Planning Siebel Server Load Balancing” on page 306](#)

[“Process of Configuring the Siebel Web Server Extension” on page 93](#)

[“Preparing to Run Siebel Server Components” on page 145](#)

Generating the Load Balancing Configuration File (lbconfig.txt)

The load balancing configuration file provides virtual server definitions for Siebel load balancing. It also provides URLs for writing connection rules for third-party HTTP load balancers.

You must generate a load balancing configuration file (lbconfig.txt) in the following situations:

- Before configuring the Siebel Web Server Extension (SWSE), when you are using Siebel native load balancing. Configuring the SWSE means applying the SWSE logical profile that you created as part of Siebel Enterprise configuration.
- When you require URLs for routing rules as part of configuring a third-party HTTP load balancer.
- When you add or remove a Siebel Server and you are using either Siebel native load balancing or a third-party load balancer.

This task is a step in [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#).

Generating and Using the lbconfig.txt File

Follow the procedure that follows to generate the lbconfig.txt file and to use it with your Siebel Web Server Extension.

NOTE: If you have modified or optimized the existing lbconfig.txt file, such as by creating multiple virtual server definitions, then you lose these changes when you generate the file. To prevent this result, save your modified file under a new name, regenerate the lbconfig.txt file, then copy your changes from your modified file to the newly generated file.

To generate the lbconfig.txt file

- 1 On a Siebel Server, start the Server Manager at the Siebel Enterprise level (do not use the /s option), and enter the following command:

```
generate lbconfig
```

This step generates the lbconfig.txt file. The file is created in the admin subdirectory of the Siebel Server installation directory.

- 2 Review the generated lbconfig.txt file to verify that virtual server definitions do not include any Siebel Servers that will not participate in load balancing.
- 3 Manually edit the lbconfig.txt file. Remove any Application Object Managers that were disabled, or add comment characters to disable the applicable entries.

- 4 Configure the SWSE logical profile to be used with Web servers that will participate in Siebel native load balancing.

For more information about creating and applying the SWSE logical profile, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

- 5 Copy the lbconfig.txt file into the SWSE logical profile directory.
- 6 Configure the installed SWSE by applying the SWSE logical profile.

The SWSE Configuration Wizard retrieves the lbconfig.txt file from the logical profile directory.

- 7 Restart the Web server.

Types of Connection Rules Provided by the lbconfig.txt File

The lbconfig.txt file provides three types of connection rules: component rules, server rules, and round-robin rules. These rule types are mandatory: you must include all three types when you configure the load balancer.

Most load balancers allow you to associate a virtual IP address and virtual port number with a group of load balancing rules. They also allow you to define servers as resources and to create groups for them. The procedure in [“Setting Up a Third-Party HTTP Load Balancer” on page 142](#) outlines general steps for setting up load balancers for Siebel Servers.

Consequences of Incomplete Configuration of Connection Rules

Incomplete configuration of the connection rules has the following consequences:

- Not configuring round-robin rules can cause login failures.
- Not configuring server rules can cause unexpected session termination.

Setting Up a Third-Party HTTP Load Balancer

A third-party load balancer receives SISNAPI messages from the Web server. The load balancer routes each message based on the URL that it contains. To configure an HTTP load balancer, you must write connection rules that route these messages to the correct Siebel Servers.

Use the generate lbconfig command to generate a file containing definitions for such connection rules. For more information, see [“Generating the Load Balancing Configuration File \(lbconfig.txt\)” on page 141](#).

The generate lbconfig command reviews the configuration of the Siebel Servers, then generates a file that pairs connection strings included in SISNAPI messages with paths to the correct Siebel Servers. The rules are stored in the load balancing configuration file (lbconfig.txt). Use this file to help configure the third-party load balancer. Use the following procedure to set up a third-party HTTP load balancer.

This task is a step in [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#).

To set up a third-party HTTP load balancer

- 1** Install and complete the initial configuration of the third-party HTTP load balancer.
See the vendor documentation for more information.
- 2** Verify that the load balancer can work with the computers that host the Siebel Servers.
See the vendor documentation for the networking requirements.
- 3** Open the lbconfig.txt file that you generated as a reference for configuring the third-party load balancer.
- 4** Add Siebel Servers to the load balancer as pools of resources.
Typically, each resource is defined as a combination of host name or IP address, and TCP Port. Use the host name or IP address of the Siebel Server, and the port number for the SCBroker component (by default, this is port 2321).
- 5** Create load balancing rules or content rules in the load balancer.
Load balancing rules are mappings between URLs and pools of resources. For each line in the lbconfig.txt file, create one such mapping or rule in the load balancer.

For more information about third-party load balancing options, see the Certifications tab on My Oracle Support.

NOTE: You must configure the HTTP load balancer to handle all three types of rules: component, server, and round-robin.
- 6** For each group of load balancing rules, define the desired load balancing scheme.
For component rules, use any preferred load balancing scheme.
For server and round-robin rules, a round-robin load balancing scheme is recommended.
- 7** Define a virtual IP address and virtual port number for all of the load balancing rules.
The virtual IP address and virtual port number must match what is defined in the Application Object Manager connect strings of the SWSE configuration file (eapps.cfg). This file is located in `SWSE_ROOT\bin`. `SWSE_ROOT` is the SWSE installation directory.
- 8** If the load balancer has a configurable TCP connection timeout interval, then adjust this setting so that it is greater than the value of the parameter `SISNAPI Connection Maximum Idle Time` (alias `ConnIdleTime`). Doing so prevents the load balancer from disconnecting active `SISNAPI` sessions.

For more information about setting `ConnIdleTime`, see ["Setting the Load Balancer Connection Timeout Interval"](#) on page 144. See also *Siebel System Administration Guide*.

Setting the Load Balancer Connection Timeout Interval

Many third-party HTTP load balancers allow you to set a connection timeout interval. When the timeout occurs, the load balancer's SISNAPI connection to the Application Object Manager on the Siebel Server is terminated. In addition, Application Object Managers have a configurable timeout parameter, SISNAPI Connection Maximum Idle Time (alias ConnIdleTime). When a session is idle for the specified time, the Application Object Manager closes the session.

This task is a step in ["Process of Configuring Load Balancing for Siebel Business Applications"](#) on page 140.

To set the load balancer connection timeout interval

- Set the load balancer connection timeout interval to be slightly longer than the ConnIdleTime setting of the Application Object Managers for which it will provide load balancing.

For example, if ConnIdleTime is 600 seconds, then set the load balancer connection timeout interval to 601 seconds or higher.

NOTE: Avoid setting ConnIdleTime to be greater than the load balancer connection timeout interval. Doing so can cause login screen delays and problems with communications performance.

Monitoring Servers with Siebel Native Load Balancer or Third-Party HTTP Load Balancers

The Siebel native load balancer and most third-party HTTP load balancers support server health monitoring. To set up server health monitoring, you configure the load balancer to send an HTTP GET request to the server URL.

This task confirms that the Siebel Server is running on the specified server computer and that SCBroker is listening at the specified port. This health check does not verify that specific Application Object Managers or other server components are running on the computer.

CAUTION: Do not use TCP Health Check. It might connect to SCBroker and remain connected until the SCBroker component parameter ConnRequestTimeout expires. During this period, SCBroker cannot handle new user-session requests.

This task is a step in ["Process of Configuring Load Balancing for Siebel Business Applications"](#) on page 140.

To set up monitoring for a Siebel Server

- Configure the load balancer to send an HTTP GET request to the server URL.

Here is an example URL:

```
//Si ebSrvr1: 2321/si eb16/SCBroker
```


where:

- *SiebSrvr1* is the Siebel Server host name or IP address.
- *2321* is the port number for the Siebel Connection Broker (SCBroker). This port number is the default.
- *sieb16* is the Siebel Enterprise Server name.
- *SCBroker* is the Siebel Connection Broker server component.

If the Siebel Server and Siebel Connection Broker are running, then Siebel Connection Broker returns the string: SCBroker OK.

Guidelines for Setting Up Server Monitoring

Use the following guidelines when you set up server monitoring:

- **On the Siebel Servers that you want to monitor, set the Default Tasks and Maximum Tasks parameters for SCBroker to 2.** These settings provide two instances of SCBroker, which helps prevent monitoring requests from delaying handling of user requests.
- **Use HTTP 1.0 to do health checks.** It terminates connections to SCBroker quickly.

Preparing to Run Siebel Server Components

This topic summarizes some of the tasks that you might have to do after installing and configuring Siebel Server and before you run Siebel Server components. It includes the following information:

- [“Enabling and Disabling Server Component Groups” on page 146](#)
- [“Enabling and Disabling Language-Specific Application Object Managers and Adding Languages” on page 147](#)
- [“Synchronizing Batch Components” on page 148](#)
- [“Migrating Siebel Enterprise Server and Siebel Server Parameter Settings” on page 148](#)
- [“Performing Additional Tasks to Configure Siebel Servers” on page 148](#)
- [“Updating the CRC Parameter” on page 148](#)
- [“About Installing Additional Siebel Servers for an Existing Siebel Enterprise” on page 149](#)

You might have to perform some of these tasks on multiple Siebel Servers in order to configure them similarly for use in a load-balanced environment. For more information, see [“Planning Siebel Server Load Balancing” on page 306](#) and [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#).

NOTE: For detailed information about enabling and disabling server component groups, synchronizing batch components, creating server component job definitions, using Server Manager, and related tasks, see *Siebel System Administration Guide*.

Enabling and Disabling Server Component Groups

When you initially configured your Siebel Server, you specified which server component groups to enable. Before you deploy your Siebel Server, verify that the server component groups that you require are enabled. It is also recommended that you disable any server component groups that you do not require. Because you explicitly enabled server component groups when you configured the Siebel Server, you might or might not have to disable component groups after installation and configuration.

As is common for a new release, for the current release, Siebel Innovation Pack 2016, some new server components are provided. Also, some components have been removed or are no longer used. In the current release, the Tomcat Proxy Object Manager component in the EAI component group is new. The Application Object Managers that in previous release were used for Siebel eSales, Siebel eCustomer, and Siebel eMarketing are now used for new customer applications built for Siebel Open UI.

Customers migrating from earlier releases also must consider which product changes are new to them because they were made in intervening releases. For example, in Siebel Innovation Pack 2014, some components moved from existing component groups into a new component group, Disconnected Mobile Synchronization (alias MobileSync). Consequently, if your deployment uses Siebel Mobile disconnected applications or uses Siebel Remote or Siebel Replication Manager, then you must enable the MobileSync component group, if you have not already done so, along with the HandheldSync or HandheldSyncSIS component group.

Product changes of these types introduce changed requirements for enabling server components and for deploying applications. The specific requirements that apply to your deployment depend on the products that you are using. Some requirements apply only for migration installations, and vary based on the Siebel CRM version that you are migrating from or the Siebel CRM version in effect when you first configured the software.

For example, for a new installation, you can enable any component groups using the Siebel Server Configuration Wizard. For a migration installation, if you do not reconfigure the Siebel Server and you have to enable any additional component groups, then you can do so manually after installation. In some cases, however, you might have to run certain scripts on the Siebel Server to make new products available.

Before performing a migration installation, also review parameter settings for server components affected by product changes, in case you need to reapply custom settings to components that moved, for example, or in case you must reconfigure the Siebel Server.

Several requirements apply to all migrations to Siebel Innovation Pack 2016, as [“Additional Tasks for Migration Installations” on page 62](#). For example, you must recreate the Siebel Web Server Extension (SWSE) logical profile and reapply it to each installed SWSE instance.

For information about the requirements for particular Siebel CRM products, see product documentation on *Siebel Bookshelf* or elsewhere.

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Related Topics

[“Additional Tasks for Migration Installations” on page 62](#)

[“Enabling and Disabling Language-Specific Application Object Managers and Adding Languages” on page 147](#)

Related Books

Siebel System Administration Guide

Siebel Mobile Guide: Disconnected

Siebel Remote and Replication Manager Administration Guide

Siebel Database Upgrade Guide

Enabling and Disabling Language-Specific Application Object Managers and Adding Languages

When you installed and configured Siebel Business Applications software, you would have included one or more languages, as described in [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#). That topic also describes optional approaches to installing and deploying languages in a phased approach.

If you install the Siebel Server with multiple languages and specify these languages as deployed languages when you configure the Siebel Server, then language-specific Application Object Manager components are created for each deployed language. If you decide that you do not require Application Object Managers for one or more of these deployed languages, then you can use Server Manager to disable such components prior to deployment.

If you install multiple languages, then it is recommended that you deploy all of the installed languages when you run the Siebel Server Configuration Wizard. As stated, you can disable any language-specific components that you do not require.

You must coordinate the language deployment tasks between your installations of Siebel Server and Siebel Web Server Extension.

For more information about performing tasks in the Siebel Server Configuration Wizard, see [“Options for Configuring the Siebel Gateway Name Server, the Siebel Enterprise, and the SWSE Logical Profile” on page 106](#).

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Related Topics

[“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#)

[“Options for Configuring the Siebel Gateway Name Server, the Siebel Enterprise, and the SWSE Logical Profile” on page 106](#)

Related Books

Siebel System Administration Guide

Siebel Global Deployment Guide

Synchronizing Batch Components

After installing and configuring the Siebel Server, you must synchronize any batch components before you can operate them. Do this after upgrading the Siebel database, where applicable. For more information about synchronizing batch components, see *Siebel System Administration Guide*.

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Migrating Siebel Enterprise Server and Siebel Server Parameter Settings

Some Siebel Enterprise Server and Siebel Server parameter settings can be migrated from one Siebel application environment to another by using the configuration migration utility (cfgmerge). Other customized application data can be migrated by using Siebel Application Deployment Manager (Siebel ADM).

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Related Books

Siebel System Administration Guide

Siebel Application Deployment Manager Guide

Performing Additional Tasks to Configure Siebel Servers

After installing and configuring a Siebel Server as described in this guide, you might have to perform some additional configuration tasks, such as setting parameters for the Siebel Enterprise, Siebel Server, or server components, such as Application Object Managers.

You perform these types of configuration tasks with Server Manager, whether by using views in the Administration - Server Configuration screen or by using commands at the `svrmgr` command line. For more information about using Server Manager, see *Siebel System Administration Guide*.

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Related Books

Siebel System Administration Guide

Updating the CRC Parameter

If you are using a security adapter, then you might have to update the value of the CRC parameter after installing the current release as a migration installation. The value must reflect the checksum value applicable to the security adapter library file, such as a DLL file on Microsoft Windows.

This task might be necessary if you previously determined to use checksum validation for your security adapter deployment, and set the value of the CRC parameter. If a Siebel CRM release that you installed later as a migration installation included an updated security adapter library file, then checksum validation fails and Siebel Web Clients might not start. To prevent this result, you must update the value of the CRC parameter. For more information about this task, see the topic about configuring checksum validation in *Siebel Security Guide*.

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Related Books

Siebel Security Guide

About Installing Additional Siebel Servers for an Existing Siebel Enterprise

You can install and configure multiple Siebel Servers for a Siebel Enterprise.

Typically, before installing and configuring additional Siebel Servers for an existing Siebel Enterprise, you complete installation and configuration for the Siebel Web Server Extension (SWSE).

Run the Siebel Enterprise Server installer to install each additional Siebel Server on another server computer, and run the Siebel Server Configuration Wizard to configure this Siebel Server.

You can also deploy a new Siebel Server based on an existing configured Siebel Server, using the Siebel cloning utility.

NOTE: Alternatively, you can use the Siebel Server Configuration Wizard to configure an additional Siebel Server on a single computer where the Siebel Server is already installed and configured. Creating multiple Siebel Server configurations for a single installed Siebel Server instance is typically done *for test or development purposes only*. In your production environment, it is strongly recommended that you configure only one Siebel Server for each server computer. Where Siebel Remote is to be deployed, do not create multiple Siebel Server configurations for a single installed Siebel Server instance.

After configuring a new Siebel Server, you must perform corresponding SWSE configuration tasks to make the applications on this Siebel Server available on the Siebel Web server. You might have to recreate the SWSE logical profile and then reapply the logical profile on the SWSE. In some cases, you might choose to manually edit the eapps.cfg file and manually create new virtual directories on the Web server. As part of this overall process, you might also regenerate the lbconfig.txt file, which is used for load balancing.

This topic is part of [“Preparing to Run Siebel Server Components” on page 145](#).

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[Chapter 9, “Cloning a Siebel Installation”](#)

[“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#)

[“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#)

Installing and Deploying Siebel Business Applications with Multiple Languages

Multiple Siebel language packs can be installed and deployed as part of Siebel Business Applications installation and configuration, for the current release. Review this topic and related topics when planning multilingual deployments. Language installation is part of the installation procedure for each installable Siebel module. The task of adding and deploying new languages is described for Siebel Server, Siebel Web Server Extension (SWSE), Siebel Web Client, and Siebel Tools.

Scenarios for deploying Siebel Business Applications with more than one language pack are described in [“Scenarios for Installing and Deploying Multiple Languages” on page 155](#).

See also [“General Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#) and other relevant topics.

For a list of the languages supported by Siebel Business Applications, see 1513102.1 (Article ID) on My Oracle Support. See also *Siebel Global Deployment Guide*, *Siebel System Administration Guide*, and other applicable documentation.

Note the following recommendations:

- It is strongly recommended that you install and deploy, or at least install, all of the languages that you expect to require, on each physical server.
- It is strongly recommended that you install the same set of language files on each physical server. Doing so helps ensure maximum compatibility between physical servers, so that the system can be reconfigured to meet ongoing requirements. Oracle only tests configurations in which the same set of language files are installed on each physical server that is used in a single Siebel Enterprise.

You can add languages to an existing installation of the same version of Siebel Enterprise Server, SWSE, Siebel Web Client, or Siebel Tools by using unattended mode (silent mode) only. After adding languages in this case, you must run the Configuration Wizards for the Siebel Server and the SWSE and perform the tasks to add new languages. See the limitations described for adding languages.

If you include multiple languages with a Siebel Enterprise Server installation, then you designate one language as the primary language to be used for server messages and logging. Typically, the same primary language is also used for the Siebel database, which cannot be changed after database installation.

If you install and deploy a new language in an existing installation, then you must add the language to the Siebel database and perform additional tasks using the Database Configuration Wizard, as described in [“About Language Deployment Tasks Using the Database Configuration Wizard” on page 153](#).

This topic contains the following information:

- [“About Language Deployment and the Siebel Network Image” on page 151](#)
- [“About Language Deployment and Migration Installations” on page 151](#)

- [“About Language Deployment on Siebel Server and Siebel Web Server Extension”](#) on page 153
- [“About Language Deployment Tasks Using the Database Configuration Wizard”](#) on page 153
- [“About Language Deployment for Unshipped Languages”](#) on page 154
- [“Limitations for Installing Additional Languages”](#) on page 154
- [“Scenarios for Installing and Deploying Multiple Languages”](#) on page 155
- [“Installing and Deploying All Required Languages Once”](#) on page 155
- [“Installing All Required Languages but Deploying Some Languages Later”](#) on page 156
- [“Installing and Deploying Additional Languages”](#) on page 158
- [“Importing Locale-Specific Data into the Siebel Repository”](#) on page 162

About Language Deployment and the Siebel Network Image

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages”](#) on page 150.

In order to include any languages in a new installation or to add languages that were not previously installed, the languages must be present in the Siebel network image for the applicable release of Siebel Business Applications. This requirement applies to the current release and to all applicable Siebel Patchset releases, where available.

Where a language was not previously included in the network image, you can add languages to each applicable network image (for all applicable releases) using the Siebel Image Creator utility. For details, see [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)

About Language Deployment and Migration Installations

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages”](#) on page 150.

For Siebel Enterprise Server, Siebel Web Server Extension (SWSE), Siebel Web Client, or Siebel Tools, when you perform a migration installation of the current release, files for all of the installed languages are automatically included. First, however, you must include all of these languages when you create the network image for the current release. For more information about the types of Siebel releases, see [“About Siebel CRM Releases”](#) on page 300.

If you plan to perform a migration installation of the current release, and you also want to add languages to your existing deployment, then you have two options for how to do this, subject to limitations:

- **Add languages after installing the current release.** The Siebel Enterprise Server and SWSE installers for the current release support adding languages to an existing installation of the same version, using an unattended installation method. You would perform this task after performing the migration installation tasks for these modules. Some limitations might apply to adding languages to your existing installed Siebel client software. For more information, see [“Limitations for Installing Additional Languages” on page 154](#) and [“Installing and Deploying Additional Languages” on page 158](#).
- **Add languages before installing the current release.** Subject to limitations for your existing installed Siebel server and client software, it might be possible or desirable for you to install new languages before you install the current release. To determine if this option is possible for the currently installed software in your Siebel deployment and, if so, to determine what steps are required, see the documentation that applies to your currently installed Siebel software version for information about this version.

For example, for Siebel CRM version 8.1.1.10 on Microsoft Windows, see *Siebel Maintenance Release Guide, Version 8.1.1.10*, and see *Siebel Installation Guide for Microsoft Windows*, version 8.1, Rev. D. For versions of *Siebel Maintenance Release Guide* for prior releases, see 880452.1 (Article ID) on My Oracle Support for version 8.1.1.x or see 1441523.1 (Article ID) for version 8.2.2.x. For versions of the *Siebel Installation Guide* for prior releases, see 1461732.1 (Article ID) on My Oracle Support.

For a list of the languages supported by Siebel Business Applications, see 1513102.1 (Article ID) on My Oracle Support.

NOTE: Specific installation tasks and requirements might apply for any language pack that is newly supported and thus requires a minimum Siebel release of Siebel CRM version 16.0. For more information, see [“Importing Locale-Specific Data into the Siebel Repository” on page 162](#).

Related Topics

[“Limitations for Installing Additional Languages” on page 154](#)

[“Installing and Deploying Additional Languages” on page 158](#)

[“Importing Locale-Specific Data into the Siebel Repository” on page 162](#)

[“About Siebel CRM Releases” on page 300](#)

About Language Deployment on Siebel Server and Siebel Web Server Extension

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150.](#)

When you configure each installed instance of Siebel Server and Siebel Web Server Extension (SWSE), you specify which languages to deploy, from among the installed languages. It is possible to deploy a subset of the installed languages. Which languages you deploy on a given server depends on the uses to which you will put that server.

Note the following points about language deployment on Siebel Server and SWSE:

- On each Siebel Server, the set of deployed languages determines which language-specific components such as Application Object Managers are created on that server. It is recommended that you deploy all of the languages that are installed in the enterprise and optionally disable Application Object Managers for particular languages where they are not required.
- On each instance of SWSE, you must deploy the superset of all of the languages that are required by all of the Application Object Managers that connect to it. It is recommended that you deploy all of the languages that are installed in the enterprise.

Related Topics

[Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)
[“Scenarios for Installing and Deploying Multiple Languages” on page 155](#)

About Language Deployment Tasks Using the Database Configuration Wizard

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150.](#)

In addition to software installation and configuration tasks, for installed languages other than the primary language for the Siebel database, you must perform the following operations, using the Database Configuration Wizard. You perform these tasks after installing the Siebel database.

- Adding the language (including seed data) to the Siebel database. Perform this task once for each nonprimary language that you install.
- Importing the Siebel Repository into the Siebel database. Perform this task once for each nonprimary language that you install.
- Running the MLOV (multilingual LOV) conversion utility. Perform this task once after installing multiple languages initially and again after adding one or more languages.

Related Topics

[Chapter 5, “Installing the Siebel Database on the RDBMS”](#)
[“Installing the Siebel Database” on page 118](#)

[“Importing a Siebel Repository Manually into the Siebel Database” on page 126](#)

About Language Deployment for Unshipped Languages

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

If you are localizing Siebel Business Applications to use a language for which a Siebel language pack is not provided, then see also the topics about localizing an unshipped language in *Siebel Global Deployment Guide*.

Limitations for Installing Additional Languages

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

Although it is strongly recommended to install all of the languages that you might require (whether or not you initially deploy them all), you can also add languages to an existing installation by using the installer for the current release. However, several limitations apply.

NOTE: If you plan to perform a migration installation of the current release, and you also want to add languages to your existing deployment, then you might be able to install the languages before you install the current release. For more information, see [“About Language Deployment and Migration Installations” on page 151](#).

For Siebel Enterprise Server, SWSE, Siebel Web Client, and Siebel Tools, the limitations for installing additional languages for the current release are as follows:

- You can install additional languages for existing installations by using the installers of the same version only. For example, for the current release, you can install the software as a new installation or as a migration installation, then later use the same installers to add languages.
- You can add languages to the current release by running the installer in unattended mode (silent mode) only, using response files that you have prepared for this purpose. You cannot add languages by running the installer in GUI mode.
- You cannot generate response files for an operation to add languages. You must use an edited copy of one of the response files that are provided for Siebel Enterprise Server, SWSE, Siebel Web Client, or Siebel Tools. For the location of these response files, see [“Installing and Deploying Additional Languages” on page 158](#).
- You cannot add languages as part of performing a migration installation of the current release. However, you can add languages after the migration installation.
- You cannot add languages to an earlier version of the installed software by using the installers for the current release. Conversely, you cannot use the installers for any earlier release to add languages to an installation of the current release.
- Before you install additional languages, you must uninstall any Siebel Patchset release that you have installed onto the current release. Reinstall the Siebel Patchset onto the current release after completing the steps to add the languages.

Related Topics

[“About Language Deployment and Migration Installations” on page 151](#)

[“Installing and Deploying Additional Languages” on page 158](#)

[Chapter 10, “Uninstalling Siebel Business Applications”](#)

Scenarios for Installing and Deploying Multiple Languages

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

Consider the following scenarios for installing and deploying multiple Siebel language packs:

- **Install and deploy all of the languages that you require once.** For customers who are installing and deploying languages shipped with the Siebel CRM base release, and who *do not* plan to deploy other languages at a later date. This option is easiest but might not be suitable for phased language deployments.
- **Install all of the languages that you will require, but deploy some languages later.** For customers who are installing and deploying languages shipped with the Siebel CRM base release, but who plan to deploy some of the installed languages at a later date. This option is recommended for phased language deployments.
- **Install and deploy additional languages in an existing deployment.** For customers who are installing and deploying languages shipped with the Siebel CRM base release, and who plan to install and deploy additional languages at a later date. This option might be suitable for some phased language deployments. You can install languages at any time to meet changing business needs. However, deploying languages is easier if you include them when you first install and configure the Siebel CRM software.

Related Topics

[“Installing and Deploying All Required Languages Once” on page 155](#)

[“Installing All Required Languages but Deploying Some Languages Later” on page 156](#)

[“Installing and Deploying Additional Languages” on page 158](#)

Installing and Deploying All Required Languages Once

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

This scenario is intended for customers who are deploying language packs that shipped with the current release and who are installing all of the language packs that their enterprise will require during initial installation and configuration.

Include all of the required languages with your initial installation and deploy them when you configure the installed Siebel software.

NOTE: You perform the tasks in this topic in conjunction with topics such as [“Installing Siebel Enterprise Server” on page 44](#) and [“Installing the Siebel Web Server Extension” on page 51](#). Perform all applicable steps that are documented in more detail in these and other topics.

To deploy multiple languages shipped with the current release

- 1 Install Siebel Enterprise Server software on all of the applicable servers, with all of the languages that you will require for the enterprise.
- 2 Configure the Siebel Gateway Name Server and configure the Siebel Enterprise. Also configure the SWSE logical profile.
- 3 Install the Siebel database. This task installs seed data for the primary language into the Siebel database.

NOTE: For information about Siebel Gateway Name Server authentication and associated requirements for the installation and configuration sequence, see [“Requirements for Siebel Gateway Name Server Authentication” on page 333](#).

- 4 Configure each Siebel Server, using the Siebel Server Configuration Wizard. During Siebel Server configuration, specify to deploy all of the installed languages.
- 5 Install SWSE software on all of the applicable Web servers, with all of the languages that you will require for the enterprise.
- 6 Configure each SWSE, using the SWSE Configuration Wizard. During SWSE configuration, specify to deploy all of the installed languages.
- 7 For each additional installed (nonprimary) language that you are deploying for the first time: add the language to the Siebel database and import the Siebel Repository. Also run the MLOV conversion utility (once).
- 8 If you have not already done so, install the latest Siebel Patchset release on all of the components in your Siebel CRM deployment. (It is recommended that you install a Siebel Patchset release after you install Siebel CRM software and before you configure it.)

Installing All Required Languages but Deploying Some Languages Later

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

This scenario is intended for customers who are deploying language packs included in the current release but who plan to deploy some language packs at a later date on particular instances of Siebel Server or SWSE.

Include all of the required languages with your initial installation.

There are two variations of this scenario that can achieve the desired result. Review each option and decide which one works best for your situation. See also [“Installing and Deploying All Required Languages Once” on page 155](#) for details for some tasks.

NOTE: You perform the tasks in this topic in conjunction with topics such as [“Installing Siebel Enterprise Server” on page 44](#) and [“Installing the Siebel Web Server Extension” on page 51](#). Perform all applicable steps that are documented in more detail in these and other topics.

Deploying Multiple Languages Now and Later (Option 1)

Use the following procedure to deploy multiple languages now and at a later date. This procedure represents Option 1. See also Option 2.

To deploy multiple languages now and at a later date (Option 1: preferred)

- 1 Perform tasks similar to those described in [“Installing and Deploying All Required Languages Once” on page 155](#).
 - Install Siebel Business Applications software with all of the languages that you will deploy now and at a later date.
 - When you configure each Siebel Server and SWSE, specify that you want to deploy all of the installed languages.
- 2 For each Siebel Server, disable any language-specific Application Object Manager components that you do not yet require.
- 3 When you are ready to deploy additional installed languages, re-enable any language-specific Application Object Managers that you previously disabled.
- 4 For each additional installed (nonprimary) language that you are deploying for the first time: add the language to the Siebel database and import the Siebel Repository. Also run the MLOV conversion utility (once).
- 5 If you have not already done so, install the latest Siebel Patchset release on all of the components in your Siebel CRM deployment. (It is recommended that you install a Siebel Patchset release after you install Siebel CRM software and before you configure it.)

Deploying Multiple Languages Now and Later (Option 2)

Use the following procedure to deploy multiple languages now and at a later date. This procedure represents Option 2. See also Option 1.

To deploy multiple languages now and at a later date (Option 2)

- 1 Perform tasks similar to those described in [“Installing and Deploying All Required Languages Once” on page 155](#). In this case, it is assumed that you did not deploy all of the installed languages.
 - Install Siebel Business Applications software with all of the languages that you will deploy now and at a later date.
 - When you configure each Siebel Server or SWSE, optionally specify to deploy only a subset of the installed languages.

- 2 When you are ready to deploy additional installed languages, perform the following for each Siebel Server:
 - a Start the Siebel Server Configuration Wizard.
 - b Perform the wizard task Add Language Support for the Siebel Server.
 - c In the Deployed Languages screen, specify the additional languages to deploy.
 - d Execute the configuration.
- 3 Perform the following for each SWSE:
 - a Start the SWSE Configuration Wizard.
 - b Perform the wizard task Add Language Support for the SWSE Configuration.
 - c In the Deployed Languages screen, specify the additional languages to deploy.
 - d Execute the configuration.
- 4 For each additional installed (nonprimary) language that you are deploying for the first time: add the language to the Siebel database and import the Siebel Repository. Also run the MLOV conversion utility (once).
- 5 If you have not already done so, install the latest Siebel Patchset release on all of the components in your Siebel CRM deployment. (It is recommended that you install a Siebel Patchset release after you install Siebel CRM software and before you configure it.)

Installing and Deploying Additional Languages

This topic is part of [“Installing and Deploying Siebel Business Applications with Multiple Languages”](#) on page 150.

This scenario is intended for customers who did not install all of the Siebel language packs and who later determine that they require additional supported Siebel language packs that were not previously installed and deployed.

This topic describes adding new languages to your existing Siebel Business Applications deployment and existing physical resource allocation. As part of expanding language support, you might also install components on new servers that include new language packs.

For an existing installation of the current release of Siebel Enterprise Server, SWSE, Siebel Web Client, or Siebel Tools, you can run the same installer in unattended mode to add any available and supported language packs that you require that were not previously installed. You must perform this installation task using unattended mode (silent mode) only.

For detailed requirements and other information about running Siebel installers and Configuration Wizards, see [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications,”](#) and other applicable parts of this guide.

Perform the tasks in this topic in conjunction with the installation instructions for each installable module and the unattended installation instructions for these modules. Perform all applicable steps, including those that are documented in more detail in other topics.

For more information about performing unattended installations, see [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#) and [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#).

NOTE: Where you are adding languages to an existing installation, the primary language for the Siebel database will already have been determined when you installed the Siebel Enterprise Server software and the Siebel database. Any language that is to serve as the primary language for a new Siebel database must be included when you first install the Siebel Enterprise Server software.

Oracle-Provided Installation Response Files

The Oracle-provided response files that you can use for adding languages using unattended mode are as follows, depending on your Siebel CRM version. Use the file whose name best reflects the version, product, and operating system for each installation you are performing, and modify the file as necessary for your installation task.

- 811x_ses_addlang_unix.rsp
- 811x_swse_addlang_unix.rsp
- seaw_mobile_webclient_addlang.rsp
- seaw_dedicated_webclient_addlang.rsp
- seatools_addlang.rsp

Response File Parameters

The response files that you use when you install additional languages in unattended mode include parameters that specify information about your existing installation, the network image, the new languages you are installing, and so on. Review the parameters in each response file to determine the parameters for which you must provide values. All values must be enclosed in double-quotes.

For any operation to install new languages, you must do the following:

- Specify values for the ORACLE_HOME and ORACLE_HOME_NAME parameters, which correspond to values that you specified when you performed the original installation. These settings identify the installation to which you are adding languages.
- Specify a value for the s_shiphomeLocation parameter, representing the location of the Disk1 directory in the network image for the Siebel module that you are installing.
- Specify a value for the FROM_LOCATION parameter, representing the location of the products.xml file within the Disk1/stage directory in the network image for the Siebel module that you are installing.
- Specify a value for the selectedLangs parameter, representing the new language or languages that you are installing.

For Siebel Enterprise Server only, you must set the following parameters to *true* for each installed component:

- b_isGatewayInstalled (if Siebel Gateway Name Server is installed)
- b_isSiebsrvrInstalled (if Siebel Server is installed)
- b_isDBInstalled (if Siebel Database Configuration Utilities is installed)

- `b_isEAIInstalled` (if EAI Connectors is installed)

To install and deploy additional languages on existing installations

- 1 Perform tasks similar to those described in “Installing and Deploying All Required Languages Once” on page 155 or “Installing All Required Languages but Deploying Some Languages Later” on page 156. In this case, it is assumed that you did not install and deploy all of the languages.
- 2 Review “Limitations for Installing Additional Languages” on page 154.
- 3 Uninstall any Siebel Patchset release that you have installed on top of the current release, for each applicable installed Siebel module.
- 4 Verify that the additional new languages that you require and plan to install are included in the Siebel network image.
- 5 Navigate to the location of an existing response file for the Siebel module for which you are adding languages.

For example, for Siebel Enterprise Server on Oracle Solaris, navigate to *Siebel_Image/Solaris/Server/Siebel_Enterprise_Server/Disk1/stage/Response*.

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as */Siebel_Install_Image/16.0.0.0*.

- 6 Edit the response file, as appropriate for the Siebel module for which you are adding languages. For example, for Siebel Enterprise Server, for Siebel CRM version 16.0, edit the response file `811x_ses_addlang_unix.rsp`.

See the information about response file parameters, before this procedure.

NOTE: Always back up any existing response file before editing it or replacing it with an edited version of the file.

- 7 Copy the edited file to a suitable location. For example, you might place a file into a subdirectory of the existing location for the response files, or into a temporary location.
- 8 Navigate to the location of the installer for the Siebel module for which you are installing additional languages.

For example, for Siebel Enterprise Server on Oracle Solaris, navigate to *Siebel_Image/Solaris/Server/Siebel_Enterprise_Server/Disk1/Install*.

- 9 When you are ready to install additional languages as indicated by the settings in each of your edited response files, run each installer program in unattended mode (silent mode) on each computer where the current release is already installed.

For example, for Siebel Enterprise Server, for Siebel CRM version 16.0, run a command like the following:

```
./runInstaller -silent -responseFile /export/home/811x_ses_addlang_unix.rsp  
-invPtrLoc inventory_location
```

For example, for Siebel Tools, for Siebel CRM version 16.0, run a command like the following:

```
setup.bat -silent -responseFile C:\811x_tools_addlang_win.rsp
```


- 10** When you are ready to deploy the newly installed languages, and any other languages that were not previously deployed, perform the following for each applicable Siebel Server:
 - a** Start the Siebel Server Configuration Wizard.
 - b** Choose the wizard task Add Language Support for the Siebel Server.
 - c** In the Deployed Languages screen, specify the additional languages to deploy.
 - d** Execute the configuration.
- 11** When you are ready to deploy the newly installed languages, and any other languages that were not previously deployed, perform the following for each applicable SWSE:
 - a** Start the SWSE Configuration Wizard.
 - b** Choose the wizard task Add Language Support for the SWSE Configuration.
 - c** In the Deployed Languages screen, specify the additional languages to deploy.
 - d** Execute the configuration.
- 12** For each additional installed (nonprimary) language that you are deploying for the first time: add the language to the Siebel database and import the Siebel Repository. Also run the MLOV conversion utility (once).
- 13** Validate the installation after it has completed.
- 14** Repeat the previous steps, where applicable, to install and deploy the new languages for each applicable installed Siebel module.

NOTE: In general, it is recommended that you add the languages for all of the applicable server installations before you add the languages for Siebel Web Client and Siebel Tools, where needed.
- 15** Reinstall any previously installed Siebel Patchset release that you uninstalled in [Step 3 on page 160](#). Then validate the installation again.

Related Topics

- ["Installing Siebel Enterprise Server" on page 44](#)
- ["Installing the Siebel Web Server Extension" on page 51](#)
- ["Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode" on page 58](#)
- ["Limitations for Installing Additional Languages" on page 154](#)
- ["Installing and Deploying All Required Languages Once" on page 155](#)
- ["Installing All Required Languages but Deploying Some Languages Later" on page 156](#)
- ["Installing the Siebel Web Client" on page 177](#)
- ["Installing Siebel Tools" on page 184](#)
- ["Installing Siebel Web Clients and Siebel Tools in Unattended Mode" on page 195](#)
- [Chapter 8, "Verifying and Troubleshooting Your Installation"](#)
- [Chapter 11, "Requirements for Installing and Configuring Siebel Business Applications"](#)
- ["About Siebel CRM Releases" on page 300](#)

Importing Locale-Specific Data into the Siebel Repository

This topic is part of “[Installing and Deploying Siebel Business Applications with Multiple Languages](#)” on page 150.

Sometimes it is necessary to update the text strings held in the repository for a particular language or for multiple languages. These text strings are held in the Symbolic String Model (SSM) table, and appear on-screen as labels for tabs, fields, and so on, across all of the Siebel applications.

Updates might be needed either because a string has been incorrectly translated for a particular language or because installing a patch release has caused a new string or message to appear for all of the languages for which Oracle ships language packs for Siebel Business Applications.

NOTE: These instructions are provided for use with any releases to which they might apply. They might not apply for any particular Siebel CRM version release or language.

The following procedure uses the Locale Management Utility (LMU), which is part of Siebel Tools, to import an LMU file. An LMU file might contain strings in just one language or in multiple languages. When running the Locale Management Utility, you can choose to import only the strings for the languages that you are using in your installation. In the procedure, when you are prompted for the file to import, specify the name of the LMU file provided for the applicable language.

NOTE: Install the current release before you run the Locale Management Utility.

For more information about using the Locale Management Utility, see *Using Siebel Tools* and *Siebel Global Deployment Guide*.

To import strings and other locale-specific attributes into the repository

- 1 In Siebel Tools, choose Tools, then Utilities, and then Locale Management.

The Locale Management Utility appears.

- 2 Select a source language and a target language.

The source language is the language of the locale-specific data in the LMU file that you are importing. The target language is the Siebel language into which the strings will be imported.

- 3 Click the Import tab.

- 4 Enter the name of the LMU file from which you want to import locale-specific attributes.

You can also click Browse to find and select the file.

- 5 Specify whether you want to mark records in the repository with the Redo flag that have changed since the export occurred.

When the import occurs, the LMU compares the source language records in the repository with the source language records in the import file. If the records in the repository have changed since the export occurred, then they are marked with the Redo flag. This flag helps you identify records that might have to be retranslated.

- 6 Click Import.

- 7 After completing the import process, recompile the SRF file and restart the Application Object Manager component on the Siebel Server to see the results.

Related Books

Using Siebel Tools

Siebel Global Deployment Guide

Additional Tasks for the Siebel Web Server Extension and the Web Server

Perform the following additional tasks for the Siebel Web Server Extension and the Web server, as required by your deployment:

- [“Configuring the Web Server” on page 163](#)
- [“Verifying the Siebel Virtual Directories on the Web Server” on page 164](#)
- [“Creating Custom Virtual Directories” on page 165](#)
- [“Setting SWSE and Virtual Directory Permissions” on page 166](#)
- [“Restarting the Web Server” on page 166](#)
- [“Granting User Permissions on the Web Server” on page 166](#)
- [“Configuring Oracle iPlanet Web Server to Accept the SWSE” on page 168](#)
- [“Enabling HTTP Compression for Siebel Business Applications” on page 169](#)
- [“Editing the SWSE Configuration File \(eapps.cfg\)” on page 170](#)
- [“Configuring the Default HTTP and HTTPS Ports for the Web Server” on page 170](#)

Configuring the Web Server

This topic describes steps for configuring the Web server for use with the SWSE. Some other documented postinstallation tasks also involve Web server configuration.

Additional Web server configuration tasks are described in [“Installing the Web Server” on page 341](#).

For version information for supported Web servers and the operating systems they run on (where you also install SWSE), see the Certifications tab on My Oracle Support.

For Apache-based Web servers, to configure the Web server for use with the SWSE, you must edit the Web server configuration file `httpd.conf`. For more information about the location of this file, see [“Installing the Web Server” on page 341](#).

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

Use the following guidelines for setting parameters in the `httpd.conf` file when using Apache-based Web servers with Siebel Business Applications.

Requirements for an Apache-Based Web Server

Use the following settings for configuring an Apache-based Web server. Some adjustments to these values might be needed, as outlined in article 871352.1 (Article ID) on My Oracle Support.

- Make sure that your section <worker.c> looks like the following:

```
<IfModule worker.c>
ThreadLimit N
StartServers 1
ServerLimit 1
MaxClients N
MinSpareThreads 1
MaxSpareThreads N
ThreadsPerChild N
MaxRequestsPerChild 0
</IfModule>
```

In this example, *N* is two times the average number of concurrent users.

- The User and Group values must correspond to an existing user who has appropriate permissions. Most importantly, the user must have appropriate permissions for various SWSE directories.

Recommendations for an Apache-Based Web Server

The following are recommended settings for configuring an Apache-based Web server:

- Set UseCanonicalName to OFF. You are required to set UseCanonicalName to OFF if you load-balance Web servers.
- Set KeepAliveTimeout to 15 seconds.
- Set MaxKeepAliveRequests to 0 for maximum performance.

Optional Settings for an Apache-Based Web Server

If you are not using the CGI functionality of your Apache-based Web server, then you can optionally add comment characters and disable the line that loads the CGI module. Doing this makes tracking Web server processes simpler because there is always one child process.

Verifying the Siebel Virtual Directories on the Web Server

Review the Siebel virtual directories that were created during configuration of the Siebel Web Server Extension. The virtual directories are created on the Web server for the installed Siebel Business Applications. For example, the virtual directory eservice_enu is for Siebel eService using U.S. English (ENU).

NOTE: In Siebel Innovation Pack 2016, the virtual directories, which formerly mapped to `publ i c/ / lang_code` (such as ENU), now map directly to `publ i c`. However, the existing virtual directories on the Web server that were configured for a prior release are not updated automatically when you migrate the SWSE. In order to correct this problem after migrating, you must reconfigure the SWSE. For more information about how to do this, see [“About Configuring Siebel Business Applications”](#) on page 69. See also [“Additional Tasks for Migration Installations”](#) on page 62.

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server”](#) on page 163.

To verify the virtual directories on Apache-based Web servers

- Open the Web server configuration file `httpd.conf`.

See also [“Configuring the Web Server”](#) on page 163.

The following examples for Siebel CRM version 16.0 partially illustrate the virtual directory structure for Siebel Business Applications:

```
Al i as /cal l center_enu /vol 1/si ebel /16. 0. 0. 0. 0/sweapp/publ i c/enu
```

```
Al i as /sal es_enu /vol 1/si ebel /16. 0. 0. 0. 0/sweapp/publ i c/enu
```

To verify the virtual directories on Oracle iPlanet Web Server

- Open the Web server configuration file `obj.conf`.

This file is located in `Orac l e_ i P l a n e t_ W e b_ S e r v e r_ i n s t a l l / w e b / h t t p s - l o c a l h o s t / c o n f i g`, in the Web server installation directory. In this path, `Orac l e_ i P l a n e t_ W e b_ S e r v e r_ i n s t a l l` is the root directory of the Oracle iPlanet Web Server.

The following examples for Siebel CRM version 16.0 partially illustrate the virtual directory structure for Siebel Business Applications:

```
NameTrans fn="pfx2di r" from="/cal l center_enu" di r="/export/home/si ebel /16. 0. 0. 0. 0/ sweapp/publ i c/enu"
```

```
NameTrans fn="pfx2di r" from="/sal es_enu" di r="/export/home/si ebel /16. 0. 0. 0. 0/ sweapp/publ i c/enu" . . .
```

Creating Custom Virtual Directories

Virtual directories are created automatically for Siebel Business Applications when you apply the SWSE logical profile to an installed SWSE. However, in some cases you might want to create your own virtual directory and point to an existing Application Object Manager; for example, to be able to test features like Web Single Sign-On (Web SSO).

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server”](#) on page 163.

Setting SWSE and Virtual Directory Permissions

You must set permissions as outlined in [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#). See also [“Granting User Permissions on the Web Server” on page 166](#) and related topics. This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

Restarting the Web Server

You must restart the Web server (or Web servers) after you have finished installing the current release as a migration installation on the computers where you installed Siebel Enterprise Server or Siebel Web Server Extension (SWSE).

After performing a migration installation of SWSE, you must reconfigure the SWSE, as noted in [“Additional Tasks for Migration Installations” on page 62](#). After doing this, then restart the Web server.

For detailed information about how to stop and restart the Web server, see [“Requirements for Stopping and Starting the Web Server” on page 347](#).

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

Related Topics

[“Additional Tasks for Migration Installations” on page 62](#)

[“Requirements for Stopping and Starting the Web Server” on page 347](#)

Related Books

Siebel Security Guide

Granting User Permissions on the Web Server

After installing the SWSE on a Web server running on UNIX, take the following steps.

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

To modify permissions on all operating systems

- Verify that the Web server administrator has read and execute permissions for all of the SWSE directories and files.
- Verify that the SWSE process owner (such as the httpd daemon) has recursive read, write, and execute permissions for the `SWSE_ROOT/public` directory. This directory contains the files for the Web image publishing and file caching features.

To modify permissions on Apache-based Web servers

- 1 Make sure that the login running the Web server has the following permissions for the scripts installed with the SWSE. On Oracle HTTP Server, such permissions must apply to the script `OHS_ROOT/opmn/bin/opmnctl` for starting and stopping the Web server.
 - Read, write, and execute privilege
 - Write permission for the log file path
 - Read-write permissions to files in `SWSE_ROOT/public`

CAUTION: If you use port 1 to 1024, then you must have root privileges to start the Web server (for applicable Web servers). If you do not have or need root privileges, then use a port number greater than 1024. Verify that your port number is available by using a command like the following:

```
netstat -a | grep port_number
```

- 2 Install the SWSE, as described in “Installing the Siebel Web Server Extension” on page 51. Run the installer program under a user account that can modify Web server configuration files.
- 3 Verify that the account the Web server httpd daemon uses has the following privileges:
 - Write permissions for the `SWSE_ROOT/Log` directory. Typically, to do so, you must change the permissions for the appropriate directory.
 - Recursive read and write permissions to all of the files in the `SWSE_ROOT/public` and `SWSE_ROOT/public/enu` directories.

To modify permissions on Oracle iPlanet Web Server

- 1 Verify that you have installed the required version of Oracle iPlanet Web Server, as documented in the Certifications tab on My Oracle Support.
- 2 After the correct version of the Oracle iPlanet Web Server is installed, use the Oracle iPlanet Web Server administration console to create a Web server instance. You can find the administration console at:

```
Oracle_iPlanet_Web_Server_install/https-admserv
```

In this path, `Oracle_iPlanet_Web_Server_install` is the root directory of the Oracle iPlanet Web Server.

- 3 In that directory, run `./start` to start the Admin Web Server instance if it is not running.
- 4 Open a Web browser instance and enter a URL like the following:

```
http://ComputerName:PortNumber/https-admserv
```

where:

- `ComputerName` is the name of the local computer on which the Web server resides
- `PortNumber` is the port number of the Admin Web Server

The Oracle iPlanet Web Server administration console is displayed in the browser window.

- 5 In the Web server administration console, choose Add Server. Enter the following values required to define the new instance of the Web server:

Server Name. This value can be any name, but is usually the host name of the computer, as in *computer_name.domainname.com*.

Server Port. The port number on which you want to run this Web server.

CAUTION: If you use port 1 to 1024, then you must have root privileges to start the Web server. If you do not have or need root privileges, then use a port number greater than 1024. Verify that your port number is available by using a command like the following:

```
netstat -a | grep port_number
```

Server Identifier. This value can be any name, but is usually identified as *computer_name*.

Server User. Usually either *root* or the system user based on which port that you choose and which user that you want to control the Web server instance.

MTA Host. Accept the default.

- 6 Verify that the account the Oracle iPlanet Web Server httpd daemon uses has the following privileges:
 - Recursive read, write and execute permissions for all of the files and subdirectories in the *SWSE_ROOT/log* and *SWSE_ROOT/public* directories.

Configuring Oracle iPlanet Web Server to Accept the SWSE

For Oracle iPlanet Web Server running on Oracle Solaris, you must configure the Web server to accept the changes that the SWSE Configuration Wizard makes to the Web server configuration files when you configure the SWSE.

CAUTION: If you do not configure the Web server as described here, then changes that you might make in the future to the Web server configuration will overwrite the changes made by the SWSE Configuration Wizard.

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server”](#) on page 163.

To configure Oracle iPlanet Web Server to accept changes made by SWSE

- 1 Navigate to the Oracle iPlanet Web Server Administration page. (For instructions, see the Oracle iPlanet Web Server documentation.)
- 2 Click the button that shows the server instance on which the SWSE was installed.
The Server Preferences page for the instance appears.

- 3 On the upper-right side of the Server Preferences page, click Apply.

Another page with a warning message appears:

WARNING: The configuration files have been edited by hand. Use this button to load the latest configuration files.

- 4 Click Load Configuration Files. The following message appears:

Success! The most recent configuration files have been loaded.

This message indicates that the Oracle iPlanet Web Server has accepted the changes made to it by the SWSE Configuration Wizard.

Oracle iPlanet Web Server References to the eapps.cfg File

When you configure the Siebel Web Server Extension, the SWSE Configuration Wizard adds a reference to the Oracle iPlanet Web Server configuration file `magnus.conf`. This file specifies global settings of the Web server, such as server information, object file configuration, DNS lookup, ACL, and so on.

A typical line the SWSE Configuration Wizard would add to `magnus.conf` might resemble the following example:

```
Init fn="swe-init" config-file="SWSE_ROOT/bin/eapps.cfg" siebel-home="SWSE_ROOT"
```

In this entry, `SWSE_ROOT` is the root directory where the SWSE is installed.

To locate `magnus.conf`

- Navigate to the following path:

```
Oracle_iPlanet_Web_Server_install/https-your_server_instance_name/config
```

In this path, `Oracle_iPlanet_Web_Server_install` is the root directory of the Oracle iPlanet Web Server.

Enabling HTTP Compression for Siebel Business Applications

You can specify whether, or when, the SWSE compresses HTTP traffic by setting the value of the `DoCompression` parameter in the `eapps.cfg` file. Compressing HTTP traffic, where it is feasible to do so, substantially reduces bandwidth consumption. This feature is supported on HTTP 1.1 and is not supported on HTTP 1.0. For detailed information about setting the value for the `DoCompression` parameter, see *Siebel Security Guide*.

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

Editing the SWSE Configuration File (eapps.cfg)

The SWSE configuration process updates the eapps.cfg and eapps_sia.cfg files in *SWSE_ROOT*/bin. The same files are used for all deployments.

These SWSE configuration files contain configuration information that you entered during the configuration of the SWSE, including identity and connectivity information for the Application Object Managers, and login and security settings.

You can modify the settings in the eapps.cfg and eapps_sia.cfg files by recreating and reapplying the SWSE logical profile, or in some cases you can just reapply the SWSE logical profile. For more information, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

Alternatively, you can manually add or modify selected optional parameters in these files to affect all of the Siebel applications or selected applications. For example, you might do this to tune the performance of Siebel Business Applications. (A manually edited file might then become out of sync with the SWSE logical profile.)

Other related files might also be used in your deployment. The file eapps_sia.cfg is included by eapps.cfg and extends its functionality by specifying connectivity information for Application Object Managers for additional applications not specifically defined in eapps.cfg. In general, documented information about the eapps.cfg file also applies to eapps_sia.cfg.

For detailed information about the structure and parameters of the eapps.cfg file, see *Siebel System Administration Guide*. For information about security and authentication parameters in the eapps.cfg file, see *Siebel Security Guide*. Most of the information also applies to eapps_sia.cfg.

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

To edit the eapps.cfg or eapps_sia.cfg file

- 1 Open eapps.cfg or eapps_sia.cfg, which are located in *SWSE_ROOT*/bin, using a text editor of your choice.
- 2 Modify settings in the file. Save and close the file.
- 3 Stop and restart the Web server, as described in [“Requirements for Stopping and Starting the Web Server” on page 347](#).

Configuring the Default HTTP and HTTPS Ports for the Web Server

The default HTTP and HTTPS ports for the Web server are port 80 and 443. When you deploy SWSE onto the Web server, and if you want to use nondefault port numbers, then use the following procedure to configure these ports.

For information about using port numbers in secure deployments and about configuring Transport Layer Security (TLS) for Siebel CRM, see *Siebel Security Guide*.

This topic is part of [“Additional Tasks for the Siebel Web Server Extension and the Web Server”](#) on page 163.

To configure the default ports for HTTP and HTTPS

- 1 Open the eapps.cfg file.

For more information, see [“Editing the SWSE Configuration File \(eapps.cfg\)”](#) on page 170.

- 2 Locate the [defaults] section.
- 3 Change the port number for HTTPPort and HTTPSPort to a desired port number. For example:

```
HTTPPort = 81
HTTPSPort = 444
```

NOTE: Alternatively, update these ports by recreating and reapplying the SWSE logical profile.

- 4 (Apache-based Web servers only) Configure the HTTP port:
 - a Using any text editor, open the httpd.conf file on the Web server.
 - b Locate the Listen section and change the HTTP port number to the number that you set in [Step 3 on page 171](#). For example:

```
Listen HostIP:81
```

In this entry, *HostIP* is the IP address of the Web server.

- c Change the ServerName value to the same value as the one for Listen. For example:

```
ServerName HostIP:81
```

In this entry, *HostIP* is the IP address of the Web server.

- 5 (Oracle HTTP Server only) To configure the HTTPS port, for use with TLS:
 - a Using any text editor, open the ssl.conf file on the Web server.
 - b Change the HTTPS port numbers in the following section to the port number that you set in [Step 3 on page 171](#). For example:

```
Listen 444
<VirtualHost _default_: 444>
SSLEngine on
```

- c Add comment characters to disable the following directives, in order to make sure that attachments can be opened and saved in all supported browsers, including those using HTTP 1.0.

```
# SetEnvIf User-Agent "MSIE" \
#         nokeepalive ssl-unclean-shutdown \
#         downgrade-1.0 force-response-1.0
```

- d Using any text editor, open the httpd.conf file on the Web server.
- e Add the following section before the Virtual Directories section to enable TLS:

```
<IfDefine SSL>
LoadModule ssl_module modules/mod_ssl.so
</IfDefine>
```

- 6 (Oracle iPlanet Web Server only) Configure the HTTP or HTTPS ports, for use with TLS:
 - a Using the Oracle iPlanet Web Server Administration console, go to the Preferences screen.
 - b Click on the Edit Listen Sockets tab and change the port number to the new value that you set in [Step 3 on page 171](#).

Configuring Support for CalDAV or CardDAV Publishing

This topic provides information about configuring your Siebel CRM environment to support CalDAV or CardDAV publishing. CalDAV (Calendaring Extensions to WebDAV) is an internet standard designed to allow users to access and share calendar data on a remote server. CardDAV (vCard Extensions to WebDAV) is a client-server protocol designed to allow users to access and share address book or contact data on a server. These standards allow users to view external contact or calendar information in Siebel Business Applications.

To enable CalDAV or CardDAV for your Siebel CRM deployment, the following requirements apply:

- On the Web server where you installed Siebel Web Server Extension, Transport Layer Security (TLS) must be configured. For more information, see *Siebel Security Guide*.
- On the Siebel Server, the EAI component group must be enabled. For more information, see [“Options for Configuring the Siebel Server” on page 107](#). See also *Siebel System Administration Guide* and additional documentation on *Siebel Bookshelf* for Siebel Enterprise Application Integration.
- In the Siebel CRM applications, valid email addresses must be associated with all Employees and Contacts. For each mobile user, the email address defined in Siebel CRM must match the user’s email address on the mobile device. For more information, see *Siebel Mobile Guide: Connected* or *Siebel Mobile Guide: Disconnected*. See also *Siebel Applications Administration Guide*.
- Users of mobile devices must set up CalDAV or CardDAV publishing on their devices in order to be able to access calendar or contact data. For more information, see *Siebel Mobile Guide: Connected* or *Siebel Mobile Guide: Disconnected*.
- Additional steps must be performed to enable dynamic mapping for CardDAV. Siebel Innovation Pack 2016, Patchset 3 or later supports dynamic mapping for CardDAV on mobile devices running supported versions of iOS. CardDAV dynamic mapping defines the mapping between Siebel objects and the CardDAV properties. The Siebel CardDAV Sync module synchronizes the defined entities (address book and contact data) accordingly between a user’s mobile device and Siebel CRM applications. For information about enabling this feature for Siebel CRM version 16.3 or later, see 2160593.1 (Article ID) on My Oracle Support. For information about installing Siebel Patchset 3 or later, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

Related Books

Siebel Security Guide

Siebel System Administration Guide

Siebel Mobile Guide: Connected

Siebel Mobile Guide: Disconnected

Siebel Applications Administration Guide

2160593.1 (Article ID) on My Oracle Support (about CardDAV dynamic mapping)

Siebel Patchset Installation Guide for Siebel CRM, 1614310.1 (Article ID) on My Oracle Support

7

Installing Siebel Web Clients and Siebel Tools

This chapter describes the tasks that you must perform to install Siebel Web Clients and Siebel Tools, and optionally the local database or sample database, and to start Siebel Business Applications. Both new installations and migration installations are described. Additional tasks for the client computer are also described. This chapter includes the following topics:

- [About Installing the Siebel Web Client or Siebel Tools on page 175](#)
- [Installing the Siebel Web Client on page 177](#)
- [Installing Siebel Tools on page 184](#)
- [Installing and Using Oracle Database XE for the Local or Sample Database on page 191](#)
- [Installing Siebel Web Clients and Siebel Tools in Unattended Mode on page 195](#)
- [About the Workspaces Feature in Siebel Tools on page 200](#)
- [Installing Desktop Integration Siebel Agent on Client Computers on page 201](#)
- [Installing Outlook to Siebel Drag and Drop on Client Computers on page 201](#)
- [Siebel Client Deployment Requirements When Using Firewalls or Proxy Servers on page 203](#)
- [Configuring Siebel Business Applications for Pop-Up Blocker Compatibility on page 204](#)
- [Logging in to Your Siebel Application on page 205](#)
- [Siebel Web Client Shortcuts and Startup Options on page 207](#)

About Installing the Siebel Web Client or Siebel Tools

This chapter describes how to install Siebel Web Clients (for Siebel Mobile Web Clients) and Siebel Tools, and optionally the local database or sample database, with specified Siebel language packs. Before installing, review all documented requirements.

The software that is installed on the user's computer for Siebel Mobile Web Client and Developer Web Client is identical. A single installer provides the software necessary to install and run either of these client types. For general information about these client types, see *Siebel Deployment Planning Guide*. Information in this guide about installing the *Siebel Web Client* refers to either or both of these two client types. (Siebel Developer Web Client installation is covered with the Siebel Mobile Web Client.) See also *Deploying Siebel Open UI*.

