Siebel

Applications Administration Guide

December 2025

Siebel
Applications Administration Guide

December 2025

Part Number: F87441-07

Copyright © 1994, 2025, Oracle and/or its affiliates.

Authors: Siebel Information Development Team

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display in any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or “commercial computer software documentation” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government’s use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

The business names used in this documentation are fictitious, and are not intended to identify any real companies currently or previously in existence.

Contents

Preface i

1 What's New in This Release 1

What's New in This Release 1

2 Getting Started 7

Getting Started 7
Requirements for Getting Started 7
Starting the Siebel Application for the First Time 8
About License Keys 9
Selecting a Data Source 9
About Seed Data 10
Summary of Application Administration Tasks 10

3 Initial Setup 13

Initial Setup 13
About Initial Setup 13
Process of Implementing Initial Setup 13
Adding Views to the Siebel Application 14
Completing Employee Setup 14
Assigning Skills 16
Setting Up Locales 16
Setting Up Satmetrix Survey Reports 22

4 Ongoing Application Administration Tasks 25

Ongoing Application Administration Tasks 25
About Setting Defaults in a Siebel Application 25
Setting System Preferences 26
Setting Up Predefined Queries 26
Enabling Cancel Query 28
Setting Up Currencies 29

Setting Up Currency Conversion 31
Setting Up Expense Types 34
Setting Up Payment Terms 34
Setting Up Periods 35
Working with Telephone Formats 36
Setting Up Pager Companies 42
About Date Formats 42
Setting Up ZIP Codes 42
Administering Global Time Zone Support 42
Setting Up Email, Fax, and Mail Accounts (Contact Us) 45
Setting Up Industries 45
Setting Up Languages 46
About Case-Insensitive and Accent-Insensitive Queries and Searches 47
Adding Additional Web Browsers 48
Administering Quick Fill Templates 50
Setting Up Default View Links for Screen Home Pages 50
Setting the MaxMessageCount User Preference 51

5 **Working with Lists of Values** **53**
Working with Lists of Values 53
About Lists 53
Adding a New Value to an Existing List of Values 54
Clearing the Cache 55
List of Values Fields 56
Modifying a List of Values 57
Deactivating a Value in a List of Values 58
Constrained Lists of Values 59
Modifying LOVs Using Siebel Enterprise Integration Manager 61
Modifying LOVs Using REST API 61
Modifying LOVs in Runtime Repository Environments 63
Modifying LOVs in Integration Workspace in DR Environments 66

6 **Siebel Audit Trail** **67**
Siebel Audit Trail 67
About Siebel Audit Trail 67
Process of Configuring and Using Siebel Audit Trail 70
Enabling and Disabling Siebel Audit Trail 70

Setting Up Read Auditing 72
Specifying Parent–Child Associations for Audit 73
Specifying Siebel Audit Trail Restrictions 74
Verifying Siebel Audit Trail Configuration 75
Viewing Audit Trail Records 75
Linking Siebel Audit Trail to a Business Component 78
Decoding the Audit Log File 79
Importing Siebel Audit Trail with Enterprise Integration Manager 82
Customizing Siebel Audit Trail 82

7 Usage Pattern Tracking 83
Usage Pattern Tracking 83
About Usage Pattern Tracking 83
Process of Setting Up Usage Pattern Tracking 84
Usage Pattern Collection 92
Processing Usage Pattern 92
Viewing Usage Patterns 94
Details of Records for Usage Pattern Tracking 95
Application Programming Interfaces for Usage Pattern Tracking 95

8 Upload of UPT and UPT-IRM Intersect Data 99
Upload of UPT and UPT-IRM Intersect Data 99
Overview of UPT and IRM Data 99
Process of Uploading and Intersecting Data 100

9 Analytical Reports for UPT and UPT with IRM Intersection 105
Analytical Reports for UPT and UPT with IRM Intersection 105
Analytical Reports for UPT and UPT with IRM Intersect Data 105
Process of Configuring Reports 106

10 Creating and Administering iHelp 109
Creating and Administering iHelp 109
About iHelp 109
Scenario for Administering iHelp 109
Process of Administering iHelp 110
Creating iHelp Item Records 110

Designing iHelp 113
Clearing the iHelp List Cache 115
Activating, Revising, and Deactivating iHelp Items 116
Translating iHelp Items 117
Importing and Exporting iHelp Items 118

11 Alerts 119

Alerts 119
About Alerts 119
Scenario for Using Alerts 119
Creating Alerts 120

12 Administering and Using Inbox 123

Administering and Using Inbox 123
About the Inbox 123
Scenarios for Administering and Using the Inbox 125
Process of Administering the Inbox 126
Reviewing All Inbox Items 126
Deleting Inbox Items 127
Setting Expiration Dates and Due Dates for Inbox Items 127
Changing the Destination View for an Inbox Type 128
Changing Inbox Downloading to Remote Databases 128
Adding Inbox Translations 129
Process of Using the Inbox 129
Taking Action on Inbox Items 129
Reviewing Completed Items 130
Reviewing Submitted Items 130

13 Configuring the Inbox 131

Configuring the Inbox 131
Process of Setting Up and Configuring Inbox 131
Planning for Inbox Configuration 131
Creating Inbox Items 132
Creating Inbox Types 133
Setting Up Inbox Links to Views and SmartScripts 134
Setting Up Inbox Actions 135

Configuring the Inbox for Use with Remote Databases 138
Setting Up Inbox Approval Translations 139
Configuring the Toggle Applets for Inbox Views 140
Configuring the Category Icon for the Inbox 141
Setting the Log File for Troubleshooting 142
Universal Inbox Business Service Methods 142
Examples of Inbox Triggers 162

14 Activities 171
Activities 171
About Activities 171
Creating Activities (End User) 173
Working with Others' Activities (End User) 176
Delegating an Activity (End User) 177
Viewing Activities Associated with Another Record Type (End User) 178
About Configuring Owner and Employee Fields for Activities 178

15 Activity Plans and Sales Methods 179
Activity Plans and Sales Methods 179
About Activity Templates and Activity Plans 179
About Sales Methods 180
About Activity Assignment 180
Scenario for Managing Activity Plans 181
Process of Administering and Using Activity Plans 181
Defining a Sales Methodology 182
Creating an Activity Template 183
Creating TAS Customer Milestone Templates in a Localized Application 185
Deleting an Activity Template 186
Setting a Default Sales Methodology (End User) 187
Using an Activity Plan (End User) 187

16 Assessments 189
Assessments 189
About Assessment Templates 189
Scenario for Using and Administering Assessments 189
Process of Administering and Using Assessments 190

Creating an Assessment Template 190
Performing an Assessment (End User) 192
Assessing an Opportunity for Target Account Selling (End User) 193

17 Calendar 195

Calendar 195
About Calendar Resources 195
About Calendar Access 195
Scenarios for Administering Calendars 195
Process of Administering the Calendar 196
Setting Up Resources 196
Adding and Modifying Calendar Access 197
Deleting Calendar Access 198
Configuring the Calendar Alarm 199
Configuring the Calendar 199

18 State Models 213

State Models 213
About State Models 213
Scenario for Managing State Models 214
Process of Setting Up State Models 214
Configuring Business Components for State Models 215
Creating State Models and State Transitions 216
Activating State Models 218
Configuring All Operations for Child Records 219
About Criteria for State Transitions 221

19 Literature 223

Literature 223
About Literature 223
About Setting Up Literature Files 224
Creating and Modifying Literature Files 224
Creating Literature Records 225
Creating Translation Records 227
Creating Literature Item Kits 228
About Making Literature Visible to Users 229

Sharing Literature Through the Products Screen 229
Sharing Literature Through the Competitors Screen 230
Sharing Literature Through the Decision Issues Screen 230
Sharing Literature Through the Correspondence Screen 231
Sharing Literature Through Literature or Infocenter 231

20 Global Target List Management 233

Global Target List Management 233
About Global Target List Management 233
Scenario for Managing Global Target Lists 234
Process of Managing Global Target Lists 235
Creating Target Lists by Querying (End User) 235
Editing Target Lists (End User) 236
Creating Target Lists By Combining Lists (End User) 236
Applying Target Lists (End User) 237
Creating Activities from Target Lists (End User) 237
About Configuring Target Lists 238

21 D&B Integration 243

D&B Integration 243
About D&B Data 243
Scenarios for Using D&B 244
About the D&B D-U-N-S Number 245
Integrating D&B Data 245
Setting Up the Symbolic URL for Access to the D&B Database 258
Configuring D&B Integration 259
Field Mappings for Configuration of D&B Integration 262

22 D&B Integration (End User) 271

D&B Integration (End User) 271
Accessing Company Data and Reports with D&B 271
Viewing D&B Aggregate Data for a Company 271
Promoting a D&B Account 272
Creating a Prospect List from D&B Data 272
Viewing a D&B Report 273
Using Global Integration to Add New D&B Accounts 273

23 Contacts 277
Contacts 277
About Contacts 277
Scenario for Managing Contacts 277
Adding a Contact 278
Promoting a Personal Contact to a Contact 280
Creating a Profile for a Contact 281
Adding a Contact to a Synchronization List 281
Removing a Contact From a Synchronization List 281
Assessing a Contact 282
Synchronizing Contact Information with External Applications 282

24 Integration Using ASIs 283
Integration Using ASIs 283
About ASIs 283
Setting Up Account, Contact, and Household ASIs 284
ASI Workflow Descriptions 286

25 Web Services 289
Web Services 289
About the Word Web Service 289
Seed Data for Word Web Service 290
Requirements for Connecting Template to Siebel EAI 290
Process of Configuring Word Web Service 291
Downloading the Template for the Word Web Service 291
Connecting the Word Template to Siebel EAI 291
Process of Using Word Web Service to Perform a Mail Merge 292
Getting the Data for a Mail Merge from the Siebel Database 292
Refining Recipients for a Mail Merge 293
Refining the Message for a Mail Merge 293
Previewing Messages for a Mail Merge 294
Printing or Sending Mail Merge Messages 294
Logging Messages as a Siebel Activity 295

26 Accounts 297
Accounts 297

About Accounts 297
Scenario for Managing Accounts in Siebel Sales 297
Scenario for Managing Accounts in Siebel Call Center 298
Creating an Account 298
Associating a Contact with an Account 302
Associating an Activity with an Account 302
Associating an Opportunity with an Account 302
Assessing an Account 303
Synchronizing Account Information with External Applications 303
Viewing Account Credit Profiles 303

27 Global Accounts 305

Global Accounts 305
About Global Accounts 305
Scenario for Using and Administering Global Accounts 305
Process of Using and Administering Global Accounts 306
Generating a Default Hierarchy 307
Creating a Custom Hierarchy 309
Assigning a Custom Hierarchy to an Organization 309
Updating a Custom Hierarchy 310
Updating a Custom Hierarchy by Processing Deleted Records 311
Configuring Error Log Files for Hierarchy Changes 313
Adding Business Objects to the Global Accounts Hierarchy View 313
Viewing Global Accounts (End User) 316

28 Opportunity Workflows 319

Opportunity Workflows 319
About Opportunity Workflows 319
Setting Up Opportunity Notification Workflows 320
Activating the Opportunity Notification Workflow Processes and Policies 320
Rerouting an Opportunity Using Workflows 322
Modifying Opportunity Workflows 323
Setting Up the Get Manager Email 324

29 Opportunities (End User) 325

Opportunities (End User) 325

About Opportunities 325
Scenarios for Managing Opportunities 326
About Opportunities Lead Assignment 327
About Lead Response 328
About Lead Qualification, Sales Methods, and Stages 328
Process of Managing Opportunities 329
Creating an Opportunity 330
Changing the Primary Sales Team Member 333
Monitoring Significant Opportunity Transactions 333
Assessing an Opportunity 334
Viewing Decision Issues for an Opportunity 334
Associating a Contact with an Opportunity 334
Managing Activities Associated with an Opportunity 335
Associating a Product with an Opportunity 335
Creating a Quote from an Opportunity 336
Creating an Organization Analysis 337
Viewing Opportunity Charts 339
Setting Up Lead Sources for Opportunities 341

30 Households 343

Households 343
Household Contact Tracking 343
Scenario for Managing Households 344
Process of Managing Households 344
Adding a Household Record 344
Adding Contacts to a Household 346
Adding Activities to Household Records 348
Storing and Viewing Information About Households 348
Synchronizing Household Information with External Applications 349

31 References 351

References 351
Scenario for Managing References 351
Process of Managing Accounts and References 352
Designating an Account as a Reference 352
Associating an Activity with a Reference 352
Associating a Contact with a Reference 353

Associating an Attachment with a Reference 353
Viewing Reference Activities in the Calendar 354
Adding a Note to a Reference 354
Adding Profile Information to a Reference 354
Searching for References 355
Viewing Reference Asset and Profile Charts 355

32 Categories 357
Categories 357
Scenario for Managing Categories 357
Adding a Category 357
Searching by Category 358

33 Competitors 359
Competitors 359
Scenario for Managing Competitors 359
Associating a Competitor with an Opportunity 359
Viewing Competitor Comparisons 360

34 Decision Issues 361
Decision Issues 361
About Decision Issues 361
Scenario for Managing Decision Issues 361
Creating Decision Issues 361
Associating Decision Issues with an Opportunity (End User) 362

35 Enterprise Selling Process 363
Enterprise Selling Process 363
About Enterprise Selling Process 363
About Using ESP Methodology to Manage Accounts 363
Scenario for Managing Enterprise Selling Process 364
Process of Managing Enterprise Selling Process 365
Adding ESP Business Unit and Service Unit Information 365
Adding ESP Business and Service Unit Offerings 366
Conducting an ESP Organizational Analysis 368
Charting the Organization's Reporting Structure 369

Adding Partners for ESP Analysis 370
Viewing the BU/SU Offering Summary 371
Adding ESP Objectives 372
Adding ESP Account Plan Highlights 373
Viewing an ESP Manager's Review 374

36 Target Account Selling 375

Target Account Selling 375
About Using Target Account Selling to Manage Opportunities 375
Scenarios for Managing Target Account Selling 376
Process of Managing Target Account Selling 377
Completing a TAS Overview 377
Assessing an Opportunity 379
Developing Strategy with TAS Competitive Analysis 380
Conducting a TAS Organizational Analysis 380
Mapping the Organization's Reporting Structure 381
Developing a Relationship Strategy 382
Adding Customer Milestones 383
Viewing PRIME Activities 385
Adding Notes to Opportunities 385

37 Managing Portfolios 387

Managing Portfolios 387
About the Portfolio Management Process 387
Scenario for Managing a Portfolio 388
Roadmap for Managing Portfolios 389
Creating a Portfolio Plan 389
Process of Segmenting Accounts 391
Process of Analyzing the A Accounts 393
Process of Analyzing B, C, and D Accounts 393
Performing a Manager Review of a Portfolio Plan 401
Adding Solutions to Portfolio Plans 401

38 System Preferences and Component Parameters 403

System Preferences and Component Parameters 403
System Preferences for Siebel Business Applications 403

Component Parameters for Siebel Business Applications 409

39 Siebel Runtime Repository Version Rollback 413

Siebel Runtime Repository Version Rollback 413
About the Runtime Repository Version Rollback Feature 413
Marking MAIN Workspace Versions as Stable or Unstable 415
Rolling Back to the Last Stable Version of an Application 415
Rolling Back to Any Other Stable Version of an Application 416
Exiting Rollback Mode 416
Using Siebel Runtime Repository Version Rollback in Siebel Web Tools 417

40 Oracle AI for Siebel CRM 419

Artificial Intelligence (AI) Services for Siebel CRM 419
About Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services 419
Accessing Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services 420
Process of Setting Up Oracle Cloud Infrastructre (OCI) Artificial Intelligence (AI) Services 420
Artificial Intelligence Services (AI) Use Cases 428
Siebel REST APIs for Artificial Intelligence (AI) Services 430
Generative AI Service for Siebel CRM 443
Accessing Large Language Models (LLMs) with APIs 469

41 Oracle Knowledge Management Integration for Service Requests for Other Siebel Applications 475

Enabling Oracle Knowledge Management Integration for Service Requests for other Siebel Applications 475
Troubleshooting 475

42 Siebel Intelligent Data Archival 477

Siebel Intelligent Data Archival 477
Overview of Siebel Intelligent Data Archival 477
Component Parameters and Data Flow 478
About Helidon Microservices 479
Installing Siebel Intelligent Data Archival 480
Deploying the Archival Microservice Package 481
Configuring Helidon Microservices 482
Configuring Archival Source 483
Archival Rule Lifecycle 486

Retrieving Archived Data Records 488
Best Practices for Configuring Archival Rule 490

Preface

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

Using Oracle Applications

To find guides for Oracle Applications, go to the Oracle Help Center at *https://docs.oracle.com/*.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the *Oracle Accessibility Program website*.

Contacting Oracle

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit *My Oracle Support* or visit *Accessible Oracle Support* if you are hearing impaired.

Comments and Suggestions

Please give us feedback about Oracle Applications Help and guides! You can send an email to: *oracle_fusion_applications_help_ww_grp@oracle.com*.

1 What's New in This Release

What's New in This Release

This chapter tracks the changes in the documentation. It includes the following topics:

- *What's New in Siebel Applications Administration Guide, Siebel CRM 25.12 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 25.8 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 25.3 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 24.10 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 24.9 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 24.7 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 23.9 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 22.10 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 22.8 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 22.7 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 21.8 Update*
- *What's New in Siebel Applications Administration Guide, Siebel CRM 21.5 Update*

What's New in Siebel Applications Administration Guide, Siebel CRM 25.12 Update

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

Topic	Description
Siebel Intelligent Data Archival	New chapter. Describes the Siebel Intelligent Data Archival, that provides an automated, configurable, and secure approach to offload infrequently accessed data from the primary Siebel database.

