Siebel Search Administration Guide

Siebel Innovation Pack 2013

Version 8.1/8.2

October 2013

ORACLE®

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1 What's New in This Release

What's New in Siebel Search Administration Guide, Version 8.1/8.2

Table 1 lists changes in this revision of the documentation to support version 8.1.1.11 and version 8.2.2.4 of the software.

NOTE: Oracle provides the functionality that this revision describes as part of Siebel Innovation Pack 2013. To complete the Siebel Innovation Pack 2013 prerequisite installation and setup tasks, and postinstallation configuration tasks, see the applicable *Siebel Maintenance Release Guide* on My Oracle Support.

Table 1.   What's New in Siebel Search Administration Guide, Version 8.1/8.2

Topic	Description
"Supported Functionality for Siebel Find and Siebel Search" on page 18	Modified topic. Support has been added to Oracle's Siebel Open UI for the following functionality: ■ Parametric search for Siebel Find ■ Automated suggested keywords for Siebel Search ■ Language filter for Siebel Search ■ Saved Find results Support for language filtering has also been added for Siebel High Interactivity.
"Configuring EAI File Transport Folder Access for Siebel Search" on page 28	New topic. It describes how to configure the EAIFileTransportFolders parameter for Siebel Search.
"Configuring the RSS Crawler for HTTP Indexing" on page 32	Modified topic. The <feedLocation> attribute has been changed to include the Siebel administrative user name in Siebel Search version 8.1.1.9 and later, and Siebel Search version 8.2.2.2 and later.
"Configuring Siebel Search Engine Settings" on page 37	Modified topic. The Feed URL Prefix parameter has been changed to include the Siebel administrative user name in Siebel Search version 8.1.1.9 and later, and Siebel Search version 8.2.2.2 and later.
"Configuring the Language LOV for Siebel Search" on page 93	New topic. It describes how to create and configure the Language list of values for Siebel Search.
"Overview of Siebel Search Functionality for Siebel Open UI" on page 137	Modified topic. Added automated suggested keywords for Siebel Search.

Table 1.   What's New in Siebel Search Administration Guide, Version 8.1/8.2

Topic	Description
"Setting Search Preferences in Siebel High Interactivity" on page 129 "Setting Search Preferences in Siebel Open UI" on page 139	Modified topics. The following search preferences have been added: ◼ Language ◼ Fetch Language Specific Docs
"Performing a Find Operation in Siebel Open UI" on page 143	Modified topic. The following features have been added: ◼ Parametric search ◼ Saved Find results

What's New in Siebel Search Administration Guide, Version 8.1, Rev. C

Table 2 lists changes in this revision of the documentation to support release 8.1.1.10 of the software.

NOTE: Oracle provides the functionality that this revision describes as part of an ADR. To use this functionality, you must install the required ADR, and perform the postinstallation configuration tasks. To complete the prerequisite installation and setup tasks, see the applicable *Siebel Maintenance Release Guide* on My Oracle Support.

Table 2.   What's New in Siebel Search Administration Guide, Version 8.1, Rev. C

Topic	Description
"Supported Functionality for Siebel Find and Siebel Search" on page 18	Modified topic. It has been updated to include the following features: ■ Support for Siebel Open UI ■ Automated suggested keywords ■ Database source indexing ■ IMAP email source indexing ■ Lotus Notes source indexing The Search by file format feature has been updated to include filtering on the following file types: ■ HTML ■ Plain text ■ Rich Text Format ■ Asynchronous indexing ■ Index status monitoring
"Configuring the Search Results View for Siebel High Interactivity or Siebel Open UI" on page 27	New topic. It describes how to configure the Search results for the UI mode that your application is running in. Both the Search View and Search All Results View are activated by default. The views must be configured in Siebel Tools as follows: ■ If your application is using Siebel High Interactivity, then you must disable Search All Results View. ■ If your application is using Siebel Open UI, then you must disable Search View.
"Enabling Search Security Web Service" on page 36	Modified topic. It has been updated to include SOAP header authentication.

Table 2.   What's New in Siebel Search Administration Guide, Version 8.1, Rev. C

Topic	Description
"Configuring Siebel Search Engine Settings" on page 37	Modified topic. The following search engine settings have been added: ■ **Advanced Batching And Indexing.** This setting is used to turn the asynchronous indexing and index status monitoring features on or off. ■ **Visibility Support**. This setting is used to turn the enhanced access control feature on or off. ■ **OSESAutoStartSchedule**. This setting is used to turn automatic Oracle Secure Enterprise Search scheduling on or off. ■ **Remote Admin Support**. This setting is used to turn automated remote administration and configuration for the Oracle Secure Enterprise Search Connector on or off. ■ **Strong Password Encryption Rules Enforced**. This setting is used to turn the enhanced security features on or off.
"Enabling Rich Text Format Processing for the External File System Connector" on page 51	New topic. It describes how to enable rich text format processing for the external file system connector.
"Process of Setting Up the Database Source and Connector" on page 55	New topic. It describes how to set up the database source and connector.
"Process of Setting Up the IMAP Email Source and Connector" on page 58	New topic. It describes how to set up the IMAP email source and connector.
"Process of Setting Up the Lotus Notes Source and Connector" on page 61	New topic. It describes how to set up the Lotus Notes source and connector.
"Configuring User Authentication for Search Queries" on page 71	New topic. It describes how to configure end user authentication for search queries.
"Enabling and Disabling Quick Search Mode for the Search Results View" on page 83	Modified topic. Added information for creating the SamePage record for Business Service User Property.
"Process of Configuring Access Control for Search Results" on page 87	Modified topic. It describes how to configure access control for search results. Multiple access control mappings for sblvisibilityid can be passed to Oracle Secure Enterprise Search at index-time.
"Configuring the Indexing Mode for Index Status Monitoring" on page 87	New topic. It describes how to configure the indexing mode for index status monitoring.

Table 2.   What's New in Siebel Search Administration Guide, Version 8.1, Rev. C

Topic	Description
"Administering Navigable Fields" on page 90	New topic. It describes how to configure which fields are displayed in a Refine Results operation.
"Administering Alternate Keywords" on page 91	New topic. It describes how to configure alternate keywords.
"Administering Query-Time Clustering Configuration" on page 92	New topic. It describes how to configure query-time clustering to dynamically generate query-time automated keywords.
"Administering Asynchronous Indexing and Index Status Monitoring" on page 125	New topic. It describes how to enable and disable the asynchronous indexing and index status monitoring features.
"Monitoring Indexing Status" on page 125	New topic. It describes how to monitor the indexing status for both HTTP and FTP indexing modes.
"Setting Search Preferences in Siebel High Interactivity" on page 129	Modified topic. Added information for using automated suggested keywords.
"Performing an Advanced Search Operation in Siebel High Interactivity" on page 131	Modified topic. Support has been added for indexing and searching the following file types: ■ HTML ■ Plain text ■ Rich text format

What's New in Siebel Search Administration Guide, Version 8.2, Rev. A

Table 2 lists changes in this revision of the documentation to support release 8.2.2.3 of the software.

NOTE: Oracle provides the functionality that this revision describes as part of an ADR. To use this functionality, you must install the required ADR, and perform the postinstallation configuration tasks. To complete the prerequisite installation and setup tasks, see the applicable *Siebel Maintenance Release Guide* on My Oracle Support.

Table 3.   What's New in Siebel Search Administration Guide, Version 8.2, Rev. A

Topic	Description
"Supported Functionality for Siebel Find and Siebel Search" on page 18	Modified topic. It has been updated to include support for Siebel Open UI.
"Configuring the Search Results View for Siebel High Interactivity or Siebel Open UI" on page 27	New topic. It describes how to configure the Search results for the UI mode that your application is running in. Both the Search View and Search All Results View are activated by default. The views must be configured in Siebel Tools as follows: ■ If your application is using Siebel High Interactivity, then you must disable Search All Results View. ■ If your application is using Siebel Open UI, then you must disable Search View.
"Configuring Siebel Search Engine Settings" on page 37	Modified topic. The following search engine settings have been added: ■ **Visibility Support**. This setting is used to turn the enhanced access control feature on or off. ■ **OSESAutoStartSchedule**. This setting is used to turn automatic Oracle Secure Enterprise Search scheduling on or off. ■ **Remote Admin Support**. This setting is used to turn automated remote administration and configuration for the Oracle Secure Enterprise Search Connector on or off.
"Monitoring Indexing Status" on page 125	New topic. It describes how to monitor the indexing status for both HTTP and FTP indexing modes.
"Setting Search Preferences in Siebel High Interactivity" on page 129	Modified topic. Added information for using automated suggested keywords.
Chapter 10, "Using Siebel Find and Siebel Search for Siebel Open UI"	New chapter. It describes Siebel Find and Siebel Search end user functionality for applications using Siebel Open UI.

2 **Overview of Siebel Search**

This chapter provides an overview of Oracle's Siebel Search functionality and architecture, and includes the following topics:

About Siebel Search

Oracle's Siebel Search provides incremental indexing of search fields, basic and advanced search functionality for both structured and unstructured data, and Find operations for real-time database queries. Siebel Search is integrated with Oracle Secure Enterprise Search.

About Siebel Search Operations

Full text searches can be performed across multiple business components, fields, and files, in one operation. A Search operation allows a broad search by not requiring the user to specify specific fields to search on. Search also gives you the option of searching through attachments. Search operations are case insensitive. Indexed Search requires licensing Oracle Secure Enterprise Search.

About Siebel Find Operations

A Siebel Find operation consists of a direct query on a database, and allows users to query on a field-by-field basis. Find objects are accessible through the Search Center, and allow users to perform queries on specific predefined fields linked to specific business components (such as querying for a name in the Last Name field). Find results are a real-time reflection of database records. This makes Find appropriate for searching on transactional database records that change frequently, such as Activity or Opportunity records. Find operations are case sensitive.

NOTE: The Siebel Query tool is covered in *Siebel Fundamentals* on the Siebel Bookshelf. The *Siebel Bookshelf* is published on Oracle Technology Network (OTN) and Oracle E-Delivery.

Supported Functionality for Siebel Find and Siebel Search

Table 4 summarizes the functionality available for Siebel Find and Siebel Search.

Table 4. Supported Functionality for Siebel Find and Siebel Search

Functionality	Supported for Find	Supported for Search
Siebel Open UI	Yes	Yes
Siebel High Interactivity	Yes	Yes
Siebel Standard Interactivity	Yes	Yes
Business component indexing	Not applicable	Yes
File system indexing	Not applicable	Yes
Web source indexing	Not applicable	Yes
Database source indexing	Not applicable	Yes
IMAP email source indexing	Not applicable	Yes
Lotus notes source indexing	Not applicable	Yes
Secure indexing	Not applicable	■ HTTPS indexing: Highly secure. ■ FTP indexing: Less secure than indexing over HTTPS.
Refresh indexing	Not applicable	Yes
Incremental indexing	Not applicable	Yes
Asynchronous indexing	Not applicable	Yes
Index status monitoring	Not applicable	Yes. Supported for both HTTP and FTP indexing modes.
Real time database queries	Yes	No. Searches are run against search indices.
Full text search	Not applicable	Yes
Keyword search	No	Yes
Automated suggested keywords	No	Yes
Parametric search (field based search).	Yes	■ Supported for Siebel High Interactivity. ■ Not supported for Siebel Open UI.

Table 4.   Supported Functionality for Siebel Find and Siebel Search

Functionality	Supported for Find	Supported for Search
Wildcard search	Yes. Applies to any character, including punctuation characters, such as a space, or a comma. The find operation can span more than one word.	Yes. Does not apply to punctuation characters, such as a space, or a comma. Applies to characters only within a word.
Case insensitive search	No	Yes
Boolean operators	No	Yes. Supports AND and OR Boolean operators.
Searches on content in attachments	No	Yes
Searches on external data sources and file systems	Not applicable	Yes
Search by file format	Not applicable	Yes. The search can be filtered by the following file types: ■ All ■ HTML ■ Microsoft Excel ■ Microsoft PowerPoint ■ Microsoft Word ■ PDF ■ Plain text ■ Rich Text Format
Search by language	Not applicable	Yes
Associate option in search results	■ Supported for Siebel High Interactivity ■ Not supported for Siebel Open UI	■ Supported for Siebel High Interactivity ■ Not supported for Siebel Open UI
Password Encryption	Not applicable	■ Supported for HTTPS indexing ■ Not supported for FTP indexing

Siebel Search Architecture Overview

Siebel Search architecture is comprised of the elements in Figure 1.
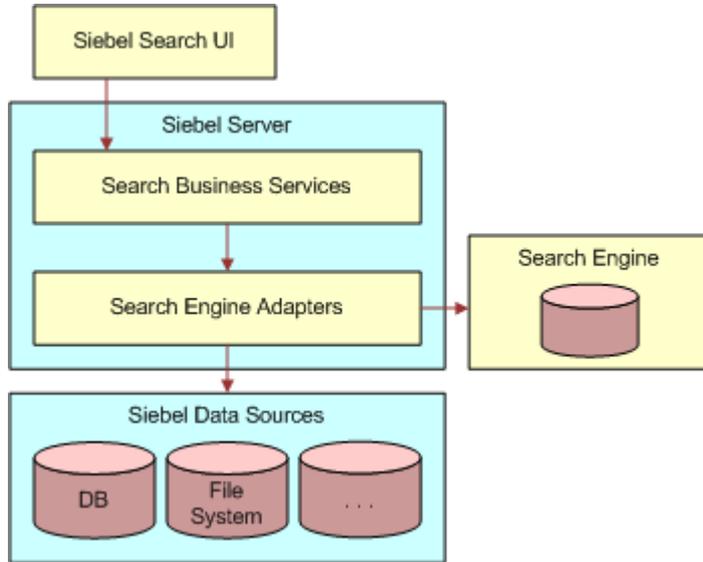
Figure 1.   Siebel Search Architecture Overview

Figure 1 includes the following elements:

■ **Siebel Search UI.** Interface for retrieval of Find and Search results.

■ **Siebel Server.** Hosts the search business services and search engine adapters.

■ **Search Engine Adapters and Indexing Adapters.** Interface with the Siebel data sources and search engine. Index the Siebel business data.

■ **Data Sources.** Indexed data sources, for example, Siebel business components, Web sources, or file systems.

Siebel Search Web Services

Siebel Search provides a set of Business Service APIs, which can be implemented as Web services through the Siebel Web services framework. The following Search Web services are provided:

■ **SearchExternalService.** This Web service can be used as a Search Front End Web service, to facilitate searches on the data stored in the Siebel application, from a non-Siebel Web application.

■ **SearchSolutionService.** This Web service can be used to search for solutions based on user inputs, and retrieve a solution as a search result.

■ **RetrieveAttachmentService.** This Web service has one standard QueryPage method to retrieve attachment documents.

- **ProductSearchService.** Business Service (Search Product Service) for searching product business components, and performing eligibility checks.

For more information on Siebel Search Web services, see *Siebel CRM Web Services Reference*.

3 Setting Up Siebel Search with Oracle Secure Enterprise Search

This chapter covers setting up Siebel Search with Oracle Secure Enterprise Search. All tasks in this chapter are required for Siebel Search and Oracle Secure Enterprise Search integration. This chapter includes the following topics:

- Configuring Secure Sockets Layer Authentication for HTTP Indexing on page 70

- Importing the SSL Certificate for HTTP Indexing on page 70

- Configuring Single Sign-On Authentication for HTTP Indexing on page 71

- Configuring User Authentication for Search Queries on page 71

- Disconnecting from Oracle Secure Enterprise Search and Deactivating the Identity Manager on page 71

About Installing Siebel Search

Siebel Search uses Oracle Secure Enterprise Search as the default search engine. This chapter covers installation of Oracle Secure Enterprise Search, and installation of Siebel components related to Search.

Upgrading from Siebel Search Version 7.x

Any custom search objects which were defined in Siebel Search Version 7.x must be redefined in the *Application_Suite*_OSES_Field-Mappings.xml file. For more information, see Chapter 7, "Configuring Index Mappings."

Installing Server Components for Siebel Search

Siebel Search requires the installation of the Siebel Enterprise Server, including the Siebel Server and the Gateway Name Server, and Oracle Secure Enterprise Search. Oracle Secure Enterprise Search and the Siebel Enterprise Server must be deployed on separate, dedicated servers. For information on system requirements and supported platforms, see *Siebel System Requirements and Supported Platforms* on Oracle Technology Network, and the Oracle Secure Enterprise Search documentation. The recommended installation and configuration sequence is as follows:

- Install the Siebel Enterprise Server

- Install the Oracle Secure Enterprise Search Server

- Configure Siebel Search on the Oracle Secure Enterprise Search server and Siebel servers.

For information on installing server components, see the *Siebel Installation Guide* for the operating system you are using.

Oracle Secure Enterprise Search Pre-Installation Tasks

Refer to the Pre-Installation Tasks topic in the *Oracle Secure Enterprise Search Installation and Upgrade Guide*. This guide is provided on Oracle Technology Network.

Installing Oracle Secure Enterprise Search

This topic covers Oracle Secure Enterprise Search installation and additional installation steps required for Siebel Search. Capture the Search and Administration URLs from the Oracle Secure Enterprise Search install wizard during the Oracle Secure Enterprise Search installation process, as these will be required for post-installation verification. The Administration Password will also be required when configuring the Search Engine Settings in the Siebel Search administration view. The examples in this guide use Siebel1 as the Oracle Secure Enterprise Search Administration Password. Make sure that the file RSS_Crawler_Configuration.xml is accessible to the Oracle Secure Enterprise Search engine and that the file *Application_Suite*_OSES_Field-Mappings.xml is accessible to the Siebel Server.

To install Oracle Secure Enterprise Search

1 Complete the tasks in the Installation Tasks section of the *Oracle Secure Enterprise Search Installation and Upgrade Guide*. Use the installation values in the following table.

Field	Value
Search Server Name	Set the value to SES.
Administrative Password	Set the value to siebel1.
HTTP Port	The default port can be used.
Destination Path	Set the value to D: \oracle\ses*ses version*\OH.
Data Storage Location	Set the value to D: \oracle\ses*ses version*\oradata.

2 Create the Siebel Search Center Config directory under the Siebel File System on the Oracle Secure Enterprise Search Server:

■ On Windows create the Config directory at D: \fs\SSC\Config\.

■ On UNIX create the Config directory at /export/home/fs/SSC/Config/.

3 Copy the file RSS_Crawler_Configuration.xml from the Siebel Server to the SSC Config directory on the Oracle Secure Enterprise Search Server:

■ On Windows copy the crawler file from siebsrvr\bin\ on the Siebel Server to *D: \fs\SSC\Config/* on the Oracle Secure Enterprise Search Server.

■ On UNIX copy the crawler file from siebsrvr/lib/ on the Siebel Server to /export/home/fs/SSC/Config/ on the Oracle Secure Enterprise Search Server.

4 Set the permissions for fs\SSC\Config\ to Full Control for Everyone.

Creating the Siebel Search Center Directory Structure on the Siebel Server

This topic covers creating the Siebel Search Center directory structure on the Siebel Server for storing the XML feed files and feed status files which are generated at runtime.

This topic includes the following tasks:

■

■

Creating the Siebel Search Center Directory on Windows

This topic covers creating the Siebel Search Center directory structure on the Siebel Server for a Windows environment. The D:\fs\SSC directory on the Siebel Server will also be used as the FTP home directory.

To create the Siebel Search Center directory structure on Windows

1   Create a directory for storing the XML feed files on the Siebel Server, for example, D:\fs\SSC\xmldata.

    The XML feed files are generated at runtime and temporarily stored in the fs\SSC\xmldata folder. The feed files are automatically deleted once indexing completes.

2   Create a directory for storing the XML feed status files on the Siebel Server, for example, D:\fs\SSC\xmldata\err.

    The XML feed status files are generated at run time, and indicate the error or success status of the crawl operation.

3   Create a directory for storing the XML field mapping file on the Siebel Server, for example, D:\fs\SSC\Config.

4   Copy the file *Application_Suite*_OSES_Field-Mappings.xml from the installation directory at siebsrvr\bin\ to the config directory at D:\fs\SSC\Config\.

    ■ Copy the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales or Siebel Marketing.

    ■ Copy the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Medical, or Siebel Pharma.

5   Copy the file Search_Engine_Config.xml from the installation directory to the config directory at *D:\fs\SSC\Config*.

    NOTE: Do not modify the contents of the file Search_Engine_Config.xml from the preconfigured settings.

6   Set the permissions for D:\fs\ to Full Control for Everyone.

Creating the Siebel Search Center Directory on UNIX

This topic covers creating the Siebel Search Center directory structure on the Siebel Server for a UNIX environment.

To create the Siebel Search Center directory structure on UNIX

1 Create a directory for storing the XML feed files on the Siebel Server, for example, /export/home/fs/SSC/xmldata.

   The XML feed files are generated at runtime and temporarily stored in the fs/SSC/xmldata folder. The feed files are automatically deleted once indexing completes.

2 Create a directory for storing the XML feed status files on the Siebel Server, for example,

   /export/home/fs/SSC/xmldata/err.

   The XML feed status files are generated at runtime, and indicate the error or success status of the crawl operation.

3 Create a directory for storing the XML field mapping file on the Siebel Server, for example,

   /export/home/fs/SSC/Config.

4 Copy the file *Application_Suite*_OSES_Field-Mappings.xml from the installation directory at siebsrvr/lib/ to the config directory at /export/home/fs/SSC/Config/.

   ■ Copy the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales or Siebel Marketing.

   ■ Copy the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Medical, or Siebel Pharma.

5 Copy the file Search_Engine_Config.xml from the installation directory to the config directory at /export/home/fs/SSC/Config/.

   NOTE: Do not modify the contents of the file Search_Engine_Config.xml from the preconfigured settings.

6 Set the permissions for /export/home/fs/ to Full Control for Everyone.

Configuring the Search Results View for Siebel High Interactivity or Siebel Open UI

The Search results view must be configured in Siebel Tools for the UI mode that your application is running in. Both the Search View and Search All Results View are activated by default. The views must be configured as follows:

■ If your application is using Siebel High Interactivity, then you must disable Search All Results View.

■ If your application is using Siebel Open UI, then you must disable Search View.

For more information on configuring your application for Open UI or High Interactivity, see *Configuring Siebel Open UI*.

To configure the search results view for Siebel High Interactivity or Siebel Open UI

1 Log in to Siebel Tools.

2 In the Object Explorer, expand the Screen object.

3 Query for Search View Screen.

The list of views is displayed in Screen Views.

4 Configure the Inactive property value as follows:

■ To use the application with Siebel High Interactivity, set the Inactive property for Search All Results View to True.

■ To use the application with Siebel Open UI, set the Inactive property for Search View to True.

5 Stop the Siebel Server.

6 Compile and deploy the repository file.

7 Restart the Siebel Server.

8 Restart the Siebel application.

Configuring EAI File Transport Folder Access for Siebel Search

The EAIFileTransportFolders parameter must be configured to grant write access to specific folders within the Siebel file system that are required for Siebel Search. For information on configuring the EAIFileTransportFolders parameter, see *Transports and Interfaces: Siebel Enterprise Application Integration*.

Enabling FTP or HTTP Indexing

Siebel Search provides both FTP and HTTP options for indexing. Indexing over HTTPS is more secure than indexing over FTP. Each indexing method uses a different type of feed. The feed is defined as the collection of documents in the data repository for the index operation. FTP and HTTP indexing use the following feed types:

■ **FTP indexing using directory feed.** All feeds are placed in a directory, and this directory is the input to the connector. The directory feed location is configured in the file RSS_Crawler_Configuration.xml. Directory feed is useful when the data feeds are available in a single directory. The number of documents in each directory must be less than 10,000.

■ **HTTP indexing using control feed.** Individual feeds are generated dynamically, and can be located anywhere. A single control file is generated with links to the feeds. This control file is the input to the connector. The control feed location is configured in the file RSS_Crawler_Configuration.xml.

The Send Index Feed Via HTTP setting is used to switch between FTP and HTTP indexing.

To enable FTP or HTTP indexing

1 Navigate to the Administration – Search screen, and then the Search Engine Settings view.

2 Configure the Send Index Feed Via HTTP settings as follows:

■ Set the value to True to turn on HTTP indexing.

■ Set the value to False to turn on FTP indexing.

The default value is False.

For information on configuring search engine settings for HTTP or FTP indexing, see "Configuring
Siebel Search Engine Settings" on page 37.

Configuring the FTP Server for FTP Indexing

Siebel Search uses an Oracle Secure Enterprise Search XML framework for submitting records for
indexing in the form of XML feeds. The pre-indexed XML feed files are stored on an FTP server for
Oracle Secure Enterprise Search access. The FTP server and Siebel Server must be colocated on the
same server—all examples in this guide assume that the FTP server and Siebel Server are colocated.
Accessing the feeds over FTP is a crawl time operation requiring administrative privileges. The FTP
location is not accessed at search time, therefore there is no end user access to the FTP location.

This topic includes the following tasks:

■ "Configuring the Search FTP Server on Windows" on page 29

■ "Configuring the Search FTP Server on UNIX" on page 30

Configuring the Search FTP Server on Windows

This topic covers configuring the FTP server on Windows, so that Oracle Secure Enterprise Search
can access the Siebel Search XML feed files for crawling and indexing operations. The FTP home
directory is set to the Siebel Search Center directory. For more information on setting up the FTP
server, see your operating system documentation on Internet Information Services.

To configure the Search FTP server on Windows

1 From the Start menu choose Control Panel, Add or Remove Programs, and then the Add/Remove
Windows Components option.

2 From the Windows Components list choose Application Server, Details, Internet Information
Services (IIS), and then Details.

3 Select File Transfer Protocol (FTP) Service and click OK.

4 Click Next on Windows Components Wizard.

This will install the IIS and FTP services.

5 From the Start menu choose All Programs, Administrative Tools, and then Internet Information
Services.

The Internet Information Services (IIS) console is launched.

6 Right Click on Default FTP Site and select Properties.

7 Select the FTP Site tab.

8 Enter Siebel Search Center FTP Site in the Description field.

9 Select the Home Directory tab.

10 Select the option Directory Located on this Computer.

11 Set the Home Directory Local Path to D:\fs\SSC.

The paths in the RSS Crawler file are configured relative to your FTP Home Directory.