Each Siebel Web Client is designed to be used within a single Siebel Enterprise. To support multiple Siebel Enterprises on a single computer for testing purposes, install separate Siebel client instances in separate directories.

It is recommended to install the Siebel Developer Web Client with Siebel Tools. The Siebel Developer Web Client has specific requirements for connectivity to the enterprise database. For information about the relational database management systems (RDBMS) that you might need to install on client computers running Siebel Developer Web Clients, see the Certifications tab on My Oracle Support. RDBMS products are not provided by Oracle; you must obtain them based on your database-connection requirements.

NOTE: The Siebel Developer Web Client is supported for administration, development, and troubleshooting usage scenarios only.

Oracle Database XE is always installed for Siebel Mobile Web Client and Siebel Tools, for a new or migration installation. You can optionally install the sample database for Siebel Mobile Web Client, or optionally install the local database for Siebel Tools. However, do not install the local database or the sample database if you plan to initialize a local database through Siebel Remote. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

The migration installation tasks are a type of patch installation provided for Siebel Web Client and Siebel Tools installers. You perform migration installations using the same installers (for the current release) that you use for new installations. A migration installation applies settings from your existing installation to a new installation. The existing Oracle home name, installation location, installation languages, configuration data, and other settings are used for the new installation. Before the new installation is performed, the existing installation is moved to a backup location and can no longer be used.

NOTE: For information about additional tasks and considerations for migration installations, see [“Additional Tasks for Migration Installations” on page 62](#).

The language that the installer displays is the one that corresponds to the current regional settings on the installation client computer.

This chapter also includes information about installing additional modules on client computers, for use with any Siebel Web Client.

Siebel Web Client and Siebel Tools Installer Flow

In general, the installer for Siebel Web Client or Siebel Tools does the following:

- 1 Checks the client computer to verify whether required components have already been installed.
- 2 Creates all of the required ODBC data sources.
- 3 Installs the Siebel CRM software and specified Siebel language packs.
- 4 (Siebel Mobile Web Client and Siebel Tools only) Installs Oracle Database XE, and optionally installs the sample database or local database. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).
- 5 Creates Siebel shortcuts.
- 6 Writes data to installation log files.

Related Topics

[“Installation-Related Changes for Siebel Innovation Pack 2016” on page 25](#)

["Installing the Siebel Web Client" on page 177](#)

["Installing Siebel Tools" on page 184](#)

["Installing and Using Oracle Database XE for the Local or Sample Database" on page 191](#)

["Requirements for Installing Siebel Web Clients" on page 352](#)

["Requirements for Installing Siebel Tools" on page 355](#)

["About Siebel CRM Releases" on page 300](#)

Related Books

Siebel Deployment Planning Guide

Deploying Siebel Open UI

Siebel Remote and Replication Manager Administration Guide

Configuring Siebel Business Applications

Installing the Siebel Web Client

This topic provides instructions for installing the Siebel Mobile Web Client or Developer Web Client and specified Siebel language packs.

NOTE: This topic includes instructions for installing the Siebel Web Client as a new installation or as a migration installation. For an existing installation, you perform a migration installation instead of a new installation.

The language that the installer displays is the one that corresponds to the current regional settings on the installation client computer.

This topic contains the following information:

■ ["Installing the Siebel Web Client as a New Installation" on page 178](#)

■ ["Installing the Siebel Web Client as a Migration Installation" on page 182](#)

Related Topics

["About Installing the Siebel Web Client or Siebel Tools" on page 175](#)

["Installing Siebel Web Clients and Siebel Tools in Unattended Mode" on page 195](#)

["Installing and Using Oracle Database XE for the Local or Sample Database" on page 191](#)

["Verifying Installation for the Siebel Web Client" on page 225](#)

["Verifying Installation for Oracle Database XE" on page 231](#)

["Uninstalling Siebel Web Clients or Siebel Tools" on page 291](#)

["Uninstalling Oracle Database XE" on page 294](#)

["Requirements for Installing Siebel Web Clients" on page 352](#)

Related Books

Siebel Remote and Replication Manager Administration Guide

Installing the Siebel Web Client as a New Installation

Use the following procedure to install the Siebel Web Client as a new installation for the current release, Siebel CRM version 16.0. Some of the information applies to only the Siebel Mobile Web Client or only the Siebel Developer Web Client.

NOTE: Use this procedure only when Siebel Web Client is not already installed. Where an earlier version of Siebel Web Client is already installed, you perform a migration installation instead, as described in “Installing the Siebel Web Client as a Migration Installation” on page 182.

Oracle Database XE is always installed for Siebel Mobile Web Client. You can optionally install the sample database for a new installation. Alternatively, you can use this procedure to install the sample database for an existing installation of Siebel Mobile Web Client for the current release, if you had not previously installed the sample database. Do not install the sample database if you plan to initialize a local database through Siebel Remote. For more information, see “Installing and Using Oracle Database XE for the Local or Sample Database” on page 191.

This topic is part of “Installing the Siebel Web Client” on page 177.

This task is a step in:

- “Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33
- “Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case (Existing Database)” on page 38

To install the Siebel Web Client as a new installation

1 Review “About Installing the Siebel Web Client or Siebel Tools” on page 175. See also “Installing and Using Oracle Database XE for the Local or Sample Database” on page 191.

2 Uninstall your existing sample database from a previous version, where applicable.

You might have installed the existing sample database for a prior release, such as version 8.1.1.x, version 8.2.2.x, or version 15.x.

NOTE: The *Siebel Installation Guides* for prior Siebel CRM version 8.1.1.x, version 8.2.2.x, and version 15.x releases are available on My Oracle Support, at 1461732.1 (Article ID).

3 In Windows Explorer, navigate to the Siebel image location for the current release. Then navigate to the directory where the installer is located. Navigate to *Siebel_Image\Windows\Client\Siebel_Web_Client\Disk1\install*.

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as *C:\Siebel_Install_Image\16.0.0.0*.

4 To start the Siebel Web Client installer, double-click *setup.bat*.

The Siebel Web Client installer displays the Welcome screen.

5 Click Next.

A screen appears that prompts for email contact information.

- 6 When prompted for the email address and password corresponding to your My Oracle Support account, click Next. (This information is not used in this context.)

The Select Installation Task screen appears. The New Installation task is selected by default.

- 7 To perform a new installation of Siebel Web Client software where no existing installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x is present, click Next. Also click Next if you are installing the sample database into an existing installation of Siebel Mobile Web Client for the current release.

The New Installation Details screen appears.

- 8 Enter a name for your installation and specify the installation location, and then click Next. (Note the installation name and location for future reference.) Note the following:
 - The default installation name (Oracle Home Name) is CLIENT_HOME. The value that you specify is used in the parent program folder name for the Siebel application client shortcuts. (A separate program folder is created for the Oracle Universal Installer software.) If you have an existing installation, then you must specify a new name for the new installation.
 - The default installation path (Oracle Home Location) for a new installation is C:\siebel\16.0.0.0\client or a similar value. Accept the default path or specify a different location by typing it directly or by clicking Browse. If you have an existing installation, then you must specify a new path for the new installation.

For more information about Oracle home and installation path requirements, see [“File and Directory Naming Conventions” on page 319](#).

If you specified an existing installation of Siebel Mobile Web Client for the current release in this screen, then the installer gives you the option of installing the sample database into your existing installation. Go to [Step 19 on page 181](#). Otherwise, go to the next step.

For a new installation, the Select Languages screen appears. All of the languages that were included in the Siebel network image for Siebel Web Client are available for selection.

- 9 Select the languages that you want to install, and click Next. You must select at least one language in order to proceed.

To select a language, you click the name of the language in the Available box and then use the arrow controls to move it into the Selected box.

You specify languages to install in order to run Siebel Business Applications using these languages. The files that are specific to the languages chosen in this step will be copied to your computer.

NOTE: You can add languages to an existing installation by running the installer in unattended mode (silent mode). For more information about installing and deploying languages, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

The Client Type screen appears.

- 10 Specify the type of Siebel Web Client that you are installing: either Siebel Mobile Web Client or Siebel Developer Web Client.

Do one of the following:

- For Siebel Mobile Web Client, go to the next step.

- For Siebel Developer Web Client, go to [Step 12 on page 180](#).

- 11** (Siebel Mobile Web Client only) In the Remote Server Information screen, specify the name of the Siebel Server on which you are running the Siebel Remote Server components. Then click Next. Go to [Step 20 on page 181](#).

The Siebel Remote Server components are required for initializing and synchronizing the local database on the Siebel Mobile Web Client computer.

- 12** (Siebel Developer Web Client only) In the Database Server screen, select the type of database server that you are using for Siebel Business Applications. Choose one of the following, and click Next:

- Oracle Database Server
- IBM DB2 UDB for Windows and UNIX
- IBM DB2 UDB for z/OS

NOTE: According to your selection, the Siebel Web Client installer validates that the correct database connectivity software has been installed. If it has not been installed, then you must exit the Siebel Web Client installer, install the required software, and then restart the Siebel Web Client installer.

- 13** (Siebel Developer Web Client only) In the Database Identification screen, enter the following information, and click Next. Specify information for the database that you specified in [Step 12 on page 180](#):

- For Oracle Database, specify the Database Alias and Table Owner.
- For IBM DB2, specify the Database Alias and Table Owner.
- For IBM DB2 for z/OS, specify the Database Alias (as defined in DB2 Connect) and Table Owner or Schema Qualifier.

Enter the data that you previously specified in the worksheet in [Appendix A, "Siebel Deployment Planning Worksheet."](#)

- 14** (Siebel Developer Web Client only) In the File System Server Information screen, specify the directory path for a network-based Siebel File System by typing it directly or by clicking Browse. Then click Next.

NOTE: For the Siebel File System path, you can use a UNC share name (for example, `\\SRV1\si ebfi le`) or a mapped drive (for example, `K: \si ebel FS`). For more information, see "File and Directory Naming Conventions" on page 319. See also "Creating the Siebel File System" on page 320.

- 15** (Siebel Developer Web Client only) In the Remote Server Information screen, click Next to accept the default. (This screen is primarily for Siebel Mobile Web Client.)

- 16** (Siebel Developer Web Client only) In the Enterprise Server Information screen, specify the address of the Siebel Gateway Name Server and the name of the Siebel Enterprise to which this Siebel Developer Web Client will connect for administration. Then click Next.

The Gateway Name Server Address is the network name or the IP address of the computer on which the Siebel Gateway Name Server is installed. To enter a specific port number, append the Gateway Name Server Address string with a colon and the desired port number.

The Enterprise Server name is the name of the Siebel Enterprise under which the Siebel Servers that support the server database were installed.

- 17** (Siebel Developer Web Client only) In the Server Request Broker Information screen, specify the Request Server Name, and click Next.

This value is the name of the Siebel Server on which the Server Request Broker component is operating. This component is used for dynamic assignment and other interactive operations.

- 18** (Siebel Developer Web Client only) In the Search Server Information screen, if you will use a search server, then enter the following for the server computer where the search server operates. Then click Next.

- **Search Server Hostname.** The default value is localhost.

- **Search Server Port Number.** The default value is 2048.

NOTE: For system requirements and other information about deploying a search server, see *Siebel Search Administration Guide*.

- 19** (Siebel Mobile Web Client only) In the Sample DB Selection screen of the Siebel Web Client installer, you can optionally specify that you want to install the sample database. Specify the path to the installed 32-bit Oracle Database Client, whether or not you install the sample database.

- 20** In the Summary screen, review the information presented.

This screen displays the location where the Siebel Web Client will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the Siebel Web Client software, click Install. You can also click Install after saving a response file.
- To save a response file to use for an unattended installation later, click Save Response File. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#).

The Installation Progress screen appears. The Siebel Web Client software is installed into the directory that you specified in [Step 8 on page 179](#).

- 21** When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results.

22 To close the installer, click Close.

The Siebel Web Client installation is now finished. Siebel application shortcuts are created in the program folder that you specified in [Step 8 on page 179](#). For more information about these shortcuts, see [“Siebel Web Client Shortcuts” on page 208](#).

23 After installing the Siebel Web Client software:

- Verify the Siebel Web Client installation, as described in [“Verifying Installation for the Siebel Web Client” on page 225](#).
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#)

24 Repeat this procedure on each computer where you are installing Siebel Web Client.

Installing the Siebel Web Client as a Migration Installation

Use the following procedure to install the Siebel Web Client as a migration installation for the current release, Siebel CRM version 16.0. Migration installation is a type of patch installation. The information applies to both the Siebel Mobile Web Client and the Siebel Developer Web Client.

NOTE: Use this procedure only when an earlier version of the Siebel Web Client is already installed (Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x). Otherwise, you must follow the steps in [“Installing the Siebel Web Client as a New Installation” on page 178](#) instead.

During a migration installation, the original Siebel Web Client installation directory is renamed from *Original Name* to *Original Name_pre16.0*. For example, if the original installation directory name (*Original Name*) was `Client_1`, then this directory is renamed to `Client_1_pre16.0`. The new Siebel Web Client installation directory is named *Original Name*, such as `Client_1`. Retain the original installation directory, in case you choose to perform a rollback uninstallation later. For more information, see [“Rolling Back the Siebel Web Client” on page 292](#).

Oracle Database XE is always installed for Siebel Mobile Web Client. You can optionally install the sample database in a migration installation of Siebel Mobile Web Client. Do not install the sample database if you plan to initialize a local database through Siebel Remote. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

This topic is part of [“Installing the Siebel Web Client” on page 177](#).

This task is a step in [“Roadmap for Installing Siebel Business Applications in a Migration Installation Case \(Existing Installation\)” on page 36](#).

To install the Siebel Web Client as a migration installation

- 1** Review [“About Installing the Siebel Web Client or Siebel Tools” on page 175](#). See also [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).
- 2** Perform any premigration tasks that might be necessary, as noted in [“Additional Tasks for Migration Installations” on page 62](#).

- 3 Exit any Siebel software on the client computer where you are installing the current release.

NOTE: For a Siebel Mobile Web Client using the Siebel QuickStart feature, you must also exit the QuickStart agent if it is running. To do this, right-click the QuickStart icon in the system tray, and then choose Exit.

- 4 Perform any additional premigration tasks that might be necessary. For example, you might need to upgrade the 32-bit Oracle Database Client version installed on your computer.
- 5 In Windows Explorer, navigate to the Siebel image location for the current release, and then to the directory where the installer is located. Navigate to *Siebel_Image\Windows\Client\Siebel_Web_Client\Disk1\install*.

In this path, *Siebel_Image* is the directory for your version-specific Siebel installation image, such as *C:\Siebel_Installation_Image\16.0.0.0*.

- 6 To start the Siebel Web Client installer, double-click *setup.bat*.

The Siebel Web Client installer displays the Welcome screen.

- 7 Click Next.

A screen appears that prompts for email contact information.

- 8 When prompted for the email address and password corresponding to your My Oracle Support account, click Next. (This information is not used in this context.)

The Select Installation Task screen appears.

- 9 To perform a migration installation of the Siebel Web Client software where an existing prior installation of version 8.1.1.x, version 8.2.2.x, or version 15.x is present, choose Migration Installation, and click Next.

The Installation Migration Details screen appears.

- 10 Confirm or select the name and location of your existing installation, and then click Next. Do the following:

- Confirm the existing installation name, or select it from the drop-down list.
- Confirm the existing installation location, or select it from the drop-down list.

For more information about Oracle home and installation path requirements, see ["File and Directory Naming Conventions" on page 319](#).

- 11 (Siebel Mobile Web Client only) In the Sample DB Selection screen of the Siebel Web Client installer, you can optionally specify that you want to install the sample database. Specify the path to the installed 32-bit Oracle Database Client, whether or not you install the sample database.

- 12 In the Summary screen, review the information presented.

This screen displays the location where the Siebel Web Client will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the Siebel Web Client software, click Install. You can also click Install after saving a response file.

- To save a response file to use for an unattended installation later, click Save Response File. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#).

The Installation Progress screen appears. The Siebel Web Client software is installed into the directory that you specified in [Step 10 on page 183](#).

- 13** When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results. This screen also shows the new location of the original installation, which the installer moved before it performed the new installation.

- 14** Review the report that is generated about any conflicts between your customized files and the files that are delivered by the Siebel Web Client installer. As needed, copy any of your customized files from the original installation to the new migrated installation.

Conflicts are identified in the file `overwrittenfiles_timestamp.log`, which is created in the `SIEBEL_CLIENT_ROOT\cfgtool\logs\oui` directory (in the new Siebel Web Client installation).

- 15** To close the installer, click Close.

The Siebel Web Client installation is now finished. Siebel application shortcuts are created in the program folder that you specified in [Step 10 on page 183](#). For more information about these shortcuts, see [“Siebel Web Client Shortcuts” on page 208](#).

- 16** After installing the Siebel Web Client software:

- Verify the Siebel Web Client installation, as described in [“Verifying Installation for the Siebel Web Client” on page 225](#).
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#) See also [“Additional Tasks for Migration Installations” on page 62](#).

- 17** Repeat this procedure on each computer with a Siebel Web Client installation to be migrated.

Installing Siebel Tools

This topic provides instructions for installing the Siebel Tools Client and specified Siebel language packs. Siebel Tools is an integrated environment used by developers for configuring Siebel Business Applications.

NOTE: This topic includes instructions for installing Siebel Tools as a new installation or as a migration installation. For an existing installation, you perform a migration installation instead of a new installation.

The language that the installer displays is the one that corresponds to the current regional settings on the installation client computer.

This topic contains the following information:

- [“Installing Siebel Tools as a New Installation” on page 185](#)
- [“Installing Siebel Tools as a Migration Installation” on page 189](#)

Related Topics

- [“About Installing the Siebel Web Client or Siebel Tools” on page 175](#)
- [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)
- [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#)
- [“About the Workspaces Feature in Siebel Tools” on page 200](#)
- [“Verifying Installation for Siebel Tools” on page 227](#)
- [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#)
- [“Requirements for Installing Siebel Tools” on page 355](#)

Related Books

- Using Siebel Tools*
- Configuring Siebel Business Applications*
- Siebel Remote and Replication Manager Administration Guide*
- Configuring Siebel Open UI*
- Siebel Developer’s Reference*
- Siebel CRM Composer Developer Preview Guide*

Installing Siebel Tools as a New Installation

Use the following procedure to install Siebel Tools as a new installation for Siebel CRM version 16.0.

NOTE: Use this procedure only when Siebel Tools is not already installed. Where an earlier version of Siebel Tools is already installed, you perform a migration installation instead, as described in [“Installing Siebel Tools as a Migration Installation” on page 189](#).

Oracle Database XE is always installed for Siebel Tools. You can optionally install the local database for a new installation. Alternatively, you can use this procedure to install the local database for an existing installation of Siebel Tools for the current release, if you had not previously installed the local database. Do not install the local database if you plan to initialize a local database through Siebel Remote. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

This topic is part of [“Installing Siebel Tools” on page 184](#).

This task is a step in:

- [“Roadmap for Installing and Configuring Siebel Business Applications for a New Deployment” on page 33](#)

- [“Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case \(Existing Database\)” on page 38](#)

To install Siebel Tools as a new installation

- 1 Review [“About Installing the Siebel Web Client or Siebel Tools” on page 175](#). See also [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).
- 2 In Windows Explorer, navigate to the Siebel image location for Siebel CRM version 16.0. Then navigate to the directory where the installer is located. Navigate to `Siebel_Image\Windows\Client\Siebel_Tools\Disk1\install`.

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as `C:\Siebel_Install_Image\16.0.0.0`.
- 3 To start the Siebel Tools installer, double-click `setup.bat`.

The Siebel Tools installer displays the Welcome screen.
- 4 Click Next.

A screen appears that prompts for email contact information.
- 5 When prompted for the email address and password corresponding to your My Oracle Support account, click Next. (This information is not used in this context.)

The Select Installation Task screen appears. The New Installation task is selected by default.
- 6 To perform a new installation of Siebel Tools software where no existing installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x is present, click Next. Also click Next if you are installing the local database into an existing installation of Siebel Tools for the current release.

The New Installation Details screen appears.
- 7 Enter a name for your installation and specify the installation location, and then click Next. (Note the installation name and location for future reference.) Note the following:
 - The default installation name (Oracle Home Name) is `TOOLS_HOME`. The value that you specify is used in the parent program folder name for the Siebel Tools client shortcut. (A separate program folder is created for the Oracle Universal Installer software.) If you have an existing installation, then you must specify a new name for the new installation.
 - The default installation path (Oracle Home Location) for a new installation is `C:\siebel\16.0.0.0\Tools` or a similar value. Accept the default path or specify a different location by typing it directly or by clicking Browse. If you have an existing installation, then you must specify a new path for the new installation.

For more information about Oracle home and installation path requirements, see [“File and Directory Naming Conventions” on page 319](#).

If you specified an existing installation of Siebel Tools for the current release in this screen, then the installer gives you the option of installing the local database into your existing installation. Go to [Step 14 on page 188](#). Otherwise, go to the next step.

For a new installation, the Select Languages screen appears. All of the languages that were included in the Siebel network image for Siebel Tools are available for selection.

- 8 Select the languages that you want to install, and click Next. You must select at least one language in order to proceed.

To select a language, you click the name of the language in the Available box and then use the arrow controls to move it into the Selected box.

You specify languages to install in order to run applications using these languages. The files that are specific to the languages chosen in this step will be copied to your computer.

NOTE: You must install Siebel Tools with the U.S. English (ENU) language pack. You can also install other Siebel language packs.

NOTE: You can add languages to an existing installation by running the installer in unattended mode (silent mode). For more information about installing and deploying languages, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

- 9 In the Database Server screen, select the type of database server that you are using for Siebel Business Applications. Choose one of the following, and click Next:
- Oracle Database Server
 - IBM DB2 UDB for Windows and UNIX
 - IBM DB2 UDB for z/OS

- 10 In the Database Identification screen, enter the following information, and click Next. Specify information for the database that you specified in [Step 9 on page 187](#):

- For Oracle Database, specify the Database Alias and Table Owner.
- For IBM DB2, specify the Database Alias and Table Owner.
- For IBM DB2 for z/OS, specify the Database Alias (as defined in DB2 Connect) and Table Owner or Schema Qualifier.

Enter data that you previously specified in the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

- 11 In the File System Server Information screen, specify the directory path for a network-based Siebel File System by typing it directly or by clicking Browse. Then click Next.

NOTE: For the Siebel File System path, you can use a UNC share name (for example, `\\SRV1\si ebfi le`) or a mapped drive (for example, `K: \si ebel FS`). For more information, see [“File and Directory Naming Conventions” on page 319](#). See also [“Creating the Siebel File System” on page 320](#).

- 12 In the Remote Server Information screen, specify the name of the Siebel Server on which you are running the Siebel Remote Server components. Then click Next.

The Siebel Remote Server components are required for initializing and synchronizing the local database on the Siebel Tools computer.

- 13 In the Enterprise Server Information screen, specify the address of the Siebel Gateway Name Server and the name of the Siebel Enterprise to which Siebel Tools will connect for administration. Then click Next.

The Gateway Name Server Address is the network name or the IP address of the computer on which the Siebel Gateway Name Server is installed. To enter a specific port number, append the Gateway Name Server Address string with a colon and the desired port number.

The Enterprise Server is the name of the Siebel Enterprise under which the Siebel Servers that support the server database were installed.

- 14 In the Local DB Selection screen of the Siebel Tools installer, you can optionally specify that you want to install the local database. If you checked Install Local DB, then you must also specify an appropriate user name and password. Also specify the path to the installed 32-bit Oracle Database Client, whether or not you install the local database.

- 15 In the Summary screen, review the information presented.

This screen displays the location where Siebel Tools will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the Siebel Tools software, click Install. You can also click Install after saving a response file.
- To save a response file to use for an unattended installation later, click Save Response File. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#).

The Installation Progress screen appears. The Siebel Tools software is installed into the directory that you specified in [Step 7 on page 186](#).

- 16 When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results.

- 17 To close the installer, click Close.

Siebel Tools installation is now finished. The Siebel Tools shortcut was created in the program folder that you specified in [Step 7 on page 186](#).

- 18 After installing the Siebel Tools software:

- Verify the Siebel Tools installation, as described in [“Verifying Installation for Siebel Tools” on page 227](#).
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#)

- 19 Repeat this procedure on each computer where you are installing Siebel Tools.

Installing Siebel Tools as a Migration Installation

Use the following procedure to install Siebel Tools as a migration installation for the current release, Siebel CRM version 16.0. Migration installation is a type of patch installation.

NOTE: Use this procedure only when an earlier version of Siebel Tools is already installed (Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x). Otherwise, you must follow the steps in “Installing Siebel Tools as a New Installation” on page 185 instead.

During a migration installation, the original Siebel Tools installation directory is renamed from *Original Name* to *Original Name_pre16.0*. For example, if the original installation directory name (*Original Name*) was *Tool s_1*, then this directory is renamed to *Tool s_1_pre16.0*. The new Siebel Tools installation directory is named *Original Name*, such as *Tool s_1*. Retain the original installation directory, in case you choose to perform a rollback uninstallation later. For more information, see “Rolling Back Siebel Tools” on page 293.

Oracle Database XE is always installed for Siebel Tools. You can optionally install the local database in a migration installation of Siebel Tools. Do not install the local database if you plan to initialize a local database through Siebel Remote. For more information, see “Installing and Using Oracle Database XE for the Local or Sample Database” on page 191.

This topic is part of “Installing Siebel Tools” on page 184.

This task is a step in “Roadmap for Installing Siebel Business Applications in a Migration Installation Case (Existing Installation)” on page 36.

To install Siebel Tools as a migration installation

- 1 Review “About Installing the Siebel Web Client or Siebel Tools” on page 175. See also “Installing and Using Oracle Database XE for the Local or Sample Database” on page 191.
- 2 Perform any premigration tasks that might be necessary, as noted in “Additional Tasks for Migration Installations” on page 62. For example, your administrator might want you to check in any changes you have made to objects in your existing local database.
- 3 Exit any Siebel software on the Siebel Tools Client computer where you are installing the current release.
- 4 Perform any additional premigration tasks that might be necessary. For example, you might need to upgrade the 32-bit Oracle Database Client version installed on your computer.
- 5 In Windows Explorer, navigate to the Siebel image location for the current release, and then to the directory where the installer is located. Navigate to *Siebel_Image\Windows\Client\Siebel_Tool s\Disk1\install*.
In this path, *Siebel_Image* is the directory for your version-specific Siebel installation image, such as *C:\Siebel_Install_Image\16.0.0.0*.
- 6 To start the Siebel Tools installer, double-click *setup.bat*.
The Siebel Tools installer displays the Welcome screen.
- 7 Click Next.
A screen appears that prompts for email contact information.

- 8 When prompted for the email address and password corresponding to your My Oracle Support account, click Next. (This information is not used in this context.)

The Select Installation Task screen appears.

- 9 To perform a migration installation of the Siebel Tools software where an existing prior installation of version 8.1.1.x, version 8.2.2.x, or version 15.x is present, choose Migration Installation, and click Next.

The Installation Migration Details screen appears.

- 10 Confirm or select the name and location of your existing installation, and then click Next. Do the following:

- Confirm the existing installation name, or select it from the drop-down list.
- Confirm the existing installation location, or select it from the drop-down list.

For more information about Oracle home and installation path requirements, see [“File and Directory Naming Conventions” on page 319](#).

- 11 In the Local DB Selection screen of the Siebel Tools installer, you can optionally specify that you want to install the local database. If you checked Install Local DB, then you must also specify an appropriate user name and password. Also specify the path to the installed 32-bit Oracle Database Client, whether or not you install the local database.

- 12 In the Summary screen, review the information presented.

This screen displays the location where Siebel Tools will be installed. Before you proceed, confirm that you have met all of the installation requirements, such as for disk space. Then do one of the following:

- To begin installing the Siebel Tools software, click Install. You can also click Install after saving a response file.
- To save a response file to use for an unattended installation later, click Save Response File. If you are not also installing at this time, then click Cancel after you save the response file. For information about performing unattended installations, see [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#).

The Installation Progress screen appears. The Siebel Tools software is installed into the directory that you specified in [Step 10 on page 190](#).

- 13 When the Next button becomes available, the installation is complete. Click Next.

The Finish Installation screen appears. This screen indicates whether the installation was successful and shows the location of the installer log file. You can access this file to review the installation results. This screen also shows the location of the original installation, which the installer moved before it performed the new installation.

- 14 Review the report that is generated about any conflicts between your customized files and the files that are delivered by the Siebel Tools installer. As needed, copy any of your customized files from the original installation to the new migrated installation.

Conflicts are identified in the file `overwrittenfiles_timestamp.log`, which is created in the `SIEBEL_TOOLS_ROOT\cfgtool\logs\oui` directory (in the new Siebel Tools installation).

15 To close the installer, click Close.

The Siebel Tools installation is now finished. The Siebel Tools shortcut was created in the program folder that you specified in [Step 10 on page 190](#).

16 After installing the Siebel Tools software:

- Verify the Siebel Tools installation, as described in [“Verifying Installation for Siebel Tools” on page 227](#).
- Install the latest Siebel Patchset release, where available. Then verify the installation again.
- Perform any additional postinstallation steps, as described in [Chapter 6, “Additional Postinstallation and Configuration Tasks.”](#) See also [“Additional Tasks for Migration Installations” on page 62](#).

17 Repeat this procedure on each computer with a Siebel Tools installation to be migrated.

Installing and Using Oracle Database XE for the Local or Sample Database

In the current release, Oracle Database XE is provided as the database platform for the local database for Siebel Tools and for Siebel Mobile Web Client, or for the sample database for Siebel Mobile Web Client. Oracle Database XE software is always installed for Siebel Tools or Siebel Web Client (Siebel Mobile Web Client only), for a new or migration installation.

Oracle Database XE is installed and used in the following cases:

- **Local database for Siebel Tools.** The Siebel Tools installer installs Oracle Database XE and provides the option to install the local database, as described in [“Installing Siebel Tools” on page 184](#). Alternatively, the installer installs a database template, and you initialize the local database through the Siebel Remote server.
- **Local database for Siebel Mobile Web Client.** The Siebel Web Client installer installs Oracle Database XE and a database template (if you do not install the sample database instead), and you initialize the local database through the Siebel Remote server. Support for the local database for this client is new in Siebel Innovation Pack 2016.
- **Sample database for Siebel Mobile Web Client.** The Siebel Web Client installer installs Oracle Database XE and provides the option to install the sample database, as described in [“Installing the Siebel Web Client” on page 177](#).

NOTE: SAP SQL Anywhere is no longer provided for the local or sample database. The Siebel Sample Database is no longer provided through a separate installer.

Requirements for Installing and Using Oracle Database XE

For platform requirements for installing and using Siebel Tools and Siebel Web Clients, see the Certifications tab on My Oracle Support. See also [“Requirements for Installing Siebel Web Clients” on page 352](#) and [“Requirements for Installing Siebel Tools” on page 355](#). See also the documentation for Oracle Database Express Edition on Oracle Help Center.

- **Siebel image requirement.** For your users to be able to install the local database or sample database on client computers, you must include the necessary JAR files in the Siebel image for Siebel Innovation Pack 2016. When you create the Siebel image, select options that will support users of both 32-bit and 64-bit versions of Microsoft Windows. For more information, see [“About the Siebel Network Image” on page 383](#). See also [“About Siebel CRM Releases” on page 300](#).

- **Oracle Database Client requirement.** For your users to be able to use Oracle Database XE on the client computer, the 32-bit Oracle Database Client must be installed. The Siebel Tools and Siebel Web Client installers prompt for the installed location of this database client, which must be installed at the location you specified in order for users to be able to access the local or sample database.

Because Oracle Database XE is always installed for Siebel Tools or Siebel Mobile Web Client, the same Oracle Database Client requirement also applies if you plan to initialize a local database through Siebel Remote.

For the version of Oracle Database XE that is installed and used with Siebel Web Client and Siebel Tools, see the Certifications tab on My Oracle Support.

- **Disable antivirus software.** You might need to disable antivirus software while installing Oracle Database XE and the local database or sample database for Siebel Tools or Siebel Mobile Web Client.

About Installing the Local Database or Sample Database

You can install the local database in a new or migration installation of Siebel Tools or install the sample database in a new or migration installation of Siebel Mobile Web Client. For existing installations of the current release, the installers also provide the option of installing the local database or the sample database, if you had not previously installed it.

When you specify to install the local or sample database, the installation is done silently: no separate screens are displayed for this purpose. If Oracle Database XE is already installed, then it is not installed again, but the local database or sample database is still installed.

You can optionally install Siebel Tools and the local database or install Siebel Web Client and the sample database in unattended mode, as described in [“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#).

Installing the local database for Siebel Tools requires you to provide an appropriate user name and password when the installer prompts for them. For unattended installation, include the user name in the response file and specify the password at the command line when you execute the response file.

CAUTION: If Oracle Database XE was previously installed for any non-Siebel use, then you must uninstall it before proceeding. Otherwise, the existing Oracle Database XE installation would be used and the local or sample database files would be created under that existing installation (overwriting any existing database).

Only one instance of Oracle Database XE and one database are valid on a single computer. Installing a new database overwrites an existing database. For example, on the Siebel Mobile Web Client, if the local database or the sample database is already present, then this database's DBF files are overwritten if you add the other database. However, you can support multiple instances of Oracle Database XE databases by using the OracleXEConfig.bat utility.

NOTE: You can use the `OracleXEConfig.bat` utility to create, manage, and switch between different installed instances of Oracle Database XE databases on the same computer, such as the local database and the sample database. The `SIEBEL_TOOLS_ROOT\bin` directory contains the files `OracleXEConfig.bat` and `XEConfig.jar`. To run `OracleXEConfig.bat` on a Siebel Mobile Web Client installation, you can also copy these files to the `SIEBEL_CLIENT_ROOT\bin` directory.

If you did not install the local database when you installed Siebel Tools or install the sample database when you installed Siebel Web Client for the current release, then you can add it to the existing installation later. To do this, start the Siebel Tools or Siebel Web Client installer as if for a new installation, and then provide the existing Oracle home information.

After you install the Siebel Web Client or Siebel Tools, verify the installation, as described in [“Verifying Installation for the Siebel Web Client” on page 225](#) or [“Verifying Installation for Siebel Tools” on page 227](#). Also verify the Oracle Database XE installation, as described in [“Verifying Installation for Oracle Database XE” on page 231](#).

About Data Sources for the Local Database or Sample Database

The Siebel Tools and Siebel Web Client installers also create data sources as follows, if they did not already exist:

- When you install Siebel Tools, the `LOCAL_XE` data source is created in all cases (whether or not you install the local database). You use this data source for connections to the local database that you installed, or to connect to a local database that you initialize through Siebel Remote. The corresponding section of the `tools.cfg` file is `[LOCAL_XE]`.

If the local database has been extracted for the user on the Siebel Remote server, then you initialize this database by logging in using `LOCAL_XE`, as described in *Configuring Siebel Business Applications* and *Using Siebel Tools*.

- When you install Siebel Mobile Web Client without installing the sample database, the `LOCAL_XE` data source is created, which you use for connections to a local database. The corresponding section of the Siebel application configuration file is `[LOCAL_XE]`.

If the local database has been extracted for the user on the Siebel Remote server, then you initialize this database by logging in using `LOCAL_XE`, as described in *Siebel Remote and Replication Manager Administration Guide*.

- When you install Siebel Mobile Web Client with the sample database, the `SAMPLE_XE` data source is created, which you use for connections to the sample database. The corresponding section of the Siebel application configuration file is `[SAMPLE_XE]`.

About Migration Installations

Before any migration installation tasks are performed, local database users must synchronize any changes that must be preserved.

In a migration installation where Oracle Database XE and the local or sample database were previously installed, this instance of Oracle Database XE software migrates to the new installation. No database from the prior release is migrated. A new database and data source is created under the new instance according to the installer selections the user made, as in a new installation.

About the Local Database for Siebel Tools

As noted, you use the procedure in [“Installing Siebel Tools” on page 184](#) to install the local database for Siebel Tools in a new or migration installation. The user connects to the LOCAL_XE data source to log into this local database. The data in each local database is a subset of the server database, as determined by each user’s visibility rules.

Additional steps are necessary to prepare the local database for use by the Siebel Tools developer. After installing Oracle Database XE and the local database for Siebel Tools, you must set up this database based on your company’s database customizations and based on the particular developer who will use this local database. For example, to prepare the local database for use by the developer user, you can run the local database setup script. For more information about this task, see *Configuring Siebel Business Applications*.

Alternatively, you might choose to initialize the local database through Siebel Remote, see *Configuring Siebel Business Applications* and *Using Siebel Tools*. In this case, do not install the local database with Siebel Tools. The user connects to the LOCAL_XE data source to initialize the local database. When logging in to a local database for the first time, the user is automatically prompted to connect to the Siebel Server and download the local database. Users must attempt this only after a local database has been extracted for them by the system administrator.

About the Local Database for Siebel Mobile Web Client

For information about initializing the local database for Siebel Mobile Web Client through Siebel Remote, see *Siebel Remote and Replication Manager Administration Guide*. In this case, do not install the sample database with Siebel Mobile Web Client. The data in each local database is a subset of the server database, as determined by each user’s visibility rules.

NOTE: The user connects to the LOCAL_XE data source to initialize the local database. When logging in to a local database for the first time, the user is automatically prompted to connect to the Siebel Server and download the local database. Users must attempt this only after a local database has been extracted for them by the system administrator.

About the Sample Database for Siebel Mobile Web Client

As noted, you use the procedure in [“Installing the Siebel Web Client” on page 177](#) to install the sample database for Siebel Mobile Web Client in a new or migration installation. Connect to the SAMPLE_XE data source to log into this sample database.

The sample database contains example data of various kinds to help you understand how Siebel Business Applications work. The sample database contains schema changes, repository changes, and seed data for Siebel CRM functionality through the current release. For more information about some of the content in the sample database, see *Siebel Demo Users Reference*.

After you have installed the sample database, you can run Siebel demo applications, such as those described in [“Siebel Web Client Shortcuts and Startup Options” on page 207](#). You can also customize shortcuts, as described in the same topic.

About Uninstalling Oracle Database XE

Oracle Database XE and the local database or sample database are not uninstalled when you uninstall the Siebel Web Client or Siebel Tools software, in either a full uninstallation or a rollback uninstallation. For information about uninstalling Oracle Database XE, see [“Uninstalling Oracle Database XE” on page 294](#).

NOTE: In a migration installation case, you might choose to uninstall an existing installation of the Siebel Sample Database that uses SAP SQL Anywhere, because this database is not relevant to your migration. For information about uninstalling earlier versions of Siebel CRM software, see [“About Uninstalling Earlier Versions of Siebel Business Applications” on page 295](#).

About the Workspaces Feature

Workspaces are a feature of Siebel Tools that provides an alternative to using local databases for developers to make and test changes to repository data. All Siebel Tools developers in a given Siebel development environment must either use a local database or use workspaces.

Related Topics

[“Installing the Siebel Web Client” on page 177](#)

[“Installing Siebel Tools” on page 184](#)

[“Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 195](#)

[“About the Workspaces Feature in Siebel Tools” on page 200](#)

[“Siebel Web Client Shortcuts and Startup Options” on page 207](#)

[“Verifying Installation for Oracle Database XE” on page 231](#)

[“Uninstalling Oracle Database XE” on page 294](#)

[“About Siebel CRM Releases” on page 300](#)

[“About the Siebel Network Image” on page 383](#)

Related Books

Siebel Remote and Replication Manager Administration Guide

Siebel Demo Users Reference

Configuring Siebel Business Applications

Using Siebel Tools

Installing Siebel Web Clients and Siebel Tools in Unattended Mode

The installer programs for Siebel Mobile or Developer Web Client and Siebel Tools support an optional *unattended installation*, which is an installation that has been preconfigured to require no user input when the installation program runs. You can save a response file in a regular installer session. Then you can run the installer at the command line with certain flags appended to the installer command to execute the response file. Together, these tasks constitute installing in unattended mode.

You can perform unattended installations for better performance when installing software on multiple client computers. Or, you might perform unattended installations if user input during an installation is not allowed in your environment, as might be the case in some secure environments. An unattended installation prepackages all of the required parameters so that you only have to execute a command to perform the installation.

You can use unattended mode to perform a new installation or migration installation of the current release, or to add languages to an existing installation of the current release. To add languages, you must use this method.

CAUTION: Unattended installations provide no direct feedback or error notification. Therefore, you must test your settings in a development environment before system-wide deployment in a production environment. It is strongly recommended that you become thoroughly familiar with GUI installation for any Siebel modules for which you intend to perform unattended installation.

This topic contains the following information:

- [“Guidelines for Installing Siebel Web Clients and Siebel Tools in Unattended Mode” on page 196](#)
- [“Saving an Installation Response File” on page 197](#)
- [“Editing an Oracle-Provided Installation Response File” on page 198](#)
- [“Installation Response File Entries for Installing Oracle Database XE” on page 198](#)
- [“Performing an Installation in Unattended Mode” on page 199](#)

Related Topics

[“Installing and Deploying Additional Languages” on page 158](#)

[“Installing the Siebel Web Client” on page 177](#)

[“Installing Siebel Tools” on page 184](#)

[“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)

[“Verifying Installation for the Siebel Web Client” on page 225](#)

[“Verifying Installation for Siebel Tools” on page 227](#)

[“Requirements for Installing Siebel Web Clients” on page 352](#)

[“Requirements for Installing Siebel Tools” on page 355](#)

Guidelines for Installing Siebel Web Clients and Siebel Tools in Unattended Mode

Review the following guidelines for installing Siebel Web Clients and Siebel Tools in unattended mode:

- **Keep track of the response file results.** Because the unattended installation session is controlled by the response file, you must keep careful track of the result that each response file will yield when you perform an unattended installation.

- **Create the response file on a computer similar to the target computer.** When you run the installer as described in [“Saving an Installation Response File” on page 197](#), validations are performed as if you were performing a real installation.

It is strongly recommended that you run the installer on a computer that has similar resources and configuration settings as the target computer on which the installation will be performed, as described in [“Performing an Installation in Unattended Mode” on page 199](#). Unattended installations must meet all of the documented requirements, including those described in [“Requirements for Installing Siebel Web Clients” on page 352](#) and [“Requirements for Installing Siebel Tools” on page 355](#).

- **Validate the installation.** Validate each installation after it has completed, as described in [“Verifying Installation for the Siebel Web Client” on page 225](#) and [“Verifying Installation for Siebel Tools” on page 227](#).

To install Siebel Web Client or Siebel Tools and the specified Siebel language packs using unattended mode, perform the following tasks:

- [“Saving an Installation Response File” on page 197](#)
- [“Editing an Oracle-Provided Installation Response File” on page 198](#)
- [“Performing an Installation in Unattended Mode” on page 199](#)

Saving an Installation Response File

Perform the following steps to save an installation response file to be used in an unattended installation of Siebel Web Client or Siebel Tools.

NOTE: If you are adding languages to an existing installation of the current release, then do not use this procedure. Instead, follow the procedure in [“Editing an Oracle-Provided Installation Response File” on page 198](#).

To save an installation response file

- 1 Navigate to the Siebel image location where the installer is located.
- 2 Start the installer for Siebel Web Client or Siebel Tools.
For information about starting these installers, see [“Installing the Siebel Web Client” on page 177](#) and [“Installing Siebel Tools” on page 184](#).
- 3 Provide input to the installer wizard, as in a normal GUI installation.
- 4 In the Summary screen, click Save Response File.
- 5 Specify the location of the response file, for example, C: \temp\cl i enti nstal l . rsp, and save the file.

A response file is generated that includes data that is derived from the input that you made during the installer session.

- 6 After the response file is saved, click Cancel.

The installer session ends.

In addition to saving the response file at the location that you specified at the command line, the installer creates the Siebel installation directory at the location that you specified in the installer session (for example, C:\temp\cli\entinstall\). Although the Siebel module is not installed (because you clicked Cancel), this directory contains a subdirectory called `inventory`, which includes information about the product inventory.

NOTE: You might also edit the response file to add entries for different cases of installing Oracle Database XE for the local or sample database for Siebel Tools or Siebel Web Client, as described in [“Installation Response File Entries for Installing Oracle Database XE”](#) on page 198.

See [“Performing an Installation in Unattended Mode”](#) on page 199 for information about performing a Siebel Web Client or Siebel Tools installation in unattended mode, using the response file that you just generated.

Editing an Oracle-Provided Installation Response File

If you are adding languages to an existing Siebel Web Client or Siebel Tools installation, then you must edit an Oracle-provided installation response file instead of saving a response file from the installer. For detailed information about the task of adding languages, see [“Installing and Deploying Additional Languages”](#) on page 158.

Installation Response File Entries for Installing Oracle Database XE

You use different response file options for different cases of installing Oracle Database XE for the local or sample database for Siebel Tools or Siebel Web Client, as described here. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database”](#) on page 191.

- To install Siebel Tools with a local database, add entries like the following to your installation response file. Specify the same user name that you will use when you execute the response file (you must also use the `-passwd` option).

```
INSTALL_LOCAL_OR_SAMPLE_DB="true"  
LOCAL_DB_USERNAME="username"  
ORACLE_CLI_ENT_PATH="Oracle_DB_install_path"
```

- To install Siebel Tools without installing a local database (for example, where you plan to initialize a local database through Siebel Remote), add entries like the following to your installation response file:

```
INSTALL_LOCAL_OR_SAMPLE_DB="false"  
LOCAL_DB_USERNAME=""  
ORACLE_CLI_ENT_PATH="Oracle_DB_install_path"
```

- To install Siebel Web Client where you plan to initialize a local database through Siebel Remote, add entries like the following to your installation response file:

```
INSTALL_LOCAL_OR_SAMPLE_DB="false"  
ORACLE_CLI_ENT_PATH="Oracle_DB_install_path"
```

- To install Siebel Web Client with the sample database, add entries like the following to your installation response file:

```
INSTALL_LOCAL_OR_SAMPLE_DB="true"  
ORACLE_CLIENT_PATH="Oracle_DB_install_path"
```

Performing an Installation in Unattended Mode

Perform the following steps to perform an unattended installation of Siebel Web Client or Siebel Tools.

First, you must save an installation response file as described in [“Saving an Installation Response File” on page 197](#) or prepare an installation response file for adding languages as described in [“Editing an Oracle-Provided Installation Response File” on page 198](#).

NOTE: You might also edit the response file to add entries for different cases of installing Oracle Database XE for the local or sample database for Siebel Tools or Siebel Web Client, as described in [“Installation Response File Entries for Installing Oracle Database XE” on page 198](#).

Then you run the installer command as shown in the following procedure. For detailed information about the task of adding languages, see [“Installing and Deploying Additional Languages” on page 158](#).

To perform an installation in unattended mode

- 1 (For add language operations only) Uninstall any Siebel Patchset release that you have installed on top of Siebel CRM version 16.0, for each installed Siebel module for which you are adding languages.
- 2 Navigate to the Siebel image location where the installer is located.
- 3 Place the response file that you previously generated or edited into the correct Siebel image directory for the Siebel module (where the installer program is located), so that the file can be read when you run the installer.

NOTE: Always back up any existing valid response file before replacing it with a new file.

- 4 Open a DOS command window.
- 5 Run a command like the following to run the Siebel Web Client or Siebel Tools installer in unattended mode:

```
setup.bat -silent -responseFile path_to_installation_response_file -passwd  
password
```

where:

path_to_installation_response_file is the full path and name of a response file to be executed (for example, C:\temp\clientinstall.rsp).

password is the password for the user name of the developer for this existing installation of Siebel Tools.

NOTE: The `-passwd` option applies only to Siebel Tools installation with Oracle Database XE. See also [“Installation Response File Entries for Installing Oracle Database XE” on page 198](#).

This command runs the installer in unattended mode and specifies the location of the response file to be executed. No installer screens are displayed, and no further user input is prompted for after the installer starts. The installation result depends on the content of the specified response file.

- 6 Validate the installation after it has completed.

For more information, see [“Verifying Installation for the Siebel Web Client” on page 225](#) and [“Verifying Installation for Siebel Tools” on page 227](#). See also [“Verifying Installation for Oracle Database XE” on page 231](#).

- 7 (For add language operations only) Reinstall any previously installed Siebel Patchset release that you uninstalled in [Step 1 on page 199](#). Then validate the installation again.

About the Workspaces Feature in Siebel Tools

As of Siebel Innovation Pack 2016, Siebel Tools supports a new feature called workspaces, which provides a new way to manage the configuration of repository artifacts in Siebel Tools. This feature allows multiple developers to work against the same repository objects in the Siebel database.

A workspace in Siebel Tools provides a user with a sandbox in which to make changes to repository data. The feature makes sure that a developer's work is isolated from that of other developers making changes to either the same objects or other objects of the application. Repository updates made in the developer's environment can be compiled and tested without affecting other developers, until all updates are coordinated and final SRF files are compiled and distributed to all Siebel Servers and Siebel Mobile Web Clients in test and production environments. For more information about using the workspaces feature in Siebel Tools, see *Using Siebel Tools*.

NOTE: Workspaces are an alternative to using local databases to make changes to repository data. All Siebel Tools developers in a given Siebel development environment must either use a local database or use workspaces.

Workspaces is also a feature of Siebel Composer, which is a browser-based alternative to the traditional Siebel Tools client. When Siebel Composer is used, SRF files are not generated or used in the Siebel environment. Siebel Composer is provided as a developer preview in Innovation Pack 2016. For more information, see *Siebel CRM Composer Developer Preview Guide*.

Related Topics

[“Installing Siebel Tools” on page 184](#)

[“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)

Related Books

Using Siebel Tools

Siebel CRM Composer Developer Preview Guide

Installing Desktop Integration Siebel Agent on Client Computers

This topic provides information about installing software on user computers that enables users to use certain features in Siebel Business Applications that formerly were based on Java applets. This software is called Desktop Integration Siebel Agent, which is sometimes called DISA.

Many major browsers no longer support Netscape Plugin Application Programming Interface (NPAPI). Consequently, as of Siebel Innovation Pack 2016, Siebel Business Applications no longer provide special-purpose Java applets to extend application functionality in the browser. As of Siebel Innovation Pack 2016, Desktop Integration Siebel Agent is provided to support similar functionality.

Customers can install and deploy Desktop Integration Siebel Agent on user computers for use with employee applications such as Siebel Call Center. In the current release, Desktop Integration Siebel Agent supports inline editing of attachments, CTI hoteling, Send Email (F9) integration with Microsoft Outlook, and batch fulfillment printing.

For more information about installing and deploying Desktop Integration Siebel Agent, see 2107511.1 (Article ID) on My Oracle Support. For information about hoteling, see *Siebel CTI Administration Guide*.

For more information about using Desktop Integration Siebel Agent for the Send Email (F9) integration with Microsoft Outlook, see 2117013.1 (Article ID) on My Oracle Support.

NOTE: Future Siebel Patchset releases for Siebel Innovation Pack 2016 might include an updated version of Desktop Integration Siebel Agent, which might support additional features. If a new version is distributed in a patchset release, then the new version will be described in the *Siebel Patchset Installation Guide* for Siebel CRM, 1614310.1 (Article ID) on My Oracle Support.

Related Books

Siebel CTI Administration Guide

2117011.1 (Article ID) on My Oracle Support (about DISA)

2117013.1 (Article ID) on My Oracle Support (about Send Email integration with DISA)

Siebel Patchset Installation Guide for Siebel CRM, 1614310.1 (Article ID) on My Oracle Support

Installing Outlook to Siebel Drag and Drop on Client Computers

This topic provides information about installing an addin for Microsoft Outlook on user computers that enables users to drag and drop email messages or email attachments into Siebel Business Applications.

As of Siebel Innovation Pack 2016, customers can install the addin Outlook to Siebel Drag and Drop on user computers for use with employee applications. Installing this software enables a user to drag one or more email messages or email attachments from a Microsoft Outlook client and drop it onto a Siebel attachment applet. Each item is saved in an attachment record in the Siebel File System. You can then open this attachment like any other similar type of attachment that you have added to Siebel Business Applications. Outlook to Siebel Drag and Drop is sometimes abbreviated as SODD.

For more information about installing and deploying Outlook to Siebel Drag and Drop, see 2117212.1 (Article ID) on My Oracle Support.

NOTE: Future Siebel Patchset releases for Siebel Innovation Pack 2016 might include an updated version of the Outlook to Siebel Drag and Drop addin. If a new version of the addin is distributed in a patchset release, then the new version will be described in the *Siebel Patchset Installation Guide for Siebel CRM, 1614310.1* (Article ID) on My Oracle Support.

Use Cases for Outlook to Siebel Drag and Drop

Outlook to Siebel Drag and Drop supports the following use cases:

- Drag one email message from the Microsoft Outlook client and drop it into the Siebel CRM application. The email message is saved in a single attachment record. Or drag multiple email messages, which are saved in multiple attachment records.
- Drag one email attachment from the Microsoft Outlook client and drop it into the Siebel CRM application. The email attachment is saved in a single attachment record. Or drag multiple email attachments, which are saved in multiple attachment records.

Installing Outlook to Siebel Drag and Drop

Use the following procedure to install the Outlook to Siebel Drag and Drop addin on a client computer on which the Microsoft Outlook client is installed and on which the user runs Siebel Business Applications.

To install the Outlook to Siebel Drag and Drop addin

- 1 From the Siebel Innovation Pack 2016 media on Oracle Software Delivery Cloud, download \siebel_sodd_209\Siebel_SODD_2.0.9.zip.
- 2 Unzip Siebel_SODD_2.0.9.zip to extract the installer program, Outlook Add-in for Siebel.exe.
- 3 On the client computer, double-click the installer file, Outlook Add-in for Siebel.exe, to start the Outlook to Siebel Drag and Drop installer program.
- 4 After the installation completes, restart the Microsoft Outlook client.
- 5 Verify that Outlook to Siebel Drag and Drop installed correctly. To do this, check the list of installed Outlook add-ins in the Microsoft Outlook client.

Installing Outlook to Siebel Drag and Drop in Silent Mode

Use a command like one of the following examples to run the Outlook to Siebel Drag and Drop installer in silent mode. The first example shows an installation path with spaces, while the second example shows an installation path without spaces. To run this installer in silent mode, you must do so as an Administrator user.

```
"Outlook Add-in for Siebel.exe" /s /v"/qn INSTALLDIR="C:\Program Files  
(x86)\Outlook Add-in for Siebel\""
```

```
"Outlook Add-in for Siebel.exe" /s /v"/qn INSTALLDIR=C:\SODD"
```

After installation, restart the Microsoft Outlook client.

Related Books

Siebel Fundamentals

2117212.1 (Article ID) on My Oracle Support (about Outlook to Siebel Drag and Drop)

Siebel Patchset Installation Guide for Siebel CRM, 1614310.1 (Article ID) on My Oracle Support

Siebel Client Deployment Requirements When Using Firewalls or Proxy Servers

This topic describes Siebel client deployment requirements that apply when you use firewalls or proxy servers, such as reverse proxy servers. This topic applies to all Siebel applications that are deployed inside the firewall or using a proxy server.

Deploying Siebel Business Applications Accessed Through a Firewall

When deploying Siebel Business Applications that are accessed through a firewall, if you are planning to enable compression for traffic between the Web server and the Web browser, then your firewall must support the HTTP 1.1 protocol.

If your firewall does not support HTTP 1.1, then set the DoCompression parameter to False in the eapps.cfg file on the Siebel Web Server Extension (SWSE). In addition, disable HTTP 1.1 for proxy connections on each client computer.

Follow instructions for your browser for this purpose. For example, for Microsoft Internet Explorer, you uncheck the option Use HTTP 1.1 Through Proxy Connections.

NOTE: For more information about deploying Siebel Business Applications with firewalls, and about settings for the DoCompression parameter, see ["Enabling HTTP Compression for Siebel Business Applications" on page 169](#). See also *Siebel Security Guide* and the description of the DoCompression parameter in *Siebel System Administration Guide*.

Bypassing the Proxy Server for Local Addresses

If your LAN uses a proxy server, then adjust your browser settings to bypass the proxy server for local (internal) addresses. This setting provides better performance for Siebel employee applications deployed on the LAN, and is required for the Siebel Mobile Web Client.

Follow instructions for your browser for this purpose. For example, for Microsoft Internet Explorer, you check the options Use a Proxy Server for Your LAN and Bypass Proxy Server for Local Addresses. For Siebel Web Clients, you also specify the proxy server address and port number.

NOTE: For customer applications, this setting does not apply. The proxy server setting applies only on a LAN.

Configuring Siebel Business Applications for Pop-Up Blocker Compatibility

Pop-up blocking software can sometimes cause Siebel Business Applications not to work, because such software might block required Siebel application functionality. Such blocking software typically blocks processes or pop-up windows that originate from particular computer host names or domain names. This topic applies to all Siebel Business Applications.

Siebel Business Applications that you run on a LAN (Siebel Web Client) or that run on local client computers (Siebel Mobile Web Client) might be affected by pop-up blockers. Configuring the Siebel application to use a fully qualified domain name (FQDN), as described in this topic, might prevent such problems and allow you to use pop-up blockers safely. See also the descriptions of the EnableFQDN and FQDN parameters in *Siebel System Administration Guide*.

For example, the URL `http://ebiz.example.com` uses FQDN, while `http://ebiz` does not.

NOTE: If you have configured FQDN for your Siebel Business Applications, and if conflicts with pop-up blockers persist, then it might be necessary to uninstall the pop-up blocking software or any applications in which such functionality is built in.

Parameters to configure fully qualified domain names are located in multiple places. How you set these parameters depends on the Siebel client that you are using. Specified host names or domain names must meet all of the applicable requirements, for example, underscores cannot be used.

- **Siebel Web Client.** To use FQDN for this client type, configure the following parameters in the `eapps.cfg` file on each SWSE that is applicable to Siebel Web Client deployments.

```
[default t]
EnableFQDN = True
FQDN = hostname.primaryDNS.domainsuffix
```

where:

- *hostname*, an optional element, is the name of the Web server computer
- *primaryDNS* is the primary part of the domain name (such as `example`)
- *domainsuffix* is the domain type (such as `com`)
- *EnableFQDN* is set to `False` by default for the SWSE.

For example, you might set FQDN to `corp.example.com` or `server1.corp.example.com`.

- **Siebel Mobile Web Client.** To use FQDN for this client type, configure the following parameters in the Siebel application configuration file, such as `uagent.cfg` for Siebel Call Center, on each local client computer.

```
[Siebel ]
EnableFQDN = True
```

EnableFQDN is set to True by default for the Siebel Mobile Web Client.

If you do not also specify the FQDN parameter, then the URL is constructed automatically. For example, the FQDN for CCHENG might be constructed as `ccheng.corp.example.com`. Optionally, you can explicitly provide similar information, by using the FQDN parameter, as follows:

```
FQDN = hostname.primaryDNS.domainsuffix
```

where:

- *hostname* is the name of the local client computer
- *primaryDNS* is the primary part of the domain name (such as `example`)
- *domainsuffix* is the domain type (such as `com`)

For example, you might set FQDN to `ccheng.corp.example.com`.

CAUTION: When you explicitly configure an FQDN for use with the Siebel Mobile Web Client, you must specify the local computer name. The localhost string from the default Siebel Mobile Web Client URL (which is used when EnableFQDN is False) cannot be used as an element in an FQDN. The localhost string is only functional when used by itself, with no additional qualifying elements.

Logging in to Your Siebel Application

This topic provides basic instructions for logging in to your Siebel application using one of the Siebel Web Client types. It contains the following information:

- [“Before Logging in to Your Siebel Application” on page 205](#)
- [“Logging in Using the Siebel Developer Web Client” on page 206](#)
- [“Logging in Using the Siebel Mobile Web Client” on page 207](#)
- [“Logging in Using the Siebel Web Client” on page 207](#)

Before Logging in to Your Siebel Application

This topic contains information that you must know before you log in to your Siebel application.

This topic is part of [“Logging in to Your Siebel Application” on page 205](#).

Review the following issues:

- User rights to read and write in Siebel Web Client installation directories are required for running the Siebel Mobile Web Client or Developer Web Client. For information about setting user rights, consult the operating system manuals for the version of Microsoft Windows on which the application is installed.
- After the Siebel database has been installed, as described in [Chapter 5, “Installing the Siebel Database on the RDBMS,”](#) and the server modules have been configured and you activate the license keys, users can access the Siebel CRM applications.

For information about activating the license keys in the Siebel database, see [“Activating License Keys” on page 124.](#)

- The user name and password used to log in to Siebel Business Applications must be those of an employee with a valid position and division defined in the Siebel database.