What's New in Siebel Applications Administration Guide, Siebel CRM 25.8 Update

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

Topic	Description
Enabling Oracle Knowledge Management Integration for Service Requests for other Siebel Applications	New chapter. Describes procedures to enable other Siebel Applications for Fusion Knowledge Management Integration.

Topic	Description
Configure Business Component User Properties for Multimodal AI	New topic. Describes User Properties that provide support to Siebel Business Components for Multimodal AI.
Configure Business Component User Properties and activate Runtime Event for GSAT Score	New topic. Describes User Properties that provide support to Siebel Business Components for GSAT.
Generative AI Service Use Cases	Modified topic. Added new use cases (Multimodal AI and GSAT).

What's New in Siebel Applications Administration Guide, Siebel CRM 25.3 Update

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

Topic	Description
Accessing Large Language Models (LLMs) with APIs	New topic. The Siebel AI Framework has been enhanced to now include a feature that enables developers to effortlessly connect the Siebel CRM application to large language models (LLMs) that support their specific GenAI use-cases.

What's New in Siebel Applications Administration Guide, Siebel CRM 24.10 Update

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

Topic	Description
Artificial Intelligence (AI) Services for Siebel CRM	Modified topics. Describes how Siebel supports ORACLE model for Transcribing an Audio Speech file to Text. There is a recent support provided for WHISPER model as well. WHISPER_MEDIUM will be the default model for Speech to text Transcription.

What's New in Siebel Applications Administration Guide, Siebel CRM 24.9 Update

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

Topic	Description
Artificial Intelligence (AI) Services for Siebel CRM	Modified topic. The new enhancements to the AI Framework provide organizations a faster route to leveraging OCI Generative AI service for a variety of use cases.

Topic	Description
Generative AI Service for Siebel CRM	New topic. The AI Framework provides the ability to interoperate with prebuilt machine learning AI models and Generative AI service.

What's New in Siebel Applications Administration Guide, Siebel CRM 24.7 Update

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

Topic	Description
Configure the Oracle Cloud Infrastructure (OCI) Speech AI Service	Modified topic. Updated list of user properties and description to provide support for all Siebel Business Components for the Oracle Cloud Infrastructure (OCI) Speech AI service.
Siebel REST APIs for Artificial Intelligence (AI) Services	Modified topic. Added **Sample Payload** for *Sentiment Analysis, Text Classification, Detection of Dominant Language, and Language Translation* under REST API for Language AI Services.

What's New in Siebel Applications Administration Guide, Siebel CRM 23.9 Update

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

Topic	Description
Uptake of AI/ML powered features with OCI Java SDK 3.54.0	New topic. Describes procedure for the uptake of AI/ML powered features with OCI Java SDK 3.2.2.

What's New in Siebel Applications Administration Guide, Siebel CRM 22.10 Update

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

Topic	Description
Artificial Intelligence (AI) Services for Siebel CRM	New chapter. Describes the Artificial Intelligence (AI) use cases for Siebel CRM and how to setup and configure Oracle Cloud Infrastructure (OCI) AI Services for Siebel CRM.

What's New in Siebel Applications Administration Guide, Siebel CRM 22.8 Update

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

Topic	Description
Various topics.	Modified various topics to remove reference to *Siebel Briefings Administration Guide* guide, which is an obsolete guide.
Various topics.	Modified various topics to remove reference to Lotus Notes, since it is no longer supported.

What's New in Siebel Applications Administration Guide, Siebel CRM 22.7 Update

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

Topic	Description
Setting Up Locales	Modified topic. The field descriptions (*Long Date Format* and *Short Date Format*) in step 2 have expanded to include the following note: **Note:** If the locale format is set to `dd-mm-yy` (where only the last two digits of the year are set), then the input of any year between 1950 to 2049 is supported by your Siebel Business Application. To support the input of a year greater than 2049, however, you must switch to the following locale format: `dd-mmm-yyyy` (where the full four digits of the year are set).
Usage Pattern Tracking	Modified topic. Removed reference to article 2259206.1 (Article ID) on My Oracle Support.
About the Runtime Repository Version Rollback Feature	Modified topic. The note has been updated. Tasks are now part of the Workspace-versioned object definition in RR tables (so rollback is supported for tasks).

What's New in Siebel Applications Administration Guide, Siebel CRM 21.8 Update

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

Topic	Description
About Modifying LOVs in RR Environments	Modified topic. Added a new sub section about Foreign Key References for Seed Data After Migration.
Capturing User Actions with Usage Pattern Tracking	Modified topic. Enabling UPT is not compatible with test automation.
Adding the Generate Hierarchy Business Service to a Batch Workflow Policy *Adding the Hierarchy Update Business Service to a Batch Workflow Policy*	Modified topics. If inspecting a business service for the first time, then you must manually add it and any associated method(s) to execute the business service in the Process Simulator.

Topic	Description
Setting the MaxMessageCount User Preference	New topic. Describes the MaxMessageCount user preference, the purpose of setting it and how to configure it.

What's New in Siebel Applications Administration Guide, Siebel CRM 21.5 Update

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

Topic	Description
Component Parameters for Siebel Business Applications	Modified topic. Added the following component parameter: EBCDICCodePage.

2 Getting Started

Getting Started

This chapter includes information about getting started with Siebel Business Applications. It includes the following topics:

- *Requirements for Getting Started*
- *Starting the Siebel Application for the First Time*
- *About License Keys*
- *Selecting a Data Source*
- *About Seed Data*
- *Summary of Application Administration Tasks*

Requirements for Getting Started

After you successfully install your Siebel Business Applications, you are ready to set up your Siebel Business Applications.

The following table shows the software that you must correctly install before you can begin to use your Siebel Business Applications.

Software	More Information
Siebel Gateway Name Server	*Siebel Installation Guide*
Siebel Server	*Siebel Installation Guide*
Siebel Database Server	*Siebel Installation Guide*
Siebel Tools or Siebel Developer Web Client	*Siebel Installation Guide*
Siebel Business Applications	Application-specific administration guide and this guide

After you successfully install these Siebel servers and applications, you can proceed to use them.

Starting the Siebel Application for the First Time

To begin setting up your Siebel application, you must log in with administrative responsibilities. The Siebel database server installation script creates a Siebel administrator account that you can use to perform administrative tasks. The default user ID is SADMIN. A password is assigned to this user ID during the installation process. Your database administrator might also create a user ID and password that allows you to access the Siebel Server and perform the required setup. To set up entities in the Group Administration view, you must be connected to the Siebel Server; you do not have full administrative capabilities for this view if you are connected to the local database or working in a mobile Web client.

Note: You cannot modify the responsibility for the SADMIN ID that comes with Siebel Business Applications. However, you can copy this responsibility and modify the copy. For more information, see *Siebel Security Guide* .

Note: The *Siebel Bookshelf* is available on Oracle Technology Network (http://www.oracle.com/technetwork/indexes/documentation/index.html) and Oracle Software Delivery Cloud. It might also be installed locally on your intranet or on a network location.

Using Siebel Developer Web Client

You can start a Siebel application from the Siebel Developer Web Client.

To start a Siebel application from the Siebel Developer Web Client for the first time

1. From the Start menu, select Programs and then select your Siebel application.
2. Enter SADMIN in the User ID field and the appropriate password in the Password field.
3. In the Connect to field, select the server database from the drop-down list, and click OK.

   For information about the other databases available in the Connect to drop-down list, see *Selecting a Data Source*.

Using Siebel Web Client

You can also start a Siebel application from the Siebel Web Client.

To start a Siebel application from the Siebel Web Client

1. Open your Web browser.
2. Navigate to the URL for your Siebel Web Client.

   The login screen appears.
3. Enter SADMIN in the User ID field and the appropriate password in the Password field, and click OK.

About License Keys

As of Siebel Innovation Pack 2014, you do not have to enter the license keys for Siebel CRM base applications. The license keys are provided in the seed data that is imported into a new Siebel database. For more information, see the topic about installing the Siebel Database in *Siebel Installation Guide* .

The license keys are also part of the seed data that is imported into an existing database as part of the Incremental Repository Merge or database upgrade operations. For more information about performing these operations, see *Siebel Database Upgrade Guide* .

Selecting a Data Source

When you start a Siebel application from the Siebel Developer Web Client, you specify the data source to which you want to connect.

The following databases are potentially available to administrators and users:

- **Local.** A database that resides on your local computer. You can synchronize this database with the corporate database. This database is typically stored on a laptop computer, and mobile users who are not connected to a server when working use this database.
- **Server.** Your enterprise server database.
- **Sample.** A database of sample data, stored on your workstation. Using this database, you can experiment with a Siebel application without risk of damaging actual organizational data.

Always perform system administration tasks against the server database. Although you can perform these tasks against your local database and synchronize, doing so can cause errors, including data conflicts. In addition, performance problems can result from a large local database, and from routing large numbers of transactions.

About the Sample Database

Siebel Business Applications include a sample database to use in demonstrating, evaluating, or experimenting with the Siebel client and Siebel Tools. For more information, see *Siebel Installation Guide* .

The sample database includes numerous demo user accounts. (SADMIN is one of these accounts.) Each of these accounts has a predefined responsibility that reflects the demo user's position within the sample organization. If you log in to the sample database as a demo user, then your demo user's responsibility determines that views that you can access within Siebel Business Applications.

You do not have to install server components to run the Siebel sample database. However, you cannot access the Administration - Server Management screen if the server component is not running. You cannot copy the sample database to the server data sources.

To log on as a demo user, double-click the icon for the listed Siebel application in the Siebel client program group. The Demo Siebel application automatically logs the indicated user into the sample database. For the other Siebel Business Applications, enter the user ID and password in the logon dialog box, and select Connect to: Sample.

The sample database that ships with the Siebel application has a built-in license key that includes access to all views and modules for a period of a year from the initial ship date of the product.

About Seed Data

The enterprise database of your default Siebel application contains some built-in seed data, such as organization, division, position, responsibility, and employee records, as well as a list of countries for addresses. You can use this seed data for training or testing, or as templates for the real data that you enter. This seed data is only a starting point from which you can add more information as required. For more information about the seed data, including descriptions of seed data records, see *Siebel Security Guide* .

Summary of Application Administration Tasks

The following table summarizes the additional application administration tasks necessary to set up various Siebel Business Applications and optional modules.

If You Want to	You Might Have to Perform	More Information
Use any Siebel CRM base application (for example, Siebel Sales or Siebel Call Center)	Initial Setup tasks.	*Initial Setup*
	Ongoing administration tasks.	*Ongoing Application Administration Tasks*
Control access to views or data	Tasks to establish a strategy for controlling access to views and data. These tasks include: • Establish the business environment (such as organizations, divisions, and territories). • Add employees. • Assign responsibilities to employees.	*Siebel Security Guide*
Launch a global deployment	Locale and language administration tasks.	*Setting Up Locales* *Setting Up Languages* *Siebel Global Deployment Guide*
Manage global accounts	Account administration tasks to set up global account hierarchies.	*Global Accounts*
Use Application Services Interfaces (ASIs) for accounts, contacts, or households	Tasks to set up Web services and activate workflows for the ASIs.	*Integration Using ASIs*

If You Want to	You Might Have to Perform	More Information
Create catalogs for data, including products	Tasks to create catalogs for products, literature, solutions and auctions.	*Siebel Order Management Guide*
Use Correspondence, Presentations, and Proposals functionality	Tasks to set up the Siebel Document Server and create templates.	*Siebel Correspondence, Proposals, and Presentations Guide*
Use the calendar to set up resources, such as conference rooms, equipment, and projectors	Calendar administration tasks.	*Calendar*
Use Assignment Manager to automatically assign tasks to appropriate users	Tasks to create skills and other criteria.	*Siebel Assignment Manager Administration Guide*
Use Siebel Marketing	Marketing administration tasks.	*Siebel Marketing Installation and Administration Guide*
Manage lists of prospects, contacts, accounts, positions, and employees	List Management tasks.	*Siebel Marketing User Guide* and *Global Target List Management*
Use Competency Management	Skills and competencies administration tasks. **Note:** These skills are different skills than those that Assignment Manager uses.	*Siebel Project and Resource Management Administration Guide*
Use Time Sheets and Expense Reports	Tasks for Time Sheet and Expense Report setup, such as creating work types.	*Siebel Project and Resource Management Administration Guide*
Manage Service schedules, Service Assets, and Warranties	Service administration tasks.	*Siebel Field Service Guide*
Manage orders and the order process	Order administration tasks.	*Siebel Order Management Guide*

3 Initial Setup

Initial Setup

This chapter includes information about initial setup tasks. It includes the following topics:

- *About Initial Setup*
- *Process of Implementing Initial Setup*
- *Adding Views to the Siebel Application*
- *Completing Employee Setup*
- *Assigning Skills*
- *Setting Up Locales*
- *Setting Up Satmetrix Survey Reports*

About Initial Setup

After you successfully install your Siebel Business Applications, you must perform numerous tasks to set up and administer them.

You must complete initial setup tasks in order for your Siebel Business Applications to work correctly, and then you can complete these tasks infrequently as your company grows. Complete ongoing tasks on an occasional or ongoing basis. *Ongoing Application Administration Tasks* describes these ongoing tasks.

Process of Implementing Initial Setup

To implement initial setup, perform the following tasks:

1. Add any custom views.

   Custom views are created in Siebel Tools and must be added to your Siebel application. Add custom views to the Views view before you define responsibilities. For information about adding views, see *Adding Views to the Siebel Application*.
2. Determine access control strategy and define business environment structure.

   You can set up your Siebel Business Applications to support many strategies for your company to control access to views and data. These strategies include methods such as defining your business environment structure (organizations, internal and external divisions, and so on), defining employee positions, and creating access groups so that specific groups of people have access to specific views and data.

   Make these decisions early in the deployment process, so that you can implement the strategy during the initial setup. For more information about controlling access to views and data, and the procedures for implementing access control, see *Siebel Security Guide* .

3. Enter employee records into the Siebel application and determine employee access to views and data.

   Enter employee records after you have defined your business environment structure. You must assign at least one responsibility to each employee, and you can also assign organizations, positions, or other access control parameters. For more information about entering or deactivating employee records, see *Siebel Security Guide* .
4. Complete employee setup. For information about associating additional information to an employee record, see *Completing Employee Setup*.
5. Assign employee skills. For more information, see *Assigning Skills*.
6. Set up locales.

   Locale Codes and parameters are necessary for a global deployment. For more information, see *Setting Up Locales*.

Adding Views to the Siebel Application

Developers create new views through Siebel Tools. In order for the views to become available for administrators to work with, you must add them to the Views screen in the Siebel application before you define your business environment.

For example, you want to add an Opportunities view in the Reference screen. In Siebel Tools, you create the view and name it Reference Opportunities. In your Siebel application, you follow the steps in this topic, and add the Reference Opportunities view in the View Administration view. After it has been added in both places, the view can be made accessible to the appropriate users. For details on creating views, see *Configuring Siebel Business Applications* . For details about controlling visibility to views, see *Siebel Security Guide* .

You generally do not have to modify or delete views that are already listed. You must modify a view only if its name was changed in Siebel Tools. You must delete a view only if it no longer exists in the data model schema, or if you do not want anyone to have access to it. Instead of deleting views, administrators remove the views from responsibilities and keep them in the Siebel database.

Note: Only visibility-level views can be configured to appear in the Site Map.

This task is a step in *Process of Implementing Initial Setup*.

To add customized views to the Siebel application

1. Navigate to the Administration - Application screen, then the Views view.
2. In the Views list, create a new record, and complete the necessary fields.

Completing Employee Setup

After completing the employee setup procedures, which are required to allow employee access to the Siebel application, views, and data, you complete employee setup by providing additional information. For information about the employee setup procedures, see *Siebel Security Guide* .

This setup can include the following:

- **Assignment Rules.** Allows you to see and administer the assignment rules for an employee. For more information about assignment rules, see *Siebel Assignment Manager Administration Guide* .

> **Note:** You must be logged on to a server database to use the Employee Assignment Rules view.

- **Availability.** Lists the projects for which an employee is on staff, or for which an employee has been requested. For more information, see *Siebel Project and Resource Management Administration Guide* .

  > **Note:** Employees can also change their availability in the Availability view on the User Preferences screen.

- **Exception Hours.** Specifies the days and hours an employee is not available.
- **Utilization.** Displays a chart with the monthly and quarterly utilization of the currently selected employee. Managers use this chart for monitoring professional services projects and employees. For more information about professional services, see *Siebel Project and Resource Management Administration Guide* .
- **Tools.** Defines the tools that field service engineers carry with them or have access to. It allows a call center person to check whether the engineers have the correct tools for the jobs they are assigned to.
- **Job Information.** Specifies the job profile, salary, compensation ratio, pay currency, and location of employee.
- **Calendar administration.** Defines the calendar properties and access for an employee.
- **Assignment Skills.** Defines an employee's skills and skill items, along with their level of expertise. Skills can be used as assignment criteria in Siebel Assignment Manager. For more information about how the Siebel application uses skills, see *Siebel Assignment Manager Administration Guide* .
  Skills can also be used in the Project and Resource Management product for managing resources. For information about these types of skills, see *Siebel Project and Resource Management Administration Guide* .
- **Employee Query.** Allows queries to identify employees with particular skills and expertise.
- **Service Details.** Provides details about the shift start and end locations, hourly costs, overtime availability and other details for a service employee.
- **Competency.** Provides a list of areas in which the employee has some demonstrated level of knowledge or accomplishment.
- **Education.** Provides details of an employee's education history.
- **Past Work Experience.** Provides details of an employee's work history.
- **Honor/Award.** Provides list of honors and awards earned by an employee.
- **Membership.** Provides details of an employee's memberships in various organizations.
- **Certification.** Provides details of an employee's certification.

This task is a step in *Process of Implementing Initial Setup*.

To complete the employee setup

1. Navigate to the Administration - User screen, then the Employees view.
2. In the Employees list, drill down on Last Name field for an employee record.
3. Navigate to the More Info view.
4. In the form, complete the necessary fields.
   Some of the fields are described in the following table.