12 Select the options Read, Write and Log visits.

13 Set Directory Listing Style to UNIX.

Configuring the Search FTP Server on UNIX

This topic covers configuring the FTP server on UNIX, so that Oracle Secure Enterprise Search can
access the Siebel Search XML feed files for crawling and indexing operations.

To configure the Search FTP server on UNIX

1 Enable the FTP service on the Siebel Server.

2 Set the FTP home directory to /export/home/fs/SSC.

The paths in the RSS Crawler file are configured relative to your FTP home directory.

Configuring the RSS Crawler for FTP Indexing

Oracle Secure Enterprise Search crawls Siebel data in RSS feed format. The file
RSS_Crawler_Configuration.xml is located on the Oracle Secure Enterprise Search Server and is
used to configure the Oracle Secure Enterprise Search Crawler. The path to this configuration file
must be specified when creating the Siebel Source in Oracle Secure Enterprise Search. Siebel Search
uses the directory feed type for indexing over FTP.

To configure the RSS Crawler on the Oracle Secure Enterprise Search Server

1 Open the file RSS_Crawler_Configuration.xml on the Oracle Secure Enterprise Search server in an XML or text editor:

■ On Windows this file is located at D:\fs\SSC\Config\.

■ On UNIX this file is located at /export/home/fs/SSC/Config/.

2 Complete the mandatory fields in the Siebel Customer configuration section. The fields are described in the following table.

Field	Description	Mandatory
feedLocation	The xmlidata\(XML-based indexable data) directory location on the FTP Server, where the XML-based feed files are stored for indexing. This value is specified relative to your FTP Home Directory, for example, if your FTP Home Directory is set to D:\fs\SSC and the xmlidata folder is at D:\fs\SSC\xmlidata, then set the *feedLocation* value to *ftp://Siebel_Server_IP_Address/xmlidata*. On Windows this value is specified in the format: *ftp://Siebel_Server_IP_Address/xmlidata* On UNIX this value is specified in the format: *ftp://Siebel_Server_IP_Address/xmlidata* **NOTE:** FTP must be included in the feedLocation value.	Yes
feedType	Type of feed file. Set the value to directoryFeed.	Yes
errorFileLocation	Location on the FTP Server where the *FileName*.err and *FileName*.suc files will be stored. This value is specified relative to your FTP Home Directory On Windows and UNIX the value is specified in the format: /xmlidata/err **NOTE:** FTP is not included in the errorFileLocation value.	No
securityType	Type of security to be enabled. Set the value to attributeBased.	Yes
sourceName	Name of the Siebel data source. Set the value to buscomp.	Yes

Field	Description	Mandatory
securityAttributte	Attribute in the feed files that provides the security information. Set the value to sblvisibilityid. Multiple access control mappings for sblvisibilityid can be passed to SES at index-time.	Yes
Grant	This attribute governs the Siebel user's access to a set of result records. Set the value to True. The Siebel user will have access to the records with Visibility IDs set up for that user. The Visibility ID for each record is set in the XML feed that is generated by Siebel Search for Oracle Secure Enterprise Search to crawl. The set of Visibility IDs accessible to a user is retrieved by Oracle Secure Enterprise Search from Siebel CRM through the Siebel Web service, when the user logs in to Oracle Secure Enterprise Search.	No

Example of Configuring the RSS Crawler for FTP Indexing

This extract provides an example of configuring the file RSS_Crawler_Configuration.xml for FTP indexing.

```
<feedLocation>ftp://Siebel_Server_IP_Address/xmlidata</feedLocation>

<feedType>directoryFeed</feedType>

<errorFileLocation>/xmlidata/err</errorFileLocation>

<securityType>attributeBased</securityType>

<sourceName>buscomp</sourceName>
```

```
<securityAttribute name="sblvisibilityid" grant="true"/>
```

Configuring the RSS Crawler for HTTP Indexing

Oracle Secure Enterprise Search crawls Siebel data in RSS feed format. The file RSS_Crawler_Configuration.xml is located on the Oracle Secure Enterprise Search Server and is used to configure the Oracle Secure Enterprise Search Crawler. The path to this configuration file must be specified when creating the Siebel Source in Oracle Secure Enterprise Search. Siebel Search uses the control feed type for indexing over HTTP.

To configure the RSS Crawler on the Oracle Secure Enterprise Search Server

1 Open the file RSS_Crawler_Configuration.xml on the Oracle Secure Enterprise Search server in an XML or text editor:

   a   On Windows this file is located at D: \fs\SSC\Config\.

   b   On UNIX this file is located at /export/home/fs/SSC/Config/.

2   Complete the mandatory fields in the Siebel Customer configuration section. The fields are
described in the following table.

Field	Description	Mandatory
feedLocation	Location on the HTTP server where the control file is generated with links to the feeds. On Windows and UNIX the value is specified in the format: http://[Siebel_Web_Server]/eai_[language]/ start.swe?OSESRequest=true&SWEExtSource=Searc hDataProcessor&SWEExtCmd=Execute&FeedTy pe=controlFeed&UserName=[Siebel_admin_user]	Yes
feedType	Type of feed file. Set the value to controlFeed.	Yes
errorFileLocation	Location on the HTTP server where the FileName.err and FileName.suc files will be stored. On Windows and UNIX the value is specified in the format: http://[Siebel_Web_Server]/eai_[language]/ start.swe?OSESRequest=true&FeedType=statusFeed	No
securityType	Type of security to be enabled. Set the value to attributeBased.	Yes
sourceName	Name of the Siebel data source. Set the value to buscomp.	Yes
securityAttributte	Attribute in the feed files that provides the security information. Set the value to sblvisibilityid.	Yes
Grant	This attribute governs the Siebel user's access to a set of result records. Set the value to True. The Siebel user will have access to the records with Visibility IDs set up for that user. The Visibility ID for each record is set in the XML feed that is generated by Siebel Search for Oracle Secure Enterprise Search to crawl. The set of Visibility IDs accessible to a user is retrieved by Oracle Secure Enterprise Search from Siebel CRM through the Siebel Web service, when the user logs in to Oracle Secure Enterprise Search.	No

Example of Configuring the RSS Crawler for HTTP Indexing
This extract provides an example of configuring the file RSS_Crawler_Configuration.xml for HTTP
indexing.

The following extract provides sample RSS_Crawler_Configuration.xml content:

```
<rsscrawler xmlns="http://xmlns.oracle.com/search/rsscrawlerconfig">

<feedLocation>http://<Siebel_Web_Server>/eai_<language>/
start.swe?OSESRequest=true&amp;SWEExtSource=SearchDataProcessor&amp;SWEExtCmd=Exec
ute&amp;FeedType=controlFeed&amp;UserName=[Siebel_admin_user]</feedLocation>

<feedType>controlFeed</feedType>

<errorFileLocation>http://<Siebel_Web_Server>/eai_<language>/
start.swe?OSESRequest=true&amp;FeedType=statusFeed</errorFileLocation>

<securityType>attributeBased</securityType>

<sourceName>buscomp</sourceName>

<securityAttribute name="sblvisibilityid" grant="true"/>

</rsscrawler>
```

Configuring Field Mapping Settings

The settings enclosed in percentages in the field mapping file must be configured for integration between Siebel Search and Oracle Secure Enterprise Search. There are two mapping files and the correct one to use is as follows:

■ Use the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales or Siebel Marketing.

■ Use the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Medical, or Siebel Pharma.

To configure field mapping settings

1 Open the file *Application_Suite*_OSES_Field-Mappings.xml, located on the Siebel Server, in an XML or text editor.

■ On Windows this file is located at D:\fs\SSC\Config\.

■ On UNIX this file is located at /export/home/fs/SSC/Config/.

2 Configure all fields enclosed in the percentage symbol. The fields are described in the following table.

Field	Description
%webserver%	Set the value to *IP_Address:Port_Number* of the Siebel application server. Port number is optional for Windows.
%objmgr%	This is the application object manager. Set the value to the application that is running, for example, CallCenter or Fins.

Field	Description
%lang%	Set the value to the language for which the Siebel application is configured, for example, the value for English is enu.
%hostName%	Set the value to the IP address of the Siebel host.

Administering Siebel Server Component Groups

This procedure enables the EAI Object Manager and Search Data Processor server component groups. These two component groups must be enabled for all indexing operations. The SearchDataProcessor component processes Search data and builds the index. Once the Search server is set up and the indices have been defined, the components must be synchronized. For more information on Siebel Server component groups, see *Siebel System Administration Guide*.

NOTE: This task is required only for thin client deployments.

To administer Siebel Server component groups

1 Navigate to the Administration - Server Configuration screen, and then the Component Groups view.

2 Query on the Search Processing Component Group.

3 On the Component Groups applet, click the Enable button.

4 Query on the EAI Component Group.

5 On the Component Groups applet, click the Enable button.

6 Restart the Siebel Server.

7 Navigate to Administration – Server Management screen, then the Servers and Component Groups view.

8 Make sure that the Search Processing and EAI Component Groups have state Online.

9 Navigate to Administration – Server Configuration screen, then the Enterprises and Synchronize view.

10 Query on the Search Data Processor Component in the list applet.

11 Click Synchronize.

12 Restart the Siebel Server.

Administering Workflow Management Components

This topic covers enabling the Workflow Management Server components. All Workflow Management components must be enabled for incremental and refresh indexing. For more information on Siebel Server component groups, see *Siebel System Administration Guide*.

To administer Workflow Management Components for incremental and refresh indexing

1 Navigate to Administration - Server Configuration screen, and then the Component Groups view.

2 Query on the Workflow Management Component Group.

3 On the Component Groups applet, click the Enable button.

4 Restart the Siebel Server.

5 Navigate to Administration - Server Management screen, then the Enterprises, Servers and Components view.

6 Query on each of the following Workflow Management components and verify that the State of each is Online:

■ Workflow Action Agent

■ Workflow Monitor Agent

■ Workflow Process Batch Manager

■ Workflow Process Manager

■ Workflow Recovery Manager

■ Generate Triggers

7 Click the Startup button for any Workflow Management component that is not online.

Enabling Search Security Web Service

This topic covers enabling the SearchSecurityService Inbound Web service for integration with Oracle Secure Enterprise Search. This Web service uses SOAP header authentication.

To enable security for Search inbound Web services

1 Navigate to Administration - Web Services screen, and then the Inbound Web Services view.

2 Click on the Query button on the Inbound Web Services applet.

3 Enter SearchSecurityService in the Name field and click Go.

4 On the Address field of the Service Ports applet, substitute the address variables in the following URL:

```
http://<webserver>/eai_<language>/
start.swe?SWEExtSource=WebService&SWEExtCmd=Execute&WSSOAP=1
```

    a   Substitute the *WebServer* variable with the *IP_Address:Port_Number* of the Siebel application
server. Port number is optional for Windows.

    b   Substitute the *language* variable with the Siebel application language, for example, *enu*.

5   On the Service Ports applet select Menu, and then the Save Record menu item.

6   Click the Clear Cache button on the Inbound Web Services applet.

Activating the Search Engine

A search engine is activated by selecting the Default Flag option in the Search Engine Settings view.
Only one search engine can be activated at any time—make sure that the Default Flg option is
selected for just one search engine.

To activate the search engine

1   Navigate to Administration – Search screen, and then the Search Engine Settings view.

2   Select the Default Flag option for Oracle Secure Enterprise Search.

Configuring Siebel Search Engine Settings

This topic covers configuration of the Oracle Secure Enterprise Search and Siebel Search integration
fields in the Search Engine Settings view of the Siebel Search Administration UI. Settings that are
listed as specific to FTP indexing are not required for HTTP indexing. Settings that are listed as
specific to HTTP indexing are not required for FTP indexing.

To configure Siebel Search engine settings for Oracle Secure Enterprise Search
integration

1   Navigate to the Administration – Search screen, and then the Search Engine Settings view.

2 Complete the search engine settings. The settings are described in the following table.

Setting	Description
Admin API Namespace	The Namespace for the OracleSearchAdminService Web service. This Oracle Secure Enterprise Search Web service invokes the Oracle Secure Enterprise Search Schedule that crawls and indexes the Siebel business component data. Set the value to http:// search.oracle.com/AdminService/2006-09-15.
Admin API Webserver Address	The Web server address for the Oracle Secure Enterprise Search OracleSearchAdminService Web service. Set the value to http://*SES_Server:Port*/search/ws/admin/ SearchAdmin.
Advanced Batching And Indexing	This setting is used to turn the asynchronous indexing and index monitoring features on or off: ■ Set the value to True to enable the asynchronous indexing and index monitoring features. ■ Set the value to False to disable the asynchronous indexing and index monitoring features. The default value is True.
Batch Split Size	The number of business component records in a batch. The Object Manager query performance, search engine footprint size, and Siebel Server specification are used in determining optimum Batch Split Size. Set the value to one of the following: ■ If you are using FTP indexing, set the value to less than or equal to 4500. ■ If you are using HTTP indexing, set the value to less than or equal to 10000.
Batch Submit Size	The number of records submitted at a time for indexing. The Object Manager query performance, search engine footprint size, and Siebel Server specification are used in determining optimum Batch Submit Size. Set the value to one of the following: ■ If you are using FTP indexing, set the value to less than or equal to 1500. ■ If you are using HTTP indexing, set the value to less than or equal to 1000.
Dupmarked	This functionality is not supported. Set the value to false. **NOTE:** This setting is case sensitive.

Setting	Description
Dupremoved	This is a Boolean setting to enable or disable the removal of duplicates from the result set. Set the value to true to remove duplicates from the results. **NOTE:** This setting is case sensitive.
Feed Access Password	This is the password for accessing the RSS feeds that Oracle Secure Enterprise Search will crawl. ■ If you are using FTP indexing, then set the value to the password used to log in to the FTP server where the XML feed files are generated. ■ If you are using HTTP indexing, then set the value to the password used to access the Siebel EAI component. Feed Access User ID is set in the Search Connector Settings view.
Feed URL Prefix	This setting is specific to HTTP indexing. The value is set to the HTTP URL used for HTTP indexing. Set the value to http://*Siebel_Server*:*HTTP_Port*/eai_*language*/ start.swe?OSESRequest=true&UserName=[Siebel_Admin_User]&
Filename	The path to the *Application_Suite*_OSES_Field-Mappings.xml file on the Siebel Server. ■ Use the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales or Siebel Marketing. ■ Use the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Medical, or Siebel Pharma. This file is located on the Siebel Server in the \fs\SSC\Config directory.
Login URL	The administration URL for Oracle Secure Enterprise Search. The URL format is http://*SES_Server*:*HTTP_Port*/search/admin/control/login.jsp.
Namespace	The name of the Oracle Secure Enterprise Search Web service. Set the value to OracleSearchService.

Setting	Description
OSESAutoStartSchedule	This setting is used to turn automatic Oracle Secure Enterprise Search scheduling on or off. ■ Set the value to True to enable automatic scheduling of the index operation in Oracle Secure Enterprise Search. The schedule is automatically started once Siebel Search generates the feed files. ■ Set the value to False to disable automatic scheduling of the index operation. This option requires manually starting the indexing schedule in Oracle Secure Enterprise Search. The default value is True.
Password	This is the Oracle Secure Enterprise Search Administration User Password. The examples in this guide use siebel1. For more information, see "Installing Oracle Secure Enterprise Search" on page 25.
Recordcount	This setting configures the inclusion of an estimate in the result for the number of records in the result set. Set the value to True.
Remote Admin Support	This setting is used to turn the remote administration feature for the Oracle Secure Enterprise Search Connector on or off: ■ Set the value to True to enable the remote administration feature. ■ Set the value to False to disable the remote administration feature. The default value is True.
Schedule Name	This is used for starting the Oracle Secure Enterprise Search Schedule remotely. This field takes the same value as the Business Component Connector Library Name, and is set to buscomp. This value is case sensitive.
Schedule URL	Oracle Secure Enterprise Search schedule URL for starting the crawler remotely using the Oracle Secure Enterprise Search HTTP API. Set the value to http://*SES_Server*:*HTTP_Port*/search/admin/schedules/schedules.jsp. The Oracle Secure Enterprise Search Server can be specified using either the DNS name or IP address.

Setting	Description
Search Engine Config Filename	The path to the search engine configuration file on the Siebel server. The value is set to *SearchServer*\fs\SSC\config\Search_Engine_Config.xml
Send Index Feed Via HTTP	This setting is used to turn HTTP indexing on or off: ■ Set the value to True to turn on HTTP indexing. ■ Set the value to False to turn on FTP indexing. The default value is False.
SES Password	This is the password which Siebel Search uses to access the application for the search operation. This value corresponds to the Entity Password which is set when creating the Oracle Secure Enterprise Search Federation Trusted Entities. The examples in this guide use Welcome as the Oracle Secure Enterprise Search Password/Entity Password. For more information, see "Verifying Oracle Secure Enterprise Search Federated Trusted Entities and Siebel Identity Plugin Manager" on page 45.
SES Username	This is the unique User ID which Siebel Search uses to access the application for the search operation. This value corresponds to the Entity Name which is set when creating the Oracle Secure Enterprise Search Federation Trusted Entities. The examples in this guide use sblsesuser as the Oracle Secure Enterprise Search Username/Entity Name. For more information, see "Verifying Oracle Secure Enterprise Search Federated Trusted Entities and Siebel Identity Plugin Manager" on page 45.
Shared Search UNC Location	This setting is specific to FTP indexing. The value is set to the Siebel Search Center shared FTP UNC location where Siebel Search decompresses the Siebel File System files. It is the parent directory of the Xmlidata directory. ■ The address format on Windows is: *IP address*\fs\SSC ■ The address format on UNIX is: /export/home/qa/fs/SSC **NOTE:** Adding a slash (/) or backslash (\) after *SSC* will create an error.

Setting	Description
SSC FTP Location	This setting is specific to FTP indexing. The value is set to the FTP Server shared search center location from where Oracle Secure Enterprise Search reads the Siebel File System files. The FTP Home directory is configured on the FTP server. The value must be set to ftp://*Siebel_Server_IP_Address/*.
Strong Password Encryption Rules Enforced	This setting is used to turn the enhanced security features on or off: ■ Set the value to True to enable the enhanced security features. ■ Set the value to False to disable the enhanced security features. The default value is True.
Use Session Mode	This setting is specific to HTTP indexing: ■ Set the value to True to use a single HTTP session for retrieving all batches of data required for the index operation. **NOTE:** Make sure that cookies are enabled in the Web browser. ■ Set the value to False to use a separate HTTP session for retrieving each batch of data required for the index operation. The HTTP request will log in again every time the schedule service is invoked during the index operation. **NOTE:** Setting the value to False might impact indexing performance.
Username	This is the Oracle Secure Enterprise Search Administration User ID. The default value is eqsys.
Visibility Support	This setting is used to turn enhanced access control functionality on or off: ■ Set the value to True to enable the enhanced access control feature. ■ Set the value to False to disable the enhanced access control feature. The default value is True.

Setting	Description
Web Service Endpoint Address	This is the Siebel authentication and validation Web service endpoint. Set the value to http://<WebServer>/ eai_<language>/ start.swe?SWEExtSource=WebService&SWEExtCmd=Execute&WSSOAP=1.
	This value can be copied from where it was configured in the Inbound Web Services view of the Siebel administration UI, removing the username and password from the URL. For more information, see "Enabling Search Security Web Service" on page 36.
Web Service Endpoint Password	This is the Siebel administrative User Password. This value is used by Oracle Secure Enterprise Search when connecting to the Siebel server and authenticating the connection.
Web Service Endpoint Username	This is the Siebel administrative User ID. This value is used by Oracle Secure Enterprise Search when connecting to the Siebel server and authenticating the connection.
WebServer Address	URL for the Oracle Search Service. The address format is http://*SES_Server*:*HTTP_Port*/search/query/ OracleSearch.
XML Indexable Data Location	This setting is specific to FTP indexing. Set the value to the Siebel Search Center shared FTP location for storing data for the RSS crawler to access and index.
	■ The path format on Windows is:
	IP address\fs\SSC\xmlidata\
	■ The path format on UNIX is:
	/home/export/fs/SSC/xmlidata/

3 Select Save Record on the list applet.

NOTE: The Siebel Server must be restarted every time a change is made to Search Engine Settings configuration.

Process of Setting Up the Business Component Source and Connector

The business component source and connector must be set up to integrate Siebel Search and Oracle Secure Enterprise Search.

To set up the business component source and connector for integration with Oracle Secure Enterprise Search, perform the following tasks:

■ "Configuring the Siebel Business Component Connector" on page 44

■ "Activating the Siebel Identity Plugin Manager for Oracle Secure Enterprise Search" on page 45

■ "Verifying Oracle Secure Enterprise Search Federated Trusted Entities and Siebel Identity Plugin Manager" on page 45

■ "Deploying the Business Component Source" on page 47

■ "Verifying the Oracle Secure Enterprise Search Source for the Business Component Connector" on page 47

Configuring the Siebel Business Component Connector

This topic covers configuration of the business component connector settings for integration with Oracle Secure Enterprise Search.

This task is a step in "Process of Setting Up the Business Component Source and Connector" on page 43.

To configure the Siebel business component connector settings

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Complete the business component connector fields. Some fields are described in the following table. Values are case-sensitive.

Field	Value
Name	This field is preconfigured and takes the value Bus Comp. Do not change the preconfigured value.
Library Name	This field is preconfigured and takes the value buscomp. Do not change the preconfigured value.
Engine Name	This field is preconfigured and takes the value OSES. Do not change the preconfigured value.
Configuration URL	This is the file URL of the crawler configuration file. Set the value to the location of the RSS_Crawler_Configuration.xml file on the Oracle Secure Enterprise Search server. ■ On Windows set the value to *file://localhost/fs/SSC/config/RSS_Crawler_Configuration.xml* ■ On UNIX set the value to *file://localhost//export/home/fs/SSC/config/RSS_Crawler_Configuration.xml*

Field	Value
Feed Access User ID	This is the User ID for accessing the RSS feeds that Oracle Secure Enterprise Search will crawl. Set the value to the User ID used to log in to the FTP server where the XML feed files are generated. If the server has user accounts registered in multiple domains then use the format *Domain\UserID*. Feed Access Password is set in the Search Engine Settings view.
Scratch Directory	Create a Temp/ local directory on the Oracle Secure Enterprise Search server where status files can be temporarily written.
Type	Set the value to buscomp. This value is case sensitive.
className	This field is preconfigured and takes the value oracle.search.plugin.security.auth.siebel.SiebelAuthManager. Do not change the preconfigured value.
jarFile	This field is preconfigured and takes the value /oracleapplications/Siebel8Crawler.jar. Do not change the preconfigured value.

Activating the Siebel Identity Plugin Manager for Oracle Secure Enterprise Search

The Oracle Secure Enterprise Search Federation Trusted Entities and Siebel Identity Plugin Manager are activated remotely when the Siebel SES adapter connects to Oracle Secure Enterprise Search.

This task is a step in .

To activate the Siebel Identity Plugin Manager for Oracle Secure Enterprise Search

1   Navigate to the Administration – Search screen, and then the Search Engine Settings view.

2   Select the CSSOSESAdapter search engine library, and click Connect.

   The Connected flag in the Search Engine Settings view is set to true.

Verifying Oracle Secure Enterprise Search Federated Trusted Entities and Siebel Identity Plugin Manager

This task covers verification of the Federation Trusted Entities settings, and configuration and activation of the Identity Plugin Manager. It is recommended to execute this task if the status of the CSSOSESAdapter search engine library does not update correctly after the Connect operation, or if the error message "Error in RemoteAdmin Adapter" is displayed.

This task is a step in .

To verify Federated Trusted Entities and the Siebel Plugin Manager

1   Log in to the Oracle Secure Enterprise Search Administration application.

2   Navigate to the Global Settings screen, and then the Federation Trusted Entities view.

3   Verify the fields described in the following table.

Field	Description
Key	Siebel Search uses this value to access the application for the search operation. Verify that the value is set to sblsesuser. This value corresponds to the Oracle Secure Enterprise Search Username configured in the Siebel Search Engine Settings view. This value also corresponds to the Entity Name in the Key column of the Oracle Secure Enterprise Search Trusted Entities table. For more information, see "Configuring Siebel Search Engine Settings" on page 37.
Description	Verify that the description is set to Trusted Siebel-Oracle Secure Enterprise Search user.
Authentication	Verify that the value is set to Password.
Authentication Attribute	This field is not used for Siebel Search integration and is empty.

4   Navigate to the Global Settings screen, and then the Identity Management Setup view.

5   Verify that the oracle.search.plugin.security.identity.siebel.SiebelIdentityPluginMgr Identity Plugin Manager is listed as an active plug-in.

6   Verify the Authorization Manager plugin fields described in the following table.

Field	Description
Siebel 8 authentication web service endpoint	This is the Siebel authentication Web service endpoint. Verify that the value is set to http://<webserver>/eai_<language>/start.swe?SWEExtSource=WebService&SWEExtCmd=Execute&WSSOAP=1. For more information, see "Enabling Search Security Web Service" on page 36.
Siebel 8 validation web service endpoint	This is the Siebel user validation Web service endpoint. Verify that the value is set to http://<webserver>/eai_<language>/start.swe?SWEExtSource=WebService&SWEExtCmd=Execute&WSSOAP=1. For more information, see "Enabling Search Security Web Service" on page 36.

Field	Description
User ID	This is the Siebel administrative user ID.
Password	This is the Siebel administrative password.

Deploying the Business Component Source

This topic covers remote administration of the Oracle Secure Enterprise Search Connector. This task configures the Oracle Secure Enterprise Search business component Source and Source Group, and creates the Oracle Secure Enterprise Search business component Schedule.

This task is a step in *"Process of Setting Up the Business Component Source and Connector" on page 43*.

To deploy the business component Source

1 Navigate to the Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Select Bus. Comp Connector and click Create Source.

The Deployed Flag field is automatically selected when the business component source has been deployed.

Verifying the Oracle Secure Enterprise Search Source for the Business Component Connector

This topic covers verification of the Oracle Secure Enterprise Search Source to integrate with the Siebel Search business component connector. It is recommended to execute this task if the status of the business component connector does not update correctly after the Deploy operation, or if the error message "Error in RemoteAdmin Adapter" is displayed.

This task is a step in *"Process of Setting Up the Business Component Source and Connector" on page 43*.

To verify the Oracle Secure Enterprise Search Source for the business component connector

1 Start the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Sources screen.

3 Select the Edit option for the buscomp Source.

The Source Configuration tab is displayed for the buscomp Source.