You must log in to Siebel Business Applications (using the Server database option in the login screen) as the Siebel administrator before anyone else can log in. Log in using the SADMIN user name or using other credentials as defined by your database administrator. Then you or other administrators can set up more users as employees with defined positions and responsibilities and other settings suitable for your access control policies. For more information about setting up employees, see *Siebel Security Guide*.

- For the Siebel Developer Web Client, you must edit the application configuration file, such as uagent.cfg for Siebel Call Center, as follows:
 - In the [Siebel] section of the file, add the parameter ServerDbODBCDataSource, and set it to the ODBC data source that you are using for the server database.
 - In the [ServerDataSrc] section of the file, set the parameter ConnectString to the necessary value. For Oracle Database, set it to the alias defined in the tnsnames.ora file.
- Tabbed browsing is supported with Siebel applications for one active session. Multiple Web pages can be opened using tabbed browsing, but only one tab can have a live connection to a Siebel application at a given time.

Logging in Using the Siebel Developer Web Client

You can use the Siebel Developer Web Client to log in to the Siebel application.

This topic is part of [“Logging in to Your Siebel Application” on page 205.](#)

To log in to your Siebel application using the Siebel Developer Web Client

- 1 Double-click one of the Siebel shortcuts in the program folder, such as Siebel Call Center for the language you are using.
- 2 Log in using a valid user ID and password.
- 3 Specify the Server database, and click OK.

Logging in Using the Siebel Mobile Web Client

You can use the Siebel Mobile Web Client to log in to the Siebel application.

This topic is part of [“Logging in to Your Siebel Application”](#) on page 205.

To log in to your Siebel application using the Siebel Mobile Web Client

- 1 Double-click one of the Siebel shortcuts in the program folder, such as Siebel Call Center for the language you are using.
- 2 Log in using a valid user ID and password.
- 3 Specify the Local database, and click OK.

NOTE: When logging in to a local database for the first time, users are automatically prompted to connect to the Siebel Server and download the local database. Users must attempt this only after a local database has been extracted for them by the system administrator. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database”](#) on page 191.

For more information about Siebel Remote and extracting local databases, see *Siebel Remote and Replication Manager Administration Guide*.

Logging in Using the Siebel Web Client

You can use the Siebel Web Client to log in to the Siebel application. (In this context, *Siebel Web Client* refers to the client type that is not installed locally, except for the browser itself.)

This topic is part of [“Logging in to Your Siebel Application”](#) on page 205.

To log in to your Siebel application using the Siebel Web Client

- 1 Open your Web browser.
- 2 Go to the URL for your Siebel application.
- 3 Log in using a valid user ID and password.

The Siebel application that you are connecting to is already configured to work with a specific database. When using this client type, you do not specify a database to connect to.

Siebel Web Client Shortcuts and Startup Options

This topic provides information about the shortcuts installed in the Siebel program folder when you install the Siebel Web Client, and about command-line options used in these shortcuts. Some of these shortcuts are only if you install the sample database.

This topic also provides information about creating custom shortcuts to access Siebel Business Applications using demo users other than those specified in the predefined shortcuts installed with the sample database. For the demo users provided with the sample database, by Siebel application, see *Siebel Demo Users Reference*.

This topic contains the following information:

- [“Siebel Web Client Shortcuts” on page 208](#)
- [“Siebel Web Client Startup Options” on page 209](#)
- [“Creating Custom Siebel Application Shortcuts” on page 211](#)

Siebel Web Client Shortcuts

The Siebel Web Client installer creates shortcuts in the Siebel program folder for the modules that you have installed. For Siebel Business Applications, separate shortcuts are installed for each installed language. Which shortcuts are installed depends on your installation choices and is also subject to the settings in the `siebel.ini` file at the time of installation. Most of the shortcuts are installed in the program group (program folder); some are installed in the startup group.

For information about customizing the shortcuts or creating new ones, see [“Siebel Web Client Startup Options” on page 209](#) and [“Creating Custom Siebel Application Shortcuts” on page 211](#).

Siebel application shortcuts are created by the Siebel Web Client installer. When you run a shortcut to start a Siebel application, you can connect to the Siebel database (for LAN-connected users of the Siebel Developer Web Client) or to an initialized local database on the local computer (for Mobile Web Client). Each application shortcut loads the Siebel configuration file for that application; for example, Siebel Call Center uses the file `uagent.cfg`.

Where the sample database has been installed on the local computer, the demo application shortcuts connect to the sample database, using predefined demonstration users.

This topic is part of [“Siebel Web Client Shortcuts and Startup Options” on page 207](#).

Siebel Application Shortcuts

Several Siebel application shortcuts are created in the Siebel Web Client program folder for Siebel Business Applications. All demo applications use the sample database. You can create shortcuts for any valid Siebel application for which no shortcut is created by the installer.

Demo Application Shortcuts

The sample database, which can be accessed by using one of the demo (demonstration) application shortcuts, contains many predefined demo users. For example, CCHENG is the demo user for the Siebel Call Center Demo shortcut. Many other demo users are available in the sample database that are not represented in the existing demo application shortcuts. Each demo user is intended to illustrate a particular Siebel application as it would appear for a user with certain predefined responsibilities.

Related Books

Siebel Demo Users Reference

Siebel Security Guide

Utility and Synchronization Program Shortcuts

The following are some of the additional shortcuts created in the Siebel Web Client program folder for Siebel Business Applications. These shortcuts run utilities or synchronization programs.

- **Siebel Remote.** Starts the Siebel Remote stand-alone synchronization program (siebsync.exe).
- **Siebel TrickleSync.** Starts the Siebel TrickleSync program (autosync.exe). This shortcut is created in both the program group and the startup group.

Additional shortcuts are created for the synchronization program for specific Siebel Handheld applications.

Related Books

Siebel Remote and Replication Manager Administration Guide

Siebel Web Client Startup Options

The application shortcuts described in [“Siebel Web Client Shortcuts” on page 208](#) run an executable program called siebel.exe, followed by various startup options. For example, the shortcut for Siebel Call Center - ENU might be defined as shown in the following example (depending on your installation location). For this example, the only option used is /c, to specify the configuration file.

```
"C:\siebel\release_number\client\BIN\siebel.exe" /c CFG_FILE_PATH\ugent.cfg
```

The demo application shortcuts also specify the sample database and user and password information. For this example for Siebel CRM version 16.0, the shortcut for Siebel Call Center Demo - ENU might be defined as shown in the following:

```
"C:\siebel\16.0.0.0\client\BIN\siebel.exe" /c CFG_FILE_PATH\ugent.cfg /d sample /u CCHENG /p CCHENG
```

In the preceding examples, *CFG_FILE_PATH* represents the full path to the configuration file. This file is located in *BIN\LANGUAGE* in the *SIEBEL_CLIENT_ROOT* directory. In this path, *LANGUAGE* is a language code, such as ENU for U.S. English.

For example, the target definition for the Siebel Call Center - ENU shortcut might resemble the following example for Siebel CRM version 16.0:

```
"C:\siebel\16.0.0.0\client\BIN\siebel.exe" /c  
"C:\siebel\16.0.0.0\client\bin\ENU\ugent.cfg"
```

The siebel.exe program can also be run from an MS-DOS window. In this case, the startup options would be entered directly on the command line. For information about creating custom shortcuts, see [“Creating Custom Siebel Application Shortcuts” on page 211](#).

This topic is part of [“Siebel Web Client Shortcuts and Startup Options” on page 207](#).

The available startup options are described in [Table 16 on page 210](#).

Table 16. Siebel Web Client Startup Options

Startup Option	Description
<i>/c config_file</i>	Required. Specifies the path and file name for the configuration file to use, such as <i>siebel.cfg</i> for Siebel Sales or <i>uagent.cfg</i> for Siebel Call Center.
<i>/d data_source</i>	Specifies the data source to connect to, as defined in the configuration file. The demo application shortcuts specify <i>/d sample</i> to access the sample database: <ul style="list-style-type: none"> ■ If you do not use <i>/u</i> and <i>/p</i> to specify a valid Siebel user and do not use <i>/d</i> to specify a valid data source, then you can specify the data source from the login screen. ■ If you use <i>/u</i> and <i>/p</i> but do not use <i>/d</i>, then the local database is assumed.
<i>/l language</i>	Specifies the three-letter code for the language to use for this Siebel Web Client session, such as <i>ENU</i> for U.S. English. The applicable Siebel language pack must have been installed for the Siebel Web Client. <p>If you do not use <i>/l</i> to specify a valid language, then the language is obtained from the configuration file.</p>
<i>/u username</i>	Specifies the user name. The demo application shortcuts specify predefined demo users using <i>/u</i> and <i>/p</i> options. <p>If you do not use <i>/u</i> and <i>/p</i> to specify a valid Siebel user, then you must log in from a login screen.</p> <p>For lists of demo users provided with the sample database, by Siebel application, see <i>Siebel Demo Users Reference</i>.</p> <p>CAUTION: Consider the security issues when using <i>/u</i> and <i>/p</i> options (in particular <i>/p</i>) to access a live, production system. These values are not encrypted.</p>
<i>/p password</i>	Specifies the password for the user specified using <i>/u</i> .
<i>/b browser_exe</i>	Specifies the path and file name for the browser executable program to use for the Siebel Web Client session. <p>The <i>/b</i> option is used to override the default browser in Microsoft Windows.</p> <p>For more information about the supported browsers for Siebel Business Applications, see the Certifications tab on My Oracle Support.</p>
<i>/s spool_file</i>	Specifies spooling SQL to a specified output file. This option can be useful for troubleshooting purposes. For more information, see <i>Siebel Performance Tuning Guide</i> .

Creating Custom Siebel Application Shortcuts

If you want to customize Siebel Business Applications shortcuts described in [“Siebel Web Client Shortcuts” on page 208](#), then you can do so by modifying shortcut properties and changing the value for the Target field. Generally, rather than modifying existing shortcuts or creating them from scratch, it is recommended that you copy existing ones and rename and modify the copies.

Observe the following requirements for creating or modifying shortcuts:

- Do not modify the location displayed in the shortcut property labeled *Start in*.
- When defining the Target value for a shortcut, follow the guidelines for using the options described in [“Siebel Web Client Startup Options” on page 209](#).

This topic is part of [“Siebel Web Client Shortcuts and Startup Options” on page 207](#).

To create custom Siebel application shortcuts

- 1 Copy existing Siebel application shortcuts.
- 2 Modify the copies, for example, by changing the value for the Target field.

8

Verifying and Troubleshooting Your Installation

This chapter provides information about verifying and troubleshooting your installation of Siebel Business Applications. It includes the following topics:

- [Verifying Installation for the Siebel Enterprise Server on page 213](#)
- [Verifying Installation for the Siebel Database on page 220](#)
- [Verifying Installation for the Siebel Web Server Extension on page 222](#)
- [Verifying Installation for the Siebel Web Client on page 225](#)
- [Verifying Installation for Siebel Tools on page 227](#)
- [Verifying Installation for Oracle Database XE on page 231](#)
- [Verifying the ODBC Data Source on page 233](#)
- [Verifying Network Connectivity for the Siebel Server Computer on page 235](#)
- [Verifying Network Connectivity for Mobile Users on page 237](#)
- [Verifying That the Siebel Gateway Name Server Has Started on page 237](#)
- [Troubleshooting Installation and Configuration for Siebel Enterprise Server on page 237](#)
- [Troubleshooting Installation for the Siebel Database on page 242](#)
- [Troubleshooting Installation for the Siebel Web Server Extension on page 244](#)
- [Configuring the Siebel Mobile Web Client When Neither Siebel VB nor Siebel eScript Is Licensed on page 246](#)
- [About the Environment Verification Tool on page 247](#)
- [Using the Environment Verification Tool on page 250](#)

Verifying Installation for the Siebel Enterprise Server

After installing the Siebel Enterprise Server software as a new installation or as a migration installation, review the installation log files, verify the version number of your installed software, and review the Siebel Enterprise Server directories and files that now exist under the `$SIEBEL_ROOT` directory that you specified during the installation.

NOTE: Additional top-level directories are created, which are parallel to the directories for the Siebel Gateway Name Server, Siebel Server, and so on. These directories include `ccr` for Oracle Configuration Manager files, `config` for Siebel Configuration Wizard files, `cfgtoollogs` for installation log files, `opatch` for files related to the `opatch` utility, `oui` for files related to Oracle Universal Installer, and so on.

TIP: In addition to performing the steps described in this topic and related topics about verifying installation, perform any other tasks that might be necessary for verifying that your Siebel CRM software is functioning correctly. At the minimum, for example, after you install and configure all of the key components, including the Siebel Enterprise Server software, Siebel database, and Siebel Web Server Extension, and perform the basic verification steps for each component, start a suitable browser and log in (using valid credentials) to one of the Siebel Business Applications that your deployment supports. Access various screens and views in the application and make sure that the application functions properly and that the necessary seed data is present. Try this for all of the Siebel applications and languages that your deployment must support. Additional testing considerations are outside the scope of this document.

This topic contains the following information:

- [“Reviewing the Installation Log Files for Siebel Enterprise Server” on page 214](#)
- [“Verifying the Installation Version Number for Siebel Enterprise Server” on page 214](#)
- [“Reviewing the Installation Directories for Siebel Gateway Name Server” on page 215](#)
- [“Reviewing the Installation Directories for Siebel Server” on page 216](#)
- [“Reviewing the Installation Directories for Siebel Database Configuration Utilities” on page 219](#)

Related Topic

[“Installing Siebel Enterprise Server” on page 44](#)

Reviewing the Installation Log Files for Siebel Enterprise Server

After installing the Siebel Enterprise Server components, review the installation log files to verify that all of the components installed successfully, particularly if you experienced any difficulties with the installation. The log files are created in the following directory:

```
$SIEBEL_ROOT/cfgtool/logs/oui
```

The relevant log files for an installation session are named `installActionsdate_time.log` file. In the file name, `date_time` represents the date and time when the file was created; for example, `installActions2015-07-02_10-28-04PM.log`. For each set of files created, the oldest and largest log file generally represents the Siebel module being installed.

Verifying the Installation Version Number for Siebel Enterprise Server

After installing the Siebel Enterprise Server components, verify the version number of installed software.

To verify the installation version number for Siebel Enterprise Server

- 1 Open a shell window.

- 2 Set the value of the ORACLE_HOME environment variable to correspond to your top-level installation location, such as /siebel/16.0.0.0/ses for an installation of Siebel Enterprise Server software. For example, you might enter a command like this:

```
set ORACLE_HOME=/siebel/16.0.0.0/ses
```

- 3 Navigate to the opatch directory within your installation. For example, you might enter a command like this:

```
cd /siebel/16.0.0.0/ses/patch
```

- 4 Enter the following command:

```
opatch lsinventory -jre jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the -jre option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#).
- *inventory_location* is the full path of the oraInst.loc file (for example, /export/home/orainst.loc), which points to the OUI inventory location. Use the -invPtrLoc option if you want to specify an inventory pointer file other than the default.

The installed components within the specified Oracle home are displayed, with the version number as managed by Oracle Universal Installer. For example, the version number shown for your installed software might be 16.0.

Reviewing the Installation Directories for Siebel Gateway Name Server

After installing the Siebel Gateway Name Server, review the directory structure created by the installer.

The Siebel Gateway Name Server is installed in the \$SIEBEL_GATEWAY_ROOT directory within the Siebel root directory that you specified during the installation. The default installation location is /siebel/16.0.0.0/ses/gtwysrvr. Verify that the following Siebel Gateway Name Server directories and files now exist in the installation directory. In the list, *lang* represents each language that you have installed, such as ENU for U.S. English.

gtwysrvr. Top-level directory for Siebel Gateway Name Server.

admin. The template files used for scripts that control the running and configuration of the Siebel Gateway Name Server.

bin. Siebel Gateway Name Server start script, stop script, and executable programs.

cfgenv.csh. C shell variant of the Siebel script for setting environment variables on the server before you run one of the Siebel Configuration Wizards.

cfgenv.sh. Bourne or Korn shell variant of the Siebel script for setting environment variables on the server before you run one of the Siebel Configuration Wizards.

dbtempl. Dictionary and local database files required by Siebel Remote for regional users and mobile Web users.

input. Contains files related to Siebel Remote.

install_script. Contains files related to installation and configuration.

lib. Siebel Gateway Name Server program library files.

locale. Language-specific files and scripts. These are not configurable.

log. Siebel Gateway Name Server log files.

objects. Empty directory. When you install the Siebel Server into the same root directory, that installation procedure populates this directory with a *lang* subdirectory (such as *enu* for U.S. English) with a corresponding Siebel Repository file (*siebel_sia.srf*).

output. Contains files related to Siebel Remote.

siebenv.csh. C shell variant of the Siebel script for setting environment variables on the server after you configure the Siebel Enterprise Server.

siebenv.sh. Bourne or Korn shell variant of the Siebel script for setting environment variables on the server after you configure the Siebel Enterprise Server.

sqltempl. An empty directory, initially. When you install the Siebel Server into the same root directory, that installation procedure populates this directory with SQL files, containing SQL templates that can be used to create SQL statements that the Siebel Server uses to perform specific database operations.

sys. The backing files and service entry files used by the Siebel Gateway Name Server and server control utilities. Do not edit or modify these files, unless you are instructed to do so by Oracle Global Customer Support.

temp. Stores temporary files generated by the Siebel Gateway Name Server.

upgrade. Files and scripts related to version upgrades of Siebel Business Applications. Also holds temporary, backup, and state log files used during an upgrade.

upgrade.log. File that contains information logged during an upgrade.

Reviewing the Installation Directories for Siebel Server

After installing the Siebel Server, review the directory structure created by the installer.

The Siebel Server is installed in the `$SIEBSVR_ROOT` directory within the Siebel root directory that you specified during the installation. The default installation location is `/siebel/16.0.0.0/ses/siebsvr`. Verify that the following Siebel Server directories and files now exist in the installation directory. In the list, *lang* represents each language that you have installed, such as *ENU* for U.S. English.

NOTE: The `objects` directory contains the SRF file. Monitoring of any SRF files by virus scanning software might significantly degrade Siebel Server performance. If you have virus scanning software installed on your computers, then configure it to skip SRF files. Because these files are binary data files, the risk of virus infection is low, and so excluding these files from scanning is usually acceptable. Alternatively, you can scan SRF files less frequently than other files.

siebsrvr. Top-level directory for Siebel Server.

admin. The template files used for scripts that control the running and configuration of Siebel Server.

apache. Files used by embedded instances of Apache Tomcat, which supports Siebel REST services and other functionality. See also *Siebel REST API Guide*.

bin. Binary file directory, containing executable programs, scripts, and language subdirectories related to language-specific server components. Also contains files used by Oracle Global Customer Support for installation workarounds.

cfgenv.csh. C shell variant of the Siebel script for setting environment variables on the server before you run one of the Siebel Configuration Wizards.

cfgenv.sh. Bourne or Korn shell variant of the Siebel script for setting environment variables on the server before you run one of the Siebel Configuration Wizards.

classes.

dbenv.csh. C shell variant of the Siebel script for setting environment variables on the server before you run the Siebel Database Configuration Wizard. You create this file by using the script `CreateDbSrvrEnvScript` before you first run the wizard. For more information, see [“Installing the Siebel Database” on page 118](#).

dbenv.sh. Bourne or Korn shell variant of the Siebel script for setting environment variables on the server before you run the Siebel Database Configuration Wizard. You create this file by using the script `CreateDbSrvrEnvScript` before you first run the wizard. For more information, see [“Installing the Siebel Database” on page 118](#).

dbtempl. Contains dictionary and local database files required by Siebel Remote for regional users and Mobile Web Client users.

docking. Contains transaction files, visibility, and other databases required by Siebel Remote.

enterprises. Files specific to a particular enterprise; contains a server subdirectory that contains files specific to a particular server (for example, log files).

help. Contains help files.

input. Contains files related to Siebel Remote.

install. Contains files used by the installer.

install_script. Contains files related to installation and configuration.

IVSE.LIC. Merant ODBC Driver license file.

input. Contains files related to Siebel Remote.

jre8. Contains files for Java Runtime Environment.

lex. Language-related files.

lib. Library subdirectory. Contains the *.so files used in LDAP or other applications.

locale. Contains language-specific files. These files are not configurable.

log. Contains client and utility log files.

msgtempl. Stores language-specific files for mail merge.

mw. Contains MainWin binaries, libraries, and scripts that function as a Windows interface. For more information, see article 473791.1 (Article ID) on My Oracle Support. This document was previously published as Siebel FAQ 2240. See also *Siebel System Administration Guide*.

nlp. Contains natural-language processing files.

objects. Contains language-specific Siebel Repository files.

output. Contains files related to Siebel Remote.

reports. Contains the report executable programs used by Siebel Proposals to include reports in proposals.

SDQConnector. Contains the DLLs, configuration files, and other files necessary to connect the Siebel Data Quality Universal Connector to one or more external data quality products. An external data quality product is validated through Oracle's partner initiative.

search. Contains the indexes and scripts used to administer and execute searches.

siebenv.csh. C shell variant of the Siebel script for setting environment variables on the server after you run the Siebel Server Configuration Wizard.

siebenv.sh. Bourne or Korn shell variant of the Siebel script for setting environment variables on the server after you run the Siebel Server Configuration Wizard.

sqltempl. Contains SQL statements used by Siebel Server components. Do not modify these files.

sys. The service entry files and .odbc.ini files used by the Siebel Server and server control utilities. Do not edit or modify these files, unless you are instructed to do so by Oracle Global Customer Support.

tclient. Contains Web server-related files.

temp. Stores temporary files for use by the Siebel Server.

upgrade. Contains files and scripts related to version upgrades of Siebel Business Applications. Also holds temporary, backup, and state log files used during an upgrade.

upgrade.log. File that contains information logged during an upgrade.

webtempl. Contains Siebel Web templates and HTML files that support the applets and views required for Siebel Web Clients for Siebel Business Applications. Store your own custom Web template files or HTML files only in the custom subdirectory. For more information, see *Configuring Siebel Open UI*.

xml. Web server-related files.

Reviewing the Installation Directories for Siebel Database Configuration Utilities

After installing the Siebel Database Configuration Utilities, review the directory structure created by the installer.

The Siebel Database Configuration Utilities software is installed in the *DBSRVR_ROOT* directory within the Siebel root directory that you specified during the installation. The default installation location is */siebel/16.0.0.0.0/ses/dbsrvr*. Verify that the following Siebel Database Configuration Utilities directories and files now exist in the installation directory. In the list, *lang* represents each language that you have installed, such as ENU for U.S. English.

dbsrvr. Top-level directory for Siebel Database Configuration Utilities.

bin. Contains files for internal use.

common. Contains database platform-independent files.

db_server (oracle, db2udb, or db2390). Contains scripts specific to your database, including upgrade scripts for previous versions of Siebel Business Applications.

dboutput (IBM DB2 for z/OS only). Contains subdirectories in which DDL is deposited by the installer for later transfer to the DB2 host when the Siebel Schema installation option Generate DDL Into Files is chosen.

siebproc (IBM DB2 only). Contains User Defined Functions (UDFs) and stored procedures for IBM DB2, by operating system. See also [“Installing the Stored Procedures and User-Defined Functions on IBM DB2” on page 117](#).

aix. UDFs and stored procedures for IBM DB2 on AIX.

hpux. UDFs and stored procedures for IBM DB2 on HP-UX.

linux. UDFs and stored procedures for IBM DB2 on Linux.

solaris. UDFs and stored procedures for IBM DB2 on Oracle Solaris.

win32. UDFs and stored procedures for IBM DB2 on Windows.

sqlproc (IBM DB2 only). Contains subdirectories that contain the SAR (stored procedure archive) files for each of the supported operating systems that are installed on the server.

aix. Stored procedures for IBM DB2 on AIX.

hpux. Stored procedures for IBM DB2 on HP-UX.

linux. Stored procedures for IBM DB2 on Linux.

solaris. Stored procedures for IBM DB2 on Oracle Solaris.

win32. Stored procedures for IBM DB2 on Windows.

storproc (IBM DB2 for z/OS only). Contains stored procedures for DB2 for z/OS.

upgrade. Directories containing files to enable upgrading from specific versions of Siebel Business Applications that are supported for upgrade to the current release.

lang. Contains language-specific and database-specific files for the ancestor Siebel Repository and supporting files. For example, ENU contains language-specific files for U.S. English, and DEU contains language-specific files for German.

files. This directory contains sample file attachments. You must copy these files to the appropriate subdirectory of the Siebel File System. See [“Populating the Siebel File System” on page 126](#).

locale. Contains translation files (for Oracle use only).

Verifying Installation for the Siebel Database

After installing the Siebel database on the RDBMS using the Siebel Database Configuration Wizard, review the installation log files and the system preferences for the database code page. This topic has the following information:

- [“Reviewing the Installation Log Files for the Siebel Database” on page 220](#)
- [“Verifying System Preferences and Settings for the Database Code Page” on page 221](#)

Related Topic

[“Installing the Siebel Database” on page 118](#)

Reviewing the Installation Log Files for the Siebel Database

Installing Siebel database components on the RDBMS creates several log files within the `$SIEBEL_ROOT/log` subdirectory. You must review the files in this subdirectory for any errors.

For example, log files created might be named `svrupgwiz1.log` (the most recently created), `svrupgwiz1_01.log`, `svrupgwiz1_02.log`, and so.

NOTE: For information about reviewing log files using the `logparse` utility, see *Siebel Database Upgrade Guide*. This utility is located in `$SIEBEL_ROOT/bin`.

Some other files generated, by supported RDBMS, are listed as follows.

Oracle Database. For Oracle Database, the following log files are also generated when you create tables, indexes, and seed data:

```
ddl_ctl.log
dataimp_prim.log
dataimp_prim_lang.log
ddlseq.log
ddlora.log
ddlview.log
ddlview_sia.log
seedssa.log
seedver.log
pkgseq.log
pkgldel.log
seedora.log
pkgvis.log
trgreset.log
ifstrg.log
ifindxstrg.log
set_utc_on.log
month_fn.log
```

IBM DB2. For IBM DB2, the following log files are also generated when you create tables, indexes, and seed data:

```
ddl_ctl.log  
dataprim.log  
dataprim_lang.log  
db2ddl.log  
siebproc.log  
seeddb2.log  
seedver.log  
seedssa.log  
ddlview.log  
ddlview_sia.log  
grantstat.log  
updatestats.log  
loadstats.log  
set_utc_on.log
```

Verifying System Preferences and Settings for the Database Code Page

After you complete installing Database Configuration Utilities and installing the Siebel database, you must verify system preferences and other settings for the Siebel application that indicate whether you are using Unicode, and indicate the code page that you are using.

For more information about code pages, see [“Planning RDBMS Installation and Configuration” on page 308](#). For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

The following procedure assumes that you have already installed Siebel Tools.

- For information about installing Siebel Tools, see [“Installing Siebel Tools” on page 184](#).
- For information about starting Siebel Tools, see [“Verifying Successful Installation of Siebel Tools” on page 230](#).

To verify system preferences and settings for the database code page

- 1 Start Siebel Tools and connect to the Siebel database.
- 2 Navigate to Screens, System Administration, and then System Preferences.
- 3 Look for System Preference Name = Enterprise DB Server Code Page. Verify that the value has been set correctly, based on the value that you selected during the installation of the Siebel database components (see [“Installing the Siebel Database” on page 118](#)).

NOTE: The value of Enterprise DB Server Code Page must be in lowercase, for example, utf-8 or utf-16. An Oracle Database character set might have a different value, although the system preference value must be utf-8. The utf-16 code page is also known as UCS-2, although the system preference value must be utf-16.

Possible values for the system preference are listed in the following table:

Language	Database	Value
All	Oracle	utf-8 (for Unicode)
All	IBM DB2	utf-16 (for Unicode)
Japanese	Oracle, IBM DB2	cp932 (or equivalent)
Western European	All	cp1252 (or equivalent)

- 4 Verify that the column UNICD_DATATYPS_FLG in the table S_APP_VER is set correctly. The flag value must be in uppercase.

Possible values for UNICD_DATATYPS_FLG are listed in the following table:

Code Page	Database	Value
Non-Unicode code page	All	N
Unicode	Oracle	8
Unicode	IBM DB2	Y

Verifying Installation for the Siebel Web Server Extension

After installing the Siebel Web Server Extension (SWSE) software as a new installation or as a migration installation, review the installation log files, verify the version number of your installed software, and review the Siebel Web Server Extension (SWSE) directories and files that now exist under the *SWSE_ROOT* directory that you specified during the installation.

In addition to the steps below, for full verification that your installed Siebel CRM server environment is working correctly, you must start one of the Siebel CRM applications in a Web browser. Specify a valid URL for your environment and log in using valid user credentials. Then access various screens and views in the application. For example, the URL for Siebel Call Center in French would resemble the following:

http://siebel_crm.example.com/callcenter_fra

This topic contains the following information:

- [“Reviewing the Installation Log Files for the SWSE” on page 223](#)
- [“Verifying the Installation Version Number for the SWSE” on page 223](#)
- [“Reviewing the Installation Directories for the SWSE” on page 224](#)
- [“Reviewing the Log Files for the SWSE” on page 224](#)

Related Topic

[“Installing the Siebel Web Server Extension” on page 51](#)

Reviewing the Installation Log Files for the SWSE

After installing the SWSE, review the installation log files to verify that all of the components installed successfully, particularly if you experienced any difficulties with the installation. The log files are created in the following directory:

```
$SIEBEL_ROOT/cfgtool/logs/oui
```

The relevant log files for an installation session are named `installActionsdate_time.log` file. In the file name, `date_time` represents the date and time when the file was created; for example, `installActions2015-07-02_10-28-04PM.log`. For each set of files created, the oldest and largest log file generally represents the Siebel module being installed.

Verifying the Installation Version Number for the SWSE

After installing the SWSE, verify the version number of the installed Siebel software.

To verify the installation version number for the SWSE

- 1 Open a shell window.
- 2 Set the value of the `ORACLE_HOME` environment variable to correspond to your top-level installation location, such as `/siebel/16.0.0.0/sweapp` for an installation of Siebel Web Server Extension software. For example, you might enter a command like this:

```
set ORACLE_HOME=/siebel/16.0.0.0/sweapp
```

- 3 Navigate to the `opatch` directory within your installation. For example, you might enter a command like this:

```
cd /siebel/16.0.0.0/sweapp/opatch
```

- 4 Enter the following command:

```
opatch lsiinventory -jre jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jre` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#).
- *inventory_location* is the full path of the `oralnst.loc` file (for example, `/export/home/oralnst.loc`), which points to the OUI inventory location. Use the `-invPtrLoc` option if you want to specify an inventory pointer file other than the default.

The installed components within the specified Oracle home are displayed, with the version number as managed by Oracle Universal Installer. For example, the version number shown for your installed software might be 16.0.

Reviewing the Installation Directories for the SWSE

Review the physical directories created during the installation of the Siebel Web Server Extension (SWSE) on the Web server host to familiarize yourself with the locations of files such as the `eapps.cfg` and `eapps_sia.cfg` configuration files.

NOTE: Additional top-level directories are created, which are parallel to the `sweapp` directory for the Siebel Web Server Extension. These directories include `ccr` for Oracle Configuration Manager files, `config` for SWSE Configuration Wizard files, `cfgtool logs` for installation log files, `opatch` for files related to the `opatch` utility, `oui` for files related to Oracle Universal Installer, and others.

The following list shows some of the physical directories and files created after you install the SWSE on the Web server. Some of these directories are not created until the first login. In the list, *lang* represents each language that you have installed, such as `ENU` for U.S. English.

sweapp. Top-level directory for SWSE.

admin. Contains model files used during configuration of the SWSE.

bin. Contains the SWSE configuration files (`eapps.cfg` and `eapps_sia.cfg`) and the library files needed for the SWSE functionality.

lang. Language-specific files and scripts. These are not configurable.

cfgenv.csh. C shell variant of the Siebel script for setting environment variables on the server before you run one of the Siebel Configuration Wizards.

cfgenv.sh. Bourne or Korn shell variant of the Siebel script for setting environment variables on the server before you run one of the Siebel Configuration Wizards.

install_script. Contains files related to installation and configuration.

locale. Contains resource files with information about any run-time errors. These language-specific files and scripts are not configurable.

log. Reports communication errors between the SWSE and the Application Object Managers in the Siebel Servers.

public. Contains the default HTML file (`default.htm`) and also subdirectories such as `files`, `fonts`, `html templates`, `images`, and `scripts`. CSS files are located in the `files` directory, for example.

lang. Language-specific files, including those in the `help` subdirectory.

Reviewing the Log Files for the SWSE

SWSE generates one or more log files as a result of connection attempts with the Siebel Server. These log files reside in `SWSE_ROOT/log`.

Depending on the logging level that you choose, these files record errors, warnings, and general information. Events such as Web server failures or invalid configuration of the SWSE are captured in these log files. Analyzing the log files can provide clues for troubleshooting SWSE problems. For more information about reviewing log files and monitoring Web servers and SWSE, see *Siebel System Monitoring and Diagnostics Guide*.

Verifying Installation for the Siebel Web Client

After installing the Siebel Web Client software as a new installation or as a migration installation, review the installation log files, verify the version number of your installed software, and review the Siebel Web Client directories and files that now exist under the *SIEBEL_CLIENT_ROOT* directory that you specified during the installation.

This topic contains the following information:

- [“Reviewing the Installation Log Files for the Siebel Web Client” on page 225](#)
- [“Verifying the Installation Version Number for the Siebel Web Client” on page 225](#)
- [“Reviewing the Installation Directories for the Siebel Web Client” on page 226](#)
- [“Verifying ODBC Data Sources for the Siebel Developer Web Client” on page 227](#)

Related Topic

[“Installing the Siebel Web Client” on page 177](#)

Reviewing the Installation Log Files for the Siebel Web Client

After installing the Siebel Web Client software, review installation log files to verify that all of the components installed successfully, particularly if you experienced any difficulties with the installation. The log files are created in the following directory:

```
SIEBEL_CLIENT_ROOT\cfgtool\logs\oui
```

The relevant log files for an installation session are named *installActionsdate_time.log* file. In the file name, *date_time* represents the date and time when the file was created; for example, *installActions2015-07-02_10-28-04PM.log*. For each set of files created, the oldest and largest log file generally represents the Siebel module being installed.

This topic applies to the Siebel Web Client installation, optionally with the local database or sample database.

Verifying the Installation Version Number for the Siebel Web Client

After installing the Siebel Web Client software, verify the version number of the installed Siebel software.

This topic applies to the Siebel Web Client installation, optionally with the local database or sample database.

To verify the installation version number for the Siebel Web Client

- 1 Open a DOS window.

- 2 Set the value of the ORACLE_HOME environment variable to correspond to your installation location, such as C:\siebel\16.0.0.0\client. For example, you might enter a command like this:

```
set ORACLE_HOME=C:\siebel\16.0.0.0\client
```

- 3 Navigate to the opatch directory within your installation. For example, you might enter a command like this:

```
cd C:\siebel\16.0.0.0\client\opatch
```

- 4 Enter the following command:

```
opatch lsi nventory
```

Installed components within the specified Oracle home are displayed, with the version number as managed by the Oracle Universal Installer software. For example, the version number of an installation of Siebel CRM version 16.0 is shown as 16.0.

Reviewing the Installation Directories for the Siebel Web Client

The following minimum directories are created for a Siebel Web Client installation. These directories, the files and subdirectories they contain, and various other files are created in the directory that you specified during the installation, such as C:\siebel\16.0.0.0\client. Use Windows Explorer to verify the directory structure on your computer.

NOTE: The objects directory contains the SRF file. The monitoring of any SRF file by virus scanning software might significantly degrade Siebel Web Client performance. If you have virus scanning software installed on your computers, then configure it to skip SRF files. Because these files are binary data files, the risk of virus infection is low, and so excluding these files from scanning is usually acceptable. Alternatively, you can scan SRF files less frequently than other files.

SIEBEL_CLIENT_ROOT. The directory for the Siebel Web Client installation, such as C:\siebel\16.0.0.0\client (or a similar location). This installation directory contains the subdirectories identified here. You can change the name during the installation process. For more information, see [“Requirements for Installing Siebel Web Clients” on page 352](#).

bin. Contains all of the binary files (*.exe, *.dll, and so on), configuration files (*.cfg), user preference files, and language-specific files.

cfgtoollogs. Contains installation log files.

fonts. Contains font files.

lex. Contains dictionary files used by the spelling checker.

local. Where the local database is stored.

locale. Stores language-specific files.

log. Stores the log files from Siebel Web Client operations, such as synchronization.

msgtempl. Stores message files used by the Siebel Web Client.

objects. Contains compiled Siebel Repository (SRF) files and language-specific files.

opatch. Files used by the opatch utility.

oraclexe. The installation path for Oracle Database XE. This directory is created if you have installed that module for the local database or sample database, as described in [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

public. Contains the default HTML file (default.htm) and also subdirectories such as files, fonts, html templates, images, and scripts. CSS files are located in the files directory, for example.

sqltempl. Contains SQL scripts. Do not modify these files.

temp. Contains working report files.

upgrade. Contains Siebel Anywhere upgrade files that have been retrieved by the user.

webtempl. Contains Siebel Web templates and HTML files that support the applets and views required for Siebel Web Clients for Siebel Business Applications. Store your own custom Web template files or HTML files only in the custom subdirectory. For more information, see *Configuring Siebel Open UI*.

Verifying ODBC Data Sources for the Siebel Developer Web Client

Verification of ODBC data sources for the Siebel Developer Web Client is similar to that for Siebel Tools. For information, see [“Verifying the ODBC Data Sources for Siebel Tools” on page 230](#).

Verifying Installation for Siebel Tools

After installing Siebel Tools, as a new installation or as a migration installation, review the installation log files, verify the version number of your installed software, and review the Siebel Tools directories and files that now exist under the *SIEBEL_TOOLS_ROOT* directory that you specified during the installation.

This topic contains the following information:

- [“Reviewing the Installation Log Files for Siebel Tools” on page 228](#)
- [“Verifying the Installation Version Number for Siebel Tools” on page 228](#)
- [“Reviewing the Installation Directories for Siebel Tools” on page 228](#)
- [“Verifying Successful Installation of Siebel Tools” on page 230](#)
- [“Verifying Directory Permissions for Siebel Tools” on page 230](#)
- [“Verifying the ODBC Data Sources for Siebel Tools” on page 230](#)

Related Topic

[“Installing Siebel Tools” on page 184](#)

[“Verifying Installation for Oracle Database XE” on page 231](#)

Reviewing the Installation Log Files for Siebel Tools

After installing Siebel Tools, review the installation log files to verify that all of the components installed successfully, particularly if you experienced any difficulties with the installation. The log files are created in the following directory:

```
SIEBEL_TOOLS_ROOT\cfgtool\logs\oui
```

The relevant log files for an installation session are named `installActionsdate_time.log` file. In the file name, `date_time` represents the date and time when the file was created; for example, `installActions2015-07-02_10-28-04PM.log`. For each set of files created, the oldest and largest log file generally represents the Siebel module being installed.

Verifying the Installation Version Number for Siebel Tools

After installing Siebel Tools, verify the version number of the installed software.

To verify the installation version number for Siebel Tools

- 1 Open a DOS window.
- 2 Set the value of the `ORACLE_HOME` environment variable to correspond to your installation location, such as `C:\siebel\16.0.0.0\Tools`. For example, you might enter a command like this:

```
set ORACLE_HOME=C:\siebel\16.0.0.0\Tools
```

- 3 Navigate to the `opatch` directory within your installation. For example, you might enter a command like this:

```
cd C:\siebel\16.0.0.0\Tools\opatch
```

- 4 Enter the following command:

```
opatch lsi nventory
```

Installed components within the specified Oracle home are displayed, with the version number as managed by the Oracle Universal Installer software. For example, the version number of an installation of Siebel CRM version 16.0 is shown as 16.0.

Reviewing the Installation Directories for Siebel Tools

The following minimum directories are created for a Siebel Tools installation. These directories, the files and subdirectories they contain, and various other files are created in the directory that you specified during the installation, such as `C:\Siebel\16.0.0.0\Tools`. Use Windows Explorer to verify the directory structure on your computer. In the list, *lang* represents each language that you have installed, such as `ENU` for U.S. English.

NOTE: The `objects` directory contains the SRF file. Monitoring of any SRF file by virus scanning software might significantly degrade Siebel Tools performance. If you have virus scanning software installed on your computers, then configure it to skip SRF files. Because these files are binary data files, the risk of virus infection is low, and so excluding these files from scanning is usually acceptable. Alternatively, you can scan SRF files less frequently than other files.

SIEBEL_TOOLS_ROOT. The directory for the Siebel Tools installation, such as C:\siebel\16.0.0.0\Tools (or a similar location). This installation directory contains the subdirectories identified here. You can change the name during the installation process. For more information, see [“Requirements for Installing Siebel Tools” on page 355](#).

bin	All binary files (.exe, .dll, .cfg, .dsn, .enu, .bat), configuration files, and user preference files.	
	<i>lang</i>	Language-specific DLL files.
	dll	Siebel Tools program library files.
	bin	Siebel Tools binary files.
	exe	Siebel Tools executable files.
cfgtoollogs	Contains installation log files.	
classes	Java code files.	
	examples	
	examples\src	
	examples\src\com	
	examples\src\com\siebel	
	examples\src\com\extra	
	examples\src\com\integration	
	examples\src\com\integration\mq	Examples of Java code files.
	examples\src\com\integration\servlet	Examples of Java code files.
help	Siebel Tools help files.	
	<i>lang</i>	Help files for the language that you installed.
local	The local, extracted database.	
	files	Local file attachments.
	inbox	Not used for Siebel Tools.
	outbox	Not used for Siebel Tools.
locale	Text files for installed languages containing version information.	
log	Log files from Siebel Tools operations.	
msgtempl	Message files.	
objects	Location of the compiled Siebel Repository file used by Siebel Tools (siebel_sia.srf). Also the default location for SRF files created using the Siebel Tools object compiler.	
opatch	Files used by the opatch utility.	
oraclexe	The installation path for Oracle Database XE. This directory is created if you have installed that module for the local database, as described in “Installing and Using Oracle Database XE for the Local or Sample Database” on page 191 .	
public	Contains the default HTML file (default.htm) and also subdirectories such as files, fonts, html templates, images, and scripts. CSS files are located in the files directory, for example.	
reppatch	Location of the XML files used by the maintenance update wizard. All log files generated by this wizard are also created under reppatch\log.	

scripts	Location of Java scripts.
sqltempl	SQL statement fragments used by certain Siebel Tools operations.
temp	Temporary working area.
upgrade	Not used for Siebel Tools.
webtempl	Contains Siebel Web templates and HTML files that support the applets and views required for Siebel Web Clients for Siebel Business Applications. Store your own custom Web template files or HTML files only in the custom subdirectory. For more information, see <i>Configuring Siebel Open UI</i>

Verifying Successful Installation of Siebel Tools

After installing Siebel Tools, verify that installation was successful by starting Siebel Tools and connecting to the Siebel database.

To verify that the Siebel Tools installation completed successfully

- Start Siebel Tools and log in to the Siebel database.

Verifying Directory Permissions for Siebel Tools

After installing Siebel Tools, verify that the Siebel Tools user has sufficient permissions to read and write data to the Siebel Tools installation directory.

To verify directory permissions for Siebel Tools

- 1 Select the Siebel Tools root directory and right-click on it.
- 2 Choose Properties and go to the Sharing tab.
- 3 Make sure that the Siebel Tools user has read and write access.

In addition, in user account properties, the Siebel Tools user must not be defined as a restricted user in the group membership section.

Verifying the ODBC Data Sources for Siebel Tools

The Siebel Tools installer creates the ODBC data sources described in [Table 17](#). By default, these are created as system data sources, which are visible to all of the user accounts on the computer where Siebel Tools is installed.

Table 17. Siebel Tools ODBC Data Sources

Data Source	Use
LOCAL_XE	Connects to the local database using Oracle Database XE.
SAMPLE_XE	Connects to the sample database using Oracle Database XE.

Table 17. Siebel Tools ODBC Data Sources

Data Source	Use
SSD default instance	Connects to the Oracle Database.
SSD	Connects to the IBM DB2 database.

For Oracle Database, verify that the following registry keys are set as shown. These values are required in order for the ODBC driver to behave correctly.

```
PacketSize = 0
EnableScrollableCursors = 0
ColumnsAsChar = 1
ColumnSizeAsCharacter = 1
```

For more information about how to run the Microsoft ODBC Administrator to verify ODBC data sources, see [“Verifying the ODBC Data Source” on page 233](#). Consult this topic as it is presented in *Siebel Installation Guide for Microsoft Windows*. See also [“Requirements for Installing Siebel Tools” on page 355](#).

Verifying Installation for Oracle Database XE

Oracle Database XE is installed with Siebel Tools or Siebel Mobile Web Client. You can verify the existence of or the successful installation of Oracle Database XE in multiple ways. This topic includes the following information:

- [“Verifying Installation of Oracle Database XE” on page 231](#)
- [“Verifying the ODBC Data Source for Oracle Database XE” on page 232](#)
- [“Verifying the TNSNAMES.ORA Entry for Oracle Database XE” on page 232](#)

Related Topics

[“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)

[“Verifying Installation for Siebel Tools” on page 227](#)

Verifying Installation of Oracle Database XE

Use the following methods to verify the installation of Oracle Database XE. Also perform the other verification steps in this topic. See also the documentation for Oracle Database Express Edition on Oracle Help Center.

To verify installation of Oracle Database XE

- Do any or all of the following:
 - Open SERVICES.MSC and check for OracleServiceXE.

- Open Programs and Features and check for Oracle Database XE under installed programs.
- Check for the presence of the oracl exe directory in the Siebel Tools or Siebel Mobile Web Client installation.
- Open the install.log file, which is available under the %temp% folder. Make sure that [ResultCode] is set to zero.
- Run the command below to find the entry for Oracle Database XE in the registry:

```
reg query HKLM\SOFTWARE\ORACLE\KEY_XE /v ORACLE_BASE
```
- Start Siebel Tools and connect to the LOCAL_XE data source, or start Siebel Mobile Web Client and connect to the LOCAL_XE or SAMPLE_XE data source.

NOTE: For Siebel Mobile Web Client, or for Siebel Tools if you did not already install the local database, then connecting to LOCAL_XE initializes the local database. Users must attempt this only after a local database has been extracted for them by the system administrator.

Verifying the ODBC Data Source for Oracle Database XE

Installing Oracle Database XE with Siebel Tools or Siebel Mobile Web Client automatically creates an ODBC system data source name (DSN) that Siebel Tools or Siebel Mobile Web Client use to connect to an Oracle Database XE installation. The ODBC data sources are as follows:

- LOCAL_XE (for a Siebel Tools or Siebel Mobile Web Client installation, with the local database using Oracle Database XE)
- SAMPLE_XE (for a Siebel Mobile Web Client installation, with the sample database using Oracle Database XE)

To verify the ODBC data source for Oracle Database XE

- 1 Open ODBCAD32.exe, which is available in the C:\Windows\SysWOW64 directory.
- 2 Check that one of the following ODBC data source has been added under the System DSN tab, corresponding to your installation: either LOCAL_XE or SAMPLE_XE.
- 3 Make sure that the DSN connects.

Verifying the TNSNAMES.ORA Entry for Oracle Database XE

Use the following procedure to verify the TNSNAMES.ORA entry for Oracle Database XE.

To verify the TNSNAMES.ORA entry for Oracle Database XE

- 1 Open TNSNAMES.ORA, which is available under *Oracl e_DB_Cli ent*\network\admin.
- 2 Verify that a new entry of LOCAL_XE or SAMPLE_XE has been added.

Verifying the ODBC Data Source

This topic provides information about verifying the ODBC data source for your enterprise database platform. It includes the following information:

- “Verifying the ODBC Data Source for Oracle Database” on page 233
- “Verifying the ODBC Data Source for IBM DB2” on page 234

Verifying the ODBC Data Source for Oracle Database

Configuring the Siebel Enterprise automatically creates an ODBC system data source name (DSN) that the Siebel Server uses to connect to the Siebel database on the RDBMS.

Make sure that a supported version of the Oracle Database Client has been installed and that the Siebel Server service is started prior to verifying the ODBC data source. This topic applies also to virtual ODBC data sources in a clustered environment.

CAUTION: In general, do not change the default settings that are created automatically with the ODBC data source. However, if you have upgraded from an Oracle Database that does not use CBO, or if you manually created your ODBC, then you must check your ODBC settings, as shown in the following procedure.

For more information about the ODBC data source, see “Planning RDBMS Installation and Configuration” on page 308.

To verify the ODBC data source for Oracle Database (on UNIX)

- 1 Navigate to the file `$SIEBEL_HOME/sys/.odbc.ini`, and open this file for editing.
- 2 Locate the section of the file containing a reference to `ServerName` and `Driver`.

This section defines the ODBC data source for Siebel Server. A sample section is represented in the following example:

```
[EnterpriseName_DSN]
ServerName=oraDB4
Driver=$SIEBEL_HOME/lib/SEor827.so
ColumnsAsChar=1
ColumnSizeAsCharacter=1
```

CAUTION: The `ColumnsAsChar` and `ColumnSizeAsCharacter` parameter settings are required in order for the ODBC driver to behave correctly.

`ServerName` is the Oracle connect string that you entered while configuring the Siebel Enterprise. (To verify this connect string, run `sqlplus`.) The driver must point to `$SIEBEL_HOME/lib/SEor827.so`, allowing you to verify the existence of this file.

- 3 Verify that the `SIEBEL_UNIXUNICODE_DB` environment variable is set to `ORACLE`.

NOTE: If you use Siebel Marketing, which requires simultaneous heterogeneous database connectivity, then set this variable to `ORACLE`, regardless of your database platform.

- 4 Source the `siebenv.csh` (for C shell) or `siebenv.sh` (for Bourne or Korn shell) file.

- 5 Test the connection by navigating to `$SIEBEL_HOME/bin` and entering the command:

```
odbcsql /u database_account_name /p password /s ODBC_DSN
```

where:

- `database_account_name` is a valid database account name.
- `password` is the corresponding database account password.
- `ODBC_DSN` is the ODBC data source name, in the form `SiebelEnterpriseName_DSN`. In the data source name, `SiebelEnterpriseName` is the name of your Siebel Enterprise.

If you do not receive an error message, then the ODBC connection is working. If your ODBC DSN is not working, then the program exits with an error message. For more information, see [“Verifying Network Connectivity for the Siebel Server Computer” on page 235](#) and [“Troubleshooting the ODBC Data Source Connection” on page 241](#).

Verifying the ODBC Data Source for IBM DB2

Configuring the Siebel Enterprise automatically creates an ODBC system data source name (DSN) that the Siebel Server uses to connect to the Siebel database on the RDBMS.

Make sure that the appropriate database client has been installed and that the Siebel Server service is started prior to verifying the ODBC data source. This topic applies also to virtual ODBC data sources in a clustered environment.

CAUTION: Do not change the default settings that are created automatically with the ODBC data source.

For more information about the ODBC data source, see [“Planning RDBMS Installation and Configuration” on page 308](#).

NOTE: For information about verifying the ODBC data source for IBM DB2 for z/OS, see [Implementing Siebel Business Applications on DB2 for z/OS](#).

To verify the ODBC data source for IBM DB2 (on UNIX)

- 1 Open a DB2 Command Window.
- 2 Run the following command:

```
db2 get cli cfg for section SiebelEnterpriseName_DSN
```

In the data source name, `SiebelEnterpriseName` is the name given the Siebel Enterprise during initial configuration, for example `sieb16`.

Entering this command generates the following results:

```
Section: SiebelEnterpriseName_DSN
-----
dbalias=SBL
cli pkg=6
txnsolation=1
```

The value for `dbalias` is the database alias catalogued for your DB2 database server.

If the `SiebelEnterpriseName_DSN` section is missing, then run the `confi gdb2` script in `$SIEBEL_HOME/bin` to set it, and then verify again that the section is present.

See also [“Guidelines for Preventing IBM DB2 from Running Out of ODBC Statement Handles”](#) on page 379.

- 3 Verify that the `SIEBEL_UNIXUNICODE_DB` environment variable is set to `DB2`.

NOTE: If you use Siebel Marketing, which requires simultaneous heterogeneous database connectivity, then set this variable to `ORACLE`, regardless of your database platform.

- 4 Source the `siebenv.csh` (for C shell) or `siebenv.sh` (for Bourne or Korn shell) file.
- 5 Test the connection by navigating to `$SIEBEL_HOME/bin` and entering the command:

```
odbcsql /u database_account_name /p password /s ODBC_DSN
```

where:

- `database_account_name` is a valid database account name.
- `password` is the corresponding database account password.
- `ODBC_DSN` is the ODBC data source name, in the form `EnterpriseName_DSN`. In the data source name, `EnterpriseName` is the name of your Siebel Enterprise.

If you do not receive an error message, then the ODBC connection is working.

If your ODBC DSN is not working, then the program exits with an error message. For more information, see [“Verifying Network Connectivity for the Siebel Server Computer”](#) on page 235 and [“Troubleshooting the ODBC Data Source Connection”](#) on page 241.

Verifying Network Connectivity for the Siebel Server Computer

The Siebel Server must have network access to other Siebel Enterprise components, such as the Siebel Gateway Name Server, the Siebel database on the RDBMS, and the Siebel File System. Use the following procedure to verify that the Siebel Server computer can access other Siebel Enterprise components.

NOTE: For information about verifying network connectivity for IBM DB2 for z/OS, see *Implementing Siebel Business Applications on DB2 for z/OS*.

To verify network connectivity for the Siebel Server computer

- 1 Verify network connectivity to the Siebel Gateway Name Server and the Siebel database from the Siebel Server computer, using the test utility for your network type.

For TCP/IP networks, use the ping utility to verify network connectivity. Or test the connection through Control Panel, Administrative Tools, Data Sources (ODBC), and then System DSN.

- 2 For Oracle Database, verify connectivity to the Siebel database, then go to [Step 4 on page 236](#).

Use the tns ping utility and Oracle Database connectivity alias, as appropriate to your database, from a command prompt window to make sure that you can connect to the database using the network connect string that you defined.

- 3 For IBM DB2, verify connectivity to the Siebel database, then go to [Step 4 on page 236](#).

- a Open a DB2 Command Window to make sure that you can connect to your database.

- b Enter:

```
db2 connect to database_alias user user_ID using password
```

where:

- *database_alias* is your database alias
- *user_ID* is a valid user name on DB2
- *password* is the password for that *user_ID*

If your connection is valid, then you see a message that looks like the following:

The connection test is successful

```
Database Server      = DB2/AIX/Solaris x.x.x
SQL authorization ID = SADMIN
Database alias       = DB_Alias
```

- c If your connection is not valid, then verify your configuration.

- d To close the connection, type db2 terminate.

- 4 Provide network connections from the Siebel Server to all of the applicable Siebel File System directories.

For more information, see ["Creating the Siebel File System" on page 320](#).

- 5 Verify that the Siebel File System directories are visible and that the Siebel service owner account has the necessary permissions on these directories.

If you are clustering the Siebel File System, then use the Network IP resource or Network Hostname Resource assigned to that cluster file share.

Verifying Network Connectivity for Mobile Users

Siebel Mobile Web Client users must be able to connect to the Siebel Remote Server, using TCP/IP, to synchronize with the master Siebel database. Make sure that you have the correct network software and hardware installed to support this connectivity and that your remote users are able to establish a TCP/IP connection to the server. To check connectivity, use the `ping` utility.

Related Book

Siebel Remote and Replication Manager Administration Guide

Verifying That the Siebel Gateway Name Server Has Started

If, during configuration, you selected manual start for the Siebel Gateway Name Server, then you must make sure that the Siebel Gateway Name Server is started when you do any of the following:

- Create and configure the Siebel Enterprise
- Configure a new Siebel Server
- Operate any of the Siebel applications
- Remove the configuration of a Siebel Server (such as when uninstalling) or the Siebel Enterprise

NOTE: It is recommended that you review the Siebel Gateway Name Server log files, which are found in the `$SIEBEL_GATEWAY_ROOT/log` directory.

Related Topics

[“Starting the Siebel Gateway Name Server” on page 131](#)

[“Verifying Installation for the Siebel Enterprise Server” on page 213](#)

[“Troubleshooting Installation and Configuration for Siebel Enterprise Server” on page 237](#)

Troubleshooting Installation and Configuration for Siebel Enterprise Server

This topic presents troubleshooting information related to installation and configuration of Siebel Enterprise Server components.

Related Topics

[“Starting the Siebel Gateway Name Server” on page 131](#)

[“Configuring the Siebel Gateway Name Server for Automatic Start” on page 132](#)

[“Configuring the Siebel Server for Automatic Start” on page 136](#)

[“Verifying Installation for the Siebel Enterprise Server” on page 213](#)

[“Verifying That the Siebel Gateway Name Server Has Started” on page 237](#)

Troubleshooting Installation and Configuration for the Siebel Gateway Name Server

This topic describes potential errors that can result from a faulty installation or configuration of Siebel Gateway Name Server. Such problems can have any of several causes, the most common of which are listed in [Table 18 on page 238](#).

NOTE: If you cannot start the Siebel Gateway Name Server, then you will not be able to configure a Siebel Enterprise or configure and start a Siebel Server.

Table 18. Troubleshooting Siebel Gateway Name Server Installation and Configuration

Problem	Cause	Solution
The Siebel Gateway Name Server does not start.	You might not have privileges as the Siebel service owner.	Review the instructions in “Creating the Siebel Service Owner Account” on page 324 .
The Siebel Gateway Name Server does not start.	<p>Failure to start the Siebel Gateway Name Server can be caused by a number of problems including, but not limited to:</p> <ul style="list-style-type: none"> ■ Incorrectly set LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux or Oracle Solaris) environment variable ■ Incorrect permissions set on shared libraries ■ Missing shared libraries 	<p>Use the <code>ldd</code> command to show missing libraries.</p> <p>Make sure that <code>\$SIEBEL_HOME/lib</code> is included and set before <code>LIBPATH</code> (AIX), <code>SHLIB_PATH</code> (HP-UX), or <code>LD_LIBRARY_PATH</code> (Linux or Oracle Solaris). If there are library conflicts, then set <code>\$SIEBEL_HOME/lib</code> as the first element of the shared library path environment variable.</p> <p>Check the <code>LIBPATH</code>, <code>SHLIB_PATH</code>, or <code>LD_LIBRARY_PATH</code> settings in all applicable files, including <code>cfgenv.csh</code> (for C shell) or <code>cfgenv.sh</code> (for Bourne or Korn shell), and <code>siebenv.csh</code> or <code>siebenv.sh</code>.</p> <p>Make sure that <code>siebenv.csh</code> and <code>siebenv.sh</code> were correctly generated.</p>

Troubleshooting Installation and Configuration for the Siebel Server

This topic describes potential errors that can result from a faulty installation or configuration of Siebel Server. Such problems can have any of several causes, the most common of which are listed in [Table 19](#).

Table 19. Troubleshooting Siebel Server Installation and Configuration

Problem	Cause	Solution
The Siebel Server cannot be installed.	Insufficient user privileges	For information about setting up appropriate administrative user privileges to install, see “Setting Permissions and Ownership” on page 316 and “Creating the Siebel Service Owner Account” on page 324.
	Trying to install or configure the Siebel Server out of sequence	For the required installation and configuration sequence, see Chapter 2, “Overview of Installing Siebel Business Applications.”
	Failure to install required hardware or software	Installation errors related to software requirements are logged in the Siebel Enterprise Server installer log file. For requirements, see the Certifications tab on My Oracle Support.
	Environment variables not set properly	For more information about environment variables, see “Managing Environment Variables” on page 139.
	Faulty network connection	Sometimes a faulty network connection can result in the system administrator being unable to install to the <code>\$SIEBEL_HOME</code> directory in which he or she has write privileges. Verify that your network connection is stable.