Field	Comments
Configuration	Select the Siebel application or group of software components to associate with the currently selected employee. For more information, see *Siebel Anywhere Administration Guide* .

Field	Comments
Available Until	Select a date and time to indicate the active period of an employee. This field is used in conjunction with the Availability, Overtime Availability, and Next Available fields.

5. Navigate to another appropriate view.
6. Create a new record, if needed, and complete the necessary fields.

Assigning Skills

At the levels of organizations, positions, and employees, you can add skills. Skills are used for assigning employees to certain projects, service requests, and so on. Skills added to an organization apply to all employees assigned to that organization. Skills assigned to a position apply only to the employee assigned to that position. You create skills with Siebel Tools.

Employees can track and update their own skill profiles in the User Preferences Profile view. For more information about how your Siebel application uses skills, see *Siebel Assignment Manager Administration Guide* .

This task is a step in *Process of Implementing Initial Setup*.

Setting Up Locales

A locale is a set of rules guiding how common data appears to the user or is received from the user. These rules are used to format data from a Siebel database before displaying the resulting information in output fields on the user interface. Siebel Business Applications use local settings to support language and geographical conventions for the display language of drop-down lists and formatting of data, such as dates, times, numbers, and currencies.

The Locale information is stored in the Locale Table (S_LOCALE). The data in this table is maintained by the administrator using the Locale Administration view. For more information about languages and locales, see *Siebel Global Deployment Guide* . For more information about configuring the formatting for dates and currency, see *Configuring Siebel Business Applications* .

The locale with which a Siebel Application Object Manager component is initialized is determined by the value of the parameter Locale Code. Although the locale is set during initial installation and configuration, it can be changed to any locale that is preconfigured with the Siebel application or that has been added by the administrator. The Locale Code parameter can be set at the Enterprise, Server, or Component level.

Several locale definitions come with the standard Siebel application. You can also revise these existing locales, or create new locales, using the Locale Administration view.

Note: Create a new locale only if a locale is not already defined that can meet your requirements.

After a locale and its settings are defined, you can create translations for locale names that appear in the locale pick applet, rather than the three-letter acronym locale code. For example, instead of showing ENU as the locale name, the

administrator provides `English–United States` as a translation for English speakers, `Inglese–Stati Uniti d'America` for Italian speakers, and so on. Only translated locale names appear to users on locale pick applets.

> **Note:** While the Siebel Web Clients use the locale settings specified in the Locale Administration view, the Siebel Mobile Web Client and the Siebel Developer Web Client use the locale settings defined in the Regional and Language Options settings on the client computer.

Setting up a Siebel Application Object Manager component includes assigning it a locale. Because the locale directs how locale-sensitive information such as dates, times, and numbers differs between countries, customers can configure a Siebel Application Object Manager for each country or other geographical setting in which they have users, and provide these users with data that appears correctly for their locale.

This task is a step in *Process of Implementing Initial Setup*.

To create a locale

1. Navigate to the Administration - Data screen, then the Locale view.
2. In the Locale list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Locale Code	Type the locale code. Siebel Business Applications use the three-letter acronym conventions of Microsoft for the locale codes. In most cases, the acronym is created by taking the two-letter language abbreviation from ISO Standard 639 and adding a third letter to form a unique identifier. For example, ENU (English–United States), ENG (English–United Kingdom), or FRA (French–France) For information about Microsoft codes, see your Microsoft documentation.
Locale Name	Type the locale name. The naming convention for locales is generally `Language Name–Territory` (for example, English–United States, English–United Kingdom, or French–France).
Description	Type optional text describing the locale.
UI Directionality	Select a value for the direction of the text that appears in the user interface. Values are: o Right To Left (Arabic and Hebrew) o Left To Right (all other predefined locales)
International Dialing Code	Select the country code to appear in phone numbers. This field suppresses the country code for phone numbers that are in the user's locale. For example, the phone numbers for two accounts are the following: o +33 1-23 42 34 56, for an account based in France (+33 is the country code for France)

Field	Comments
	○ +1 6502955000, for an account based in the U.S. (+1 is the country code for the U.S.) To a user based in the U.S. (locale ENU), the International Dialing Code value is “USA and Canada (1)", and the phone numbers given here appear as follows: ○ +33 1-23 42 34 56 ○ (650) 295-5000
Positive Currency Format	Select a value for the location of the currency symbols with respect to the digits (100). For example, for U.S. format, $32.45, select s100.
Negative Currency Format	Select a value for the location of the negative sign (-) with respect to the currency symbols and digits (100). Examples follow: ○ For U.S. format, ($32.45), select (s100). ○ For British format, -£32.40, select -s100.
Currency Decimal Separator	Type the symbol to indicate the decimal place in currency.
Currency Grouping Separator	Type the symbol to group numbers in currency. Use **\B** to designate a space.
Number Decimal Separator	Type the symbol to indicate the decimal place in numbers. Examples follow: ○ For French format, 1 234,34 (comma as decimal symbol) ○ For U.S. format, 1,234.34 (period as decimal symbol)
Number Grouping Separator	Type the symbol to group numbers. Examples follow: ○ For French format, 1 234 (space as number grouping separator). Use **\B** to designate a space. ○ For German format, 1.234 (period as number grouping separator) ○ For U.S. format, 1,234 (comma as number grouping separator)
Number Leading Zero	Select the check box to display a leading zero in numbers less than one. For example: **0.7** and not **.7**.
Number Fractional Digits	Type the number of digits after the decimal separator. For example, the number 12.340 has a number fractional of 3. This field applies to data fields of type DTYPE_NUMBER.
List Separator	Type the symbol to separate consecutive numbers in a list. In the U.S., consecutive numbers are separated by a comma. For example: 1.23,3.57,4.01, and so on.

Field	Comments
	In France, consecutive numbers are separated by a semi-colon. For example: 1,23;3,57;4,01).
Long Date Format	Type the appropriate long date format, which typically contains day and month names. For example, the dddd, dd mmm, yyyy format yields a date such as Friday, 07 Jun, 2004. The date format options for the day of the month are: o **d** specifies the day of the month, with no leading zero for single-digit days. For example: 1, 2, 3, and so on. o **dd** specifies the day of the month, with a leading zero for single-digit days. For example: 01, 02, 03, and so on. o **ddd** specifies the abbreviated name of the day of the week. For example: Mon, Tue, Wed, and so on. o **dddd** specifies the full name of the day of the week. For example: Monday, Tuesday, Wednesday, and so on. The date format options for the month are: o **m** specifies the month, with no leading zero for single-digit months. For example: 1, 2, 3, and so on. o **mm** specifies the month, with a leading zero for single-digit months. For example: 01, 02, 03, and so on. o **mmm** specifies the abbreviated month name. For example: Jan, Feb, Mar, and so on. o **mmmm** specifies the full month name. For example: January, February, March, and so on. The date format options for the year are: o **yy** specifies the last two digits of the year. For example: 00, 01, 02, and so on. o **yyyy** specifies the full four digits of the year. For example: 2020, 2021, 2022, and so on. Date formats can include literal delimiter characters, such as a space, comma, period, hyphen, or forward slash (/). The Date Separator character is usually one of these characters. A delimiter can be any non-numeric character, but avoid using the date format options for the Long Date Format field in the delimiter. If you must use a date format option in a delimiter, then enclose the delimiter in single quotation marks. For example, a date of Thursday, January 24, 2013 in English is quinta-feira, 24 de janeiro de 2013 in Portuguese. The de delimiters (which mean “of") in the Portuguese date include the letter d, which is a date format option for the day of the month. You specify the English date in a format of dddd, mmmm dd, yyyy. But you must specify the Portuguese date in a format of dddd, dd 'de' mmmm 'de' yyyy. You enclose the de delimiters in single quotation marks so that the letter d in these delimiters is not interpreted as the day of the month. **Note:** Long dates are supported only for the calendar, the Gantt chart, salutation text on the home page, and balloon text in some charts.

Field	Comments
	Note: If the locale format is set to **dd-mm-yy** (where only the last two digits of the year are set), then the input of any year between 1950 to 2049 is supported by your Siebel Business Application. To support the input of a year greater than 2049, however, you must switch to the following locale format: **dd-mmm-yyyy** (where the full four digits of the year are set).
Short Date Format	Type the appropriate shortened date format, for example, as follows: o **yymmdd**: 081104 or 080321. o **m/dd/yyyy**: 11/04/2008 or 3/21/2008). This is the default U.S. format. o **dd.mm.yyyy**: 04.11.2008 or 21.03.2008. This is the default German format. Date formats can include literal delimiter characters, such as a space, comma, period, hyphen, or forward slash (/). The Date Separator character is usually one of these characters. A delimiter can be any non-numeric character, but avoid using the date format options for the Long Date Format field in the delimiter. For information about other elements used in date formats, see the description for the Long Date Format field. **Note:** If you enter a month number greater than 12, then the month defaults to 12. If you enter a day number greater than the number of days in the month, then the day defaults to the last day of the month. For example, if you enter 42/99/03 (U.S. format), then the date defaults to 12/31/03. **Note:** If the locale format is set to **dd-mm-yy** (with only the last two digits of the year set), then the input of any year between 1950 to 2049 is supported by your Siebel Business Application. To support the input of a year greater than 2049, however, you must switch to the following locale format: **dd-mmm-yyyy** (with the full four digits of the year set).
Date Separator	Type the symbol to use in a date format to separate the components of the date. It must be a single non-numeric character that is not one of the elements representing day, month, or year.
Time Separator	Type the symbol to separate hours from minutes in a time format.
Time Leading Zero	Select the check box to display a leading zero (0) in time fields. Examples follow: o 01:03 AM, 01:03 PM, 12-hour clock with leading zero. o 1:03 AM, 1:03 PM, 12-hour clock without leading zero. o 01:03, 13:03, 24-hour clock with leading zero. o 1:03, 13:03, 24-hour clock without leading zero.
24-hour clock	Select the check box to indicate use of the 24-hour clock. Clear the check box to indicate use of the 12-hour clock.

Field	Comments
Time A.M. Designator	Type the symbol for designating time between 00:00 and 12:00 (for example, AM, a.m., or am).
Time P.M. Designator	Type the symbol for designating time between 12:00 and 24:00 (for example, PM, p.m., or pm).

Creating a Translation for a Locale Name

Complete the following procedure to create a translation for a locale name.

To create a translation for a locale name

1. Navigate to the Administration - Data screen, then the Locale view.
2. In the Locale list, select the appropriate record.
3. Navigate to the Locale Name Translation view.
4. In the Locale Name Translation list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Language	Type the language code of the translation of the locale name. For examples of language codes, see *Siebel Global Deployment Guide* .
Translated Name	Type the exact translation of the locale name to appear in the drop-down list for users with the designated language code. For example, for the locale English–United States: o For the locale with the language code ENU, the locale name is English–United States. o For the locale with the language code ITA, the locale name is Inglese–Stati Uniti d'America.
Description	Type the translated description of this locale.

Editing the Current Locale

Complete the following procedure to edit the current locale.

To edit the current locale

1. Locate and select the locale record.

   For more information about accessing the locale record, see *Setting Up Locales*.
2. Edit the locale record as required.

Restart the Siebel Application Object Manager component for the changes to take effect.

For information about shutting down and starting Siebel Server components such as a Siebel Application Object Manager, see *Siebel System Administration Guide* .

Setting Up Satmetrix Survey Reports

Note: This topic applies only to those who have purchased Siebel Satmetrix Surveys or who have purchased surveys directly from Satmetrix Systems.

To view Satmetrix survey reports through your Siebel application, you must:

- Add the Account Satmetrix Survey View view to the appropriate user responsibilities. For information about how to add views to responsibilities, see *Siebel Security Guide* .
- Enter the secret key string provided by Satmetrix Systems into the Satmetrix Key Value system preference. For information about how to change system preferences, see *Setting System Preferences*.
- Complete the procedures in this topic.

Extending the List of Values

Extend the List of Values for WI_ARG_TYPE. This LOV defines the arguments for integrating with other portal and internet applications.

To extend the List of Values for WI_ARG_TYPE

1. Navigate to the Administration - Data screen, then the List of Values view.
2. Create a new record, and complete the fields, using the following table as a guide.

Field	Value
Type	WI_ARG_TYPE
Display Value	Satmetrix
Language-Independent Code	Satmetrix
Active	Yes
Translate	Yes
Replication Level	All

Setting Up The Symbolic URL

Next, set up the symbolic URL for access to the Satmetrix reports server. For more information about symbolic URLs, see *Siebel Portal Framework Guide* .

To set up the symbolic URL for access to Satmetrix Reports

1. Navigate to the Administration - Integration screen, then the WI Symbolic URL List view.
2. From the visibility filter, select Symbolic URL Administration.
3. In the list of symbolic URLs, select SatmetrixSurvey.
4. Make sure the URL is the URL for the reports server provided by Satmetrix Systems.
5. In the Symbolic URL Arguments list, complete the fields, using the following table as a guide.

Name	Required Argument	Argument Type	Argument Value	Append as Argument	Sequence
EncodeUrl	Yes	Command	FALSE	Yes	1
version	Yes	Constant	Obtain from Satmetrix	Yes	2
windowsize	Yes	Command	WebControl width=1000 height=500 border=1	Yes	3
type	Yes	Constant	acct	Yes	4
acctid	Yes	Field	Id	Yes	5
acctname	Yes	Field	Name	Yes	6
contactid	Yes	Constant	* (asterisk)	Yes	7
contactname	Yes	Constant	* (asterisk)	Yes	8
user	Yes	Profile Attribute	Login Name	Yes	9
domain	Yes	Constant	Obtain from Satmetrix	Yes	10
model	Yes	Constant	Obtain from Satmetrix	Yes	11

Name	Required Argument	Argument Type	Argument Value	Append as Argument	Sequence
created	Yes	Field	Timestamp	Yes	12
token	No	Satmetrix	Satmetrix Surveys, CalculateToken	Yes	13

4 Ongoing Application Administration Tasks

Ongoing Application Administration Tasks

This chapter describes how to set up defaults that are used throughout your Siebel application. It includes the following topics:

- *About Setting Defaults in a Siebel Application*
- *Setting System Preferences*
- *Setting Up Predefined Queries*
- *Enabling Cancel Query*
- *Setting Up Currencies*
- *Setting Up Currency Conversion*
- *Setting Up Expense Types*
- *Setting Up Payment Terms*
- *Setting Up Periods*
- *Working with Telephone Formats*
- *Setting Up Pager Companies*
- *About Date Formats*
- *Setting Up ZIP Codes*
- *Administering Global Time Zone Support*
- *Setting Up Email, Fax, and Mail Accounts (Contact Us)*
- *Setting Up Industries*
- *Setting Up Languages*
- *About Case-Insensitive and Accent-Insensitive Queries and Searches*
- *Adding Additional Web Browsers*
- *Administering Quick Fill Templates*
- *Setting Up Default View Links for Screen Home Pages*
- *Setting the MaxMessageCount User Preference*

About Setting Defaults in a Siebel Application

For some implementations, the default settings provided through the seed data meet a company's needs without customization. In other cases, administrators find it useful to make adjustments to these defaults.

> **Note:** This chapter assumes that you have successfully installed your Siebel application and have completed the tasks for initial setup. For more information, see *Initial Setup*.

Setting System Preferences

System preferences control how Siebel Business Applications operate in your environment. Review default settings and modify these settings as appropriate for your environment.

Some system preferences might not take effect until the affected components are restarted. For information about shutting down and starting Siebel Server components such as a Siebel Application Object Manager, see *Siebel System Administration Guide* .

To set system preferences

1. Navigate to the Administration - Application screen, then the System Preferences view.
2. Check that the default system preference values are correct in your environment.
3. Change values for system preferences as needed.

Setting Up Predefined Queries

To set up predefined queries, review the following topics:

- *About Setting Up Predefined Queries*
- *Guidelines for Setting Up Queries*
- *Creating Predefined Queries*

About Setting Up Predefined Queries

Predefined queries (PDQ) automate queries that a user can perform online. Rather than creating a query, entering criteria, and running the query, the user selects a PDQ from the Queries drop-down list.

Predefined queries can be private (available only to the person who created them) or they can be public (available to all the users of the Siebel application).

Set up predefined queries in the following ways:

- Create and run a query in the usual way, and then save the query.
- Create or modify a predefined query in the Predefined Query screen.

Guidelines for Setting Up Queries

When setting up queries, remember:

- The Administrator can define a PDQ using both displayed and nondisplayed fields.
- You can reference only fields from the current applet's business component in your query.

- On occasion, using the asterisk (*) wildcard character to find all entries in a field can cause a performance problem. If you encounter a performance problem, then use IS NOT NULL instead. For more information about query operators, see *Siebel Fundamentals Guide* .

  Predefined queries are defined on a business object. All screens that are based on the same business object display all the predefined queries created for that business object.
- Querying on fields of data type DTYPE_NOTE is not supported on some databases.

Creating Predefined Queries

The following procedure describes how to create a predefined query by saving a query.

To create a predefined query by saving a query

1. Navigate to the screen where you want to run the query.
2. Create and run a query.
3. From the application-level menu, select Query, then Save Query As.
4. In the Save Query As dialog box, enter a name for the query.

   The query is added to your list of predefined queries. This query is private, and only you can view it.
5. If you want to make the query public, then perform the following steps:

   a. Navigate to the Administration - Application screen, then the Predefined Queries view.
   b. In the Predefined Queries list, deselect the Private field in the record for the query you just created.

Note: Predefined Queries can be Workspace enabled in your development environment. If they have been Workspace enabled in your development environment and you are working in that environment, then you can only modify them in an editable Workspace. You do not need an editable Workspace to create and edit Predefined Queries in your Production environment.

Setting Up Queries in the Predefined Query View

The following procedure describes how to set up a query in the Predefined Query view.