4 Verify the Source fields and values against the following table.

Field	Description
Source Name	Verify that the value is set to buscomp. This value corresponds to the buscomp connector library name in the Siebel Search Connector Settings view. **NOTE:** This value is case sensitive.
Configuration URL	This is the file URL of the configuration file. Verify that the value is set to the location of the RSS_Crawler_Configuration.xml file on the Oracle Secure Enterprise Search server. ■ On Windows the value is set to file://localhost/fs/SSC/config/ RSS_Crawler_Configuration.xml. ■ On UNIX the value is set to file://localhost//export/home/fs/SSC/ config/RSS_Crawler_Configuration.xml
Authentication Type	This field is not supported. The value must be empty.
User ID	This setting corresponds to, and takes the same value as, the business component connector Feed Access User ID field. For more information, see "Configuring the Siebel Business Component Connector" on page 44.
Password	This setting corresponds to, and takes the same value as, the business component connector Feed Access Password field. For more information, see "Configuring the Siebel Business Component Connector" on page 44.
Realm	This field is not supported for Siebel Search and Oracle Secure Enterprise Search integration. Verify that this field is empty.
Scratch Directory	This value points to a Temp/ local directory on the Oracle Secure Enterprise Search server where status files can be temporarily written.
Max. no. of connection attempts	This is the maximum number of connection attempts to access the data feed or upload the status feed. Verify that the value is set to 3.

5 Select the Authorization tab.

6 Verify that Crawl-time ACL Stamping is set to ACLs Controlled by the Source.

7 Verify the Authorization Manager fields and values against the following table:

Field	Description
Plug-in Class Name	This field takes the value oracle.search.plugin.security.auth.siebel.SiebelAuthManager.
JAR File Name	This field takes the value oracleapplications/Siebel8Crawler.jar.
Siebel 8 authorization Web service endpoint	This field takes the value http://<webserver>/eai_<language>/ start.swe?SWEExtSource=WebService&SWEExtCmd=Execute&WSSOAP= 1.

Field	Description
User ID	This is the Siebel administrative User ID.
Password	This is the Siebel administrative User password.

8 Start the Oracle Secure Enterprise Search application, and verify that buscomp appears as a searchable source on the Search home page.

9 Navigate to the Sources screen.

10 Select the Edit option for the buscomp Source.

The Source Configuration tab is displayed for the buscomp Source.

11 Select the Authorization tab.

12 Verify that the SBLVISIBILITYID attribute is listed, with a value of Grant, in the Security Attributes table.

If the attribute has not been created you might have specified an incorrect path to the file RSS_Crawler_Configuration.xml.

Process of Setting Up the File System Source and Connector

The file system source and connector must be set up if you want external file systems to be indexed and searched by Oracle Secure Enterprise Search.

NOTE: The file system is not a required connector for Siebel Search and Oracle Secure Enterprise Search integration. This process is only required if the Siebel File System connector will be used.

To set up the file system source and connector for integration with Oracle Secure Enterprise Search, perform the following tasks:

■ "Configuring the Siebel File System Connector" on page 49

■ "Deploying the File System Source" on page 50

■ "Verifying the Oracle Secure Enterprise Search Source for the File System Connector" on page 51

■ "Enabling Rich Text Format Processing for the External File System Connector" on page 51

■ "Verifying Indexing for the File System Connector" on page 52

Configuring the Siebel File System Connector

The file system connector must be set up if you want external file systems to be indexed and searched by Oracle Secure Enterprise Search.

NOTE: The file system is not a required connector for Siebel Search and Oracle Secure Enterprise Search integration. This process is only required if the Siebel File System Connector will be used.

This task is a step in "Process of Setting Up the File System Source and Connector" on page 49.

To configure the Siebel file system connector

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Click on the New button on the list applet.

3 Complete the following file system connector fields.

Field	Value
Name	filesystem
Version	1.0
Library Name	filesystem
Engine Name	OSES
StartingUrl	The starting URL is the location where the files or directories are crawled for indexing. If a URL represents a single file, then the crawler searches only that file. If a URL represents a directory, then the crawler recursively crawls all files and subdirectories in that directory.
	Only local host file URLs are allowed. You cannot specify file URLs on a remote computer. It is recommended to set the Starting URL to a shared folder.
	On Windows set the value to *file://localhost/// SiebelServerIPAddress/fsl*.
	On UNIX set the value to *file://localhost//directory_1/ directory_2*

4 Select Save Record on the Connector list.

Deploying the File System Source

This topic covers remote administration of the Oracle Secure Enterprise Search File System Connector. This task configures the Oracle Secure Enterprise Search File System Source and Source Group, and creates the Oracle Secure Enterprise Search file system Schedule.

This task is a step in "Process of Setting Up the File System Source and Connector" on page 49.

To deploy the file system Source

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Select Filesystem Connector and click Deploy.

Verify that the deployment status of the file system Connector changes in the Search Connector Settings view.

Verifying the Oracle Secure Enterprise Search Source for the File System Connector

This topic covers verification of the Oracle Secure Enterprise Search Source to integrate with the Siebel Search file system connector. It is recommended to execute this task if the status of the file system connector does not update correctly after the Deploy operation, or if the error message "Error in RemoteAdmin Adapter" is displayed.

This task is a step in .

To verify the Oracle Secure Enterprise Search Source for the file system connector

1 Start the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Sources screen.

3 Select the Edit option for the Filesystem Source.

The Source Configuration tab is displayed for the Filesystem Source.

4 Verify that the Starting URL is set to *file://localhost///SiebelServerIPAddress/fs/*.

5 Start the Oracle Secure Enterprise Search application, and verify that Filesystem appears as a searchable source on the Search home page.

Enabling Rich Text Format Processing for the External File System Connector

Rich Text Format file types are not processed by default by Oracle Secure Enterprise Search. This task enables indexing and searching of RTF files for the external file system connector.

This task is a step in .

To enable Rich Text Format processing for the external File System Connector

1 Start the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Sources screen.

3 Select the Edit option for the file system Source.

The Customize File Source screen is displayed for the file system source.

4 Select the Document Types tab.

The supported document types are listed for the source type.

5 Select RTF Document in the Not Processed column, and click the right arrow to move it to the Processed column.

6 Click Apply.

Verifying Indexing for the File System Connector

The crawling and indexing operations can be invoked from the Oracle Secure Enterprise Search administration UI to make sure that the Oracle Secure Enterprise Search File System Source has been configured correctly. It is recommended to execute this task if the status of the business component connector does not update correctly after the Deploy operation, or if the error message "Error in RemoteAdmin Adapter" is displayed.

This task is a step in "Process of Setting Up the File System Source and Connector" on page 49.

To verify indexing for the file system connector

1 Navigate to the Schedules screen in the Oracle Secure Enterprise Search administration application.

2 Select Filesystem Schedule and click Start.

3 Click the Status link to view status details.

4 Start the Oracle Secure Enterprise Search application, and verify that Filesystem appears as a searchable source on the Search home page.

Process of Setting Up the Web Crawler Source and Connector

The crawler source and connector must be set up if you want web sources to be indexed and searched by Oracle Secure Enterprise Search.

NOTE: The Web Crawler is not a required connector for Siebel Search and Oracle Secure Enterprise Search integration. This process is only required if the Siebel Web Crawler connector will be used.

To set up the Web Crawler source and connector for integration with Oracle Secure Enterprise Search, perform the following tasks:

■ "Creating an Oracle Secure Enterprise Search Source for the Web Crawler Connector" on page 53

■ "Creating a Source Group for the Web Crawler Connector" on page 54

■ "Verifying Oracle Secure Enterprise Search Indexing of the Web Crawler Source" on page 54

■ "Administering the Siebel Web Crawler Connector" on page 55

Creating an Oracle Secure Enterprise Search Source for the Web Crawler Connector

This topic covers creation of an Oracle Secure Enterprise Search Web Crawler Data Source to integrate with the Siebel Search Web Crawler connector.

This task is a step in *"Process of Setting Up the Web Crawler Source and Connector" on page 52*.

To create an Oracle Secure Enterprise Search source for the Web crawler connector

1 Start the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Sources screen.

3 Select Web from the Source Type list.

4 Click Create.

5 Complete the Web Source fields. The fields are described in the following table.

Field	Description
Source Name	The name for the Web Source. This value corresponds to the crawler connector Library name in the Siebel Search Administration Search Connector Settings view. Set the value to crawler. This value is case sensitive.
Starting URL	The URL for the crawler to begin crawling. The starting address can be in HTTP or HTTPS format, for example, http://www.oracle.com.
Self Service	Enable Self Service so that Web sources that require user authentication can be crawled and indexed. Enabling Self Service means that end users can enter their credentials and authenticate themselves to crawl their data.
Start Crawling Immediately	Select this to start crawling automatically after the source is created. Clear this for crawling to begin at the next scheduled time. Note: If the Create and Customize button is clicked rather than the Create button, or if Self Service is enabled, then this option is ignored.

6 Click Create.

Creating a Source Group for the Web Crawler Connector

The Oracle Secure Enterprise Search File System Source must be assigned to an Oracle Secure Enterprise Search Source Group. The Oracle Secure Enterprise Search Source Group name must correspond to the Source name and the Siebel connector library name.

This task is a step in "Process of Setting Up the Web Crawler Source and Connector" on page 52.

To create a source group for the File System connector

1 Start the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Search screen, and then the Source Groups view.

3 Click Create.

4 Enter crawler as the name of the Source Group. This value is case sensitive.

5 Click Proceed to Step 2.

6 Select Web from the Select Source Type list.

7 Click Go.

8 Select crawler from the Available Sources list, and click the right arrow button to add it to Assigned Sources.

9 Click Finish.

10 Start the Oracle Secure Enterprise Search application, and verify that crawler appears as a searchable source on the Search home page.

Verifying Oracle Secure Enterprise Search Indexing of the Web Crawler Source

This topic covers invoking the crawling and indexing operations from the Oracle Secure Enterprise Search administration UI, to make sure that the Oracle Secure Enterprise Search crawler source has been configured correctly.

This task is a step in "Process of Setting Up the Web Crawler Source and Connector" on page 52.

To verify Oracle Secure Enterprise Search indexing of the Web Crawler data source

1 Navigate to Schedules view in the Oracle Secure Enterprise Search administration application.

2 Select the crawler Schedule and click Start.

3 Click the Status link to view status details.

Administering the Siebel Web Crawler Connector

The Siebel Search web crawler connector is required for integrating with the Oracle Secure Enterprise Search web crawler source. It is administered in the Search Connector Settings view.

This task is a step in .

To configure the Siebel Search web crawler connector

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

   The Search Connector Settings List applet is displayed.

2 Click the New button on the list applet.

3 Complete the following fields.

Field	Value
Name	crawler
Version	1.0
Library Name	crawler
Engine Name	OSES

4 Select Save Record on the Connector list.

Process of Setting Up the Database Source and Connector

The database source and connector must be set up if you want JDBC sources to be indexed and searched by Oracle Secure Enterprise Search.

NOTE: The Database Connector is not a required connector for Siebel Search and Oracle Secure Enterprise Search integration.

To set up the Database source and connector for integration with Oracle Secure Enterprise Search, perform the following tasks:

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Creating a Source for the Database Connector

This topic covers creation of an Oracle Secure Enterprise Search Source to integrate with the Siebel Search Database Connector. This task is executed in the Oracle Secure Enterprise Search Administration application.

This task is a step in the .

To create a source for the Database Connector

1 Navigate to the Sources screen.

2 Select Database from the Source Type menu.

3 Click Create.

4 Complete the Database Source fields. The fields are described in the following table.

Field	Description
Source Name	The name of the Database Source. This value corresponds to the crawler connector Library name in the Siebel Search Administration Search Connector Settings view. Set the value to Database.
Database Connection String	The JDBC connection string for the database. ■ Set the value to jdbc:oracle:thin@<Hostname>:<Port Number>:<SID> for an Oracle database. ■ Set the value to jdbc:sqlserver://<Hostname for SQL Server.
User ID	User ID to log in to the database.
Password	Password to log in to the database.
Query	Query to retrieve contents for crawling.
Query File	Path to the XML file specifying the attribute and attachment sub queries.
Cache File	Absolute path and filename prefix of temporary file for caching crawled data, for example: c:\temp
Path Separator	Path separator in the document path. Set the value to #.

5 Click Next.

6 Select ACLs Controlled by the Source to secure the table that is crawled.

7 Click Create.

Creating a Source Group for the Database Connector

The Oracle Secure Enterprise Search Database source must be assigned to an Oracle Secure
Enterprise Search source group. The Oracle Secure Enterprise Search source group name must
correspond to the source name and the Siebel connector library name. This task is executed in the
Oracle Secure Enterprise Search Administration application.

This task is a step in the

To create a source group for the Database Connector

1   Navigate to the Search screen, and then the Source Groups view.

2   Click Create.

3   Enter Database as the name of the Source Group.

4   Click Proceed to Step 2.

5   Select Database from the Select Source Type menu.

6   Click Go.

7   Select Database from the Available Sources list, and click the right arrow button to add it to
    Assigned Sources.

8   Click Finish.

9   Start the Oracle Secure Enterprise Search application, and verify that Database appears as a
    searchable source on the Search home page.

Verifying Oracle Secure Enterprise Search Indexing of the Database Source

This topic covers invoking the crawling and indexing operations from the Oracle Secure Enterprise
Search administration UI, to make sure that the Database source has been configured correctly.

This task is a step in the

To verify Oracle Secure Enterprise Search indexing of the Database Crawler

1   Navigate to Schedules view in the Oracle Secure Enterprise Search administration application.

2   Select the Database Schedule and click Start.

3   Click the Status link to view status details.

Configuring the Database Connector

The Siebel Search Database Connector is required for integrating with the Oracle Secure Enterprise
Search Database source. It is administered in the Siebel Search Connector Settings view.

This task is a step in the .

To configure the Database Connector

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Click the New button on the list applet.

3 Complete the following fields.

Field	Value
Name	Database
Version	1.0
Library Name	Database
Engine Name	OSES

4 Select Save Record on the Connector list.

Process of Setting Up the IMAP Email Source and Connector

The IMAP E-Mail source and connector must be set up if you want to index and search IMAP email sources. An email source derives its content from emails sent to a specific email address. When Oracle Secure Enterprise Search crawls an email source, it collects email from all folders set up in the email account, including Drafts, Sent Items, and Trash emails.

NOTE: The IMAP E-Mail Connector is not a required connector for Siebel Search and Oracle Secure Enterprise Search integration.

To set up the IMAP E-Mail source and connector for integration with Oracle Secure Enterprise Search, perform the following tasks:

■ "Creating a Source for the IMAP E-Mail Connector" on page 58

■ "Creating a Source Group for the IMAP E-Mail Connector" on page 59

■ "Verifying Oracle Secure Enterprise Search Indexing of the IMAP E-Mail Source" on page 60

■ "Configuring the IMAP E-Mail Connector" on page 60

Creating a Source for the IMAP E-Mail Connector

This topic covers creation of an Oracle Secure Enterprise Search Source to integrate with the Siebel Search E-Mail Connector. This task is executed in the Oracle Secure Enterprise Search Administration application.

This task is a step in the "Process of Setting Up the IMAP Email Source and Connector" on page 58.

To create a source for the IMAP E-Mail Connector

1 Navigate to the Sources screen.

2 Select E-Mail from the Source Type list.

3 Click Create.

4 Complete the E-Mail Source fields. The fields are described in the following table.

Field	Description
Source Name	The name of the IMAP E-Mail Source. This value corresponds to the crawler connector Library name in the Siebel Search Administration Search Connector Settings view. Set the value to IMAP E-Mail.
IMAP Server	The address of the IMAP server.
User Name	The user name for the email account.
Password	The password for the email account.

5 Click Create.

Creating a Source Group for the IMAP E-Mail Connector

The Oracle Secure Enterprise Search IMAP E-Mail source must be assigned to an Oracle Secure Enterprise Search source group. The Oracle Secure Enterprise Search source group name must correspond to the source name and the Siebel connector library name. This task is executed in the Oracle Secure Enterprise Search Administration application.

This task is a step in the "Process of Setting Up the IMAP Email Source and Connector" on page 58.

To create a source group for the IMAP E-Mail Connector

1 Navigate to the Search screen, and then the Source Groups view.

2 Click Create.

3 Enter IMAP E-Mail as the name of the Source Group.

4 Click Proceed to Step 2.

5 Select E-Mail from the Select Source Type list.

6 Click Go.

7 Select IMAP E-Mail from the Available Sources list, and click the right arrow button to add it to Assigned Sources.

8 Click Finish.

9 Start the Oracle Secure Enterprise Search application, and verify that IMAP E-Mail appears as a searchable source on the Search home page.

Verifying Oracle Secure Enterprise Search Indexing of the IMAP E-Mail Source

This topic covers invoking the crawling and indexing operations from the Oracle Secure Enterprise Search administration UI, to make sure that the IMAP E-Mail source has been configured correctly.

This task is a step in the *"Process of Setting Up the IMAP Email Source and Connector" on page 58*.

To verify Oracle Secure Enterprise Search indexing of the IMAP E-Mail Crawler

1 Navigate to Schedules view in the Oracle Secure Enterprise Search administration application.

2 Select the IMAP E-Mail Schedule and click Start.

3 Click the Status link to view status details.

Configuring the IMAP E-Mail Connector

The Siebel Search IMAP E-Mail Connector is required for integrating with the Oracle Secure Enterprise Search E-Mail source. It is administered in the Siebel Search Connector Settings view.

This task is a step in the *"Process of Setting Up the IMAP Email Source and Connector" on page 58*.

To configure the IMAP E-Mail Connector

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Click the New button on the list applet.

3 Complete the following fields.

Field	Value
Name	IMAP E-Mail
Version	1.0
Library Name	IMAP E-Mail
Engine Name	OSES

4 Select Save Record on the Connector list.

Process of Setting Up the Lotus Notes Source and Connector

The Lotus Notes source and connector must be set up if you want to index and search Lotus Notes sources. A Lotus Domino Server instance can have one or more databases that can be crawled using the Lotus Notes source. The Lotus Notes source navigates through the databases to crawl email, calendar and address book data.

NOTE: The Lotus Notes connector is not a required connector for Siebel Search and Oracle Secure Enterprise Search integration.

To set up the Lotus Notes source and connector for integration with Oracle Secure Enterprise Search, perform the following tasks:

■ "Setting Up Identity Management for Lotus Notes" on page 61

■ "Setting Up Identity Management for Lotus Notes" on page 61

■ "Creating a Source Group for the Lotus Notes Connector" on page 63

■ "Verifying Oracle Secure Enterprise Search Indexing of the Lotus Notes Source" on page 64

■ "Configuring the Lotus Notes Connector" on page 64

Setting Up Identity Management for Lotus Notes

This topic covers setting up identity management for the Lotus Notes connector. Oracle Secure Enterprise Search provides a Lotus Notes identity plug-in so that the Lotus Domino Directory can be used to authenticate and validate the Lotus Notes users and groups for Siebel Search. This task is executed in the Oracle Secure Enterprise Search Administration application.

This task is a step in the "Process of Setting Up the Lotus Notes Source and Connector" on page 61.

To set up identity management for Lotus Notes

1 Navigate to the Global Settings screen, and then the Identity Management Setup view.

2 Select Lotus Notes in the Identity Plug-In applet.

3 Click Activate.

4 Complete the Lotus Notes Source fields. The fields are described in the following table.

Field	Description
Server Name	The Domino server fully qualified host name. The value format is <Server-Name>:<HTTP Port Number>. Port number is not required if the Domino server is using the default 80 port.

Field	Description
User Name	Name of the Lotus Domino server user to be used for crawling the Lotus Notes databases.
Password	Password for the Lotus Domino server user to be used for crawling the Lotus Notes databases.

5 Click Finish.

Creating a Source for the Lotus Notes Connector

This topic covers the creation of an Oracle Secure Enterprise Search source to integrate with the Siebel Search Lotus Notes connector. This task is executed in the Oracle Secure Enterprise Search Administration application.

This task is a step in the .

To create a source for the Lotus Notes Connector

1 Navigate to the Sources screen.

2 Select Lotus Notes from the Source Type list.

3 Click Create.

4 Complete the Lotus Notes Source fields. The fields are described in the following table.

Field	Description
Source Name	The name of the Lotus Notes source. This value corresponds to the crawler connector Library name in the Siebel Search Administration Search Connector Settings view. Set the value to Lotus Notes.
Server Name	The IP address of the Domino server. The value is specified in the format <IP address>:< HTTP port number>.
Attribute List	The list of attribute names in the Lotus Notes database to be crawled. The attributes are specified in a comma-separated list in the format <attribute name>, <attribute name>.
User Name	The Lotus Notes user who has access to the Lotus Notes database used for crawling.
Password	The password for the Lotus Notes account.

Field	Description
Container Name	The names of the containers to be crawled. Multiple container names are specified in a comma-separated list. The container name can include folders, databases, views and folders within databases. For example, database-abc.nsf, folders-folder1, views-abc.nsf:By Author, and db-abc.nsf:folder\subfolder.
Authentication Attribute	The name of the authentication attribute that is used to validate the ACL. For Active Directory identity plug-in manager, the value is set to USER_NAME. For the Lotus Notes identity plug-in manager, the value is set to NATIVE.
Notes Title Field	This field is used to specify the text fields that are parsed to retrieve the title field, such as Subject.

Creating a Source Group for the Lotus Notes Connector

The Oracle Secure Enterprise Search Lotus Notes source must be assigned to an Oracle Secure Enterprise Search source group. The Oracle Secure Enterprise Search source group name must correspond to the source name and the Siebel connector library name. This task is executed in the Oracle Secure Enterprise Search Administration application.

This task is a step in the .

To create a source group for the Lotus Notes Connector

1   Navigate to the Search screen, and then the Source Groups view.

2   Click Create.

3   Enter Lotus Notes as the name of the Source Group.

4   Click Proceed to Step 2.

5   Select Lotus Notes from the Select Source Type list.

6   Click Go.

7   Select Lotus Notes from the Available Sources list, and click the right arrow button to add it to Assigned Sources.

8   Click Finish.

9   Start the Oracle Secure Enterprise Search application, and verify that Lotus Notes appears as a searchable source on the Search home page.

Verifying Oracle Secure Enterprise Search Indexing of the Lotus Notes Source

This topic covers invoking the crawling and indexing operations from the Oracle Secure Enterprise Search administration UI, to make sure that the Lotus Notes source has been configured correctly.

This task is a step in the "Process of Setting Up the Lotus Notes Source and Connector" on page 61.

To verify Oracle Secure Enterprise Search indexing of the Lotus Notes Source

1 Navigate to Schedules view in the Oracle Secure Enterprise Search administration application.

2 Select the Lotus Notes Schedule, and click Start.

3 Click the Status link to view status details.

Configuring the Lotus Notes Connector

The Siebel Search Lotus Notes Connector is required for integrating with the Oracle Secure Enterprise Search E-Mail source. It is administered in the Siebel Search Connector Settings view.

This task is a step in the "Process of Setting Up the Lotus Notes Source and Connector" on page 61.

To configure the Lotus Notes Connector

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Click the New button on the list applet.

3 Complete the following fields.

Field	Value
Name	Lotus Notes
Version	1.0
Library Name	Lotus Notes
Engine Name	OSES

4 Select Save Record on the Connector list.

Administering Connectors for Oracle Secure Enterprise Search Integration

This topic covers administering connectors for Siebel Search and Oracle Secure Enterprise integration.

To administer connectors for Siebel Search and Oracle Secure Enterprise integration, perform the following tasks:

Updating Connector Settings

This topic covers updating Search connector settings for a connector which has already been deployed. The changes are entered in the Siebel Search Connector Settings view, and submitted to Oracle Secure Enterprise Search for remote update.

This task is a step in

To update connector settings

1 Navigate to Administration – Search screen, then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Select the Connector for which settings have been changed, and click Update Source.

Deleting a Connector

This task deletes the Siebel connector, the corresponding Oracle Secure Enterprise Search source, source group, and schedule, and all index records for that connector. It is recommended to execute this task if a malformed connector must be deleted and recreated.

This task is a step in

To delete a connector

1 Navigate to Administration – Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Select the Connector and click Delete Source.

Configuring the Default Search Definition

The list of Categories displayed in the Search Index Settings view is determined by the default Search
Definition in the Search Definition view. Each Siebel application is mapped to a Search Definition.
Before indexing business components or configuring Search Categories in the Search Index Settings
view for a particular application, the corresponding Search Definition must be set up as the default
Definition in the Search Definition view. For more information on Search Definition and Siebel
application mappings, see "Application and Search Definition Mappings" on page 156.

To configure the default search definition

1   Navigate to Administration – Search screen, and then the Search Definition view.

2   Select the Search Definition that is to be set as the default.

3   Select the Default Flg option.

Activating Search Run-Time Events

Activating preconfigured Search run-time events is required to enable incremental indexing and
refresh indexing. This task is required for both thick and thin clients. Search runtime events monitor
create, update and delete events executed on Search Objects in the data repository. The Action Sets
create records in the transaction table (S_SRCH_CHG_TXN) and trigger the Search Content business
service method *UpdateIndex*.

To activate the Search run-time events

1   Navigate to Administration - Runtime Events screen, and then the Action Sets view.

2   Query on the Update Index Action Set.

3   Select the Active and Enable Export options to activate the Update Index run-time events.

Creating Server Repeating Jobs for Incremental Indexing

This topic covers creating server repeating jobs to enable incremental indexing. Incremental
indexing enables the index to automatically update, at preconfigured intervals, with create, update
and delete operations that have been executed on the data source since the last index update. It
provides a more efficient method of updating the index without the overhead of a full Refresh Index
operation. Incremental indexing is supported for thin clients. Refresh indexing must be used on thick
clients.

When importing a batch of data, it is recommended that incremental indexing is turned off and a one
time Index All operation is performed. Incremental indexing is turned off by deactivating the Update
Index action set on the Runtime Events Action Set view. For more information on server component
repeating jobs, see *Siebel System Administration Guide*.

NOTE: This task is required only for thin client deployments.