Table 19. Troubleshooting Siebel Server Installation and Configuration

Problem	Cause	Solution
The Siebel Server does not start.	<p>Failure to start the Siebel Server can be caused by a number of problems including, but not limited to:</p> <ul style="list-style-type: none"> ■ Incorrectly set LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux or Oracle Solaris) environment variable ■ Incorrect permissions set on shared libraries ■ Missing shared libraries 	<p>Use the <code>ldd</code> command to show missing libraries.</p> <p>Make sure that <code>\$SIEBEL_HOME/lib</code> is included and set before LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux or Oracle Solaris). If there are library conflicts, then set <code>\$SIEBEL_HOME/lib</code> as the first element of the shared library path environment variable.</p> <p>Check the LIBPATH, SHLIB_PATH, or LD_LIBRARY_PATH settings in all applicable files, including <code>cfgenv.csh</code> (for C shell) or <code>cfgenv.sh</code> (for Bourne or Korn shell), <code>siebenv.csh</code> or <code>siebenv.sh</code>, and <code>dbenv.csh</code> or <code>dbenv.sh</code>.</p> <p>Make sure that <code>siebenv.csh</code>, <code>siebenv.sh</code>, <code>dbenv.csh</code>, and <code>dbenv.sh</code> were correctly generated.</p>
Application Object Manager component does not start.	<p>Heavily used servers running more than 50 instances of Object Manager components can experience a condition where some of the Object Managers do not start correctly and log the following error message:</p> <p style="padding-left: 40px;">Got error 1801210 when dequeuing a connection request (62)</p>	<p>Change TCP stack parameters.</p> <p>For more information about sizing Application Object Manager components, see <i>Siebel Deployment Planning Guide</i>, <i>Siebel Performance Tuning Guide</i>, and other relevant documents on Oracle Technology Network or My Oracle Support.</p>
The Siebel Server does not start after configuration.	Siebel Gateway Name Server not started	Verify that the Siebel Gateway Name Server was started. Start it if it was stopped.
	Invalid input values during configuration	Verify that the input values during configuration were valid.
	Insufficient system privileges	Verify that you have sufficient system privileges to start the service. For more information, see “Creating the Siebel Service Owner Account” on page 324 .

Troubleshooting the ODBC Data Source Connection

This topic describes troubleshooting steps for your ODBC data source connection.

NOTE: If your database is IBM DB2 for z/OS, then see *Implementing Siebel Business Applications on DB2 for z/OS*.

Troubleshooting Connection Problems on Oracle Database

Complete the following instructions to troubleshoot Oracle Database connection problems on AIX, HP-UX, Linux, or Oracle Solaris. See also [“Configuring Siebel Server Connectivity to the Siebel Database”](#) on page 381.

If you are unable to verify if your ODBC connection to your Oracle Database is working, then verify that the value of the environment variable TNS_ADMIN is the exact path of tnsnames.ora.

To troubleshoot a failed ODBC connection for Oracle Database on AIX, HP-UX, Linux, or Oracle Solaris

- 1 Verify that the Oracle connect string entered as part of Siebel Enterprise configuration is valid.
- 2 If the connect string entered is correct, then check the ODBCINI environment variable to verify that it was set by entering the following command:

```
echo ${ODBCINI}
```

The following response appears:

```
$SIEBEL_ROOT/sys/.odbc.ini
```

- 3 If the ODBCINI environment variable was correctly set, then verify that the .odbc.ini file is valid by reviewing it for the presence of the following parameters:

```
[EnterpriseName_DSN]
ServerName=oraDB4
Driver=$SIEBEL_ROOT/lib/SEor827.so
ColumnsAsChar=1
ColumnSizeAsCharacter=1
```

CAUTION: The ColumnsAsChar and ColumnSizeAsCharacter parameter settings are required in order for the ODBC driver to behave correctly.

- 4 If the `.odbc.ini` file is valid, then verify that the library path includes the path for the ODBC driver on your operating system by entering the following command:

AIX. Use `echo ${LIBPATH}`.

HP-UX. Use `echo ${SHLIB_PATH}`.

Linux and Oracle Solaris. Use `echo ${LD_LIBRARY_PATH}`.

The following response appears:

```
$SIEBEL_HOME/lib
```

NOTE: Siebel Business Applications support the Oracle 32-bit client. Therefore, if you have installed the Oracle 64-bit client on your Siebel Server, then you must include `$ORACLE_HOME/lib32` in your definition for the `LIBPATH` (AIX), `SHLIB_PATH` (HP-UX), or `LD_LIBRARY_PATH` (Linux or Oracle Solaris) environment variable. (If you require `$ORACLE_HOME/lib` for non-Siebel applications, then make sure that `$ORACLE_HOME/lib32` is placed in front of `$ORACLE_HOME/lib`.)

- 5 If the response illustrated for your operating system in [Step 4 on page 242](#) was correct and you are verifying a Unicode installation, then make sure that the following environment variable is set according to the recommendations from your database platform vendor.

```
SIEBEL_UNI XUNICODE_DB=ORACLE
```

This variable is also set in the `siebenv.csh` (for C shell) and `siebenv.sh` (for Bourne or Korn shell) scripts.

Troubleshooting Connection Problems on IBM DB2

Complete the following instructions to troubleshoot IBM DB2 connection problems. See also [“Configuring Siebel Server Connectivity to the Siebel Database” on page 381](#).

To troubleshoot a failed ODBC connection for IBM DB2

- Verify that the data source name (`SiebelEnterpriseName_DSN`) that you entered during the Siebel Server configuration was valid. Also verify that the required IBM DB2 client version is available on the machine and verify that the IBM DB2 catalog step has been completed correctly.

Troubleshooting Installation for the Siebel Database

These topics provide suggestions for troubleshooting problems that you might encounter when installing and configuring the Siebel database.

Troubleshooting Installation for the Siebel Database

Typically, problems during database installation result from insufficient storage space having been allocated, or from the installer having improper user privileges.

Acceptable Errors for Installation of the Siebel Database

The log files might include errors that are expected and benign. Compare any error messages found in the log files to the sample error messages in the errors.txt file, which is located in the installation subdirectory for your database, for example, oracl e. If a log file is not listed in the errors.txt file, then there are no acceptable error messages for that log file. No further action is required if the log files contain errors listed in the errors.txt file.

NOTE: Only one of each type of error occurring in a particular log file appears in the errors.txt file.

If you find errors that are not listed in the errors.txt file, then correct the condition that caused the errors, and rerun the Upgrade Wizard. The wizard restarts from the point where it left off.

Do not review only the error numbers because these might have changed following installation of a new driver version. Instead, compare the error descriptions to find out which are acceptable errors for this database.

CAUTION: Although other errors are rarely encountered, this review is critical. Certain errors, such as a failure to create indexes, might result in performance problems or anomalous behavior in Siebel Business Applications.

You can view a log summary generated using the logparse utility. For more information, see *Siebel Database Upgrade Guide*.

Troubleshooting Siebel Repository Import for the Siebel Database

Typical problems that can occur at this stage are shown in [Table 20](#). These errors might appear in the log files produced by the Siebel Repository import process.

Table 20. Troubleshooting Siebel Repository Import for the Siebel Database

Problem	Cause	Solution
Cannot import a Siebel Repository	Importing a Siebel Repository with the same name as an existing Siebel Repository	Choose a unique name for the new Siebel Repository.
Database runs out of tablespace pages and cannot allocate new data pages	Insufficient tablespace size	Increase the tablespace sizes.
(IBM DB2 only) Errors regarding the settings for DB2 configuration parameters, such as APP_CTL_HEAP_SZ	Values too low	Reset the DB2 configuration parameters to higher values. Guidelines for Siebel Business Applications suggest using only minimum values.

Troubleshooting Installation for the Siebel Web Server Extension

This topic provides suggestions for troubleshooting problems that you might encounter when installing and configuring the Siebel Web Server Extension (SWSE). Typical problems are shown in [Table 21](#).

Table 21. Troubleshooting Siebel Web Server Extension Installation

Problem	Cause	Solution
The Siebel Web Server Extension plug-in does not start.	<p>Failure to start the SWSE plug-in can be caused by a number of problems including, but not limited to:</p> <ul style="list-style-type: none">■ Incorrectly set LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux or Oracle Solaris) environment variable■ Incorrect permissions set on shared libraries■ Missing shared libraries	<p>Use the <code>ldd</code> command to show missing libraries.</p> <p>Make sure that <code>\$SIEBEL_HOME/lib</code> is included and set before LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux or Oracle Solaris). If there are library conflicts, then set <code>\$SIEBEL_HOME/lib</code> as the first element of the shared library path environment variable.</p> <p>Check the LIBPATH, SHLIB_PATH, or LD_LIBRARY_PATH settings in all applicable files, including <code>cfgenv.csh</code> (for C shell) or <code>cfgenv.sh</code> (for Bourne or Korn shell).</p>

Table 21. Troubleshooting Siebel Web Server Extension Installation

Problem	Cause	Solution
After installation, when the Siebel Web Client is started, a message appears, stating: Page Cannot be displayed	The Web server instance is not running.	Make sure that the Web server instance is running. Refresh the connection between your browser and the Web site.
	The Web server port is incorrectly specified in the eapps.cfg file.	Verify that the Web server port information in the eapps.cfg file is correct.
	Virtual directories were not installed or configured properly.	Make sure that the Local Path for the virtual directories is correct and resembles the following: <i>SWSE_ROOT/public</i>
	Anonymous users have incorrect responsibilities.	Make sure that anonymous users specified in the eapps.cfg file (AnonUserName and AnonPassword parameters) are also defined in the Siebel database with the correct responsibilities. Otherwise, end users cannot access the home page.
	The connect string for the Siebel application is incorrect.	Make sure that the connect string for the Siebel application is correct. The value resembles the following example (where load balancing is not deployed): <i>ConnectString = siebel.TCPIP.none.none://SiebelServerHost:2321/EnterpriseServerName/ProductNameObjMgr_Language</i>
	Siebel Server components or component groups might not be enabled.	Make sure that the necessary Siebel Server components and component groups are enabled.

Table 21. Troubleshooting Siebel Web Server Extension Installation

Problem	Cause	Solution
Your Siebel application stops responding, displays a blank page or page not found, or times out.	Appropriate parameters are not available within the [defaults] section of the eapps.cfg file for Siebel Business Applications.	Make sure that the [defaults] section of the eapps.cfg file contains valid AnonUserName, AnonPassword, HTTPPort, and HTTPSPort values. Also make sure that SessionTimeout and GuestSessionTimeout have appropriate values. For information about configuring these and other parameters, see “Configuring the SWSE Logical Profile” on page 94.
Inability to access the Siebel Web Client. The browser status bar might display errors such as: SWESubmitOnEnter is undefined Also, the login page might stop responding. Or, the Siebel Web Client login page does not display properly; for example, images might be missing.	The user running the SWSE plug-in does not have proper permissions to the <i>SWSE_ROOT/public</i> directory.	Stop the Web server. Make sure that the permissions meet the requirements described in “Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340. Restart the Web server.

Configuring the Siebel Mobile Web Client When Neither Siebel VB nor Siebel eScript Is Licensed

By default, the Siebel Mobile Web Client has Siebel VB or Siebel eScript enabled. The parameter EnableScripting is set to True in the application configuration files. If this parameter is True, but neither Siebel VB nor Siebel eScript is licensed, then the Siebel Mobile Web Client does not start. An error message is returned, indicating that you must turn off Siebel VB or Siebel eScript before running the Siebel Mobile Web Client.

To configure the Siebel Mobile Web Client when neither Siebel VB nor Siebel eScript is licensed

- Set EnableScripting to FALSE in the configuration file used by your Siebel Mobile Web Client, such as uagent.cfg for Siebel Call Center. This configuration file is located in the directory `SIEBEL_CLIENT_ROOT\bin\LANGUAGE`.

where:

- `SIEBEL_CLIENT_ROOT` is the directory where you installed the Siebel Mobile Web Client.
- `LANGUAGE` is the three-letter code for the language in which you are running the Siebel Mobile Web Client.

About the Environment Verification Tool

The Environment Verification Tool (EVT) is a tool intended to help system administrators verify the configuration of the Siebel CRM environment. System administrators can use the EVT utility to identify errors and potential problems in the Siebel Enterprise after installation in a development or test environment, or following rollout or upgrades.

It is recommended that you use EVT to verify your Siebel Business Applications environment. EVT is included with the installed software for Siebel Server, Siebel Gateway Name Server, and Siebel Web Server Extension (SWSE). It is provided for each supported Siebel Enterprise Server operating system.

Siebel Modules or Third-Party Products That EVT Can Check

You can run EVT against Siebel Business Applications modules and some third-party products.

- Siebel Gateway Name Server
- Siebel Server
- Siebel Web Server Extension
- Web server (Microsoft IIS, Apache Web Server, Oracle HTTP Server, or Oracle iPlanet Web Server)
- Database

EVT Check Groups

The EVT engine is driven by a configuration file (evt.ini). This file is specific for each version of Siebel Business Applications, and cannot be used to run the utility against an earlier or a later version of the software. This file identifies the default checks that must be run, and it also provides the dependency logic, such as operating system-specific checks or database-specific checks, between different checks. The evt.ini file can be customized to check for other issues as well.

If you want to create customized checks, then create a copy of the original evt.ini file for this purpose, so that you do not accidentally affect EVT functionality.

You can use EVT to validate configuration settings in the following check groups:

- Environment checks (ENV)

- Siebel Server checks (SVR)
- Database client checks (DBC)
- Web server checks (WEB)
- Database server (RDBMS) checks (DBS)
- Internal checks (INT)
- Network settings checks (NET)
- Operating system checks (OS)
- Other checks (OTH)

About the EVT Configuration File

EVT uses a configuration file (evt.ini) to determine what checks to perform and, for each check, what settings it will check for. Each Siebel CRM release has a corresponding configuration file specific for that release. This file resides under the bin subdirectory of the \$SIEBSRVR_ROOT directory on the Siebel Server, or of the SWSE_ROOT directory on the SWSE.

In the evt.ini file, the [CheckX] sections contain check definitions for different check groups. Refer to the evt.ini file for descriptions of the parameters used for each check section. A check definition can have the parameters shown in Table 22. Not shown in the table are check-dependent parameters, such as PARAMNAME and PARAMVALUE.

Table 22. EVT Check Definition Format

Parameter	Description
CHECKID	Unique identifier for each check definition.
CHECKGROUP	The area of the application environment that is verified by this check.
CHECKNAME	Name of the check to run.
SERVERTYPE	The server type on which the check can be run: either Siebel Server, Siebel Gateway Name Server, Web server with SWSE, or Database Server (RDBMS). For values, see "Optional EVT Command-Line Flags" on page 252 . SERVERTYPE can have multiple delimited values separated by commas, for example, SERVERTYPE=DBSERVER,SIEBSRVR,SWSE.
OSTYPE	The operating system applicable to this check. OSTYPE can have multiple delimited values separated by commas, for example, OSTYPE=AIX,HPUX,LINUX,SOL,W32. For a list of supported operating systems for the current release, see the Certifications tab on My Oracle Support.

Table 22. EVT Check Definition Format

Parameter	Description
DEPENDENCY	<p>This feature is used to implement conditional logic in the .ini file, for example, checking for the right Oracle client version if Oracle Database is in use.</p> <p>DEPENDENCY can have multiple delimited values separated by commas, for example, DEPENDENCY=Check1,Check231.</p>
PRIMARY	<p>Determines whether this check must be printed as part of the output. Dependent checks that prevent the next check from succeeding are not printed in the output.</p>
RESULTMODE	<p>The value of RESULTMODE specifies how the check is evaluated. Use one of the following values:</p> <ul style="list-style-type: none"> ■ evaluate. Performs a text comparison and returns TRUE if the values are the same. ■ inverted. The opposite of evaluate. Returns FALSE where evaluate would return TRUE. ■ versioncheck. Evaluates version strings, including dotted version strings. ■ invertedversioncheck. The opposite of versioncheck. Returns FALSE where versioncheck would return TRUE.
ERRORLEVEL	<p>This parameter uses two values, WARN and FAIL, to determine whether the failure of a particular check constitutes a critical failure or just a warning.</p> <p>Critical failures are misconfigurations that would result in the failure of Siebel Business Applications software in one form or another. Warnings apply to misconfigurations that might result in reduced performance but not necessarily in a software failure.</p>

Parameters in the .ini file must be set to the alias and not to the value; for example, PARAMNAME=Lang and PARAMVALUE=ENU.

You can use # (pound sign) as a comment character in the evt.ini file, to disable particular entries.

You can also add new checks to the .ini file based on your business requirements, using the parameters described in [Table 22 on page 248](#). If you decide to do so, then make a copy of the file, and make your modifications in the new file. Then run EVT using the -f option, as described in [“Optional EVT Command-Line Flags” on page 252](#), to direct EVT to use the new configuration file.

Using the Environment Verification Tool

EVT uses various operating systems utilities and Siebel command-line utilities to query information about installation and configuration settings for Siebel components. EVT verifies that the computers running Siebel Business Applications software are configured correctly and according to the Certifications tab on My Oracle Support and other documented requirements.

This topic has the following information:

- [“Starting the EVT Utility” on page 250](#)
- [“Running EVT in Query Mode” on page 251](#)
- [“Optional EVT Command-Line Flags” on page 252](#)
- [“Available EVT Output Formats” on page 253](#)
- [“Changing EVT Output Text” on page 254](#)

Starting the EVT Utility

The EVT executable program is installed under the `bin` subdirectory of `$SIEBSRVR_ROOT`. The command name is `evt.exe` for Windows or `evt` for UNIX operating systems.

You can run this executable program with different options, depending on what part of your environment that you want to check.

NOTE: For more information about using EVT, see [477105.1 \(Article ID\) on My Oracle Support](#). This document was previously published as Siebel Technical Note 467.

Review the following topics to determine how to edit the `evt.ini` file and how to use command-line options:

- [“About the EVT Configuration File” on page 248](#)
- [“Optional EVT Command-Line Flags” on page 252](#) (includes command examples)
- [“Available EVT Output Formats” on page 253](#)
- [“Changing EVT Output Text” on page 254](#)

The `evt.ini` file contains all of the approved checks. If you have to add any checks or modify any of the existing checks, then make a copy of the file, and make your modification in the new file. Then run EVT using the `-f` option to direct EVT to use the new configuration file.

To start EVT

- 1 Verify that permissions for the EVT executable program are set to 755.

- 2 Navigate to the `$SIEBEL_ROOT` directory and source the following environment setup file. Use one of the following commands, depending on the type of shell that you use:

C shell

```
source siebenv.csh
```

Bourne or Korn shell

```
./siebenv.sh
```

TIP: Make sure that there is a space between the initial period and `./siebenv.sh`.

- 3 Make `$SIEBEL_ROOT/bin` the current directory.
- 4 Enter an EVT command, as follows:

```
./evt
```

You can include any of the flags described in [“Optional EVT Command-Line Flags” on page 252](#).

Running EVT in Query Mode

EVT can also be run in query mode. This mode is intended to work with other utilities that query the installation for information.

To run EVT in query mode, you use the `-q` flag. The `-q` flag must be accompanied by a properly formatted query string.

NOTE: In query mode, EVT ignores all of the other options (except `-h`).

The query string consists of `name=value` pairs delimited by the plus sign (+).

The output of EVT in this mode is either `pass[]` or `fail []`, with the current value of the parameter in brackets, where applicable. The following are examples for UNIX.

Example

```
% evt -q "Checkname=VAR+ParamName=SIEBEL_ASSERT_MODE+ParamValue=0"
```

```
fail []
```

This command returns `fail []` because `SIEBEL_ASSERT_MODE` is not set to 0 and its current value is `[NULL]`.

Example

```
% evt -q "Checkname=UNDEFVAR+ParamName=SIEBEL_ASSERT_MODE"
```

```
pass[]
```

This command returns `pass[]`. Because `SIEBEL_ASSERT_MODE` is not defined, `UNDEFVAR` checks whether the variable is defined. As expected, this check passes, and the current value is still `[NULL]`.

Optional EVT Command-Line Flags

You can run the EVT utility with various options as described in [Table 23 on page 252](#).

NOTE: If you do not provide `-e`, `-g`, `-s`, `-u`, and `-p` options, then EVT tries to query information from the configuration files under the `ENU` directory.

Table 23. Command-Line Flags Used with EVT

Flag	Description
-h	Prints a help message with a list of all of the flags that you can use with the EVT utility.
-g	The name of the Siebel Gateway Name Server. If it is not provided, then EVT picks up the name of the Siebel Gateway Name Server from the Siebel Server configuration file; for example, <code>enu/siebel.cfg</code> .
-s	The name of the Siebel Server. If it is not provided, then EVT tries to determine the name of the server from the directory tree.
-e	The name of the Siebel Enterprise. If it is not provided, then EVT determines the name of the Siebel Enterprise from the Siebel Server configuration file; for example, <code>enu/siebel.cfg</code> .
-u	The user name to use to log in to Server Manager. The default user name is <code>sadmin</code> .
-p	The password to log in to Server Manager. NOTE: If any <code>srvrmgr</code> parameters are provided incorrectly, then EVT will not be able to check Siebel Server parameters. To print the details of root cause, use the <code>-d SHOWERRORS</code> flag.
-o	The output format. EVT can generate output in several formats: TEXT (default), TEXTFILE, HTML, and HTMLFILE. For more information, see “Available EVT Output Formats” on page 253 .
-d	Runs the script in debug mode. Supported debug levels are shown in order of verbosity, starting with the least verbose level (see examples of this flag as follows): DEFAULT. (Default) Prints only check for pass, fail, or not executed. EXPLAIN. Prints a description of what has been checked and why. If a check cannot run, then no explanation is given. If a check executes and finds an error, then it reports the corrective actions to be taken. SHOWERRORS. Prints the same information as EXPLAIN, but, in addition, prints any errors encountered that prevented a check from executing. For example, if the check tried to verify that a particular file was executed, but the file does not exist, then SHOWERRORS provides the error that prevented the execution. SHOWCOMMENTS. Prints the same output as SHOWERRORS, but, in addition, prints more detailed information about how the check was implemented. The output represents debug information, for example: <code>Got value A from file X</code> . EVTLOG. Prints the same output as SHOWCOMMENTS, but, in addition, prints the execution log for EVT. This output is primarily useful to EVT developers.

Table 23. Command-Line Flags Used with EVT

Flag	Description
-l	The output directory to which reports are written.
-t	The type of server to check: <ul style="list-style-type: none"> ■ Siebel Server [SIEBSRVR] ■ Siebel Gateway Name Server [GTWYNS] ■ Database Server (RDBMS) [DBSERVER] ■ Siebel Web Server Extension [SWSE] <p>For example, if -t SWSE is specified, then EVT runs Web server-related checks (along with those checks that can be run on any type of server, such as for JRE).</p>
-f	The location of the evt.ini file. When EVT is started, it verifies the existence of this file. By default, the evt.ini file is located in the same directory as the EVT executable program. If the evt.ini file is located in a different directory, or has a different name, then you must use this flag to specify the location of the evt.ini file.
-q	Runs EVT in query mode. See “Running EVT in Query Mode” on page 251 .
-w	The location of the Web server installation (required for SWSE-related checks on UNIX).

Example 1

Starting EVT using a custom .ini file and generating HTML output:

```
evt -f evt_cust.ini -o HTML > output.htm
```

Example 2

Starting EVT using a custom .ini file and generating HTML output with details on what commands were run, what files were opened, and so on:

```
evt -f evt_cust.ini -o HTML -d SHOWCOMMENTS > output_debug.htm
```

Available EVT Output Formats

EVT supports the following output formats:

- **TEXT.** Prints all of the output directly to the console, terminal, or DOS window. This format is the only mode of operation when EVT is executed in query mode by giving the -q option. For an explanation of flags that can be used with EVT, see [“Optional EVT Command-Line Flags” on page 252](#).
- **TEXTFILE.** Prints all of the output to a log file. The file name format is *evt.hostname.timestamp.log*. The log is created in the current directory. To create the log in a specified directory, use the option -l *log_dir*. In this option, *log_dir* is the path to the directory that you want.

- **HTML.** Prints HTML output to the console, terminal, or DOS window. This format is mainly for redirecting the output to another program or utility that can consume the output or redirect it to a file.
- **HTMLFILE.** HTMLFILE output format creates an HTML file in the current directory. The file name takes the form `evt. hostname. timestamp. htm`, where:
 - *hostname* is the computer name where you are running EVT.
 - *timestamp* is the number of epoch seconds (starting from January 1, 1970). This value is used solely to maintain the uniqueness of file names.

It is recommended that you delete previously generated output files on a regular basis.

Changing EVT Output Text

EVT supports user-specified strings in output reports. By default, EVT output reports are generated using a message template. However, the user can specify any other string to be used as part of the report. The following user-defined output tags are supported:

- **USERPASSEDSTRING.** Overrides the internal message template and allows you to specify your own message, in case this check passes.
- **USERFAILEDSTRING.** Overrides the internal message template and allows you to specify your own message, in case this check fails.
- **USERNOTEXESTRING.** Overrides the internal message template and allows you to specify your own message, in case this check is not executed.

The user-defined message can contain some placeholders that are defined by EVT. Such placeholders are specified by using two underscores on each side. During execution of the checks, these placeholders are substituted. When the check runs, the following placeholders are defined:

- **CURRENTVALUE.** The current value of the parameter being checked.
- **PASSEDSTRING.** The system-defined *check passed* message.
- **FAILEDSTRING.** The system-defined failure or error message.
- **NOTEXESTRING.** The system-defined *check is not executed* message.
- **CHECKID.** The ID number of the currently executing check.

For example, assume a user-defined check like the following:

```
[Check241]
CHECKNAME=OSVERSION
OSTYPE=AI X
PARAMVALUE=5200-02
```

```
USERFAILEDSTRING=[__CHECKID__] Version __CURRENTVALUE__ is not supported anymore.
Please contact Mr. John Smith (j.smith@yourcompanyhere.com) to get your system
upgraded to __PARAMVALUE__.
```

In this example, when the placeholders are filled by values when the check executes, the error defined for the USERFAILEDSTRING tag appears in the output report as follows:

```
[Check241] Version 5100-02 is not supported anymore. Please contact Mr. John Smith (j.smith@yourcompanyhere.com) to get your system upgraded to 5200-02.
```


9

Cloning a Siebel Installation

This chapter explains how to clone an installation of Siebel Enterprise Server or Siebel Web Server Extension on one computer and deploy it on another computer. This chapter includes the following topics:

- [About Cloning a Siebel Installation on page 257](#)
- [Requirements When Cloning an Installation on page 260](#)
- [Limitations When Cloning an Installation on page 261](#)
- [Process of Cloning a Siebel Installation on page 262](#)
- [Properties Files Used in Cloning Operations on page 265](#)
- [Properties File Settings for Cloning an Installation on page 266](#)

About Cloning a Siebel Installation

You can copy or clone an existing installed instance of Siebel Enterprise Server or Siebel Web Server Extension on a source computer and then deploy the clone as a new instance on a target computer.

For a cloning operation, the existing installed Siebel software instance from which you create a clone is called the *source instance*, and the computer where the software instance is installed is called the *source computer*. The new Siebel software instance that you deploy is called the *target instance*, and the computer where you deploy it is called the *target computer*.

Use the cloning feature for the current release, Siebel CRM version 16.0. You can clone any source instance that is at the current release level.

About Cloning a Siebel Enterprise Server Installation

The primary intended usage case for Siebel Enterprise Server cloning is to clone an installed and configured instance of Siebel Server.

When you deploy a Siebel Server clone, you can optionally create a new Siebel Gateway Name Server on the target computer. Alternatively, you can specify that the target instance of Siebel Server should use an existing installed instance of Siebel Gateway Name Server on another computer.

When you create the clone for the Siebel Server source instance, you can include certain configuration data sets, such as the Siebel Server configuration or the Siebel Enterprise configuration. Typically, you export the Siebel Server configuration as part of the clone. If you will create a new Siebel Gateway Name Server on the target instance, then you also export the Siebel Enterprise configuration. When you deploy the clone, you can import this configuration data into the new or existing Siebel Gateway Name Server for the new target instance of Siebel Server.

To specify these (and other) variations in how you create and deploy a clone, you use different settings in the cloning properties files, which are described in [“Properties File Settings for Cloning an Installation” on page 266](#).

The files for the Siebel Database Configuration Utilities and Siebel EAI are also included if you create and deploy a clone for a Siebel Server instance for which these modules were also installed. However, do not use the Database Configuration Wizard on the target instance, because you already have it on the source instance.

Where to Obtain the Siebel Cloning Utility

The files that make up the Siebel cloning utility are provided in the file `clone.zip`. You can find `clone.zip` with the JAR files after you unpack the media zip files for the current release. For more information about obtaining the Siebel CRM media, see [“About Siebel CRM Releases” on page 300](#) and [“Obtaining Siebel Installation Media Files” on page 385](#).

You must save or copy the file `clone.zip` to any computer that will be used as a source or target computer for a cloning operation. On each source or target computer, you use a standard unpacking tool, such as WinZip or `unzip`, to extract files into a directory named `clone`.

Files Provided with the Siebel Cloning Utility

The Siebel cloning utility includes the following files:

- The Siebel cloning utility executable program for the operating system on which you run the utility: `clone.bat` (on Microsoft Windows) or `clone.sh` (on UNIX and Linux). These files are created in the `clone` directory that is created when you unpack the `clone.zip` file.
- The files `cloneconfig.jar` and `orainstaller.jar` are created in a subdirectory called `lib`.
- Several example properties files, which are text files that contain settings for use in different operations of the Siebel cloning utility. These files are created in a subdirectory called `templates`. For more information, see [“Properties Files Used in Cloning Operations” on page 265](#).

When you run the Siebel cloning utility at the command line, you specify the name of a properties file that you have updated to include all of the settings necessary for the operation that you are performing. For example, the properties file must include a pointer to the snapshot file that you are creating or deploying, the host name of the source or target computer, and so on. For more information, see [“Properties File Settings for Cloning an Installation” on page 266](#).

About Running the Siebel Cloning Utility

Cloning an existing source instance includes separate tasks to create the clone on a source computer and to deploy the clone on a target computer. Both of these tasks involve running the Siebel cloning utility. These tasks are outlined in [“Process of Cloning a Siebel Installation” on page 262](#).

- **Creating the clone.** The operation to create a clone creates a file called the *snapshot file*, which is a ZIP file representing the installed software that you are cloning, in compressed form. This task is referred to as *creating a clone*. The term *clone*, when it is used as a noun, refers to the snapshot file. What is included in the snapshot file depends on the settings that you specify for the operation to create the clone.

- **Deploying the clone.** The operation to deploy a clone uses the snapshot file to deploy the clone on the target computer. This task is referred to as *deploying a clone*. What is included in the deployed clone depends on the contents of the snapshot file and on the settings that you specify for the operation to deploy the clone.

About Creating and Deploying a Full Clone or a Delta Clone

A clone that you create and deploy can be either a full clone or a delta clone, as follows:

- **Full clone.** Creating and deploying a *full clone* copies a complete installation on the source computer and deploys it on the target computer, assuming that no existing installation is present on the target computer. For a source instance that has not been cloned before, you always create a full clone. To deploy a new target instance, you always deploy a full clone.
- **Delta clone.** Creating and deploying a *delta clone* (also called a *partial clone*) identifies differences in a source instance, relative to a snapshot file, and deploys new or updated files on an existing target instance that had been created using this same snapshot file. Creating a delta clone generates a *delta snapshot file*, which represents the differences between the source instance in its current state and the original full snapshot file. Deploying a delta clone updates the target instance to include these differences.

Excluding Files or File Types

You can specify files or file types that you want to exclude from a cloning operation. You do this by specifying a value for the Exclude File List parameter in the properties file. It is strongly recommended that you do not exclude any files from the cloning operation unless you are certain that the target instance does not require those files. Log files are never cloned and do not have to be specified for exclusion.

About the Log Files for Cloning Operations

During a cloning operation, whether creating or deploying a clone, a log file is written to the `clone_log` subdirectory of the temp directory. Verify the location of the temp directory, as defined by the TEMP environment variable.

After the cloning operation has completed, the log file is copied into the Log directory in the location of the snapshot file.

Related Topics

["Requirements When Cloning an Installation" on page 260](#)

["Limitations When Cloning an Installation" on page 261](#)

["Process of Cloning a Siebel Installation" on page 262](#)

["Properties Files Used in Cloning Operations" on page 265](#)

["Properties File Settings for Cloning an Installation" on page 266](#)

Requirements When Cloning an Installation

The following are requirements for using the cloning feature for Siebel Business Applications installations and configurations:

- **Using the cloning feature requires the current release, Siebel CRM version 16.0.** You can clone any source instance that is at the current release level.
- **The source and target computer environments must be consistent.** The source computer and the target computer must use the same supported server operating system, including the same operating system version and patch updates. The target computer must meet all of the documented requirements for installing the Siebel software that you are cloning, including those documented in this guide and those documented in the Certifications tab on My Oracle Support.
- **Java Runtime Environment (JRE) must be installed.** JRE must be installed on any computer where you will run the Siebel cloning utility, that is, on the source computer and on the target computer. Also, the JAVA_HOME environment variable must be set to point to the JRE installation location at the time that you run the Siebel cloning utility (for example, /usr/java8_64 on AIX). On the source computer, JRE was already installed with the Oracle Universal Installer software, under the JDK directory, so you can set JAVA_HOME to this installation location. For supported version information, see the Certifications tab on My Oracle Support.
- **For Siebel Enterprise Server, the database client and data source must be present on the target computer.** For Siebel Enterprise Server, the database client software must be installed and configured on the target computer, and the data source must be created (using the same name as on the source computer) before you deploy the clone. The database client on the target computer must be able to connect to the correct database. For an Oracle Database, you must also add entries to tnsnames.ora, as needed. For more information, see [Chapter 12, "Configuring the RDBMS."](#)
- **The installation directory on the source instance and the target instance must be the same.** For example, these directories might be /siebel/16.0.0.0.0/ses for Siebel Enterprise Server, or /siebel/16.0.0.0.0/sweapp for SWSE.

When you edit the properties file for deploying a clone on the target instance, specify the directory into which you installed the Siebel CRM software on the source instance, such as /siebel/16.0.0.0.0.

NOTE: The installation directories on the source computer might not match these examples. In particular, the default installation paths were constructed differently where the Siebel CRM software was initially installed using the original Siebel CRM version 8.1.1 installers, which used InstallShield technology instead of Oracle Universal Installer.

- **The properties file for any cloning operation must contain a valid user name (such as SADMIN) and password.** For security reasons, it is strongly recommended that you include a password in any properties file only when you are using the properties file.
- **You must specify all of the applicable data in the properties file that are necessary for the cloning operation that you are performing.**

- **You must start all of the necessary Siebel modules or create all of the necessary configurations that are required for the cloning operation that you are performing.** For example:
 - Before you create a clone of an installed and configured instance of Siebel Enterprise Server software on a source computer, the applicable Siebel Gateway Name Server must be running. Depending on your cloning case, the Siebel Gateway Name Server might be running on the source computer as part of the source instance, or it might be running on another computer.
 - Before you deploy a clone of an installed and configured instance of Siebel Enterprise Server software (Siebel Server only, in this case) on a target computer, where the Siebel Gateway Name Server is running on a different computer, the Siebel Enterprise for the target environment must already have been configured on that Siebel Gateway Name Server. The clone must have been created using the same settings as the Siebel Enterprise that applied to the source environment.
- **The Oracle Configuration Manager service cannot be running during a cloning operation.** If the Oracle Configuration Manager service is running on either the source computer or the target computer, then you must stop this service before you initiate any cloning operation. Otherwise, errors occur and the operation cannot complete successfully.

The name of the Oracle Configuration Manager service is `OracleOracleHomeNameConfigurationManager`, where *OracleHomeName* is the Oracle Home name for the Siebel CRM installation on this computer.

Related Topics

["About Cloning a Siebel Installation" on page 257](#)

["Limitations When Cloning an Installation" on page 261](#)

["Process of Cloning a Siebel Installation" on page 262](#)

["Properties Files Used in Cloning Operations" on page 265](#)

["Properties File Settings for Cloning an Installation" on page 266](#)

Limitations When Cloning an Installation

The following are limitations for using the cloning feature for Siebel Business Applications installations and configurations:

- **Support for the cloning feature is currently limited to Siebel Enterprise Server and Siebel Web Server Extension (SWSE).**
- **For Siebel Enterprise Server, the cloning feature is primarily intended to be used to clone a single, configured, source instance of Siebel Server to a target computer.**
 - The cloning feature is not intended to be used as an alternative to installation of the Siebel Enterprise Server software.

- A Siebel Server that you clone can optionally include the Siebel Gateway Name Server. It is possible to clone a Siebel Gateway Name Server installation that does not also include a Siebel Server, but this is not the primary usage case.
- **For Siebel Web Server Extension, the cloning feature currently supports cloning an installation only.** SWSE configurations are not included in the operations to create or deploy the clone. Although parts of the eapps.cfg file are updated when you deploy the SWSE target instance, you must configure this SWSE instance in the standard way (by applying the SWSE logical profile) after you deploy the clone.

Related Topics

- ["About Cloning a Siebel Installation" on page 257](#)
- ["Requirements When Cloning an Installation" on page 260](#)
- ["Process of Cloning a Siebel Installation" on page 262](#)

Process of Cloning a Siebel Installation

The installation process requires multiple tasks that you perform in the following general sequence:

- 1 ["Creating a Clone on a Source Computer" on page 262.](#)
- 2 ["Deploying a Clone on a Target Computer" on page 263.](#)

Related Topics

- ["About Cloning a Siebel Installation" on page 257](#)
- ["Requirements When Cloning an Installation" on page 260](#)
- ["Limitations When Cloning an Installation" on page 261](#)
- ["Properties Files Used in Cloning Operations" on page 265](#)
- ["Properties File Settings for Cloning an Installation" on page 266](#)

Creating a Clone on a Source Computer

Use the following procedure to create a clone on a source computer. After you create a clone, you deploy the clone on a target computer. This task is part of ["Process of Cloning a Siebel Installation" on page 262.](#)

To create a clone on a source computer

- 1 Determine your goals for the cloning operation that you are performing.
- 2 Log on to the server computer on which you will create the clone.
- 3 Open a shell window.
- 4 Copy the Siebel cloning utility and all of the relevant files to the target computer.

- 5 Copy one of the existing properties files, and edit the copy appropriately for your operation to create a clone. Use a properties file that is similar to one of the following:
 - For a cloning operation for Siebel Server, use a file that is similar to `unixsource_ses.properties`.
 - For a cloning operation for Siebel Web Server Extension, use a file that is similar to `unixsource_swse.properties`.

For example, the properties file must specify the location of the snapshot file that you are creating. Several other settings are required for creating a clone on a source computer.

- 6 Enter a command like the following to run the Siebel cloning utility:

```
./clone.sh -p properties_file -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *properties_file* is the name of the properties file that you prepared for this operation.
 - *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#).
 - *inventory_location* is the full path of the `oralnst.loc` file (for example, `/export/home/oralnst.loc`), which points to the Oracle Universal Installer inventory location. Use the `-invPtrLoc` option if you want to specify an inventory pointer file other than the default.
- 7 When the operation is complete, validate the creation of the snapshot file in the specified location. Also review the command output and the log file to confirm that the operation completed successfully without any errors.
 - 8 If errors are encountered when creating the clone, then do the following:
 - Delete the snapshot file.
 - Review requirements and correct errors.
 - Restart the operation to create the clone.

Deploying a Clone on a Target Computer

Use the following procedure to deploy a clone on a target computer. Before you can deploy a clone on a target computer, you must create it on a source computer. This task is part of [“Process of Cloning a Siebel Installation” on page 262](#).

To deploy a clone on a target computer

- 1 Determine your goals for the cloning operation that you are performing.
- 2 Verify that the clone was created on the source computer correctly for your purposes.
- 3 Log on to the server computer on which you will deploy the clone.

- 4 Install and configure the database client software on the target computer. Also create the data source using the same name as on the source computer.
- 5 Open a shell window.
- 6 Create an installation directory on the target computer that corresponds to the installation location on the source computer.

For example, you might create a directory like `/siebel/16.0.0.0.0`.

- 7 Copy the Siebel cloning utility and all of the relevant files to the target computer.
- 8 Copy one of the existing properties files, and edit the copy appropriately for your operation to deploy a clone. Use a properties file that is similar to one of the following:
 - For an operation to deploy a clone for the Siebel Server, use a file that is similar to `unixtarget_ses.properties`.
 - For an operation to deploy a clone for the Siebel Web Server Extension, use a file that is similar to `unixtarget_swse.properties`.

For example, the properties file must specify the location of the snapshot file that you are deploying. Several other settings are required for deploying a clone to a target computer.

- 9 Validate that the snapshot file is located in a suitable location for the deployment operation that you are performing. Copy the file to another location, if necessary.

NOTE: You might have created the snapshot file in a network location that is accessible to both the source computer and the target computer. Or, you might have to copy the snapshot file to another location, such as on the target computer, before you run the Siebel cloning utility to deploy the clone.

- 10 Enter a command like the following to run the Siebel cloning utility:

```
. /clone.sh -p properties_file -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *properties_file* is the name of the properties file that you prepared for this operation.
 - *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. This option is not required on other operating systems. For more information about the JRE requirements for AIX, see ["Requirements Specific to UNIX or Linux Operating Systems"](#) on page 335.
 - *inventory_location* is the full path of the `oralnst.loc` file (for example, `/export/home/oralnst.loc`), which points to the Oracle Universal Installer inventory location. Use the `-invPtrLoc` option if you want to specify an inventory pointer file other than the default.
- 11 When the operation is complete, validate the creation of a valid installation as a result of deploying the clone. Also review the command output and the log file to confirm that the operation completed successfully without any errors.
 - 12 Perform any additional tasks that are necessary to set up the deployed clone to function as a valid installation.

For example, if you cloned an installation of Siebel Web Server Extension, then you must run the SWSE Configuration Wizard to complete the configuration of the target instance.

13 If errors are encountered when deploying the clone, then do the following:

- Look for any service generated by the Siebel Enterprise Server installer (Siebel Gateway Name Server or Siebel Server).
- If the clone fails after the configuration is imported, then:
 - Microsoft Windows: Delete from the registry any newly created services related to the deployed instance.
 - UNIX or Linux: Stop any process related to the deployed instance.
- Delete the deployed target instance.
- Review requirements and correct errors.
- Restart the operation to deploy the clone.

Properties Files Used in Cloning Operations

Table 24 on page 265 lists several properties files that are provided for use with the Siebel cloning utility. Before you perform a cloning operation, copy an existing properties file, such as one of the following files, and edit the copy appropriately for your operation to create or deploy a clone.

TIP: Retain the original properties files, and do not modify them. Edit only copies of the properties files for use in your cloning operations. You can also save multiple versions of any file with some of the settings that you typically use, to serve as templates for future use.

Table 24. Siebel Cloning Utility Properties Files

File Name	Operating System	Cloning Operation	Installable Module
unixsource_ses.properties	UNIX	Clone	Siebel Enterprise Server
unixtarget_ses.properties	UNIX	Deploy	Siebel Enterprise Server
unixsource_swse.properties	UNIX	Clone	Siebel Web Server Extension
unixtarget_swse.properties	UNIX	Deploy	Siebel Web Server Extension

Related Topics

[“Properties File Settings for Cloning an Installation” on page 266](#)

Properties File Settings for Cloning an Installation

Table 25 on page 266 describes the possible settings in the properties files for different cloning operations and provides some usage information. The properties files themselves also provide basic usage information. Different settings apply depending on the particulars of your cloning operation, such as whether you are creating or deploying a clone, cloning the Siebel Server or the Siebel Web Server Extension, using Microsoft Windows or UNIX, creating or deploying a full clone or a delta clone, and so on.

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Product	Creating a clone Deploying a clone	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ ses. Creates or deploys a clone of the Siebel Enterprise Server. ■ swse. Creates or deploys a clone of the Siebel Web Server Extension. <p>This setting cannot be null. It is predefined in the properties files provided with the Siebel cloning utility.</p> <p>The properties files for cloning the Siebel Enterprise Server include <i>ses</i> in the file name. The properties files for cloning the SWSE include <i>swse</i> in the file name.</p>
Mode	Creating a clone (which uses the value <i>clone</i>) Deploying a clone (which uses the value <i>deploy</i>)	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ clone. Creates a clone (that is, a snapshot file) on a source computer. ■ deploy. Deploys a clone on a target computer, using a previously created snapshot file. <p>This setting cannot be null. It is predefined in the properties files provided with the Siebel cloning utility.</p> <p>The properties files for creating a clone include <i>source</i> in the file name. The properties files for deploying a clone include <i>target</i> in the file name.</p>

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Type	Creating a clone Deploying a clone	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ full. Creates or deploys a full clone, using a complete snapshot file. ■ delta. Creates or deploys a partial (delta) clone, using a delta snapshot file. <p>This setting cannot be null. It is predefined as <i>full</i> in the properties files provided with the Siebel cloning utility.</p>
Source Location	Creating a clone	The location of the source instance for which you are creating a clone. This setting cannot be null.
Target Location	Deploying a clone	The location of the target instance where you are deploying a clone. This setting cannot be null. The value must be the same as the location of the source instance.
Snapshot Location	Creating a clone Deploying a clone	The location of the snapshot file that you are creating or deploying. This setting cannot be null.
Zip FileName	Creating a clone Deploying a clone	<p>The name of the snapshot file, including the file extension, that will be created in the snapshot location or that will be deployed from the snapshot location. This setting cannot be null.</p> <p>For Siebel Enterprise Server, an example file name is <i>sessnapshot.zip</i>. For SWSE, an example file name is <i>swsesnapshot.zip</i>.</p>
Delta Zip FileName	Creating a clone (creating a delta clone only) Deploying a clone (deploying a delta clone only)	The name of the delta snapshot file, including the file extension, that will be created in the snapshot location or that will be deployed from the snapshot location. This setting cannot be null for an operation to create or deploy a delta clone (that is, an operation of type <i>delta</i>).
Exclude File List	Creating a clone	A comma-separated list of files in the source instance that will be excluded when you create a clone. You can use wildcards. For each file that you specify, you must include the full path.

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Source Host Name	Creating a clone (for Siebel Enterprise Server only)	The host name of the source computer for which you are creating a clone. This setting cannot be null.
Target Host Name	Deploying a clone	The host name of the target computer on which you are deploying a clone. This setting cannot be null.
Target Gateway Server Host Name	Deploying a clone (for Siebel Enterprise Server only)	The host name of the computer hosting the Siebel Gateway Name Server for the target instance.
Gateway Port	Creating a clone (for Siebel Enterprise Server only) Deploying a clone (for Siebel Enterprise Server only)	The port number of the Siebel Gateway Name Server for the source instance or target instance.
Language	Creating a clone (for Siebel Enterprise Server only) Deploying a clone (for Siebel Enterprise Server only)	The language code (such as RUS for Russian) for the primary language for the source instance or target instance. You must use the same setting for creating and for deploying a clone. This setting cannot be null.
UserName	Creating a clone (for Siebel Enterprise Server only) Deploying a clone (for Siebel Enterprise Server only)	The name of the Siebel Administrator user who will access the source instance or target instance, such as SADMIN. This setting cannot be null.
Password	Creating a clone (for Siebel Enterprise Server only) Deploying a clone (for Siebel Enterprise Server only)	The password for the Siebel Administrator user. This setting cannot be null.

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Source Enterprise Name	Creating a clone (for Siebel Enterprise Server only)	<p>The name of the Siebel Enterprise for the source instance.</p> <p>Specify the Siebel Enterprise name if you are exporting the Siebel Enterprise configuration when you create the clone. Do this if deploying the clone will also create a new Siebel Gateway Name Server on the target computer. To export the Siebel Enterprise configuration, you also must specify Export Enterprise = Y.</p> <p>If no value is provided, then no Siebel Enterprise configuration is exported when you create the clone.</p>
Source Siebel Server Name	Creating a clone (for Siebel Enterprise Server only)	<p>The name of the Siebel Server for the source instance.</p> <p>Specify the Siebel Server name if you are exporting the Siebel Server configuration when you create the clone. This is the expected usage case for cloning a Siebel Server. To export the Siebel Server configuration, you must specify Export Siebel Server = Y.</p> <p>If no value is provided, then no Siebel Server configuration is exported when you create the clone.</p>
Export Enterprise	Creating a clone (for Siebel Enterprise Server only)	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ Y. Exports the Siebel Enterprise configuration when you create a clone. This setting assumes that the Siebel Enterprise has been defined for the source instance and is specified using Source Enterprise Name. The Siebel Gateway Name Server must be running when you create the clone. ■ N. Does not export the Siebel Enterprise configuration when you create a clone. <p>This setting cannot be null.</p>

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Export Siebel Server	Creating a clone (for Siebel Enterprise Server only)	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ Y. Exports the Siebel Server configuration when you create a clone. This setting assumes that the Siebel Server is running on the source instance and is specified using Source Siebel Server Name. The Siebel Gateway Name Server must be running when you create the clone. ■ N. Does not export the Siebel Server configuration when you create a clone. <p>This setting cannot be null.</p>
Target Enterprise Name	Deploying a clone (for Siebel Enterprise Server only)	<p>The name of the Siebel Enterprise for the target instance. This setting cannot be null.</p> <p>If you exported the Siebel Enterprise configuration when you created the clone, then set Target Enterprise Name to match the setting you used for Source Enterprise Name. In this case, you are creating a new Siebel Gateway Name Server on the target computer. To import the Siebel Enterprise configuration, you must specify Import Enterprise = Y and set Create Gateway = Y.</p> <p>If an existing Siebel Gateway Name Server runs on a computer that is different from the target computer, then specify the name of an existing Siebel Enterprise and point to an existing Siebel Gateway Name Server, which must be running. In this case, you are not creating the Siebel Gateway Name Server on the target computer. You must set Import Enterprise = N and Create Gateway = N.</p>
Target Siebel Server Name	Deploying a clone (for Siebel Enterprise Server only)	<p>The name of the Siebel Server for the target instance. This setting cannot be null.</p> <p>To import the Siebel Server configuration, you also specify Import Siebel Server = Y.</p>

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Import Enterprise	Deploying a clone (for Siebel Enterprise Server only)	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ Y. Imports the Siebel Enterprise configuration when you deploy a clone. This setting assumes that the Siebel Enterprise configuration was exported when you created the clone. The Siebel Gateway Name Server must be running when you deploy the clone. ■ N. Does not import the Siebel Enterprise configuration when you deploy a clone. <p>This setting cannot be null.</p>
Import Siebel Server	Deploying a clone (for Siebel Enterprise Server only)	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ Y. Imports the Siebel Server configuration when you deploy a clone. This setting assumes that the Siebel Server configuration was exported when you created the clone. The Siebel Gateway Name Server must be running when you deploy the clone. ■ N. Does not import the Siebel Server configuration when you deploy a clone. <p>This setting cannot be null.</p>
Create Gateway	Deploying a clone (for Siebel Enterprise Server only)	<p>The possible values are:</p> <ul style="list-style-type: none"> ■ Y. Creates the Siebel Gateway Name Server when you deploy a clone. The Siebel Gateway Name Server is created using the settings for Target Host Name, Gateway Port, Username, and Password. ■ N. Does not create the Siebel Gateway Name Server when you deploy a clone. <p>This setting cannot be null.</p>
Gateway.VersionString	Deploying a clone (for Siebel Enterprise Server only)	<p>Specifies the version string for the Siebel Gateway Name Server. Use this setting if you are creating a new instance of Siebel Gateway Name Server on the target computer.</p>

Table 25. Settings in the Siebel Cloning Utility Properties File

Setting	Cloning Operation	Description
Gateway.UseDefault	Deploying a clone (for Siebel Enterprise Server only)	Use this setting if you are creating a new instance of the Siebel Gateway Name Server on the target computer.
Gateway.CreateDefault	Deploying a clone (for Siebel Enterprise Server only)	Use this setting if you are creating a new instance of the Siebel Gateway Name Server on the target computer.
Update SWSE	Deploying a clone (for SWSE only)	Updates the Siebel Web Server Extension configuration files (eapps.cfg and eapps_sia.cfg) to include the target host name. This setting must be Y.

Related Topics

["Requirements When Cloning an Installation" on page 260](#)

["Limitations When Cloning an Installation" on page 261](#)

["Properties Files Used in Cloning Operations" on page 265](#)

10 Uninstalling Siebel Business Applications

This chapter provides instructions for uninstalling Siebel Business Applications. It includes the following topics:

- [About Uninstalling Siebel Business Applications on page 273](#)
- [Process of Removing Configuration Data on page 279](#)
- [Uninstalling Siebel Enterprise Server or Siebel Web Server Extension on page 283](#)
- [Uninstalling Siebel Web Clients or Siebel Tools on page 291](#)
- [About Uninstalling Earlier Versions of Siebel Business Applications on page 295](#)

About Uninstalling Siebel Business Applications

The topics in this chapter describe how to uninstall the current release, Siebel CRM version 16.0. Separate instructions are provided for server and client software modules. This chapter describes both full uninstallation and rollback uninstallation:

- *Full uninstallation* removes the installed Siebel software module.
- *Rollback uninstallation* (also referred to as *rollback* or *rolling back*) uninstalls a Siebel CRM release that you had installed as a patch release and reverts to the previously installed software release, where applicable. With a rollback uninstallation, the release that you can revert to depends on how you originally installed the Siebel CRM software module.

NOTE: Siebel Management Server is no longer provided, as of Siebel Innovation Pack 2014. For more information about uninstalling any software for a prior Siebel CRM version, see [“About Uninstalling Earlier Versions of Siebel Business Applications” on page 295](#).

This topic includes the following information:

- [“Uninstallation Options for Siebel Modules” on page 274](#)
- [“Requirements for Uninstalling Siebel Business Applications” on page 274](#)
- [“Limitations for Uninstalling Siebel Business Applications” on page 277](#)

Related Books

Siebel Deployment Planning Guide

Siebel System Administration Guide

Siebel Global Deployment Guide

Uninstallation Options for Siebel Modules

This topic summarizes the uninstallation options for the Siebel modules described in this guide.

This topic is part of [“About Uninstalling Siebel Business Applications” on page 273](#).

The following uninstallation options apply:

- If you installed the current release as a new installation, then you can perform a full uninstallation. Performing a rollback uninstallation is not an option in this case. This option applies to Siebel Enterprise Server, Siebel Web Server Extension (SWSE), Siebel Web Client, and Siebel Tools.
- If you installed the current release as a migration installation, then you can perform a rollback uninstallation to revert to your previously installed software version (such as Siebel CRM version 8.1.1.x, Siebel CRM version 8.2.2.x, or Siebel CRM version 15.x). You can also perform a full uninstallation. This option applies to Siebel Enterprise Server, SWSE, Siebel Web Client, and Siebel Tools.
CAUTION: Different rollback installation methods are provided for different situations. Make sure to use the correct method for your situation.
- If you installed a Siebel Patchset release on top of an installation of the current release, then you can uninstall the Siebel Patchset. This guide does not describe uninstallation (rollback) for Siebel Patchset releases. For the readme documents for individual Siebel Patchset releases, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

Related Topics

[“Requirements for Uninstalling Siebel Business Applications” on page 274](#)

[“Limitations for Uninstalling Siebel Business Applications” on page 277](#)

Requirements for Uninstalling Siebel Business Applications

Uninstallation of Siebel Business Applications software is subject to various requirements.

This topic is part of [“About Uninstalling Siebel Business Applications” on page 273](#).

The following requirements apply to uninstalling Siebel Business Applications software:

- **Use documented methods.** To successfully uninstall, you must use the supported methods documented in this chapter and observe all of the requirements and limitations that apply for uninstalling each module. Review this entire chapter before you uninstall any software.
- **Before a full uninstallation, you must remove configuration data.** For Siebel Enterprise Server components and Siebel Web Server Extension (SWSE) that were previously configured using Siebel Configuration Wizards, you must perform wizard tasks to remove the configuration data before you uninstall the Siebel software. For detailed information, see [“Process of Removing Configuration Data” on page 279](#).

- **You must have the required access.** When you uninstall an instance of Siebel Enterprise Server or Siebel Web Server Extension, you must either be the same user or be a user in the same group as the user who performed the installation. This requirement applies to both full uninstallation and rollback uninstallation.
- **Do not delete installation directories until you have performed a full uninstallation.** Do not delete the installation directories for any Siebel module until after you have performed a full uninstallation of the module. After a full uninstallation has completed successfully, you might have to restart your computer. Afterwards, you can safely delete the remaining directories. (Do not delete any installation directories after you perform a rollback uninstallation.)
- **Siebel modules must use the same version after a rollback uninstallation.** If you roll back to the previously installed version for Siebel Enterprise Server and SWSE, then you must also perform a similar rollback uninstallation for all of the other Siebel modules sharing the same Siebel Enterprise and Siebel database. After performing a rollback, see the documentation that applies to your currently installed Siebel software version for information about this version.
- **To perform a rollback uninstallation, you must have retained the previous installation.** When you installed the current release as a migration installation, the existing installation directory was renamed. You must retain this installation directory in order to be able to roll back to the version that it represents.

During a migration installation, the original installation directory is renamed from *Original Name* to *Original Name_pre16.0*. The new installation directory is named *Original Name*. Examples follow:

- If the original installation directory name for Siebel Enterprise Server was *ses*, then this directory is renamed to *ses_pre16.0*. The new installation directory is named *ses*.
 - If the original installation directory name for SWSE was *sweapp*, then this directory is renamed to *sweapp_pre16.0*. The new installation directory is named *sweapp*.
 - If the original installation directory name for Siebel Web Client was *Client_1*, then this directory is renamed to *Client_1_pre16.0*. The new installation directory is named *Client_1*.
 - If the original installation directory name for Siebel Tools was *Tools_1*, then this directory is renamed to *Tools_1_pre16.0*. The new installation directory is named *Tools_1*.
- **For Siebel Enterprise Server and SWSE, you must use the correct rollback uninstallation method for your situation.** Different rollback installation methods are provided for different situations. You must use the correct method for your situation, as follows:
 - If you originally installed Siebel CRM version 8.1.1 (using the InstallShield installer) and are now rolling back to Siebel CRM version 8.1.1 through version 8.1.1.7, then you must use the Oracle Universal Installer uninstallation option to roll back the current version. (You must use this method because it removes the defined Oracle home, which no longer applies after the rollback in this case.)
 - If you are rolling back to Siebel CRM version 8.1.1.8 or later, version 8.2.2.x, or version 15.x, then you must use the manual steps to roll back the current version. (You must use this method because it does not remove the defined Oracle home, which still applies after the rollback in this case. If the Oracle home is removed, then the rollback process is incomplete and your original installation cannot be used in its current state.)

- **After a rollback uninstallation, you must restore the Siebel Repository.** New functionality and bug fixes associated with the current release are no longer available after a rollback uninstallation. After you roll back the current release, you must remove any configuration changes and restore the Siebel Repository and the SRF files to the state when you first installed the current release.

NOTE: After you installed the current release as a migration installation, you would have used the Incremental Repository Merge feature to update the Siebel Repository and to make other Siebel database changes. For more information about Incremental Repository Merge, see *Siebel Database Upgrade Guide*.

- **After a rollback uninstallation, you must re-enable the applicable services.** After a rollback uninstallation, the Siebel Server service and the Siebel Gateway Name Server service are disabled and must be re-enabled. For example, you might edit the service properties and specify that "startup-type" is automatic.
- **After a rollback uninstallation, refer to earlier versions of the documentation.** After you roll back the current release, you must refer to the documentation that applies to the Siebel CRM version that you revert to. For example, if you revert to Siebel CRM version 8.1.1.7, then for information about the new effective version of your installed software you must refer to version 8.1, Rev. A of the *Siebel Installation Guide* for the operating system you are using. This version of the guide is available from 1461732.1 (Article ID) on My Oracle Support.

For versions of *Siebel Maintenance Release Guide* for applicable releases, see 880452.1 (Article ID) on My Oracle Support for version 8.1.1.x or see 1441523.1 (Article ID) for version 8.2.2.x. For applicable Siebel Patchset releases, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

- **After a rollback uninstallation, verify the software version.** After a rollback uninstallation, verify the version number of the installed software that you revert to. See the documentation that applies to your new effective version. See also "[Verifying Installation for the Siebel Enterprise Server](#)" on page 213 and related topics.
- **After a rollback uninstallation, you must revert to previous required versions of third-party software.** After a rollback uninstallation to a version prior to Siebel Innovation Pack 2016, you must revert installed third-party (or non-Siebel Oracle) software to the versions supported for the version of Siebel CRM that you are reverting to, where necessary. For supported versions of third-party software, see the Certifications tab on My Oracle Support.
- **After a rollback uninstallation, you must reconfigure SWSE.** After a rollback uninstallation to a version prior to Siebel Innovation Pack 2016, you must reconfigure the Siebel Web Server Extension (SWSE). For more information, see "[Additional Tasks for Migration Installations](#)" on page 62 and "[About Configuring Siebel Business Applications](#)" on page 69.
- **After a rollback uninstallation, configure Oracle Configuration Manager (if necessary).** If Oracle Configuration Manager was not configured before you performed a migration installation of Siebel Enterprise Server, then, after a rollback to the original installation, you must configure this instance of Oracle Configuration Manager manually in order for it to function properly. For more information about Oracle Configuration Manager, see "[About Oracle Configuration Manager](#)" on page 303.
- **Clustered nodes present special requirements.** Clustered nodes present special requirements that might change part of the installation and uninstallation process from what is described in this guide.