Note: Predefined Queries can be Workspace enabled in your development environment. If they have been Workspace enabled in your development environment and you are working in that environment, then you can only modify them in an editable Workspace. You do not need an editable Workspace to create and edit Predefined Queries in your Production environment.

To set up a predefined query in the Predefined Query view

1. Navigate to the Administration - Application screen, then the Predefined Queries view.

2. In the Predefined Queries list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Object	Select the object on which the query is performed.
Name	Type the name that appears in the predefined query drop-down list.
Private	Select the check box to indicate the query is available only to the person who created it. When you clear the check box y to make a query public, the other users must first exit the Siebel application and reenter before they can see the newly public query.
Query	Type the SQL code for the query. When you create a query for a field that is a multi-value group, you can use the EXISTS operator to query nonprimary child records. For more information about the syntax, see information about operators, expressions, and conditions in *Siebel Developer's Reference* . **Note:** You cannot use SQL functions in the query for a predefined query.
Cache Result	Select the check box to indicate the query returns all rows up to the value of the DSMaxFetchArraySize parameter set for the data source. For information about setting DSMaxFetchArraySize, see information about modifying Named Subsystems in *Siebel System Administration Guide* . **Note:** Setting DSMaxFetchArraySize to -1 and Cache Result to Y can cause memory problems for queries returning many rows.

Enabling Cancel Query

The cancel query feature allows users to stop their slow or incorrect queries while using Siebel Web Client. If the query does not return records within a specific number of seconds (the timeout period), then a dialog box that allows the user to cancel the query appears.

The cancel query feature is enabled through the CancelQueryTimeOut parameter. However, this parameter does not apply to search and find queries.

To enable the cancel query feature

1. Navigate to Administration - Server Configuration, Enterprises, and then Component Definitions.
2. Query for Call Center Object Manager (ENU) and select it.
3. In Component Parameters, change the CancelQueryTimeOut parameter to the following, where timeout can be any integer from zero upwards:

   ```
   CancelQueryTimeOut = timeout
   ```

   For example, if CancelQueryTimeOut is 3, then the cancel query dialog box appears if records are not returned within 3 seconds.

   > **Note:** A timeout value of less than zero, for example `-1`, disables the feature.

4. Restart the Siebel Server.

Setting Up Currencies

You specify the currencies your company uses by:

- **Making Currencies Active.** If the Siebel application includes the currency definitions you need, then make these currencies active.
- **Defining Currencies.** If you need additional currencies that have definitions the Siebel application does not include, then you must also define these currencies.

> **Note:** If you use multiple currencies, then you must also set up exchange rates before you import data that contains foreign currencies and before you use any of the Siebel currency features.

Making Currencies Active

The Siebel application includes more than 30 currency definitions. If your currency is one of these currencies, then mark it as active.

To make currencies active

1. Navigate to the Administration - Data screen, then the Currencies view.
2. For any currency that you want to make active, click the Active field in the Currencies list.
3. (Optional) Enter the Start Date and End Date in the form to specify the date when this currency is active and the date when it is no longer active.

Defining Currencies

If your company uses any currencies that the Siebel application does not include, then you must define them and mark them as active.

If you modify the definition of currencies, then you must clear the cache or log out and back in to the Siebel application before the modification becomes visible.

You cannot delete a currency after you have defined it. If you no longer use it, then you can mark it as inactive.

To define a currency

1. Navigate to the Administration - Data screen, then the Currencies view.
2. Create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Code	Type the three-letter code for the currency.
Name	Type the name of the currency.
Issuing Country	Select the country that issues the currency.
Symbol	Type the symbol for the currency, such as $.
Scale	Type the number of places after the decimal for displaying currency in the interface. For example, U.S. Dollars has a scale of 2 to accommodate the cents, so an amount appears as $10.50. If the scale is 1, then this same amount appears as $10.5.
Smallest Denomination	Type the smallest unit of currency available. For example, the smallest unit of currency for the U.S. Dollar is one cent, or .01 dollars. If there are no cents, then the scale is still 2, but the smallest denomination is $0.05.
EMU Triangulation	Select the check box to indicate that this currency must be converted to other checked currencies using the EMU Triangulation method.
Active	Select the check box to indicates the currency can be chosen by the user.
Start Date	Select the date when the currency becomes active.
End Date	Select the date when the currency is no longer active.
Extended Scale	Type the number of places after the decimal for storing currency data in the Siebel database. The following values must be the same:

Field	Comments
	○ The number of decimal places that the value in the Extended Scale field designates ○ The number of decimal places that the value in the Scale field designates ○ The number of decimal places after the decimal in the value in the Exchange Rate field (in the Exchange Rate view in the Currencies view of the Administration - Data screen) Although these values are generally the same, the number of decimals in the Extended Scale and Exchange Rate fields might be higher than in the Scale field when currency calculations (such as, conversions or discounts) are performed. The values stored in Siebel database, and not the displayed values, are used for the calculations.

Setting Up Currency Conversion

To set up exchange rates, review the following topics:

- *Setting Up Exchange Rates*
- *The Euro and Triangulation*
- *Currency Conversion Functionality*

Setting Up Exchange Rates

After you have set up your currencies, but before you use any currency features or import data with foreign currencies, you must set up exchange rates that are used to convert currencies.

If you fail to set up an exchange rate, then currency is converted on a one-to-one basis. Consequently, the amount stays the same, but the currency symbol changes.

Note: To calculate exchanges between currencies, you must set up an exchange rate twice. For example, if you want to calculate exchange rates between U.S. dollars and Japanese yen, then you must set up an exchange rate for yen to dollars, and set up another rate for dollars to yen.

To set up exchange rates

1. Navigate to the Administration - Data screen, then the Currencies view.
2. In the Currencies list, select the currency for which you want to establish exchange rates.
3. Navigate to the Exchange Rates view.
4. In the Exchange Rates list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Type	Select a value for the type of exchange rate. Currently, Daily is the only type used.

Field	Comments
To Currency	Select the currency to which you are converting the currency selected in the currencies list.
Exchange Rate	Type the conversion rate. If the number of places after the decimal point in this field does not match the value in the Extended Scale field and Scale field in the Currencies list, then the results of currency calculations might be different than expected.
Exchange Date	Select the date of this conversion rate. When converting currencies, Siebel Business Applications use the exchange rate date is closest to, but not past, the date of the transaction. Depending on the accuracy that you need and on how much currency values are fluctuating, you might want to enter a new exchange rate every week, month, quarter, or year. Siebel Business Applications use the Exchange Date only to convert currencies in transactions in which money is received. For example, Quote Item Price has an Exchange Date field, because it represents money that your company will receive, and your sales representatives enter the date when the money will be received.

5. Repeat step 4 to add additional exchange rates.

You must restart the Siebel client or use the clear cache command before any changes to exchange rates can be seen in your Siebel application.

The Euro and Triangulation

Note: As of January 2002, the Euro Triangulation method for converting between currencies belonging to EMU members is not needed for present and future currency exchanges. However, the method is still available in Siebel Business Applications, as are the old currencies, so that historical data can be maintained accurately. The following description applies only to historical data needing conversion prior to the 2002 switch to the Euro for the EMU member countries.

If a country is a member of the European Monetary Union (EMU), then convert its currency to other currencies through the Euro. This currency conversion is called triangulation, and is used when either currency being converted has EMU Triangulation checked.

For example, if you are converting from USD to DEM and DEM has EMU Triangulation checked, then you must set up the conversion rates between US dollars and the Euro and between the Euro and US dollars. You do not have to check the EMU Triangulation field for USD. The DEM is converted to EUR according to the fixed exchange rate set by the European Monetary Union, and then the amount in EUR is converted to USD according the exchange rate you set up.

The EMU Triangulation field is already checked for the following European Monetary Union member nations: Germany (DEM), Belgium (BEF), Spain (ESP), France (FRF), Ireland (IEP), Italy (ITL), Netherlands (NLG), Austria (ATS), Portugal (PTE), Finland (FIM), and Luxembourg (LUF). However, you can check or clear this field. For example, if the United Kingdom or Sweden joins the EMU, then you can check the field for that currency.

To calculate triangulation conversion, the conversion rate is always expressed to six significant figures. Conversions from one national currency unit into another currency are made by:

1. Converting the monetary amount from the national currency unit into the Euro.
2. Rounding the result to not less than three decimal places.
3. Converting the result to the target national currency.
4. Rounding the result to the lowest subunit of the target national currency, such as pfennig for the German mark or centime for the French franc.

Note: The EMU Triangulation field is checked only for currencies that are subdivisions of the Euro.

Currency Conversion Functionality

Currency conversions currently occur in your Siebel application in various features. Some examples follow:

- **Price lists.** When you change the currency code of a price list, it prompts you for an exchange date and converts the prices of all of the price list items.
- **Quotes.** When you change the currency code of a quote, it converts the discount amounts and discount prices.
- **Forecasting.** When you update forecast information from the opportunity, it converts from the opportunity currency to the forecast currency if the currencies are different. When you roll up the forecast lines, it converts from the forecast line currency to the rollup forecast currency if the currencies are different.
- **Projects.** When you create expenses in a currency different from the project's currency and submit the expenses to the project, the expense amount is converted from the expense currency to the project currency in the Project Time Expenses Summary and Project Time Expenses Adjustments views.
- **Rate lists.** When you change the currency code of a rate list, you are prompted for an exchange date and the prices of all of the price list items are converted.
- **Expense reports.** When you prepare expense reports, you can perform currency conversion between the expense currency and your default currency.
- **Reports.** The following reports support currency conversion:
    - **Opportunity Pipeline Report by Rep.** Opportunity revenues created in different currencies are converted in the Total and Subtotal fields to the user's default currency.
    - **Euro Expense Report.** If expenses have been created in an EMU currency, then all expenses appear in dual currencies.
    - **Project Limit Summary Report.**
    - **Forecasting Reports.**
    - **Current Quotes Report.**
- **Charts.** The following charts support currency conversion:
    - **Opportunity Current Opportunity Analysis.** Opportunity revenue is converted to the user's default currency if both the opportunity currency and the revenue currency are different from the user's default currency.
    - **Forecast Analysis.**

Setting Up Expense Types

When employees create expense reports, they select an expense type for each line item in the report. For example, when employees travel on business, they might have to enter line items with expense types Food, Airfare, Car Rental, Hotel, and so on.

When you set up expense types, you specify the expense types that are available to employees in the drop-down list that they use to select expense types. You also specify how these expense types are to be categorized and summarized in expense reports.

You can also create establishments that are associated with these expense types. For example, if the expense type is Airfare, then you might associate establishments with it such as Air Canada and British Airways. For more information about associating expense types with establishments, see *Siebel Project and Resource Management Administration Guide* .

Note: Before you can add expense types and establishments, you must add them in the List of Values view of the Administration - Data screen so that they appear in the drop-down list. Create expense types under EXP_ITEM_TYPE, and create establishments under EXP_ITEM_ESTAB.

To set up expense types

1. Navigate to the Expense Reports screen, then the Expense Types view.
2. Create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Expense Type	Select a value for the expense type that the employee selects in the Expense Type drop-down list of expense report line items, such as Airfare.
Report Category	Select a category for this expense type. This category is used in summary reports, such as Air/Rail Fare.
Summary	Type a larger summary category for this expense type, such as Travel Cost. This summary category is used in summary reports.

Setting Up Payment Terms

Payment terms are the different terms that you offer to your customers, such as Net 30 days and Net 60 days. You set up payment terms so that they are available in your Siebel application, for example in the Quotes screen.

To set up a payment term

1. Navigate to the Administration - Data screen, Orders, and then the Payment Terms view.
2. Create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Payment Term	Type a name for the payment term, such as Net 30.
Net Days	Type the number of days if the payment term requires payment in a specific number of days after the order date.
Description	Type a description of the payment term.
Discount	Select a value for the amount of the discount if there is a discount for early payment.
Discount Days	Type the number of days within which a customer must pay to qualify for the discount if there is a discount for early payment.
Due	Select the due date if there is a specific due date for payment.
Integration ID	Displays a cross-reference that links the Siebel application to corresponding payment term information in the back-office application. Do not modify this field.

Setting Up Periods

Periods are time periods that are used in your business, such as Q1 2002 or Jan. 2001. Periods are used extensively in the Siebel application, such as in forecasting, time sheets, and expense reports.

Be sure to set up periods far enough into the future to accommodate forecasting. For example, the default forecast is for seven months ahead. Therefore, if you keep this default, then you must create periods defined for at least seven months from the current date for forecasting to work correctly.

To set up periods

1. Navigate to the Administration - Data screen, then the Periods view.

2. In the Period Definition list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Period	Type a name for the period, such as Q1 2001.
Closed	Select the check box to indicate that the period has already closed.
Start	Select the start date for the period.
End	Select the end date for the period.
Type	Select a value for the type of period, such as month, quarter, or year.
Description	Type a description of the period.

Associating Period Units with a Period

After setting up a period, you can associate Period Units with it. Period Units allow you to define one time unit in terms of another time unit. For example, day periods can be associated with week periods for use in Timesheets. When a new timesheet is created for a week period, each day in that week is also added to the timesheet. This functionality requires the day periods to be associated as Period Units with the week period.

To associate period units with a period

1. Navigate to the Administration - Data screen, then the Periods view.
2. Select the appropriate period.
3. In the Period Units list, create a new record, select all the period units to associate with the period in the Period Units dialog box, and click OK.

Working with Telephone Formats

Telephone formats specify how phone numbers are formatted when users enter the numbers in phone number fields. You can have only one phone format for each country code. The phone format is applied only when users enter numbers without other formatting symbols, such as a slash (/), or dash (-).

Before users enter phone numbers, perform the following tasks:

- Set the default locale. The default phone format is determined by the locale setting. For more information, see *Setting Up Locales*.

- Define phone formats for countries that do not have a format already defined. For more information, see *Specifying Phone Formats*.

If a user enters a phone number from a country for which the format has not yet been specified, then the phone number might be formatted incorrectly.

Note: If you define any new phone formats, then coordinate with communications administrators who specify CTI functionality and define dialing filters. For more information, see *Siebel CTI Administration Guide* .

CAUTION: If you modify the phone formats that are provided with your Siebel application, then make sure that you thoroughly test the changes.

North American Phone Formats

The default format for North American phone numbers is (000) 000-0000. The phone formatting logic for North American phone numbers works as follows:

- If the user enters 10 digits in a phone number field, then the number is formatted as (123) 123-1234.
- If the user enters more than 10 digits, then the first 10 digits are formatted as (123) 123-1234, and the rest of the digits are formatted as the extension number. The user can enter up to 40 digits.
- If the user enters fewer than 10 digits, then an error message appears.
- If the user begins the phone number with a zero (0), then an error message appears.

This formatting logic is followed even when the default locale is not North America.

International Phone Formats

An international phone number is a phone number for a country other than the current default country.

To enter an international phone number in a phone number field, the user must enter a plus sign (+), followed by the country code. For example, the user can enter +44. If the user does not enter a country code, then the default country code is assumed.

When a user enters an international phone number in a phone number field, the formatting of the number depends on the following:

- The number of digits that the user enters
- The number of digits specified for the country in the phone format

The following table describes the formatting logic.

Number of Digits	Formatting Details
Same as in format	Formatted as specified.
More than in format	First digits are formatted as specified. The rest of the digits are formatted as an extension number.
Fewer than in format	Entry is accepted without an error message to accommodate phone numbers of different lengths.

Number of Digits	Formatting Details

If there is no phone format for the indicated country, then the number remains formatted in the same way that the user enters the number. No error message appears.

Maximum Length for International Phone Numbers

The following table shows how to calculate the safe maximum length for international phone numbers.

Is there a phone format for the country?	Then, the safe maximum length for international phone number is
Yes	`C + 2N + E + 2 ≤ 40`
No	`2C + 2N + E + 2 ≤ 40`

In the formulae in this table:

- C is the length of the country code.
- N is the length of the city code and the subscriber number, including any formatting, such as spaces or hyphens.
- E is the length of the extension number.

The following table shows an example calculation of the maximum length of an international phone number (`+834 91 518-400 x 123`).

International phone number	Maximum length for each element (C, N, E)
`+834`	C=3
`91 518-400`	N=10
`x 123`	E=3

Specifying Phone Formats

If your users must enter phone numbers for countries for which a format has not been entered in your Siebel application, then you must specify phone formats for those countries.

Note: When you change or add a phone format, the existing phone numbers are not automatically updated.

CAUTION: When a user enters phone numbers, the user can enter letters in place of digits, but computer telephony integration (CTI) features, such as outbound dialing, do not work for these numbers. Queries for such numbers must include the letters, not the numeric equivalents. Siebel Business Applications do not detect or warn users if they enter Q or Z (letters that do not appear on all phones).

To specify phone formats

1. Navigate to the Administration - Data screen, then the List of Values view.
2. Query the Type field for the entry PHONE_FORMAT to see the existing phone formats.
3. Create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Type	Select a value of PHONE_FORMAT.
Display Value	Type the format string for the display value.
Language-Independent Code	Type the language-independent code. Use the number zero (0) to represent required digits, the # character to represent optional digits, and other formatting characters to represent how to format the phone number. Do not include any alphanumeric characters other than zero. For example, to format an Australian phone number, which includes a two-digit area code and a six- or eight-digit number, use (00) 000# 000#. You do not have to include characters to represent the country code in the format. When a user enters a number, the country code is automatically shown if the default country is different from the country code.
Order	Type the country code of the new format. When adding new codes, make sure that no country code is a prefix of any other. For example, because India's country code is 91, do not add a country code of 9 or of 910 (or any other number beginning with 91).

4. Restart the Siebel Server.

Examples of Formatting of Phone Numbers

The following table shows how phone numbers appear under various circumstances. In this example, the default country is the United States. Therefore the default format is the North American format, `(000) 000-0000`. The `00-000-0000` format has been entered for country code 91.