To create server repeating jobs for incremental indexing

1 Navigate to Administration - Server Configuration screen, and then the Job Templates view.

2 In the Jobs Templates list, click New.

3 Set the Name to Search Incremental Indexer.

4 Set the Short Name to SII.

5 In the Component/Job field, click the list and select the SearchDataProcessor server component.

6 In the Job Parameters list, add the following two parameters for the component job.

Name	Value
Business Service Name	Search Data Processor
Method Name	CreateIncrementalIndex

7 Navigate to Administration - Server Management screen, and then the Jobs view.

8 Add a new repetitive job with the values described in the following table.

Field	Description
Component/Job	Set this to Search Incremental Indexer.
Scheduled Start	The scheduled start date and time of the component job.
Expiration	The date at which the component job is no longer valid.
Requested Server	Set if you want to target a server component on a specific Siebel Server.
Request Key	Set if you want to target a component or repeating component job to a specific instance of the server component identified by the request key. In all other situations, keep this field blank.
Delete Interval	Set with Delete Unit field, this field determines the length of time before the component job is deleted. If not updated, this field defaults to 1.
Delete Unit	Set with Delete Interval field, this field determines the length of time before the component job is deleted. If not updated, this field defaults to Weeks.
Repeating	This option must be selected.

Field	Description
Repeat Units	Set the value to Seconds.
Repeat Interval	Set the value to 600.
Retry on Error	This option must be selected. This option will retry the component job in case of error.
Sleep Time	This field determines the amount of time before the component job is retried. The value is specified in seconds. Set the value to 60.
Number of Retries	This field determines the number of times the component job is retried. Set the value to 1.

9 In the Job Parameters list, add the following two parameters for the component job.

Name	Value
Business Service Name	Search Data Processor
Method Name	CreateIncrementalIndex

10 Click Start to start the new job.

Creating Server Repeating Jobs for HTTP Indexing

This topic describes how to create the Search Schedule Monitor repeating job for HTTP indexing. Search Schedule Monitor starts the Oracle Secure Enterprise Search Scheduler. For more information on server component repeating jobs, see *Siebel System Administration Guide*.

NOTE: This task is required only for thin client deployments.

To create server repeating jobs for HTTP indexing

1 Navigate to the Administration - Server Configuration screen, and then the Job Templates view.

2 In the Jobs Templates list, click New.

3 Set the Name to Search Schedule Monitor.

4 Set the Short Name to SSM.

5 In the Component/Job field, select the SearchDataProcessor server component.

6 In the Job Parameters list, add the following two parameters for the component job.

Name	Value
Business Service Name	Search Data Processor
Method Name	ScheduleMonitor

7 Navigate to Administration - Server Management screen, and then the Jobs view.

8 Add a new repetitive job with the values described in the following table.

Field	Description
Component/Job	Set to Search Schedule Monitor
Repeating	This option must be selected.
Repeat Units	Set the value to Minutes.
Repeat Interval	Set the value to 5.
Retry on Error	This option must be selected. This option will retry the component job in the event of an error.
Sleep Time	This field determines the amount of time before the component job is retried. The value is specified in seconds. Set the value to 60.
Number of Retries	This field determines the number of times the component job is retried. Set the value to 1.

9 Click Submit Job.

Configuring Session Mode Settings for HTTP Indexing

The eapps.cfg file contains parameters that control interactions between the Siebel Web Engine and the Siebel Web Server Extension (SWSE), for all Siebel Business Applications deploying the Siebel Web Client. To use session mode for HTTP indexing, configure the SessionTracking parameter in the eapps.cfg file. For more information on eapps.cfg, see *Siebel Security Guide*.

To configure session mode settings for HTTP indexing

1 Navigate to the SWEAPP_ROOT\bin directory.

SWEAPP_ROOT is the directory in which you installed the SWSE.

2 Open the file eapps.cfg

3 Set SessionTracking to Cookie.

Configuring Enterprise Application Integration Settings for HTTP Indexing

The topic describes the Enterprise Application Integration settings that are required to enable
indexing over HTTP. Verify if the settings exist in the file eai.cfg. For more information on configuring
Enterprise Application Integration settings, see *Integration Platform Technologies: Siebel Enterprise
Application Integration*.

To configure Enterprise Application Integration settings for HTTP indexing

1 Open the file eai.cfg.

2 Add the following section and settings:

[SearchDataProcessor]

Service = Search Data Processor

Method = GetSiebelData

3 Add the following setting to the [HTTP Services] section:

SearchDataProcessor = SearchDataProcessor

4 Save the changes.

5 Restart the Siebel Server.

Configuring Secure Sockets Layer Authentication for HTTP Indexing

For information on configuring Secure Sockets Layer (SSL) authentication for HTTP indexing, see
Siebel Security Guide.

Importing the SSL Certificate for HTTP Indexing

Oracle Secure Enterprise Search uses the default keystore in J2SE: `$ORACLE_HOME/jdk/jre/lib/
security/cacerts`. The Siebel SSL certificate must be imported into this keystore to use SSL for
HTTP indexing.

NOTE: Back up the keystore file before modifying it.

To import the SSL certificate for HTTP indexing

1 Copy the Siebel SSL certificate from the Siebel Server to the Oracle Secure Enterprise Search
server at SES_HOME/ses1/jdk/jre/lib/security/.

2 Execute the following command:

```
SES_HOME/ses1/jdk/jre/bin keytool -import -trustcacerts -alias ohs -file ../lib/
security/certificate.cer -keystore ../lib/security/cacerts -storepass changeit
```

3 Select Yes when asked for confirmation to import the certificate into your specified keystore.

Configuring Single Sign-On Authentication for HTTP Indexing

For information on configuring Single Sign-On (SSO) authentication for HTTP indexing, see *Siebel
Security Guide*.

Configuring User Authentication for Search Queries

This topic describes configuring end user authentication for search queries. To require user login for
secure content, configure the Login Requirement value in Oracle Secure Enterprise Search.

To configure user authentication for search queries

1 Log in to the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Global Settings screen, and then the Query Configuration view.

3 Set the Login Requirement value to one of the following options:

■ **Require login for secure content only.** This is the default. Users can search public content
without logging in, but they must log in to retrieve secure content.

■ **Require login for public and secure content.** Users must first log in to retrieve any
content.

Disconnecting from Oracle Secure Enterprise Search and Deactivating the Identity Manager

This topic covers disconnecting from Oracle Secure Enterprise Search, and deactivating the identity
plugin manager for Siebel.

Disconnecting from Oracle Secure Enterprise Search

This topic covers disconnecting from Oracle Secure Enterprise Search, using the Siebel Search
Administration UI.

To disconnect from Oracle Secure Enterprise Search

1 Navigate to the Administration – Search screen, and then the Search Engine Settings view.

2 Select the CSSOSESAdapter search engine library, and click Disconnect.

The Connected flag in the Search Engine Settings view is set to false.

Deactivating the Siebel Identity Plugin Manager

This topic covers deactivating the Siebel identity plugin manager, using the Oracle Secure Enterprise
Search Administration UI.

To Deactivate the Siebel Identity Plugin Manager

1 Log in to the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Global Settings screen.

3 Select Identity Management Setup.

The Siebel Identity Plugin Manager is displayed.

4 Click Deactivate.

4 Setting Up Search for Siebel Remote

This chapter covers setting up Siebel Search for Siebel Remote. This chapter includes the following topics:

- "About Installing Search for the Siebel Remote Client" on page 73
- "Creating the Siebel Search Center Directory Structure on the Siebel Remote Client" on page 74
- "Installing Siebel Search for Siebel Remote" on page 74
- "Starting the DSM Listener" on page 75
- "Configuring Search Field Mapping Settings for Siebel Remote" on page 75
- "Adding the Siebel Mobile Search Administration Screen for Siebel Remote" on page 76
- "Verifying the Business Component Search Connector Settings for Siebel Remote" on page 77
- "Activating Search for Siebel Remote" on page 77
- "Configuring Search Engine Settings for Siebel Remote" on page 78
- "Process of Setting Up the Index Definition for the Siebel Remote Client" on page 79
- "Activating Search Run-Time Events for Siebel Remote" on page 80
- "Synchronizing Siebel Search for Siebel Remote" on page 80
- "Search Functionality Supported for Siebel Remote" on page 81

About Installing Search for the Siebel Remote Client

This chapter covers installation of Search for Siebel Remote, and installation of related Siebel components. The Siebel Mobile Client must be installed before installing Search for Siebel Remote. See *Siebel Remote and Replication Manager Administration Guide* for information on the Siebel Mobile Web Client and Siebel Remote. Siebel Search for Siebel Remote is supported in employee-facing applications, and is not supported in customer-facing applications.

NOTE: Siebel Search for Siebel Remote is supported only on the Windows operating system.

Upgrading from Siebel Search Version 7.x
Any custom search objects which were defined in Siebel Search Version 7.x must be redefined in the file SSC_DSM_Field-Mappings.xml. See Chapter 7, "Configuring Index Mappings."

Creating the Siebel Search Center Directory Structure on the Siebel Remote Client

This topic covers creation of the directories that are required when using Siebel Search for Siebel Remote.

To create the Siebel Search Center Directory Structure on the Siebel Remote Client

1 Create the Siebel Search Center Config directory `D:\fs\SSC\Config\` under the Siebel File System on the Siebel Remote client.

2 Create a directory for storing the XML feed files on the Siebel Server, for example, `D:\fs\SSC\xmldata`.

   The XML feed files are generated at runtime and temporarily stored in the `\xmldata` folder. The feed files are automatically deleted once indexing completes.

3 Create a directory for storing the XML field mapping file on the Siebel Server, for example, `D:\fs\SSC\Config`.

Installing Siebel Search for Siebel Remote

Siebel Mobile Search crawls Siebel data in RSS feed format. The file ConfigRSS.exe is used to install and configure Siebel Mobile Search.

To install Siebel Search for Siebel Remote

1 Install the client for Siebel Remote.

   This installs dsm.zip to `<mobile client install dir>\BIN\`

2 Extract the contents of dsm.zip to create the directory `<mobile client install dir>\BIN\dsm\`.

3 Copy the XML field mapping file from the mobile Client installation directory at `<mobile client install dir>\BIN\` to the config directory at `D:\fs\SSC\Config\`. The correct mapping file to copy is determined as follows:

   ■ Copy the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales, or Siebel Marketing.

   ■ Copy the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Clinical, or Siebel Pharma.

4 Rename the XML field mapping file to SSC_DSM_Field-Mappings.xml.

5 Double-click on the file ConfigRSS.exe to install the Disconnected Search Module (DSM) client.

6 Complete the DSM Configuration fields. Some fields are described in the following table.

Field	Description
Install Directory	This is the install directory for the DSM log file and encrypted password file. The default value is C:\Documents and Settings\<UserName>\My Documents\Disconnected Search.
Feed Location	Location where the XML-based indexable data files will be generated. Set the value to D:\fs\SSC\xmlidata.
HTTP Port	This is the port of the DSM listener. The default value is 8095. This value will be required when configuring the DSM Index Listener field in the Mobile Search administration view.
User Name	Create a user name for DSM. This value is also required when setting the DSM Username setting in the Search Engine Settings view.
Password	Create a password for DSM. This value is also required when setting the DSM Password setting in the Search Engine Settings view.

7 Click Install.

Starting the DSM Listener

This topic covers enabling Siebel Search for Siebel Remote by starting the Disconnected Search Module (DSM) Listener.

To start the Disconnected Search Module Listener

1 Double-click on the file SearchAPI.exe on the Siebel Mobile client.

This file is located at <mobile client install dir>\BIN\dsm\.

2 Enter the DSM User Name and Password.

3 Select Debug Mode to enable debug logging level.

This setting is optional, and is only required if you wish to view logging information.

4 Click Start Listener.

Configuring Search Field Mapping Settings for Siebel Remote

This topic covers configuring the Search field mapping settings for Siebel Remote The settings enclosed in percentage tags in the field mapping file must be configured to Search for Siebel Remote

To configure Search field mapping settings for Siebel Remote

1 Open the file D:\fs\SSC\Config\SSC_DSM_Field-Mappings.xml in an XML or text editor.

2 Configure all fields enclosed in percentage tags. The fields are described in the following table:

Field	Description
%webserver%	Set the value to the IP address of the Mobile Client host computer.
%objmgr%	Set the object manager value to the application that is running, for example, CallCenter or Fins.
%lang%	Set the value to the language which the Siebel application is configured for, for example, the value for English is enu.
%hostName%	Set the value to the IP address of the Mobile Client host computer.

Adding the Siebel Mobile Search Administration Screen for Siebel Remote

The Siebel Mobile Search Administration screen must be added for each application project in Siebel Tools.

NOTE: The Mobile Search Administration screen has already been added for the Call Center application.

To add the Mobile Search Administration screen for Siebel Remote

1 Connect to Tools.

2 From the Object Explorer, expand the Application object type.

3 Select the application in the Object Explorer.

Note the project to which the application belongs.

4 Lock the application project.

5 From the Object Explorer, expand the Application object type.

6 Select Screen Menu Item.

7 Choose Edit, and then New Record, and use the information in the following table to define the object properties:

Property	Description
Screen	Set the value to Search Mobile Admin View Screen.

Property	Description
Sequence	Use Screen View Sequence Editor to determine the sequence of views. Do not edit the Sequence property of the Screen View Object manually. See *Configuring Siebel Business Applications* for defining Sequence for Screen View Objects.
Text - String Reference	Set the value to SBL_ADMINISTRATION_-_MOBILE_SEARCH

8 Compile the changes.

Verifying the Business Component Search Connector Settings for Siebel Remote

The Search business component connector for Siebel Remote is preconfigured. This task covers verifying the connector settings.

To verify the Search Connector settings for Siebel Remote

1 Navigate to the Administration – Mobile Search screen, and then the Search Connector Settings view.

The Search Connector Settings List applet is displayed.

2 Verify the settings in the following table. Values are case-sensitive.

Field	Description
Name	The preconfigured value must be set to Mobile Business Component.
Library Name	The preconfigured value must be set to buscomp.
Engine Name	The preconfigured value must be set to DSM.

Activating Search for Siebel Remote

Siebel Search for Siebel Remote is activated by selecting the Default Flag option in the Search Engine Settings view. Only one search engine can be activated at any one time—make sure that the Default Flg option is selected for just one search engine.

To activate Search for Siebel Remote

1 Navigate to Administration – Mobile Search screen, and then the Search Engine Settings view.

2 Select the Default Flag option for DSM Search Engine.

Configuring Search Engine Settings for Siebel Remote

This topic covers configuration of the Search Engine Settings view for Siebel Remote.

To configure search engine settings for Siebel Remote

1 Navigate to the Administration – Mobile Search screen, and then the Search Engine Settings view.

2 Complete the search engine fields. The fields are described in the following table:

Field	Description
Batch Submit Size	The number of records submitted at a time in each feed for indexing. Set the value to less than or equal to 1500. The Object Manager query performance, search engine footprint size, and Siebel Server specification are used in determining optimum Batch Submit Size.
DSM Index Listener	Set the value to http://*<localhost>:<HTTP Port>*/?index, where HTTP Port is the port of the DSM Listener. HTTP Port is defined when installing the Mobile Search client. The default value is http://localhost:8095/?index.
DSM Password	This is the password that was created when installing the DSM client. See "Installing Siebel Search for Siebel Remote" on page 74.
DSM Username	This is the user name that was created when installing the DSM client. See "Installing Siebel Search for Siebel Remote" on page 74.
Dupmarked	This setting configures the marking of duplicates in the result set. Set the value to False.
Dupremoved	This setting configures the removal of duplicates from the result set. Set the value to True.
Filename	This value configures the path of the DSM field mapping file SSC_DSM_Field-Mappings.xml on the Mobile client. Set the value to D:\fs\SSC\Config\SSC_DSM_Field-Mappings.xml
Recordcount	This setting configures the inclusion of an estimate in the result for the number of records in the result set. Set the value to True.
Shared Search UNC Location	This is the Siebel Search Center location for storing configuration and XML data files. It is the parent directory of the Xmlidata directory. The address format is D:\fs\SSC.

Field	Description
WebServer Address	URL for the Search Service. The address format is *http://localhost:<HTTP_Port>/*. The default value is *http://localhost:8095/*.
XML Indexable Data Location	This is the Siebel Search Center location where the XML feed files are temporarily stored for the DSM Listener to access and index. The path format is: `D:\fs\SSC\xmlidata\`.

3 Select Save Record on the list applet.

4 Log out and log in to the Mobile Client for the changes to take effect.

NOTE: The Siebel Server must be restarted every time a change is made to Search Engine Settings configuration.

Process of Setting Up the Index Definition for the Siebel Remote Client

Search Categories for each Siebel application are defined in Search Definition groupings in the Search Definition view. This view can be used for creating or customizing Search Definitions and Search Definition Categories. This topic covers configuring the Mobile Client Search Definition in the Siebel Mobile Search administration UI, and then adding the definition to the application configuration file.

To set up the index definition for the Search mobile client, perform the following tasks:

■

■

Configuring the Search Definition for Siebel Remote

This topic covers configuring the Mobile Client Search definition in the Search Definition view of the Administration – Mobile Search screen. The list of Categories displayed in the Search Index Settings view is determined by the default Search Definition in the Search Definition view.

To configure the default search definition for Siebel Remote

1 Navigate to Administration – Mobile Search screen, and then the Search Definition view.

2 Select Mobile Client Search Definition.

3 Select the Default Flg option.

Configuring the Application Configuration File

This topic covers configuring the Search Definition in the SearchDefName parameter of the application configuration file for the Siebel Mobile Client. Application configuration file names are in the format *<application>.cfg*, for example, the file shm.cfg is the Siebel Hospitality application configuration file, and the file uagent.cfg is the Siebel Call Center application configuration file. Verify that you are using the correct application configuration file by checking the ApplicationName parameter in the file.

NOTE: This configuration change must be applied to each application configuration file for each language in the enterprise.

To configure the application configuration file

1   Open the application configuration file in a text editor. On Windows the file is located at: *<install_dir>bin\<language>\<application>.cfg*

2   Scroll to the SIEBEL section of the configuration file.

3   Change the value of the SearchDefName parameter to Mobile Client Search Definition, and save the changes.

Activating Search Run-Time Events for Siebel Remote

Activating preconfigured Search run-time events is required to enable refresh indexing. Search runtime events monitor create, update and delete events executed on Search Objects in the data repository. The Action Sets create records in the transaction table and trigger the Search Content business service method UpdateIndex.

To activate the Search run-time events for Siebel Remote

1   Navigate to Administration - Runtime Events screen, and then the Action Sets view.

2   Query on the Update Index Action Set.

3   Select the Active and Enable Export options to activate the Update Index run-time events.

NOTE: Incremental indexing is not supported for disconnected Mobile Search.

Synchronizing Siebel Search for Siebel Remote

See *Siebel Remote and Replication Manager Administration Guide* for information on synchronizing a Mobile Web Client with the Siebel Remote server.

Search Functionality Supported for Siebel Remote

Table 5 summarizes the Search functionality available for Siebel Remote.

Table 5. Supported Search Functionality for Siebel Remote

Functionality	Supported for Siebel Remote
Siebel Open UI	No.
Siebel High Interactivity	Yes.
Siebel Standard Interactivity	Yes.
Business component indexing	Yes.
File system indexing	No.
Web source indexing	No.
Database source indexing	No.
IMAP email source indexing	No.
Lotus notes source indexing	No.
Secure indexing	No.
Refresh indexing	Yes.
Incremental indexing	Manual incremental indexing supported.
Asynchronous indexing	No.
Index status monitoring	No.
Real time database queries	No. Searches are run against search indices.
Full text search	Yes.
Keyword search	Yes.
Automated suggested keywords	No.
Filter field search (also called parametric search).	Yes.
Wildcard search	Yes. Does not apply to punctuation characters, such as spaces, or commas. Applies to characters only within a word.
Case insensitive search	Yes.
Boolean operators	Yes. Supports AND and OR Boolean operators.
Searches on content in attachments	Yes.
Searches on external data sources and file systems	Yes.

Table 5.   Supported Search Functionality for Siebel Remote

Functionality	Supported for Siebel Remote
Search by file format	No.
Associate option in search results	Yes.
Password Encryption	No.

5 Configuring Siebel Search

This chapter describes how to configure Siebel Search views, and execution settings. It includes the following topics:

This chapter assumes that you know how to use Siebel Tools. For more information, see *Using Siebel Tools*.

About Siebel Tools Configuration Tasks

Siebel Tools is a declarative software development tool that allows you to configure the underlying data and data presentation of your Siebel application without making changes to the program source code. Siebel Business Applications provide a core set of search object definitions that you can use as a basis for your tailored application. There are no source code modifications, nor modifications to schema. Siebel Tools allows you to create and maintain a custom Siebel Repository file (.srf) to store your custom configurations.

Enabling and Disabling Quick Search Mode for the Search Results View

The Search results can be configured to display either in Quick Search mode in the business component view on the right hand side, or in the Search Results view on the left hand side. The display options differ as follows:

■ **Quick Search Mode.** Displays the search results in the business component view on the right
hand side, and bypasses the intermediate search results page. In this mode the list of search
results are lost when the user drills down on an individual search result. Preview and Attach
features are not available in this mode.

■ **Results Retention Mode**. Displays the Search results in the Search Results view on the left,
under the Look-In applet. In this mode, the user can drill down on a record to get the detailed
record information displayed on the right hand side, and the search results are retained under
the Look In panel on the left hand side. Preview and Attach features are available in this mode.

The Search results view is configured in Siebel Tools.

NOTE: If Preview or Attach features are required, the Search results must be configured to display
in the Search Results view on the left hand side.

To enable or disable quick search mode for Search Results View

1 Log in to Siebel Tools.

2 Choose Tools, and then Lock Project, to lock the Search project.

3 Select Applet in the Object Explorer.

4 Query for Search lookin applet.

5 Navigate to Applet User Prop.

6 Configure the SamePage value as follows:

■ Set SamePage to FALSE to display the Search results in the business component view on the
right hand side in Quick Search mode.

■ Set SamePage to TRUE, and GotoResultsView to Search lookin Results View, to display the
Search results on the left under the Look-In panel.

7 Navigate to Business Service.

8 Query for Search External Service.

9 Select Business Service User Property in the Object Explorer.

10 Create the SamePage record.

11 Configure the SamePage value as follows:

■ Set SamePage to FALSE to display the Search results in the business component view on the
right hand side in Quick Search mode.

■ Set SamePage to TRUE, and GotoResultsView to Search lookin Results View, to display the
Search results on the left under the Look-In panel.

12 Compile the Siebel.srf file.

13 Restart the Siebel Server.

Configuring Pick Views for Search and Attach Records

Users can associate Search results from the search center with the active record in the top applet in the main content area. The Pick View object, located under Find Pick View, identifies the applet that can receive the selected item from the Search Results list as an associated record. This applies only to applets that can handle such associations.

In order to attach a record in the Search Results list applet to an active parent object in the Content Area, the relationship between the record and the applet must be many-to-many. In Siebel Tools, this relationship is implemented by creating a link between the two business components with an intersection table. If you select a business object and find out that a Search object is one of its business components, and there is a many-to-many link between them, it is permissible to attach this result row to an object.

This association happens in the business object layer, in terms of Siebel Three-Level Architecture. To support the user to go to a view directly to verify the association, there is a requirement that Pick View be added to the Search object. This Pick View defines the view that users can go to after an association occurs, as well as the candidate association. You must add new Pick Views in order to add this Search object to a business object.

Pick views have been created for all existing business components. Pick views must be created in Siebel Tools for any new or custom business component.

To create Search Pick Views for custom business components

1 Log in to Siebel Tools.

2 Lock the project that will contain the Pick View object you want to add.

3 In the Object Explorer choose Find, and then Find Pick View.

4 In the Find Pick Views window, create a new record, and enter the required property values. Some properties are described in the following table:

Property	Description	Required
Applet Name	Name of the applet	Yes
View Name	Name of the view containing the applet	Yes
Name	Logical name of the pick view	Yes
Field Name	Name of the multivalue group field that will receive the search result	No

5 To commit your changes, click anywhere outside the modified row, or move outside the row using the up and down arrow keys.

6 Compile your changes to the SRF file.

Creating Preview Views for Search

In order for a user to preview a result record, you must define the view to use for the preview. You define the view by setting the Preview property of the Search Category object. The view will show up in a pop-up window when the user clicks on the Preview button. Siebel Search does not support any navigation in the pop-up Preview view. The Preview view is read-only with no navigation buttons. When you have a preview view defined for a search category object, the Drilldown business component property must be populated. The Drilldown View property does not have to be populated.

To create a preview view for Search

1   Log in to Siebel Tools.

2   Choose Tools, and then Lock Project to lock the project that will contain the Preview View object you want to add.

3   Choose an existing applet that best fits your preview purpose.

This applet must be a Form Applet, and must be based on the class CSSFrameBase.

4   Create a Base type Applet Web Template and comment it as being for Search Preview.

5   Map Data type Controls to Applet Web Template Items.

Do not map any button type controls that are command controls.

6   Configure a new view, and associate the applet in Base mode with your new view.

7   Associate this view with a screen that will exist in the application where you are running Search Center.

Viewbar Text and Menu Text are not required.

8   Compile your changes in the SRF file.

Make sure to add the view to the user's responsibilities and restart the services to refresh the responsibilities.

Configuring the Frame Size for Search

This topic covers configuration of the frame size for the left and right frames in the Siebel Search Center.

To configure the frame size for Search

1   Log in to Siebel Tools.

2   In the Object Explorer, expand Business Service.

3   Query for the Invoke Search business service.

4   In the Object Explorer, click Business Service User Prop.

5   In the Business Service User Props view, select Invoke Search.

6 Set the SWEFrameSize values for the left and right frames, for example, entering 35%,65% assigns a value of 35% for the left frame, and a value of 65% for the right frame.

7 Compile the changes in the Siebel repository file.

Configuring the Indexing Mode for Index Status Monitoring

This topic covers configuration of the indexing mode for index status monitoring. The indexing mode is configured for FTP indexing by default. For information on index status monitoring, see "Monitoring Indexing Status" on page 125.

To configure the indexing mode for index status monitoring

1 Log in to Siebel Tools.

2 Query for the Search Index Batches BC business component.

3 Configure the Search Specification property using the following SQL conditions:

■ Set Search Specification to Index Mode<>'FTP' for HTTP indexing.

■ Set Search Specification to Index Mode<>'HTTP' for FTP indexing.

4 Compile the changes in the Siebel repository file.

Process of Configuring Access Control for Search Results

User access to a particular view in the search results is determined by the sblvisibilityid index field mapping, and the account profile of the logged in user, such as Position ID or Account ID.