The following recommendations apply to performing a full uninstallation:

- **Uninstall Database Configuration Utilities only after backing up files.** Before you uninstall an instance of Siebel Enterprise Server that includes the Database Configuration Utilities and Siebel Server, it is strongly recommended that you back up relevant files, such as `summary.html` and `summary.txt` in the `DBSRVR_ROOT` directory and the files in the `log` directory under `$SIEBSRVR_ROOT`.
- **Uninstall Database Configuration Utilities only after removing configuration data.** Before you uninstall an instance of Siebel Enterprise Server that includes the Database Configuration Utilities and Siebel Server, it is strongly recommended that you first remove the Siebel Enterprise configuration or the Siebel Gateway Name Server.

Related Topics

[“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#)

[“Uninstallation Options for Siebel Modules” on page 274](#)

[“Limitations for Uninstalling Siebel Business Applications” on page 277](#)

Related Books

Siebel Database Upgrade Guide

Limitations for Uninstalling Siebel Business Applications

Uninstallation of Siebel Business Applications software is subject to various limitations.

This topic is part of [“About Uninstalling Siebel Business Applications” on page 273](#).

The following limitations apply to uninstalling Siebel Business Applications software:

- **You cannot selectively uninstall Siebel Enterprise Server components installed together on the same computer.** For example, if you have installed Siebel Gateway Name Server and Siebel Server in the same Siebel Enterprise Server instance, then you cannot uninstall Siebel Server by itself. If you do not want to use this Siebel Server, then you can remove configuration data for this Siebel Server or disable the Siebel Server so that it does not run on this server computer. For information about disabling Siebel Server components, see *Siebel System Administration Guide*. See also [“Preparing to Run Siebel Server Components” on page 145](#).
- **You cannot selectively uninstall Siebel language packs.** If you have installed a particular Siebel language pack but determine that it is not needed on that installation, then you can deploy your applications using only the languages that you require. You cannot uninstall the Siebel language pack.

If you have already deployed languages that you do not require, then you can remove and recreate a Siebel Server configuration with fewer deployed languages, or recreate an SWSE logical profile with fewer deployed languages and reapply it to each installed SWSE instance. Alternatively, you can disable unneeded language-specific Application Object Managers or other components. For these tasks, you do not uninstall the Siebel software. For more information about multilingual deployments, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#) and *Siebel Global Deployment Guide*.

- **Limitations might apply for previous versions that you roll back to.** If you installed the current release as a migration installation and are rolling it back, then you can revert to the previously installed software version. After rolling back, however, you might not be able to roll back again to an earlier release. For more information, see [“About Uninstalling Earlier Versions of Siebel Business Applications” on page 295](#).
- **This guide describes uninstalling the current release only.** For information about uninstalling any version prior to the current release (for example, uninstalling Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x), see [“About Uninstalling Earlier Versions of Siebel Business Applications” on page 295](#).
- **This guide describes GUI uninstallation only.** Topics in this chapter describe full uninstallation by running Oracle Universal Installer in GUI mode. It is also possible to perform a full uninstallation by using unattended mode, similar to the installation process described in [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode” on page 58](#).
- **This guide does not describe uninstalling Siebel Patchset releases.** If you installed a Siebel Patchset release on top of an installation of the current release, then you can uninstall the Siebel Patchset. For information about uninstalling a Siebel Patchset release, see the readme document for the Siebel Patchset. This guide does not describe uninstallation for Siebel Patchset releases. For the readme documents for individual Siebel Patchset releases, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

Related Topics

[“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#)

[“Uninstallation Options for Siebel Modules” on page 274](#)

[“Requirements for Uninstalling Siebel Business Applications” on page 274](#)

[“About Uninstalling Earlier Versions of Siebel Business Applications” on page 295](#)

Related Books

Siebel System Administration Guide

Siebel Global Deployment Guide

Siebel Patchset Installation Guide for Siebel CRM, 1614310.1 (Article ID) on My Oracle Support

Process of Removing Configuration Data

This topic describes the tasks that you perform for removing the configuration data for the Siebel Enterprise Server components and the Siebel Web Server Extension (SWSE). You perform these tasks using the same Siebel Configuration Wizards that you used for configuration.

Removing configuration data is related to uninstalling the Siebel software, but it is distinct from it. Before you uninstall Siebel Enterprise Server or SWSE, you must remove configuration data that was previously created for these modules, using Configuration Wizard tasks for this purpose. Do not perform tasks to remove configuration data where a module was not previously configured. In some cases, you might choose to remove configuration data without uninstalling.

Perform the tasks for removing configuration data in the following order (the reverse of the order of configuration):

- 1 "Removing the SWSE Configuration" on page 279
- 2 "Removing the Siebel Server Configuration" on page 280
- 3 "Removing the SWSE Logical Profile" on page 280
- 4 "Removing the Siebel Enterprise Configuration" on page 281
- 5 "Removing the Siebel Gateway Name Server Configuration" on page 282

For general information and procedures for starting the Siebel Configuration Wizards, see [Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension."](#)

Removing the SWSE Configuration

The SWSE Configuration Wizard removes the physical configuration from the SWSE. This task removes the eapps.cfg file and removes the Siebel application virtual directories that were created when you applied the SWSE logical profile. This task automatically stops and restarts the Web server.

This task is a step in ["Process of Removing Configuration Data" on page 279.](#)

To remove the SWSE configuration

- 1 Start the SWSE Configuration Wizard, as described in ["Starting a Siebel Configuration Wizard" on page 71.](#)
- 2 Choose the task Remove the SWSE Configuration, and click Next.
- 3 Click the check box for Remove Selected Siebel Web Server Extension, and click Next.

NOTE: When the task to remove the SWSE configuration is complete, the Web server is stopped and restarted automatically.

Related Topics

["Additional Tasks for Migration Installations" on page 62](#)

[Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension"](#)

["About Uninstalling Siebel Business Applications" on page 273](#)

[“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#)

Removing the Siebel Server Configuration

The Siebel Server Configuration Wizard removes Siebel Server configuration data from the Siebel Gateway Name Server and removes the Siebel Server service from the local server computer.

NOTE: When removing Siebel Server configuration data using this wizard task, observe all of the documented requirements. Perform this task only if you have uninstalled, or removed all of the applicable configuration data for, all of the installed instances of SWSE that depend on this Siebel Server. Before you uninstall a previously configured instance of Siebel Server, you must perform this task. This task can also be useful in cases that do not involve uninstallation. When you perform this task, the Siebel Gateway Name Server must be running and the Siebel Server service must be stopped.

If this Siebel Server was not configured, then this task is not necessary before uninstallation.

This task is a step in [“Process of Removing Configuration Data” on page 279](#).

To remove the Siebel Server configuration

- 1 Make sure that the Siebel Gateway Name Server is running.
- 2 Make sure that the Siebel Server service is not running. Stop the service if necessary.
- 3 Start the Siebel Server Configuration Wizard, as described in [“Starting a Siebel Configuration Wizard” on page 71](#).
- 4 Choose Remove Existing Configuration.
- 5 Follow the wizard prompts.

Related Topics

[Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)
[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#)

Removing the SWSE Logical Profile

The Siebel Enterprise Configuration Wizard removes an SWSE logical profile that you previously created.

Removing an SWSE logical profile deletes all of the files in the directory that was created with the logical profile, including the files that are used in creating the Siebel application virtual directories on any SWSE instance to which you apply the logical profile.

The task to remove an SWSE logical profile directory can be useful to perform in certain situations (which might or might not involve uninstallation), for housekeeping purposes.

Configuration data saved in an SWSE logical profile is used only when the profile is applied to an installed SWSE instance.

NOTE: It is strongly recommended that you retain any SWSE logical profile that you have created and applied. Back up the files in this directory before you remove it, in case you might need any of the files later.

This task is a step in [“Process of Removing Configuration Data” on page 279](#).

To remove the SWSE logical profile

- 1 Start the Siebel Enterprise Configuration Wizard, as described in [“Starting a Siebel Configuration Wizard” on page 71](#).
- 2 Choose Remove Existing Configuration, then Remove a Siebel Web Server Extension Profile Directory.
- 3 Follow the wizard prompts.

Related Topics

[“Additional Tasks for Migration Installations” on page 62](#)

Chapter 4, [“Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#)

Removing the Siebel Enterprise Configuration

The Siebel Enterprise Configuration Wizard removes a Siebel Enterprise that you have configured on the Siebel Gateway Name Server.

NOTE: When removing a Siebel Enterprise using this wizard task, observe all of the documented requirements. Perform this task only if you have uninstalled, or removed all of the applicable configuration data for, all of the installed instances of SWSE and Siebel Server that depend on this Siebel Enterprise. When you perform this task, the Siebel Gateway Name Server must be running. This task might be useful in cases that do not involve uninstallation.

This task is a step in [“Process of Removing Configuration Data” on page 279](#).

To remove the Siebel Enterprise configuration

- 1 Make sure that the Siebel Gateway Name Server is running.
- 2 Start the Siebel Enterprise Configuration Wizard, as described in [“Starting a Siebel Configuration Wizard” on page 71](#).
- 3 Choose Remove Existing Configuration, then Remove an Enterprise from the Gateway Name Server.
- 4 Follow the wizard prompts.

Related Topics

[Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension"](#)

["About Uninstalling Siebel Business Applications" on page 273](#)

["Uninstalling Siebel Enterprise Server or Siebel Web Server Extension" on page 283](#)

Removing the Siebel Gateway Name Server Configuration

The Siebel Enterprise Configuration Wizard removes the Siebel Gateway Name Server service from the server computer, for a Siebel Gateway Name Server that you have installed and configured.

NOTE: When removing a Siebel Gateway Name Server using this wizard task, observe all of the documented requirements. Perform this task only if you have uninstalled, or removed all of the applicable configuration data for, all of the installed instances of SWSE and Siebel Server that depend on this Siebel Gateway Name Server. Before you uninstall a previously configured instance of Siebel Gateway Name Server, you must perform this task. When you perform this task, the Siebel Gateway Name Server must be running.

If this Siebel Gateway Name Server was not configured, then this task is not necessary before uninstallation.

This task is a step in ["Process of Removing Configuration Data" on page 279](#).

To remove the Siebel Gateway Name Server configuration

- 1 Make sure that the Siebel Gateway Name Server is running.
- 2 Start the Siebel Enterprise Configuration Wizard, as described in ["Starting a Siebel Configuration Wizard" on page 71](#).
- 3 Choose Remove Existing Configuration, then Remove a Physical Gateway Name Server.
- 4 Follow the wizard prompts.

Related Topics

[Chapter 4, "Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension"](#)

["About Uninstalling Siebel Business Applications" on page 273](#)

["Uninstalling Siebel Enterprise Server or Siebel Web Server Extension" on page 283](#)

Uninstalling Siebel Enterprise Server or Siebel Web Server Extension

This topic describes how to uninstall Siebel Enterprise Server and Siebel Web Server Extension software for the current release. Both full uninstallation and rollback uninstallation (a type of patch uninstallation) are described. With a rollback uninstallation for these modules, you roll back to the previously installed software version (whether Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x).

In a full uninstallation, the installed Siebel Enterprise Server software components are uninstalled, which might include Siebel Gateway Name Server, Siebel Server, Database Configuration Utilities, and EAI Connector. Siebel Enterprise Server components might have been installed on a single computer, or different components might have been installed on multiple computers.

This topic also includes information about how to uninstall the Oracle LDAP Client, if you installed it with the Siebel Server or Siebel Gateway Name Server.

CAUTION: Before you proceed with any uninstallation task, review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.

This topic includes the following information:

- [“Uninstalling the Siebel Enterprise Server” on page 283](#)
- [“Rolling Back the Siebel Enterprise Server” on page 285](#)
- [“Uninstalling Oracle LDAP Client” on page 286](#)
- [“Uninstalling the Siebel Web Server Extension” on page 287](#)
- [“Rolling Back the Siebel Web Server Extension” on page 289](#)

Uninstalling the Siebel Enterprise Server

Use the following procedure to perform a full uninstallation of Siebel Enterprise Server software on a single computer.

NOTE: If you use the method described in this topic to perform a rollback uninstallation rather than a full uninstallation, then you do not remove configuration data first. Use this method only when it is appropriate, so that you do not perform a full uninstallation by mistake. See also [“Rolling Back the Siebel Enterprise Server” on page 285](#).

This topic is part of [“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#).

To uninstall the Siebel Enterprise Server components

- 1 Review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.

- 2 Verify that you have performed any required tasks to uninstall other modules or remove configuration data.

NOTE: For example, before you uninstall an instance of Siebel Enterprise Server, particularly one that includes Siebel Gateway Name Server, you must perform all of the applicable Configuration Wizard tasks to remove existing configuration data. For more information, see [“Process of Removing Configuration Data” on page 279](#).

- 3 Open a new shell.
- 4 Navigate to the `$SIEBEL_ROOT/ses/oui/bin` directory.
- 5 Start the Oracle Universal Installer software using the following command:

```
./runInstaller -deinstall -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#).
- *inventory_location* is the full path of the `oralnst.loc` file (for example, `/export/home/oralnst.loc`), which points to the Oracle Universal Installer inventory location. Use the `-invPtrLoc` option if you want to specify an inventory pointer file other than the default.

This action starts the instance of Oracle Universal Installer that was installed with your Siebel Enterprise Server installation.

- 6 Click Installed Products.
- 7 In the Inventory dialog box, select the Oracle Home value (for example, `SES_HOME`) representing the installed instance of Siebel Enterprise Server software that you want to uninstall.
- 8 Click Remove.
- 9 Click Yes to confirm that you want to uninstall this Siebel Enterprise Server and all of its dependent components on the same computer.

The Siebel Enterprise Server software is uninstalled from this computer.

- 10 In the Inventory dialog box, click Close.
- 11 In the Oracle Universal Installer window, click Cancel.
- 12 Restart your server.

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)
[“About Uninstalling Siebel Business Applications” on page 273](#)
[“Process of Removing Configuration Data” on page 279](#)

Rolling Back the Siebel Enterprise Server

Use the following procedure to roll back the current release of the Siebel Enterprise Server software on a single computer and revert to the previously installed software version. You can do this only when you have installed the current release as a migration installation for an existing installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x.

NOTE: To be able to roll back the current release and revert to a previous version, you must have retained the backup directory to which the previous installation was moved during the migration installation. During that installation, if the original Siebel Enterprise Server installation directory was named `ses`, then it was renamed from `ses` to `ses_pre16.0`.

NOTE: This topic describes only rolling back a migration installation, not rolling back a patchset installation. For patchset uninstallation (rollback), see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

This topic is part of [“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#).

To roll back the Siebel Enterprise Server

- 1 Review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.
- 2 Verify that the renamed original installation directory, such as `ses_pre16.0`, exists.
- 3 Stop the Siebel services for the Siebel CRM version 16.0 installation.
- 4 Stop any active Oracle Configuration Manager processes.
- 5 You must use the correct rollback uninstallation method for your situation, as follows. For more information, see [“Requirements for Uninstalling Siebel Business Applications” on page 274](#).
 - If you originally installed Siebel CRM version 8.1.1 (using the InstallShield installer) and are now rolling back to Siebel CRM version 8.1.1 through version 8.1.1.7, then use the Oracle Universal Installer uninstallation option to uninstall Siebel CRM version 16.0. Follow the procedure described in [“Uninstalling the Siebel Enterprise Server” on page 283](#), but do not remove configuration data. After performing this task, go to [Step 10 on page 286](#). ([Step 6](#) through [Step 9](#) do not apply in this case.)
 - If you are rolling back to Siebel CRM version 8.1.1.8 or later, version 8.2.2.x, or version 15.x, then use the manual steps that follow. Go to the next step. ([Step 6](#) through [Step 9](#) apply in this case only.)
- 6 Delete the directory representing the current installation of Siebel Enterprise Server for the current release. For example, if the directory name is `ses`, then delete this directory.
- 7 Rename the backup directory representing the previously installed software to use the original installation directory name for Siebel Enterprise Server. Rename the original (renamed) directory, such as `ses_pre16.0`, to `ses` (depending on your original installation directory name).

- 8 Delete the program folder that was created for the current release, which contains the shortcuts for running the Siebel Configuration Wizards.
NOTE: After the rollback, in order to run the Siebel Configuration Wizards, you must use the wizard shortcuts for the version of the software that you rolled back to. Additional requirements apply to the post-rollback environment.
- 9 If you rolled back to Siebel CRM version 8.1.1.8 or later, version 8.2.2.x, or version 15.x, then verify the version number by using the `opatch` command, as described in [“Verifying Installation for the Siebel Enterprise Server” on page 213](#).
- 10 Restart the Siebel services.
- 11 If Oracle Configuration Manager was not configured before you performed a migration installation of Siebel Enterprise Server, then, after a rollback to the original installation, you must configure this instance of Oracle Configuration Manager manually in order for it to function properly.

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[“Verifying Installation for the Siebel Enterprise Server” on page 213](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Process of Removing Configuration Data” on page 279](#)

Uninstalling Oracle LDAP Client

Use the following procedure to uninstall Oracle LDAP Client software.

Regardless of how it was installed, Oracle LDAP Client is not uninstalled when you uninstall Siebel Enterprise Server. Also, you cannot uninstall Oracle LDAP Client using the GUI interface for Oracle Universal Installer. Instead, you must use a command-line method to uninstall Oracle LDAP Client, whether it was installed with Siebel Enterprise Server or installed manually by running the Oracle LDAP Client installer directly.

NOTE: This procedure assumes that you had installed Oracle LDAP Client with Siebel Enterprise Server, as described in [“Requirements for Installing Oracle LDAP Client” on page 331](#). If you had installed Oracle LDAP Client manually, then the navigation steps might differ from what is shown in the procedure, depending on your installation location.

This topic is part of [“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#).

To uninstall Oracle LDAP Client

- 1 Open a new shell.
- 2 Navigate to the `$SIEBEL_ROOT` installation location for Siebel Enterprise Server, such as `/siebel/16.0.0.0.0/ses`.
- 3 Run a command like the following:

```
./LDAPClient/client/deinstall/deinstall
```

- 4 When you are prompted to confirm deinstallation of the LDAP Client software, enter Y and press Enter.

Related Topics

[“Installing Siebel Enterprise Server” on page 44](#)

[“Requirements for Installing Oracle LDAP Client” on page 331](#)

Related Books

Siebel Security Guide

Uninstalling the Siebel Web Server Extension

Use the following procedure to perform a full uninstallation of Siebel Web Server Extension (SWSE) software on a single computer. Uninstalling SWSE is similar to uninstalling the Siebel Enterprise Server.

NOTE: If you use the method described in this topic to perform a rollback uninstallation, then you do not remove configuration data first. Use this method only when it is appropriate, so that you do not perform a full uninstallation by mistake. See also [“Rolling Back the Siebel Web Server Extension” on page 289](#).

This topic is part of [“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension” on page 283](#).

To uninstall the Siebel Web Server Extension

- 1 Review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.
- 2 Verify that you have performed any required tasks to uninstall other modules or remove configuration data.

NOTE: For example, before you uninstall an instance of Siebel Web Server Extension, you must perform the Configuration Wizard task to remove existing SWSE configuration data. For more information, see [“Process of Removing Configuration Data” on page 279](#).

- 3 Open a new shell.
- 4 Navigate to the `$SIEBEL_ROOT/sweapp/oui/bin` directory.
- 5 Start the Oracle Universal Installer software using the following command:

```
./runInstaller -deinstall -jreLoc jre_location -invPtrLoc inventory_location
```

where:

- *jre_location* is the full path of the installed Java Runtime Environment (JRE) software. On AIX, you must use the `-jreLoc` option. It is not required on other operating systems. For more information about the JRE requirements for AIX, see [“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#).

- *inventory_location* is the full path of the oraInst.loc file (for example, /export/home/oraInst.loc), which points to the Oracle Universal Installer inventory location. Use the -invPtrLoc option if you want to specify an inventory pointer file other than the default.

This action starts the instance of Oracle Universal Installer that was installed with your Siebel Web Server Extension installation.

- 6 Click Installed Products.
- 7 In the Inventory dialog box, select the Oracle Home value (for example, EAPPWEB_HOME) representing the installed instance of Siebel Web Server Extension software that you want to uninstall.
- 8 Click Remove.
- 9 Click Yes to confirm that you want to uninstall this Siebel Web Server Extension and all of its dependent components on the same computer.

The Siebel Web Server Extension software is uninstalled from this computer.

- 10 In the Inventory dialog box, click Close.
- 11 In the Oracle Universal Installer window, click Cancel.
- 12 Restart your server.

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)
[“About Uninstalling Siebel Business Applications” on page 273](#)
[“Process of Removing Configuration Data” on page 279](#)

Restoring a Web Server After Uninstalling the SWSE

After uninstalling your SWSE, you can restore your Web server by using the following procedure.

To restore your Web server

- 1 Copy all of the backup configuration files, which were created during the installation and are referenced in the following example, to their original location under the Web server directory.

config_file_name_backup_timestamp.bak

For example:

obj_conf_020714204932.bak

- **AIX, HP-UX, and Linux**

- conf/httpd.conf
- conf/mime.types

- **Oracle Solaris**

- start

- ❑ `config/mime.types`
 - ❑ `config/object.conf`
 - ❑ `config/magnus.conf`
- 2 (HP-UX only) Reset any existing LANG variable to the directory that the symbolic link represents. If the environment variable LANG is set to a directory name that is a symbolic link, then the uninstaller will fail.
- NOTE:** The LANG variable cannot be set to `unix.utf8`. This setting causes the uninstaller to fail.
- 3 Remove additional files that were created on the Web server as a result of installing the SWSE, particularly if you are uninstalling a previous version of SWSE.
- For example, depending on the Web server, you might have to remove the library file `libmod_swe.so` from the `modules` subdirectory of the Web server installation directory. Otherwise, when you later install a more recent version of SWSE (such as the current version), the newer version of this file does not overwrite the existing file.

Rolling Back the Siebel Web Server Extension

Use the following procedure to roll back the current release of the Siebel Web Extension (SWSE) software on a single computer and revert to the previously installed software version. You can do this only when you have installed the current release as a migration installation for an existing installation of Siebel CRM version 8.1.1.x, version 8.2.2.x, or 15.x.

NOTE: To be able to roll back the current release and revert to a previous version, you must have retained the backup directory to which the previous installation was moved during the migration installation. During that installation, if the original SWSE installation directory was named `sweapp`, then it was renamed from `sweapp` to `sweapp_pre16.0`.

NOTE: This topic describes only rolling back a migration installation, not rolling back a patchset installation. For patchset uninstallation (rollback), see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

This topic is part of [“Uninstalling Siebel Enterprise Server or Siebel Web Server Extension”](#) on page 283.

To roll back the Siebel Web Server Extension

- 1 Review all of the information in [“About Uninstalling Siebel Business Applications”](#) on page 273, particularly the requirements and limitations.
- 2 Verify that the renamed original installation directory, such as `sweapp_pre16.0`, exists.
- 3 Stop the Web server.
- 4 Stop any active Oracle Configuration Manager processes.

- 5 You must use the correct rollback uninstallation method for your situation, as follows. For more information, see [“Requirements for Uninstalling Siebel Business Applications” on page 274](#).
 - If you originally installed Siebel CRM version 8.1.1 (using the InstallShield installer) and are now rolling back to Siebel CRM version 8.1.1 through version 8.1.1.7, then use the Oracle Universal Installer uninstallation option to uninstall Siebel CRM version 16.0. Follow the procedure described in [“Uninstalling the Siebel Web Server Extension” on page 287](#), but do not remove configuration data. After performing this task, go to [Step 10 on page 290](#). (Step 6 through [Step 9](#) do not apply in this case.)
 - If you are rolling back to Siebel CRM version 8.1.1.8 or later, version 8.2.2.x, or version 15.x, then use the manual steps that follow. Go to the next step. (Step 6 through [Step 9](#) apply in this case only.)
- 6 Delete the directory representing the current installation of SWSE for the current release. For example, if the directory name is sweapp, then delete this directory.
- 7 Rename the backup directory representing the previously installed software to use the original installation directory name for SWSE. Rename the original (renamed) directory, such as sweapp_pre16.0, to sweapp (depending on your original installation directory name).
- 8 Delete the program folder that was created for the current release, which contains the shortcut for running the SWSE Configuration Wizard.

NOTE: After the rollback, in order to run the SWSE Configuration Wizard, you must use the wizard shortcut for the version of the software that you rolled back to. Additional requirements apply to the post-rollback environment.
- 9 If you rolled back to Siebel CRM version 8.1.1.8 or later, version 8.2.2.x, or version 15.x, then verify the version number by using the opatch command, as described in [“Verifying Installation for the Siebel Web Server Extension” on page 222](#).
- 10 Restart the Web server.
- 11 If Oracle Configuration Manager was not configured before you performed a migration installation of SWSE, then, after a rollback to the original installation, you must configure this instance of Oracle Configuration Manager manually in order for it to function properly.

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[“Verifying Installation for the Siebel Web Server Extension” on page 222](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Process of Removing Configuration Data” on page 279](#)

Uninstalling Siebel Web Clients or Siebel Tools

This topic describes how to uninstall Siebel Web Clients (Mobile Web Client or Developer Web Client) or Siebel Tools. Both full uninstallation and rollback uninstallation (a type of patch uninstallation) are described. With a rollback uninstallation for these modules, you roll back to the previously installed software version (whether Siebel CRM version 8.1.1.x, version 8.2.2.x, or version 15.x).

NOTE: If you installed Oracle Database XE for use with Siebel CRM, and you plan to uninstall or roll back Siebel Web Client or Siebel Tools, then it is recommended that you first uninstall Oracle Database XE. For more information, see [“Uninstalling Oracle Database XE” on page 294](#).

CAUTION: Before you proceed with any uninstallation task, review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.

This topic includes the following information:

- [“Uninstalling the Siebel Web Client” on page 291](#)
- [“Rolling Back the Siebel Web Client” on page 292](#)
- [“Uninstalling Siebel Tools” on page 293](#)
- [“Rolling Back Siebel Tools” on page 293](#)
- [“Uninstalling Oracle Database XE” on page 294](#)

Uninstalling the Siebel Web Client

Use the following procedure to uninstall the Siebel Mobile Web Client or Developer Web Client in a full uninstallation.

NOTE: If you installed Oracle Database XE for use with Siebel Web Client, and you plan to uninstall Siebel Web Client, then it is recommended that you first uninstall Oracle Database XE. For more information, see [“Uninstalling Oracle Database XE” on page 294](#).

This topic is part of [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#).

To uninstall the Siebel Web Client

- 1 Choose Start, All Programs, Oracle - CLIENT_HOME (or a similar Oracle home identifier), Oracle Installation Products, and then Universal Installer.
- 2 Click Deinstall Products.
- 3 Select the Oracle home (for example, CLIENT_HOME) representing the installed instance of Siebel Mobile or Developer Web Client that you want to uninstall.
- 4 Click Remove.

Related Topics

[“Installing the Siebel Web Client” on page 177](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Uninstalling Oracle Database XE” on page 294](#)

Rolling Back the Siebel Web Client

Use the following procedure to roll back the installed current release, Siebel CRM version 16.0, for the Siebel Mobile Web Client or Developer Web Client and revert to Siebel CRM version 8.1.1 or a prior version 8.1.1.x release, version 8.2.2 or a prior version 8.2.2.x release, or version 15.0 or a prior version 15.x release.

In the procedure below, the example installation paths are those that might apply for previous releases that you subsequently migrated to the current release.

NOTE: If you installed Oracle Database XE for use with Siebel Web Client, and you plan to roll back Siebel Web Client, then it is recommended that you first uninstall Oracle Database XE. For more information, see [“Uninstalling Oracle Database XE” on page 294](#).

NOTE: This topic describes only rolling back a migration installation, not rolling back a patchset installation. For patchset uninstallation (rollback), see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

This topic is part of [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#).

To roll back the Siebel Web Client

- 1 Review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.
- 2 Exit the Siebel Web Client if it is running.
- 3 Verify that the renamed original installation directory, such as `Client_1_pre16.0`, exists.
- 4 Delete the directory representing the current installation of Siebel Web Client for the current release. For example, if the directory name is `Client_1`, then delete this directory.
- 5 Rename the backup directory representing the previously installed software to use the original installation directory name for Siebel Web Client. Rename the original (renamed) directory, such as `Client_1_pre16.0`, to `Client_1` (depending on your original installation directory name).
- 6 Verify the version number by using the `opatch` command, as described in [“Verifying Installation for the Siebel Web Client” on page 225](#).
- 7 When the rollback process is complete, restart the Siebel Web Client.

Related Topics

[“Installing the Siebel Web Client” on page 177](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Uninstalling Oracle Database XE” on page 294](#)

Uninstalling Siebel Tools

Use the following procedure to uninstall Siebel Tools in a full uninstallation.

NOTE: If you installed Oracle Database XE for use with Siebel Tools, and you plan to uninstall Siebel Tools, then it is recommended that you first uninstall Oracle Database XE. For more information, see [“Uninstalling Oracle Database XE” on page 294](#).

This topic is part of [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#).

To uninstall Siebel Tools

- 1 Choose Start, All Programs, Oracle - TOOLS_HOME (or a similar Oracle home identifier), Oracle Installation Products, and then Universal Installer.
- 2 Click Deinstall Products.
- 3 Select the Oracle home (for example, TOOLS_HOME) representing the installed instance of Siebel Tools that you want to uninstall.
- 4 Click Remove.

Related Topics

[“Installing Siebel Tools” on page 184](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Uninstalling Oracle Database XE” on page 294](#)

Rolling Back Siebel Tools

Use the following procedure to roll back the installed current release, Siebel CRM version 16.0, for Siebel Tools and revert to Siebel CRM version 8.1.1 or a prior version 8.1.1.x release, version 8.2.2 or a prior version 8.2.2.x release, or version 15.0 or a prior version 15.x release.

In the procedure below, the example installation paths are those that might apply for previous releases that you subsequently migrated to the current release.

NOTE: If you installed Oracle Database XE for use with Siebel Tools, and you plan to roll back Siebel Tools, then it is recommended that you first uninstall Oracle Database XE. For more information, see [“Uninstalling Oracle Database XE” on page 294](#).

NOTE: This topic describes only rolling back a migration installation, not rolling back a patchset installation. For patchset uninstallation (rollback), see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

This topic is part of [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#).

To roll back Siebel Tools

- 1 Review all of the information in [“About Uninstalling Siebel Business Applications” on page 273](#), particularly the requirements and limitations.

- 2 Exit Siebel Tools if it is running.
- 3 Verify that the renamed original installation directory, such as `Tools_1_pre16.0`, exists.
- 4 Delete the directory representing the current installation of Siebel Tools for the current release. For example, if the directory name is `Tools_1`, then delete this directory.
- 5 Rename the backup directory representing the previously installed software to use the original installation directory name for Siebel Tools. Rename the original (renamed) directory, such as `Tools_1_pre16.0`, to `Client` (depending on your original installation directory name).
- 6 Verify the version number by using the `opatch` command, as described in [“Verifying Installation for Siebel Tools” on page 227](#).
- 7 When the rollback process is complete, restart Siebel Tools.

Related Topics

[“Installing Siebel Tools” on page 184](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

[“Uninstalling Oracle Database XE” on page 294](#)

Uninstalling Oracle Database XE

Use the following procedure to uninstall Oracle Database XE. You can use this procedure if you previously installed Oracle Database XE and the local database with Siebel Tools, or installed Oracle Database XE and the local database or sample database with Siebel Web Client. Uninstalling Oracle Database XE also uninstalls the local database or the sample database.

It is recommended that you uninstall Oracle Database XE if you installed it for use with Siebel Tools or Siebel Mobile Web Client but then determine that you will not use it. For example, you would uninstall Oracle Database XE if you uninstall Siebel Innovation Pack 2016 (version 16.0) and roll back to Siebel Innovation Pack 2015 (version 15.0). Uninstall Oracle Database XE before you uninstall or roll back Siebel Tools or Siebel Web Client. For patchset uninstallation (rollback), see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

NOTE: When you uninstall Siebel Tools or Siebel Web Client, in a full installation or rollback uninstallation (including rollback of a patchset release), Oracle Database XE and the local database or the sample database are not uninstalled. In addition, the ODBC data source created for Oracle Database XE is not deleted in these uninstallation cases.

As an alternative to the procedure below, you can use one of the following methods:

- Uninstall Oracle Database Express Edition from the Windows Control Panel.
- Uninstall Oracle Database Express Edition from Programs and Features.

After uninstalling Oracle Database XE, restart the computer.

This topic is part of [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#).

To uninstall Oracle Database XE and the local database or sample database

- 1 In Windows Explorer, navigate to the Siebel image location for the Siebel release from which you installed Oracle Database XE with Siebel Tools or Siebel Web Client. Then navigate to the directory where the Oracle Database XE installer is located.

Navigate to one of the following locations, based on the Siebel software for which you are uninstalling Oracle Database XE, and based on whether you are using a 64-bit or 32-bit version of Microsoft Windows:

- *Siebel_Image*\Windows\client\Siebel_Tools\Disk1\stage\XE\64\Disk1
- *Siebel_Image*\Windows\client\Siebel_Tools\Disk1\stage\XE\32\Disk1
- *Siebel_Image*\Windows\client\Siebel_Web_Client\Disk1\stage\XE\64\Disk1
- *Siebel_Image*\Windows\client\Siebel_Web_Client\Disk1\stage\XE\32\Disk1

In this path, *Siebel_Image* is the directory for your version-specific Siebel network image, such as C:\Siebel_Install_Image\16.0.0.0, for Siebel Innovation Pack 2016.

- 2 To start the Oracle Database XE installer, double-click setup.exe.
- 3 Click Remove.
- 4 After uninstalling Oracle Database XE, restart the computer.
- 5 Delete the directory *SIEBEL_CLIENT_ROOT*\oracl exe or *SIEBEL_TOOLS_ROOT*\oracl exe.

Related Topics

["Installing and Using Oracle Database XE for the Local or Sample Database" on page 191](#)

["Uninstalling the Siebel Web Client" on page 291](#)

["Rolling Back the Siebel Web Client" on page 292](#)

["Uninstalling Siebel Tools" on page 293](#)

["Rolling Back Siebel Tools" on page 293](#)

About Uninstalling Earlier Versions of Siebel Business Applications

To uninstall an earlier version of Siebel Business Applications software, you must use the documented uninstallation method for that version, as follows. For each version, always use the latest revision of the documentation that applies for the Siebel CRM version that you are uninstalling.

For Siebel CRM version 15.x

- For the full uninstallation or rollback uninstallation instructions for Siebel CRM version 15.x (Siebel Innovation Pack 2015), see that version of the *Siebel Installation Guide* for the operating system you are using, the guide that you used when you installed Siebel CRM version 15.0. The most recent applicable guides, including those for this release, are available on My Oracle Support, at 1461732.1 (Article ID).

For Siebel CRM version 8.1.1.14 or 8.1.1.11

- For the full uninstallation or rollback uninstallation instructions for Siebel CRM version 8.1.1.14 (Siebel Innovation Pack 2014) or version 8.1.1.11 (Siebel Innovation Pack 2013), see the version of the *Siebel Installation Guide* for the operating system you are using, the guide that you used when you installed Siebel CRM version 8.1.1.14 or 8.1.1.11. The most recent applicable guides, including those for these releases, are available on My Oracle Support, at 1461732.1 (Article ID).

For Siebel CRM version 8.1.1 and version 8.1.1.x (through version 8.1.1.10)

- For the full uninstallation instructions for Siebel CRM version 8.1.1, which used the InstallShield versions of the Siebel Enterprise Server and Siebel Web Server Extension (SWSE) installers, see the version of the *Siebel Installation Guide* for the operating system you are using, the guide that you used when you initially installed. The most recent applicable guides that cover the InstallShield installers, version 8.1, Rev. A, are available on My Oracle Support, at 1461732.1 (Article ID).
- For the full uninstallation instructions for Siebel CRM version 8.1.1.8 through version 8.1.1.10 (when Siebel Enterprise Server and SWSE were installed as a new installation), see the version of the *Siebel Installation Guide* for the operating system you are using, the guide that you used when you initially installed. The most recent applicable guides, version 8.1, Rev. D, are available on My Oracle Support, at 1461732.1 (Article ID).
- For the Siebel Fix Pack uninstallation instructions for Siebel CRM version 8.1.1.x Fix Pack releases through Siebel CRM version 8.1.1.10 (when Siebel Enterprise Server and SWSE were installed as a patch installation), see the applicable *Siebel Maintenance Release Guide* on My Oracle Support, 880452.1 (Article ID). Different uninstallation options apply for different Siebel Fix Pack releases. In particular, uninstallation options are different for Siebel CRM versions 8.1.1.8 and later, compared to Siebel CRM versions 8.1.1.1 through 8.1.1.7.

For Siebel CRM version 8.2.2.14 and version 8.2.2.4

- For the full uninstallation or rollback uninstallation instructions for Siebel CRM version 8.2.2.14 (Siebel Innovation Pack 2014) or version 8.2.2.4 (Siebel Innovation Pack 2013), see the version of the *Siebel Installation Guide* for the operating system you are using, the guide that you used when you installed Siebel CRM version 8.2.2.14 or 8.2.2.4. The most recent applicable guides, including those for these releases, are available on My Oracle Support, at 1461732.1 (Article ID).

For Siebel CRM version 8.2.2 and version 8.2.2.x (through version 8.2.2.3)

- For the full uninstallation instructions for Siebel CRM version 8.2.2, see the version of the *Siebel Installation Guide* for the operating system you are using, the guide that you used when you initially installed. The most recent applicable guides, version 8.2, Rev. C, are available on My Oracle Support, at 1461732.1 (Article ID).
- For the Siebel Fix Pack uninstallation instructions for Siebel CRM version 8.2.2.x Fix Pack releases through version 8.2.2.3, see the applicable *Siebel Maintenance Release Guide* on My Oracle Support, 1441523.1 (Article ID).

For Siebel CRM versions 8.0, 7.8.x, or 7.7.x

- For the uninstallation instructions for Siebel CRM version 8.0, 7.8.x, or 7.7.x, see version 8.0, 7.8, or 7.7 of the *Siebel Installation Guide* for the operating system you are using.

For Siebel CRM versions 7.5.x, 7.0.x, or 6.x.x

- For the uninstallation instructions for Siebel CRM versions 7.5.x, 7.0.x, or 6.x.x, see the applicable version of the *Siebel Server Installation Guide* for your operating system. See also *Siebel Web Client Administration Guide*, *Siebel Tools Reference*, or other applicable documents for these earlier versions.

Related Topics

[“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#)

[“About Uninstalling Siebel Business Applications” on page 273](#)

Related Books

Earlier versions of the *Siebel Installation Guides* on My Oracle Support, 1461732.1 (Article ID)

11

Requirements for Installing and Configuring Siebel Business Applications

This chapter documents requirements that apply to installing and configuring Siebel Business Applications software. It contains the following topics:

- [About Installing Siebel Business Applications on page 299](#)
- [Planning Your Siebel Deployment on page 304](#)
- [Requirements for Installing and Configuring Siebel Enterprise Server Components on page 328](#)
- [Requirements for Installing and Configuring the Siebel Web Server Extension on page 340](#)
- [Requirements for Installing and Configuring the Siebel Database on page 350](#)
- [Requirements for Installing Siebel Web Clients on page 352](#)
- [Requirements for Installing Siebel Tools on page 355](#)

About Installing Siebel Business Applications

Each Siebel Business Applications software release from Oracle has a specific version level. The current release is Siebel Innovation Pack 2016, which refers to Siebel CRM version 16.0.

You can install Siebel Enterprise Server, Siebel Web Server Extension (SWSE), Siebel Web Client, or Siebel Tools at one of these versions, whether it is a new installation or a migration installation.

This topic contains the following information:

- [“About Documented Requirements” on page 300](#)
- [“About Siebel CRM Releases” on page 300](#)
- [“About Installing in Upgrade Environments” on page 302](#)
- [“About Language Installation” on page 303](#)
- [“About Oracle Configuration Manager” on page 303](#)

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)

[Chapter 7, “Installing Siebel Web Clients and Siebel Tools”](#)

[Chapter 10, “Uninstalling Siebel Business Applications”](#)

About Documented Requirements

This topic is part of [“About Installing Siebel Business Applications” on page 299](#).

Before installing any Siebel release, observe all of the documented requirements and review documented installation tasks. See this guide or any updated version of it, the Certifications tab on My Oracle Support, and any other relevant documents on Oracle Help Center, Oracle Technology Network, or My Oracle Support. Documentation for each Siebel Patchset release is provided with the Siebel Patchset.

NOTE: All Siebel modules used within a given Siebel Enterprise must share the same release level (version number), such as Siebel CRM version 16.0, 16.1, and so on. Third-party products must use supported release levels as documented in the Certifications tab on My Oracle Support.

Examples of installation requirements follow:

- Before installing a Siebel Innovation Pack release for Siebel Enterprise Server (migration installation case), you must shut down services for Siebel Server or Siebel Gateway Name Server, and shut down any running instances of `svrmgr`.
- Before installing a Siebel Innovation Pack release for Siebel Web Server Extension (migration installation case), you must stop the Web server.

About Siebel CRM Releases

This topic is part of [“About Installing Siebel Business Applications” on page 299](#).

Siebel CRM software releases and their various installation methods have evolved significantly. New types of releases are provide, and some of the traditional types of releases no longer apply. The current release is Siebel CRM version 16.0 (Siebel Innovation Pack 2016). This book describes the tasks and requirements that apply for the current release.

An *innovation pack* release is similar to a traditional Siebel Fix Pack release (applicable to some prior releases), but includes new application functionality. In a limited sense, an innovation pack release could be considered a *patch release*, because, although you can install the release as a new installation, you can also install it for an existing installation, in the migration installation case. Siebel Fix Pack releases are no longer provided.

This guide, the *Siebel Installation Guide* for the operating system you are using, is for installing the current release. The *Siebel Installation Guides* describe how to perform both new installations and migration installations.

You install Siebel Enterprise Server, Siebel Web Server Extension, Siebel Web Client, or Siebel Tools as a new installation of the current version of the software or as a migration installation. For more information, see [“Installation-Related Changes for Siebel Innovation Pack 2016” on page 25](#) and related topics.

NOTE: For an existing installation, running Incremental Repository Merge is required after performing a migration installation for Siebel Innovation Pack 2016. For more information, see [“About Database Updates for the Current Release” on page 114](#). Other requirements apply. See also [“Additional Tasks for Migration Installations” on page 62](#).

Table 26 on page 301 lists the major Siebel CRM installable modules for Siebel CRM version 16.0 and shows which installation methods are supported in order to install the current release as a new installation or as a migration installation for an existing installation, where applicable. Both new installations and migration installations use the same installers and are one-step installations.

Table 26. Siebel CRM Installers and Applicable Versions

Siebel CRM Module	Installation Method for Current Release (Siebel Innovation Pack 2016)
Siebel Enterprise Server	<ul style="list-style-type: none"> ■ New installation, as described in “Installing Siebel Enterprise Server as a New Installation” on page 44 ■ Migration installation, as described in “Installing Siebel Enterprise Server as a Migration Installation” on page 48
Siebel Web Server Extension	<ul style="list-style-type: none"> ■ New installation, as described in “Installing the Siebel Web Server Extension as a New Installation” on page 52 ■ Migration installation, as described in “Installing the Siebel Web Server Extension as a Migration Installation” on page 55
Siebel Web Client	<ul style="list-style-type: none"> ■ New installation, as described in “Installing the Siebel Web Client as a New Installation” on page 178 ■ Migration installation, as described in “Installing the Siebel Web Client as a Migration Installation” on page 182
Siebel Tools	<ul style="list-style-type: none"> ■ New installation, as described in “Installing Siebel Tools as a New Installation” on page 185 ■ Migration installation, as described in “Installing the Siebel Web Client as a Migration Installation” on page 182

For information about the features and fixes provided in Siebel Business Applications for prior Siebel Innovation Pack and Siebel Fix Pack releases, and about the configuration requirements for those features, see the applicable *Siebel Maintenance Release Guide* on My Oracle Support. For versions of *Siebel Maintenance Release Guide* for prior releases, see 880452.1 (Article ID) on My Oracle Support for version 8.1.1.x or see 1441523.1 (Article ID) for version 8.2.2.x. Many of the configuration steps documented for prior Siebel Fix Pack releases are superseded by the Incremental Repository Merge feature. For information about using Incremental Repository Merge, see *Siebel Database Upgrade Guide*.

Typically, no additional Siebel Configuration Wizard tasks are associated with a migration installation. You would not run the Siebel Configuration Wizard to configure a module that was already configured. However, requirements might vary for a given release, or for using particular functionality. In some cases, you might have to perform a new installation instead of a migration installation or you might need to reconfigure a server after doing a migration installation.

Siebel Patchset releases are provided for the current release, each of which provides several fixes. The fixes are provided on a cumulative basis in each Siebel Patchset release. In some cases, installing a particular Siebel Patchset release might be required or strongly recommended.

In general, this guide does not provide details about installing or uninstalling Siebel Patchset releases. The information in this guide complements the existing documentation for installing the applicable Siebel Patchset release. For more information, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

NOTE: You must verify the availability, characteristics, and requirements of any future releases, including any Siebel CRM version 16.x releases, that might also be covered by this guide (or updated versions of it) or by other documentation. The installation tasks and requirements for all future releases are subject to change.

Related Books

For the readme documents for individual Siebel Patchset releases, see *Siebel Patchset Installation Guide for Siebel CRM*, 1614310.1 (Article ID) on My Oracle Support.

For more information about Siebel Patchset releases, see 1600520.1 (Article ID) on My Oracle Support.

About Installing in Upgrade Environments

This topic is part of [“About Installing Siebel Business Applications”](#) on page 299.

When you install Siebel Business Applications, you might be creating a new deployment or you might be installing updated software to be used in a deployment that is being upgraded from a previous release of Siebel Business Applications, such as an upgrade from version 8.0 to the current version. A deployment that is being upgraded is sometimes called an *upgrade environment*. You install your new Siebel Business Applications software *before* upgrading the Siebel database.

In some cases, you can upgrade the Siebel database directly to the current release. For detailed information about upgrading the Siebel database, and about tasks that you perform before the installation or upgrade, see *Siebel Database Upgrade Guide*. See also any relevant documents on Oracle Technology Network or My Oracle Support.

NOTE: Review all of the applicable documentation before you install or upgrade.

For IBM DB2 for z/OS, see relevant parts of [“Planning RDBMS Installation and Configuration”](#) on page 308 and see *Siebel Database Upgrade Guide for DB2 for z/OS*.

CAUTION: As part of installing Siebel Business Applications software in an upgrade environment, in general, you do not perform any database-related tasks described in this guide.

In an upgrade environment:

- You *do install* the Siebel Enterprise Server component called *Database Configuration Utilities* on a Siebel Server, as described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)
- You *do not create* the database instance on the RDBMS, as described in [Chapter 12, “Configuring the RDBMS.”](#) (After the upgrade is complete, you might have to modify database parameters for your RDBMS platform to match settings described in that chapter.)
- You *do not perform* the tasks described in [Chapter 5, “Installing the Siebel Database on the RDBMS.”](#)

- Certain installation and configuration requirements associated with Siebel Gateway Name Server authentication that apply for new deployments do not apply in this case. For details, see [“Requirements for Siebel Gateway Name Server Authentication” on page 333](#).

After installing and upgrading, you might have to perform additional tasks. For example, some tasks that might apply are described in *Siebel Application Deployment Manager Guide* and *Siebel System Administration Guide*. See also [“Preparing to Run Siebel Server Components” on page 145](#).

When you install Siebel Business Applications in some upgrade scenarios, you might in some cases be able to install different versions of a Siebel module on the same computer, if this scenario is valid for particular modules and might be helpful to you. For more information, see [“Planning to Install Multiple Instances of Siebel Business Applications” on page 311](#).

After you install the current release, you can install the latest Siebel Patchset release, where available. Install the Siebel Patchset release *before* you initiate the upgrade process. After upgrading, you can install additional patchset releases as they become available.

CAUTION: After you have started upgrading, do not install any Siebel CRM releases until the upgrade is complete.

For information about types of Siebel CRM releases, see [“About Siebel CRM Releases” on page 300](#).

Instructions in this guide apply both for new installations and upgrades, except where noted.

About Language Installation

This topic is part of [“About Installing Siebel Business Applications” on page 299](#).

It is strongly recommended that you install and deploy, or at least install, all of the languages that you expect to require. For more information about installing and deploying languages, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

About Oracle Configuration Manager

This topic is part of [“About Installing Siebel Business Applications” on page 299](#).

Oracle Configuration Manager is installed by the installers for Siebel Enterprise Server and Siebel Web Server Extension (SWSE). These installers, which use Oracle Universal Installer software, automatically invoke the installer for Oracle Configuration Manager before completing the Siebel installation.

During the installation session, as described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) the user is prompted for email contact information. Specify the credentials for a valid My Oracle Support account.

NOTE: After installation, update Oracle Configuration Manager online with the latest version in order to obtain fixes and enhancements.

Oracle Configuration Manager is configured automatically after installation. Oracle Configuration Manager collects system configuration data for Siebel installation computers and uploads it to the Oracle repository. Oracle Configuration Manager is intended to help Oracle Global Customer Support representatives resolve customer issues more effectively.

For more information about Oracle Configuration Manager and its installer, see the Oracle Configuration Manager documentation provided on Oracle Technology Network. In particular, see *Oracle Configuration Manager Installation and Administration Guide*.

For the version number of the Oracle Configuration Manager software provided with the current Siebel CRM release, see the Certifications tab on My Oracle Support.

An instance of Oracle Configuration Manager is installed for both new installations and migration installations of Siebel Enterprise Server or SWSE, for the current release. Before performing a migration installation or before rolling back an installation after a migration, you must stop any active Oracle Configuration Manager processes.

NOTE: If Oracle Configuration Manager was not configured before you performed a migration installation of Siebel Enterprise Server or SWSE, then, after a rollback to the original installation, you must configure this instance of Oracle Configuration Manager manually in order for it to function properly.

The Oracle Configuration Manager service cannot be running during a cloning operation. For more information, see [“Requirements When Cloning an Installation” on page 260](#).

If you uninstall a Siebel module for which Oracle Configuration Manager was installed, then this instance of Oracle Configuration Manager is also uninstalled. See also [Chapter 10, “Uninstalling Siebel Business Applications.”](#)

Planning Your Siebel Deployment

You must plan where to install the various Siebel components on your servers. This topic contains the following information:

- [“Preparing the Hardware and Planning Topologies” on page 305](#)
- [“Planning Siebel Server Load Balancing” on page 306](#)
- [“Planning Disk Space and Configuration Requirements” on page 307](#)
- [“Planning RDBMS Installation and Configuration” on page 308](#)
- [“Managing Temporary Disk Space Required by Siebel Installers and Wizards” on page 310](#)
- [“About The Language in Which Siebel Installers and Wizards Run” on page 311](#)
- [“Planning to Install Multiple Instances of Siebel Business Applications” on page 311](#)
- [“Specifying the Locale for Siebel Business Applications” on page 313](#)
- [“Specifying the Locale for Your UNIX Operating System” on page 314](#)
- [“Setting Permissions and Ownership” on page 316](#)
- [“Installing Siebel Business Applications from a Remote Server Computer” on page 317](#)
- [“Restrictions on Host Names for Siebel Gateway Name Server and Siebel Server” on page 317](#)

- [“Restrictions on Names for Siebel Enterprise and Siebel Server” on page 318](#)
- [“File and Directory Naming Conventions” on page 319](#)
- [“Creating the Siebel File System” on page 320](#)
- [“Creating the Siebel Service Owner Account” on page 324](#)
- [“Installation and Configuration Methods by Deployment Type” on page 325](#)

Preparing the Hardware and Planning Topologies

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

Verify that the hardware that you have chosen meets all of the requirements for running your Siebel Business Applications as well as the required third-party software. Verify also that the hardware is able to support the RDBMS and the Siebel database, the Siebel File System, Siebel Gateway Name Server, Siebel Server, and other Siebel modules. Also plan to support Siebel Tools developer workstation computers and Siebel Mobile Web Client computers, where applicable.

Consider running specialized components on dedicated computers. Whether you do so depends on considerations that include available resources, overall load, performance, security, and so on.

In general, it is assumed that, for security purposes, your computer resources are not shared between Siebel CRM and other applications or systems that are not related to supporting your Siebel CRM deployment.

Record the computer names and installation directory names that you decide on in your copy of the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

Related Topics

- [“Planning to Install Multiple Instances of Siebel Business Applications” on page 311](#)
- [“Restrictions on Host Names for Siebel Gateway Name Server and Siebel Server” on page 317](#)
- [“Restrictions on Names for Siebel Enterprise and Siebel Server” on page 318](#)
- [“File and Directory Naming Conventions” on page 319](#)
- [“Creating the Siebel File System” on page 320](#)
- [“About the Siebel Web Server Extension” on page 340](#)
- [“Installing the Web Server” on page 341](#)

Related Books

Siebel Deployment Planning Guide

Siebel Performance Tuning Guide

Siebel Security Guide

Siebel Security Hardening Guide

Certifications tab on My Oracle Support

Planning Siebel Server Load Balancing

This topic is part of “[Planning Your Siebel Deployment](#)” on page 304.

Before you install your Siebel Enterprise Server components, determine your load balancing strategy for Siebel Servers. For more information, see “[Process of Configuring Load Balancing for Siebel Business Applications](#)” on page 140. See also *Siebel Deployment Planning Guide* and *Siebel System Administration Guide*.

Requirements for Generating the Load Balancing Configuration File

Generating the load balancing configuration (lbconfig.txt) file has the following requirements:

- **Verify that all of the Siebel Servers for which you want to provide load balancing are running.**
- **On each Siebel Server, verify that the Application Object Managers that you want to load balance are enabled.** Disable any Application Object Managers that you will not use. Note the Application Object Managers that are to be load balanced, so that you can later remove or comment out any disabled Application Object Managers that appear in the lbconfig.txt file that you generate.

Requirements for Setting Up a Third-Party HTTP Load Balancer

Observe the following requirements for setting up a third-party HTTP load balancer:

- **The third-party HTTP load balancer must be validated for use with Siebel Business Applications.** For more information about third-party load balancing options, see the Certifications tab on My Oracle Support.
- **Your third-party load balancer must have the following characteristics:**
 - It must be an HTTP load balancer capable of level 7 HTTP routing. It must be able to parse URLs in HTTP headers.
 - It must allow end-points to manage TCP connections. Specifically, it must allow one-to-one mapping between client and server TCP sessions. Also, it must not do back-end connection pooling, such as reverse proxy server pooling.
- **Verify that all of the Siebel Servers for which you want to provide load balancing are running.** At least one Siebel Server must be running.
- **On each Siebel Server, verify that the Application Object Managers that you want to load balance are enabled.** Disable any Application Object Managers that you will not use.
- **Select an unallocated, static virtual IP address and virtual port number for the load balancer.**
- **Generate the load-balancing configuration file (lbconfig.txt),** as described in “[Generating the Load Balancing Configuration File \(lbconfig.txt\)](#)” on page 141.
- **Review the HTTP load balancer rule types.** Review the component rules, server rules, and round-robin rules.

- **Configure the SWSE.** The SWSE Configuration Wizard will ask you to choose Siebel load balancing or third-party load balancing. Choose third-party load balancing and enter the virtual IP address and virtual port number for the load balancer. For more information, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

Planning Disk Space and Configuration Requirements

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

Before you install, you must anticipate your disk space requirements for each installable Siebel module. Each Siebel installer displays the required disk space for the installed software before files are copied. Also anticipate the disk space required for Siebel image directories. For more information, see [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)

Siebel installers also have temporary disk space requirements, as described in [“Managing Temporary Disk Space Required by Siebel Installers and Wizards” on page 310](#).

The Siebel Enterprise Server architecture is designed to scale across multiple application server computers to meet the needs of large, complex deployments. For assistance in capacity planning and sizing hardware platforms for Siebel Enterprise Server, contact your Oracle sales representative or Oracle Advanced Customer Services to request assistance from Oracle’s Application Expert Services.

The number of server computers, the CPU resources, and the memory resources required for operating Siebel Business Applications increases with the number and types of users and the deployed Siebel CRM modules.

In addition to the disk space required for installation, computers operating Siebel Remote components require 15 MB of usable disk space for each mobile user. Oracle recommends using high-performance and high-availability storage solutions, as appropriate, for deployments of Siebel Business Applications, particularly for high-capacity deployments. Oracle also recommends using high-performance disks or fault-tolerant disk arrays for all server computers, Siebel File System servers, and database servers.

Hardware or software high-availability disk configurations are critical for Siebel Remote servers, Siebel File System servers, and database servers. It is recommended that you configure other Siebel application servers, Siebel Web servers, and other Siebel Server components to use hardware or software RAID level 1 or comparable configurations.

High-availability solutions, such as clustering, are also recommended on critical components and can be used in conjunction with applicable high-availability storage solutions. Clustering is critical for high availability of the Siebel Gateway Name Server, Siebel Remote servers, and the database server. Clustering is also recommended for any application server computer that is not load-balanced. See also [“Planning Siebel Server Load Balancing” on page 306](#) and related topics.

Customers are responsible for making sure that clustering is supported on each server component and that the Siebel Server hardware operates with the supported server operating systems and clustering solutions. For supported operating systems and supported Web servers, see the Certifications tab on My Oracle Support. For more information, see 1492194.1 (Article ID) on My Oracle Support.

NOTE: Some of the information in this topic was formerly presented in *Siebel System Requirements and Supported Platforms* on Oracle Technology Network. Use the requirements described in this topic as a guideline. The requirements do not take into consideration various factors that affect scalability and performance.

For more information about some of these recommendations, see *Siebel Deployment Planning Guide*. See also *Siebel Performance Tuning Guide*.

Planning RDBMS Installation and Configuration

This topic is part of “[Planning Your Siebel Deployment](#)” on page 304.

Note the following guidelines for installing and configuring the Relational Database Management System (RDBMS) on which you will create the Siebel database.

For more information about configuring the RDBMS, see [Chapter 12, “Configuring the RDBMS.”](#) For more information about configuring the Siebel database after installing Siebel Enterprise Server, see [Chapter 5, “Installing the Siebel Database on the RDBMS.”](#)

- Make sure that this release of Siebel Business Applications supports the exact version of your chosen RDBMS, as specified in the Certifications tab on My Oracle Support, and that the RDBMS has been installed on its designated server. This server will hold the database tables containing your business data, such as sales (personnel, territories, opportunities, and activities), marketing, and customer service information.
- Verify that the network name of the server that will support the Siebel database is properly recorded in your copy of the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)
- When you configure the Siebel Enterprise, the Siebel Enterprise Configuration Wizard creates the ODBC data source name, using the name *EnterpriseName_DSN*. For example, if your Siebel Enterprise name is *sieb16*, then the ODBC data source name will be *sieb16_DSN*. Using this pattern, determine what your ODBC data source name will be and record it in your copy of the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

NOTE: In most cases, do not change any of the default ODBC settings or parameters. Otherwise, you will encounter problems using the ODBC. For example, setting `OptimizeLongPerformance` to `enable` corrupts all of the scripts in the Siebel Repository during import or export processes. See also the topics for verifying the ODBC data source for your RDBMS platform, such as those in “[Verifying the ODBC Data Source](#)” on page 233.

Siebel Web Client and Siebel Tools installers also create ODBC data source names during the installation. The naming convention is different than ODBC data source names created by the Siebel Enterprise Configuration Wizard. For more information, see [Chapter 7, “Installing Siebel Web Clients and Siebel Tools.”](#)

About Database Code Pages and Locale Support

In a database environment that is enabled for Unicode, you can install any of the available Siebel language packs. However, in a database environment that is not enabled for Unicode, you must consider the correlation of the language packs that you want to install and the characters supported by your database code page. For example, in a Western European code page database, you can only install Western European language packs, such as U.S. English, French, Spanish, or German language packs. In a Japanese code page database, you can only install Japanese or U.S. English language packs. The installed languages and the code page of the operating system on which your Siebel Server runs must match those of your Siebel database instance.

Related Topics

[“Specifying the Locale for Siebel Business Applications” on page 313](#)

[“Specifying the Locale for Your UNIX Operating System” on page 314](#)

[Chapter 12, “Configuring the RDBMS”](#)

Related Books

Siebel Global Deployment Guide

Certifications tab on My Oracle Support

For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

Planning Database Connectivity

Use the ODBC driver versions listed in the Certifications tab on My Oracle Support for your chosen RDBMS for Siebel Servers, Siebel Tools, and Siebel Developer Web Clients (if applicable). Make sure that ODBC connectivity uses TCP/IP as the transport layer protocol for your Siebel Servers, Siebel Tools, and Siebel Developer Web Clients.

How to Use This Guide If Your Database Is IBM DB2 for z/OS

This guide describes installation of Siebel modules for each supported RDBMS, with the exception of IBM DB2 for z/OS. (This database product was formerly referred to in some *Siebel Bookshelf* documentation as *IBM DB2 UDB for z/OS and OS/390*.)

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

Customers for IBM DB2 for z/OS require this guide (*Siebel Installation Guide* for the operating system you are using) and *Implementing Siebel Business Applications on DB2 for z/OS*. Both of these guides are available on the *Siebel Bookshelf*.

NOTE: In this guide, [Chapter 12, “Configuring the RDBMS,”](#) and [Chapter 5, “Installing the Siebel Database on the RDBMS,”](#) do not apply to customers using DB2 for z/OS. Instead, see *Implementing Siebel Business Applications on DB2 for z/OS* for database-related content. If you are upgrading on this platform, then see also *Siebel Database Upgrade Guide for DB2 for z/OS*. For information about relevant requirements related to authentication for the Siebel Gateway Name Server, see [“Requirements for Siebel Gateway Name Server Authentication” on page 333](#).

Implementing Siebel Business Applications on DB2 for z/OS includes, but is not limited to, topics such as special security issues for this RDBMS, installing the Siebel schema, performance guidelines for use of this RDBMS with Siebel Business Applications, and specific procedures for moving data from development to production. Also consult all of the other applicable *Siebel Bookshelf* documentation, such as *Siebel Security Guide*.

Managing Temporary Disk Space Required by Siebel Installers and Wizards

This topic is part of “[Planning Your Siebel Deployment](#)” on page 304.

Siebel installer programs, the Siebel Image Creator utility, and Siebel Configuration Wizards all require the use of temporary disk space while operating. Disk space required varies by operating system. The location of temporary directories is specified using the TEMP and TMP environment variables. Set these variables the same: to a valid existing directory that contains adequate space.

It is recommended that you periodically clear out the temporary directory that you are using. You might have to do this as part of resolving installer or wizard problems.

On Microsoft Windows, the temporary directory used by default is C:\Documents and Settings\username\Local Settings\Temp.

The minimum disk space figures provided in this topic are general guidelines only. The specific amount of temporary disk space needed by a particular installation operation varies. If there is insufficient disk space, then the installer will notify you that more disk space is needed.

The user running the installer or wizard must have privileges that include write permission for the temporary directory.

[Table 27](#) shows the minimum disk space required by Siebel installers and wizards (by operating system), along with the default temporary directory locations.

Table 27. Temporary Disk Space Required by Siebel Installers and Wizards

Operating System	Minimum Required Space	Default Location
Windows	65 to 100 MB	System drive (usually C:)
AIX	200 MB	/tmp
HP-UX	240 MB	/var/tmp
Linux	200 MB	Home directory for user
Oracle Solaris	115 MB	/var/tmp

About The Language in Which Siebel Installers and Wizards Run

This topic is part of [“Planning Your Siebel Deployment”](#) on page 304.

When you start Siebel installer programs, the Siebel Image Creator utility, or Siebel Configuration Wizards, the language in which the program runs (the user interface text) is determined by the language for the locale of your operating system, where this language and locale are supported for the current version of Siebel Business Applications and for the installer or other type of wizard.

Installers for Siebel CRM server modules and client modules are based on Oracle Universal Installer and run in the current language corresponding to the regional and language options settings on the server or client computer, where the current language is one of the following: U.S. English, French, German, Italian, Brazilian Portuguese, Spanish, Japanese, Korean, Chinese Simplified, or Chinese Traditional. For any other current language setting, the installer runs in U.S. English.

Siebel Configuration Wizards and Siebel Image Creator also use the current language corresponding to the regional and language options setting. The programs can run in all of the languages corresponding to the available Siebel language packs, except Arabic, Hebrew, Polish, Russian, Thai, or Turkish. If the current language is one of these or any language not supported for Siebel Business Applications, then the program runs in U.S. English.

For all of the Siebel installers and Configuration Wizards, and Siebel Image Creator, in order to change the user interface language, you must change the current operating system language and locale. Make sure that the locale of your operating system is set to the desired choice of your language. The language that you select must be one of those supported for Siebel Business Applications, as described earlier.

NOTE: If a supported locale that you intend to use does not exist on the supported operating system, then use another existing supported locale, so that you can proceed with installation and initial configuration in a familiar language; for example, DE_DE.UTF-8 for German (on AIX), en_US.UTF-8 for U.S. English (on Oracle Solaris), and so on. For a list of supported locales for your UNIX operating system, see [“Specifying the Locale for Your UNIX Operating System”](#) on page 314.

For information about installing language packs for Siebel Business Applications, see the applicable installation task topic and see [“Installing and Deploying Siebel Business Applications with Multiple Languages”](#) on page 150.

Planning to Install Multiple Instances of Siebel Business Applications

This topic is part of [“Planning Your Siebel Deployment”](#) on page 304.

This topic describes issues in installing multiple instances of similar or dissimilar versions of Siebel Business Applications on the same computer.

Installing Multiple Instances of Similar Versions of Siebel Business Applications

By default, the Siebel installers automatically install Siebel Business Applications software in directories with unique names that will not conflict with other Siebel modules that you install on the same computer. To install another instance of the same version of a module on a single computer (where applicable), specify a custom installation path.

However, installing multiple instances of some modules might cause problems. For example:

- You cannot install multiple instances of the same version of Siebel Gateway Name Server on the same computer.
- Restrictions apply for installing multiple instances of SWSE. For details, see [“Requirements for Installing and Configuring the Siebel Web Server Extension”](#) on page 340.

For important related considerations, see also [“About Installing Siebel Business Applications”](#) on page 299 and [“Preparing the Hardware and Planning Topologies”](#) on page 305.

NOTE: In this context, *same version* refers to multiple installations of the current release, Siebel Innovation Pack 2016.

All Siebel Enterprise Server components that you install on the same computer are installed into the same root directory (such as C: \si ebel \16. 0. 0. 0\ses on Microsoft Windows or /si ebel / 16. 0. 0. 0/ses on UNIX), except in the case described in the note that follows. These components include Siebel Gateway Name Server, Siebel Server, Database Configuration Utilities, and EAI Connector. See also [“File and Directory Naming Conventions”](#) on page 319.

NOTE: If you have already installed Siebel Enterprise Server for the current release, and you require additional Siebel Enterprise Server components (for example, Siebel Gateway Name Server is already installed and you want to install a Siebel Server), then you can install a new instance, with the modules you require, in a different directory or on a different computer. (Then install the latest Siebel Patchset release for all of the applicable installed instances.) For more information about options in this situation, see [“General Requirements for Installing and Configuring Siebel Enterprise Server Components”](#) on page 328.

Installing Multiple Instances of Dissimilar Versions of Siebel Business Applications

Multiple versions of Siebel components can be installed on the same computer. Sometimes you might have to do this as part of some upgrade scenarios.

You might use naming conventions for your installation directories that reflect the component and the version being installed, such as 16 or 16.0 for the current version. The default installation directories already reference Siebel CRM version 16.0 in this way, just as the default installation directories for earlier Siebel CRM versions reflected those versions.

- If you install multiple versions of the Siebel Gateway Name Server on the same computer, then you must install them in different directories and assign unique port numbers.
- If you install multiple versions of the Siebel Server on the same computer, then you must install them in different directories.
- Restrictions apply for installing multiple instances of Siebel Web Server Extension.

Related Topics

[Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”](#)
[“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#)

Related Books

Siebel Database Upgrade Guide

Specifying the Locale for Siebel Business Applications

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

When a Siebel application component (Siebel Server, Siebel Tools, or Siebel Developer Web Client) opens a connection to the Siebel database, the locale is automatically determined on a per-session basis for the connection. This setting overrides settings that might be defined elsewhere.

Do not explicitly set the NLS_LANG (Oracle-specific), LANG, or SIEBEL_CODEPAGE environment variables for Siebel Business Applications. Siebel environment setup files such as siebenv.csh (for C shell) or siebenv.sh (for Bourne or Korn shell) might set these variables, but these settings are not used for the database connection. The settings in the siebenv.csh or siebenv.sh files affect any software that runs in the Siebel environment controlled by those files (except for Siebel Business Applications).

For deployments using Oracle Database, the NLS_LANG variable determines default behaviors that can be overridden using other variables, such as NLS_SORT, that are *not* set automatically for Siebel Business Applications using an Oracle Database connection. Therefore, settings that you make for NLS_SORT will affect any software that runs in the Siebel environment (*including* Siebel Business Applications).

CAUTION: For development environments, Siebel Business Applications support only binary sort order. Therefore, for Oracle Database, when you are setting the locale for your development environment, either do not set NLS_SORT at all, or set it to BINARY. In production environments, this restriction does not apply. (In this guide, *sort order* and *collation sequence* are used interchangeably, even though these terms might not always mean the same thing.)

You can explicitly set the locale to be used by a Siebel Server or Application Object Manager component by setting the Locale Code parameter.

Related Topics

[“Planning RDBMS Installation and Configuration” on page 308](#)
[“Specifying the Locale for Your UNIX Operating System” on page 314](#)
[“Managing Environment Variables” on page 139](#)
[Chapter 12, “Configuring the RDBMS”](#)

Related Books

Siebel Applications Administration Guide
Siebel Global Deployment Guide

Specifying the Locale for Your UNIX Operating System

This topic is part of “Planning Your Siebel Deployment” on page 304.

To successfully run Siebel Business Applications on UNIX, you must configure the appropriate locales on your operating system for the language that you will run the applications in. In some cases, you might have to install additional content on your system in order to support the locale.

For LANG or LC_ALL settings on different UNIX operating systems for supported languages or locales, see [Table 28 on page 314](#).

NOTE: The setting of the LANG environment variable does not affect database connections for Application Object Manager components for Siebel Business Applications. However, it does affect database connections used by other Siebel components.

Table 28. Lang or LC_ALL Parameter Settings for Supported Languages or Locales

Language or Locale Siebel Language Code	LANG or LC_ALL Parameter Setting for Each Supported UNIX Operating System		
	AIX	HP-UX or Linux	Oracle Solaris
Arabic (Saudi Arabia) ARA	AR_SA.UTF-8	ar_SA.utf8	ar_SA.UTF-8
Chinese (Simplified) CHS	ZH_CN.UTF-8	zh_CN.utf8	zh_CN.UTF-8
Chinese (Traditional) CHT	ZH_TW.UTF-8	zh_TW.utf8	zh_TW.UTF-8
Czech CSY	CS_CZ.UTF-8	cs_CZ.utf8	cs_CZ.UTF-8
Danish DAN	DA_DK.UTF-8	da_DK.utf8	da_DK.UTF-8
Dutch NLD	NL_NL.UTF-8	nl_NL.utf8	nl_NL.UTF-8
English (United States) ENU	EN_US.UTF-8	en_US.utf8	en_US.UTF-8
Finnish FIN	FI_FI.UTF-8	fi_FI.utf8	fi_FI.UTF-8
French (France) FRA	FR_FR.UTF-8	fr_FR.utf8	fr_FR.UTF-8
German (Germany) DEU	DE_DE.UTF-8	de_DE.utf8	de_DE.UTF-8
Hebrew HEB	IW_IL.UTF-8	iw_IL.utf8	iw_IL.UTF-8

Table 28. Lang or LC_ALL Parameter Settings for Supported Languages or Locales

Language or Locale Siebel Language Code	LANG or LC_ALL Parameter Setting for Each Supported UNIX Operating System		
	AIX	HP-UX or Linux	Oracle Solaris
Italian ITA	IT_IT.UTF-8	it_IT.utf8	it_IT.UTF-8
Japanese JPN	JA_JP.UTF-8	ja_JP.utf8	ja_JP.UTF-8
Korean KOR	KO_KR.UTF-8	ko_KR.utf8	ko_KR.UTF-8
Polish PLK	PL_PL.UTF-8	pl_PL.utf8	pl_PL.UTF-8
Portuguese (Brazil) PTB	PT_BR.UTF-8	pt_BR.utf8	pt_BR.UTF-8
Portuguese (Portugal) PTG	PT_PT.UTF-8	pt_PT.utf8	pt_PT.UTF-8
Russian RUS	RU_RU.UTF-8	ru_RU.utf8	ru_RU.UTF-8
Spanish (Modern) ESN	ES_ES.UTF-8	es_ES.utf8	es_ES.UTF-8
Swedish SVE	SV_SE.UTF-8	sv_SE.utf8	sv_SE.UTF-8
Thai THA	TH_TH.UTF-8	th_TH.utf8	th_TH.UTF-8
Turkish TRK	TR_TR.UTF-8	tr_TR.utf8	tr_TR.UTF-8

Related Topics

[“Specifying the Locale for Siebel Business Applications” on page 313](#)

[“Managing Environment Variables” on page 139](#)

Setting Permissions and Ownership

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

This topic provides information about permissions and ownership for user accounts that will perform installations.

- To install server-based Siebel CRM modules, you must be a nonroot user. You cannot install these modules as the root user using Oracle Universal Installer software. This requirement applies to all new installations of Siebel Enterprise Server and Siebel Web Server Extension (SWSE). It also applies to all migration installations and to all installations of Siebel Patchset releases for the current release.

For existing installations of Siebel CRM version 8.1.1.7 or earlier that were originally installed as the root user (using InstallShield installers), you can use the `chown` command to change the owner for all of the installation directories and files to a nonroot user in order to perform the migration installation.

After installing as a nonroot user, you can optionally change the installation owner back to the root user. Note that the same requirement will apply every time that you install a new release, including migration installations of a future release or installations of Siebel Patchset releases. In general, it is recommended not to change the owner back to the root user, unless your deployment requires it.

For example, for new or existing installations of SWSE, after installing as a nonroot user, you might need to change the owner to the root user in order to work with an existing Web server installation that uses privileged ports that are reserved for the root user (for example, port 80).

For more information, see [“Requirements for the Installation User for the Siebel Web Server Extension” on page 345](#).

- Before you install each server module discussed in this guide, set `umask` to `027` on the installation directory of that computer. Changing this setting eliminates other permissions, including group write permissions. This action also sets the default permissions, so that all of the files and directories that are created afterwards have `rwxr-x---` permissions. The Siebel service owner account must have all permissions. However, the group must have read and execute (for directory access) permissions only. See also [“Creating the Siebel Service Owner Account” on page 324](#).

Related Topics

[“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#)

[“Configuring the Siebel Gateway Name Server for Automatic Start” on page 132](#)

[“Configuring the Siebel Server for Automatic Start” on page 136](#)

Installing Siebel Business Applications from a Remote Server Computer

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

If you are installing server-based Siebel modules in GUI mode from a remote server computer, then you must set the DISPLAY variable to display the Java installer user interface on your local computer. For example, depending on your shell:

```
export DISPLAY=mycomputer: 0.0
```

or:

```
setenv DISPLAY mycomputer: 0.0
```

In this command, *mycomputer* is the computer name or IP address of your local workstation computer.

You might be able to test that your display works correctly on your local computer by entering:

```
xclock
```

You can also verify the IP address by entering:

```
echo $DISPLAY
```

If the clock does not appear on your local computer, then issue the following command on your local computer:

```
xhost +
```

If you are using X-connectivity software to access the UNIX computer from a Windows computer, then the installer might fail or stop responding. If this is the case, then try using a later version of the X-connectivity software.

NOTE: For additional information, refer to vendor or other documentation for your UNIX operating system, or contact your system administrator for assistance.

Restrictions on Host Names for Siebel Gateway Name Server and Siebel Server

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

See also [“Restrictions on Names for Siebel Enterprise and Siebel Server” on page 318](#), which is about names for Siebel entities that you specify during configuration.

This topic describes restrictions for host names for server computers on which you will install Siebel Gateway Name Server or Siebel Server.

The Siebel Gateway Name Server name is defined automatically based on the host name of the server computer. However, problems might arise during configuration of Siebel modules unless the following requirements are observed:

- Host names for Siebel Gateway Name Server or Siebel Server must not include dashes (hyphens). It is recommended that you use an underscore if a separator character is required. For example, `host_sba16` is acceptable, but `host-sba16` is not.

NOTE: A dash might not cause problems in every scenario, but problems have been observed in many specific scenarios, as noted in 477993.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Alert 1067. (Workarounds described in the alert, involving substitute `.scm` files, do not apply to the current software version.) In any case, similar restrictions for naming a Siebel Enterprise or Siebel Server are noted in [“Restrictions on Names for Siebel Enterprise and Siebel Server” on page 318](#).

- The host name for Siebel Gateway Name Server must be no longer than 15 characters.

The Siebel Configuration Wizard task for configuring the Siebel Gateway Name Server cannot execute successfully if the host name is longer than 15 characters.

(Configuration Wizard tasks for configuring the Siebel Enterprise and the Siebel Server also validate that the name of the Siebel Gateway Name Server, which would have been previously configured, is no longer than 15 characters.)

- In general, it is recommended not to define the host name for the Siebel Gateway Name Server computer to include domain information, as might be common in some UNIX environments. The entire host name is subject to the 15-character limit mentioned previously.

Restrictions on Names for Siebel Enterprise and Siebel Server

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

This topic describes restrictions to observe when planning the names that you will give the Siebel Enterprise and Siebel Server instances during configuration of Siebel Business Applications software.

See also [“Restrictions on Host Names for Siebel Gateway Name Server and Siebel Server” on page 317](#).

Siebel Configuration Wizard tasks that specify or refer to the Siebel Enterprise name or the Siebel Server name validate for some of the following requirements, such as the 12-character limit. User input is validated in the wizard, unless you specify to skip validation, as described in [“Starting a Siebel Configuration Wizard” on page 71](#). Observe all of the documented restrictions regardless of validation behavior.

Siebel Enterprise Naming Restrictions

The following restrictions apply to naming a Siebel Enterprise:

- The name must be no longer than 12 characters.
- The name cannot be *server* or *enterprise*. (A name such as *enterprise1* is acceptable.)

Siebel Server Naming Restrictions

When planning the names of Siebel Server instances within a Siebel Enterprise, the following restrictions apply:

- Names must contain only alphabetic characters, numerals, underscores, or a combination thereof. For example, do not use dashes (hyphens) in naming Siebel Server instances.
- Names must lead with an alphabetic character.
- Names must be unique within the Siebel Enterprise.
- Names must be no longer than 12 characters.
- Names cannot be *server* or *enterprise*. (Names such as *server1* are acceptable.)

File and Directory Naming Conventions

This topic is part of “[Planning Your Siebel Deployment](#)” on page 304.

Use lowercase for all of the file names, directory names, path names, parameters, flags, and command-line commands, unless you are instructed otherwise.

Directory names or file names cannot contain special characters, including periods, apostrophes, accents, number (pound or hash) signs, ampersands, or spaces. Underscores are acceptable. Spaces are not allowed for server installs on Windows (though the operating system might otherwise allow it). Spaces are acceptable for Siebel Web Client or Siebel Tools installs (on Windows).

How This Guide Refers to Your Installation Directories

This guide uses the following conventions to refer to the installation directories either created by the installers or to which users navigate to access files and executable programs.

NOTE: The default installation directories shown in this guide for Siebel Enterprise Server components, Siebel Web Server Extension, Siebel Web Clients, and Siebel Tools are those for new installations of the current release, Siebel CRM version 16.0. Alternatively, your products might have been installed in different installation directories, such as if you originally installed them for a prior release.

`$SIEBEL_ROOT`. Generally, this refers to the main directory in which software for each Siebel Enterprise Server component has been installed. The installers for the Siebel Enterprise Server components install into the top-level directory, such as `/siebel/16.0.0.0/ses` by default, although the directory where you install might be different, such as `/export/home/siebel/16.0.0.0/ses`. Generally, this directory is what `$SIEBEL_ROOT` represents in this guide.

NOTE: `$SIEBEL_ROOT` might also represent the value of the `SIEBEL_ROOT` environment variable, which usually corresponds to a module-specific installation directory, such as `/siebel/16.0.0.0/ses/siebsrvr` for Siebel Server.

`$ORACLE_HOME`. This refers to the same directory as represented by `$SIEBEL_ROOT`.

`$SIEBEL_HOME`. The installation or root directory for Siebel Business Applications software in general (such as `/siebel/16.0.0.0/ses`), or of a specific module such as the Siebel Gateway Name Server or the Siebel Server (such as `/siebel/16.0.0.0/ses/siebsrvr` for Siebel Server), depending on the context. Many scripts contain variables with this name; its meaning is most often derived from the context.

`$SIEBSRV_ROOT`. The installation or root directory for Siebel Server. By default, it is installed in `/siebel/16.0.0.0/ses/siebsrvr`.

`$SIEBEL_SERVER_ROOT`. This term is sometimes used within executable programs, such as the `siebel_server` script, as a synonym for `$SIEBEL_HOME`.

`$SIEBEL_GATEWAY_ROOT`. The installation or root directory for Siebel Gateway Name Server. By default, it is installed in `/siebel/16.0.0.0/ses/gtwysrvr`.

`DBSRVR_ROOT`. The directory into which you install the Siebel Database Configuration Utilities (also called the *Siebel Database Server*). By default, these utilities are installed in `/siebel/16.0.0.0/ses/dbsrvr` (on a Siebel Server computer).

`SWSE_ROOT`. The directory into which you install the Siebel Web Server Extension (SWSE). By default, it is installed in `/siebel/16.0.0.0/sweapp`.

`SIEBEL_CLIENT_ROOT`. The directory into which you install the Siebel Mobile Web Client or Siebel Developer Web Client. By default, it is installed in `C:\siebel\16.0.0.0\client` or a similar location.

`SIEBEL_TOOLS_ROOT`. The directory into which you install Siebel Tools. By default, it is installed in `C:\siebel\16.0.0.0\tools` or a similar location.

Creating the Siebel File System

This topic is part of [“Planning Your Siebel Deployment” on page 304](#).

The *Siebel File System* is a shared directory, or set of directories, that is network-accessible to the Siebel Server and that can store files such as attachments for use by Siebel Business Applications. Siebel File System directories might optionally exist on multiple separate devices or partitions.

Each File System directory might be created on a server computer where you have installed a Siebel Server, or on another network server that can share the directory, so that it is available to the Siebel Server. Consult your third-party documentation for requirements for networked file systems.

Creating multiple Siebel File System directories in different locations can enable you to store larger volumes of data. As new file attachments are inserted, they are evenly distributed to these multiple File System directories. If you create multiple File System directories, then you must include all of the directory locations, delimited by commas, when you specify the Siebel File System location during configuration of your Siebel environment. Each File System directory location must be uniquely named within the network context where it will be accessed.

You can exclude certain types of files from being saved to the Siebel File System, as determined by their file extensions. For more information about setting system preferences to enable this feature and to specify the file extensions to be excluded, see *Siebel Security Hardening Guide*.

Siebel File System Requirements

The following are requirements for the Siebel File System. Additional requirements are noted later in this topic.

- A primary Siebel File System directory must be created before you configure the Siebel Enterprise. You specify this location during configuration. The user running the Siebel Configuration Wizard must have write permission in this directory.
- It is strongly recommended that you disable short file-name generation on Windows servers hosting the Siebel File System, because this type of file-naming can cause severe performance issues when the file system grows to a large size.
- The underlying physical file system must use file locking. Valid locks must be returned that are appropriate to the action being undertaken. For example, when a file is created or written to, an exclusive lock is needed. File locking must ensure the integrity of the files accessed. If a write lock is acquired for a file, then no other process must be able to access the file. For more information and recommendations, see 759070.1 (Article ID) on My Oracle Support.

For a UNIX deployment with an NFS file system, you must enable the NFS server's `lockd` and `statd` daemons, and also the basic NFS daemons that implement mounting and accessing a share. These locking daemons must be tuned to the number of operating system threads. Otherwise, these daemons might not be able to manage the high volume of concurrent file system lock requests that a large scale Siebel CRM system can generate.

- If the operating systems of the computers hosting the Siebel Server and a File System directory are different (for example, one Windows and one UNIX), then you might have to deploy a third-party cross-platform networking tool, such as Samba, to allow both computers to share the directory. See your third-party vendor documentation for details.
- You must create a separate Siebel File System for each Siebel Enterprise. For example, if you have development and test databases, then you must have two separate Siebel Enterprises, and therefore two Siebel File Systems.
- The ability to use multiple directories and devices for the Siebel File System does not apply to the Siebel Mobile Web Client, for which the Siebel File System must use a single directory on the client computer.
- If you operate a File System directory as part of a cluster for failover purposes, then you must create the directory on a clustered disk drive with a clustered network share resource. For information about clustering your servers and about deployment options for the Siebel File System, see *Siebel Deployment Planning Guide*.

Siebel File System and Siebel Server Components

Each Siebel Server accesses the Siebel File System (for the Siebel Enterprise) by means of a dedicated server component, called File System Manager (alias `FSMSrvr`). Individual Siebel Web Clients require no direct knowledge of the locations of the Siebel File System directories, because they connect to `FSMSrvr` through the Application Object Manager component on the Siebel Server to request file uploads or downloads. The Application Object Manager passes such requests to `FSMSrvr`, which processes the requests through interaction with the File System directories.

Because the Siebel Server is the sole access mechanism to the Siebel File System, the user with administrative privileges for the Siebel Server, and no other user, must have access privileges to the File System directories. This precaution protects the File System from direct physical access by all other users.

Some Siebel Server components might access the Siebel File System directly, without using File System Manager.

Siebel File System Parameter

The Siebel File System parameter defines the particular directory or set of directories that you are using for the Siebel File System. Specify multiple File System directories delimited by commas.

The Siebel File System parameter can be defined at the Siebel Enterprise level, Siebel Server level, or server component level. For example, for a Siebel Server dedicated for use with Siebel EIM, you might choose to use a Siebel File System location that is not in general use in the Siebel Enterprise. Use Server Manager to individually modify the parameter at the Siebel Server or component level, if the File System that is to be used by a particular Siebel Server or applicable component has different directory locations than are defined for the Siebel Enterprise.

The value of the Siebel File System parameter cannot exceed 2048 characters in length.

NOTE: Verify that the network names of servers that support the Siebel File System are properly recorded in your copy of the worksheet in [Appendix A, "Siebel Deployment Planning Worksheet."](#) Use the computer names, not the IP addresses, for the Siebel File System names. IP addresses are not supported.

Siebel File System Utilities

The following utilities are available to help you manage your Siebel File System directories: `sfscleanup` and `sfspartition`.

- Use `sfscleanup` to clean up orphan files in the Siebel File System.
- Use `sfspartition` to configure an existing Siebel File System to use multiple partitions or multiple directories.

For information about using these utilities, see *Siebel System Administration Guide*.

Naming a Siebel File System Directory

Each Siebel File System directory name must be alphanumeric, must begin with an alphabetic character, and cannot contain special characters or spaces. Underscores are permitted. For example, you might name a directory something like this:

```
/server/siebel or /server/siebel/filesystem
```

Such a directory might be referred to using the following notation:

/SiebelFS/siebel16

where:

- *SiebelFS* is the host name of the computer (for example, where a dedicated computer is used for the Siebel File System).
- *siebel16* is the name of the shared directory.

You have to specify all of the applicable shared directories (delimited by commas) when configuring the Siebel Enterprise. These shared directories must be available to all of the Siebel Servers in the Siebel Enterprise. You might have to use a file-sharing tool to access the directories.

As part of the Siebel Server installation, File System Manager automatically generates a set of subdirectories under each Siebel File System root directory, as described in [Table 29 on page 323](#).

Table 29. Siebel File System Subdirectories

Subdirectory	Purpose
att	Main subdirectory for file attachments
atttmp	Temporary directory for file attachments
cms	Files used for outbound communication requests
ei m	Siebel transaction files for Siebel EIM
Marketi ng	Main subdirectory for Siebel Marketing
red	Rule edit cache for Siebel Product Configurator
ssp	Session preferences
userpref	Siebel user preferences

NOTE: When you create a Siebel File System shared directory, only the associated Siebel Servers must be allowed to create subdirectories in that location. Do not manually create subdirectories in that location.

For more information about some of these subdirectories, see *Siebel System Administration Guide*.

Setting Up the Siebel File System

Use the following procedures to set up the Siebel File System directories.

NOTE: In addition to using the following steps, you must install the third-party software required to view standard attachment types, such as Microsoft Word, Excel, or Lotus Notes, on client computers where users run Siebel Business Applications.

To set up the Siebel File System

- 1 Create each directory on the applicable server and record all of the directory locations in the copy that you made of the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)
- 2 Using the appropriate administrative tools for your UNIX operating system, set permissions for the Siebel administrator to access the directory and subdirectories to 700.

NOTE: Only the Siebel administrator for the Siebel Server, and no other user, must have access privileges to the Siebel File System directories.

- 3 Grant access to each Siebel Server for the appropriate group.

If an appropriate GUI-based administrative tool does not exist on your operating system, then you can use the `chmod` and `chgrp` utilities to set these parameters. Consult your UNIX operating system documentation for more information.

Related Topics

[“Populating the Siebel File System” on page 126](#)

Related Books

Siebel Deployment Planning Guide

Siebel System Administration Guide

Siebel Security Guide

Siebel Security Hardening Guide

Creating the Siebel Service Owner Account

This topic is part of [“Planning Your Siebel Deployment” on page 304.](#)

The Siebel Enterprise Server requires that you create a standard UNIX system user account. This account must be available on each Siebel Server in your Siebel Enterprise under which Siebel processes and components operate.

Use the following guidelines to create the Siebel service owner account:

- The Siebel service owner account must be defined or available on each applicable server computer: on the Siebel Gateway Name Server, on each Siebel Server in the Siebel Enterprise, and on any computer on which the Siebel File System exists.
- Create the Siebel service owner account at the network level, using an appropriate administration tool for your UNIX operating system, so that the same account can be used for all of the UNIX server computers within the Siebel Enterprise Server. Make sure that the numeric values for `uid` and `gid` match across the various computers.
- The Siebel service owner account password must not require a change on next logon and must be set not to expire.
- The Siebel service owner account name or password cannot contain any spaces.

- When you determine the Siebel service owner account name and password, record this information in your copy of the worksheet in [Appendix A, "Siebel Deployment Planning Worksheet."](#) (For security reasons, you might prefer not to record the password in the worksheet.) See also *Siebel Security Guide*.

Related Topics

- ["Setting Permissions and Ownership" on page 316](#)
- ["Requirements Specific to UNIX or Linux Operating Systems" on page 335](#)
- [Appendix A, "Siebel Deployment Planning Worksheet"](#)

Installation and Configuration Methods by Deployment Type

You can use any of several different overall methods for installing and configuring Siebel Business Applications software. Use the following information to help you determine which overall method, or combination of methods, is most suitable for your deployment requirements.

- ["Small to Medium-Sized Deployments" on page 325](#)
- ["Medium-Sized Deployments" on page 326](#)
- ["Large Deployments" on page 326](#)
- ["Installation and Configuration Options" on page 327](#)

For more information, see [Chapter 2, "Overview of Installing Siebel Business Applications,"](#) and other relevant topics.

Small to Medium-Sized Deployments

Do you require a small to medium-sized deployment? For smaller deployments, including some test or demonstration deployments, you might require all of the server-based Siebel Business Applications software to be installed on the same computer.

Verify that you have created the database instance (if you do not already have a Siebel database) and installed the Web server. The Siebel database might be located on the same computer as the Siebel Enterprise Server and the Web server with the Siebel Web Server Extension (SWSE), or on a different computer.

In this scenario, you install the Siebel Enterprise Server components and you install the Siebel Web Server Extension (SWSE) on the computer with the Web server. Siebel Enterprise Server components include Siebel Gateway Name Server, Siebel Server, Database Configuration Utilities, and EAI Connector.

You use the Siebel Enterprise Server installer to install the Siebel Enterprise Server components, and you use the SWSE installer to install the SWSE.

Run Siebel Configuration Wizards to configure the components that you installed. First configure the Siebel Gateway Name Server, then the Siebel Enterprise, then the SWSE logical profile. (You configure the physical SWSE after SWSE installation.)

If you do not have a Siebel database, then you start the Database Configuration Wizard and perform the task to install the Siebel database into the database instance. After you install the Siebel database, you start the Siebel Server Configuration Wizard and configure the Siebel Server.

You install the SWSE on the Web server computer, where you also installed Siebel Enterprise Server components, then you apply the SWSE logical profile.

Medium-Sized Deployments

Do you require a medium-sized deployment? Will you install all of the Siebel Enterprise Server components on the same computer? Siebel Enterprise Server components include Siebel Gateway Name Server, Siebel Server, Database Configuration Utilities, and EAI Connector.

Verify that you have created the database instance (if you do not already have a Siebel database) and installed the Web server. The Siebel database is assumed to be located on a different computer than the computer with Siebel Enterprise Server software.

In this scenario, all of the Siebel Enterprise Server components are to be installed on the same computer, but the Web server and Siebel Web Server Extension (SWSE) are to be installed on a different computer.

You use the Siebel Enterprise Server installer to install the Siebel Enterprise Server components, and you use the SWSE installer to install the SWSE.

You can install in GUI mode or use unattended installation. For more information about unattended installation, see [“Large Deployments” on page 326](#).

Run Siebel Configuration Wizards to configure the components that you installed. First configure the Siebel Gateway Name Server, then the Siebel Enterprise, then the SWSE logical profile. (You configure the physical SWSE after SWSE installation.)

If you do not have a Siebel database, then you start the Database Configuration Wizard and perform the task to install the Siebel database into the database instance. After you install the Siebel database, you start the Siebel Server Configuration Wizard and configure the Siebel Server.

You install the SWSE on the Web server computer, then you apply the SWSE logical profile.

Large Deployments

Do you require a relatively large deployment? Will you use multiple servers to deploy your Siebel Enterprise Server components? Siebel Enterprise Server components include Siebel Gateway Name Server, Siebel Server, Database Configuration Utilities, and EAI Connector.

If you must support many users or multiple Siebel Business Applications and have multiple servers available, then you will probably install the Siebel Gateway Name Server on a different computer than the Siebel Server.

A large deployment usually also requires multiple Siebel Servers running on different computers. Each Siebel Server might be configured to run a particular application or set of applications. Or, multiple Siebel Servers might be configured similarly for participation in load balancing. Install and configure additional Siebel Servers after completing initial installation and configuration tasks.

Verify that you have created the database instance (if you do not already have a Siebel database) and installed the Web server. The Siebel database and the Web server are assumed to be located on different computers than those with Siebel Enterprise Server software.

You use the Siebel Enterprise Server installer to install the Siebel Enterprise Server components, and you use the SWSE installer to install the SWSE.

You install the Database Configuration Utilities with the first Siebel Server. For a new deployment, you must install both of these on the same computer where you installed the Siebel Gateway Name Server. (Configuring and deploying this Siebel Server is optional.) The Siebel database itself is located on a different computer than the Siebel Enterprise Server software.

You can install in GUI mode or use unattended installation.

Run Siebel Configuration Wizards to configure the components that you installed. First configure the Siebel Gateway Name Server, then the Siebel Enterprise, then the SWSE logical profile. (You configure the physical SWSE after SWSE installation.)

If you do not have a Siebel database, then you start the Database Configuration Wizard and perform the task to install the Siebel database into the database instance. After you install the Siebel database, you start the Siebel Server Configuration Wizard and configure the Siebel Server.

You install the SWSE on the Web server computer, then you configure the installed SWSE (apply the SWSE logical profile).

Installation and Configuration Options

This topic is part of [“Installation and Configuration Methods by Deployment Type”](#) on page 325.

Options that can help you install and configure Siebel Business Applications software efficiently include:

- Installation and configuration tasks are separate and are performed at different times, optionally by different users. After basic deployment decisions are made, installations can be done under the supervision of administrators who are most familiar with Siebel Business Applications. Such specialized administrators might perform all of the Siebel Configuration Wizards tasks.
- You can perform unattended installation or configuration, which can save you time, provide greater flexibility, and reduce error, compared to installing and configuring each installed component manually.
 - For information about unattended installation, see [“Installing Siebel Enterprise Server Components and Siebel Web Server Extension in Unattended Mode”](#) on page 58.
 - For information about unattended configuration, see [Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)

Requirements for Installing and Configuring Siebel Enterprise Server Components

Review the requirements and guidelines in the following topics before installing and configuring the Siebel Enterprise Server:

- [“General Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#)
- [“Requirements for Installing Oracle LDAP Client” on page 331](#)
- [“Requirements for Siebel Gateway Name Server Authentication” on page 333](#)
- [“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#)
- [“Requirements for Installing and Configuring the Siebel Gateway Name Server” on page 336](#)
- [“Requirements for Installing and Configuring the Siebel Server” on page 337](#)
- [“Requirements for Installing the Siebel EAI Connector” on page 339](#)

For requirements specific to the Siebel database, see [“Requirements for Installing and Configuring the Siebel Database” on page 350](#).

General Requirements for Installing and Configuring Siebel Enterprise Server Components

This topic is part of [“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

Review this topic before installing and configuring Siebel Enterprise Server components. See also the topics about individual components.

- Before installing Siebel Business Applications software, you must review all of the relevant information in the Certifications tab on My Oracle Support. Also check for applicable alerts, bulletins, or other documents on My Oracle Support.
- Review [“About Installing Siebel Business Applications” on page 299](#) and [“Planning Your Siebel Deployment” on page 304](#).
- All computers on which the Siebel Enterprise Server software is installed must meet the hardware and software requirements detailed in the Certifications tab on My Oracle Support or elsewhere. The Siebel Enterprise Server installer verifies that you have required software at the necessary version levels.
- In general, you must have installed all of the third-party products that you will require for the Siebel Enterprise Server software that you are installing. Some products can be installed after Siebel Business Applications software. Such products are listed in the Certifications tab on My Oracle Support.

- You must have created a Siebel Business Applications installation image that includes all of the modules and components that you require. Users who run Siebel installers or modify installer files must have the necessary permissions to the network directories where the Siebel image is located. For information about creating the Siebel installation image, see [Chapter 13, “Creating the Siebel Installation Image on the Network.”](#)
- When you install multiple components of the Siebel Enterprise Server, such as Siebel Gateway Name Server and Siebel Server, on the same computer, they are installed into a common root directory, such as `/siebel/16.0.0.0/0/ses`. The environment variable `SIEBEL_ROOT` might be set differently in different locations, to reflect the full path to the installation location of a specific component, such as Siebel Server.
- Installation directories must meet the requirements described in [“File and Directory Naming Conventions” on page 319](#).
- If you will be clustering the Siebel Gateway Name Server or Siebel Server, then plan your use of clustering or redundant disk arrays (RAID) to configure against a single point of failure. For more information about this topic, see *Siebel Deployment Planning Guide*.
- Each computer that supports Siebel Enterprise Server software must have TCP/IP network connectivity to other computers that are part of or that work with the Siebel Enterprise Server. For example, the Siebel Gateway Name Server computer requires connectivity to all of the Siebel Server computers. Verify connectivity between all such computers, using the `ping` utility. For more information, see [“Verifying Network Connectivity for the Siebel Server Computer” on page 235](#).
- Before running any of the Siebel Configuration Wizards in which you will specify a server computer’s host name or IP address, validate the host name or IP address that you will enter during configuration. You can use the `ping` utility for this purpose. The host name and IP address data that you specify when you run the wizards must be correct in order for the configuration process to proceed correctly.
- Verify that the network names of the servers that will support the Siebel Gateway Name Server and all of the Siebel Servers are recorded in [Appendix A, “Siebel Deployment Planning Worksheet.”](#) You need this information when configuring the Siebel Servers.
- If you intend to use Transport Layer Security (TLS) with any Siebel Business Applications modules described in this guide, then you must review all of the applicable information before you configure the software.

If you are not yet ready to configure TLS for Siebel Enterprise Server and Siebel Web Server Extension, then you can either postpone configuration until you are fully ready to configure TLS or configure these components without TLS and reconfigure them later to use TLS. For more information about using TLS, see *Siebel Security Guide*.

- When data encryption is enabled, make a backup copy of the key file before you start a migration installation for Siebel Enterprise Server. Copy back this file after the migration.

CAUTION: When data encryption is enabled, a migration installation for Siebel Enterprise Server creates a new key file (`keyfile.bin`), overwriting your existing key file. If this happens, the encrypted columns will be inaccessible. To prevent this result, you must make a backup copy of the key file before starting the migration installation. After the migration installation, copy back the original key file. For more information about data encryption, see *Siebel Security Guide*.

- Review the issues described in [“Managing Temporary Disk Space Required by Siebel Installers and Wizards” on page 310](#). For example, make sure that you have adequate disk space, and make sure that the login ID running the installer has write permissions to this directory.
- It is strongly recommended that you install and deploy, or at least install, all of the languages that you expect to require. For more information, see [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#).

For more information, see additional relevant topics, including:

- [“About Installing Siebel Business Applications” on page 299](#)
- [“Planning RDBMS Installation and Configuration” on page 308](#)
- [“Siebel Installation Media Contents” on page 387](#)
- [“About Configuring Siebel Business Applications” on page 69](#) and following topics
- [“Preparing to Run Siebel Server Components” on page 145](#)
- You cannot install new Siebel Enterprise Server components into an existing installation.
- Note that the Siebel Enterprise Server installer user interface can run in the supported languages described in [“About The Language in Which Siebel Installers and Wizards Run” on page 311](#).
- Before you configure Siebel Enterprise Server components, you must have created the Siebel File System. It must meet all of the criteria described in [“Creating the Siebel File System” on page 320](#).
- Before you install Siebel Business Applications, review documented information about the installation and configuration process and applicable requirements. Customers must manage the overall installation and configuration process carefully to ensure success.
- For existing deployments, all Siebel Server component jobs must complete before:
 - You perform any Siebel CRM installations in a migration installation case.
 - You perform any upgrade tasks in a full database upgrade case.

After you perform all installation and upgrade tasks, recreate any component job definitions that you require for your deployment.

- Antivirus software, firewalls, and other security software can interfere with installation and operation of software if they are not properly configured. In some cases, you might need to disable antivirus software while installing Siebel CRM software. It is also recommended to exclude certain types of files from virus scanning, such as SRF files. In addition, you might need to disable the Windows feature User Account Control while installing Siebel CRM software.
- Additional requirements apply for migration installations of the current release. For more information, see [“Additional Tasks for Migration Installations” on page 62](#).

Related Topics

[Chapter 2, “Overview of Installing Siebel Business Applications”](#)

[“Additional Tasks for Migration Installations” on page 62](#)

[“About Configuring Siebel Business Applications” on page 69](#) and following topics

[“Installation and Configuration Methods by Deployment Type” on page 325](#)

[“Requirements for Installing Oracle LDAP Client” on page 331](#)

Related Books

Siebel Security Guide

Siebel Deployment Planning Guide

[“Requirements Specific to UNIX or Linux Operating Systems” on page 335](#)

Requirements for Installing Oracle LDAP Client

Oracle LDAP Client is integrated into the Siebel Enterprise Server installer tasks for installing the Siebel Server or Siebel Gateway Name Server. This client is available for customers using LDAP (Lightweight Directory Access Protocol) for authentication. Note the following requirements for installing and using Oracle LDAP Client:

- To be able to install Oracle LDAP Client, for each supported operating system, you must first include it in the network image along with Siebel Enterprise Server, as noted in [“About the Siebel Network Image” on page 383](#). Siebel Image Creator places the Oracle LDAP Client installer into the directory `Disk1\stage`, under `Siebel_Enterprise_Server`. The Siebel Enterprise Server installer invokes the Oracle LDAP Client installer from this location. The same network image location is used if you run the Oracle LDAP Client installer manually.

For example, the network image location might be like one of the following:

`Siebel_Image\Windows\Server\Siebel_Enterprise_Server\Disk1\stage`

`Siebel_Image/Solaris/Server/Siebel_Enterprise_Server/Disk1/stage`

- The Siebel Enterprise Server installer includes an option to install Oracle LDAP Client, in the Enterprise Security Authentication Profile screen. If you select the option Lightweight Directory Access Protocol (LDAP) Client, then Oracle LDAP Client is installed, silently, at the end of the Siebel Enterprise Server installation. The Siebel Enterprise Server installation task is described in [“Installing Siebel Enterprise Server” on page 44](#).
- If Oracle LDAP Client installation fails for any reason, then the Siebel Enterprise Server installation also fails and displays an error message. Correct the error and restart the Siebel Enterprise Server installer.

If Oracle LDAP Client is not present in the network image, then selecting its option in the installer leads to an installation validation error. Restart the Siebel Enterprise Server installer and do not select Oracle LDAP Client.

TIP: Alternatively, if Oracle LDAP Client exists in a network image location other than what was noted earlier, then you can edit the `oneclick.properties` file for the Siebel Enterprise Server installer to specify this location. In this case, restart the Siebel Enterprise Server installer and select Oracle LDAP Client.

Possible failures for LDAP Client installation include:

- Required kernel patches missing
- Insufficient swap space
- Multiple users with same user IDs in `passwd` file

- Install Oracle LDAP Client through the Siebel Enterprise Server installer only for deployments with databases other than Oracle Database. For Oracle Database, do not select the option in the Siebel Enterprise Server installer to install Oracle LDAP Client. Instead, you can install Oracle LDAP Client manually, as described in *Siebel Security Guide*.
- NOTE:** If you install Oracle LDAP Client with a Siebel Enterprise Server that connects to an Oracle Database, then this installation resets the existing Oracle Home defined for Oracle Database Client to the newly installed Oracle LDAP Client. Consequently, Siebel Business Applications will be unable to connect to the database.
- Oracle LDAP Client is installed with Siebel Enterprise Server in a new installation only. It is not included in a migration installation from any prior release.
 - Oracle LDAP Client is provided with the current release of Siebel CRM. The Oracle LDAP Client installation includes Oracle Wallet Manager. Required Oracle LDAP Client patches are also installed when you install Siebel Enterprise Server with Oracle LDAP Client. For version information, see the Certifications tab on My Oracle Support.
 - Before you install Siebel Enterprise Server with Oracle LDAP Client, verify that your server operating system has all required patches. Install any required operating system patches before proceeding. For more information, see the Certifications tab on My Oracle Support.
 - If your installation tasks did not install Oracle LDAP Client with Siebel Enterprise Server, but you still require it on applicable servers, then you can install Oracle LDAP Client manually. Manual installation of Oracle LDAP Client, and separate manual installation of applicable patches for Oracle LDAP Client, are described in *Siebel Security Guide*. For example, you might install Oracle LDAP Client manually in the following cases:
 - After a migration installation of Siebel Enterprise Server from an earlier release.
 - If you require Oracle LDAP Client for use in a deployment with Oracle Database.
 - If you have an existing installation of Oracle LDAP Client that is below the minimum version required. For version information, see the Certifications tab on My Oracle Support.
 - Cloning is not supported for Oracle LDAP Client, which must be excluded if you clone an installed source instance of Siebel Enterprise Server. To do this, you must specify the full path of the Oracle LDAP Client installation directory in the exclude list of the source properties file, for either a full clone or a delta clone operation. An example installation location on Windows is C:\siebel\16.0.0.0\ses\LDAPClient. If you specify the location incorrectly, then you will not be able to use LDAP on the target computer. If necessary, you can install Oracle LDAP Client manually on the target computer. For more information about cloning for Siebel Enterprise Server, see [Chapter 9, "Cloning a Siebel Installation."](#)
 - Regardless of how it was installed, Oracle LDAP Client is not uninstalled with Siebel Enterprise Server. You must uninstall Oracle LDAP Client as a separate task, using a command-line method. For more information, see ["Uninstalling Oracle LDAP Client" on page 286](#).
 - For more information about using Oracle LDAP Client with Siebel Business Applications, and about installing Oracle LDAP Client manually, see *Siebel Security Guide*.

Related Topics

["Installing Siebel Enterprise Server" on page 44](#)
[Chapter 9, "Cloning a Siebel Installation"](#)

[“Uninstalling Oracle LDAP Client” on page 286](#)

[“About the Siebel Network Image” on page 383](#)

Related Books

Siebel Security Guide

Requirements for Siebel Gateway Name Server Authentication

This topic is part of [“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

Before you configure any Siebel Enterprise Server software, review the requirements associated with authentication for access to the Siebel Gateway Name Server. Authentication applies to access using Siebel Configuration Wizards or Siebel Server Manager.

Note the following requirements:

- When you initially configure the Siebel Enterprise (after installing and configuring the Siebel Gateway Name Server), you propagate settings to the Siebel Gateway Name Server that specify authentication settings. Siebel Gateway Name Server authentication uses Siebel security adapters, which are discussed in detail in *Siebel Security Guide*.
- Database authentication is the default Siebel Gateway Name Server authentication method. LDAP, ADSI, or custom methods are also supported, but additional configuration is required. You must use database authentication for your initial Siebel Server configuration.
- The user account that you use for Siebel Gateway Name Server authentication must have the same privileges as the Siebel administrator account created during the Siebel installation process; these privileges are required to connect to the Siebel Gateway Name Server. You can choose to use the Siebel administrator account for Siebel Gateway Name Server authentication, or you can create a new database user account, ensuring that you assign it the same level of rights and privileges as the Siebel administrator account. For more information about requirements for this account, see *Siebel Security Guide*.
- If you do not have an existing Siebel database, then you must install an instance of Siebel Server and Siebel Database Configuration Utilities on the same computer where you install the Siebel Gateway Name Server. You can select all three options to install together. In this case, you must configure the installed modules in the sequence shown in [Figure 2 on page 33](#). Note in particular that you must install the Siebel database before you can configure the Siebel Server.
NOTE: After you install the Siebel database, you can optionally configure and deploy the Siebel Server that you installed with Siebel database Configuration Utilities. Or, you can skip configuring this Siebel Server and instead install and configure a Siebel Server on one or more other computers.
- If you already have a Siebel database, such as in an upgrade case, then you do not install the Siebel database before you configure the Siebel Server. In this case, you do not have to install Siebel Server and Database Configuration Utilities on the same computer with the Siebel Gateway Name Server. For a general illustration of this case, see [Figure 3 on page 39](#).

- After you configure the Siebel Gateway Name Server and the Siebel Enterprise, users doing subsequent Configuration Wizard tasks that require Siebel Gateway Name Server authentication, or using Server Manager, must enter Siebel administrator user credentials that are valid for the authentication method in use.

Configuration Wizard tasks subject to Siebel Gateway Name Server authentication include configuring the Siebel Server, configuring a Siebel Enterprise (after initial configuration), modifying a Siebel Enterprise, and removing an existing Siebel Enterprise or Siebel Server.

For more information about using Server Manager, see *Siebel System Administration Guide*.

- When you propagate authentication settings to the Siebel Gateway Name Server, these settings are written to the gateway.cfg file, which is located in the bin subdirectory in the Siebel Gateway Name Server installation. Security adapter configuration data stored in this file corresponds to the configuration settings that apply to the Siebel Enterprise, which are stored on the Siebel Gateway Name Server itself (in the siebns.dat file).
- If you want to use LDAP, ADSI, or a custom authentication method for the Siebel Gateway Name Server, then you can configure this method as part of the Configuration Wizard tasks for creating or modifying the Siebel Enterprise. However, although the wizard configures the security adapter, it does not enable it (for the Siebel Enterprise or for the Siebel Gateway Name Server).

To enable an authentication method, edit the gateway.cfg file on the Siebel Gateway Name Server and specify appropriate values for the SecAdptMode and SecAdptName parameters in the section [InfraSecMgr]. Use similar values to those described in *Siebel Security Guide*. After editing this file, you restart the Siebel Gateway Name Server. For this scenario, make these configuration changes after your initial configuration of the first Siebel Server.

- Additional parameters in the gateway.cfg file include:
 - NSAdminRole, which is set to Siebel Administrator by default. This parameter defines the role that is required to access the Siebel Gateway Name Server.
 - EnableAuditTrail, which is set to False by default. When this is set to True, most accesses to the Siebel Gateway Name Server are logged, including login operations, writes, modifications, and deletions (simple reads are not logged). When this parameter is False, only failed login attempts are logged. The audit trail is in the file nameserver_audit.log, which is located in the bin subdirectory of the Siebel Gateway Name Server installation directory.
- If you want to configure a second Siebel Enterprise on the same Siebel Gateway Name Server, then do not check the option to propagate authentication settings to the Siebel Gateway Name Server when prompted. Otherwise, your settings will overwrite the existing settings.

Requirements Specific to UNIX or Linux Operating Systems

This topic is part of [“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

Review the following requirements specific to UNIX or Linux operating systems:

- Verify that the network adapter is correctly configured to support full duplex Ethernet by verifying the following parameters:
 - RJ45 Port Link Status: up
 - Media Speed Selected: 100 Mbps Full Duplex
 - Media Speed Running: 100 Mbps Full Duplex
- If the set-group-id flag is used, then make sure that the installer ID is a member of the group that owns the Siebel Enterprise Server root directory.
- Installation must be performed as a nonroot user. This requirement stems from the Oracle Universal Installer software.

Future Siebel CRM releases must be installed as the same user who installed the base release.

For more information, see [“Setting Permissions and Ownership” on page 316](#).

See also [“Configuring the Siebel Gateway Name Server for Automatic Start” on page 132](#) and [“Configuring the Siebel Server for Automatic Start” on page 136](#).

- On UNIX operating systems, when you install Siebel server modules into a mount point location, you must do so into a directory that is at least one level down from this location.

For example, given the mount points `/export/home` or `/export/siebel`, you must create a new directory under either of these directories, in which you will install the Siebel Enterprise Server or Siebel Web Server Extension (SWSE). For example, you might create a directory named `siebel` and then install into `/export/home/siebel` or `/export/siebel/siebel`. Installing directly into the mount point location, such as `/export/siebel`, might create significant problems for your installation.

- On UNIX operating systems, you must configure the environment before you run the Database Configuration Wizard. Run the script `CreateDbSrvrEnvScript` to generate the environment setup files `dbenv.csh` and `dbenv.sh`. Source one of these files before you run the Database Configuration Wizard. For more information, [“Installing the Siebel Database” on page 118](#). See also [“General Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

Requirements for AIX Only

The following requirements apply on HP-UX only:

- Before installing, verify that the login ID performing the installation has permission to run `si bcl ean` by asking the administrator to change the permission as follows:

```
chmod 6555 /usr/sbin/si bcl ean
```

- Before you install Siebel Enterprise Server software on AIX, you must install X11 filesets, if they were not included as part of the base AIX installation.
- Java Runtime Environment (JRE) must be installed on any computer running AIX where you will run the installer for Siebel Enterprise Server or Siebel Web Server Extension software. In addition, the following requirements apply:
 - When you run the command for installing or uninstalling, specify the JRE installation location using the command-line option `-jreLoc`, as shown in [“Installing Siebel Enterprise Server” on page 44](#).
 - Before you run the `opatch` command, which you use to verify the version of installed software, set the `ORACLE_HOME` environment variable. Then, when you run `opatch`, specify the JRE installation location using the command-line option `-jre` (instead of `-jreLoc`).

For supported version information for JRE, see the Certifications tab on My Oracle Support.

Requirement for HP-UX Only

The following requirement applies on HP-UX only:

- If the environment variable `LANG` is set to a directory name that is a symbolic link, then the Java installer for Siebel Server will fail. You must reset any existing `LANG` variable to the directory that the symbolic link represents.

NOTE: The `LANG` variable cannot be set to `uni v. utf8`. Doing so causes the installer to fail.

Requirement for Oracle Solaris Only

The following requirement applies on Oracle Solaris only:

- Set the TCP `ndd` variable `tcp_co_min` to the MTU of the network interface card.

Requirements for Installing and Configuring the Siebel Gateway Name Server

This topic is part of [“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

Review this topic before installing and configuring the Siebel Gateway Name Server. See also [“General Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

- Install the Siebel Gateway Name Server once for each Siebel Enterprise. If necessary, multiple Siebel Enterprises can be supported by a single Siebel Gateway Name Server. In general, installing multiple instances of the same version of Siebel Gateway Name Server on the same computer is not recommended.

For more information, see [“Planning to Install Multiple Instances of Siebel Business Applications” on page 311](#). See also 477770.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Technical Note 531.

- Siebel Gateway Name Server uses port 2320 by default. If necessary, you can select any port number (32767 or lower) that is free on the computer where the Siebel Gateway Name Server is running. Do not use port number 2321, which is the default port number for the SCBroker (Siebel Connection Broker) component, or any other port already in use on the server. To confirm that a port (such as 2320) is free, use a command like `netstat -a | grep 2320`.

Requirements for Installing and Configuring the Siebel Server

This topic is part of [“Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

Review this topic before installing and configuring the Siebel Server. See also [“General Requirements for Installing and Configuring Siebel Enterprise Server Components” on page 328](#).

- To configure a Siebel Server, a Siebel Gateway Name Server must be installed and running, and the Siebel Enterprise must be configured, unless you are using the Configuration Wizard option to skip validation.
- After you install the Siebel Gateway Name Server, you run the Configuration Wizard to configure it, and then you configure the Siebel Enterprise. All Siebel Servers you install that are part of the same Siebel Enterprise, regardless of the operating system, must connect to the same Siebel database. For most deployments, all of the Siebel Servers connecting to this database will belong to the same Siebel Enterprise.

Additional Siebel Servers that you install and configure inherit parameters from the Siebel Enterprise. You configure each Siebel Server using the Siebel Server Configuration Wizard.

- When you run the Siebel Server Configuration Wizard for each Siebel Server, all of the component groups are listed and you must enable the ones that you need for this server. If you do not enable component groups during Siebel Server configuration, then you can enable them manually after installation, using Server Manager. For more information about component groups and about using Server Manager, see *Siebel System Administration Guide*. See also [“Preparing to Run Siebel Server Components” on page 145](#).
- The Siebel Server software must be installed only once on each computer. For test or development purposes only, you can use the Siebel Server Configuration Wizard to configure an additional Siebel Server on a single computer where the Siebel Server is already installed and configured. For more information, see [“About Installing Additional Siebel Servers for an Existing Siebel Enterprise” on page 149](#).
- Depending on your business requirements, you might deploy one or more Siebel Enterprise Servers. For information about deploying multiple Siebel Enterprise Servers, see *Siebel Deployment Planning Guide*. See also 477770.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Technical Note 531.

NOTE: In special cases, such as for some large deployments, a single Siebel database can support multiple Siebel Enterprises. Such a deployment must be planned carefully. For details, see 477829.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Technical Note 544.

About Clustering the Siebel Gateway Name Server and Siebel Server

If you will operate certain servers as part of a cluster, then it is strongly recommended that you install and configure the Siebel Gateway Name Server and the Siebel Server on separate resource groups. For information about clustering, see *Siebel Deployment Planning Guide*.

Language and Locale Requirements

Make sure that you have the appropriate locales installed on the computers on which you intend to deploy Siebel Server. Siebel log and configuration files use UTF-8 with Byte Order Mark as the default encoding. If these files contain any non-ASCII characters, then proper viewing and editing requires a UTF-8 locale.

For more information about supported locales, see the Certifications tab on My Oracle Support.

The locale can affect how dates and times are displayed. For more information, see *Siebel Global Deployment Guide*.

NOTE: Make sure that the locale that you are using matches the locale set at your operating system level. For details, see [“Specifying the Locale for Your UNIX Operating System”](#) on page 314.

Guidelines for Installing Multiple Language Packs on the Siebel Server

If you will install multiple language versions of Siebel Business Applications on your Siebel Servers, then review the following configuration guidelines:

- You can include multiple languages when you install and configure a Siebel Server.
- For each installed language that you choose to deploy in the Siebel Server Configuration Wizard, language-specific Application Object Manager components are created.

For more information about scenarios for multilingual deployments, see [“Installing and Deploying Siebel Business Applications with Multiple Languages”](#) on page 150 and related topics. See also *Siebel Global Deployment Guide*.

- If multiple languages are installed on a Siebel Gateway Name Server or Siebel Server, then you will be prompted for the primary (base) language. The primary (base) language is the language in which you want your server to run and in which you normally want to read messages. If you want to change the language in which you bring up your server, then you must change this setting.

Search Server

A Siebel Server computer can be configured to execute searching using a locally installed search server or can be pointed to a remote search server to handle search execution tasks.

NOTE: For search-related installation guidelines and requirements, see *Siebel Search Administration Guide*.

Database Requirements

Make sure that your database administrator has installed the RDBMS that your site will use and created the Siebel database instance and that you meet all of the database connectivity requirements. For more information, see [Chapter 12, “Configuring the RDBMS,”](#) including [“Configuring Siebel Server Connectivity to the Siebel Database”](#) on page 381. See also [“Planning RDBMS Installation and Configuration”](#) on page 308.

The RDBMS that you are using must support the same languages and code pages that you install on the Siebel Servers. For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

NOTE: After performing a migration installation of the current release, then you must run Incremental Repository Manager. For more information, see [“About Database Updates for the Current Release”](#) on page 114.

Siebel Repository Files Requirement

Make sure that you have the Siebel Repository files (SRF files) that are correct for your installed Siebel CRM version and the version of your Siebel database, such as Siebel CRM version 16.0. For the current release, updated SRF files are provided with new installations and migration installations of Siebel CRM.

Third-Party Software Requirements

Make sure that you have already installed the appropriate version of all of the third-party software products required. Otherwise, the Required Software Components prompt appears. For more information, see the Certifications tab on My Oracle Support.

Temporary Disk Space

Review the issues described in [“Managing Temporary Disk Space Required by Siebel Installers and Wizards”](#) on page 310. For example, make sure that you have adequate disk space, and make sure that the login ID running the installer has write permissions to this directory.

Requirements for Installing the Siebel EAI Connector

This topic is part of [“Requirements for Installing and Configuring Siebel Enterprise Server Components”](#) on page 328.

For a list of supported operating systems for EAI connectors, see the Certifications tab on My Oracle Support. See also [“General Requirements for Installing and Configuring Siebel Enterprise Server Components”](#) on page 328.

Requirements for Installing and Configuring the Siebel Web Server Extension

Before installing and configuring the SWSE, review the requirements described in the following information:

- [“About the Siebel Web Server Extension” on page 340](#)
- [“Installing the Web Server” on page 341](#)
- [“General Requirements for Installing and Configuring the Siebel Web Server Extension” on page 344](#)
- [“Support for Heterogeneous Environments” on page 345](#)
- [“Siebel Web Server Extension Requirements for Siebel Load Balancing” on page 345](#)
- [“Requirements for the Installation User for the Siebel Web Server Extension” on page 345](#)
- [“Requirements for User Permissions for the Siebel Web Server Extension” on page 346](#)
- [“Requirements for Stopping and Starting the Web Server” on page 347](#)
- [“Requirements for Configuring Anonymous Users for the Siebel Web Server Extension” on page 347](#)
- [“Requirements for Binary Coexistence of the Siebel Web Server Extension” on page 349](#)

About the Siebel Web Server Extension

Siebel Web Server Extension (SWSE) enables communication between Siebel Web Clients and Siebel Servers. Siebel Business Applications are a family of Web-based applications that users access through a standard Web browser. Several components work together to deliver the applications to end users:

- **Siebel Web Client.** The Siebel Business Applications client that runs in the browser on the end user’s computer and connects to the Web server.

For information about other Siebel clients, see the applicable documentation. For example, for information about the Siebel Mobile applications, see *Siebel Mobile Guide: Connected* and *Siebel Mobile Guide: Disconnected*.

- **Web server.** Client Web browsers connect to Web servers to access Siebel Business Applications. Supported Web servers and operating systems include:
 - Microsoft IIS (on Microsoft Windows)
 - Apache Web Server
 - Oracle HTTP Server (on supported Linux operating systems)
 - Oracle iPlanet Web Server (on Oracle Solaris)

NOTE: For more information about Web servers, see [“Installing the Web Server” on page 341](#). For Web server platform support, see the [Certifications tab on My Oracle Support](#).

Depending on the operating system of the Web server computer, specific Web servers are discussed in either the Windows version or the UNIX version of this guide (the *Siebel Installation Guide* for the operating system you are using).

For Web server and operating system tuning information, see *Siebel Performance Tuning Guide*.

NOTE: Oracle HTTP Server and other Apache Web Servers are sometimes referred to in this document as *Apache-based Web servers*, because they share many characteristics, such as the use of the `httpd.conf` configuration file.

- **Siebel Web Server Extension (SWSE).** A plug-in extension, installed on the Web server computer, that runs within the Web server and that communicates with the Siebel Web Engine (which is part of an Application Object Manager component, such as Call Center Object Manager) on the Siebel Server.

For SWSE installation instructions, see [“Installing the Siebel Web Server Extension” on page 51](#). For SWSE configuration instructions, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

- **Siebel Web Engine (part of Application Object Manager on Siebel Server).** The Siebel Web Engine is part of the Application Object Manager component on the Siebel Server, such as Call Center Object Manager. The Application Object Manager provides access to Siebel Business Applications data and logic.

For information about the hardware, operating systems, Web servers, and Web browsers supported for Siebel Business Applications, see the Certifications tab on My Oracle Support.

Installing the Web Server

Before installing the SWSE, you must install, configure, and start the supported Web server software on the designated computers. Follow the vendor documentation for this task, and also see relevant information in this chapter.

For the best performance and scalability, put the Web server on a dedicated computer.

Some Web server configuration tasks are also included in [“Additional Tasks for the Siebel Web Server Extension and the Web Server” on page 163](#).

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

Planning the Web Server Topology

Before you install the Siebel Web Server Extension (SWSE), as described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) you must decide how to will distribute the Web servers and other components. Two basic methods are as follows:

- **Single-node.** Installing Siebel Enterprise Server components and your Web server and SWSE on a single computer or node. (If you do this, then use separate installation directories to avoid file permission problems at installation time.)

- **Distributed.** Distributing the preceding components, where multiple Web servers connect to multiple Siebel Servers in the Siebel Enterprise. These Web servers can be dynamically balanced for Application Object Manager components on different Siebel Server computers.

Each deployment choice involves a trade-off. However, in enterprise-sized deployments, it is strongly recommended that you use a distributed node deployment for the following reasons:

- **Less resource contention.** Distributing the Web servers and the Siebel Servers (with Application Object Manager components) on different computers eliminates contention for CPU and other server resources. However, to take advantage of the performance improvement, you must have a high-speed network connection between the two computers.
- **Higher fault tolerance.** Operating multiple instances of components on multiple computers reduces downtime and the effect of failure on any one computer.
- **Greater flexibility with firewalls.** Putting the Web components of Siebel Business Applications on a different computer from the Siebel Server with Application Object Managers lets you deploy your Web server in the DMZ while keeping the Siebel Enterprise Server behind a secure firewall.
- **High availability.** A multinode configuration is required for deployments that support large numbers of concurrent users or where high availability is an operating requirement.

For more information about Web servers and Siebel Web Server Extension, see [“About the Siebel Web Server Extension” on page 340](#).

See also *Siebel Deployment Planning Guide* and *Siebel Security Guide*.

Editing the httpd.conf File for Apache-Based Web Servers

For Apache-based Web servers, to configure the Web server for use with the SWSE, you must edit the Web server configuration file httpd.conf. This file contains configuration directives for the Web server. Detailed information about the directives in httpd.conf is available at the Apache Web site:

<http://www.apache.org>

The httpd.conf file is located in the conf subdirectory under the Web server installation directory or instance directory. The following is an example path (exact paths might vary).

- For Oracle HTTP Server, the httpd.conf file is located in a directory like /vol 2/smi thj ones/dohs/web/ohs/conf.

Specifying the Character Set Encoding for Apache-Based Web Servers

Apache-based Web servers might use the default character encoding setting AddDefaultCharset ISO-8859-1 in the httpd.conf configuration file. For nonresident user interface languages, this setting makes some static content, such as pop-ups, About boxes, and help pages, display incorrectly. Complete the procedure that follows to reset this for non-Western languages.

To specify a different character encoding setting

- 1 Open httpd.conf with a text editor, such as vi.
- 2 Locate the line AddDefault tCharset I S0-8859-1 and comment it out by placing a number sign (#) character at the beginning of the line.

- 3 Save the file.
- 4 Restart the server.

Specifying SWSE Port Number for Apache-Based Web Servers

If a different port number is specified for SWSE, then you also have to make the following modifications in the httpd.conf file.

To specify a different port number for SWSE

- Modify the following two lines in the httpd.conf file:

Listen: PortNumber

ServerName: PortNumber

where:

- *Listen* is the IP Address of the Web server computer
- *ServerName* is the computer name
- *PortNumber* is the port number

For example:

72. 20. 167. 154: 16131

sdch70a012. oracle. com: 16131

Adding Domain Name for Oracle iPlanet Web Server

For Oracle iPlanet Web Server installations, add the domain name to either /etc/hosts or resolve.conf.

Finding the Web Server Listening Port Number on Oracle iPlanet Web Server

During SWSE configuration, you are prompted to provide the listening port number for your Web server. You can find this number for Oracle iPlanet Web Server using the following procedure.

NOTE: For Oracle iPlanet Web Server, you can instantiate a virtual Web server on existing installed software.

To find the Web server listening port number on Oracle iPlanet Web Server

- 1 Open the server.xml file located under the config subdirectory of your Web server instance.
- 2 Locate the line `port=port_number`.

In this entry, *port_number* is a number for your listening port.

General Requirements for Installing and Configuring the Siebel Web Server Extension

This topic lists general requirements for installing and configuring the SWSE.

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension”](#) on page 340.

- Before installing Siebel Business Applications software, you must review all of the relevant information in the Certifications tab on My Oracle Support. Also check for applicable alerts, bulletins, or other documents on My Oracle Support.
- Review the issues described in [“Managing Temporary Disk Space Required by Siebel Installers and Wizards”](#) on page 310. For example, make sure that you have adequate disk space, and make sure that the login ID running the installer has write permissions to the temporary directory.
- You must have installed a supported Web server as identified in the Certifications tab on My Oracle Support for the current release. See also [“Installing the Web Server”](#) on page 341.

Make sure that the Web server computer on which you install the SWSE meets all of the hardware and software platform requirements documented in the Certifications tab on My Oracle Support.

NOTE: Note the port number for the Web server. For an Apache-based Web server, if you are using a nondefault port number, then you must modify the `httpd.conf` file to reflect the correct port number. For details, see [“Editing the httpd.conf File for Apache-Based Web Servers”](#) on page 342.

- You must have installed all of the key Siebel Enterprise Server components, including the Siebel Gateway Name Server, at least one Siebel Server, and the Database Configuration Utilities.

You must have configured the Siebel Gateway Name Server, created and configured the Siebel Enterprise, created the SWSE logical profile, and configured the Siebel Server.

Application Object Manager components must be enabled for the Siebel CRM products that you purchased and intend to use. You enable components during initial Siebel Server configuration. For information about enabling server components using Server Manager, see *Siebel System Administration Guide*.

NOTE: Wait to install additional Siebel Servers until after you have completed installation of the SWSE software and verified the connection from the Web server to the initial Siebel Server.

- You can deploy multiple language packs on one Web server and one SWSE instance. The Siebel Server and the Web server do not have to be operated in the same language. However, the Siebel Server, the Web server, and all of the other server components must use the same character set. For more information, see *Siebel Global Deployment Guide*. See also [“Installing and Deploying Siebel Business Applications with Multiple Languages”](#) on page 150.
- At least one SWSE is required for each Siebel Enterprise.
- Note that uninstalling an SWSE instance that you have configured removes the associated Siebel application virtual directories. See also [“Uninstalling the Siebel Web Server Extension”](#) on page 287.
- Note that the SWSE installer user interface can run in the supported languages described in [“About The Language in Which Siebel Installers and Wizards Run”](#) on page 311.

Support for Heterogeneous Environments

SWSE configuration can be performed in homogeneous environments or in heterogeneous environments where the Siebel Gateway Name Server (where you configure the SWSE logical profile) and the Web server and SWSE are on different operating systems.

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

Heterogeneous environments might resemble the following scenarios:

- You installed the Siebel Gateway Name Server on a UNIX or Linux computer, and installed the Web server and SWSE on a Windows computer.
- You installed the Siebel Gateway Name Server on a Windows computer, and installed the Web server and SWSE on a UNIX or Linux computer.

According to your needs, you can move the SWSE logical profile directory to another computer before configuring the physical SWSE (applying the logical profile to an installed instance of SWSE). For more information, see [“Applying the SWSE Logical Profile” on page 99](#).

Siebel Web Server Extension Requirements for Siebel Load Balancing

If you will use Siebel native load balancing for your Siebel Servers, then you must generate the load-balancing configuration file (lbconfig.txt).

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

After you create the SWSE logical profile, you generate the load balancing file and place the file in the SWSE logical profile directory. When you apply the profile to an installed SWSE instance, the SWSE Configuration Wizard copies the lbconfig.txt file to the installed SWSE.

After initially applying the SWSE logical profile, you might have to generate the lbconfig.txt file again after installing and configuring additional Siebel Servers that will participate in load balancing. Then apply the SWSE logical profile again.

For more information, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#) and [“Process of Configuring Load Balancing for Siebel Business Applications” on page 140](#).

Requirements for the Installation User for the Siebel Web Server Extension

You must install the SWSE as a nonroot user, due to requirements of Oracle Universal Installer software. Patch releases must be installed as the same user who installed the base release. Further, the SWSE must be installed as the same user who installed the Web server. This user must be able to modify files on the Web server. In general, it is recommended that all installations be performed by a nonroot user for simpler administration and maintenance.

Note the following:

- Consult your vendor documentation about requirements and configuration options for your supported Web server. For example, some supported Web servers (for example, Oracle HTTP Server) must be installed as a nonroot user.
- In any of the following cases, you must either reinstall the Web server and SWSE as a nonroot user or else perform applicable workarounds to resolve conflicting requirements:
 - The Web server was installed as root.
 - The SWSE was initially installed as root (for version 8.1.1 through 8.1.1.7 only).
 - The Web server and SWSE must run as root, such as to use privileged port numbers.

Applicable workarounds, where available, vary depending on Web server requirements and capabilities and depending on the requirements of your deployment. For information about possible workarounds to use in some of these cases, see [“Setting Permissions and Ownership” on page 316](#), [“Granting User Permissions on the Web Server” on page 166](#), [“Requirements for User Permissions for the Siebel Web Server Extension” on page 346](#), and other relevant topics.

- For more information about Oracle HTTP Server, see article 475370.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Alert 1317.

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

Requirements for User Permissions for the Siebel Web Server Extension

This topic describes some requirements for permissions that affect installation or operation of the SWSE software and the Siebel virtual directories on the Web server.

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

The user who will run the SWSE plug-in must have read, write, and execute permissions on the *SWSE_ROOT/public/language* directories and their subdirectories (in this path, *SWSE_ROOT* is the directory in which the SWSE is installed and *language* is a language directory such as ENU, FRA, CHT, and so on). These permissions allow static public files to be cached on the Web server. These directories are created during SWSE installation and configuration. In general, Siebel administrators require full access to *SWSE_ROOT* and all of its subdirectories.

The Web server administrator and all of the Siebel users and groups must have read and execute permission on all of the virtual directories for Siebel Business Applications. The virtual directories are created on the Web server during SWSE configuration. If these permissions are not granted, then login pages will not be rendered properly.

See also [“Setting SWSE and Virtual Directory Permissions” on page 166](#), [“Requirements for the Installation User for the Siebel Web Server Extension” on page 345](#), and [“Granting User Permissions on the Web Server” on page 166](#).

(AIX only) Before installing, verify that the login ID performing the installation has permission to run `sl i bcl ean` by asking the administrator to change the permission as follows:

```
chmod 6555 /usr/sbin/sl i bcl ean
```

Requirements for Stopping and Starting the Web Server

At various points in the process of installing and configuring the Siebel Web Server Extension, you might be required to stop the Web server, perform certain tasks, and then restart the Web server. Or you might only have to restart the Web server. The SWSE Configuration Wizard also stops and starts the Web server automatically, as needed.

For example, you have to stop the Web server before installing the current release as a migration installation, and you have to restart the Web server after completing this installation. For more information about when you might have to restart the Web server, see [“Restarting the Web Server” on page 166](#). See also the third-party documentation for the Web server product.

Choosing the SWSE Configuration Wizard option to restart the Web server executes the following commands for supported Web servers:

- For Oracle HTTP Server (on supported Linux operating systems), this wizard option executes the commands `ompmctl stopall` and `ompmctl startall`.
- For other supported Apache-based Web servers (on applicable supported operating systems), this wizard option executes the commands `stopapa` and `startapa`.
- For Oracle iPlanet Web Server (on Oracle Solaris), this wizard option executes the commands `stop` and `start`.

NOTE: From now on, if you must manually restart the Web server instance for any reason, then use these commands or equivalent methods, such as using the administration console for the Web server. Do not use other commands for this purpose, such as `apachectl` for Apache-based Web servers.

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

Requirements for Configuring Anonymous Users for the Siebel Web Server Extension

As noted in [“Configuring the SWSE Logical Profile” on page 94](#), when you configure the SWSE logical profile, you are prompted for user names and passwords of Siebel users who will serve as anonymous users for employee applications and customer applications, respectively. Provide the credentials for the anonymous users, as appropriate for your deployment.

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

The following are the two main types of anonymous users:

- **Anonymous user for employee applications.** Where applicable, the anonymous user for employee applications (sometimes called the employee user) starts the anonymous session that displays the login page to an end user for an employee application.
- **Anonymous user for customer applications.** Where applicable, the anonymous user for customer applications (sometimes called the contact user) starts the anonymous session that displays the login page to an end user for a customer application, and allows anonymous navigation within the application. This user must have access to any public view in the application.

If, after performing the initial configuration, you change the password for the database account that you are using for an anonymous user, or decide to specify a different anonymous user for a particular application, then you can edit the `eapps.cfg` or `eapps_sia.cfg` files manually and update values for the parameters `AnonUserName` and `AnonPassword`. Alternatively, you can recreate the SWSE logical profile and reapply it to each physical SWSE.

Record the credentials for each anonymous user in your deployment in the worksheet provided in [Appendix A, "Siebel Deployment Planning Worksheet."](#)

For more information about configuring anonymous users, see *Siebel Security Guide*.

Note the following guidelines and requirements:

- All anonymous users for your deployment must be defined in the Siebel database and must be defined as Siebel users. Strong passwords are highly recommended for anonymous user accounts. Anonymous users should have limited access rights, no more than is necessary for the usage context. The Siebel Configuration Wizard task for configuring the SWSE logical profile does not allow the Siebel administrator user, `SADMIN`, to be specified as an anonymous user.
- The anonymous user for employee applications must be defined as an employee and must be associated with an appropriate position and responsibility.
- If your Siebel application does not use functionality that requires anonymous browsing, then you can disable access by the anonymous user by setting the `AllowAnonUsers` parameter for the Application Object Manager to `False`. If anonymous browsing must be enabled, then you set `AllowAnonUsers` to `True`.
- Some Siebel application functionality that requires that anonymous browsing be enabled include using a Siebel login view (not just an HTML page), using external authentication such as LDAP, browsing by unregistered users, self-registration, and so on.
- If password encryption is in effect, then you must use the `encryptstring` utility to encrypt any password before inserting it into `eapps.cfg` or `eapps_sia.cfg` as a value for `AnonPassword`. See also 475381.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Alert 1306.
- The anonymous user for employee applications that you configure in the wizard is defined in `eapps.cfg` as a default that applies to all of the applications of this type. The `AnonUserName` and `AnonPassword` parameters are defined once, in the `[defaults]` section of this file.
- The anonymous user for customer applications that you configure in the wizard is defined in `eapps.cfg` and `eapps_sia.cfg` for each application of this type. The `AnonUserName` and `AnonPassword` parameters are defined in separate application-specific sections of these files.

- To use application-specific anonymous users, you must define AnonUserName and AnonPassword in separate application-specific sections of eapps.cfg or eapps_sia.cfg.
- Optionally, you can create new database users before initial configuration through editing the grantusr.sql script, which you review, modify, and execute before you install the Siebel database. You still must add corresponding Siebel users. For more information, see [“Creating Table Owner and Administrator Accounts” on page 114](#).

Related Books

Siebel Security Guide

Siebel Security Hardening Guide

Siebel System Administration Guide

Deploying Siebel Open UI

Related Topics

[“Configuring the SWSE Logical Profile” on page 94](#)

[“Creating Table Owner and Administrator Accounts” on page 114](#)

Requirements for Binary Coexistence of the Siebel Web Server Extension

If you do *not* require side-by-side installations of the same or different versions of SWSE on the same computer, then uninstall any existing version of SWSE on the computer before installing the current version. See [“Uninstalling the Siebel Web Server Extension” on page 287](#).

This topic is part of [“Requirements for Installing and Configuring the Siebel Web Server Extension” on page 340](#).

Side-by-side installations of the same or different versions of SWSE on the same computer (sometimes referred to as *binary coexistence*) might be helpful in some upgrade scenarios or for development or testing purposes. In general, however, it is recommended that you install only one instance of SWSE on each Web server computer. Binary coexistence scenarios might be subject to limitations for your operating system and Web server platform.

For more information about creating and applying the SWSE logical profile, see [“Process of Configuring the Siebel Web Server Extension” on page 93](#).

NOTE: Scalability and performance implications must be taken into consideration when running multiple instances of SWSE on a single Web server computer.

Note the following considerations and limitations applicable to binary coexistence:

- **Oracle Solaris using Oracle iPlanet Web Server.** You can install multiple instances (virtual server instances) of Oracle iPlanet Web Server on the same computer. You can also install multiple instances of SWSE to run against these virtual server instances. Configure each SWSE instance to communicate with a separate virtual server instance using a different port.

- **UNIX operating systems (including Linux) using Apache-based Web server.** You can install multiple instances of a supported Apache-based Web server on the same computer. You can also install multiple instances of SWSE to run against these Web server instances. Configure each SWSE instance to communicate with a separate Web server instance using a different port.
- **Microsoft Windows using Microsoft IIS.** You can install only a single instance of the Web server on the same computer. You can install multiple instances of SWSE on this computer, but you cannot run multiple instances of SWSE simultaneously, unless you configure them to run in separate memory spaces.

Before you configure a new installed instance of SWSE where another instance is already installed and configured, you must edit the batch file that creates the virtual directories for Siebel Business Applications so that the virtual directory names for the new instance are unique. The virtual directories are created by batch files in the SWSE logical profile directory. You can also edit these batch files before configuring the SWSE to remove entries for virtual directories that you do not need. For more information about using Microsoft IIS, see *Siebel Installation Guide for Microsoft Windows*.

Requirements for Installing and Configuring the Siebel Database

Before you install and configure the Siebel database, review the following information:

- Review database information in the Certifications tab on My Oracle Support and elsewhere. For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.
- For new installations, make sure that the Siebel database instance has been created and is properly configured, as documented in [Chapter 12, "Configuring the RDBMS."](#)
- Review [Chapter 5, "Installing the Siebel Database on the RDBMS,"](#) including ["About Installing the Siebel Database" on page 111](#) and the topics that follow.
- Obtain the services of a qualified database administrator (DBA) to assist you with your installation and, where applicable, upgrade.
- Complete the appropriate RDBMS-specific information in your copy of the worksheet in [Appendix A, "Siebel Deployment Planning Worksheet,"](#) as follows.

General Requirement

Installing the Siebel database is subject to installation requirements for Siebel Database Configuration Utilities related to Siebel Gateway Name Server authentication, which are noted in ["General Requirements for Installing and Configuring Siebel Enterprise Server Components" on page 328](#).

Oracle Database

For Oracle Database, make sure that the following elements are defined for your Siebel database:

- **Oracle SQLNet alias connect string.** You need this to connect to your Oracle Database.
- **Table owner account (schema) name and password.** Using an Oracle Database requires that you assign a user name and password to any database tables that you create. The term *table owner* refers to the schema that owns the database objects, such as tables, indexes, views, and triggers.

Before installing the Siebel database components, you have to edit the grantusr.sql script, enter this and related information, and execute the script. See [“Creating Table Owner and Administrator Accounts” on page 114](#).

- **Siebel data tablespace.** The name of the tablespace on the Oracle Database server where the Siebel data tables are stored.
- **Siebel index tablespace.** The name of the tablespace on the Oracle Database server where the Siebel indexes are stored.
- Install the Oracle Database Client software onto the computer where you will install the Database Configuration Utilities. Make sure that you have set the ORACLE_HOME variable appropriately before installing Siebel Business Applications software. For information about installing the Oracle Database Client for the current release, see *Siebel Security Guide*.

NOTE: Make sure that the Oracle Database Client and Oracle Database versions are compatible, unless you are otherwise advised by Oracle Global Software Support or unless required for your particular deployment. For supported versions of Oracle Database products, see the [Certifications tab on My Oracle Support](#).

IBM DB2

For IBM DB2, make sure that the following elements are defined for your Siebel database:

- **Database alias.** The DB2 database alias that you created when you installed the DB2 software.
- **Table owner or database owner account user name and password.** DB2 requires that you assign a user name and password to each database that you create.

Before you install the tablespaces and indexes, you are prompted to edit the grantusr.sql script, enter this and related information, and execute the script. See [“Creating Table Owner and Administrator Accounts” on page 114](#).

- **Siebel index tablespace.** The name of the tablespace on the DB2 server where the Siebel indexes are stored.
- **Siebel 4-KB tablespace.** The name of the tablespace on the DB2 server where the 4 KB Siebel data tables are stored.
- **Siebel 16-KB tablespace.** The name of the tablespace on the DB2 server where tables reside whose row length is equal to or greater than 4005 bytes, but less than 16384 bytes.
- **Siebel 32-KB tablespace.** The name of the tablespace on the DB2 server where tables reside whose row length is 32768 bytes.

- Statistics are generated automatically during table, index, and seed data installation, and during the Siebel Repository import process. However, it is recommended that statistics be kept up to date through standard database administration procedures.
- Make sure that you have installed the required IBM fix pack on your database server computer. For more information, see the Certifications tab on My Oracle Support.
- Make sure that IBM DB2 is properly configured and you have allocated disk space appropriate to your installation requirements.

Requirements for Installing Siebel Web Clients

Review the issues and tasks in this topic before installing the Siebel Web Client, as described in [“Installing the Siebel Web Client” on page 177](#).

Administrative Rights for Installation

Administrative rights are required for installation or uninstallation of the Siebel Mobile Web Client or Developer Web Client.

For information about setting administration rights, consult the operating system manuals for the version of Microsoft Windows on which you are installing the Siebel Web Client software.

For information about uninstalling Siebel Web Client software, see [“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#).

Directory Naming Conventions

By default, the Siebel Web Client installer assumes an installation directory of C: \siebel\16.0.0.0\client or a similar location. You can specify to install in a different location, but the default location is generally recommended.

If you must change the installation location to use a nondefault path, then use installation directory names that describe both the version number and the component being installed. The directory name can use any characters appropriate for Windows-compatible long file names, except that spaces must not be used in your install directory.

In this guide, the directory into which you install the Siebel Web Client is often referred to as *SIEBEL_CLIENT_ROOT*. If you install into a directory other than the default, then make appropriate substitutions throughout this guide.

CAUTION: Do not install other Siebel components, such as Siebel Tools, into the same directory where you have installed the Siebel Web Client, such as C: \siebel\16.0.0.0\client. Install each component into a separate directory, or into a subdirectory of the top-level directory, such as a subdirectory of C: \siebel\16.0.0.0\client. If you install the sample database, then do so in the same directory as the Siebel Mobile Web Client. (Alternatively, you can install the sample database into the Siebel Tools directory instead of the Siebel Mobile Web Client directory.) If you install multiple Siebel components on the same computer (that will access different data sources), then determine your directory-naming convention before you begin installing.

Requirements and Recommendations for Siebel Web Client

Before beginning Siebel Web Client installation, review the requirements and recommendations for hardware, system software, and third-party software described in the Certifications tab on My Oracle Support.

Restricted Support for Siebel Developer Web Client

The Siebel Developer Web Client is not supported for end-user deployment. This Siebel Web Client type is supported only for development, troubleshooting, and limited administration usage scenarios.

Database Connectivity Software for Siebel Developer Web Client

Siebel Developer Web Client computers connecting directly to the Siebel database must have the correct vendor-specific database connectivity software installed. See the Certifications tab on My Oracle Support.

NOTE: The correct version of database connectivity software must be installed before you install the Siebel Web Client.

For additional information, see [“Logging in to Your Siebel Application” on page 205](#).

When you have installed your database connectivity software, configure it as follows:

- For Oracle Database, you install and configure the Oracle client software to connect to the Siebel database. Record the connect string and table owner information on the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#) Use the driver version specified in the Certifications tab on My Oracle Support.

For an Oracle client, use a binary sort order for development environment databases. This setting is required for adequate performance from the Siebel Developer Web Client.

For more information, see [“Specifying the Locale for Siebel Business Applications” on page 313](#). See also [“Configuring an Oracle Database for Siebel Business Applications” on page 359](#) and *Siebel Database Upgrade Guide*.

- For IBM DB2, you install and configure the DB2 Client software to connect to the Siebel database. Record the connect string and table owner information on the worksheet in [Appendix A, “Siebel Deployment Planning Worksheet.”](#) Use the ODBC driver version specified in the Certifications tab on My Oracle Support.
- For IBM DB2 for z/OS, you use DB2 Connect to connect from the Siebel Developer Web Client to the Siebel database. For details, see *Implementing Siebel Business Applications on DB2 for z/OS*.

Requirements for Oracle Database XE and the Local Database or Sample Database

In the current release, Oracle Database XE is used for the local database and the sample database. For information about the requirements for using Oracle Database XE and for installing the sample database for Siebel Mobile Web Client, see [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#).

Security-Related Software

Antivirus software, firewalls, and other security software can interfere with installation and operation of software if they are not properly configured. In some cases, you might need to disable antivirus software while installing Siebel CRM software, including Oracle Database XE and the sample database for Siebel Mobile Web Client on Microsoft Windows. It is also recommended to exclude certain types of files from virus scanning, such as SRF files. In addition, you might need to disable the Windows feature User Account Control while installing Siebel CRM software.

Siebel Repository Files Requirement

Make sure that you have the Siebel Repository files (SRF files) that are correct for your installed Siebel CRM version and the version of your Siebel database, such as Siebel CRM version 16.0. For the current release, updated SRF files are provided with new installations and migration installations of Siebel CRM. For migration installations, you must run Incremental Repository Merge, as described in *Siebel Database Upgrade Guide*, and recompile the SRF file.

Other Oracle or Third-Party Software

Your Siebel application might require some third-party software products to be installed on the client computer, for full functionality. For more information about third-party software, see the Certifications tab on My Oracle Support.

NOTE: Remember to install on the client computers all of the software required to view any standard attachment types your Siebel Business Applications deployment might use.

For information about requirements for the Web browser environment for running Siebel Web Clients, see *Deploying Siebel Open UI* and see the Certifications tab on My Oracle Support. See also topics such as the following:

- [“About Installing the Siebel Web Client or Siebel Tools” on page 175](#)
- [“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)
- [“Installing Desktop Integration Siebel Agent on Client Computers” on page 201](#)
- [“Installing Outlook to Siebel Drag and Drop on Client Computers” on page 201](#)
- [“Siebel Client Deployment Requirements When Using Firewalls or Proxy Servers” on page 203](#)
- [“Configuring Siebel Business Applications for Pop-Up Blocker Compatibility” on page 204](#)

Chrome Browser Users

When using Siebel Mobile Web Client or Developer Web Client with Google Chrome as the default browser, make sure that no other instances of Chrome are running prior to starting the Siebel client.

Closing Browser Sessions

Before you install the Siebel Web Client software, it is strongly recommended that you close any browser sessions on the client computer.

For information about requirements for the Web browser environment for running Siebel Web Clients, see also *Deploying Siebel Open UI*.

Migration Installations

Additional requirements apply for migration installations of the current release. For more information, see [“Additional Tasks for Migration Installations”](#) on page 62.

Requirements for Installing Siebel Tools

Review the requirements in this topic before installing Siebel Tools, as described in [“Installing Siebel Tools”](#) on page 184.

- Your Siebel Tools platform must meet the requirements defined in the Certifications tab on My Oracle Support.
- You must have all of the third-party software required for your implementation installed, including the database connectivity software for your chosen RDBMS. See the Certifications tab on My Oracle Support.
- You must have installed and configured the Siebel Enterprise Server software, as described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) and [Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension.”](#)
- You must have created the Siebel database and installed the Siebel schema and seed data, as described in [Chapter 12, “Configuring the RDBMS,”](#) and [Chapter 5, “Installing the Siebel Database on the RDBMS.”](#) This database stores the Siebel Tools project repositories.

A local database can also be initialized for each developer user, as applicable. For more information, see *Configuring Siebel Business Applications* and *Using Siebel Tools*. Alternatively, you can install the local database with Siebel Tools. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database”](#) on page 191.

NOTE: Siebel Tools can also access demonstration data in the sample database, which you can install with the Siebel Mobile Web Client. For more information, see [“Installing and Using Oracle Database XE for the Local or Sample Database”](#) on page 191.

- The sort order for the Siebel database for development environments must be set to binary. If it is set otherwise, then you cannot compile or merge repositories.
- In the current release, Oracle Database XE is used for the local database. For information about the requirements for using Oracle Database XE and for installing the local database for Siebel Tools, see [“Installing and Using Oracle Database XE for the Local or Sample Database”](#) on page 191.
- Antivirus software, firewalls, and other security software can interfere with installation and operation of software if they are not properly configured. In some cases, you might need to disable antivirus software while installing Siebel CRM software, including Oracle Database XE and the local database for Siebel Tools on Microsoft Windows. It is also recommended to exclude certain types of files from virus scanning, such as SRF files. In addition, you might need to disable the Windows feature User Account Control while installing Siebel CRM software.

- Administrative rights are required for installation or uninstallation of Siebel Tools. For information about setting administration rights, consult the operating system manuals for the version of Microsoft Windows on which you are installing the Siebel Web Client software.
- Before performing a migration installation of Siebel Tools in a deployment with multiple languages, you must make sure that the current language mode for Siebel Tools corresponds to the primary language of the Siebel database.

CAUTION: If the current language mode for Siebel Tools, before the migration installation, was not the same as the primary language, then failures will occur during the execution of Incremental Repository Merge after the migration installation. For more information about setting the language mode, see *Using Siebel Tools*. For more information about running Incremental Repository Merge, see *Siebel Database Upgrade Guide*.

- Additional requirements apply for migration installations of the current release. For more information, see [“Additional Tasks for Migration Installations” on page 62](#).

Related Topics

[“Additional Tasks for Migration Installations” on page 62](#)

[“Installing Siebel Tools” on page 184](#)

[“Installing and Using Oracle Database XE for the Local or Sample Database” on page 191](#)

[“Uninstalling Siebel Web Clients or Siebel Tools” on page 291](#)

12 Configuring the RDBMS

This chapter provides guidelines for configuring the third-party RDBMS and creating the database instance that you will use for the Siebel database. It includes the following topics:

- [Overview of Database Configuration on page 357](#)
- [Configuring an Oracle Database for Siebel Business Applications on page 359](#)
- [Configuring an IBM DB2 Database for Siebel Business Applications on page 368](#)
- [Configuring Siebel Server Connectivity to the Siebel Database on page 381](#)

Overview of Database Configuration

This chapter is intended for use by database administrators (DBAs) and by others who can perform the tasks for configuring the third-party RDBMS and creating the database instance that you will use for the Siebel database.

Follow the general steps for your supported RDBMS platform, as described in this chapter. For more information, see your third-party vendor documentation, the guidelines presented in this chapter for each RDBMS, and other applicable parts of this guide.

For the third-party RDBMS product versions supported for this release of Siebel Business Applications, see the Certifications tab on My Oracle Support.

For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

CAUTION: *Do not perform any of the tasks mentioned in this chapter in an upgrade environment (or in another environment where you have an existing Siebel database). In particular, you do not create the database instance on the RDBMS. However, after the upgrade is complete, you might have to modify database parameters for your RDBMS platform to match settings described in this chapter. For more information, see “About Installing in Upgrade Environments” on page 302 and “Roadmap for Installing and Configuring Siebel Business Applications in an Upgrade Case (Existing Database)” on page 38.*

For nonupgrade deployments (where there is no existing Siebel database), after creating the database instance and installing Siebel Business Applications software, you use scripts and utilities that are provided with the Database Configuration Utilities installation to create the Siebel database. Creating the Siebel database loads the Siebel schema and seed data into the database instance. For more information, see [Chapter 5, “Installing the Siebel Database on the RDBMS.”](#)

See also [“Planning RDBMS Installation and Configuration” on page 308.](#)

In this guide, `DBSRVR_ROOT` refers to the installation directory of the Siebel Database Configuration Utilities. For more information, see [“File and Directory Naming Conventions” on page 319.](#)

NOTE: In general, it is easier to configure and administer a Siebel database that does not share a database instance with other applications. This approach is considered a best practice. However, some customers might decide to include multiple applications in a single database instance. The implications of this choice might differ by RDBMS type: for example, the term *database instance* has a different meaning for an Oracle Database than it does for IBM DB2. The shared database instance must be configured according to the requirements described in this chapter.

After you have completed configuring your database as described in this chapter, you can perform all of the Siebel installation and configuration tasks, including those described in:

- Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension”
- Chapter 4, “Configuring Siebel Enterprise Server Components and the Siebel Web Server Extension”
- Chapter 5, “Installing the Siebel Database on the RDBMS”
- Chapter 6, “Additional Postinstallation and Configuration Tasks”

Overview of Configuring the Database

The overall process of configuring the RDBMS and installing the Siebel database is outlined as follows. The exact process depends on your deployment requirements.

- 1 Install the RDBMS software:
 - Install the RDBMS server software on the appropriate server computers.
 - Install the RDBMS client software on computers where you will install Siebel Server, Siebel Tools, or other modules that directly connect to the Siebel database.
- 2 Create the database instance.
- 3 Configure the parameters for the database instance.
- 4 (IBM DB2) Create the database, and configure the parameters for the database.
- 5 Configure storage settings, log space, and other elements for the Siebel database.

NOTE: After you perform these tasks, you install the Siebel Enterprise Server software, including Siebel Gateway Name Server, Siebel Database Configuration Utilities, and Siebel Server. You must install Database Configuration Utilities and Siebel Server on the computer where you run the Siebel Gateway Name Server; it is optional to configure and deploy this installed Siebel Server. Then you configure the Siebel Gateway Name Server, the Siebel Enterprise, and the Siebel Web Server Extension (SWSE) logical profile.

- 6 On the computer where you installed the Database Configuration Utilities, run the Database Configuration Wizard. Perform the task to install the Siebel database (schema) in the database instance.

This step creates the Siebel objects (tables and indexes) in the Siebel database, imports seed data for the primary language, and adds the Siebel Repository for the primary language. Also perform the other applicable tasks for the Siebel database. For more information, see [Chapter 5, “Installing the Siebel Database on the RDBMS.”](#)

NOTE: After you perform these tasks, you configure the Siebel Server, install and configure the SWSE, and perform additional configuration tasks that are required for your deployment.

About Using Sample Scripts for Creating Siebel Database Objects

Sample scripts that are provided with the Database Configuration Utilities installation can optionally be used to create the Siebel database. *These scripts are for testing purposes in small, nonproduction environments only.* If you intend to use such a script, then first perform the tasks listed previously, through [Step 6 on page 358](#), but omit [Step 4](#) and [Step 5](#).

Related Topics

[“Guidelines for Creating Oracle Database Objects” on page 365](#)

[“Guidelines for Creating IBM DB2 Database Objects” on page 380](#)

Configuring an Oracle Database for Siebel Business Applications

This topic contains guidelines for obtaining optimum performance from an Oracle Database. These guidelines will be useful to a broad segment of customers. Choose values for the parameters that are described in this guide that reflect the conditions in your particular environment. For more information, see Oracle Database technical documentation.

See also [“Overview of Database Configuration” on page 357](#).

NOTE: When scripts from the Siebel Database Configuration Utilities installation are executed in an Oracle Database, as described in [Chapter 5, “Installing the Siebel Database on the RDBMS,”](#) sequences are generated with the CACHE option. Do not drop these sequences and regenerate them with the NOCACHE option, or else performance might be adversely affected and database contention might occur. If you require additional Oracle Database sequence objects, then you must create them manually, and you must grant SELECT on these objects to sse_role.

Collect statistics for the tables, indexes, and histograms for the columns where the data shape is skewed. Recollect these statistics whenever a large amount of data has been updated, deleted, or inserted. For more information about how to collect statistics, see the Oracle Database administration manuals.

For performance reasons, do not collect statistics for an empty table. For more information, see 478242.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Alert 1162.

Guidelines for Configuring an Oracle Database

Various kinds of guidelines are presented for configuring an Oracle Database:

- [“Guidelines for Selecting a Language for Oracle Database” on page 360](#)
- [“Guidelines for Configuring Settings in the init.ora File” on page 361](#)
- [“Guidelines for Sizing Redo Logs for an Oracle Database” on page 362](#)
- [“Guidelines for Creating Oracle Database Tablespaces” on page 362](#)
- [“Guidelines for Sizing the Oracle Database” on page 364](#)

- [“Guidelines for Creating Temporary Oracle Database Tablespaces” on page 364](#)
- [“Guidelines for Overriding Oracle Database Default Tablespaces for Database Objects” on page 364](#)
- [“Guidelines for Creating Oracle Database Objects” on page 365](#)
- [“Guidelines for Ongoing Oracle Database Administration” on page 366](#)
- [“Guidelines for Using Real Application Clusters for an Oracle Database” on page 367](#)
- [“Guidelines for Installing the Siebel Database in a Pluggable Database” on page 367](#)

Guidelines for Selecting a Language for Oracle Database

When creating your database, you must specify the character set at the database level. You specify other language characteristics at the database client level.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications” on page 359](#).

Related Topics

- [“Planning RDBMS Installation and Configuration” on page 308](#)
- [“Specifying the Locale for Siebel Business Applications” on page 313](#)
- [“Verifying Installation for the Siebel Database” on page 220](#)

To specify the character set of your database

- Execute the following command to specify the character set for your database:

```
CREATE DATABASE INSTANCE_NAME CHARACTER SET CHARACTER_SET_NAME
```

where:

- *INSTANCE_NAME* is the name of your Oracle Database instance; for example, SIEBCRM.
- *CHARACTER_SET_NAME* is the textual name of the character set that you want to run; for example, WE8MSWIN1252 or AL32UTF8.

National Character Set

Siebel Business Applications do not use the three data types that store Unicode data using the national character set (NCHAR, NVARCHAR2, NCLOB). The default national character set, AL16UTF16, is acceptable.

Sort Order and Date Format

Follow the documented Oracle Database guidelines for client-level settings for the NLS_SORT and NLS_DATE_FORMAT parameters.

Guidelines for Configuring Settings in the init.ora File

The init.ora file contains parameters that have a major effect on the performance of Siebel Business Applications using Oracle Database.

Use the following settings as guidelines for your initial configuration. Your final settings will vary depending on the hardware configuration, the number of users, and the type of workload.

In the init.ora file, default parameter values are provided for small, medium, and large database deployments. Unless the configuration parameters are specified in the following settings, set them to the large database values. For detailed descriptions of each of the parameters and their effects on database performance and system resource utilization, see Oracle Database documentation.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications” on page 359](#).

Brief descriptions follow for several parameters for which you might have to adjust values:

- **CURSOR_SHARING.** This parameter is set to EXACT by default and must not be changed.
CAUTION: Changing this value might lead to failure of some Siebel Server components.
- **DB_FILE_MULTIBLOCK_READ_COUNT.** The database buffer cache parameter dictates the number of data blocks that are read in a single Oracle Database I/O operation during a table scan. For most implementations, set this parameter to an initial value of 32. If you are using NAS storage (such as a NetApp Filer), then set the value to 8 to reduce potential network traffic problems.
- **FILESYSTEMIO_OPTION.** It is recommended to set this parameter to SETALL, for all operating systems. Performance issues have been observed with other settings.
- **MEMORY_TARGET.** This parameter specifies the Oracle Database system-wide usable memory. A common recommendation is to set it to a value equalling the physical memory minus 1 GB. For example, if the Oracle Database server has 16 GB of memory, then set MEMORY_TARGET to 15 GB.
- **NLS_DATE_FORMAT.** Set this parameter as needed. The default setting is DD-MON-YY. For information about the supported formats, see Oracle Database documentation and see [“Specifying the Locale for Siebel Business Applications” on page 313](#).
- **NLS_SORT.** The sort order is specified during the initial installation of a database and defines the way in which the database sorts character data. Sort order support depends on both the code page of the database and whether it will be used in a development or a production environment. For more information, see [“Specifying the Locale for Siebel Business Applications” on page 313](#).

Considerations for development and production environments are as follows:

- **Development environment databases.** The repository object names in your development environment database must sort using a binary sort order, because Siebel Tools uses this sort order internally. Specify the same sort order at the database client level, so that output there does not have to be resorted. Customers are responsible for making sure their data is backed up and restored correctly.

NOTE: Binary sort order is the simplest and fastest sort order to perform in the database. Binary sorting is case-sensitive and is based on the numeric values (for example, 0 through 255 for an 8-bit character set) of the characters in the installed character set.

- **Production environment databases.** For information about production environment database restrictions, see the Certifications tab on My Oracle Support. See also Oracle Database documentation.
- **OPEN_CURSORS.** This parameter controls the amount of spaces that are reserved for the maximum number of cursors (a cursor being the same as an open query). The minimum open cursor requirement for Oracle Database is 1000 and the maximum is 2000. Within these limits, this parameter can be adjusted according to observed usage patterns.
- **OPTIMIZER_FEATURES_ENABLE.** This is an umbrella parameter for enabling a series of optimizer features that are based on an Oracle Database release number. For example, set this parameter to a value corresponding to the current release level of your Oracle Database. For more information, see Oracle Database documentation. For more information about performance tuning for Siebel CRM with an Oracle Database, see 781927.1 (Article ID) on My Oracle Support.
- **OPTIMIZER_INDEX_COST_ADJ.** It is recommended that you set this parameter to 1. Use this parameter to tune the optimizer to use index access path over a full table scan. However, depending on the data shape for your Siebel database, how statistics are gathered, and the nature of your Siebel configuration changes, other values might provide better results.
- **OPTIMIZER_MODE.** Set this parameter to ALL_ROWS (the default) for the Cost-Based Optimizer (CBO).

NOTE: For more information about performance tuning for Siebel CRM with an Oracle Database, see 781927.1 (Article ID) on My Oracle Support. See also *Siebel Database Upgrade Guide*.

Guidelines for Sizing Redo Logs for an Oracle Database

If redo logs are too small, then frequent log switches occur, creating resource-intensive Oracle Database check-pointing in which all of the dirty buffers are flushed. A range of 10 to 15 minutes or longer for log switching is preferable under a normal OLTP (Online Transaction Processing) load. However, during periods of heavy DML (data manipulation language) activity, such as during large Siebel EIM loads or upgrades, the logs might switch more frequently than every two minutes. When this occurs, overall database performance suffers as a result.

You can check the frequency of this operation either in the alert log or by querying v\$loghist. It is best to use verification when there is the greatest activity and the heaviest load on the database.

If this activity occurs too frequently, then drop and recreate individual redo log groups with larger sizes. A suggested minimum size is 300 MB.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications”](#) on page 359.

Guidelines for Creating Oracle Database Tablespaces

The initial (minimum) tablespace allocation recommendations are as follows:

- Data: 5 GB
- Index: 5 GB
- Temp: 2 GB

- System: 2 GB
- Sysaux: 1 GB

This allocation is enough for a fresh installation of Oracle Database (Unicode-enabled or non-Unicode-enabled).

The following additional guidelines will help you in creating tablespaces:

- To improve performance on your production system, create at least two tablespaces for a Siebel implementation: one for indexes and one for data.
- Distribute objects that you anticipate to be large or points of contention by creating additional separate tablespaces (preferably on separate disk devices).
- Be sure that you, or whoever is responsible for setting up permissions, grant the Siebel table owner account the privilege and sufficient quota to create tables and indexes in these tablespaces.

Besides the table owner, the database user ID used for Siebel Marketing also requires additional rights at the database level within the OLTP schema. You must grant DROP TABLE, DROP INDEX, CREATE TABLE, and CREATE INDEX rights to this user. For more information, see *Siebel Marketing Installation and Administration Guide*.

- Set storage parameters for your data and index tablespaces. The Siebel database installation procedure does not set storage parameters for the objects it creates. The storage configuration for each object follows the default storage parameters of its tablespace. It is recommended that you create locally managed tablespaces by using the following syntax:

```
extent management local autoallocate segment space management auto;
```

- In a development or test environment, multiple Siebel Business Applications installations can coexist on one Oracle Database instance. Install each Siebel database under a separate table owner, so that each schema owner is unique.
- Function-based indexes based on expressions that require QUERY_REWRITE_ENABLED to equal TRUE are not supported. However, DESC (descending) indexes are supported, as in a standard schema.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications”](#) on page 359.

Guidelines for Sizing the Oracle Database

Monitor object growth and fragmentation carefully and alter the database storage parameters as required. Also use the following guidelines for initial sizing of your Oracle Database. (If you use EXTENT MANAGEMENT LOCAL AUTOALLOCATE for CREATE DATABASE, then these guidelines *do not apply*.)

- Set the initial extent to a very small size (the minimum is one database block), so that empty tables and indexes do not consume large amounts of space. For example, start with either two or four blocks (in other words, 16 KB or 32 KB with an 8-KB block size). This allocation promotes less fragmentation.

Even if you have as many 10,000 objects, this number of objects uses only 312 MB, which is far less space required than for some standard office software packages.

- Set the default next extent for your data and index tablespaces to a minimum of 100 KB.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications” on page 359](#).

Guidelines for Creating Temporary Oracle Database Tablespaces

Modify all of the user temporary tablespace definitions from the default of SYSTEM to the name of the temporary tablespace; for example, TEMP.

To find out which users are assigned to which temporary tablespaces, query the TEMPORARY_TABLESPACE column of DBA_USERS. If any users are assigned to a tablespace other than the one allocated for temporary sort-type operations, then correct the situation.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications” on page 359](#).

Guidelines for Overriding Oracle Database Default Tablespaces for Database Objects

Siebel Business Applications provide the option of overriding the default storage parameters for the tablespaces in which specific tables or indexes are created. You created these tablespaces by using the instructions in [“Guidelines for Creating Oracle Database Tablespaces” on page 362](#). To override these parameters, edit the ddl.ctl file located in the `DBSRVR_ROOT/oracle` directory.

NOTE: The ddl.ctl file must not be modified except by a qualified DBA.

For each Siebel object (table or index), you can specify a tablespace by using the Table Space parameter. In the following example, the tablespace for the table S_APP_VIEW is set to DATA1.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications” on page 359](#).

As provided by Siebel Business Applications, the .ctl file does not set storage parameters for the objects it creates, so that they default to the parameters of the tablespaces in which they are created. However, the Table Space parameter works only under the following conditions:

- When the table does not yet exist (for example, when you are performing a new database installation).
- When the table must be rebuilt. In other words, when schema changes are made to the table such that an ALTER TABLE command is insufficient to implement the schema changes. In this case, the table must be dropped and recreated.

The following example illustrates the use of the Table Space parameter to set storage values for specific tables:

```
[Object 219]
Type = Table
Name = S_APP_VIEW
Column 1 = ROW_ID VARCHAR(15) NOTNULL
Column 2 = CREATED_TIMESTAMP NOTNULL DEFAULT %NOW%
Column 3 = CREATED_BY VARCHAR(15) NOTNULL
Column 4 = LAST_UPD_TIMESTAMP NOTNULL DEFAULT %NOW%
Column 5 = LAST_UPD_BY VARCHAR(15) NOTNULL
Column 6 = DCKING_NUM NUMERIC(22, 7) DEFAULT 0
Column 7 = MODIFICATION_NUM NUMERIC(10, 0) NOTNULL DEFAULT 0
Column 8 = CONFLICT_ID VARCHAR(15) NOTNULL DEFAULT '0'
Column 9 = NAME VARCHAR(50) NOTNULL
Column 10 = DESC_TEXT VARCHAR(255)
Column 11 = LOCAL_ACCESS_FLG CHAR(1)
Table Space = data1
```

If you use locally managed tablespaces and want to change the storage parameters, then see Oracle Database technical documentation.

For an example (IBM DB2) of overriding the defaults for specific tables and indexes, see [“Guidelines for Overriding IBM DB2 Default Tablespaces for Database Objects” on page 377](#).

Guidelines for Creating Oracle Database Objects

Siebel Business Applications provide sample scripts (CrBlankOracleSiebelDEMO.sql and CrBlankOracleSiebelDEMOPostCrDB.sql), located in the *DBSRVR_ROOT/Oracle* directory. Use these scripts as a reference to help you create your own scripts for creating a blank Siebel database, based on the requirements for your deployment.

Use the settings in the script as guidelines for your initial configuration. Your final settings will vary depending on the server hardware configuration, the number of users, and the type of workload. Use a small, nonproduction environment for testing purposes.

Before using these scripts, read the file CrBlankOracleSiebelDEMOReadMe.txt. See also [“Overview of Database Configuration” on page 357](#).

After you install the Database Configuration Utilities on the Siebel Server computer, as described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) you can modify the database table and index creation scripts to specify the tablespace names that you created for Siebel tables and indexes. For more information, see [“Guidelines for Overriding Oracle Database Default Tablespaces for Database Objects”](#) on page 364.

Additional information about Oracle Database configuration and tuning options is available from Oracle, your hardware vendor, and other sources.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications”](#) on page 359.

Guidelines for Ongoing Oracle Database Administration

After your Siebel Business Applications installation is up and running, monitor the following areas on a regular basis:

- **Insertion rates on tables.** You probably will want to set the INI_TRANS value for tables with high insertion rates to a value higher than 1; a typical setting is 4.

This parameter determines how many simultaneous inserts can occur on the database blocks that store data for those tables and, therefore, can affect performance in an intensive data-entry environment. Use multiple freelists for the table S_DOCK_TXN_LOG, because this table receives numerous inserts.

- **SGA cache hits.** Determine whether SGA parameters have to be adjusted for your system.
- **The extents used by each object.** A large number of extents on a table or index creates response time degradation for transactions that access the table or index.
- **Siebel tables that are subject to frequent INSERT and DELETE operations.** This transaction mixture can cause some database tables to become fragmented over time.

If you are using Siebel Remote, then your DBA must monitor space utilization and fragmentation of the following tables, and perform regular database maintenance procedures as recommended for an Oracle Database. Monitor the following tables in particular, because they will have frequent changes when transaction logging is enabled:

- S_SRM_REQUEST
- S_DOCK_TXN_LOG
- S_DOCK_TXN_LOGT
- S_DOCK_TXN_SET
- S_DOCK_TXN_SETT
- S_DOCK_INST
- S_DOCK_INIT_ITEM

Your DBA might also choose to monitor all of the tables and indexes in the Siebel schema, reorganizing them when required.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications”](#) on page 359.

Guidelines for Using Real Application Clusters for an Oracle Database

Siebel Business Applications support Oracle Real Application Clusters (RAC) failover configurations for Oracle Database. Both active-passive and active-active RAC configurations are supported.

For more information, see:

- 473859.1 (Article ID) on My Oracle Support. This document was previously published as Siebel Technical Note 635.
- 478215.1 (Article ID) on My Oracle Support. This document was previously published as Siebel FAQ 2220.
- Certifications tab on My Oracle Support.
- Concepts documentation for Oracle Real Application Clusters software on Oracle Technology Network.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications”](#) on page 359.

Guidelines for Installing the Siebel Database in a Pluggable Database

You can install the Siebel database in a multitenant environment with versions of Oracle Database that support this feature. To do so, first create a pluggable database within the container database. Then create a corresponding entry for the pluggable database in `tnsnames.ora`. This entry must specify the service you will use to connect to the pluggable database.

When you run `grantusr.sql`, you do so in the pluggable database rather than in the container database. Database settings you specify in the Siebel Configuration Wizards must be those for the pluggable database and you must create the Siebel schema within the pluggable database.

For more information about creating a pluggable database and about managing a multitenant environment, see Oracle Database documentation on Oracle Help Center, particularly the guides listed.

This topic is part of [“Configuring an Oracle Database for Siebel Business Applications”](#) on page 359.

Related Books

Oracle Database SQL Language Reference

Oracle Database Administrator's Guide

Configuring an IBM DB2 Database for Siebel Business Applications

This topic contains guidelines for obtaining optimal performance from an IBM DB2 Database for use with Siebel Business Applications. These guidelines will be useful to a broad segment of customers. Choose values for the parameters described in this guide that reflect conditions in your particular environment. For more information, see IBM DB2 technical documentation.

NOTE: In this guide, the terms *IBM DB2* or *DB2* are often used to refer to the database platform IBM DB2 for Linux, UNIX, and Windows.

See also [“Overview of Database Configuration” on page 357](#).

When you use IBM DB2, the IBM Data Server Client must be installed on the Siebel Server computer. Verify that the IBM Data Server Client is installed before proceeding. For details, see *Siebel Database Upgrade Guide*. In addition, the IBM Data Server Runtime Client must be installed on the Siebel Server computer. For IBM DB2 version information, see the Certifications tab on My Oracle Support.

NOTE: If your database is IBM DB2 for z/OS, then see *Implementing Siebel Business Applications on DB2 for z/OS* instead of this chapter. See also the relevant information under [“Planning RDBMS Installation and Configuration” on page 308](#).

Guidelines for Configuring an IBM DB2 Database

Various kinds of guidelines are presented for configuring an IBM DB2 database:

- [“Guidelines for Setting IBM DB2 Database Manager Configuration Parameters” on page 369](#)
- [“Guidelines for Selecting a Language for IBM DB2” on page 370](#)
- [“Guidelines for Creating the IBM DB2 Database” on page 372](#)
- [“Guidelines for Setting IBM DB2 Configuration Parameters” on page 372](#)
- [“Guidelines for Setting Up IBM DB2 Buffer Pools” on page 375](#)
- [“Guidelines for Creating IBM DB2 Tablespaces” on page 375](#)
- [“Guidelines for Overriding IBM DB2 Default Tablespaces for Database Objects” on page 377](#)
- [“Guidelines for Preventing IBM DB2 from Running Out of ODBC Statement Handles” on page 379](#)
- [“Guidelines for Increasing the Number of IBM DB2 User Processes Under AIX” on page 379](#)
- [“Guidelines for Determining IBM DB2 Log Space” on page 380](#)
- [“Guidelines for Creating IBM DB2 Database Objects” on page 380](#)
- [“Guidelines for Managing IBM DB2 Fragmentation” on page 381](#)

Guidelines for Setting IBM DB2 Database Manager Configuration Parameters

You can set the IBM DB2 database configuration parameters by using the update database manager configuration command of the DB2 command line processor. For more information about modifying these configuration parameters, see IBM DB2 technical documentation.

Table 30 on page 369 describes IBM DB2 database manager configuration parameters that differ from the default settings. Set these parameters for each DB2 instance. Use the configuration information in Table 30 for the listed parameters. For parameters not listed in this table, accept the default settings.

This topic is part of “Configuring an IBM DB2 Database for Siebel Business Applications” on page 368.

Table 30. IBM DB2 Database Manager Configuration Parameters

Parameter	Explanation	Setting or Comment
SHEAPTHRES	Sort heap threshold (4 KB)	200000 Deployments with 3,000 or more concurrent users and using over 5 GB of RAM can increase this to 300000. If you are using automatic management, then set this parameter to 0.
DIR_CACHE	Directory cache support	YES
ASLHEAPSZ	Application support layer heap size	15
RQRIOBLK	Maximum requester I/O block size (bytes)	65535
MON_HEAP_SZ	Database monitor heap size (4 KB)	128 (minimum)
KEEPFENCED	Keep Fenced process	YES
NUM_INITAGENTS	Initial number agents in pool	10
NUM_POOLAGENTS	Number of agents in the agent pool kept active at all times	80
MAX_COORDAGENTS	Maximum number coordinating agents	automatic
INDEXREC	Index recreation time	RESTART
INTRA_PARALLEL	Enable intra-partition parallelism	NO
INSTANCE_MEMORY	Amount of memory to be reserved for instance management	automatic

DB2set Parameters

Use the `db2set` command to set the parameters (for example, `db2set DB2_HASH_JOIN = NO`) referenced in [Table 31 on page 370](#).

Table 31. db2set Parameters

Parameter	Explanation	Setting
EXTSHM	<p>(AIX only) Use this parameter only when you have the Siebel database and the Siebel Server on the same AIX computer.</p> <p>EXTSHM must be set when the IBM DB2 database is created and must be included in the script that starts it. The parameter also must appear in the <code>sql/lib/db2profile</code> file for the DB2 server.</p> <p>Include this parameter in the script that starts the DB2 client.</p> <p>After changing any of these settings, you must perform a <code>db2stop</code>, then <code>db2start</code>, to implement the changes in your DB2 database.</p>	ON
DB2ENVLIST	(AIX only) When starting an IBM DB2 server and running EXTSHM, EXTSHM must be part of the DB2 environment. This parameter must be set when the database is created.	EXTSHM
DB2MEMDISCLAIM	(AIX only) When set to YES, IBM DB2 disclaims some or all of the freed memory, depending on the value of DB2MEMMAXFREE.	YES
DB2_MMAP_READ	(AIX only) Recommended setting only; evaluate this setting for your particular configuration and environment.	OFF
DB2_MMAP_WRITE	(AIX only) Recommended setting only; evaluate this setting for your particular configuration and environment.	OFF
DB2_PARALLEL_IO	Useful when using RAID devices. For more information, see IBM DB2 documentation.	* (asterisk)
DB2_REDUCED_OPTIMIZATION	Controls optimization techniques used at specific optimization levels.	IXOROFNR

Guidelines for Selecting a Language for IBM DB2

As part of database creation, you must set the language characteristics of your database, even if you deploy in only one language.

To do this, you must know in which of the Siebel-supported languages your database runs, the codeset your database uses, the territory for your language, and the sort order (also known as the collation sequence) that your users prefer.

For an IBM DB2 production environment database, you can use any sort order. For a development environment database, you must use binary (identity) sort order.

Setting the language characteristics of the database is part of the sample script in the *DBSRVR_ROOT/DB2UDB* directory.

For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

See also [“Planning RDBMS Installation and Configuration” on page 308](#) and [“Specifying the Locale for Siebel Business Applications” on page 313](#).

See also [“Verifying Installation for the Siebel Database” on page 220](#).

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications” on page 368](#).

Codeset

IBM DB2 distinguishes between a code page (also known as a character set) and a codeset. A *codeset* is defined as a textual string that describes the character encoding standard used for the database, whereas a *code page* is a numeric representation of the same standard.

Territory

The *territory*, or region, is a combination of the language and the locale; for example, French would be a language example, while Canada or France would be locales in which French is used with regional differences. So, an example of a territory is Canadian French.

Sort Order

The sort order is specified during the initial installation of a database and defines the way in which the database sorts character data. Sort order support depends on both the code page of the database and whether it will be used in a development or a production environment.

For more information about supported sort orders, see the Certifications tab on My Oracle Support.

- **Development environment databases.** The repository object names in your development environment database must sort in the same order that they would under the UTF-16 binary sort order, because Siebel Tools uses this sort order internally.

NOTE: Binary sort order is the simplest and fastest sort order to perform in the database. Binary sorting is case-sensitive and is based on the numeric values (for example, 0 through 255 for an 8-bit character set) of the characters in the installed character set.

Customers are responsible for making sure that their data is backed up and restored correctly.

- **Production environment databases.** For information about production environment database restrictions, see the Certifications tab on My Oracle Support. See also IBM DB2 documentation.

Guidelines for Creating the IBM DB2 Database

If you are installing a database that is to be enabled for Unicode, then you must specify UTF-8 as the codeset (including the hyphen). UTF-8 is the parameter used for Unicode implementations on IBM DB2, although the processing will use UCS-2. When you specify UTF-8 as the encoding for the VARCHAR type, the encoding for the VARGRAPHIC type is automatically set to UCS-2, even though UCS-2 is not specified as the parameter.

Verify that your data is exported and imported correctly.

For Siebel CRM language support, Unicode support, and legacy code page support, see 1513102.1 (Article ID) on My Oracle Support.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications” on page 368](#).

To create the IBM DB2 database

- 1 Locate the primary (base) language that your database will use, the territory for your language, and the applicable codeset.
- 2 Using the DB2 command line processor, enter the following command:

```
db2 create database dbname using codeset territory collate using identity
```

where:

- *dbname* is the alias for your database
- *codeset* is the textual representation of your code page
- *territory* is the territory for the language that your database runs in, under that codeset

Guidelines for Setting IBM DB2 Configuration Parameters

The database configuration parameters can be set by using the `update database configuration` command of the DB2 command line processor.

For more information about modifying these configuration parameters, see IBM DB2 technical documentation.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications” on page 368](#).

[Table 32 on page 373](#) describes IBM DB2 database configuration parameters that differ from the default settings. However, these descriptions are guidelines only. Set these parameters for *each* database within an instance on which you run your Siebel application. For other parameters, accept the default settings.

Table 32. IBM DB2 Configuration Parameters

Parameter	Explanation	Setting
DFT_DEGREE	Degree of parallelism (the value 1 turns query parallelism off).	1
DFT_QUERYOPT	<p>Default query optimization class. This parameter only takes effect on the database server and affects the Siebel Server components, such as Siebel EIM or Siebel Remote.</p> <p>Queries run through the UI are not affected by this setting. They take the value of the Siebel system preference DB2: Default Opt Level, or you can override them at the business component level by using Siebel Tools.</p>	3
DBHEAP	Database heap (4 KB).	Automatic.
CATALOGCACHE_SZ	Catalog cache size (4 KB).	10000
LOGBUFSZ	Log buffer size (4 KB).	512
LOCKLIST	Maximum storage for lock list (4 KB).	Automatic.
SORTHEAP	<p>Sort list heap (4 KB).</p> <p>Use lower values for development environments; use higher values for production. However, increasing this value can lead to insufficient memory on the database server. Also, this parameter might have to be set below the recommended range if you have a high number of Siebel users.</p> <p>Always monitor database server memory and performance to find the best setting for your environment.</p>	Automatic.

Table 32. IBM DB2 Configuration Parameters

Parameter	Explanation	Setting
STMTHEAP	Minimum setting. If necessary, increment this parameter in 1048 blocks of 4 KB.	Automatic or a fixed value. For example, you might update the parameter setting using a command like this: DB2 UPDATE DB CFG FOR SAMPLE USING STMTHEAP 8192 AUTOMATIC This value specifies 8192 times 4 KB (or 32 MB) for dynamic join enumeration and unlimited for greedy join enumeration.
STAT_HEAP_SZ	Statistics heap size (4 KB).	Automatic.
MAXLOCKS	Percentage of lock lists for each application.	Automatic.
LOCKTIMEOUT	Lock time out (seconds).	300
CHNGPGS_THRESH	Changed pages threshold.	60
NUM_IOCLEANERS	Number of asynchronous page cleaners.	Automatic.
SEQDETECT	Sequential detect flag.	YES
DFT_PREFETCH_SZ	Default prefetch size (4 KB).	32
MAXAPPLS	Maximum number of active applications.	Automatic.
AVG_APPLS	Average number of active applications.	Automatic.
MAXFILOP	Maximum DB files open for each application.	500
LOGFILSIZ	Log file size (in 4 KB increments).	65535
LOGPRIMARY	Number of primary log files.	25 to 50 The value of LOGPRIMARY and LOGSECOND together must not exceed 256.
LOGSECOND	Number of secondary log files.	Up to 103 The value of LOGPRIMARY and LOGSECOND together must not exceed 256.

Table 32. IBM DB2 Configuration Parameters

Parameter	Explanation	Setting
SOFTMAX	Percent log file reclaimed before soft checkpoint.	80
APPLHEAPSZ	Default application heap (4 KB).	Automatic.
PCKCACHESZ	Package cache size (4 KB).	Automatic.
NUM_IOSERVERS	Number of disks on which the database resides.	Automatic.

Guidelines for Setting Up IBM DB2 Buffer Pools

A *buffer pool* is an area of main system memory that is used for holding pages of data that have been fetched from the tablespace. In IBM DB2, each tablespace is associated with a buffer pool. Adding more space to a buffer pool enhances the performance of the database.

You must have at least three buffer pools for the Siebel tablespaces. You can use the default buffer pool to buffer data pages from all of the Siebel 4-KB tablespaces.

You must also create additional buffer pools with 16-KB and 32-KB page sizes for sorting and other SQL processing. A sample configuration is shown in [Table 33 on page 375](#).

Table 33. Sample Buffer Pool Configuration

Buffer Pool	Suggested Buffer Pool Size	Page Size
BUF4K	50% of available memory	4 KB
BUF16K	25% of available memory	16 KB
BUF32K	32 MB	32 KB

Different operating systems support different maximum amounts of IBM DB2 addressable memory. Depending on the memory configuration of a given server, the suggested pool sizes for BUF4K and BUF16K buffer pools might exceed these maximums, requiring you to allocate a smaller percentage. To determine the optimal buffer pool sizes, use IBM DB2 monitoring features.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications” on page 368](#).

Guidelines for Creating IBM DB2 Tablespaces

The Siebel database installation process described in [Chapter 5, “Installing the Siebel Database on the RDBMS,”](#) specifies the tablespaces in which to store your Siebel tables and indexes.

A Siebel database on IBM DB2 requires at least four tablespaces using database-managed space (DMS). Each tablespace can have one or more tablespace containers to store the data. Create a *minimum* of four DB2 tablespaces to hold your tables and indexes: a 4-KB, a 16-KB, and a 32-KB tablespace, for your various sized tables, and an additional tablespace to hold your indexes. The tablespaces must be created as database-managed space. Use a small, nonproduction environment for testing purposes.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications” on page 368.](#)

Observe the following guidelines when creating tablespaces:

- Create at least three IBM DB2 tablespaces for tables of various sizes, as shown in [Table 34 on page 376](#). Using the default tablespace names is recommended.

Table 34. IBM DB2 Tablespace Values for Non-Unicode and Unicode-Enabled Databases

DB2 Tablespace Name	Buffer Pool Name	Recommended Value	Description
Non-Unicode Database			
SIEBEL_4K	BUF4K	2 GB	Tablespace name for tables with row sizes less than 4006 bytes.
SIEBEL_16K	BUF16K	300 MB	Tablespace name for tables with row sizes from 4006 bytes through 16,293 bytes.
SIEBEL_32K	BUF32K	100 MB	Tablespace name for tables with row sizes greater than 16,293 bytes.
Unicode-Enabled Database			
SIEBEL_4K	BUF4K	4 GB	Tablespace name for tables with row sizes less than 4006 bytes.
SIEBEL_16K	BUF16K	700 MB	Tablespace name for tables with row sizes from 4006 bytes through 16,293 bytes.
SIEBEL_32K	BUF32K	100 MB	Tablespace name for tables with row sizes greater than 16,293 bytes.

- Create additional tablespaces as required for individual tables, such as S_DOCK_TXN_LOG. If you expect to have large, heavily used tables, then put these in their own tablespace.
- In addition, for performance reasons it is highly recommended that you create a separate tablespace for indexes. For example, you might create a tablespace named SIEBEL_IDX and using buffer pool BUF16K, with a page size of 16 KB, and with 3 GB allocated for this tablespace.
- Create at least 4-KB, 16-KB, and 32-KB temporary tablespaces to use for sorting and other SQL processing as described in the following topics. If you do not create them, then your database will experience serious performance and stability problems. Use system-managed space (SMS) for all of the temporary tablespaces. Make sure that these temporary tablespaces are expandable to 2 GB for storage purposes.

- If you intend to use the DB2 Load utility to populate EIM tables, then this method makes the tablespace in which EIM tables reside unavailable for the duration of the load. Placing the EIM tables in one or more separate tablespaces allows concurrent activity on the database while the load utility is running.
- To override default storage parameters, such as the tablespace definitions, see [“Guidelines for Overriding IBM DB2 Default Tablespaces for Database Objects” on page 377](#).
- Record the tablespace names in [Appendix A, “Siebel Deployment Planning Worksheet.”](#)

Guidelines for Overriding IBM DB2 Default Tablespaces for Database Objects

Siebel Business Applications provide the option of overriding the default storage parameters for the tablespaces in which specific tables or indexes are created. You created these tablespaces by using the instructions in [“Guidelines for Creating IBM DB2 Tablespaces” on page 375](#). To override these defaults, edit the `ddl.ctl` file located in the `DBSRVR_ROOT/DB2UDB` directory.

NOTE: The `ddl.ctl` file must not be modified except by a qualified DBA.

For each Siebel table, you can specify a tablespace by using the Table Space parameter. In the following example, the tablespace for the table `S_APP_VIEW` is set to `DATA1`.

As provided, the `.ctl` file does not set storage parameters for the objects it creates, so they default to the parameter settings of the tablespaces in which they are created. However, the Table Space parameter works only under the following conditions:

- When the table does not yet exist (for example, when you are performing a new database installation).
- When the table must be rebuilt. In other words, when schema changes are made to the table such that an `ALTER TABLE` command is insufficient to implement the schema changes. In this case, the table must be dropped and recreated.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications” on page 368](#).

As shown in the following example, you can use the Table Space parameter to set storage parameters for specific tables:

```
[Object 219]
Type = Table
Name = S_APP_VIEW
Column 1 = ROW_ID VARCHAR(15) NOTNULL
Column 2 = CREATED TIMESTAMP NOTNULL DEFAULT %NOW%
Column 3 = CREATED_BY VARCHAR(15) NOTNULL
Column 4 = LAST_UPD_TIMESTAMP NOTNULL DEFAULT %NOW%
Column 5 = LAST_UPD_BY VARCHAR(15) NOTNULL
Column 6 = DCKING_NUM NUMERIC(22, 7) DEFAULT 0
Column 7 = MODIFICATION_NUM NUMERIC(10, 0) NOTNULL DEFAULT 0
Column 8 = CONFLICT_ID VARCHAR(15) NOTNULL DEFAULT '0'
Column 9 = NAME VARCHAR(50) NOTNULL
```

```
Column 10 = DESC_TEXT VARCHAR(255)
Column 11 = LOCAL_ACCESS_FLG CHAR(1)
Table Space = data1
```

The following example illustrates how to override the defaults for specific tables and indexes:

```
[Object 7135]
Type = Table
Name = S_EVT_ACT
Group = Activity-1
Append Mode = Yes
Column 1 = ROW_ID WVARCHAR(15) NOTNULL
Column 2 = CREATED TIMESTAMP NOTNULL DEFAULT %NOW%
Column 3 = CREATED_BY WVARCHAR(15) NOTNULL
Column 4 = LAST_UPD TIMESTAMP NOTNULL DEFAULT %NOW%
Column 5 = LAST_UPD_BY WVARCHAR(15) NOTNULL
Column 6 = DCKING_NUM NUMERIC(22, 7) DEFAULT 0
Column 7 = MODIFICATION_NUM NUMERIC(10, 0) NOTNULL DEFAULT 0
Column 8 = CONFLICT_ID WVARCHAR(15) NOTNULL DEFAULT '0'
Column 9 = ACTIVITY_UI_ID WVARCHAR(30) NOTNULL DEFAULT 'x'
...
Column 166 = TODO_CD WVARCHAR(30)
Column 167 = USER_MSG_ID WVARCHAR(15)
Column 168 = WC_START_VIEW WVARCHAR(250)
Column 169 = WC_TYPE_CD WVARCHAR(30)
```

```
[Object 7136]
Type = Index
Name = S_EVT_ACT_F1
Table = S_EVT_ACT
Column 1 = CON_PRDINT_ID ASC
Index Space = S_EVT_ACT_TBS_IDX
```

```
[Object 7137]
Type = Index
Name = S_EVT_ACT_F10
Table = S_EVT_ACT
Allow Reverse Scans = Yes
Column 1 = TARGET_OU_ID ASC
Column 2 = APPT_START_DT DESC
Column 3 = ROW_ID ASC
```

```
[Object 7138]
Type = Index
Name = S_EVT_ACT_F11
Table = S_EVT_ACT
Column 1 = PAR_EVT_ID ASC
Index Space = S_EVT_ACT_TBS_IDX
```

Guidelines for Preventing IBM DB2 from Running Out of ODBC Statement Handles

IBM DB2 can quickly run out of ODBC statement handles, depending on the number of business objects your enterprise uses. Because it is difficult to know how many business objects your users use, increase this number automatically each time that you install the DB2 Client, or when you rebind database utilities. You can increase the number of CLI packages with the CLI PKG option for the `bind` command.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications”](#) on page 368.

To rebind the CLI packages

- 1 Navigate to `sql lib/bnd` in the IBM DB2 instance home directory, by using a method appropriate to your operating system.
- 2 Connect to the DB2 database, and enter a command similar to the following example, which sets the number of CLI packages to 30:

```
db2 bind @db2cli.lst blocking all grant public cli pkg 30
```

Specify a value for CLI PKG that is sufficient to run your applications. For more information about the DB2 `bind` command and the CLI PKG option, see IBM DB2 documentation.

Guidelines for Increasing the Number of IBM DB2 User Processes Under AIX

When you reach about 400 concurrent database users running under AIX, the connection to IBM DB2 might fail. To avoid this problem, reset the parameter controlling the maximum number of user processes on your AIX server.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications”](#) on page 368.

To reset the parameter

- 1 Log on to the server as the AIX system administrator.
- 2 Navigate to `$SIEBEL_HOME` (the Siebel Server root directory), and source environment variables, by using one of the following commands, depending on the type of shell that you use:

C shell

```
source siebenv.csh
```

Bourne or Korn shell

```
./siebenv.sh
```

TIP: Make sure that there is a space between the initial period and `./siebenv.sh`.

- 3 Execute the following command to review the options:

```
smi tty chgsys
```

- 4 Select Maximum Number of Processes and reset the default (512) to a larger number; for example, specify a value like 10,000 to avoid imposing an upper limit on the number of processes that a single user can spawn.

Guidelines for Determining IBM DB2 Log Space

You must create database transaction log files large enough to support various large transactions used by Siebel Business Applications. On IBM DB2, three parameters affect the amount of log file space reserved:

- **LOGFILSIZ.** The size of the log file.
- **LOGPRIMARY.** The number of log files to preallocate and use.
- **LOGSECOND.** Extra log files that are allocated only if they are needed for a large transaction.

For a large system, allocate 4 to 8 GB of total log file space, as needed. Create 25 to 50 primary log files of 160 MB each, by setting the LOGFILSIZ database configuration parameter to 40000 and the LOGPRIMARY parameter to a value between 25 to 50. To support very large transactions, set the LOGSECOND parameter to 128 minus the value of LOGPRIMARY. Smaller systems can use less log file space.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications”](#) on page 368.

Guidelines for Creating IBM DB2 Database Objects

Siebel Business Applications provide a sample script (CrBlankDB2UDBSiebelIDEMO.sql), located in the *DBSRVR_ROOT/DB2UDB* directory. Use this script as a reference to help you create your own scripts for creating a blank Siebel database based on the requirements for your deployment.

Use the settings in the script as guidelines for your initial configuration. Your final settings will vary depending on the server hardware configuration, the number of users, and the type of workload. Use a small, nonproduction environment for testing purposes.

Before using this script, read the file CrBlankDB2UDBSiebelIDEMOReadMe.txt. See also [“Overview of Database Configuration”](#) on page 357.

After you install the Database Configuration Utilities on the Siebel Server computer, as described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) you can modify the database table and index creation scripts to specify the tablespace names that you created for Siebel tables and indexes. For more information, see [“Guidelines for Overriding IBM DB2 Default Tablespaces for Database Objects”](#) on page 377.

Additional information about IBM DB2 configuration and tuning options is available from IBM, your hardware vendor, and other sources.

This topic is part of [“Configuring an IBM DB2 Database for Siebel Business Applications”](#) on page 368.

Guidelines for Managing IBM DB2 Fragmentation

No strict guidelines can be offered as to which tables and indexes might be fragmented, because of the variety in application and customer operation variables at any given customer site. However, DBAs must pay attention to the status of large or heavily used tables, because fragmentation of these tables can affect performance significantly. For a list of these Siebel tables, see *Siebel Deployment Planning Guide*.

NOTE: Do not reorganize S_ESCL_LOG, S_DOCK_INIT_ITEM, S_ESCL_ACTN_REQ, S_APSRVR_REQ, and all tables named S_DOCK_INITM_%% (in this table name, % is a digit), because these tables are defined to be in append mode.

This topic is part of “[Configuring an IBM DB2 Database for Siebel Business Applications](#)” on page 368.

Use the following strategy to manage table fragmentation:

- Reorganize any tables, as needed, by running REORG TABLE. For details on how to reorganize tables or indexes, see the following:
 - 477378.1 (Article ID) on My Oracle Support. This document was previously published as Siebel FAQ 2072.
 - 477402.1 (Article ID) on My Oracle Support. This document was previously published as Siebel FAQ 2073.
- After reorganizing tables, update statistics by using the runstats utility on any reorganized tables with the following minimum parameters:

```
runstats on table tablename with distribution and detailed indexes all shrlevel change
```

You might add other parameters as required, but use the shrlevel change parameter to allow concurrent access to your tables while runstats executes.

CAUTION: The runstats utility overwrites statistics loaded by Siebel Business Applications. If you use runstats, then always execute loadstats.sql afterwards, by using either the DB2 command line processor or odbcsql. Otherwise, valuable statistics will be lost.

To run loadstats.sql by using odbcsql, use the following command:

```
odbcsql /s DATASOURCE_NAME /u username /p password /v separator siebel_root/  
dbsrvr/db2udb/loadstats.sql TABLEOWNER_NAME
```

Configuring Siebel Server Connectivity to the Siebel Database

Review this topic to configure connectivity to the Siebel database from the computer where you will install Siebel Server.

The database will already have been created, as described in this chapter.

For database connectivity software requirements, see the Certifications tab on My Oracle Support.

Oracle Database

Verify that the Oracle Database connectivity software is installed on each computer, according to the Oracle Database documentation.

Siebel Server connections to the Oracle Database are made through dedicated server processes rather than through Oracle MTS; the use of MTS might negatively affect performance.

Use Oracle's Easy Configuration utility to define a database alias with the proper connection information for your Siebel database. Record the connect string in [Appendix A, "Siebel Deployment Planning Worksheet."](#) You specify this connect string when configuring the Siebel Enterprise.

NOTE: Siebel Business Applications support the Oracle 32-bit client. Therefore, if you have installed the Oracle 64-bit client on your Siebel Server, then you must include \$ORACLE_HOME/i b32 in your definition for the LIBPATH (AIX), SHLIB_PATH (HP-UX), or LD_LIBRARY_PATH (Linux or Oracle Solaris) environment variable. (If you require \$ORACLE_HOME/i b for non-Siebel applications, then make sure that \$ORACLE_HOME/i b32 is placed in front of \$ORACLE_HOME/i b.)

IBM DB2

Define a database alias with the proper connection information for your Siebel database. Record the connect string in [Appendix A, "Siebel Deployment Planning Worksheet."](#) You specify this connect string when configuring the Siebel Enterprise.

You can use the DB2 command line processor to define your database alias. For more information, see IBM DB2 documentation.

IBM DB2 for z/OS

For information about configuring database connectivity for IBM DB2 for z/OS, see *Implementing Siebel Business Applications on DB2 for z/OS*.

13 Creating the Siebel Installation Image on the Network

This chapter describes how to obtain the Siebel installation media files and how to create a network image from which you install Siebel Business Applications software. It includes the following topics:

- [About the Siebel Network Image on page 383](#)
- [Obtaining Siebel Installation Media Files on page 385](#)
- [Siebel Installation Media Contents on page 387](#)
- [Preparing to Create a Siebel Installation Image on page 389](#)
- [Creating a Siebel Installation Image on page 394](#)
- [Troubleshooting Siebel Image Creation on page 397](#)

About the Siebel Network Image

For each Siebel Business Applications release representing the products that you have purchased, you run the Siebel Image Creator utility to create a Siebel network image, which is also called a Siebel image. All installations of Siebel Business Applications modules must be performed from a Siebel image. The Siebel Image Creator is also called the Network Image Creator. Unless otherwise stated in documentation for a particular release, each Siebel release includes Siebel Image Creator and you use this utility to create a version-specific Siebel image.

To install all of the Siebel CRM software for Siebel Innovation Pack 2016, you require an image of a single version: Siebel CRM version 16.0. You must create any network image as described in this chapter. For Siebel Enterprise Server, Siebel Web Server Extension (SWSE), Siebel Web Client, and Siebel Tools, create a network image for version 16.0.

Installing these modules is a one-step task. The installers perform a complete installation of the current release. Siebel CRM version 16.0 is a base release. Network images for no prior releases, such as Siebel CRM version 8.1.1 or version 8.2.2, are required or used. For existing deployments, you use the same installers to install the current release as a migration installation.

In addition to creating a Siebel image for Siebel CRM version 16.0, you will also create Siebel images for any Siebel Patchset releases that you will install, such as version 16.1, 16.2, and so on, where available. For more information about Siebel Patchset releases, see [“About Siebel CRM Releases” on page 300](#).

You must allocate disk space on the network for the Siebel images that you will use as the source location for Siebel installations. Retain all of the Siebel images until they no longer apply. Also retain all of the Siebel media files, particularly the JAR files that you use to create the Siebel images.

The Siebel image is always of application type *Siebel Industry Applications*. The application type *Siebel Business Applications* (formerly used for Siebel Cross-Industry Applications) no longer applies. For more information about the implications of this change, see 549362.1 (Article ID) and related articles on My Oracle Support. This document often refers to Siebel Business Applications in a generic way that currently means the same thing as Siebel Industry Applications.

The remaining topics in this chapter describe how to obtain the Siebel media files from Oracle and how to create a Siebel image.

About the Siebel Network Image for Oracle LDAP Client

If you will install Siebel Enterprise Server software for use with a non-Oracle database, and will use LDAP (Lightweight Directory Access Protocol), then obtain the JAR files for Oracle LDAP Client and select this module when you also select Siebel Enterprise Server in Siebel Image Creator. A separate JAR file is provided for each supported server operating system, such as `SBA_16.0.0.0_Base_Windows_Oracle_LDAP_Client.jar` for Microsoft Windows. When you run Siebel Image Creator, the Oracle LDAP Client installer is placed into the directory `Disk1\stage`, under `Siebel_Enterprise_Server`. For example, the location might be like one of the following:

```
Siebel_Image\Windows\Server\Siebel_Enterprise_Server\Disk1\stage
```

```
Siebel_Image/Solaris/Server/Siebel_Enterprise_Server/Disk1/stage
```

When you run the Siebel Enterprise Server installer for a new installation, you can choose to include Oracle LDAP Client, which is silently installed. Or, you might install Oracle LDAP Client manually.

About the JAR Files for the Local Database for Siebel Tools

You can install a new local database for Siebel Tools that uses Oracle Database XE. When you are creating the network image for the current release, also include the corresponding Siebel media JAR files. The JAR files are:

- `SBA_16.0.0.0_Base_Windows_Oracle_XE_Local_Database_32_Bit.jar`
- `SBA_16.0.0.0_Base_Windows_Oracle_XE_Local_Database_64_Bit.jar`

These JAR files provide the local database for users of 32-bit and 64-bit versions of Microsoft Windows. When you select Siebel Tools in Image Creator, select both Oracle XE Local Database 32 Bit and Oracle XE Local Database 64 Bit to use both of these JAR files. When you run Siebel Image Creator, the corresponding installers are placed into the following directory:

```
Siebel_Image\Windows\Server\Siebel_Tools\Disk1\stage
```

When users run the Siebel Tools installer, they can choose to include the local database, the appropriate version of which is silently installed.

About the JAR Files for the Sample Database for Siebel Web Client

You can install a new sample database for Siebel Web Client that uses Oracle Database XE. When you are creating the network image for the current release, also include the corresponding Siebel media JAR files. The JAR files are:

- SBA_16.0.0.0.0_Base_Windows_Oracle_XE_Sample_Database_32_Bit.jar
- SBA_16.0.0.0.0_Base_Windows_Oracle_XE_Sample_Database_64_Bit.jar

These JAR files provide the sample database for users of 32-bit and 64-bit versions of Microsoft Windows. When you select Siebel Web Client in Image Creator, select both Oracle XE Sample Database 32 Bit and Oracle XE Sample Database 64 Bit to use both of these JAR files. When you run Siebel Image Creator, the corresponding installers are placed into the following directory:

```
Siebel_Image\Windows\Server\Siebel_Web_Client\Disk1\stage
```

When users run the Siebel Web Client installer, they can choose to include the sample database, the appropriate version of which is silently installed.

Related Topics

["Installation-Related Changes for Siebel Innovation Pack 2016" on page 25](#)

["Installing and Using Oracle Database XE for the Local or Sample Database" on page 191](#)

["About Siebel CRM Releases" on page 300](#)

["General Requirements for Installing and Configuring Siebel Enterprise Server Components" on page 328](#)

["Requirements for Installing Oracle LDAP Client" on page 331](#)

Obtaining Siebel Installation Media Files

In general, Oracle distributes the media files for Siebel Business Applications to customers as follows:

- The media files for Siebel CRM base releases, including Siebel Innovation Pack 2016, are provided as ZIP files on Oracle Software Delivery Cloud.
<https://edelivery.oracle.com>
- The media files for Siebel Patchset releases are provided as ZIP files on My Oracle Support.
<https://support.oracle.com>

NOTE: Whether particular releases are distributed as described above might change in some cases. If you cannot find your release, then check the *Siebel Release Notes* and other relevant information on My Oracle Support.

Use a standard unpacking tool such as WinZip to extract from each ZIP file a set of JAR files that serve as the Siebel media files. (Validate that the unpacking tool that you are using can handle files of the sizes of the Siebel media files.) These JAR files, which are compressed files using the Java Archive format, are processed when you run the Siebel Image Creator utility. Siebel Business Applications releases are also available on DVD.

NOTE: Siebel Business Applications software must be installed from a Siebel network image that was created using Siebel Image Creator. You cannot install directly from the ZIP files, JAR files, or DVDs.

Download the ZIP files representing the Siebel modules and languages that you require into one or more target locations. After you download the files, review the ZIP file sizes and validate the checksum values of the downloaded files against the published values. Also provided are the Siebel Image Creator executable program and the files it requires. Extract the JAR files from the ZIP files and place them in a single directory on your network. You run Siebel Image Creator from the JAR files directory. All of the JAR file names include the designation *SBA* (for Siebel Business Applications). For the full requirements for running Siebel Image Creator, see [“Preparing to Create a Siebel Installation Image” on page 389](#).

TIP: If you obtain JAR files for more than one release, then it is generally recommended that you put them into a separate directory for each release, corresponding to the version number.

You use Siebel Image Creator to create a *network image* (also called a *Siebel image*) from which you subsequently install Siebel Business Applications. All installations for Siebel modules must be performed from the Siebel image, for each software version that supports a full installation of the current release, and for any applicable Siebel Patchset releases. The installation process is described in [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) and other chapters for installing particular Siebel modules.

For more information about the contents and organization of the Siebel media files, see [“Siebel Installation Media Contents” on page 387](#).

Before you download the ZIP files to your network, see [“Preparing to Create a Siebel Installation Image” on page 389](#).

Siebel Installation Media Files Provided on DVD

Alternatively, you can obtain Siebel media ZIP files on DVD. These files are the same as the ZIP files that you can obtain from Oracle Software Delivery Cloud.

Accessing the Siebel media files that are provided on DVD requires a compatible DVD drive (+R compatible). You must use an appropriate mount command to mount each DVD before you can access its contents.

NOTE: The Siebel DVD media require the Rock Ridge extensions. On some UNIX operating systems, such as HP-UX, the mount command might require the `-o rr` switch to properly mount Rock Ridge-compliant media. For details, see the `mount CDFS` command manpages for your operating system.

For each DVD, copy the ZIP media files representing the Siebel modules or languages that you require into one or more target locations. Review the ZIP file sizes before you copy them. Each DVD uses up to 5 GB of storage.

For more information about the contents and organization of the Siebel media files, see [“Siebel Installation Media Contents” on page 387](#).

Before you copy the ZIP files to your network, see [“Preparing to Create a Siebel Installation Image” on page 389](#).

Related Documents

For more information about the available patch releases for Siebel CRM, see 975515.1 (Article ID) on My Oracle Support.

For more information about finding and downloading patch releases for Siebel CRM, see 975535.1 (Article ID) on My Oracle Support.

For more information about the Siebel CRM installers and media files, see 1461640.1 (Article ID) on My Oracle Support.

Related Topics

[“Siebel Installation Media Contents” on page 387](#)

[“Preparing to Create a Siebel Installation Image” on page 389](#)

Siebel Installation Media Contents

For each Siebel Business Applications release, the software is provided through the base media for individual installable Siebel modules and media for associated Siebel language packs, for all of the applicable languages. Most Siebel modules require one or more language packs for successful installation. Siebel Business Applications deployments include installations from both base media and language media.

The media for ancillary third-party modules are also provided with the base media. Siebel installable modules that are based on third-party modules do not use Siebel language media.

As the Siebel image is created when you use Siebel Image Creator, each JAR file is extracted and the directories and files for the corresponding module are copied to the Siebel image location.

NOTE: This guide generally refers to Siebel *modules* to mean the same thing as the items selectable as *products* in Siebel Image Creator.

See also [“Obtaining Siebel Installation Media Files” on page 385](#).

Siebel Installation Base Media

The base media for Siebel Business Applications software are organized by operating system, product category, version number, and product (module) name. For most of the Siebel modules, language support is delivered separately through the language media. The operating systems are as follows:

- Microsoft Windows
- IBM AIX
- HP-UX
- Linux
- Oracle Solaris (for SPARC)

For detailed support information about the listed operating systems, see the Certifications tab on My Oracle Support.

The base media for the listed operating systems are provided as described in [“Obtaining Siebel Installation Media Files” on page 385](#). Note the following points regarding the organization of the base media files:

- For Siebel Enterprise Server, Siebel Web Server Extension, Siebel Web Client, and Siebel Tools, the network image for the current release, Siebel CRM version 16.0, is the base media.
- For client modules, the base, language, and third-party media files are available for Windows only, and might apply for customers on all of the server operating systems. Example client modules include Siebel Web Client (Siebel Mobile Web Client) and Siebel Tools.

NOTE: When you run Siebel Image Creator, you must select the Windows operating system to be able to select any Windows-based modules. For more information about cross-platform issues when creating Siebel images, see [“Cross-Platform Issues When Creating Siebel Image Directories” on page 391](#).

- For server modules, the base, language, and third-party media files are included with the base media for your operating system, where applicable. The media files for such modules are provided with the UNIX base media where these modules run natively on Windows and are not available on UNIX.

NOTE: When you run Siebel Image Creator, you must select the Windows operating system to be able to select any Windows-based modules.

Third-party media files provide separately installable third-party software modules that work with Siebel Business Applications. In this context, *third-party* products might also include non-Siebel products from Oracle. These third-party modules are not installed through Siebel installers, and do not use language media. Documentation is provided in this guide (the *Siebel Installation Guide* for the operating system you are using), in other books on the *Siebel Bookshelf*, or in the *Siebel Business Applications Third-Party Bookshelf* in the product media pack on Oracle Software Delivery Cloud.

Language Media

The language media, also known as language extension packs or language packs, provide language support for Siebel Business Applications.

When you run Siebel Image Creator to create a Siebel image or to add modules to an existing Siebel image, you specify the languages for all of the modules that you include in the Siebel image. Alternatively, you can also add languages to all of the modules in an existing Siebel image.

When you install Siebel modules, you can include languages when you install. You can also install additional languages later. It is strongly recommended that you install and deploy, or at least install, all of the languages that you expect to require, on each physical server.

For Siebel Tools, a base JAR file and a U.S. English (ENU) language JAR file are provided. Support for other languages is provided through separate JAR files. When using Siebel Image Creator to add Siebel Tools to your Siebel image, you must select ENU and any other desired languages to proceed with extracting the base JAR file for Siebel Tools. When you later install Siebel Tools, you must select U.S. English (ENU) and optionally select any other languages that are part of the Siebel image.

For more information about the supported languages and about deploying languages, see:

- [“Installing and Deploying Siebel Business Applications with Multiple Languages” on page 150](#)

- For Siebel CRM language support, Unicode support, and legacy code page support for supported databases, see 1513102.1 (Article ID) on My Oracle Support.
- Certifications tab on My Oracle Support
- *Siebel Global Deployment Guide*

Preparing to Create a Siebel Installation Image

Before you create a Siebel installation image on your network, review the issues described in the following information:

- [“Determining the Locations for the Siebel Media Files and the Siebel Image” on page 389](#)
- [“Requirements for the Siebel Image Directories” on page 391](#)
- [“Cross-Platform Issues When Creating Siebel Image Directories” on page 391](#)
- [“Requirements for Running Siebel Image Creator” on page 392](#)

Determining the Locations for the Siebel Media Files and the Siebel Image

This topic is part of [“Preparing to Create a Siebel Installation Image” on page 389](#).

It is recommended that you download or copy all of the Siebel media files to a central location on your network where you have sufficient disk space. Typically, this location would not be the same location where you will create your Siebel image. For example, for Siebel CRM version 16.0, you might create the directory `Siebel_media_16.0`, and then create subdirectories `ZIP_16.0` and `JAR_16.0`, in which you would store the ZIP files and JAR files that you use to create the Siebel image for files of Siebel CRM version 16.0. Also place the Siebel Image Creator files in the JAR files directory and run the utility from there.

The default top-level names used by Siebel Image Creator for the Siebel image directory are `C:\Siebel_Installation_Image` on Windows or `/Siebel_Installation_Image` on UNIX. For example, if you are creating a Siebel image for Siebel CRM version 16.0 on a UNIX computer, then you might create a directory `/Siebel_Installation_Image`, in which you store your Siebel images. In this example, when you run Siebel Image Creator, specify `/Siebel_Installation_Image` as the top-level directory.

Siebel Image Creator automatically creates a subdirectory (such as `16.0.0.0`) under the specified top-level directory. This version-specific directory contains the installable Siebel modules, organized by operating system, that you choose to include in the Siebel image.

Your directories for the Siebel image, the ZIP files, and the JAR files might be as shown in [Table 35 on page 390](#). For other Siebel CRM releases, substitute the appropriate version numbers. As needed, you can create similar directories later for ZIP files and JAR files for subsequent Siebel CRM releases, including Siebel Patchset releases.

Table 35. Siebel Media Files and Image Directories

Directory Function	Example Directory Locations	Comments
ZIP files directory	/Siebel_media_16.0/ZIP_16.0	Before you run Siebel Image Creator, it is recommended to create a version-specific subdirectory like this example, to contain the ZIP files that you obtain from Oracle.
JAR files directory	/Siebel_media_16.0/JAR_16.0	Before you run Siebel Image Creator, it is recommended to create a version-specific subdirectory like this example, to contain the JAR files and the Siebel Image Creator files. (You must extract the JAR files from the ZIP files.) NOTE: You will run Siebel Image Creator from the JAR files directory. For the full requirements for running Siebel Image Creator, see “Preparing to Create a Siebel Installation Image” on page 389 .
Siebel image directory	/Siebel_Install_Image/16.0.0.0	When you run Siebel Image Creator, the utility creates a version-specific subdirectory like this, which contains the Siebel image: the installer files for each applicable module.

NOTE: Optionally, after you create the Siebel image in a central location, you might choose to copy a module-specific subdirectory of the Siebel image to a computer where you will install this module. Doing so can significantly improve performance during the installation, particularly for installations of Siebel Enterprise Server or Siebel Web Server Extension. For additional recommendations or requirements for installers, see Oracle Universal Installer documentation on Oracle Technology Network. See also [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications.”](#)

Requirements for the Siebel Image Directories

This topic is part of [“Preparing to Create a Siebel Installation Image” on page 389](#).

The directory in which you create a Siebel image, or the directory that you specify as the location for Siebel media files (JAR files), must meet the following requirements:

- The user creating the Siebel image must have write permission in the Siebel image directory.
Users who have to access the Siebel image directory in order to perform installations must have read and execute permissions. Users who have to modify files to support unattended installation mode must also have write permission.
See also the relevant topics in [“Planning Your Siebel Deployment” on page 304](#).
- Any directory that you specify for creating a Siebel image must contain sufficient disk space for all of the Siebel modules and languages that you include in the Siebel image.
- When you specify an existing network image directory into which you will add modules or languages, you must specify a top-level directory that contains a valid network image for the JAR files that you are using. For example, if you are adding languages to a Siebel image for the current release, Siebel CRM version 16.0, then the top-level directory that you specify, such as `/Siebel_Installation_Image`, must contain a subdirectory `16.0.0.0`, which must contain an existing Siebel image for the corresponding release. Siebel Image Creator cannot add modules or languages to the network image unless you specify a valid top-level directory.
- Any directory that you specify for creating a Siebel image must follow the conventions described in [“File and Directory Naming Conventions” on page 319](#). For example, on Windows, a directory name must not contain spaces or number signs (pound or hash signs).
- Do not move or rename any Siebel image subdirectories. Create each Siebel image and all of its directories by running Siebel Image Creator. It is acceptable to move or rename the top-level directory in which the Siebel image was created.

Cross-Platform Issues When Creating Siebel Image Directories

This topic is part of [“Preparing to Create a Siebel Installation Image” on page 389](#).

Each Siebel image that you create contains directories representing the specified operating system platforms that you will use, such as Windows, AIX, and so on. The Siebel image itself can reside on any supported operating system. Siebel Image Creator can run natively on Microsoft Windows, IBM AIX, HP-UX, Linux, and Oracle Solaris.

Many customers support multiple operating systems. For example, a customer who installs server modules on UNIX still might have to install client or server modules that run only on a supported Microsoft Windows operating system, such as Siebel Web Client (Siebel Mobile Web Client) and Siebel Tools. For more information, see [“Siebel Installation Media Contents” on page 387](#).

If you support multiple operating systems (such as Windows and one of the supported UNIX operating systems), then use one or more of the following strategies in creating your Siebel images:

- Create a single multi-platform Siebel image on one of your operating systems. Use a cross-platform networking tool, such as Samba, to make the Siebel image accessible from operating systems other than the one where the Siebel image was created.

For example, when you run Siebel Image Creator on Windows, include Windows and all of the applicable UNIX operating systems and include all of the modules for applicable operating systems. Before you run Siebel Image Creator, make sure that you have located the JAR files as described in [“Determining the Locations for the Siebel Media Files and the Siebel Image” on page 389](#). In order to install modules on UNIX computers (in this example), users who perform installations must be able to access the Windows-based Siebel image files.

This approach is generally recommended, because it consolidates all of the modules and applicable operating systems in a single Siebel image.

- On each applicable operating system, create a separate Siebel image that includes the modules that will be installed on that operating system.

For example, you might run Siebel Image Creator on Windows and include only the Windows operating system and the modules that will be installed on Windows. Then you might run Siebel Image Creator on Oracle Solaris and include only Oracle Solaris and the modules that will be installed on that operating system. Before you run Siebel Image Creator, make sure that you have obtained the JAR files for the applicable operating system, as described in [“Determining the Locations for the Siebel Media Files and the Siebel Image” on page 389](#). In order to install the Siebel modules (in this example), no cross-platform tool would be necessary to access the Siebel image files, because the files for each module already reside on the operating system on which the installations will be performed.

Requirements for Running Siebel Image Creator

This topic is part of [“Preparing to Create a Siebel Installation Image” on page 389](#).

Before you run Siebel Image Creator for one of the supported operating systems, consider the following requirements:

- Make sure that you have extracted all of the JAR files from the ZIP files.
- You must place the Siebel module JAR files and the Siebel Image Creator files in the appropriate directory or directories, as described in [“Determining the Locations for the Siebel Media Files and the Siebel Image” on page 389](#).

You must place at least one JAR file representing a Siebel module in the directory where you run Siebel Image Creator, referred to here as the JAR files directory. Doing so enables the utility to determine the version of the Siebel image that is to be created. For example, run Siebel Image Creator in the JAR files directory for Siebel CRM version 16.0 to create a Siebel image for that version. If the directory from which you run Siebel Image Creator contains JAR files with multiple versions, then the utility prompts for the version when you start it.

It is strongly recommended that all of the Siebel module JAR files for the same version be located in the same directory (the JAR files directory). Optionally, some JAR files might be located in one or more other directories that you specify while running Siebel Image Creator.

- Siebel Image Creator includes the following files, which must be present in the JAR files directory where you run the utility. Do not modify these files.
 - The Siebel Image Creator executable program for the operating system on which you run the utility: `snic.bat` (for Windows) or `snic.sh` (for UNIX)
 - `snic.jar`
 - `siebel.ini`
- Siebel Image Creator also includes the following template response files, which you can edit and use to run the utility in unattended mode:
 - `sample_snic_windows.rsp`
 - `sample_snic_unix.rsp`
- You can run Siebel Image Creator in GUI mode or in unattended mode. The following requirements apply only to running the utility in unattended mode:
 - To run Siebel Image Creator in unattended mode, you must use the U.S. English (ENU) locale.
 - When using unattended mode, you can only create a new Siebel image. You cannot add languages or products to an existing Siebel image.
 - To run Siebel Image Creator in unattended mode, you must use a template response file provided by Oracle that you have edited for your purposes. These files are named `sample_snic_windows.rsp` and `sample_snic_unix.rsp`. Example values are shown in the template response files. For example, you might specify values like the following, from the file `sample_snic_windows.rsp`:

```
imageVersion="16.0.0.0"
imageDirectory="Siebel_Install_Image"
platformList={Windows}
productList={Siebel_Tools}
languageList={ENU}
```
- Java Runtime Environment (JRE) must be installed on any computer where you will run Siebel Image Creator. Also, the `JAVA_HOME` environment variable must be set to point to the JRE installation location at the time that you run Image Creator (for example, `/usr/java8_64` on AIX). For supported version information, see the Certifications tab on My Oracle Support.
- A Siebel Image Creator session might take a long time to complete. While the files are being extracted or copied, you cannot click Cancel to cancel a Siebel Image Creator session. Be sure of your selections before you begin creating the Siebel image.
- For any issues that you encounter while running Siebel Image Creator as described in [“Creating a Siebel Installation Image” on page 394](#), see [“Troubleshooting Siebel Image Creation” on page 397](#).

Creating a Siebel Installation Image

You use Siebel Image Creator to create the Siebel installation image (the Siebel image) on the network for all of the Siebel CRM modules that were delivered through the Siebel media files.

The procedure in this topic describes running Siebel Image Creator to create a new Siebel image or running the utility to add modules or languages to an existing Siebel image. When you add modules or languages to an existing Siebel image, some of the steps do not apply.

NOTE: You can run Siebel Image Creator in GUI mode or unattended mode. If you will run Siebel Image Creator in unattended mode, then you must first prepare a response file. For more information about running Siebel Image Creator in unattended mode, see [“Requirements for Running Siebel Image Creator” on page 392](#).

See also [“Troubleshooting Siebel Image Creation” on page 397](#).

To create a Siebel installation image

- 1 Review the information that is presented in [“Obtaining Siebel Installation Media Files” on page 385](#) and [“Siebel Installation Media Contents” on page 387](#).
- 2 Review the issues that are described in [“Preparing to Create a Siebel Installation Image” on page 389](#). In particular, determine where the Siebel JAR files will reside and where you will create the Siebel image.
- 3 Obtain the Siebel media ZIP files, as described in [“Obtaining Siebel Installation Media Files” on page 385](#). If you download the files, then validate the checksum values of the downloaded files against the published values. Then extract the JAR files from the ZIP files.
- 4 Place the JAR files into one or more version-specific directories that you created for the purpose. For example, for Siebel CRM version 16.0, you might place the Siebel CRM version 16.0 JAR files into a directory like JAR_16.0. Also place the files for Siebel Image Creator in this directory. For more information, see [“Determining the Locations for the Siebel Media Files and the Siebel Image” on page 389](#).
- 5 Log on to the server computer on which you will run Siebel Image Creator.
- 6 Open a shell window and navigate to the directory where you placed the Siebel media JAR files and the Siebel Image Creator files. For example, for Siebel CRM version 16.0, navigate to a directory like /export/home/Siebel_Installation_Image/JAR_16.0.
- 7 If it is not already set, then set the JAVA_HOME environment variable to point to the Java Runtime Environment installation location.
- 8 To run Siebel Image Creator in unattended mode from the JAR files directory, first prepare a response file, and then run a command like the following:

```
./snic.sh -silent -responseFile response_file
```

The Siebel image is created, according to the settings you made in the response file, as described in [“Requirements for Running Siebel Image Creator” on page 392](#). Go to [Step 19 on page 397](#).

- 9 To run Siebel Image Creator in GUI mode from the JAR files directory, run the following command:

```
snic.sh
```

Siebel Image Creator displays a welcome message.

- 10 Click Next to proceed.
- 11 Specify whether you are creating a new Siebel image (or adding modules to an existing Siebel image) or adding languages to an existing Siebel image. Click Next.
- 12 If you are creating a new Siebel image, then specify the directory in which the version-specific image directory is to be created. For example, navigate to a directory like /export/home/Siebel_Installation. You can enter a directory (which must be an absolute path) or click Browse to specify the directory. Click Next.

When you specify the network image directory for adding modules or languages, you must specify the top-level directory containing the valid network image for the JAR files that you are using. For more information, see [“Requirements for the Siebel Image Directories” on page 391](#).

For guidelines for creating the directories for Siebel images, see [“Preparing to Create a Siebel Installation Image” on page 389](#).

- 13 If applicable, then specify the version for the Siebel image.

The Siebel image version automatically derives from the presence of one or more Siebel media JAR files for Siebel modules in the directory from which you are running Siebel Image Creator. If JAR files exist for multiple versions, such as Siebel CRM version 16.0 and another version, then specify one of the versions shown.

The version determines the version-specific subdirectory in which the Siebel image is created, such as 16.0.0.0. Or, the version specifies an existing Siebel image to be added to.

If you are adding modules to an existing Siebel image, then go to [Step 14 on page 395](#).

If you are adding languages to an existing Siebel image, then go to [Step 16 on page 396](#).

- 14 Specify one or more operating systems to include in your version-specific Siebel image. You can specify Windows, AIX, HP-UX, Linux, and Oracle Solaris. Click Next.

You can specify one or more operating systems to include in your Siebel image. In general, include all of the operating systems for which you will install one or more Siebel modules. You can add operating systems and modules to the Siebel image later. For more information, see [“Cross-Platform Issues When Creating Siebel Image Directories” on page 391](#).

For more information about the contents of the Siebel media, see [“Siebel Installation Media Contents” on page 387](#).

- 15** Specify the Siebel modules to include in your version-specific Siebel image. Click Next.

Each module can be selected by clicking its check box. The listed modules represent the superset of the client and server modules, including third-party modules, that are supported by this version of Siebel Image Creator for all of the applicable operating systems.

The Siebel image will include the selected modules for each applicable operating system that you specified in [Step 14 on page 395](#). Some modules do not apply to certain operating systems. For example, Siebel Tools applies to Windows only.

For more information about the contents of the Siebel media, see [“Siebel Installation Media Contents” on page 387](#).

- 16** Specify all of the languages that you want to include in the Siebel image. When you are ready to begin creating the Siebel image based on your selections, click Next.

The selected languages are included for each selected or existing module, where they apply. The languages do not apply to some modules, such as third-party modules. For information about Siebel Tools and the U.S. English language pack, see [“Siebel Installation Media Contents” on page 387](#).

NOTE: If you are adding modules to an existing Siebel image, then you must specify all of the languages that were previously included in the Siebel image, in order to be able to install these modules correctly.

Siebel Image Creator now processes all of the Siebel media JAR files in the current directory, and includes all of the selected modules and languages in the version-specific Siebel image subdirectory of the directory that you specified in [Step 12 on page 395](#). Siebel Image Creator displays the current processing status, as follows:

- If all of the Siebel media JAR files matching your selections were found in the current directory, then Siebel Image Creator completes creating or adding modules or languages to the Siebel image. Go to [Step 18 on page 397](#).
- If one or more of the JAR files matching your selections were not found in the current directory, then the utility prompts for the location of the next file. Go to [Step 17 on page 396](#).

- 17** If Siebel Image Creator cannot locate a JAR file matching your selections, then specify the location of the indicated Siebel media JAR file. You can enter a directory (which must be an absolute path) or click Browse to specify the directory. Click Next.

For example, for a Siebel CRM version 16.0 Siebel image, assume that you selected Windows and Siebel Tools, but Siebel Image Creator could not locate the file SBA_16.0.0.0_Base_Windows_Siebel_Tools.jar. Specify the location of this file, and click Next. If the file is found, then it is processed and the module that it represents is included in your Siebel image.

If you do not have the current media JAR file, then you might have to obtain the required Siebel media from Oracle before proceeding. Place the JAR file in the appropriate directory before clicking Next. If all of the remaining Siebel media files matching your selections were found in the current directory, then Siebel Image Creator completes creating or adding the modules or languages to the Siebel image.

If you decide that you do not require the module or language component represented by the current media file to be included in the Siebel image at this time, then click Next again. You are prompted to either skip the file (click Skip) or look for the file in another directory (click Select). You might have to rerun Siebel Image Creator later to add items that you previously skipped because of missing JAR files. See also “[Troubleshooting Siebel Image Creation](#)” on page 397.

- 18 After all of the modules or languages have been added to the Siebel image, or skipped, Siebel Image Creator indicates that the Siebel image has been successfully created. Click Finish.
- 19 After the Siebel image has been created, review the products.txt file to validate the modules that were included in the Siebel image. This file is located in the main directory for the Siebel image, such as/Siebel_Installation_Image/16.0.0.0.

Troubleshooting Siebel Image Creation

When you run Siebel Image Creator, the utility validates the integrity of each JAR file that it processes as it creates the Siebel image. Consequently, it is unnecessary to validate the JAR files beforehand.

If a JAR file is invalid for some reason, then Siebel Image Creator displays a message to this effect. Obtain a new copy of the JAR file and rerun Siebel Image Creator in order to include the content in the Siebel image. Rerunning Siebel Image Creator might also be necessary in some other cases identified in this topic.

When you run Siebel Image Creator and create a Siebel image successfully, the files in the Siebel image have the same timestamp as the corresponding files that were included in the JAR files.

When you rerun Siebel Image Creator, it will not replace any files that have the same or a newer timestamp.

Rerunning Siebel Image Creator might be necessary in the following cases:

- If you have deleted a Siebel image or any part of the Siebel image by mistake. In this case, remove all of the files generated by Siebel Image Creator for any affected Siebel modules, then run Siebel Image Creator again to recreate the Siebel image for those modules.
- If a JAR file is invalid and you have since obtained a new version of the JAR file.
- If you skipped a missing JAR file during a Siebel Image Creator session and have since obtained the missing JAR file.
- If any Siebel module was incompletely processed by Siebel Image Creator. In this case, remove all of the files generated by Siebel Image Creator for the affected module, then run Siebel Image Creator again to recreate the Siebel image for this module.

TIP: Keep track of the operating systems, Siebel modules, and languages in your Siebel image for the applicable version. If you have to rerun Siebel Image Creator, then reselect the options that you require to complete the Siebel image.

You might also have to run Siebel Image Creator multiple times if you intentionally processed only some of the Siebel modules that you require and have to process the JAR files in multiple batches.

Siebel Image Creator Logging

Siebel Image Creator logs details about its processing in the file `log.txt`, which is created in the top-level directory that you specified for the Siebel image (for example, `/export/home/Siebel_Installation_Image`).

Review the log file to identify where problems occurred when you created the Siebel image, such as in the following cases:

- Siebel Image Creator logs a message like the following after each JAR file has been successfully extracted. (If a JAR file is only partially extracted, then this message is not written.)

```
Extracted SBA_16.0.0.0_Base_Windows_Siebel_Enterprise_Server.jar
```

- Siebel Image Creator logs a message like the following when a JAR file has been skipped.

```
Skipped JAR_file_name - Please run Siebel Image Creator again and add module_name to the network image, once all image files are available.
```

Installer Errors and the Siebel Image

You must validate that the Siebel image was created correctly for all of the applicable modules. However, installation errors sometimes indicate problems in the Siebel image.

If, when you run a Siebel installer, errors are returned about missing or corrupt files, then remove all of the files generated by Siebel Image Creator for any module that was incompletely processed, make sure that you have all of the JAR files that you require (including those representing third-party files), and then run Siebel Image Creator again to recreate the Siebel image for that module.

For installation instructions, see [Chapter 3, “Installing Siebel Enterprise Server Components and the Siebel Web Server Extension,”](#) and other chapters for installing particular Siebel modules.

For installation requirements, see [Chapter 11, “Requirements for Installing and Configuring Siebel Business Applications.”](#)

For installation troubleshooting information, see [Chapter 8, “Verifying and Troubleshooting Your Installation.”](#)

A

Siebel Deployment Planning Worksheet

This appendix provides the Deployment Planning Worksheet. It includes the following topics:

- [About the Deployment Planning Worksheet on page 399](#)
- [Team Lead Summary on page 400](#)
- [Siebel Enterprise Server Names and Installation Directories on page 400](#)
- [Siebel Accounts, Host Names, and Static IP Addresses on page 401](#)
- [Cluster Deployment Data on page 402](#)
- [Ports and RDBMS Details Data on page 403](#)

About the Deployment Planning Worksheet

The topics that follow provide the Deployment Planning Worksheet for installing Oracle's Siebel Business Applications product family. This worksheet is an integral part of the installation process.

Before proceeding with installation-related tasks, make a copy of the worksheet topics that follow. Using the copy, the deployment team fills out the first section. Members of the team fill out the information in the sections for which they are responsible. As you work through preparation steps, record the information that you will need while installing and configuring Siebel Business Applications.

In various places in this book, you are prompted to refer to the Deployment Planning Worksheet for specific information about your site and deployment. You also use it to record other important information for future installations, upgrades, reconfiguration, and expansion of your deployment.

Each time that you install a new Siebel Enterprise Server in your deployment, make new copies of the Deployment Planning Worksheet for the deployment team.

CAUTION: Customers are responsible for ensuring the security of sensitive information, such as account passwords, that might be recorded in this worksheet or in similar documents or information stores created or employed by the customer.

Team Lead Summary

Section 1: Deployment Team Members

Deployment Team Lead	
Siebel Administrator	
System Administrator	
Database Administrator	

Section 2: Deployment Overview

Component Name	Version	Codepage or Unicode	Owner	Number of Users	Server Operating System
Database Server (RDBMS:)					
Siebel Servers					
Web Server					

Siebel Enterprise Server Names and Installation Directories

Make a copy for *each* Siebel Enterprise Server that you install.

ODBC data sources are created automatically by the Siebel Enterprise Server installer. For more information, see [“Planning RDBMS Installation and Configuration” on page 308](#).

Section 3: Server Names

Siebel Enterprise Name	
ODBC Data Source Name	
Primary Language	
Other Deployed Languages	<p>NOTE: Different languages might be deployed on different servers. Keep track of all of the languages deployed and the servers on which they are deployed.</p>

Component Name	Network Host Name	Installation Directory
Siebel Gateway Name Server		
Siebel Server		
Database Configuration Utilities		
Web Server and Siebel Web Server Extension (SWSE)		NOTE: Also record the locations of all of the SWSE logical profiles that you create for configuring installed SWSE instances.
Siebel File System Directories		

Siebel Accounts, Host Names, and Static IP Addresses

Make a copy for *each* Siebel Enterprise Server that you install.

NOTE: Requirements vary for user accounts mentioned in this topic. For example, the employee user (anonymous user) must be defined as an employee within the Siebel database.

Section 4: Siebel Account Information

	Login or User ID	Password
Siebel Service Owner		
Siebel Administrator	SADMIN	
Employee Anonymous User		
Contact Anonymous User		
Additional Anonymous User		
Security User		

Section 5: Host Name and Static IP Addresses

Server Name	Static IP or Host Name	Subnet Mask
Siebel Gateway Name Server		

Load balancer virtual IP, if third-party load balancer is used		
Siebel Server		

Cluster Deployment Data

Make a copy for *each* partition of your shared disk. (Choice of resource groups clustered is optional.)

Section 6: Cluster Resource Groups

Resource Group	Network Name	IP Address or Computer Name
Siebel Gateway Name Server		
Siebel File System		
Siebel Database		

Section 7: Cluster Configuration

Server Type	Network Host Name	Cluster IP Address	Resource Group IP Address	Subnet
Siebel Gateway Name Server Node 1				
Siebel Gateway Name Server Node 2				
Siebel File System Node 1				
Siebel File System Node 2				

Cluster Group	Heartbeat IP Address	Heartbeat Subnet

Ports and RDBMS Details Data

Section 8: Port Numbers

Make a copy for *each* Siebel Enterprise Server that you install.

NOTE: If your database is IBM DB2 for z/OS, then use the Deployment Planning Worksheet dedicated to the Siebel database installation that is provided in *Implementing Siebel Business Applications on DB2 for z/OS*.

Siebel Gateway Name Server	
Synchronization Manager for Siebel Remote Users	
Request Manager (optional)	
Siebel Connection Broker	
Web Server	
Siebel Cache Server	
TCP Proxy Service	
Other Ports	

Section 9: Database Information

Items (if applicable)	Value
RDBMS Operating System, Version and Patch	
RDBMS Platform, Version, and Patch	
Database Server	
Host Instance Name	
Database Name	
Port Number	
Table Owner and Password	
Tablespace Name, Usage (Data or Index), and Page Size	
Tablespace Name, Usage (Data or Index), and Page Size	
Tablespace Name, Usage (Data or Index), and Page Size	

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