User Enters	Number Is Formatted As
1234567890	`(123) 456-7890`

User Enters	Number Is Formatted As
1234567890123	`(123) 456-7890 x123`
123456	The following error message: `Invalid data has been entered.`
+91123456789	`+9112-345-6789`
+9112345678910	`+9112-345-6789 x10`
+9112345	`+9112345`
+2512345	`+2512345`
?0+9112345678	`?0+9112345678` **Note:** Notice the question mark (?) and zero (0).
?0HelloWorld	`?0HelloWorld` **Note:** Notice the question mark (?) and zero (0).

Sorting Phone Numbers

Phone numbers are stored in the Siebel database without special format characters, so the special format characters have no effect on the sort order.

Querying Phone Numbers

When performing a query on a phone number, do not include any format characters such as commas (,), hyphens (-), periods (.), the letter x, or spaces.

You can query for only country 61 by typing `+61*` but you cannot query for only North American phone numbers this way, because `+1*` returns all phone numbers. To query for North American phone numbers, type the following: `not like +1*`.

When you use a phone number in a query, the country code of the default locale is automatically added to the query, unless the default locale is North America. If the default locale is North America, then no code is added. For example, if the default locale is Germany, and the user types `0181` in the phone field of a query, then the German country code (+49) is added to the query. The query becomes `+490181*`.

To find a number for a country other than the default country, the user must specify the country code in the query. To avoid limiting the query to one country, the user must refine the query, and remove the country code portion of the query specification.

To see a demonstration of this behavior, look at the Contacts screen. Every phone number for a country other than the default contains +n at the beginning, while every phone number for the default country code appears as local (without a plus sign). Phone numbers that have the +n require explicit queries. The user must specify the country code and the number. Local numbers are returned normally.

The following table provides examples of how to query phone numbers.

Query Criteria	Query Result
`1234567890`	(123) 456-7890
`+611234567890`, (if 61 is defined as a country code)	+61(123) 45.67.89 x0
`+61*`	Country code 61 phone numbers
`+1*`	All phone numbers
`not like +*`	All North American phone numbers
`415*`	415 area code numbers (North America only)
`is null`	Null phone numbers
`415*` or `is null`	415 area code or null (North America only)
`800SKY*`	(800) SKY-PAGE

Importing Information with EIM

Siebel Enterprise Integration Manager (EIM) manages the exchange of data between Siebel database tables and other corporate databases. When you use EIM to import information that includes international phone numbers, the numbers are handled as described in *Working with Telephone Formats*. For more information about EIM, see *Siebel Enterprise Integration Manager Administration Guide* .

Updating the Phone Format with EAI Adapter

When you update the phone format using Siebel EAI Adapter, the plus (+) sign and the country code are required, but the phone format can be in any form (not only US format).

Setting Up Pager Companies

Pager companies can be set up so they are available from the Pager Company field in the Send Page dialog.

To set up a pager company

1. Navigate to the Administration - Communications screen, then the Pager Companies view.
2. In the Pager Companies list, create a new record, and complete the necessary fields.

   Note: The pager companies you use to send pages must support Telocator Alphanumeric Protocol (TAP), which is an industry standard for sending alphanumeric pages.

About Date Formats

For the Siebel Web Client, the display format for date and time is determined by the locale settings of the application server. For more information, see *Setting Up Locales*.

For the Siebel Developer Web Client and the Siebel Mobile Web Client, the date format is determined by the specification in the client computer's operating system.

When a user creates a query using a date field, the user must use the appropriate date format.

Setting Up ZIP Codes

ZIP Codes facilitate finding address attributes (City, State, and so on). They also facilitate using the street address to find nine-digit postal codes. Siebel Business Applications ship with a table of United States Postal Service ZIP Codes, and the table is available for customer use.

To add a ZIP Code

1. Navigate to the Administration - Data screen, then the ZIP Code Administration view.
2. In the ZIP Geocodes list, create a new record, and complete the necessary fields.

Administering Global Time Zone Support

The time zone records that are shipped as seed data with Siebel Business Applications include the world time zones, each with a start date of 1 January 1900. The world time zones that are available at the time of a Siebel release are included in the release.

Time zone detail records are included with time zone records. Time zone detail records are important for tracking minor differences in time zones. For example, there is a time zone detail record for each of the continental United States time

zones with a start date of 1 January 2007, which reflects the changes in start and end dates for daylight savings time for 2007. If the daylight savings time start and end dates change again, then add a new record for the year of the change. For more information about global time zone support, see *Siebel Global Deployment Guide* .

Use the Time Zone administration view to:

- Edit the text descriptions of time zones and their abbreviations.
- Manage the active status of time zones to control which time zones are available to users for use in the Siebel Business Applications.
- Manage multilingual translations to control how time zone information appears to users in multiple languages.
- Set the start and end dates for daylight savings time for different years and zones.

Tasks for administering time zones include:

- *Modifying Time Zones*
- *Maintaining Translations of Time Zones*

Modifying Time Zones

You rarely modify a time zone's regional settings. However, you might want to modify other time zone settings such as the display name or daylight savings rules, because these settings occasionally change.

Note: You can add, but not delete time zones. Although you can inactivate time zones, do not do so when the time zones are in use because the inactivation might cause integration issues with Siebel CRM Desktop and Siebel Server Sync for Microsoft Exchange Server.

To modify time zone settings

1. Navigate to the Administration - Data screen, then the Time Zone Administration view.
2. In the Time Zone list, select the time zone record you want to modify.
3. Modify the fields as necessary.
4. In the Detail list, add or modify the records as necessary.

   Some fields are described in the following table.

Field	Comments
Name	Type the name of time zone.
Standard Abbreviation	Type the abbreviation for the time zone.
DST Abbreviation	Type the abbreviations for daylight savings time (DST).
Start Date	Select the date on which the offset rule becomes effective.
UTC Offset	Type the number of minutes for the offset from Coordinated Universal Time (UTC) when DST is not in effect.

Field	Comments
DST Bias	Type the number of minutes for the incremental DST offset from UTC when DST is not in effect.
DST Start Ordinal	Select a value for the DST start ordinal. This field is part of the rule that determines when DST starts. For example, if the rule is the first Sunday in April, then First is defined in this field.
DST Start Day	Select a value for the DST start day. This field is part of the rule that determines when DST starts. For example, if the rule is the first Sunday in April, then Sunday is defined in this field.
DST Start Month	Select a value for the DST start month. This field is part of the rule that determines when DST starts. For example, if the rule is the first Sunday in April, then April is defined in this field.
DST Start Time	Type the number of minutes after midnight that DST starts. For example, if DST starts at 2:00 A.M., then set the start time to 120.

Maintaining Translations of Time Zones

You maintain translations of the text-based fields for each time zone using the Time Zone Administration view.

To maintain translations of time zones

1. Navigate to the Administration - Data screen, then the Time Zone Administration view.
2. In the Time Zone list, select the time zone you want to translate.
3. In the Time Zone Translation list, create a new record, and complete the necessary fields, including the translation of the Name field for the selected language.
4. Repeat step 3 for each language required for translation.

Date and Timestamps

The date and time used for timestamping records are obtained by the Siebel Server. When a remote user runs the Siebel client in disconnected mode, the Siebel Server runs on the user's computer and takes the date and time from that computer.

If the Global Time Zone feature is enabled, then fields of data type UTCDATETIME are converted to UTC during operations for the Siebel Application Object Manager. For more information, see *Siebel Global Deployment Guide* .

Setting Up Email, Fax, and Mail Accounts (Contact Us)

Salespeople use the Contact Us screen to answer questions and provide contact information to customers. If your organization uses Siebel eService, then your customers can access this information directly from a Contact Us screen on your Web site.

Creating a Contact Us Account

To help your salespeople provide information about a chosen topic, you can create different accounts, such as Technical Support, Shipping, and Sales.

To add a Contact Us account

1. Navigate to the Administration - Application screen, then the Contact Us view.
2. In the Email, Fax and Mail Accounts list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Account Type	Displays Contact Us.
Access List	Select the employees who can view the Contact Us account.

About Adding Email Addresses and Subjects

If your organization uses Siebel eService, then any email addresses you include in Contact Us accounts appear on a Contact Us screen on your Web site. You can create default email subjects that are added to the user's Subject line when the user sends email through your Web site. For more information, see Siebel eService Administration Guide.

Setting Up Industries

You can set up and maintain industry information used throughout the Siebel application. The information in the Industries view populates the Industries drop-down list, which is found in a variety of screens and views, such as in the Accounts and References screens. The Industry list can also be used by Siebel Assignment Manager to assign new leads or service requests to Siebel users. For example, a sales representative who covers the pharmaceutical industry can be automatically assigned to new accounts using a Pharmaceutical Industry value.

To add an industry

1. Navigate to the Administration - Data screen, then the Industries view.
2. In the Industries list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Industry	Type the name of the industry. If you enter a value that already exists, then an error message appears.
SIC Code	Type the Standard Industry Classification Code for the industry. If you enter a value that already exists, then an error message appears.
Type	Select the type of industry.

Setting Up Languages

You can set up and maintain language information used throughout the Siebel application. The information in the Languages view populates the Language drop-down list, which is found in a variety of screens and views, such as in the References and SmartScripts screens. The Language field can also be used by Siebel Assignment Manager to give assignments to call center agents who work for international companies and speak a variety of languages with customers.

For example, a sales representative for a German chemical manufacturing company can use a Danish SmartScript to make a sales call to a prospective customer in Copenhagen, and then make the same sales call using an Italian SmartScript when speaking to a prospective customer in Rome. In these cases, the Language field is used to identify the language into which each SmartScript has been translated.

Note: Languages cannot be deleted because deleting languages can cause problems with Mobile Web Client synchronization. Although the delete language command can be restored using Siebel Tools, this action is strongly discouraged. For help with modifying language code, create a service request (SR) on My Oracle Support. Alternatively, you can phone Global Customer Support directly to create a service request or get a status update on your current SR. Support phone numbers are listed on My Oracle Support.

To add a language

1. Navigate to the Administration - Data screen, then the Languages view.

2. In the Languages list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Name	Type the name of the language. If you enter a value that already exists, then an error message appears.
Code	Type the code for the language. If you enter a value that already exists, then an error message appears.

About Case-Insensitive and Accent-Insensitive Queries and Searches

By default, queries and searches in Siebel Business Applications are sensitive to case and accent. If you perform a query or search, then a match occurs only if the search criteria you enter are capitalized and accented in the same way that the data is capitalized and accented in the Siebel database. For information about how to implement CIAI queries and searches on particular columns or fields, see *Configuring Siebel Business Applications* . For information about how the CIAI feature affects performance, see *Siebel Performance Tuning Guide* .

If you do not want queries and searches to be case sensitive and accent sensitive, then you can enable case-insensitive and accent-insensitive (CIAI) queries and searches on particular columns and fields in Siebel Tools. If you enable CIAI queries on a column, then when you enter the query in the Siebel application, the field for the CIAI column is empty. When you enter the queries for fields that are not CIAI-enabled, <Case Required> text appears in the field.

Not all types of databases support both case-insensitive and accent-insensitive queries and searches on CIAI-enabled columns. The following table shows the CIAI features that are supported in each type of database.

Database Support for CIAI Queries

Database	Case Insensitive	Accent Insensitive
DB2	Yes	No
MSSQL	Yes	Yes
Oracle	Yes	No

Note: Determine your requirements for case-insensitive queries and searches, and set the appropriate parameters for the fields before users enter any data.

Note: Search strings against the DB2 database must not be longer than the size of the column being searched.

Forcing Case-Sensitive or CIAI Queries or Searches

Regardless of the setting for case-sensitive and accent-sensitive queries, users can use operators to force case-sensitive or CIAI queries or searches. The following table describes the operators to use to force case-sensitive or CIAI queries or searches.

Type of Query	Operator	Examples
Case sensitive and accent sensitive	= followed by the criterion in single quotation marks.	=`Computer'` returns only records that have Computer spelled with a capital C.
CIAI	~ followed by other operators if required, and the criterion.	~LIKE computer returns all records that have computer in the field, regardless of capitalization. ~LIKE francais returns all records that have francais in the field, regardless of capitalization or accent.

In searches with complex criteria, the user must also use the tilde (~) operator to force the CIAI feature, regardless of the setting for case-sensitive and accent-sensitive queries and searches.

Adding Additional Web Browsers

If you must add a Web browser definition that is not included in the standard Siebel application, then you can choose between the following two methods.

- **Add a parent browser definition.** This definition includes all of the browser capabilities. Use this method if you must add a completely new browser (such as Opera), or a major upgrade release of an existing browser (such as future releases of Microsoft Internet Explorer or Mozilla). For information about this procedure, see *Adding a Web Browser*.
- **Add a child browser definition.** Child browser definitions inherit the capabilities of the parent browser, and add additional capabilities as necessary. Use this method for adding interim releases that are based on a browser that is already defined. For information about this procedure, see *Adding a Web Browser*.

Required Browser Capabilities

For a browser to work correctly, it must include two capabilities that allow the browser to be identified at run time. The required capabilities are:

- **User-Agent.** This capability names the browser.
- **Accept.** This capability indicates the types of documents the browser can open.

These capabilities are part of HTTP standard information and appear in HTTP request headers sent from a browser. For example, a request from an HTML5 browser sent to a Web application might include the following lines:

```
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, */*
```

```
User-Agent: Mozilla/5.0
```

Both the User-Agent and Accept capabilities must be included because at run time the User-Agent is checked to identify the browser. If the User-Agent is not recognized, then the values for the Accept parameter in the header are compared to the Accept parameters of the browsers listed in the Web Browser Administration screen to find the browser with the most closely matching Accept parameters.

In addition to the User-Agent and Accept capabilities, if a browser is based on an existing parent browser, then it must include the Parent capability.

Note: Parent browsers frequently do not have the User-Agent and Accept capabilities because parent browsers are intended to serve as containers of other capabilities that can be inherited. If a browser does not have its own User Agent and Accept capabilities, then it is acting as a parent of another browser that has these capabilities.

Adding a Web Browser

Whether you are adding a parent browser or a child browser, the process is similar. However, in the case of a parent browser, you add all detailed components, and in the case of a child browser, you base the browser on an existing browser.

Note: Although a parent browser might contain the User-Agent and Accept capabilities, it does not have to. If you use parent browsers as templates for child browsers, then do not include these two capabilities in the parent browser template.

To add a parent Web browser

1. Navigate to the Administration - Web Browser screen, then the Browsers view.
2. In the Browser list, create a new record, and complete the necessary fields.

   Note: If there is an existing browser that contains most of the appropriate capabilities, then you can copy it, and make changes to it. To do so, click the cogwheel icon, and select Copy Record.

3. Drill down on the Name field for the record.
4. In the Capabilities list, create records for each of the capabilities of the browser.

Adding a Child Web Browser

Complete the following procedure to add a child Web browser.

To add a child Web browser

1. Navigate to the Administration - Web Browser screen, then the Browsers view.
2. Note the name of the parent browser (the browser on which you base the new browser).
3. Create a new record, and complete the necessary fields.
4. Drill down on the Name field for record.

5. In the Capabilities list, create the following 3 records:
    - For the first record, select the Parent capability in the Add Capabilities dialog box, and enter the parent browser you identify in Step 2 in the Capability Value field.
    - For the second record, select the User-Agent capability in the Add Capabilities dialog box, and enter the appropriate user-agent in the Capability Value field.
    - For the third record, select the Accept capability in the Add Capabilities dialog box, and enter the types of documents that the browser can open in the Capability Value field.
6. In the Capabilities list, add any additional capabilities that are not included in the parent browser or that differ from those inherited from the parent browser.

Administering Quick Fill Templates

Users can create quick fill templates for their personal use. Administrators can make these templates public so that all users have access to them. For information about creating Quick Fill Templates, see *Siebel Fundamentals* .

To make a quick fill template public

1. Navigate to the Administration - Application screen, then the Quick Fill Templates Administration view.
2. Select the template record.
3. Select the Public Flag field for the template.

Editing a Quick Fill Template

Administrators can also delete any quick fill template and make simple changes to the template record (such as name, sequence, and public flag).

To edit a quick fill template

1. Navigate to the Administration - Application screen, then the Quick Fill Templates Administration view.
2. Select the template record.
3. In the Details form, edit the fields as necessary.

   The Sequence Number determines the order in which the fields are populated.

Setting Up Default View Links for Screen Home Pages

Administrators can define links that appear on the quick links area of screen home pages. These default view links are visible to all users. For more information about screen home pages and setting up view links, see *Siebel Fundamentals* .

To add a default view link to a screen home page

1. Navigate to the Administration - Application screen, then the View Links view.
2. In the Screen Homepages list, select the home page.
3. In the View Links list, create a new record, and complete the necessary fields.

Make sure that the view you specify is available to all users.

> **Tip:** Use increments of 10 to sequence the links to provide users space to create their own view links between the default links that you create.

Setting the MaxMessageCount User Preference

Configuring the MaxMessageCount user preference sets the maximum number of active messages that Siebel Server will process at a time. The purpose of setting MaxMessageCount is to control the number of active messages that users will see in their Notification pane. By limiting the number of messages appearing in the Notification pane, you avoid any slow performance caused by the processing of large volumes of messages.

Provided MaxMessageCount is configured and the Enable Broadcast Cache parameter is set to TRUE, then the counter beside the Notification button (exclamation mark icon) on the application toolbar will be any number less than or equal to MaxMessageCount. The counter indicates the number of active messages that are waiting to be read. Click the Notification button to open the Notification pane where you can read the messages. As you open, read, and then close messages, the counter decreases accordingly.

The following table describes what happens when MaxMessageCount and Enable Broadcast Cache are configured (or not, as the case may be).