To configure access control for search results, perform the following tasks:

■ Configure sblvisibility Index Field Mappings on page 87

■ Configuring the Search Visibility Objects on page 88

■ Configuring Drill Down View Sequence for Search Results on page 89

Configure sblvisibility Index Field Mappings

The sblvisibilityid index fields are mapped to business component access control fields, such as Position ID or Account ID. The sblvisibilityid index fields can also be mapped to custom access control fields. Multiple sblvisibilityid index fields can be defined for each business component. The sblvisibilityid index fields are configured in *Application_Suite*_OSES_Field-Mappings.xml. For more information on configuring index field mappings, see Chapter 7, "Configuring Index Mappings." For more information on access control, see the access control chapter in *Siebel Security Guide*.

This task is a step in the "Process of Configuring Access Control for Search Results" on page 87.

To configure sblvisibilityid index field mappings

1 Open the index mapping file *Application_Suite*_OSES_Field-Mappings.xml. The correct mapping file to use is determined as follows:

- ■ Use the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales or Siebel Marketing.

- ■ Use the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Medical, or Siebel Pharma.

2 Set the bc-name attribute of each sblvisibilityid field to a business component access control field.

3 Save the changes to the mapping file.

4 Restart the Siebel server to populate the Search Index Settings and Available Fields views of the search administration UI with any new index fields.

Example of Mapping sblvisibilityid index fields

This extract provides an example of configuring the sblvisibilityid index field.

```
<field bc-name="Primary Organization Id" in-name="sblvisibilityid" ui-name="" on-
name="" nv-name="" one2many="" is-id="N" id-rank="" type="na" />

<field bc-name="Contact Id" in-name="sblvisibilityid" ui-name="" on-name="" nv-
name="" one2many="" is-id="N" id-rank="" type="na" />

<field bc-name="Owned By Id" in-name="sblvisibilityid" ui-name="" on-name="" nv-
name="" one2many="" is-id="N" id-rank="" type="na" />

<field bc-name="Owner Position Id" in-name="sblvisibilityid" ui-name="" on-name=""
nv-name="" one2many="" is-id="N" id-rank="" type="na" />
```

Configuring the Search Visibility Objects

This task covers configuring search visibility objects for determining access control for search result views.

This task is a step in the "Process of Configuring Access Control for Search Results" on page 87.

To configure the search visibility objects

1 Navigate to the Administration - Search screen, and then the Search Visibility Objects view.

2 Add the Search Visibility objects. The search visibility objects are described in the following table.

Visibility Object	Description
Business Object	This is the business object name.
Business Component	This is the business component name.
Input Field Name	This is a field name in the business component, such as Login Name, used to retrieve the access control values assigned to that user. The access control values retrieved can include fields such as PositionId, OrganizationId, or AccountId.

3 Configure the search visibility object fields. The search visibility object fields are described in the following table.

Visibility Object Field	Description
Field	The field name of the business component field used to determine access control, such as PositionId, OrganizationId, or AccountId.
Multi Valued	Set to Y for a multi valued field.
Parent Field	(Optional) The parent field name. It must be set if the parent field is to be included in determining access control.

4 Save the record.

Configuring Drill Down View Sequence for Search Results

This topic covers configuration of the sequence of drill down views for Search results. User access to a particular view is determined by the sblvisibilityid index field mapping, and the account profile of the logged in user, such as Position ID or Account ID.

This task is a step in the .

To configure drill down view sequence for Search results

1 Navigate to Administration - Search screen, and then the Search Index Settings view.

2 Select the Search Category for which drill down views are to be configured in the Search Index Settings applet.

3 Select the drill down view in the View Name column.

Multiple views can be selected.

4 Enter a sequence number in the Sequence column.

Administering Searchable Fields

The Searchable fields option on the Available Fields list applet determines which Search Category fields are displayed on the Search Center UI as searchable fields.

To administer searchable fields

1 Navigate to the Administration – Search screen, and then the Search Index Settings view.

2 Select the Search Category for which searchable fields are to be configured in the Search Index Settings applet.

The fields for that Search Category are displayed in the Available Fields applet.

3 Select Y (searchable) or N (not searchable) in the Searchable column for each field.

4 Enter a Display Name if it does not already exist.

The Display Name appears on the searchable field text box on the Search Center UI.

5 Select Save Record on the Available Fields list.

Administering Navigable Fields

The Navigable fields option on the Available Fields list applet determines which fields are displayed in a Refine Results operation.

To administer navigable fields

1 Navigate to the Administration – Search screen, and then the Search Index Settings view.

2 Select the Search Category for which navigable fields are to be configured in the Search Index Settings applet.

The fields for that Search Category are displayed in the Available Fields applet.

3 Select Y (navigable) or N (not navigable) in the Navigable column for each field.

4 Enter a Display Name if it does not already exist.

The Display Name appears in the Refined Results view on the Search Center UI.

5 Select Save Record on the Available Fields list.

Administering Field Weighting

The Search Index Settings view enables different weights to be defined for each searchable field in the search criteria, determining the field's ranking in the search results. For example, in the Service Request Category, a weighting of 4 could be assigned to the Description field and a weighting of 2 could be assigned to the Abstract field, to rank the Description field higher in the search results, and thereby make the results more relevant. The search is executed first against the fields that have more weighting.

The Siebel Search numeric weights are mapped to the Oracle Secure Enterprise Search weight parameters in the file Search_Engine_Config.xml. Do not modify the contents of the file Search_Engine_Config.xml from the preconfigured settings.

The Siebel Search numeric weights are mapped to the Oracle Secure Enterprise Search weight parameters in the file Search_Engine_Config.xml. Do not modify the contents of the file Search_Engine_Config.xml from the preconfigured settings.

To administer field weighting

1 Navigate to Administration - Search screen, and then the Search Index Settings view.

2 Select the Search Category for which field weightings are to be configured in the Search Index Settings applet.

The fields for that Search Category are displayed in the Available Fields applet.

3 Enter a Weighting for each field in the Weighting factor column. The available weightings and corresponding rankings are described in the table below.

Numeric Weighting	Ranking
4	Very high
3	High
2	Medium
1	Low
0	Very low

4 Select Save Record.

Administering Alternate Keywords

Use alternate keywords to suggest alternative search queries to users. This is useful for fixing common errors that users make in searching (for example, entering Oracel instead of Oracle). Also, synonyms can provide more relevant results; for example, cellular phones for cell phones. Alternate keywords can also be used for product code names, acronyms and abbreviations.

This task is executed in the Oracle Secure Enterprise Search Administration application.

To administer alternate keywords

1 Navigate to the Search screen, and then the Alternate Words view.

2 Complete the Alternate Words fields. The fields are described in the following table.

Field	Description
User Input Keyword	This is the search term the user will enter, for example, SES.
Alternate Keyword	This is the suggested text that will appear above the search results, whenever the user query contains the matching keyword(s). For example, if the user enters the search term *SES*, the suggested text *Oracle Secure Enterprise Search* will be displayed.
Auto-Expand	Set this option to automatically include the alternate keyword as part of the search.

3 Click Add.

Administering Query-Time Clustering Configuration

Siebel Search uses the Oracle Secure Enterprise Search Cluster Nodes framework to dynamically generate query-time automated keywords. This task covers verifying the Oracle Secure Enterprise Search cluster settings that are required for Siebel Search automated keywords.

It is recommended to assign the "keywords" value to the in-name attribute of a descriptive business component field, if automated keywords are required. For information on defining index attributes, see "Defining Index Attributes" on page 113.

For more information on cluster configuration and search attributes, see *Oracle Secure Enterprise Search Administrator's Guide*.

The Siebel Search automated keywords framework is mapped to the mapped to the Oracle Secure Enterprise Search cluster configuration framework in the file Search_Engine_Config.xml. Do not modify the contents of the file Search_Engine_Config.xml from the preconfigured settings.

To verify Oracle Secure Enterprise Search query-time clustering configuration

1 Start the Oracle Secure Enterprise Search Administration application.

2 Navigate to the Global Settings screen, and then the Clustering Configuration view.

3 Confirm that Enable Clustering is selected under Cluster Tree Configuration.

4 Confirm that the Topic cluster tree has been created under Cluster Trees with the following values:

Field	Value
Tree Name	Topic
Cluster Type	Topic

Field	Value
Attributes	Keywords, Title, eqsnippet, eqtopphrases
Status	Enabled

Configuring the Language LOV for Siebel Search

This topic describes how to create and configure the Language list of values for the Search Preferences applet. The examples in this topic use English, German, and Korean.

To configure the Language LOV for Siebel Search

1 Navigate to the Administration - Data screen, and then the List of Values view.

2 Create the LOV header record, using the information in the following table.

Type	Display Value	Language Independent Code
LOV_TYPE	SEARCH_LANGUAGE	SEARCH_LANGUAGE

3 Select the Active option.

4 Select the Translate option.

5 Set the Replication Level to All.

6 Define the list of languages to display in the Language LOV, using the information in the following table.

Type	Display Value	Language Independent Code	Language Name	Order
SEARCH_LANGUAGE	English	English	English-American	1
SEARCH_LANGUAGE	German	German	English-American	2
SEARCH_LANGUAGE	Korean	Korean	English-American	3

7 Select the Active option.

8 Select the Translate option.

9 Set the Replication Level to All.

6   Configuring Siebel Find

This chapter describes how to administer Siebel Find objects and Find functionally. It includes the following topics:

This chapter assumes knowledge of Siebel Tools. For more information, see *Using Siebel Tools*.

About Siebel Tools Configuration Tasks

Siebel Tools is a declarative software development tool that allows you to configure the underlying data and data presentation of your Siebel application without making changes to the program source code. Siebel Business Applications provide a core set of search object definitions that you can use as a basis for your tailored application. There are no source code modifications, nor modifications to schema. Siebel Tools allows you to create and maintain a custom Siebel Repository file (.srf) to store your custom configurations.

About Siebel Tools Find Objects

Your Siebel application contains a list of application-specific Find objects. Users have access to the Find objects that are associated to the application being used, depending on their responsibilities. You can also specify a default Find object for your Siebel application. Find objects identify business components and corresponding fields that can be searched. Global Find items are used to perform find operations on particular business components. Following execution of a Find, the Find Results View in the main window lists records from the application that satisfy the Find criteria.

Siebel Tools Find Object Reference

This topic contains reference information on Find Objects contained in your Siebel application. These include the following:

Find Object

A Find object definition creates a searchable Find Category that can be added to the Search Center Look In list, and a corresponding set of Find fields and possible views. The Find fields and find views are implemented as child object definitions of the Find object. Predefined Find objects are provided for each Siebel application.

Find Object Properties

Table 6 lists the Find object properties.

Table 6.   Find Object Properties

Property	Required	Description
Applet	Required	The applet that will be used by the Find object. It is required that the applet defined be on every one of the views defined in the Find views for the Find operation to work properly. When configuring the Find object, the choices you have for selecting come from the business component on the applet.
Destination Field	Optional	A TRUE or FALSE value, which if TRUE, highlights this Find object definition in the Search Center list. This property applies only to the initial find operation in the application.
Display Name	Optional	The name that will be displayed to the user, such as Accounts.

Table 6.   Find Object Properties

Property	Required	Description
Drilldown View	Optional	The view that appears when the user drills down. If this property is left blank, then the view is taken from the Find View records. If a Drilldown View is not specified, the view in the Find Views that the user has access to will be used. You cannot disable the drilldown on find objects.
Name	Required	The name of the Find object definition. This is referenced when setting up Application Find object definitions that use this Find object definition.
Preview	Optional	The view that appears when a user invokes the Preview button. This feature allows the user to preview a result record in a pop-up window.

Application Find Object

An application Find object definition associates one Find object definition with one application. Application Find is a child object type of Application. The name of the Find object definition appears in the Find property in the Application Find object definition. Each application has multiple Find objects defined as Find Categories in the Search Center Look In list, each one included by virtue of an Application Find object definition. You can also specify a default find in the Object Properties list.

Application Find Object Properties
Table 7 lists the Application Find object properties.

Table 7.   Application Find Object Properties

Property	Required	Description
Default Find	Optional	Valid values for the Application Find Default Find object are TRUE or FALSE. Setting this value to TRUE allows you to set the default Find object for your application. The default find object is defined in the Application Default Find property. For information on the Application Default Find property, see *Siebel Object Types Reference*. The default Find object displays as the default Find category in the Search Center Look In list.
Find	Required	The Find object definition to include in the application. Example values include Contact and Account.
Name	Required	It is the same as the Find property.

Table 7.   Application Find Object Properties

Property	Required	Description
Sequence	Required	The order in which the Find Category appears in the Search Center Look In list. This property takes an Integer value.
Text	Required	The translatable text that appears as the title of the Find dialog box.

Find Field Object

The Find Field is a child object type of Find. A Find Field object definition adds a find field to its parent Find object definition. The find field appears as a text box in the Search Center when the parent Find is active. Each child Find Field object definition provides the parent Find with a find value text box and corresponding Find field name to search.

Find Field Object Properties
Table 8 lists the Find Field object properties.

Table 8.   Find Field Object Properties

Property	Required	Description
Display Name	Optional	The text (or key to localized text) that will be displayed for this find field when its parent Find object definition is active in the Search Center window.
Field	Required	The field being searched in the business component.
Name	Required	Name of the search field added.
Sequence	Optional	The position of this find field in the list of fields displayed in the Search Center-Find category for the parent Find object definition.
Display in Results	Optional	Selecting this option allows the field to be displayed on the find results applet in the Search Center. By default, the whole field value will be displayed, but you can set a limit so that characters after the maximum length will be skipped. An ellipsis (…) is appended to the end of the results when a limit is set. You must use the user property in Find Results List Applet to set the length limit. Use the following applet user properties: ■ User Property Name: [Find object Name] ■ User Property Value: [Find Field] = [Length] If there is more than one, use the following applet user property syntax: User Property Value: [Find Field Name] = [Length], [Find Field Name] = [Length], [Find Field Name] = [Length]…

Table 8.   Find Field Object Properties

Property	Required	Description
Display in Entry	Optional	Selecting this option allows the field to be displayed on the find entry applet in the Search Center.
Drilldown View Drilldown Business Component Drilldown Source Field	Optional	Supports multiple drilldowns. When these properties are configured and Display in Results is set to TRUE, a drilldown link will be rendered for this field in the Find Results List.

Find Field Object Rules and Assumptions

■ Boolean operators are not supported when searching on a Find object.

■ The field specified in a find field must be a field that exists in the business component for the applet for the Find object definition.

■ The Search Center-Find category and a query by example (QBE) can have different behavior for multi value fields, because the Search Center will generate the same query as if you did an EXISTS query on the field in QBE. You can verify this by embedding your QBE expression with Exists(), for example, *(Ada*)*.

■ QBE supports both types of querying, but to keep the Search Center simple, Siebel Business Applications implement a query that works in all cases. This query uses the syntax Ada* (where the wildcard, as indicated by an asterisk (*) is appended to the search text). If you want to mimic the behavior of the nonExists version with the Search Center-Find category, you must create a join from the primary ID field for the MVLink to the table containing the data. Then add a field to the table you joined to, and point your find field to this new field. This configuration change will cause the query to do a query on the join field that does not use EXISTS.

■ If you want to do an exact search in a Find field, prefix the search text with an equal sign (=), for example, *= Ada*. The query uses the syntax *= Ada*. (No wildcard is appended to the text.)

Find View Object

Each Find view object definition specifies a view that can be activated when the parent Find is initiated from the Search Center. Each find view specifies a different visibility level for the same business component. The views are acted upon in a fixed order, as specified in the Sequence property of the Find view object, until a view is encountered in which the user can view data. The visibility for this view is then applied to the results from the query on the Find object.

For a given user, the find operation uses the first find view object definition that is in the user's responsibility list. Because different views apply different visibility, you have the least restrictive views, first in the list, and the most restrictive, last. This order allows users with different responsibilities to find items using the most broad visibility that they have access to use.

Find View Object Properties
Table 9 lists the Find View object properties.

Table 9.   Find View Object Properties

Property	Required	Description
Sequence	Optional	The order that views are used for the Find object definition.
View	Required	The name of the view to be used for the find operation when this find view is used.

Find Field Locale Object

Locale objects are children of Find Field objects and contain all translatable information. Locale objects represent language-specific overrides used with the Find Field object type.

Find Field Locale Object Properties
Table 10 lists the Find Field Locale object properties.

Table 10.   Find Field Locale Object Properties

Property	Required	Description
Display Name	Optional	The text or that will be displayed for this find field when its parent Find object definition is active in the Search Center.
Name	Required	The abbreviation of the language being used. For example, the value ENU is used to denote U.S. English.

Find Locale Object

Find Locale objects are children of UI objects and contain all translatable information. They represent the language-specific overrides, used with the Find object type.

Find Locale Object Properties
Table 11 lists the Find Locale object properties.

Table 11.   Find Locale Object Properties

Property	Required	Description
Display Name	Optional	Description on the Find Locale object property.
Name	Required	The abbreviation of the language. For example, the value ENU is used to denote U.S. English.

Find Pick View Object

Users can associate Find results from the Search Center with the active record in the top applet in the main content area. The Pick View object, located under Find Pick View, identifies the applet that can receive the selected item from the Find Results List as an associated record. This applies only to applets that can handle such associations. For more information see "Configuring Find and Associate Records" on page 103.

Find Pick View Object Properties

Table 12 lists the Find Pick View object properties.

Table 12.   Find Pick View Object Properties

Property	Required	Description
Applet Name	Required	Name of the applet
View Name	Required	Name of the view containing the applet
Name	Required	Logical name of the pick view
Field Name	Optional	Name of the multivalue group field that will receive the search result

Configuring Searchable Find Categories

This topic covers the activation of Find objects to display as searchable Find categories in the Search Center Look In list.

To configure searchable Find categories

1   Log in to Siebel Tools.

2   Select the application for which Find categories are to be configured in the Application Object Explorer.

3   Navigate to Application Find in the Object Explorer and activate the Find Objects that you want to display as searchable Find categories in the Search Center Look In list.

4   Make sure that the relevant Business Components are part of the Search Execution Business Object.

5   Compile your changes to the Siebel Repository File.

Configuring the Find Results View

The Find results can be configured to display either in Quick Find mode in the business component view on the right, or in the Find Results view on the left. The display options differ as follows:

■ **Quick Find Mode**. Displays the Find results in the business component view on the right, and
bypasses the intermediate Find results page. For example, if the Find results are configured to
display on the right, and the Contacts category is selected for the Find operation, the Find results
are displayed on the right in the All Contacts Across Organization business component view. In
this mode, the list of Find results are lost when the user drills down on an individual Find result.
Preview and Attach features are not available in this mode.

■ **Results Retention Mode**. Displays the Find results in the Find Results view on the left, under
the Look-In applet. In this mode, the user can drill down on a record to get the detailed record
information displayed on the right hand side, and the Find results are retained under the Look
In panel on the left hand side. Preview and Attach features are available in this mode

The Find results view is configured in Siebel Tools.

NOTE: If Preview or Attach features are required, the Find results must be configured to display in
the Find Results view on the left hand side.

To configure the Find results view

1 Log in to Siebel Tools.

2 In the Object Explorer, select Applet.

3 Query for Find Applet.

4 Choose Tools and Lock Project (or Alt+L) to lock the project.

5 Select Applet User Prop, and then GoToView.

6 Configure the GoToView value as follows:

■ Set GoToView to an empty value to display the Find results in the business component view
on the right.

■ Set the GoToView value to Find Results View to display the Find results in the Find Results
view on the left under the Look-In panel.

7 Compile the Siebel.srf file.

8 Restart the Siebel Server.

Configuring Auto-Commit for Find Result Records in the Business Component View

Edits made to Find result records in the business component view are not automatically saved. To
auto commit changes made in the business component view, the PostMainViewData user property
must be configured.

To configure auto-commit for Find result records in the business component view

1 Log in to Siebel Tools.

2 In the Object Explorer, select Applet.

3 Query for Find Applet.

4 Choose Tools and Lock Project.

5 Select Control, and then ButtonFind.

6 Add a Control User Prop named PostMainViewData to ButtonFind.

7 Set PostMainViewData value to True.

8 Compile the Siebel.srf file.

9 Restart the Siebel Server.

Configuring Find and Associate Records

Users can associate Find results from the search center with the active record in the top applet in the main content area. The Pick View object, located under Find Pick View, identifies the applet that can receive the selected item from the Find Results list as an associated record. This applies only to applets that can handle such associations.

In order to attach a record in the Find Results list applet to an active parent object in the Content Area, the relationship between the record and the applet must be many-to-many. In Siebel Tools, this relationship is implemented by creating a link between the two business components with an intersection table. If you select a business object and find out that a Find object is one of its business components, and there is a many-to-many link between them, it is permissible to attach this result row to an object.

This association happens in the business object layer, in terms of Siebel Three-Level Architecture. But to support the user to go to a view directly to verify the association, there is a requirement that Pick View be added to the Find object. This Pick View defines the view that users can go to after an association occurs, as well as the candidate association. You must add new Pick Views in order to add this Find object to a business object.

Find Pick Views have been created for all existing business components. Find Pick Views must be created in Siebel Tools for any new or custom business component.

To create Find Pick Views for custom business components

1 Log in to Siebel Tools.

2 Lock the project that will contain the Pick View object you want to add.

3 In the Object Explorer choose Find, and then Find Pick View.

4 In the Find Pick Views window, create a new record, and enter the required property values.

See Table 12 for a description of the properties.

5 To commit your changes, click anywhere outside the modified row, or move outside the row using the up and down arrow keys.

6 Compile your changes to the SRF file.

Creating Preview Views for Find

In order for a user to preview a result record, you must define the view to use for the preview. You define the view by setting the Preview property of the Search Category object or Find object. The view will show up in a pop-up window when the user clicks on the Preview button. Siebel Search does not support any navigation in the pop-up Preview view. The Preview view is read-only with no navigation buttons.

When you have a preview view defined for a search category object, the Drilldown business component property must be populated. The Drilldown View property does not have to be populated.

The Find Object Preview property is used to define preview views for both Find and Search. See for information on the Preview property.

To create a preview view for Search

1   Log in to Siebel Tools.

2   Lock the project that will contain the Preview View object you want to add.

3   Choose an existing applet that best fits your preview purpose.

   This applet must be a Form Applet, and must be based on the class *CSSFrameBase*.

4   Create a Base type Applet Web Template and comment it as being for Search Preview.

5   Map Data type Controls to Applet Web Template Items.

   Do not map any button type controls that are command controls.

6   Configure a new view, and associate the applet in Base mode with your new view.

7   Associate this view with a screen that will exist in the application where you are running Search Center.

   Viewbar Text and Menu Text are not required.

8   Compile your changes in the SRF file.

   Be sure to add the view to the user's responsibilities and restart the services to refresh the responsibilities.

Configuring the Frame Size for Find

This topic covers configuration of the frame size for the left and right frames for Siebel Find.

To configure the frame size for Find

1   Log in to Siebel Tools.

2   In the Object Explorer, expand Business Service.

3   Query for the Search Client Service business service.

4   In the Object Explorer, click Business Service User Prop.

5 In the Business Service User Props view, select Search Client Service.

6 Set the SWEFrameSize values for the left and right frames, for example, entering 35%,65% assigns a value of 35% for the left frame, and a value of 65% for the right frame.

7 Compile the changes in the Siebel repository file.

Displaying System Fields in Find Results

This topic covers exposing system fields in Find results. For more information on system fields and system columns, see *Configuring Siebel Business Applications*.

Displaying the ID System Field in Find Results

This topic provides an example of exposing a system field that already exists in the Field picklist, such as the ID system field. The ID system field represents the ROW_ID column in the base table. This example uses the Accounts business component.

To display the ID system field in Find Results

1 Log in to Siebel Tools.

2 Select Find in the Object Explorer.

3 Query for Account.

4 In the Object Explorer, navigate to the Find Field object.

5 Right click on the Find Field object and create a new record with the following details:

- Display Name = ID

- Field = Row ID

- Display In Results = TRUE

6 Compile the changes in the Siebel repository file.

Displaying the Created System Field in Find Results

This topic provides an example of exposing a system field that does not already exists in the Field picklist, such as the Created system field. An alias field must be created for the system field, such as Date Created. For information on which column name to use for each system field, see *Configuring Siebel Business Applications*. This example uses the Accounts business component.

To display the Created system field in Find Results

1 Log in to Siebel Tools.

2 Select Business Component in the Object Explorer.

3 Query for Account.

4 In the Object Explorer, navigate to the Field object.

5 Right click on the Find field and create a new record with the following details:

■ Column = CREATED

■ Name = Date Created

6 Select Find in the Object Explorer.

7 Query for Account.

8 In the Object Explorer, navigate to the Find Field object.

9 Right click on the Find Field object and create a new record with the following details:

■ Display Name = Created

■ Field = Create Date

■ Display In Results = TRUE

10 Compile the changes in the Siebel repository file.

Configuring Siebel Communications Server and Find Integration

This topic covers defining Find parameters for the CTI (Computer Telephony Integration) OnInboundCallReceived event response to automatically launch the Search Center, with pre-populated Find criteria, when an agent accepts a call on the CTI toolbar.

Siebel CTI provides voice-channel support for call center agents using Siebel Business Applications. Agents are notified of incoming calls through the communications toolbar, and can perform a range of call-handling activities using the toolbar and related menu commands. If the FindDialog, FindField.CSN, and FindField.First Name event response parameters are defined for the OnInboundCallReceived Event Response, then the Search Center is automatically launched when the agent accepts a call, and is pre-populated with the information specified in the Find Event Response parameters. For more information on Siebel CTI, see *Siebel CTI Administration Guide.*

To configure an OnInboundCallReceived Event Response for CTI and Find Integration

1 Navigate to the Administration - Communications screen, and then the All Configurations view.

2 Select the Configuration for which to define the Event Response.

3 Select the Event Handlers tab.

4 Select the OnInboundCallReceived Event Response.

5 Click the Event Response Parameters view tab and configure the Find parameters. Some fields are described in the following table.

Field	Description
FindDialog	Find Object name to determine what Find Category is displayed in the Look In field when the Search Center is launched. The Find Object name must match that defined in the Find column of the Application Find view in Siebel Tools for the Siebel application that you are using.
FindField.<Find Field Name>	The FindField.*<Find Field Name>* Event Response Parameter can be used to dynamically pre-populate Find fields in the Search Center. The following sample FindField.*<Find Field Name>* Event Response Parameters are used to define pre-populated field values for the *Service Requests* Find Category: ■ *FindField.CSN*. This field must be set to {ANI} to pre-populate the Service Requests CSN (Customer Service Number) field with the incoming telephone phone number. At runtime, on answering a call from the CTI toolbar, the Find CSN field in the Search Center is pre-populated with the telephone number of the incoming call. ■ *FindField.First Name*. This field must be set to {@UserName} to pre-populate the Service Requests First Name field with the agent's User Name. At runtime, on answering a call from the CTI toolbar, the Find First Name field in the Search Center is pre-populated with the agent's User Name for the Siebel application.

Configuring Access Control for Find Operations

Access control for Find is accomplished through specifying views for a Find object. For example, you can define All Accounts across Organizations as a Find View for an Account Find object. Within Siebel Search, visibility determines the set of records displayed to the user from specific business components in the Find results. The user's access to records is determined through a combination of user position, Siebel Tools object attributes, and record values. The following visibility modes can be applied for Find operations within Siebel Business Applications:

■ **All Organizations view.** The user has access to all records.

■ **All view.** User has access to all records in his or her own organization.

■ **Team view.** User has access to records in his or her team.

■ **My view.** User has access only to his or her own records.

For more information on each visibility mode, and on setting up visibility within your Siebel application, see *Security Guide for Siebel Business Applications*.

7 Configuring Index Mappings

This chapter covers customizing and extending search objects for integration with Oracle Secure Enterprise Search, and includes the following topics:

About Searchable Objects

All searchable objects are defined in an XML mapping file, rather than through Siebel Tools. Siebel Search ships with the preconfigured search categories listed in Appendix A, "Preconfigured Search Objects." To create additional custom search objects, or to add 7.x custom search objects, the object definition must be mapped in a field mapping XML file. The elements and attributes defined in the XML field mapping file populate the Search Index Settings and Available Fields views of the search administration UI. The search objects can be configured in the search administration UI once the search object has been created in the XML mapping file. These index mapping definitions are used to generate the XML data feed files, which Oracle Secure Enterprise Search crawls and indexes.

If amendments to the XML field mapping are required to create custom Search Objects, it is recommended that these are completed before the index is initially built, if possible. If the XML field mapping file is edited after initial deployment, the Siebel Server must be restarted, and an Index All operation must be executed to index any new or modified search objects.

Defining Index Elements

Siebel Search index mapping fields are mapped to business component fields in the file SIA_OSES_Field-Mappings.xml or the file SSC_OSES_Field-Mappings.xml, to define searchable objects. The definitions in this mapping file are used to generate the XML data feed files, which Oracle Secure Enterprise Search crawls and indexes.

Once the index mappings have been defined in *Application_Suite*_OSES_Field-Mappings.xml, the Siebel Server must be restarted, and the Search Administration UI must be populated with the new Search Categories or Available Fields. See Chapter 8, "Administering Siebel Search Index Settings."

The correct mapping file to use is determined as follows:

- Use the file SSC_OSES_Field-Mappings.xml if you are using a Siebel application that operates across industries, such as Siebel Call Center, Siebel Sales or Siebel Marketing.

- Use the file SIA_OSES_Field-Mappings.xml if you are using a Siebel industry application, such as Siebel Finance, Siebel Medical, or Siebel Pharma.

Table 13 lists the elements and attributes for defining business component index mappings.

Table 13.   Mapping Elements and Attributes

Element	Attributes	Description	Mandatory
BusComp	name	Name of the business component, for example, `name="Service Request Attachment"`	Yes
	ui-name	This is the string that will be displayed in the user interface, for example, `ui-name="SR Attachments"`	Yes
	on-name	This attribute is not supported.	No
	url	This attribute takes the following format: `url="http://%webserver%/%objmgr%_%lang%/ start.swe?SWECmd=GotoView&SWEView=#VIEWNAME# &SWERF=1&SWEHo=%hostName%&SWEBU=1&SWEAppletO =#APPLETNAME#&SWERowIdO=#ROWID#"`	Yes
	parent	This attribute is used to specify the parent of a child business component, for example, `parent="Service Request"`	No
	fkey-field	This attribute is used to define a foreign key field, for example, `fkey-field="Activity Id"`	No
field	bc-name	Name of the business component field, for example, `bc-name="Attachment List"` The value displays in the Field Name column of the Available Fields list applet.	Yes
	in-name	This is the index field for the business component field, for example, `in-name="listing01"` See "Defining Index Attributes" on page 113 for a list of required, recommended and optional in-name definitions.	Yes

Table 13.   Mapping Elements and Attributes

Element	Attributes	Description	Mandatory
	ui-name	This is the string that will be displayed as the search result snippet in the user interface, for example, ui -name="Attachments" This value populates the Available Fields list applet on the Siebel Search administration UI. The field name is displayed on the application UI if the Searchable flag option is selected in the Available Fields list applet.	No
	on-name	This attribute is not supported.	No
	nv-name	This attribute is not supported.	No
	is-id	This attribute is not supported.	No
	id-rank	This attribute is not supported.	No
	on-name	This attribute is not supported.	No

Table 13.   Mapping Elements and Attributes

Element	Attributes	Description	Mandatory
	one2many	This attribute is used for passing the business component child category information. This attribute is mandatory when you want to index a child business component, and the child business component has multiple rows associated with the parent business component. The one-to-many mapping must conform with the following format: *<Child Business Component Name>:<Child Fields><Child Reference Field>*, for example, *Service Request Attachment:ActivityFileSrcPath,ActivityFileName,ActivityFileExt,Activity Id.* In the above example the constituent parts are as follows: **Child Business Component Name.** This must be the exact name defined in Siebel Tools. Child Business Component Name takes just one value, for example, Service Request Attachment. **Child Fields.** Comma separated list of child business component fields to be indexed, for example, ActivityFileSrcPath,ActivityFileName. One or more values can be entered for Child Fields, each value must be separated by a comma. **Child Reference Field.** Child Reference Field is the foreign key equivalent of the parent Business Component linked to PAR_ROW_ID of the child table, for example Activity Id. Child Reference Field takes just one value.	Yes
	type	Used to define the file type represented by the field. This attribute is mandatory for file fields. Valid values are as follows: ■ type="path" ■ type="filename" ■ type="ext" ■ type="na"	Yes

Defining Index Attributes

This topic covers defining the attribute values for the in-name attribute. Attributes are defined in name-value pairs. In the example `<field bc-name="Description" in-name="keywords ui-name="Description" type="na"/>`, `in-name` is an attribute name, and "keywords" is an optional attribute value. Table 14 lists the mandatory, recommend and optional attribute values for assigning to the in-name attribute. The in-name attribute and values are defined in the file *Application_Suite*_OSES_Field-Mappings.xml. The index fields are reusable for mapping across business component fields.

Table 14.   The in-name Attribute and Attribute Values

Attribute Name	Attribute Value	Description	Mandatory
in-name	accessURL	Used for mapping to the business component access URL field.	No
	alias	Used for mapping to name fields.	No
	author	This index field is reserved and cannot be mapped to user-defined fields. This index field maps to the business component Updated By field. The Updated By field must also be populated in the Search Index Settings Available Fields applet in the Administration - Search UI.	Yes
	body	Used for mapping to main content field. This field is mandatory and is used to generate search results.	Yes
	city	Used for mapping to city name fields.	No
	code01	Used for mapping to generic code or ID fields.	No
	code02	Used for mapping to generic code or ID fields.	No
	comment	Used for mapping to comment fields.	No
	country	Used for mapping to country name fields.	No
	createdBy	This index field is reserved and cannot be mapped to user-defined fields. This index field maps to the business component Created By field. The Created By field must also be populated in the Search Index Settings Available Fields applet in the Administration - Search UI.	Yes

Table 14.   The in-name Attribute and Attribute Values

Attribute Name	Attribute Value	Description	Mandatory
	createdOn	This index field is reserved and cannot be mapped to user-defined fields. This index field maps to the Created business component field. The Created field must also be populated in the Search Index Settings Available Fields applet in the Administration - Search UI.	Yes
	csn	Used for mapping to customer ID number fields.	No
	date01	Used for mapping to date fields.	No
	date02	Used for mapping to date fields.	No
	description	Used for mapping to generic descriptive fields, such as comments, FAQ or details.	Recommended
	emailed	Used for mapping to email address fields.	No
	faxNumber	Used for mapping to fax number fields.	No
	firstName	Used for mapping to first name fields.	No

Table 14.　The in-name Attribute and Attribute Values

Attribute Name	Attribute Value	Description	Mandatory
	keywords	This index field corresponds to the Oracle Secure Enterprise Search Keywords search attribute, and, if configured, is used for cluster configuration. This field is recommended if automated keywords are required. The following provides an example keywords definition for the SR Resolution Item business component: `<field bc-name="Description" in-name="Keywords" ui-name="Description" on-name="" nv-name="" one2many="" is-id="N" id-rank="" type="na"/>` This configuration ensures that the content of the SR Resolution Item Description field is mapped to the Oracle Secure Enterprise Search Keywords attribute. This definition tags the Description value as a keyword in the feed file. When Oracle Secure Enterprise Search crawls and indexes the feed file, it processes the value of the Description field as a keyword for cluster configuration and automated keywords. For information on administering cluster configuration for automated keywords, see "Administering Query-Time Clustering Configuration" on page 92 For more information on search attributes, see *Oracle Secure Enterprise Search Administrator's Guide*.	Recommended
	language	Used for mapping to language identifier fields.	No
	lastModifiedDate	This index field is reserved and cannot be mapped to user-defined fields. This index field maps to the business component Updated field. The Updated field must also be populated in the Search Index Settings Available Fields applet in the Administration - Search UI.	Yes
	lastName	Used for mapping to last name fields.	No
	level	Used for mapping to level fields.	No
	listing01	Only to be used for one-to-many field mapping.	No
	listing02	Only to be used for one-to-many field mapping.	No

Table 14.   The in-name Attribute and Attribute Values

Attribute Name	Attribute Value	Description	Mandatory
	location	Used for mapping to site, directory, or path fields.	No
	name	Used for mapping to name fields.	No
	orgName	Used for mapping to organization name fields.	No
	owner	Used for mapping to Organization Information or other visibility information fields.	No
	phoneNumber01	Used for mapping to phone number fields.	No
	phoneNumber02	Used for mapping to phone number fields.	No
	price	Used for mapping to price fields.	No
	sblbctype	This index field is reserved and cannot be mapped to user-defined fields. This index field is used for mapping to the BC Name business component field, and is used to generate search results. The BC Name field must also be populated in the Search Index Settings Available Fields applet in the Administration - Search UI.	Yes
	sblrowid	This index field is reserved and cannot be mapped to user-defined fields. This index field is used for mapping to the business component ID field. The ID field must also be populated in the Search Index Settings Available Fields applet in the Administration - Search UI.	Yes

Table 14.   The in-name Attribute and Attribute Values

Attribute Name	Attribute Value	Description	Mandatory
	sblvisibilityid	The sblvisibilityid index field is used for mapping to business component fields used for access control, such as the business component's Organization ID, Contact ID, Owner Position ID, or Account ID fields. The sblvisibilityid index field can also be mapped to custom access control fields. Multiple sblvisibilityid index field mappings can be used for each business component. The visibility ID is captured at index-time and stored in the database with the indexed records. At query-time, the User ID is sent with the search criteria and authenticated by the Oracle Secure Enterprise Search Web Service. The search results are filtered based on the field's sblvisibilityid settings, and the profile of the logged in user. This mapping is mandatory for access controlled business components. See the access control chapter in *Siebel Security Guide* for more information.	Yes
	sblvisibilityinfo	This index field is reserved and cannot be mapped to user-defined fields. This index field is used for mapping to the business component Organization Information or other visibility information fields. This mapping is optional, and is used for access controlled business components.	No
	sourceHierarchy	Used for mapping to hierarchy information fields.	No
	state	Used for mapping to geographical state fields.	No
	status	Used for mapping to BusComp status fields.	No
	street	Used for mapping to street address fields.	No
	summary	Used for mapping to descriptive summary fields.	Recommended
	textID	Used for mapping to text ID fields.	No
	Title	Used for mapping to title information fields.	Yes
	type	Used for mapping to record type fields.	No
	value	Used for mapping to String value fields.	No
	zipcode	Used for mapping to zip-code, postal-code and pin-code fields.	No

Creating Search Run-Time Events for Custom Search Objects

Search run-time events must be created for any custom search object that you create. Run-time events must be created to enable incremental indexing and refresh indexing for custom Search Objects. This topic covers configuration of search runtime events for monitoring create, update and delete events executed on Search Objects in the data repository. These runtime events can be customized to monitor any type of event. The Action Sets create records in the transaction table and trigger the Search Content business service method UpdateIndex(). See *Siebel Personalization Administration Guide* for more information on Siebel Run-Time Events.

To create Search run-time events for custom search objects

1 Navigate to the Administration - Runtime Events screen, and then the Action Sets view.

2 Query on the Update Index Action Set.

3 Click the Event Aliases tab.

4 Click the New button on the Event Alias screen.

5 Complete the Event Alias fields for each buscomp create, update and delete operation. Use the Service Request values in the following table for reference.

Name	Object Type	Object Name	Event
Service Request - New	BusComp	Service Request	NewRecord
Service Request - Write	BusComp	Service Request	WriteRecord
Service Request - PreDelete	BusComp	Service Request	PreDeleteRecord

6 Select Save Record.

8 Administering Siebel Search Index Settings

This chapter covers administering Search indexes, and enabling server components required for indexing. This chapter includes the following topics:

- "About Search Indexes" on page 119
- "Creating a New Index Definition" on page 119
- "Creating a Logical Collection" on page 121
- "Filtering the Index Record-Set" on page 121
- "Creating Searchable Business Component Fields" on page 122
- "About Indexing Search Objects" on page 122
- "Administering Asynchronous Indexing and Index Status Monitoring" on page 125
- Monitoring Indexing Status on page 125

About Search Indexes

The search indexes definition determines what fields in a data source or business component are included in the index and are available for searching, and what fields are displayed in the Search Center UI as searchable fields. The index definition can enable more efficient and relevant indexing and searching by omitting less relevant fields from the index and search operations.

Search indexes are defined and configured in the Search Index Settings view of the search administration UI.

Creating a New Index Definition

Search Categories for each Siebel application are defined in Search Definition groupings in the Search Definition view. This view can be used for creating or customizing Search Definitions and Search Definition Categories. The business component for any new custom Search Category must first be mapped in the file *Application_Suite*_OSES_Field-Mappings.xml. See "Defining Index Elements" on page 109 for information on creating custom search objects for Oracle Secure Enterprise Search integration. When a new Search Definition is created, the Definition must be added to the application Object Manager for a Siebel Web Client, or to the application configuration file, for a Siebel Developer Web Client.

Creating a New Index Definition

This topic covers creating a new Search Definition. The Definition is created in the Search Definition view of the Siebel Search Administration UI.

To create a new index definition

1   Navigate to Administration – Search screen, and then the Search Definition view.

2   Click on the New button.

3   Complete the Definition fields.

The Name field is mandatory.

4   Select the Default Flg field if this Definition is to be set as the default.

5   In the Search Definition Categories list applet click on the New button.

6   Complete the Category fields.

The Name, View Name and Business Component fields are mandatory. The business component which corresponds to the Search Category must be selected from the list.

7   Select Save Record on the Search Definition list.

Configuring the Search Definition on the Siebel Web Client

This topic covers configuring a new Search Definition on the Siebel Web Client.

To configure the Search Definition on the Siebel Web Client

1   Navigate to Administration – Server Configuration screen, and then the Servers and Components view.

2   Select the Object Manager Component for your application.

3   In the Parameters list applet click Advanced.

4   Query for the Search – Definition Name parameter.

5   Replace the value of the Search – Definition Name parameter with your Search Definition Name.

6   Restart the Siebel services.

Configuring the Search Definition on the Siebel Developer Web Client

This topic covers configuring the Search Definition in the SearchDefName parameter of the application configuration file for the Siebel Developer Web Client. Application configuration file names are in the format *<application>.cfg*, for example, the file shm.cfg is the Siebel Hospitality application configuration file, and the file uagent.cfg is the Siebel Call Center application configuration file. Verify that you are using the correct application configuration file by checking the ApplicationName parameter in the file.

NOTE: This configuration change must be applied to each application configuration file for each language in the enterprise.

To configure the Search Definition on the Siebel Developer Web Client

1   Open the application configuration file in a text editor:

■   On Windows the file is located at:
<install_dir>\siebsrvr\bin*<language>**<application>*.cfg

■   On UNIX the file is located at *<install_dir>*/siebsrvr/lib/*<language>*/
<application>.cfg

2   Scroll to the SIEBEL section of the configuration file.

3   Change the value of the SearchDefName parameter to the Search Definition Name value configured in the Search Definition view, and save the changes.

Creating a Logical Collection

This procedure covers grouping Search Categories into Logical Collections, for example, a People Logical Collection could be created to include the search Categories Employees and Contacts. A search on the People Logical Collection would then include a search on both the Employees and Contacts Search Categories.

To create a logical collection

1   Navigate to Administration – Search screen, and then the Search Index Settings and Search Indices Parent Category View.

2   Click New on the Search Indices Parent Category applet.

3   Enter the Parent Category Name.

4   Select the Parent Category option.

5   Enter a Sequence Number.

6   Select Save Record on the Search Index Settings list.

7   Click on the New button on the Search Category List applet.

8   Select the Categories to be included from the list of available categories.

9   Select Save Record on the Search Category List.

Filtering the Index Record-Set

The index record-set can be filtered at the Category level, to incorporate custom business rules, using the *Filter Search Spec* field. This field takes SQL statements that comply with the syntax defined in Appendix B, "Syntax for Filter Search Specifications."

To filter the index record-set

1   Navigate to Administration – Search screen, and then the Search Index Settings view.

2   Enter the SQL statement in the *Filter Search Spec* field for each category that is to be pre-filtered.

   The syntax must comply with that defined in Appendix B, "Syntax for Filter Search Specifications."

Creating Searchable Business Component Fields

Specific fields in a business component can be excluded from the indexing and search operation, to
enable more efficient indexing and searching, and more relevant results. The Available Fields list
applet determines which fields are included in an index operation, and therefore which fields are
available for searching. The new custom fields must first be mapped in the file
*Application_Suite*_OSES_Field-Mappings.xml. See "Defining Index Elements" on page 109 for
information on mapping custom fields for Oracle Secure Enterprise Search.

To create searchable business component fields

1   Navigate to Administration – Search screen, and then the Search Index Settings view.

2   Select the business component for which the new fields will be indexed.

3   Click on the New button in the Available Fields applet and complete the fields.

4   Select the Field Name from the list.

   This field is mandatory.

5   Select Save Record.

About Indexing Search Objects

The indexing process is comprised of a number of tasks on the Siebel side and on the Oracle Secure
Enterprise Search side. When indexing initiates, the Status Code changes to a null value in the Siebel
Search Index Settings view, and a set of SearchDataProcessor jobs are created. The
SearchDataProcessor jobs create temporary XML feed files under the XML Indexable Data Location.
For each batch of rows to be indexed, a separate job is created. The index operation starts the
relevant Oracle Secure Enterprise Search Schedule. Oracle Secure Enterprise Search uses a crawler
to collect data from the XML feed files for each data source, and to generate the index. This index is
used for searching data sources.

The SearchDataProcessor status can be monitored in the Jobs view of the Administration – Server
Management screen. When complete, each SearchDataProcessor job updates the status code for the
search index to Indexed, and the Status Details reflect the number of indexed rows. The index
operation is complete on the Siebel side when all of the SearchDataProcessor jobs have a status of
success or error. The status details for the search index reflect the number of rows successfully
transferred to feed files. If the number of indexed rows is lower than the number of records in the
business component, it is recommended that the SearchDataProcessor logs are checked for errors
on the jobs that have not executed successfully.

The Oracle Secure Enterprise Search schedule status can be monitored in the Crawler Schedules table of the Schedules tab on the Oracle Secure Enterprise Search administration UI. For more information on indexing status, select the log file icon in the Crawler Schedules table.

Siebel Search provides the following indexing operations:

■ **Full Indexing**. The full indexing operation can be executed on all search objects defined in the XML mapping file, or on a specific business component or connector. This operation is available for thin and thick clients.

■ **Refresh Indexing**. Refreshes the index with any create, update or delete operations which have been executed on the data source since the last index operation. This operation is available for thin and thick clients.

■ **Incremental Indexing**. Updates the index, at preconfigured intervals, with any create, update or delete operations which have been executed on the data source since the last index operation. This operation is available for thin clients.

This topic contains the following sub-topics:

■ "Indexing Search Objects" on page 123

■ "Refreshing the Index" on page 124

■ "Enabling Incremental Indexing" on page 125

Indexing Search Objects

Full indexing can be executed against all entries in the selected Search Category (business component or external file system), by selecting the Index operation, or against all entries in the default Search Definition listed in the Search Index Settings applet, adding any new fields from the field mapping file, by selecting the Index All operation. Upon successful completion of indexing, the Status Code changes to Indexed, and the Status Details column details the number of records indexed. The number of rows indexed must correspond to the number of records in the business component. The number of records indexed is displayed when indexing a business component, and is not displayed when indexing a file system.

To index search objects for Oracle Secure Enterprise Search

1 Navigate to Administration – Search screen, and then the Search Index Settings view.

2 Choose one of the following to index one or all search components:

a Select the component to be indexed and click Index.

b Click Index All to index all components for the Default Search Definition.

When indexing initiates, the Status Code changes to a null value. When indexing completes the Status Code changes to Indexed.

3 Start the Oracle Secure Enterprise Search administration application to monitor indexing from the Oracle Secure Enterprise Search side:

a Select the Oracle Secure Enterprise Search Schedules tab.

b　Click the Launching or Executing link in the Status table.

c　Click on the Statistics link.

The Crawler Progress Summary is displayed, with a list of the number of documents crawled. Indexing is completed from the Oracle Secure Enterprise Search side once the Schedule Status has changed to Scheduled.

Refreshing the Index

Refresh indexing provides for immediate update of the search index. It is supported for both thick and thin clients. The Status Details field is incremented by the number of new records and decremented by the number of deleted records. Record updates do not contribute to the Status Details record count. Refresh indexing is supported for business components, and is not supported for the File System Connector.

Activating search run-time events is a prerequisite for using the index refresh function.

To enable refresh indexing for preconfigured search objects, see "Activating Search Run-Time Events" on page 66.

To enable refresh indexing for custom search objects, see "Activating Search Run-Time Events" on page 66 and "Creating Search Run-Time Events for Custom Search Objects" on page 118.

To refresh index search objects for Oracle Secure Enterprise Search

1　Navigate to Administration – Search screen, and then the Search Index Settings view.

2　Select the component to be indexed and click Refresh.

When indexing initiates the *Status Code* changes to a null value. When indexing completes the Status Code changes to Indexed.

3　Start the Oracle Secure Enterprise Search administration application to monitor indexing from the Oracle Secure Enterprise Search side:

a　Select the Oracle Secure Enterprise Search Schedules tab.

b　Click the Launching or Executing link in the Status table.

c　Click on the Statistics link.

The Crawler Progress Summary is displayed, with a list of the number of documents crawled. Indexing is completed from the Oracle Secure Enterprise Search side once the Schedule Status has changed to Scheduled.

Enabling Incremental Indexing

Incremental indexing is used to schedule automatic refresh indexing on all search objects. The index for all search objects (business components or search categories) is updated, at preconfigured intervals, with any create, update or delete operations which have been executed on the data source since the last index. The interval is configured at the level of each business component, and a different interval can be configured for each business component. For example, a Service Request business component index could be scheduled to update every five minutes, and an Account business component index could be scheduled to update every ten minutes. Incremental indexing is supported for business components, and is not supported for the File System Connector.

NOTE: Incremental indexing is supported only on thin clients.

To enable incremental indexing for preconfigured search objects, see "Activating Search Run-Time Events" on page 66.

To enable incremental indexing for custom search objects, see "Activating Search Run-Time Events" on page 66 and "Creating Search Run-Time Events for Custom Search Objects" on page 118.

Administering Asynchronous Indexing and Index Status Monitoring

This topic covers enabling and disabling the asynchronous indexing and index status monitoring features. These features are enabled by default. For information on configuring indexing mode settings in Siebel Tools, see "Configuring the Indexing Mode for Index Status Monitoring" on page 87.

To administer asynchronous indexing and index status monitoring

1   Navigate to the Administration – Search screen, and then the Search Engine Settings view.

2   Configure the Advanced Batching and Indexing setting as follows:

   ■   Set Advanced Batching And Indexing to True to enable the asynchronous indexing and index monitoring features.

   ■   Set Advanced Batching And Indexing to False to disable the asynchronous indexing and index monitoring features.

3   Restart the Siebel server.

Monitoring Indexing Status

The indexing status for both HTTP and FTP indexing modes can be monitored in the Search Index Status view. The data feed for indexing is collated into index batches, and submitted to the Oracle Secure Enterprise Search crawler for indexing. The number of records in each index batch is defined by the Batch Submit Size setting in the Search Engine Settings view. For information on configuring indexing mode settings in Siebel Tools, see "Configuring the Indexing Mode for Index Status Monitoring" on page 87.

To monitor indexing status

1 Navigate to the Administration – Search screen, and then the Search Index Status view.

2 Click Query to populate the table with the status of the index batches for the current indexing operation.

3 Verify the status for each index batch in the Index Status column.

4 Click Refresh to update the status for the records in the table.

5 Click Purge to clear the status records from the table.

9 Using Siebel Find and Siebel Search for Siebel High Interactivity Mode

This chapter describes Siebel Find and Siebel Search end user functionality for applications using Siebel High Interactivity. It includes the following topics:

■ "Overview of Siebel Search Functionality for Siebel High Interactivity" on page 127

■ "Setting Search Preferences in Siebel High Interactivity" on page 129

■ "Performing a Basic Search Operation in Siebel High Interactivity" on page 130

■ "Performing an Advanced Search Operation in Siebel High Interactivity" on page 131

■ "Saving Search Criteria in Siebel High Interactivity" on page 133

■ "Performing a Find Operation in Siebel High Interactivity" on page 134

■ "Associating Search and Find Results with the Active Record in Siebel High Interactivity" on page 134

Overview of Siebel Search Functionality for Siebel High Interactivity

Siebel Search allows you to perform search operations on indexed data sources. The Look In list displays Find and Search categories in the following order: Find Objects, which are database queries, followed by Search Categories which have been indexed and can be queried against. The search categories map to individual business components. Multiple search categories can be grouped into logical collections, to enable a single search to be executed against multiple search categories. The Look In field is preconfigured with different search categories, depending on the Siebel application. See Appendix A, "Preconfigured Search Objects" for the list of preconfigured search objects provided for each Siebel application. The search categories can be configured by the administrator in the Search Definition view of the Search Administration UI. Users can perform queries against Siebel business component records from anywhere in their Siebel application.