Enable Message Broadcast Cache Value	MaxMessageCount Value	Comments
`Enable Message Broadcast Cache = FALSE`	`MaxMessageCount = 50`	If `Enable Message Broadcast Cache = FALSE` and `MaxMessageCount = 50`, then the maximum number of active messages that will be processed by Siebel Server at a time is based on MaxMessageCount (which is 50 in this example).
`Enable Message Broadcast Cache = FALSE`	MaxMessageCount is not set.	If `Enable Message Broadcast Cache = FALSE` and MaxMessageCount is not set, then the maximum number of active messages that will be processed by Siebel Server at a time is 100 (which is the default value).
`Enable Message Broadcast Cache = TRUE`	`MaxMessageCount = 100`	If `Enable Message Broadcast Cache = TRUE` and `MaxMessageCount = 100`, then the maximum number of active messages that will be processed by Siebel Server at a time is based on MaxMessageCount (which is 100 in this example).
`Enable Message Broadcast Cache = TRUE`	MaxMessageCount is not set.	If `Enable Message Broadcast Cache = TRUE` and MaxMessageCount is not set, then there no limit on the number of active messages that will be processed by Siebel Server at a time (all active messages will be processed).

The following procedure shows how to configure MaxMessageCount for a business component and applet in Siebel Tools/Web Tools.

To configure MaxMessageCount

1. Create a new or open an existing Workspace.
2. Click Business Component in the Object Explorer and then query for the "User Preferences" business component.
3. Click Field (under Business Component) and then add a new field with the values shown in the following table.

Field	Value
Name	MessageBroadcasting/MaxMessageCount
Type	DTYPE_INTEGER
Predefault Value	“100”

4. Click Applet in the Object Explorer and then query for "User Profile Message Broadcasting Applet".

   For mobile applications, query for "User Profile Message Broadcasting Applet - Mobile".
5. Click Control (under Applet) and then add a new control with the following values:

Field	Value
Name	MessageBroadcasting/MaxMessageCount
Field	MessageBroadcasting/MaxMessageCount
Caption	Maximum Message Count
HTML Type	Field
Runtime	Y

6. Click Applet Web Template (under Applet) and then click Edit (the pencil icon) to open the Edit Web Layout view.
7. Select the `MessageBroadcasting/MaxMessageCount` control and move it into the Web layout window.
8. Deliver the Workspace with the new repository change into MAIN.

5 Working with Lists of Values

Working with Lists of Values

This chapter provides guidelines to administrators for working with lists of values within Siebel Business Applications. It includes the following topics:

- *About Lists*
- *Adding a New Value to an Existing List of Values*
- *Clearing the Cache*
- *List of Values Fields*
- *Modifying a List of Values*
- *Deactivating a Value in a List of Values*
- *Constrained Lists of Values*
- *Modifying LOVs Using Siebel Enterprise Integration Manager*
- *Modifying LOVs Using REST API*
- *Modifying LOVs in Runtime Repository Environments*
- *Modifying LOVs in Integration Workspace in DR Environments*

About Lists

A list is a set of values that populates when a user accesses a list (such as a drop-down or pop-up list) in the user interface. There are two types of lists in Siebel CRM applications:

- **Static lists.** A static list is a selection list with values that change only when administrators change them. An example of a static list is a list containing postal abbreviations for states and countries.

  This chapter focuses on the administration of static lists. In Siebel CRM, static lists are stored in a table named S_LST_OF_VAL and are referred to as List of Values or LOVs. Administration tasks include creating and modifying values in an existing list, deactivating values when you do not want them to appear, and how to constrain what values appear in a list based on the selection of another list.
- **Dynamic lists.** A dynamic list is a selection list that usually contains transactional data. An example of a dynamic list is a list containing account names.

  Dynamic lists are typically rendered through a pick applet, such as the list used to select an account for a contact. However, they can be configured to appear as drop-down or pop-up lists.

You can view data for lists of values by navigating to the Administration - Data screen, then the List of Values view. For information on configuring static and dynamic lists, constrained pick lists, and multilingual list of values (MLOVs), see *Configuring Siebel Business Applications* .

Siebel Business Applications come with numerous lists of values that support the static lists used in Siebel screens. You can use these lists of values as they are, or you can modify them to support your organization's requirements.

CAUTION: While most LOVs (such as Account Type, Contact Type, Service Request Area, and so on) are completely customizable, some LOV types control special application behavior so it is recommended that you exercise caution when modifying them. For more information, see *Modifying a List of Values*.

Adding a New Value to an Existing List of Values

To add an item to an existing list of values so that it appears in that list, you must know its type. You can find out the type by querying the list of values list to determine the type associated with a specific display value. Then you can create a new record with that type. For example, in the Accounts list you can see the Service Agreement Type list. Initial settings are Gold and Silver. You might want to add another setting of Bronze to this list. The procedure in this topic uses this example.

To identify the list of values type for a display value

1. Navigate to the screen displaying the list to which you want to add a value (for example, the Accounts screen).
2. Select the list and make note of one of the choices.

   For example, in the Accounts screen, select the Service Agreement Type list and make note of the value Gold.

   Tip: Be sure to note the capitalization and spacing of the choice.
3. Navigate to the Administration - Data screen, then the List of Values view.
4. In the list of values list, perform a query in the Display Value field, using the value you note in Step 2.
5. In the list of records that is returned, identify the appropriate record by reviewing the entries in the Type field.

   List of values types usually have names that relate to the field labels in the screens where they are used. In this example, you look for a type with a name similar to Service Agreement type. In this case, you will identify the correct LOV type as SRV_AGREE_TYPE.

   When you create a new value for this list, you use this type.

   Note: If unclear about which LOV type to use, consult the definition of the Applet, BusComp, and Pick List defined in the Repository. For more information, see *Configuring Siebel Business Applications* .

Adding the New Value

Complete the following procedure to add a new value to an existing list of values.

Note: The ability to edit LOVs (create, edit, or inactivate Workspace-enabled seed data) in the UI in Runtime Repository (RR) environments, such as QA and Production, is supported in Siebel CRM 19.3 update and later releases.

To add a new value to an existing list of values

1. Navigate to the Administration - Data screen, then the List of Values view.
2. Create a new record by completing the fields described in the following table. For a description of all other list of values fields, see *List of Values Fields*.

Field	Comments
Type	Select a type for the list of values. For example, select SRV_AGREE_TYPE.
Display Value	Type in the new value for the list of values. For example, Bronze.
Language Independent Code	Type in the Language Independent Code (LIC) for the list of values. To help with multilingual deployments, it is recommended that the LIC be a capitalized version of the Display Value. For example, BRONZE. **Note:** The combination of list of values Type field, Display Name field, and Language Independent Code field must be unique.
Order	Type in a number to indicate the numerical order in which the value appears in a list. For example, if the order numbers for Gold and Silver are 1 and 2, then the order number for Bronze could be 3.

3. Clear the LOV cache by clicking Clear Cache.

   For more information on the LOV cache, see *Clearing the Cache*.

   After you have cleared the cache, you can navigate to a screen and select the new value in the related list. For example, you can navigate to the Accounts screen, select a record from the Accounts list, and then select Bronze in the Service Agreement Type list for the record.

Clearing the Cache

A particular list of values is cached the first time a user opens a list that uses the list of values. This feature improves performance by avoiding having to retrieve the list from the Siebel database when subsequently using the list. However, this feature also means that updates to a list of values do not appear in a list until you clear the cache. Clearing the cache instructs the application to read the updated values out of the Siebel database and display them.

Users who log in after you add or change a list of values can see the addition or change that you made. However, in order for you to see the changes that you made in real time, you must perform one of the following actions:

- For either the Web Client or the Siebel Developer Web Client, clear the cache.
- For the Siebel Developer Web Client, log out of the application and then log back in.

To clear the cache

1. Navigate to the Administration - Data screen, then the List of Values view.
2. In the List of Values list, click Clear Cache.

List of Values Fields

Many LOV attributes, such as Target High, Target Low, or Weighting Factor, are only used by specialized Siebel C++ code. Where these attributes are defined, modify them only as described in the specific documentation for that product area. If these attributes are not defined out-of-the-box, then you can leverage them for other purposes appropriate to your business needs. Use Siebel Repsitory to extend the PickList Generic BusComp by adding fields mapped to the corresponding column on the S_LST_OF_VAL table. For more information about the PickList Generic BusComp and about configuring static lists and pick maps, see *Configuring Siebel Business Applications* .

The following table shows the fields for List of Values records. Not all fields for list of values records appear in the standard user interface. You can use the Columns Displayed option in the applet menu (the cogwheel icon) to add or remove fields from the list.

Field	Description
Type	The specific category of list of values. For example, the SR_AREA LOV Type is used to store the possible areas under which a Service Request can be filed, and the MR_MRS LOV type is used to store the possible personal titles for a Contact (such as Mr., Mrs., Dr. and so on). To determine which LOV is used by a particular list, refer to the Pick List definition in the Siebel Repository as explained in *Configuring Siebel Business Applications* .
Display Value	Only display values for the user's current language appear in this list. See also the description of the Language Independent Code field.
Translate	A check box that, when checked, indicates that internationalization is needed. This field is used by the Oracle development team to indicate that a particular LOV requires translation and does not affect any application functionality.
Multilingual	A check box that, when checked, indicates that a particular list of values Type has been multilingually-enabled. See also the description of the Language Independent Code field.
Language Independent Code	For LOV types that have been marked as Multilingual, the Language Independent Code (LIC) is used to provide a shared identity for a given LOV across all implemented languages. The LIC and Display Value are different for multilingual lists of values (MLOVs). MLOVs allow a single logical list item to support multiple display values for users who are accessing the application in different languages. For example if the MR_MS (Personal Title) list of values were multilingual, then there might be three list of values items with a LIC of Mr. These lists of values might have a display value and language of Mr. (English-American), Señor (Spanish - Modern), and Herr (German), respectively. German users see Herr in the Personal Title list, Spanish users see Señor and English users see Mr. Although the display values vary across language instances, the value stored in the Siebel database when a user selects any of these values is always the same. That is, there is a single LIC (Mr.) associated with all three records (Herr, Señor, and Mr.).
Parent LIC	The Language Independent Code of a parent list of values. This field is used in hierarchical lists of values, where the values that appear in a list are constrained by the value selected in the parent list of values. For more information, see *Constrained Lists of Values*.
Replication Level	This field is used by Siebel Remote for internal purposes only and is not for customer use. For all customer-related LOVs, the value for Replication Level should be All.

Field	Description
High	This field has specific functionality associated with it in some out-of-the-box LOV Types, such as ACCNT_REVENUE_SIZE. Where this field is defined, modify it only as described in the specific documentation for that product area.
Low	This field has specific functionality associated with it in some out-of-the-box LOV Types, such as ACCNT_REVENUE_SIZE. Where this field is defined, modify it only as described in the specific documentation for that product area.
Order	The numerical order in which a value appears within a list. **Note:** Through configuration, you can override the Order to force a different sort specification. For more information, see *Configuring Siebel Business Applications* .
Active	A check box that, when checked, indicates that the value appears to the user, and that when unchecked, indicates that the value does not appear to the user.
Language Name	The language used for the Display Value field in the list of values.
Target Low	This field is used only by specialized Siebel C++ code. Where this field is defined, modify it only as described in the specific documentation for that product area.
Target High	This field is used only by specialized Siebel C++ code. Where this field is defined, modify it only as described in the specific documentation for that product area.
Weighting Factor	This field has specific functionality associated with it in some out-of-the-box LOV Types, such as ACCNT_REVENUE_SIZE. Where this field is defined, modify it only as described in the specific documentation for that product area. This field is used by Siebel Assignment Manager Only. For more information, see *Siebel Assignment Manager Administration Guide* .
Bitmap	This field is no longer used.
Description	A description of a specific value. This field is for informational purposes only and does not affect application behavior.

Modifying a List of Values

To modify a value in a list, you must know its display value and type. You can find out the type by querying the list of values list for a specific display value. For example, if you must make a change to the value 1-ASAP in the Priority drop-down list in the Activities screen, then you can do so using the steps outlined in the following procedure.

CAUTION: While most LOVs (such as Account Type) are completely customizable, some LOV types control special application behavior so it is recommended that you exercise caution when modifying them. For example, the recurrence patterns Daily, Weekly, and Monthly in Siebel Calendar are stored as LOVs but the ability to add, modify, or delete these LOVs is not supported since they affect specialized calendar functionality. Use caution when modifying an LOV that is part of the seed data. Modifying some LOV fields that are used programmatically by the application can adversely impact standard Siebel functionality.

Some important considerations to note before modifying LOVs include the following:

- Do not change the Language Independent Code values for an LOV because the internal Siebel CRM application uses the Language Independent Code field.
- Some LOVs are for use only by the internal Siebel CRM application. Do not modify these lists of values. For example, the list of values SOURCE_TYPE (Internal) and list of values types that begin with REPOSITORY, WFR, or WF in the Type field name are for internal use only.
- Some LOV modifications can have unwanted results. For example, changing all LOVs in the Siebel CRM application to uppercase or changing the Language Independent Code from the Siebel standard can result in values not appearing or appearing improperly.

Note: Modifying a Display Value field does not automatically update records that have been populated with the old value. For example, if you change Ms. to Miz in the Display Value field, then Miz appears in the list, but all contact records that were previously entered with Ms. in the Personal Title field still have Ms. in the Personal Title field. If the Display Value field is MLOV-enabled, however, you will see the new value after clearing the cache.

To modify an item in a list of values

1. Navigate to the Administration - Data screen, then the List of Values view.
2. Perform a query to locate the record you want to change.

   For example, you might query for a value of 1-ASAP in the Display Value field. In this example, a list of records appears that includes the display value that you enter. Multiple records can appear, and the records can have different types.
3. In the list of records, select the record that you want to modify, and change the record.
4. To see the list of values modification in the application, click Clear Cache.

   For instructions about how to clear the cache, see *Clearing the Cache*.

Deactivating a Value in a List of Values

Deleting LOVs is not recommended since it may lead to referential integrity problems in the database and unexpected application behavior. Rather than deleting LOVs or values in an LOV, deactivate them as described in the following procedure.

Only the active values in a list appear to users, inactive values do not appear to users. Inactive values are not deleted.

CAUTION: Be careful when deactivating LOVs because the application might depend on the list of values. Deactivating some LOVs can adversely impact standard Siebel functionality.For example, if you deactivate the value Commercial in the Account_Type list of values, but account data with an Account Type of Commercial exists, then you might introduce inconsistencies in your data. If you want to deactivate a value, then clean up the account records first in the Siebel database.

To deactivate a value in a list of values

1. Navigate to the Administration - Data screen, then the List of Values view.
2. Query for the record that you want to deactivate.
3. Select the record that you want to deactivate.
4. In the Active field, click the check mark to clear the field.
5. Click Clear Cache.

   You can navigate to the list of values to see that the value no longer appears.

Constrained Lists of Values

Constrained lists of values are used to restrict the values that show up in a particular list based on the selection in some other list. For example, let's consider a Service Request Area (SR_AREA LOV Type). If the user selects the Area Network, then the user would see Subareas of Ethernet Card or Wifi Connections. If the user selects Hardware for the Area, then the Subarea options might be Hard Drive, DVD Rom, Memory, or Other. This helps users to choose a logical combination of values to help make the nature of the Service Request clearer.

Let's look at this example in a little more detail — it is actually a three-tier constrained picklist. That is, it has a Grandparent, Parent, Child relationship. The Grandparent dictates the possible Parent values, and the Parent dictates the possible Child values.

All three tiers are defined in the same SR_AREA LOV Type. Out-of-the-box, the high level values are those that have no parents. These can be selected in the Service Request field, Service Request Type, which defaults to External.

The Area field is populated by SR_AREA LOVs that have a parent indicated in the Service Request Type field, so any SR_AREA LOV that has a parent of External will be visible in the Area picklist unless a different SR Type is selected.

After selecting an Area, the SubArea will be constrained to the Area as described in the previous paragraphs.

The actual constraint is defined by the Parent LIC value, allowing users of the application to consistently choose appropriate children across all languages. So if the user selects Network in the Area list, then only those values that have the Parent LIC field set to Network appear in the Subarea list, while if the user selects Upgrade in the Area list, then only those values that have the Parent LIC field set to Upgrade appear in the Subarea list.

Consider a specific example where you want to add some additional Service Request Areas. The new Area value is Size and the children are Small, Medium, and Large.

- Assuming that the new Size Area will show up as a value on new Service Requests, which have a Service Request Type External, you would create a new LOV with Type SR_AREA, LIC SIZE, Display Value Size, Parent LOV External, and Language English-American.

  After defining the Size value, you would define more LOVs of Type SR_AREA with the Parent LIC Size as shown in the following table.

Type	LIC	Display Value	Language	Parent LIC
SR_AREA	SMALL	Small	English-American	SIZE
SR_AREA	MEDIUM	Medium	English-American	SIZE
SR_AREA	LARGE	Large	English-American	SIZE

- For each additional language you want to support, you would create another Area LOV with the same LIC but a different Language Code and Display Value. For French, for example, you would define an additional SR_AREA LOV with LIC SIZE, Display Value Taille, and Language French.

  For each additional language, you would define an additional number of children as shown in the following table.

Type	LIC	Display Value	Language	Parent LIC
SR_AREA	SMALL	Petit	French	SIZE
SR_AREA	MEDIUM	Moyen	French	SIZE
SR_AREA	LARGE	Grande	French	SIZE

Note: The usage of the External value to identify items in the parent list is specific to this example. To determine this value for any pair of constrained lists, reference the underlying configuration in Siebel Repository.

Constrained lists of values must first be configured in the Siebel Repository. After they are configured in the Siebel Repository, specific values in lists can be made hierarchically dependent through the List of Values view. You use the Parent LIC field in the list of values record to specify the values that appear when a value is selected in the parent list.

For more information about constraining both static lists (maintained through lists of values) and dynamic lists, see *Configuring Siebel Business Applications* .

Modifying LOVs Using Siebel Enterprise Integration Manager

You can modify LOVs in Design Time Repository (DR) and Runtime Repository (RR) environments by importing LOVs using Siebel Enterprise Integration Manager (EIM). For information on importing LOV data and on how to run EIM jobs, see *Siebel Enterprise Integration Manager Administration Guide* .