Siebel Search provides the following functionality:

Single Term Search
A search operation on a single search term. The search term must contain more than one character. Oracle Secure Enterprise Search does not support single character searches.

Multiple Term Search
A search operation on a multiple search terms. The implicit Search Term Separator is AND. For example, if you enter the text performance tuning, it is executed as performance AND tuning. Only results that contain all search terms are returned.

Phrase Search

A search operation on a phrase. The phrase must be entered in quotation marks.

Wildcard Search

A wildcard search operation using the asterisk wildcard operator. You use the wildcard character
either to represent a single character, or a sequence of characters. For example, searching for the
string *Ora** finds documents that contain all words beginning with "Ora" such as "Oracle" and
"Orator". You can also insert an asterisk in the middle of a word. For example, searching for the string
A*e finds documents that contain words such as "Apple" and "Ape".

Special Character Search

This search operation retrieves special characters other than those facilitated by wildcard searches.
For example, if you search for the term on?line, the search returns matches to on line, on-line,
on;line and on.line.

Searching Logical Collections

Users can choose from a number of categories listed in the Look In list against which they can search.
Multiple search categories can be grouped in a single logical collection, for simultaneous searching.
Logical collections are defined in the Search Indices Parent Category View of the Search
Administration UI. For information on defining logical collections, see "Creating a Logical Collection"
on page 121.

Previewing Search Results

When the Preview option in the Search Center is invoked, a database record is opened in a popup
window allowing users to view the record without changing their current application context. External
files are opened and presented in their native application.

Setting the Customer Dashboard

The customer dashboard can be updated with the selected search result.

Sorting Search Results

After obtaining the results of a search, the user can sort the results by relevance, data source, result
type, or date.

Refining Results Using Automated Keywords

Dynamic keywords are generated by Oracle Secure Enterprise Search, and are displayed in the
search results applet. After obtaining results of a search, the user can further refine the results based
on dynamically generated keywords. The selected keyword is processed with the previous search
criteria in a Boolean AND operation. On further refining with additional keywords, the new keywords
will be appended to the last executed search criteria.

Saving Search Queries

The search criteria can be saved for reuse. Saved searches are listed in the Recent Saved Searches applet in the Search Center.

Setting Search Preferences in Siebel High Interactivity

You can set search preferences to configure search results, such as the number of result records displayed on each page, and the default sort mechanism. Search preferences are applied only to Search operations, and are not applied to Find operations. After configuring the search preferences you must log back into the Siebel application for the preferences to take effect.

To set search preferences in Siebel High Interactivity

1 Navigate to the Search screen, and then the Search Preferences view.

2 Configure the search preferences. Search preferences are described in the following table.

Search Preference	Description
Number of Records	From the list, choose the number of records to display on each page in the Search Results view.
Results Window	Select this option to display the search results displayed in a separate browser window.
Automated Suggestion	Select this option to enable automated alternate keywords, and alternate words expansion. When enabled, Siebel Search automatically includes predefined alternate keywords as part of the search, and provides a suggestion for a query in the form of a *Did you mean…* message for alternate word pairs, and abbreviation expansion. For example, if the alternate word pair *SES* and *Oracle Secure Enterprise Search* is defined, then a query for SES returns documents containing the word SES, and the automated suggestion *Did you mean Oracle Secure Enterprise Search*.
Default Sort	Results can be sorted by the following options: ■ **Data Source.** The results can be sorted by individual business component, for example, Service Request or Account, or by external data source, for example by File System or Web Crawler. ■ **Date.** The date that the document was last modified. ■ **Relevance.** The relevance ranking is determined by Oracle Secure Enterprise Search algorithms and is based on variables such as proximity and frequency. ■ **Result Type.** The result data type, for example, a database record or a PDF document.

Search Preference	Description
Context Sensitivity	Select this option if you want the Look In default option set by the screen context, for example, if the Search Center is invoked from the context of a particular screen, such as Service Request, the Look In control will automatically be set to that Search object.
Criteria Reservation	Criteria Reservation is configured using the following options: ■ **Resume previous search.** The search criteria of the previous search operation is preserved, and the search fields are pre-filled for the subsequent search. ■ **Clear previous search.** The search criteria of the previous search operation is deleted.
Language	Select a language to enable searching on keywords in a specific language. English is the default search language.
Fetch Language Specific Docs	Select this option to exclude search result records that are not in the selected language.

3 Click Save Preference.

Performing a Basic Search Operation in Siebel High Interactivity

Basic Search allows you to perform full text searches using Boolean operators. Boolean operators allow you to create a more precise query. The type of object that you choose from the Look In list determines whether you execute a Find or a Search operation. User access to search results is determined by the sblvisibilityid index field mapping, and the account profile of the logged in user, such as Position ID or Account ID. For information on configuring the sblvisibilityid index field, see "Defining Index Attributes" on page 113.

To perform a basic search operation in Siebel High Interactivity

1 Select Search from the application-level menu.

2 From the Look In list, select the Search Object you want to search against. The Look In list displays categories in the following order; each category is separated by a dotted line:

■ Find categories. Find objects that database queries can be executed against in a Find operation. The Search For field is disabled for Find objects.

■ Search categories. Business components that have been indexed and can be queried against in a Search operation.

■ External data sources. Data sources, such as Web sources, and external file systems, that have been indexed and can be queried against in a Search operation.

3 Enter your search criteria in the Search For field, including the search operator, and click Go. The
Search For field is disabled for Find objects. The following table describes supported search
operators.

Search Operator	Function	Syntax and Description
* (Asterisk)	Wildcard	Placed at the end of a string, returns items containing the string, or containing the string plus any additional characters at the position at which it appears, up to (or beginning with) a space. For example, searching for the string *Ora** returns all words beginning with Ora, such as Oracle and Orator.
AND &	Boolean AND	Placed between search terms, returns only records and documents containing both terms. For example, searching for *Oracle AND Siebel* returns only records and documents containing both terms.
OR |	Boolean OR	Placed between search terms, returns records and documents containing either term or both terms. For example, searching for *Oracle OR Siebel* returns only records and documents containing one or both terms.
- NOT	Exclusion	Placed before search terms, returns only records and documents that do not contain the search term. For example, searching for *Oracle -Siebel* returns only records and documents that contain the word Oracle and that do not contain the word Siebel.
" " (Quotation marks)	Phrase Search	Surrounds a string that, unless modified by a wildcard, must be matched exactly. Allows searching for groups of words in their exact order. For example, searching for *"Oracle Secure Enterprise Search"* returns only records and documents that contain the entire phrase *Oracle Secure Enterprise Search*.

4 From the Search Results view, click the hyperlink to go to the results of your search.

Search results can be further refined by Relevance, Data Source, Result Type, or Date.

NOTE: Sorting is applied to the search results that appear in the results page rather than the entire
result set.

Performing an Advanced Search Operation in Siebel High Interactivity

Advanced Search is enabled only when a search engine has been configured and set as the default,
see .

To perform an advanced search operation in Siebel High Interactivity

1 Select Search from the application-level menu.

2 Click Advanced Search. The following table describes the Advanced Search options.

Option	Description
All these words	This option performs a Boolean AND search operation. This option returns only records and documents containing all search terms. For example, inputting *Oracle Siebel* returns only records and documents containing both Oracle and Siebel.
Any of these words	This option performs a Boolean OR search operation. This option returns records and documents containing one or more of the search terms entered. For example, inputting *Oracle Siebel* returns records and documents containing Oracle, or Siebel, or both.
Exact phrase	This option returns records and documents that exactly match the entered phrase. For example, searching for Oracle Secure Enterprise Search returns only records and documents that contain the entire phrase*.* **NOTE:** Quotation marks are not supported for this field.
None of these words	This option returns only records and documents that do not contain the search term. **NOTE:** Quotation marks are not supported for this field.
Look In	The Advanced Search Look In field displays the business components that have been indexed for that Search Definition. Select the business component or components to include in the advanced search operation.
Modified Between	Select this option to get search results for files modified between two particular dates.

Option	Description
File Format	This option provides the ability to search by file format. The files are processed by MIME type for this search operation. The search can be filtered by the following file types: ■ All ■ HTML ■ Microsoft Excel ■ Microsoft PowerPoint ■ Microsoft Word ■ PDF ■ Plain text ■ Rich Text Format
Data Source	You can choose to retrieve your search results from multiple data sources. This feature is available if external data sources have been enabled, for example, a File System Connector or a Web Crawler Connector. To enable the File System Connector, see "Configuring the Siebel File System Connector" on page 49. To enable the Web Crawler Connector, see "Process of Setting Up the Web Crawler Source and Connector" on page 52.

3 From the Search Results view, click the hyperlink to go to the results of your search.

Saving Search Criteria in Siebel High Interactivity

Search criteria can be saved to the Recent Saved Searches list for future use. Saved Searches can be queried or deleted in the Saved Searches view. Selecting saved search criteria from the Recent Saved Searches list executes the search.

To save your search criteria in Siebel High Interactivity

1 Click Save Search in the Search Results view.

2 In the Save As field, enter a unique name for your search.

3 In the Note field, enter a brief description of your search.

4 Click Save.

Performing a Find Operation in Siebel High Interactivity

Siebel Find supports real-time database queries on a field-by-field basis. The Find functionality is independent of any search engine. The type of object that you choose from the Look In list determines whether you execute a Find or a Search operation.

Find results are filtered based on the user's Visibility ID. For more information on data visibility and access control, see the chapter about access control in *Siebel Security Guide*. Preview and Associate functionality is available for Find results if the Find results have been configured in Siebel Tools to display in the Find Results view.

To perform a Find operation in Siebel High Interactivity

1 Select Search from the application-level menu.

2 From the Look In list, select the Find category you want to search against.

   The Find categories are listed first, and are separated from the Search categories by a dotted line. The Search For field is disabled when a Find category is selected.

3 Enter your search criteria in the category fields and click Go.

   The Find results are displayed in the Find Results view under the Look In panel.

4 Click the hyperlink to go to the results of your Find operation, or select the Preview button to preview the Find results.

Associating Search and Find Results with the Active Record in Siebel High Interactivity

The Associate function enables you to associate two data types that have a parent-child relationship. The Find results can be associated with the Siebel object, where a relationship has been defined between the object types in Siebel Tools, and a value has been populated in the Link Inter Table field. For example, in Siebel Tools, the Service Request Business Object is a parent object of the Solution Business Object Component, and the link between the two objects is set to active, with a value in the Inter Table field. Solution result records can therefore be associated with the active Service Request record on the Dashboard.

If you select a record that has an associated attachment, clicking on the attachment name opens the attachment in its native application. Only one result can be attached to a parent record at any one time.

To associate a Search or Find result record with the active record in Siebel High Interactivity

1 In the application window, display the record with which you want to associate the result record.

2 On the Siebel application toolbar, click the Search button and perform a search or find operation to find the record to attach.

The records that match your search criteria appear in the Find Results list.

3 In the Find Results list, select the record to associate, then click Attach.

The results record is attached to the active record in the application window.

10 Using Siebel Find and Siebel Search for Siebel Open UI

This chapter describes Siebel Find and Siebel Search end user functionality for applications using Siebel Open UI. It includes the following topics:

Overview of Siebel Search Functionality for Siebel Open UI

Siebel Search allows you to perform search operations on indexed data sources. The Look In list displays Find and Search categories in the following order: Find Objects, which are database queries, followed by Search Categories which have been indexed and can be queried against. The search categories map to individual business components. Multiple search categories can be grouped into logical collections, to enable a single search to be executed against multiple search categories. The Look In field is preconfigured with different search categories, depending on the Siebel application. See Appendix A, "Preconfigured Search Objects" for the list of preconfigured search objects provided for each Siebel application. The search categories can be configured by the administrator in the Search Definition view of the Search Administration UI. Users can perform queries against Siebel business component records from anywhere in their Siebel application.

Siebel Search provides the following functionality:

Single Term Search

A search operation on a single search term. The search term must contain more than one character. Oracle Secure Enterprise Search does not support single character searches.

Multiple Term Search

A search operation on a multiple search terms. The implicit Search Term Separator is AND. For example, if you enter the text performance tuning, it is executed as performance AND tuning. Only results that contain all search terms are returned.

Phrase Search

A search operation on a phrase. The phrase must be entered in quotation marks.

Wildcard Search

A wildcard search operation using the asterisk wildcard operator. You use the wildcard character either to represent a single character, or a sequence of characters. For example, searching for the string *Ora** finds documents that contain all words beginning with *Ora* such as *Oracle* and *Orator*. You can also insert an asterisk in the middle of a word. For example, searching for the string *A*e* finds documents that contain words such as *Apple* and *Ape*.

Special Character Search

This search operation retrieves special characters other than those facilitated by wildcard searches. For example, if you search for the term on?line, the search returns matches to on line, on-line, on;line and on.line.

Searching Logical Collections

Users can choose from a number of categories listed in the Look In list against which they can search. Multiple search categories can be grouped in a single logical collection, for simultaneous searching.

Logical collections are defined by the administrator in the Search Indices Parent Category View of the Search Administration UI. For information on defining logical collections, see "Creating a Logical Collection" on page 121.

Automated Suggested Keywords

The automated suggested keywords feature displays alternate search queries that are based on related keywords. The automated suggested keywords are displayed in the form of a *Did you mean: [Suggested Keyword(s)]* message. This automated message is useful for fixing common errors in search queries, for example, entering *Oracel* instead of *Oracle*. Also, synonyms can provide more relevant results, for example, *cellular phones* for *cell phones*. Alternate keywords can also be used for product code names, acronyms, and abbreviations.

Alternate keywords for the automated suggested keywords feature are defined by the administrator in the Oracle Secure Enterprise Search Administration application. For information on setting up automated suggested keywords, see "Administering Alternate Keywords" on page 91.

Sorting Search Results

After obtaining the results of a search, the user can sort the results by relevance, data source, result type, or date.

Refining Results Using Automated Dynamic Keywords

Dynamic keywords are generated by Oracle Secure Enterprise Search, and are displayed in the search results applet. After obtaining the results of a search, the user can further refine the results based on dynamically generated keywords. The selected keyword is processed with the previous search criteria in a Boolean AND operation. On further refining with additional keywords, the new keywords will be appended to the last executed search criteria.

Setting Search Preferences in Siebel Open UI

You can set search preferences to configure search results, such as the number of result records displayed on each page, and the default sort mechanism. Search preferences are applied only to Search operations, and are not applied to Find operations. After configuring the search preferences you must log back into the Siebel application for the preferences to take effect.

To set search preferences in Siebel Open UI

1   Navigate to the Search screen, and then the Search Preferences view.

2   Configure the search preferences. Search preferences are described in the following table.

Search Preference	Description
Number of Records	The number of records to display on each page of the Search Results view.
Default Sort	Results can be sorted by the following options: ■ **Data Source.** The results can be sorted by individual business component, for example, Service Request or Account, or by external data source, for example by File System or Web Crawler. ■ **Date.** The date that the document was last modified. ■ **Relevance.** The relevance ranking is determined by Oracle Secure Enterprise Search algorithms and is based on variables such as proximity and frequency. ■ **Result Type.** The result data type, for example, a database record or a PDF document.
Language	Select a language to enable searching on keywords in a specific language. English is the default search language.
Fetch Language Specific Docs	Select this option to exclude search result records that are not in the selected language.

3   Click Save.

Performing a Basic Search Operation in Siebel Open UI

Basic Search allows you to perform full text searches using Boolean operators. Boolean operators
allow you to create a more precise query. The type of object that you choose from the Look In list
determines whether you execute a Find or a Search operation. User access to search results is
determined by the sblvisibilityid index field mapping, and the account profile of the logged in user,
such as Position ID or Account ID. For information on configuring the sblvisibilityid index field, see
"Defining Index Attributes" on page 113.

To perform a basic search operation in Siebel Open UI

1 Select Search from the application-level menu.

2 From the Look In list, select the Search Object you want to search against. The Look In list
displays categories in the following order; each category is separated by a dotted line:

■ Find categories. Find objects that database queries can be executed against in a Find
operation. The Search For field is disabled for Find objects.

■ Search categories. Business components that have been indexed and can be queried against
in a Search operation.

■ External data sources. Data sources, such as Web sources, and external file systems, that
have been indexed and can be queried against in a Search operation.

3 Enter your search criteria in the Search For field, including the search operator, and click Go. The
Search For field is disabled for Find objects. The following table describes supported search
operators.

Search Operator	Function	Syntax and Description
* (Asterisk)	Wildcard	Placed at the end of a string, returns items containing the string, or containing the string plus any additional characters at the position at which it appears, up to (or beginning with) a space. For example, searching for the string *Ora** returns all words beginning with Ora, such as Oracle and Orator.
AND &	Boolean AND	Placed between search terms, returns only records and documents containing both terms. For example, searching for *Oracle AND Siebel* returns only records and documents containing both terms.
OR |	Boolean OR	Placed between search terms, returns records and documents containing either term or both terms. For example, searching for *Oracle OR Siebel* returns only records and documents containing one or both terms.

Search Operator	Function	Syntax and Description
- NOT	Exclusion	Placed before search terms, returns only records and documents that do not contain the search term. For example, searching for *Oracle -Siebel* returns only records and documents that contain the word Oracle and that do not contain the word Siebel.
" " (Quotation marks)	Phrase Search	Surrounds a string that, unless modified by a wildcard, must be matched exactly. Allows searching for groups of words in their exact order. For example, searching for *"Oracle Secure Enterprise Search"* returns only records and documents that contain the entire phrase *Oracle Secure Enterprise Search*.

4 From the Search Results view, click the hyperlink to go to the results of your search.

Search results can be further refined by Relevance, Data Source, Result Type, or Date.

NOTE: Sorting is applied to the search results that appear in the results page rather than the entire result set.

Performing an Advanced Search Operation in Siebel Open UI

Advanced Search is enabled when a search engine has been configured and set as the default, see "Activating the Search Engine" on page 37.

To perform an advanced search operation in Siebel Open UI

1 Select Search from the application-level menu.

2 Click Advanced Search. The following table describes the Advanced Search options.

Option	Description
All these words	This option performs a Boolean AND search operation. This option returns only records and documents containing all search terms. For example, inputting *Oracle Siebel* returns only records and documents containing both Oracle and Siebel.
Any of these words	This option performs a Boolean OR search operation. This option returns records and documents containing one or more of the search terms entered. For example, inputting *Oracle Siebel* returns records and documents containing Oracle, or Siebel, or both.

Option	Description
Exact phrase	This option returns records and documents that exactly match the entered phrase. For example, searching for Oracle Secure Enterprise Search returns only records and documents that contain the entire phrase. **NOTE:** Quotation marks are not supported for this field.
None of these words	This option returns only records and documents that do not contain the search term. **NOTE:** Quotation marks are not supported for this field.
Source	The Advanced Search Source field displays the business components that have been indexed for that Search Definition. Select the business component or components to include in the advanced search operation.
File Format	This option provides the ability to search by file format. The files are processed by MIME type for this search operation. The search can be filtered by the following file types: ■ All ■ HTML ■ Microsoft Excel ■ Microsoft PowerPoint ■ Microsoft Word ■ PDF ■ Plain text ■ Rich Text Format
Data Source	You can choose to retrieve your search results from multiple data sources. This feature is available if external data sources have been enabled, for example, a File System Connector or a Web Crawler Connector. To enable the File System Connector, see "Configuring the Siebel File System Connector" on page 49. To enable the Web Crawler Connector, see "Process of Setting Up the Web Crawler Source and Connector" on page 52.

3 From the Search Results view, click the hyperlink to go to the results of your search.

Performing a Find Operation in Siebel Open UI

Siebel Find supports real-time database queries on a field-by-field basis. The Find functionality is independent of the search engine. The type of object that you choose from the Look In list determines whether you execute a Find or a Search operation.

Parametric search is supported for the fields of the selected Find category. The results are saved in the Find Results view until a subsequent Find operation is executed. Find results are filtered based on the user's Visibility ID. For more information on data visibility and access control, see the chapter about access control in *Siebel Security Guide*.

To perform a Find operation in Siebel Open UI

1 Select Search from the application-level menu.

2 From the Look In list, select the Find category you want to search against.

The Find categories are listed first, followed by the Search categories.

The search fields for the selected Find category are displayed.

3 Enter your search criteria in the fields for the selected Find category.

The search criteria is saved until the next Find operation.

4 Click Find to view the search results.

The results are displayed in the Find Results view.

5 Drill down on a result item to display the record in its native view.

11 Siebel Search Integration API Reference

This chapter covers the Search integration API, which you can use to build an adapter that integrates with a third-party search engine. This chapter includes the following topics:

- "Search Integration API Overview" on page 145
- "InvokeMethod" on page 146
- "Search Method" on page 148
- "AdvancedSearch Method" on page 149
- "Index Method" on page 150
- "RefreshIndex Method" on page 151
- "IncrementalIndex Method" on page 152
- "ValidateEngineSetup Method" on page 153
- "Integrating a Third-Party Search Adapter with a Siebel Application" on page 153

Search Integration API Overview

Siebel Search can be integrated with a third-party search engine by implementing the Search integration API (application programming interface). Use the API method reference to build an adapter to integrate with a third-party search engine. All arguments passed between the Siebel application and the third-party adapter are in XML format. The communication format between the third-party adapter and search engine is not predetermined.

When a third-party adapter has been implemented it must be enabled in Siebel Tools and in the Siebel Search Administration UI, see "Integrating a Third-Party Search Adapter with a Siebel Application" on page 153.

A third-party implementation of the Search API will be comprised of the following elements outlined in Figure 2:

- **Third-Party search adapter**. A third-party implementation of the Search Open API to integrate a Siebel application and a third-party search engine.
- **Siebel application**. Creates the XML feed files which are input into the index operation. The Siebel application sends the index request and search query to the third-party search engine through the adapter's InvokeMethod.
- **InvokeMethod**. All Search API operations, including validation, index, and search operations, are called through InvokeMethod. All arguments passed between the Siebel application and InvokeMethod are in XML format.

■ **Third-Party search engine**. Consumes the XML feed files from the Siebel application, processes the index and search operations, and returns the search results to the Siebel application.
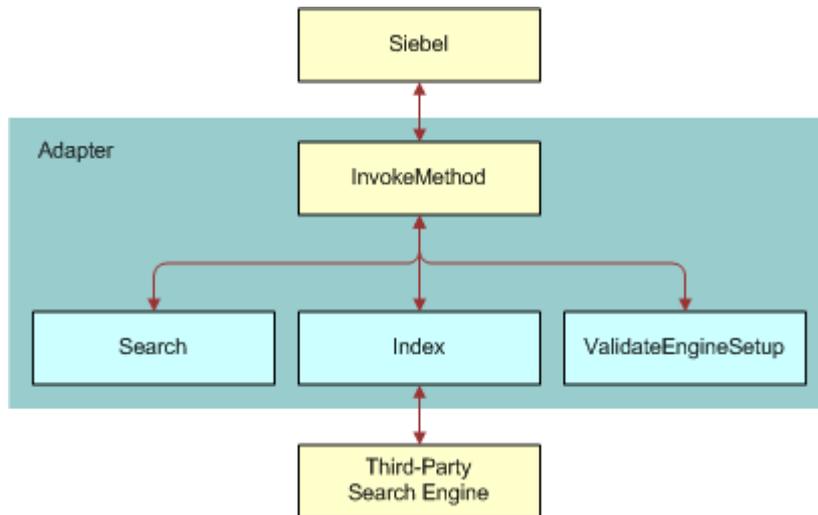
Figure 2.   Third-Party Search Adapter Implementation

InvokeMethod

InvokeMethod is used for Search Open API method calls between the Siebel application and the third-party adapter.

Syntax

```
int InvokeMethod (const wchar_t * pMethodName, const wchar_t * inputArgs, wchar_t * &
outputArgs)
```

Arguments

Argument	Description	Mandatory
pMethodName	A string indicating the name of the Search API method to be called by InvokeMethod. pMethodName can take any of the following values: ■ Search ■ Index ■ RefreshIndex ■ IncrementalIndex ■ ValidateEngineSetup	Yes
inputArgs	An XML string containing input for the specified method.	Yes
outputArgs	An XML string containing output from the specified method.	Yes

Usage

Use the InvokeMethod function to pass calls from the adapter to the appropriate Search method. The Siebel application communicates with the adapter only through InvokeMethod, and all Siebel Search operations are passed as arguments to InvokeMethod. This is the only Search API method that is called directly by the Siebel application.

Invoked From

Business service

Return Value

Zero (0) is returned on success. An error code is returned on failure.

Example

This example shows how InvokeMethod is invoked.

```
var1 = LoadLibrary(AdapterDLL);

typedef ErrCode (*ADPT_METHOD_PTR)(const SSbyte*, const SSbyte*, SSbyte *&);

ADPT_METHOD_PTR    pInvokeMethod;

pInvokeMethod =  (ADPT_METHOD_PTR)GetProcAddress(var1, SStext("InvokeMethod"));

var2 = (*pInvokeMethod)(pMethodName, InputArgs, OutputArgs);
```

Search Method

This method is used to invoke a basic search operation from the third-party search engine.

Syntax

InvokeMethod ("Search", InputArgs, OutputArgs)

The Search Type tag in the InputArgs XML string must be set to *BASIC*.

NOTE: Both the Search and AdvancedSearch methods are invoked by passing *Search* as the pMethodName value in InvokeMethod calls. The Search Type tag determines which method is invoked.

Arguments

Argument	Description
inputArgs	An XML string containing the input for the search operation, such as the engine parameters, query, and keyword. For sample format and values, see "Search inputArgs Example" on page 165.
outputArgs	An XML string of search results returned by the third-party search engine. This argument is required. For sample format and values, see "Search outputArgs Example" on page 167.

inputArgs Tags

The following search method inputArgs XML tags are used by the third-party search adapter. Other inputArgs tags are used internally by the Siebel application.

InputArgs Tag	Description
BCType	Business component, for example, Contacts or Solution. Syntax example: 2#15#Service Request8#Contacts The first character denotes the number of business components in the search operation. 15 and 8 denote the number of characters after #.
Query	The filter query string to determine which records are searched against. For example, First Name::Anil$$@@Last Name::Goyal$$@@ This query string executes a search against records where the First Name is Anil and the Last Name is Goyal. First Name and Last Name are fields in a business component. $$@@ is the delimiter used to separate terms in a query.

InputArgs Tag	Description
SelectedSearch	The selected searchable category in the Siebel Search Center Look In list. The search category also corresponds to the Name parameter in the Search Administration Search Index Settings view, for example, Solution (call center).
Freetext	The text to search for. This is the input from the Search For field in the Siebel Search Center. The freetext string can include any wildcard or Boolean operators supported by the third party search engine, for example, Ora* AND Sieb*.
Collection	The search data source, for example, business component or file system. The *Collection* value uses the same syntax and delimiters as BCType, for example, 2#7#buscomp11#File System.
From, To	The sequence of result records to request from the search engine, for example, values of from=0, to=9 indicate a request to return the first ten records from the search results.

outputArgs Tags

The following search method outputArgs XML tags are used by the third-party search adapter. Other outputArgs tags are used internally by the Siebel application.

InputArgs Tag	Description
TotalRecords	The total number of records in the search results.
From, To	The sequence of records from the search results currently displaying. For example, values of from=0, to=9 indicate the first ten records from the search results.
<RecordDetails>	The remaining OutputBlock tags contain the result record details, for example, business component type, document type, result summary, date, and data source.

Usage

Use this method to process and return the search results from the third-party search engine.

Invoked From

Invoked by the third-party adapter from InvokeMethod.

Return Value

An XML string of search results returned by the third-party adapter.

AdvancedSearch Method

This method is used to invoke an advanced search operation on the third-party search engine.

Syntax

InvokeMethod ("Search", InputArgs, OutputArgs)

The Search Type tag in the InputArgs XML string must be set to *ADVANCED*.

NOTE: Both the Search and AdvancedSearch methods are invoked by passing *Search* as the pMethodName value in InvokeMethod calls. The Search Type tag determines which method is invoked.

Arguments

Argument	Description	Mandatory
inputArgs	An XML string containing input for the advanced search operation, such as the engine parameters, query, keyword, and logical operator.	Yes
outputArgs	An XML string of search results returned by the third-party search engine.	Yes

Usage

Use this method to process and return the advanced search results from the third-party search engine. The search results can be filtered using constraints such as Boolean operators, modification date, file format, or data source.

Invoked From

Invoked by the third-party adapter from InvokeMethod.

Return Value

An XML string of advanced search results returned by the third-party adapter.

Index Method

This method is used to index the data in the XML feed file that is generated by the Siebel application. For sample feed file see "Feed File Example" on page 170.

Syntax

InvokeMethod ("Index", InputArgs, OutputArgs)

Arguments

Argument	Description	Mandatory
inputArgs	An XML string containing input for the index operation. The tag Shared_spcSearch_spcUNC_spcLocation, indicates the location where attachments are extracted to when a search category with attachments is indexed. For sample format and values see "Index inputArgs Example" on page 171.	Yes
outputArgs	An XML string of index results, such as Success or Error status, and number of records indexed.	Yes

Usage

Use this method to push the XML feed file to the third-party search engine, and index the data. The feed file is created by the Siebel application, and contains the records to be indexed. The location of the feed file is specified in the _XML_spcIndexable_spcData_spcLocation tag of the inputArgs XML string.

Invoked From

Invoked by the third-party adapter from InvokeMethod.

Return Value

An XML string of the success or error status of the index operation.

RefreshIndex Method

This method is used to update the index with any create, update or delete operations that have been executed on the source data since the last index operation.

Syntax

InvokeMethod ("RefreshIndex", InputArgs, OutputArgs)

Arguments

Argument	Description	Mandatory
inputArgs	An XML string containing input for the refresh index operation.	Yes
outputArgs	An XML string of the index results, such as Success or Error status.	Yes

Usage

Use this method to push the XML feed file to the third-party search engine, and update the index with any create, update, or delete operations that have been executed on the data source since the last index operation. The feed file is created by the Siebel application, and contains the records to be indexed. The location of the feed file is specified in the _XML_spcIndexable_spcData_spcLocation tag of the inputArgs XML string. The refresh index operation is supported on both thick and thin clients.

Invoked From

Invoked by the third-party adapter from the InvokeMethod method.

Return Value

An XML string of the success or error status of the index operation.

IncrementalIndex Method

This method is used to automatically update the index at pre-set intervals. The index is updated with any create, update or delete operations that have been executed on the source data since the last index operation.

Syntax

InvokeMethod ("IncrementalIndex", InputArgs, OutputArgs)

Arguments

Argument	Description	Mandatory
inputArgs	An XML string containing input for the index operation.	Yes
outputArgs	An XML string of the search results returned by the third-party search engine.	Yes

Usage

Use this method to push the XML feed file to the third-party search engine, and automatically index the set of data that has changed since the last index operation. The feed file is created by the Siebel application, and contains the records to be indexed. The location of the feed file is specified in the _XML_spcIndexable_spcData_spcLocation tag of the inputArgs XML string. The incremental index operation is supported on thin clients.

Invoked From

Invoked by the third-party adapter from the InvokeMethod method.

Return Value

An XML string of the success or error status of the index operation.

ValidateEngineSetup Method

This method is used to verify that the third-party search engine is running and initialized.

Syntax

InvokeMethod ("ValidateEngineSetup", InputArgs, OutputArgs)

Arguments

Argument	Description	Mandatory
inputArgs	inputArgs is empty when calling ValidateEngineSetup.	Yes
outputArgs	outputArgs will contain an appropraite error message in the event of an error.	Yes

Usage

Use this method to verify that the third-party search engine is running, and initialized for an index or search operation.

Invoked From

Invoked by the third-party adapter from InvokeMethod.

Return Value

An XML string indicating whether or not the third-party search engine is operational. Zero (0) is returned if the search engine is running.

Integrating a Third-Party Search Adapter with a Siebel Application

When a third-party adapter has been implemented, using the Search Open API, the adapter must be integrated with the Siebel application. This topic covers the required integration steps in Siebel Tools and in the Siebel Search Administration UI.

To integrate a third-party search adapter with a Siebel application

1   Start Siebel Tools.

2   In the Object Explorer, expand Business Service.

3   In the Business Service list, select Search External Service.

4 Choose Tools, and then Lock Project (or Alt+L) to lock the project.

5 In the Object Explorer, click Business Service User Prop.

6 In the Business Service User Props view, select Search External Service.

7 Set the OpenAPI Value to 1.

8 Compile the Siebel.srf file.

9 In the Siebel application navigate to the Administration – Search screen, and then the Search Engine Settings view.

10 Set the Library Name to the name and path of the adapter dll file.

11 Select the Default Flag field for the third-party adapter.

A Preconfigured Search Objects

This appendix lists the searchable objects that come preconfigured with Oracle's Siebel Search, and the application and Search Definition mappings. This appendix includes the following topics:

Call Center Searchable Objects

This topic lists the business components that are preconfigured as searchable objects in the Call Center Search Definition:

- Account
- Catalog Category
- Contact
- Decision issue
- Employee
- Internal Product
- Opportunity
- Service Request
- Service Request Attachment
- Solution
- SR Resolution Item

eService Searchable Objects

This topic lists the business components that are preconfigured as searchable objects in the eService Search Definition:

- Documentation
- Downloads
- Product Literature

- Product News

- Resolution Documents

- Solution

Sales Searchable Objects

This topic lists the business components that are preconfigured as searchable objects in the Sales Search Definition:

- Catalog Category

- Decision issue

- Internal Product

- Sales Tool

Service Searchable Objects

This topic lists the business components that are preconfigured as searchable objects in the Sales Search Definition:

- Internal Product

- Sales Tool

- Solution

- SR Resolution Item

To create or customize Search objects for Oracle Secure Enterprise Search integration, see Chapter 7, "Configuring Index Mappings."

Application and Search Definition Mappings

Table 15 lists the preconfigured mappings in the application configuration files between Siebel Business Applications and Search Definitions. See "Creating a New Index Definition" on page 119 for information on creating and customizing Search Definitions.

Table 15.   Siebel Application and Search Definition Mappings

Siebel Application	Search Definition
Siebel Automotive	Call Center
Siebel Call Center	Call Center

Table 15.   Siebel Application and Search Definition Mappings

Siebel Application	Search Definition
Siebel Consumer Sector	Call Center Definition
Siebel Customer Relationship Console	Call Center Definition
Siebel eBanking	eBanking Definition
Siebel eBriefings	eBriefings Definition
Siebel eChannel	eChannel Definition
Siebel eChannel for CG	eChannel Definition
Siebel eChannel for CME	Call Center Definition
Siebel eConsumer	eCustomer Definition
Siebel eConsumerPharma	eConsumerPharma Definition
Siebel eCustomer	eCustomer Definition
Siebel eCustomer for CME	eCustomer Definition
Siebel eDealer	eChannel Definition
Siebel eMail Response	Service Definition
Siebel eMarketing	eMarketing Definition
Siebel Energy	Call Center Definition
Siebel eProfessionalPharma	eProfessionalPharma Definition
Siebel ERM	ePortal Definition
Siebel ERM Administration	ERM Administrator Definition
Siebel ERM Embedded	ePortal Definition
Siebel ERM Portal	ePortal Definition
Siebel eSales	eSales Definition
Siebel eSales for CME	eSales Definition
Siebel eService	eService Definition
Siebel eSitesClinical	eSitesClinical Definition
Siebel E-Support	eCommerce Definition
Siebel Field Service	Service Definition
Siebel Financial eBrokerage	eBanking Definition
Siebel Financial eChannel	Call Center Definition
Siebel Financial eCustomer	eCustomer Definition
Siebel Financial eEnrollment	eService Definition
Siebel Financial eService	eService Definition

Table 15.   Siebel Application and Search Definition Mappings

Siebel Application	Search Definition
Siebel Financial Services	Call Center Definition
Siebel Financial Services Marketing	Marketing Definition
Siebel FINS eSales	FINSeSales Definition
Siebel Hospitality	Call Center Definition
Siebel Industry Marketing Enterprise	Marketing Definition
Siebel Insurance	Not supported
Siebel Life Sciences	Call Center Definition
Siebel Life Sciences	Sales Definition
Siebel Loyalty	Call Center Definition
Siebel Loyalty Customer Portal	eCustomer Definition
Siebel Loyalty Partner Portal	eChannel Definition
Siebel Marketing Enterprise	Marketing Definition
Siebel Medical	Call Center Definition
Siebel Mobile Connector	Sales Definition
Siebel Oil, Gas & Chemicals	Call Center Definition
Siebel Partner Manager	Partner Manager Definition
Siebel Power Communications	Call Center Definition
Siebel Public Sector	Call Center Definition
Siebel Sales Enterprise	Sales Definition
Siebel Transportation	Call Center Definition
Siebel Travel	Call Center Definition
Siebel Universal Customer Master	Call Center Definition

B Syntax for Filter Search Specifications

This appendix covers the syntax for filtering the index record-set to incorporate custom business rules. See Chapter 8, "Administering Siebel Search Index Settings" for information on using the Filter Search Spec field. This appendix includes the topic: "Filter Search Specification Syntax."

Filter Search Specification Syntax

This topic describes the supported syntax elements for filter search specifications, which are used for filtering the index record-set. Filter search specifications are specified in the Search Administration - Search Definitions and Search Index Settings views.

This topic includes the following information:

■ "Precedence" on page 159

■ "Comparison Operators" on page 160

■ "Logical Operators" on page 160

■ "Pattern Matching with LIKE and NOT LIKE" on page 160

■ "Functions in Calculation Expressions" on page 162

Precedence

Precedence refers to the order in which the various search operators within the filter search query specification are evaluated. Table 16 shows the levels of precedence. Expressions within parentheses are evaluated first. Using parentheses can alter the order of precedence within an expression.

Oracle's Siebel Business Applications evaluate the expression within the parentheses first, before evaluating the expression outside.

Table 16. Level of Precedence

Level	Operator
1	()
2	NOT
3	AND
4	OR

Comparison Operators

Table 17 describes the purpose of each comparison operator, and gives an example of how it is used.

Table 17. Comparison Operators

Operator	Purpose	Example
=	Equality Text	[Publish External] = "Y"
<>	Inequality text	[Role] <> LookupValue ("ROLE_TYPE", "Manager")
>	Greater than	[Start Date] > Today()
<	Less than	[End Date] < Today() + 4
>=	Greater than or equal to	[Start Date] >= Today()
<=	Less than or equal to	[End Date] <= Today() - 4

NOTE: The last four operators are used only for Date fields.

Logical Operators

Table 18 explains what a value of TRUE or FALSE means for each logical operator.

Table 18. Logical Operators

Operator	Returns TRUE	Returns FALSE
AND	If all component conditions evaluate to TRUE	If any component condition evaluates to FALSE
OR	If any component condition evaluates to TRUE	If all component conditions evaluate to FALSE

Pattern Matching with LIKE and NOT LIKE

The LIKE operator is used in character string comparisons with pattern matching.

The syntax is as follows:

   char1 LIKE *char2*

   where:

■ *char1* is the value to be compared with the pattern.

■ *char2* is the pattern to which *char1* is compared. The NOT logical operator can be used in conjunction with LIKE to exclude patterns.

The syntax including the NOT logical operator is one of the following:

>   *char1* NOT LIKE *char2*

>   NOT (char1 LIKE char2)

While the equal (=) operator does exact matching, the LIKE operator matches a portion of one character value to another. Patterns can use special characters to denote different characters. These characters are given in Table 19.

Table 19.   Pattern Matching Using Special Characters

Character	Purpose	Example
*	Zero or more characters	[Sales Type] LIKE Sales* returns all records whose [Sales Type] value starts with the characters Sales, as in Sales-Brochure, Sales-Presentation, and so on.
?	One character	[Sales Type] NOT LIKE Sale? returns all records whose [Sales Type] value was five characters long, and did not start with the letters Sales. Records with the word Sales would not be returned.

Functions in Calculation Expressions

Functions that can be used in the filter search specification are listed in Table 20.

Table 20. Functions That Can Be Used in Filter Search Specifications

Function	Purpose	Example
GetProfileAttr ("[Attribute]")	String	Returns the value stored in the profile attribute if that attribute has been defined. Used in personalization to retrieve values of attributes in a user profile and to pass information from a script to the UI. Set a session-specific personalization attribute equal to the value of the shared global, and reference the personalization attribute in a calculated field. **NOTE:** For an undefined attribute or for an attribute that has not been set up, GetProfileAttr returns NULL. Search Server does not support NULL values in the query.
LookupValue (type, lang_ind_code)	String	Finds a row in S_LST_OF_VAL table where the TYPE column matches the type argument, the CODE column matches the lang_ind_code argument, and the LANG_ID column matches the language code of the currently active language. Returns the display value (the VAL column) for the row. This function is used to obtain the translation of the specified untranslated value in the specified LOV into the currently active language.
Today	Date	Today's date (in the format mm/dd/yy).
GetValidCatalogCategories()	String	Returns a list of valid catalog categories for the current logged in user.

Filter Search Specification Examples

Assigning a search expression to an object definition's Search Specification property is similar to the predefined query's expression; however, identifying the business component and specifying the reserved word Search is not required.

NOTE: The Search Specification expression must be on one line. If more than one line is used the search specification might not be processed correctly.

The following are examples of filter search specification syntax:

■ [Close Date] > "04/15/07"

■ [Sales Tool Type] LIKE "Cal*"

- [Start Date] >= Today () AND [End Date] <= Today() + 100

- [Solution Type] = LookupValue ("SOLUTION_TYPE", "Solution") AND ([Publish External] = "Y"

- [PriceListId]=GetProfileAttr("DefaultPriceListId")

NOTE: For date formats in filter Search Specification, use the business component format. To reference a field value, you must use [Filter Field Name]. Also, string constants must be enclosed in double quotation marks ("string").

The fields declared must exist within the designated search filter field object definition.

C   Search API Examples

This appendix lists Search Open API sample formats for the Search and Index methods, and the feed file. For information on the Search Open API, see Chapter 11, "Siebel Search Integration API Reference."

This appendix includes the following topics:

Search inputArgs Example

This XML listing displays sample format and values for inputArgs when the Search method is invoked from the InvokeMethod method.

```
<?xml version="1.0" encoding="UTF-8"?><?Siebel-Property-Set
EscapeNames="true"?><PropertySet

XParam2="Val2"

Search_spcType="BASIC"

EngineName="XSearch"

BCType="1#15#Service Request"

Criteria=""

Navigation="2#7#Account4#Area"

Browser="FALSE"

Filename="\\<server>\filesystem\SSC\Config\<application>_Field-Mappings.xml"

Shared_spcSearch_spcUNC_spcLocation="\\<server>\filesystem\SSC"

_XML_spcIndexable_spcData_spcLocation="\\<server>\filesystem\SSC\xmlidata\"

Sort=""

DefaultFrom="0"

XParam1="Value1"

Context="SENSITIVE"
```

```
DefaultCriteria=""

DefaultContext="SENSITIVE"

AdptClassName="\\<server>\fs\XSearchAdapter.dll"

Batch_spcSplit_spcSize="1500"

DefaultRecordsPerPage="10"

SSC_spcFTP_spcLocation="ftp://<server>/"

AvailableFields="22#17#Service Request@@8#Abstract7#Account4#Area15#Attachment
List7#BC Name3#CSN7#Created10#Created
By11#Description2#Id12#Organization5#Owner23#Primary Organization Id20#Requestor
First Name19#Requestor Last Name15#Resolution Code9#SR Number6#Status8#Sub-
Area7#Updated10#Updated By"

RecordsPerPage="10"

Query=""

DefaultSort=""

SubOperation="Search"

New_spcSearch="0"

EngineId="42-CCOHV"

KeyOperator="OR"

DefaultTo="10"

SelectedSearch="Service Requests"

Freetext=""

Collection="1#7#buscomp"

DefaultBrowser="FALSE"

To="9"

LogOperator="AND"

Batch_spcSubmit_spcSize="1000"

Keyword=""

From="0"

></PropertySet>
```

Search outputArgs Example

This XML listing displays sample format and values for outputArgs when the Search method is invoked from the InvokeMethod method.

```
<?xml version ="1.0" encoding ="UTF-16"?>

<?XsearchAdapter-XML EscapeNames="true"?>

<OutputBlock

To ="9"

TotalRecords ="13"

From ="0">

<OutputBlock

Rowid ="1-260HR"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary
="NUOVITESTBENCHMARKSULLASCALABILITA&apos;DISIEBELSALES: sonooradisponibilisuwww.si
ebel.com|[Author:ITA_CCHE][Name:ITA_SiebelSalesProductNews7.40.01"

Date ="2002-02-26"

Title ="ITA_SiebelSalesProductNews7.40.01"

DataSource ="Solution"

Location ="">

</OutputBlock>

<OutputBlock

Rowid ="99-27Y6K"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary
="eMRSolution6|[Author:SADMIN][Name:eMRSolution6][Type:Solution][Status:Approved]"

Date ="1979-12-31"

Title ="eMRSolution6"

DataSource ="Solution"

Location ="">
```

```
</OutputBlock>

<OutputBlock

Rowid ="99-27Y6B"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary
="eMRSolution|[Author: SADMIN][Name: eMRSolution4][Type: Solution][Status: Approved]"

Date ="1979-12-31"

Title ="eMRSolution4"

DataSource ="Solution"

Location ="">

</OutputBlock>

<OutputBlock

Rowid ="1-2G2AY"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary
="HowtoSubmitanSRforRSATokenIssuesWhenlogginganSRforRSAtokensonHelpDeskOnline, youw
illwanttoensure/indicatethefollowing: NewRequests1. SR"

Date ="2002-06-01"

Title ="RSA-HowtosubmitanSRforanRSAToken"

DataSource ="Solution"

Location ="">

</OutputBlock>

<OutputBlock

Rowid ="1-26GY2"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary
="SmartScriptandeSmartScriptusethesamescriptstructureandworkexactlythesame. Thismea
nsthatyoucancreateaSmartScriptonceanddeployiteverywhere"

Date ="2002-03-05"
```

```
Title ="FRA-SmartScripteteSmartScript"

DataSource ="Solution"

Location ="">

</OutputBlock>

<OutputBlock

Rowid ="1-2G2AW"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary ="HowtoOrderanRSAToken1)ContactITCustomerCare"

Date ="2002-06-01"

Title ="RSA-OrderinganRSAToken"

DataSource ="Solution"

Location ="">

</OutputBlock>

<OutputBlock

Rowid ="1-2C38Z"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary
="OrderDocumentation(forInternalEmployees)MostSiebelDocumentationandLiteratureitem
scanbedownloadedinPDFformatfromtheLiteratureViewoneBiz.As"

Date ="2002-05-30"

Title ="MfgOps-Q3"

DataSource ="Solution"

Location ="">

</OutputBlock>

<OutputBlock

Rowid ="1-EZTJ"

BCType ="Solution"

DocumentType ="BusCompRecord"

Summary ="Name:1-EZTJ][Type:ResolutionItem]"
```

```
Date ="2001-07-17"

Title ="1-EZTJ"

DataSource ="Solution"

Location ="">

</OutputBlock></OutputBlock>
```

Feed File Example

This is a sample index feed file for two records. Oracle's Siebel application creates the XML feed files which are input into the index operation.

```
<?xml version="1.0" encoding="UTF-8" ?>

- <rss version="2.0" xsi:schemaLocation="http://xmlns.oracle.com/orarss.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://
www.w3.org/2001/XMLSchema">

- <channel>

  <title>Siebel Search Center</title>

  <link>http://www.oracle.com/apps/rss</link>

  <description>This channel contains feed for Siebel BusComp data.</description>

  <lastBuildDate>2008-05-13T08:03:39.00Z</lastBuildDate>

- <channelDesc xmlns="http://xmlns.oracle.com/orarss">

  <sourceName>buscomp</sourceName>

  <batchId>2008-05-13_08-03-39</batchId>

  <itemCount>2</itemCount>

  </channelDesc>

- <item>

  <link>http://<server>/callcenter_enu/
start.swe?SWECmd=GotoView&SWEView=User+Catalog+Explorer+View&SWERF=1&SWEHo=sdchs21
n381&SWEBU=1&SWEAppletO=InfoCenter+Explorer+List+Applet&SWERowIdO=1-12931</link>

- <itemDesc xmlns="http://xmlns.oracle.com/orarss" operation="insert">

- <documentMetadata>

  <accessURL>http://<server>/callcenter_enu/
start.swe?SWECmd=GotoView&SWEView=#VIEWNAME#&SWERF=1&SWEHo=sdchs21n381&SWEBU=1&SWE
AppletO=#APPLETNAME#&SWERowIdO=#ROWID#</accessURL>

  <docAttr name="Title">Siebel Distance Learning - ESN</docAttr>
```

```
    <docAttr name="status">Approved</docAttr>

    </documentMetadata>

-  <documentContent>

    <content>[Name:Siebel Distance Learning - ESN] [Status:Approved]</content>

    </documentContent>

-  <documentAcl>

    <securityAttr name="sblvisibilityid">PUB</securityAttr>

    </documentAcl>

-  <documentInfo>

    <status>STATUS_OK_FOR_INDEX</status>

    </documentInfo>

    </itemDesc>

    </item>

-  <item>

    <link>http://<server>/callcenter_enu/
start.swe?SWECmd=GotoView&SWEView=User+Catalog+Explorer+View&SWERF=1&SWEHo=sdchs21
n381&SWEBU=1&SWEAppletO=InfoCenter+Explorer+List+Applet&SWERowIdO=99-27Y6K</link>

-  <itemDesc xmlns="http://xmlns.oracle.com/orarss" operation="insert">

-  <documentMetadata>

    <accessURL>http://<server>/callcenter_enu/
start.swe?SWECmd=GotoView&SWEView=#VIEWNAME#&SWERF=1&SWEHo=sdchs21n381&SWEBU=1&SWE
AppletO=#APPLETNAME#&SWERowIdO=#ROWID#</accessURL>

    <docAttr name="Title">eMR Solution 6</docAttr>

    <docAttr name="status">Approved</docAttr>

    </documentMetadata>

-  <documentContent>
```

Index inputArgs Example

This XML listing displays sample format and values for inputArgs when the Index method is invoked from the InvokeMethod method.

```
<?xml version="1.0" encoding="UTF-8"?><?Siebel-Property-Set EscapeNames="true"?>

<PropertySet
```

```
Category_spcId="04-KFT4L"

EngineName="XSearch"

Search_spcSpecification="Id &gt;= &quot;1-1009T&quot; AND Id &lt;= &quot;99-
4C12M&quot;"

_XML_spcIndexable_spcData_spcLocation="\\<server>\fs\SSC\xmlidata\"

Shared_spcSearch_spcUNC_spcLocation=\\<server>\fs\SSC

Filename="\\<server>\fs\ssc\config\SSC_OSES_Field-Mappings.xml"

Filter_spcSpec=""

CategoryName="Solution (Call Center)"

XParam="Xval"

Batch_spcSplit_spcSize="1500"

AdptClassName="\\<server>\fs\XSearchAdapter.dll"

Search_spcBC_spcName="Solution"

Connector_spcId="04-KFT4D"

Adapter_spcInstance_spcCount="0"

SSC_spcFTP_spcLocation="ftp://<server>/"

Type="buscomp"

EngineId="42-CLX4P"

SearchCategoryName="Solution (Call Center)"

Batch_spcSubmit_spcSize="1000"

Operation="Index"

><PropertySet

Seq_spcNum=""

Field_spcType=""

Weight_spcFactor=""

Searchable_spcFlg="Y"

Field_spcName="Author By Name"

Navigable_spcFlg="N"

></PropertySet

><PropertySet
```

```
Seq_spcNum=""

Field_spcType=""

Weight_spcFactor=""

Searchable_spcFlg="N"

Field_spcName="BC Name"

Navigable_spcFlg="N"

></PropertySet

><PropertySet

Seq_spcNum=""

Field_spcType=""

Weight_spcFactor=""

Searchable_spcFlg="N"

Field_spcName="Catalog Category Name"

Navigable_spcFlg="N"

></PropertySet

></PropertySet>
```

Index