Modifying LOVs Using REST API

You can modify LOVs in Design Time Repository (DR) and Runtime Repository (RR) environments by importing multiple LOVs using REST API. The ability to load LOVs using REST API is provided by the LOV Import Service business service, which is available in both DR and RR environments.

To modify LOVs using REST API

1. Upload multiple LOVs using, for example, an external tool such as SOAP UI.

   To upload multiple LOVs, you must:

   - Use the UpsertLOV method of the LOV Import Service, which is updated in both DR and RR environments.
   - Define the following key attributes in the DR environment because they dictate where the LOVs will be created - these attributes are optional and can be ignored for RR environments (which only have a MAIN Workspace):
     - **WorkspaceName.** The name of the Workspace where LOVs will be imported to.
     - **ParentWorkspaceName.** The parent Workspace name under which the Workspace resides.
   - Define additional attributes, such as the field names from the LOVs business component.

   Use the following template as an example, and copy as many as is necessary of the block under List of Values to create the desired number of records:

```
{"body":{
 "WorkspaceName":"dev_sadmin_ContactCreation",
 "ParentWorkspaceName":"MAIN",
 "SiebelMessage":{
 "MessageId":"",
 "MessageType":"Integration Object",
 "IntObjectName":"List Of Values",
 "IntObjectFormat":"Siebel Hierarchical",
 "ListOfList Of Values":{
 "List Of Values":[
 {
 "Order By":"1",
 "Name":"REST_LOV_TEST",
 "Replication Level":"All",
 "Type":"LOV_TYPE",
 "Translate":"Y",
```

```
"Multilingual":"N",
"Language":"ENU",
"Active":"Y",
"Description":"REST_LOV_TEST",
"Sub Type":"",
"Value":"REST_LOV_TEST"
},
{
"Order By":"1",
"Name":"REST_LOV_1",
"Replication Level":"All",
"Type":"REST_LOV_TEST",
"Translate":"Y",
"Multilingual":"N",
"Language":"ENU",
"Active":"Y",
"Description":"REST_LOV_1",
"Sub Type":"",
"Value":"REST_LOV_1"
},
{
"Order By":"2",
"Name":"REST_LOV_2",
"Replication Level":"All",
"Type":"REST_LOV_TEST",
"Translate":"Y",
"Multilingual":"N",
"Language":"ENU",
"Active":"Y",
"Description":"REST_LOV_2",
"Sub Type":"",
"Value":"REST_LOV_2"
},...
```


2. After you run the REST API call, check that the LOVs have loaded into your application.

   For example, to locate the LOVs listed in the sample provided in the previous step, do the following:

   - Navigate to the Administration - Data screen, then the List Of Values view.
   - Click Clear Cache to make sure that it has the most current information.
   - Click New Query and in the Type field, search for the following:
     `[Type]=REST_LOV_TYPE or [Name]=REST_LOV_TYPE`

     The search results return a list of the LOVs that were loaded, for example, as follows:

LOV_TYPE	Display Value	Language-Independent Code	Language Name	Order	Active
LOV_TYPE	REST_LOV_TEST	REST_LOV_TEST	English-American	1	Yes
REST_LOV_TEST	REST_LOV_1	REST_LOV_1	English-American	1	Yes
REST_LOV_TEST	REST_LOV_2	REST_LOV_2	English-American	2	Yes

Modifying LOVs in Runtime Repository Environments

You can directly modify LOVs in Runtime Repository (RR) environments, such as QA or Production, as follows:

- By navigating to the Administration - Data screen, then the List of Values view in Siebel Business applications.
- By importing LOVs using Siebel Enterprise Integration Manager (EIM), see *Modifying LOVs Using Siebel Enterprise Integration Manager*.
- By importing LOVs using REST API, see *Modifying LOVs Using REST API*.

It is still possible to maintain LOVs strictly within DR environments and migrate them to RR environments - in such cases, your particular business requirements will dictate the appropriate way to manage LOVs.

Changing LOVs in RR environments is similar to changing LOVs in DR environments. However, note that unlike development environments, RR environments do not require you to open a Workspace in order to modify LOVs.

About Modifying LOVs in RR Environments

Since you can modify lists of values (LOVs) in both DR and RR environments, a potential conflict arises when you have changed LOVs in either DR or RR and you want to perform a full or incremental migration. For example:

- If the same record exists in both DR and RR and the record is modified in DR but not in RR, then which record takes priority?
- If the same record exists in both DR and RR and the record is modified in RR but not in DR, then which record takes priority?
- If the same record exists in both DR and RR and the record is modified in both DR and RR, then which record takes priority?

Seed Migration Priority

To resolve any conflicts that might arise when migrating from a DR to an RR environment, a system preference called Seed Migration Priority has been introduced. You can set Seed Migration Priority in the RR environment to one of the following values:

1. **Source.** If Seed Migration Priority is set to Source, then precedence is given to the seed data in the DR environment.
2. **Target.** If Seed Migration Priority is set to Target, then precedence is given to the seed data in the RR environment.

Note: The Seed Migration Priority system preference by default does not exist in Siebel database. If Seed Migration Priority is not set at all, then the default behavior is to assume Target as the priority and precedence is given to the seed data in the RR environment.

CAUTION: Prior to completing a full migration, set the value of the Seed Migration Priority system preference in the target database. Post full migration, do not modify the value of the Seed Migration Priority system preference. For any subsequent incremental migrations, the Seed Migration Priority setting must not be changed (it should remain the same as it was during full migration). Should you need to change the value of Seed Migration Priority, then full migration must be run again.

Note: The Seed Migration Priority system preference works as a conflict-resolution mechanism and applies only if there is a conflicting change during full or incremental migration (any new LOV data will migrate as normal). A conflict occurs when an existing LOV record is modified in both the DR and RR environments.

Example of Conflict Resolution for Full Migration

The following table shows how conflicts are handled during full migration from a DR to an RR environment.

If you do the following before migration:	Conflict	The seed record in RR when `Seed Migration Priority = 'Source'`	The seed record in RR when `Seed Migration Priority = 'Target'`
Modify record in DR only	No	DR record is imported to RR.	DR record is imported to RR.
Modify record in both DR and RR	Yes	DR record is imported to RR.	RR record is retained.
Modify record in RR only	Yes	DR record is imported to RR.	RR record is retained.

Example of Conflict Resolution for Incremental Migration

The following table shows how conflicts are handled during incremental migration from a DR to an RR environment.

If you do the following before migration:	Conflict	The seed record in RR when `Seed Migration Priority = 'Source'`	The seed record in RR when `Seed Migration Priority = 'Target'`
Modify record in DR only	No	DR record is imported to RR.	DR record is imported to RR.
Modify record in both DR and RR	Yes	DR record is imported to RR.	RR record is retained.
Modify record in RR only	No	RR record is retained.	RR record is retained.

Note: For incremental migrations, conflict resolutions are made only for those records which are modified in the DR (since incremental migration carries only delta changes from the DR).

Example of How Inserts are Handled During Full or Incremental Migration

The following table shows how inserts are handled when migrating from a DR to an RR environment.

If you do the following before migration:	Conflict	The seed record in RR when `Seed Migration Priority = 'Source'`	The seed record in RR when `Seed Migration Priority = 'Target'`
Insert a new record in DR	No	DR record is imported to RR.	DR record is imported to RR.
Insert a new record in RR	No	RR record is retained.	RR record is retained.

If you do the following before migration:	Conflict	The seed record in RR when `Seed Migration Priority = 'Source'`	The seed record in RR when `Seed Migration Priority = 'Target'`
Insert a new record with the same Name, LIC and Type in both DR and RR	Yes	DR record is imported.	RR record is retained.

Users must log out of the application and then back in again for any changes to take effect.

About Conflict Resolution

The following points summarize how conflicts are resolved during migrations:

1. Only conflicting records honor the Seed Migration Priority setting. For non-conflicted records, the regular migration rule (that is, migration of data from source to target) applies.
2. New records in both (DR and RR) environments are handled as follows:
    a. New records created in DR are always migrated to RR no matter whether the Seed Migration Priority is Source or Target.
    b. New records created in RR are always retained in RR no matter whether the Seed Migration Priority is Source or Target.
    c. If a new record is created with the same name in both DR and RR, then the following behavior applies:
        - If Seed Migration Priority is Target, then source DR records are skipped and target RR records are retained.
        - If Seed Migration Priority is Source, then source DR records are imported and target RR records are deleted.
3. Deleting a seed record is a modification, which follows the same rules that apply for record modification. All deleted records become inactive.

Foreign Key References for Seed Data After Migration

As of Siebel CRM 21.6 Update, foreign key references (for example, from LOVs to Organization) are resolved as follows when migrating seed data from a development (DR) environment to any RR environment (such as Production):

- If the target environment has a record with a matching name (for example, Organization Name), then the seed data record will resolve the foreign key to that matching record.
- If the target environment has no record with a matching name, then it will not be possible to resolve the foreign key. In such cases, an error is logged indicating that the foreign key could not be resolved and the administrator of the RR environment must manually create a matching record and manually update the seed data record to point to that new record as follows:
    - Manually create an Organization in the RR environment with the same name as the DR environment.
    - Manually update the LOV record(s) to refer to the newly created Organization.

Modifying LOVs in Integration Workspace in DR Environments

There is no workspacing of LOVs at the development Workspace level in DR environments. However, each integration branch (including the MAIN branch) has its own full copy of seed data or LOVs and there is complete isolation of the seed data across the integration branches (there is parallel development isolation at the Integration Workspace level, not at the development Workspace level). As a result, LOV changes carried out by any user are immediately visible across the entire scope of a specific integration branch – that is, changes are visible at the integration branch level as well as at all the development branches under it.

Up until Siebel CRM 20.2 Update release, it was mandatory to create a development Workspace in order to modify LOVs, even though there was no isolation at the development Workspace level. To make LOV development in DR environments more intuitive, given that LOV modifications happen at the scope of the Integration Workspace, LOV modifications should be performed directly against the Integration Workspace. This would eliminate the necessity of creating a development Workspace if the user wants to make LOV changes only (and is consistent with the isolation model used for seed data). Also, this is required for executing scripts that update LOVs on MAIN or Integration Workspaces.

As of Siebel CRM 20.3 Update release, you can modify LOVs by opening either the development Workspace or Integration Workspace in a DR environment. When you open the development or Integration Workspace in a DR environment and modify LOVs, the changes will always happen at the Integration Workspace level. This is the default behavior. You can enable or disable LOV modification in the development Workspace of DR environments by setting the DisableSeedUpdOnDevWS system preference as follows:

- If DisableSeedUpdOnDevWS is set to True, then LOV modification is not allowed in the development Workspace. In this case, LOVs are read-only.
- If DisableSeedUpdOnDevWS is set to False, then LOV modification is allowed in the development Workspace. By default, DisableSeedUpdOnDevWS is set to False.

6 Siebel Audit Trail

Siebel Audit Trail

This chapter includes information about Siebel Audit Trail. It includes the following topics:

- *About Siebel Audit Trail*
- *Process of Configuring and Using Siebel Audit Trail*
- *Enabling and Disabling Siebel Audit Trail*
- *Specifying Business Components and Business Component Fields for Audit*
- *Setting Up Read Auditing*
- *Specifying Parent-Child Associations for Audit*
- *Specifying Siebel Audit Trail Restrictions*
- *Verifying Siebel Audit Trail Configuration*
- *Viewing Audit Trail Records*
- *Linking Siebel Audit Trail to a Business Component*
- *Decoding the Audit Log File*
- *Importing Siebel Audit Trail with Enterprise Integration Manager*
- *Customizing Siebel Audit Trail*

About Siebel Audit Trail

Siebel Audit Trail creates a history of the changes that have been made to data in Siebel Business Applications. An audit trail is a record showing who has accessed an item, which operation was performed, when it was performed, and how the value was changed. Therefore, it is useful for maintaining security, examining the history of a particular record, documenting modifications for future analysis, and record keeping. Siebel Audit Trail logs information without requiring any interaction with, or input from, your users.

Siebel Audit Trail can be used for a variety of purposes. In a simple example, a call center uses an audit trail to track the status change of a service request, who changed it and when. Siebel Audit Trail capabilities can also be used to track the time needed to change the state of an item, such as a service request from open to closed. A calculation of the time difference can help the call center manager measure and improve service quality. Siebel Audit Trail can also be used to reproduce a record at a specific point in time to maintain regulatory compliance. You look at the audit trail for the record and compare the audit trail details with the current state of the record.

Siebel Audit Trail can also be used to track the viewing and export of data. For example, financial services organizations can use Siebel Audit Trail to monitor who has read or exported an account holder's information. Siebel Audit Trail can be implemented for the Siebel Audit Trail functionality itself to help you track any changes made to the Siebel Audit Trail settings.

Note: For any Siebel Audit Trail deployment, the combination of the number of fields audited and the number of audit records created by a business process has performance implications. If you audit a large number of fields on a business component, or audit fields in a large number of business components, then unacceptable performance might result. Because read operations are common, if you audit a large number of these operations, then unacceptable performance might result.

Siebel Audit Trail Features

More Siebel Audit Trail features are described in the following topics:

- *Audit Scope*
- *Siebel Audit Trail Content*
- *Siebel Audit Trail Constraints*
- *Siebel Audit Trail for Siebel Remote and Siebel Replication Users*

Audit Scope

System administrators can specify the audit scope by the following means:

- Operations (such as read, update, new, delete, and export) performed on business components
- Operations performed in a specific time period
- Only those operations performed by certain responsibilities, positions, or employees
- Fields, for audits of read operations

Siebel Audit Trail Content

For all auditable operations, the following information is stored:

- User ID of the person who performs the operation
- Date and time of the operation
- Record ID and row ID of the audited item

The following table outlines some of the information that is stored for particular operations.

Operation	Information Stored
New Record	• Name of the field on which the operation is performed • Value of the field
Modify	• Name of the field on which the operation is performed • Old value of the field • New value of the field
Copy Record	• Value of the field

Operation	Information Stored
Delete	• Name of the field on which the operation is performed • Value of the field when the user deleted the record
Associate	• Parent business component • Child business component • Link information
Read	• Name of the field that the user reads • Value of the field at the time of the read operation, if the Read Field Value option is selected on the Administration - Audit Trail screen
Export	• Business component from which records are exported • Row IDs of the exported records • Number of records exported

Merging duplicate records can result in delete operations for the source records that are deleted and a modify operation for the surviving record that is updated with information from the deleted records. Variations of the delete operation for merged records include the Delete (Merge Record) operation for deleted merge records and the Delete Duplicate Assoc (Merge) operation for deleted records that are associated with deleted merge records. For more information about merging duplicate records, see *Siebel Fundamentals* .

Siebel Audit Trail Constraints

The following cannot be audited:

- Virtual business components. Virtual business components do not bind to any underlying tables.
- Calculated fields. Typically, the value for a calculated field is derived from a table-based field. Audit a calculated field by auditing the table-based field that was used to derive the calculated field.
- Export of data using methods other than the following:
  - From the application-level menu, selecting File, then Export Data Map
  - Enterprise Integration Manager (EIM)
- Record inserts, updates, and deletes that are performed through Assignment Manager or Workflow Policy actions. These actions do not use the Siebel Application Object Managers.
- Business components that are based on external data sources.

Siebel Audit Trail for Siebel Remote and Siebel Replication Users

The following information applies to remote and replication users:

- Audit trails are generated only when the user synchronizes data with the server.

- Audit trails are regenerated when the user synchronizes other data.
- If the transaction is rejected during the conflict resolution, then an audit trail record is not generated.

Process of Configuring and Using Siebel Audit Trail

To set up and monitor Siebel Audit Trail, complete the following tasks:

1. *Enabling and Disabling Siebel Audit Trail*
2. *Specifying Business Components and Business Component Fields for Audit*
3. *Setting Up Read Auditing*
4. *Specifying Parent-Child Associations for Audit*
5. *Specifying Siebel Audit Trail Restrictions*
6. *Verifying Siebel Audit Trail Configuration*
7. *Viewing Audit Trail Records*

Enabling and Disabling Siebel Audit Trail

By default, the Siebel Audit Trail functionality is enabled in Siebel Business Applications.

Note: Siebel Audit Trail creates history records for predefault values.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

To enable or disable Siebel Audit Trail

1. Navigate to the Administration - Application screen, then the System Preferences view.
2. To enable Siebel Audit Trail, set the value of the EnableAuditing system preference to TRUE.

   To disable Siebel Audit Trail, set the value to FALSE.
3. To enable Siebel Audit Trail for EIM, set the value of the EnableEimAuditing system preference to TRUE.

   To disable Siebel Audit Trail for EIM, set the value to FALSE.

Specifying Business Components and Business Component Fields for Audit

You administer the business component and the business component fields to be audited from the Administration - Audit Trail screen. You cannot audit business components that are based on external data sources.

Note: If a field in the business component has a TYPE value of DTYPE_CURRENCY, then the Exchange Date Field property for the field, which has a default value of Exchange Date, and the Currency Code Field property for the field, which has a default value of Currency Code, must have a value. You can set these values in Siebel Tools.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

To configure the business component and business component fields to be audited

1. Navigate to the Administration - Audit Trail screen.
2. In the Audit Trail Buscomp list, create a new record, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
Update	Select the check box if you want to audit the Update operation.
New	Select the check box if you want to audit the New operation.
Delete	Select the check box if you want to audit the Delete operation. Clear the check box if you want to not audit the Delete operation.
Export	Select the check box if you want to audit the Export operation.
Assoc	Select the check box to audit associations with the child business components in the Child Buscomp list. For more information, see *Specifying Parent-Child Associations for Audit*.
Restriction Type	Select a value that determines who is audited.
Start Date	Select the date on which the auditing starts.
End Date	Select the date on which the auditing stops. Disable Siebel Audit Trail for an individual business component by setting the End Date to a date that has already passed.

3. In the Field list, create a new record for the field you want to audit.

   Note: If you do not create at least one new record for a field on the business component, then nothing is audited.

   Some of the fields are described in the following table.

Field	Comments
Field	Select the field name you want to audit. The details of the selected field appear in the Table Name, Column Name, and Join columns.

Field	Comments
Read Field Value	Select the check box if you want to store the field value during the audits of read operations.
Reading	Select the check box if you want to audit the read operations.
Table Name	Displays the table to which the column belongs.
Column Name	Displays the column name of the selected field.
Join	Displays the join name associated with the column. You can audit only fields that are standard joins. Standard joins apply to existing fields in existing business components. You cannot audit customized implicit joins. Customized implicit joins are not visible in Siebel Tools in the Joins list for the business component. For more information about implicit joins, see *Configuring Siebel Business Applications* .

4. Repeat step 3 until the Field list shows all the fields in that business component that you want to audit.

Disabling Individual Business Components

Complete the following procedure to disable individual business components.

To disable individual business components

1. Navigate to the Administration - Audit Trail screen.
2. Use one of the following methods to disable Siebel Audit Trail:
   - In the Audit Trail Buscomp list, enter an end date prior to today's date in the End Date field.
   - In the Audit Trail Buscomp list, delete the record for the business component.

Setting Up Read Auditing

You can configure Siebel Audit Trail to audit read operations on records.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

To set up an audit trail of read operations

1. Navigate to the Administration - Audit Trail screen.
2. In the Audit Trail Buscomp list, create a new record for the business component, and complete the necessary fields.

Some fields are described in the table in Step 2 in *Specifying Business Components and Business Component Fields for Audit*.

3. In the Field view, create a new record, and complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Field	Select the name of the field on which you want read-auditing.
Reading	Select this field to indicate you want read-auditing.

4. Click Update Audit Cache.

Specifying Parent–Child Associations for Audit

In Siebel Business Applications, parent-child associations are set through:

- MVG (multi-value group) fields
- Parent-child applets

Siebel Audit Trail can keep track of changes in parent-child associations. For example, you can audit the association (and dissociation) of contacts with accounts.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

To configure business components for auditing of parent-child associations

1. Determine the name of the child business component with the association that you want to audit.
2. Navigate to the Administration - Audit Trail screen.
3. In the Audit Trail Buscomp list, perform one of the following steps:
   - Select an existing record for the parent business component.
   - Create a new record for the parent business component, and complete the necessary fields. Some fields are described in table in *Specifying Business Components and Business Component Fields for Audit*.
4. Make sure that the Assoc field is checked.
5. Navigate to the Child Buscomp view.
6. In the Child Buscomp list, create a new record for the child business component that has an association with the parent business component you want to audit.

   Note: If the Deep Delete user property is configured for the child business component, then create a new record for the child business component in the Audit Trail Buscomp list in the same way that you create a new record for a parent business component. In this case, do not create a new record for the child business component in the Child Buscomp list.

Some of the fields are described in the following table.

Field	Comments
Link Name	Select the link between the parent and child business components that you want to audit.
Child Buscomp	Displays the child business component for the link.
Parent Field	Displays the parent field of the child business component.
Inter Child Column	Displays the name of the child column.
Table Name	Displays the name of the table on which the link is based.
M/M	Displays whether the link is a many-to-many link.

Specifying Siebel Audit Trail Restrictions

You can restrict who gets audited by user, position, or responsibility.

For example, if you set the Restriction Type to User on the Audit Trail Buscomp Fields view, then navigate to the Audit Trail Users View and add the users to audit. Restriction by responsibility or position works in the same way.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

To specify Siebel Audit Trail restrictions

1. Navigate to the Administration - Audit Trail screen.
2. In the Audit Trail Buscomp list, select a business component entry, and change the Restriction Type field to Position, Responsibility, or User.
3. Navigate to the Position, Responsibility, or User view.
4. Create or edit records in the position, responsibility, or user list for the audit trail.

   The positions, responsibilities, or users you specify are audited for the operations on this particular business component.
5. Click Update Audit Cache.

Verifying Siebel Audit Trail Configuration

The following steps are part of the verification process to make sure that the business component and business component fields were specified correctly.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

To verify Siebel Audit Trail records

1. Navigate to the view for the business component that you want to audit.
2. Make a change to the data in that view.
3. Navigate to the Audit Trail screen, then the Audit Trail Items view.
4. In the Audit Trail Items list, query the business component and field values to make sure there is a new record showing the changes that you made to the business component.

Viewing Audit Trail Records

After you have set up the fields, operations, responsibilities, positions, and employees to be audited, you can read the results of the audit trails in the Audit Trail view and the Audit Trail Items view.

This task is a step in *Process of Configuring and Using Siebel Audit Trail*.

Querying Audit Trail Information

After recording or importing audit trail records into the Siebel database, you can query audit trail information in the Audit Trail Items view. For example, you can query Audit Trail Items to determine changes made by team members, dates, or operations performed on a business component.

To query audit trail information

1. Navigate to the Audit Trail screen, then the Audit Trail Items view.
2. Query the list for Audit Trail Items of interest.

   Some fields are described in the following table.

Field	Comments
Employee Login	Displays the username of the user who changed the record.
Business Component	Displays the business component for the record where the database change occurred.
Field	Displays the name of the field where the change occurred.

Field	Comments
Operation	Displays the type of operation that was performed, for example, New Record, Delete, and so on.
Old Value	Displays the value in the field before the database change occurred.
New Value	Displays the value in the field after the database change occurred.
Date	Displays the timestamp of the change.
Child Business Component	Displays the child business component for the record where the database change occurred, if any.
Record ID	Displays the unique identifier of the record that was changed.
Base Table	Displays the name of the primary database table where the database change occurred.
Child Table Name	Displays the name of the child table for the record where the database change occurred, if any.
Column	Displays the name of the column in which the change occurred.
Group ID	Displays the unique identifier of the group to which the user who changed the record belonged.
Link	Displays the name of the link that describes the relationship between the child business component and the parent business component. This link is configured in Siebel Tools.
Table	Displays the name of table to which the selected field belongs in the Siebel database.
Row ID	Displays the unique identifier of the row in which the change occurred.
Employee ID	Displays the unique identifier of the user who changed the record.

Querying Export Audit Trail Records

You can set up Export Audit Trail for a business component to monitor the export activities for the business component. Export activities include selecting Print or Print Preview in the list that appears when you click the cogwheel icon in a

view to print a record in that view. You can view the results of export audit in the Export Audit Trail view. For details on setting up Export Audit Trail, see *Specifying Business Components and Business Component Fields for Audit*.

To query Export Audit Trail information

1. Navigate to the Audit Trail screen, then the Export Audit Items view.
2. Select the Audit Trail Item required.

   Some fields are described in the following table.

Field	Comments
Employee Login	Displays the username of the user who initiated the export.
Business Component	Displays the business component on which the export operation was performed.
Record Count	Displays the number of records that were exported.
Date	Displays the timestamp of the export activity.
Record IDs	Displays the unique identifier for each record that was exported.
Employee ID	Displays the unique identifier for the user who initiated the export.

Querying Read Audit Trail Records

You can use the Read Audit Trail feature to monitor the reading of sensitive information.

To query Read Audit Trail information

1. Navigate to the Audit Trail screen, then the Read Audit Items view.
2. Select the Audit Trail Item required.

   Some fields are described in the following table.

Field	Comments
Employee Login	Displays the username of the user who read the record.
Business Component	Displays the business component for the record that was read.

Field	Comments
Record ID	Displays the unique identifier of the record that was read.
Date	Displays the timestamp of the read operation.
Employee ID	Displays the unique identifier of the user who read the record.
Field Name	Displays the name of the field that was read.
Field Value	Displays the value that was in the field at the time that the field was read.

Note: To audit record field values, you must select Read Field Value in the Field view of the Administration - Audit Trail screen. For more information, see *Specifying Business Components and Business Component Fields for Audit*.

Linking Siebel Audit Trail to a Business Component

In some circumstances, you might want to link the Audit Trail view to a specific business component view. For example, a Call Center team might want to see the audit trail records for individual service requests. Using Siebel Tools, you can create a view that allows the Call Center team to see these audit trail records, if the following conditions are met:

- Siebel Audit Trail must be running in database auditing.
- You must be able to audit the business component you are linking to Siebel Audit Trail. For information about determining if a business component can be used in Siebel Audit Trail, see *Siebel Audit Trail Constraints*.

Note: Because Audit Trail Item records are not routed to mobile Web clients, data in these linked views can appear only in Siebel Web Client and the Siebel Developer Web Client. Make sure that mobile clients do not have access to views displaying audit trail data.

To link Siebel Audit Trail to a business component

1. Complete the following steps in Siebel Tools:
   a. Create a link between the Audit Trail Item 2 business component and the business component to which you are linking Siebel Audit Trail, and set the parent business component property of the link to the name of the audited business component.

      For example, if you are configuring the view to show the audit trail records for the Product Defect business component, then the parent business component is Product Defect. The Child Business Component for the link is Audit Trail Item List 2. The Source and Destination Fields for the link are Id and Record ID respectively.
   b. Modify the business object for the business component to which you are linking Siebel Audit Trail.

You must create Audit Trail Item 2 as one of the business object components, and specify the Link property as the link you created in Step a.

c. Create a view that has an applet that is based on the selected business component as a parent, and the Audit Trail Item List 2 applet as a child.

d. Add this view to a screen.

2. Launch one of the Siebel employee applications.
3. Navigate to the Administration - Application screen, then the Views view.
4. In the Responsibilities, and add the responsibilities that are applicable to the new view.

Decoding the Audit Log File

Audit trail data is stored in an encoded form in the Siebel database to maximize the performance of the overall Siebel application.

Audit Trail Item 2 Virtual Business Component

You can use the Audit Trail Item 2 virtual business component to export your audit trail data to a data warehouse. To maintain compatibility with data from previous Siebel versions, you must decode the new information and store the newly formatted records into the old format.

All audit trail values for a single transaction are grouped together into one record in the S_AUDIT_ITEM table. Previously, values were stored in the OLD_VAL and NEW_VAL fields. The NEW_VAL and OLD_VAL columns are no longer populated in S_AUDIT_ITEM table. Instead, the fields and values for an audit transaction are grouped into the AUDIT_LOG column of the S_AUDIT_ITEM table.

To decode audit items, you can call the Audit Trail Item 2 virtual business component. The Audit Trail Item 2 business component is no longer based on S_AUDIT_ITEM table. Instead, this business component is now a virtual business component that is based on a highly specialized class that has its own business logic to retrieve data from S_AUDIT_ITEM table.

Note: Using the virtual business component to decode audit trail data is the only method that Oracle supports. The virtual business component is updated to reflect any changes in the underlying data structure.

Workflow to Decode Audit Data

The workflow that you use to decode audit data depends on how you use the data. If you are implementing an archival solution, then you might want to implement a solution that reads all created records. If you are implementing a more data-oriented solution, then you must implement a solution that has more control of the data.

The following is an example of a high level flow for reconstructing data:

1. Start the Audit Trail Item 2 virtual business component.
2. In a search time window, run a query for Audit Trail Item 2.
3. Run an query for Audit Trail Item - Data, where the date and time match the previous record.

4. Write out the decoded record ID: New Val, Old Val.

   This step is entirely dependant on your specific requirements and can range from writing to a custom table in the Siebel database to sending the decoded data to an external data source using one of the EAI Transports.

You can modify this flow to restrict the data returned by business component, user, position, and so on. However, the flow must always include the fundamental aspect of querying both the Audit Trail Item 2 virtual business component and the Audit Trail Item – Data business component to construct a record consistent with format of a previous version of a Siebel Audit Trail record.

Use this flow to make sure that duplicate records are not included in the export of audit trail data to a data warehouse. In this flow, row IDs are not obtained from the Audit Trail Item - Data business component to create records with unique row IDs but to identify already-exported records. This identification occurs in the data warehouse. (Due to the encoded format of the Audit Trail Item - Data business component, a virtual record in the Audit Trail Item 2 virtual business component does not always map one-to-one to a physical database record in the Audit Trail Item - Data business component. Consequently, a record for the Audit Trail Item 2 virtual business component does not always have a unique row ID.)

Next, you must create a trigger for the workflow you are using to decode audit data. You can use a reactive trigger through runtime events or workflow policies. If you need real-time or near-real-time onward transmission of the audit trail data, then consider using a reactive trigger. However, consider that the volume of transactions occurring on the audit tables is high, so any per-record solution might cause unwanted performance effects on the entire Siebel application. Any deployment using a reactive trigger on audit data requires extensive performance profiling.

For any situation that does not require real-time data transmission, consider an asynchronous batch approach using a mechanism such as repeating component requests. You can tune and adjust these requests so that the frequency of the job matches the data and performance requirements of the Siebel application. In many cases, you can time these requests to run during periods of reduced activity in the Siebel application. It is recommended that you use this approach for the majority of use cases.

You can use either a custom business service in conjunction with a Workflow Process, or you can use a Workflow Process on its own to implement your solution to decode audit trail data. Leveraging only a Workflow Process might assist in the long term maintenance of the solution if you think that it might require modification over time; however this approach also adds complexity to the solution due to the requirements of stepping through data sets and restricting records.

Example Business Service

This example provides sample code for a business service that you can use to retrieve and decode data; note however that the search specification is arbitrary. Carefully consider this search specification for individual implementations. You can apply a search specification to only fields that map to physical columns, and not to encoded fields.

```
/*****************************************************************************/
/* function: decodeAuditTrail
/*
/* The top level function to read audit trail data encoded in Siebel 8.x format */
/* allowing the data to be exported as simple value pairs for purposes of archival */
/* or business intelligence. */
/*****************************************************************************/
function decodeAuditTrail(strTimediff)
{
try {
 // Create objects
 var boAudit = TheApplication().GetBusObject("Audit Trail");
 var bcAuditItem = boAudit.GetBusComp("Audit Trail Item 2");
 with(bcAuditItem) {
```

```
 SetViewMode(AllView);
 ClearToQuery();
 // Set the search specification. In this example we are only
 // using time differential.
 SetSearchSpec("Date", ">= " + strTimediff);
 ExecuteQuery(ForwardOnly);
 var bRecord = FirstRecord();
 while(bRecord) {
 //Retrieve field values
 var strRecordId = GetFieldValue("Record Id");
 var strBC = GetFieldValue("Business Component");
 var strFieldName = GetFieldValue("Field");
 var strOldVal = GetFieldValue("Old Value");
 var strNewVal = GetFieldValue("New Value");
 var strDate = GetFieldValue("Date");
 //Query for underlying Row Id
 /*************************************************************************/
 /* function: getAuditRowId */
 /*
 /* Retrieves the physical row ID associated with the decoded audit record to */
 /* provide a defined cutoff for the audit export operation. In cases where */
 /* more than one record is retrieved, an error is thrown because the defined */
 /* cutoff is not unique, and the operation is retried with new parameters. */
 /*************************************************************************/
 var strAuditId = getAuditRowId(strRecordId, strDate);
 //Placeholder for function to write out values
 writeAuditValues(strAuditId, strBC, strFieldName, strRecordId,
 strOldVal, strNewVal, strDate);
 bRecord = NextRecord();
 }
 }
}
catch(e)
{
 throw(e);
}
}
function getAuditRowId(strAuditRecordId, strAuditRecordDate)
{
 var strReturn = "";
try
{
 // Create objects
 var boAudit = TheApplication().GetBusObject("Audit Trail");
 var bcAuditData = boAudit.GetBusComp("Audit Trail Item - Data");
 with(bcAuditData) {
 SetViewMode(AllView);
 ClearToQuery();
 // Set the search specification for the combination of
 // record Id and date
 SetSearchSpec("Date", strAuditRecordDate);
 SetSearchSpec("Record Id", strAuditRecordId);
 ExecuteQuery(ForwardOnly);
 var bRecord = FirstRecord();
 if(bRecord) {
 strReturn = GetFieldValue("Id");
 // Check to see that we only have one record
 bRecord = NextRecord();
 if(bRecord) {
 throw("Error: Multiple Record Id and Date records
 identified");
 }
}
else
 strReturn = "";
}
```

```
}
catch(e)
{
 throw(e);
}
 return(strReturn);
}
```

Importing Siebel Audit Trail with Enterprise Integration Manager

You can import existing audit trail data into Siebel with Siebel Enterprise Integration Manager. You can use the Enterprise Integration Manager tables for Siebel Audit Trail to import your data from a previous version of Siebel. The current version of Siebel CRM uses the same table columns as the previous version of Siebel. The virtual business component displays the data from the previous version of Siebel along with the data from the current version of Siebel.

Enterprise Integration Manager tables for Siebel Audit Trail are designed for use solely as a data loading exercise. Oracle does not support runtime insertion of data into the Siebel Audit Trail tables by any mechanism other than Siebel Audit Trail. For more information about Siebel Enterprise Integration Manager, see *Siebel Enterprise Integration Manager Administration Guide* .

Note: It is not possible to manually update existing audit trail records.

Customizing Siebel Audit Trail

Siebel Audit Trail is a closed set of functionality that is designed to be used as delivered. It is one of the very few areas of the Siebel application that is not suitable for additional customization and configuration by integrators or customers. Audit trail data is stored is an internal format and is only accessible through the virtual business component.

Note: Additional custom columns and trigger points for inserting audit trail data are not supported.

7 Usage Pattern Tracking

Usage Pattern Tracking

This chapter includes information about usage pattern tracking (UPT) in Siebel Business Applications. It includes the following topics:

- *About Usage Pattern Tracking*
- *Process of Setting Up Usage Pattern Tracking*
- *Usage Pattern Collection*
- *Processing Usage Pattern*
- *Viewing Usage Patterns*
- *Details of Records for Usage Pattern Tracking*
- *Application Programming Interfaces for Usage Pattern Tracking*

About Usage Pattern Tracking

Usage pattern tracking allows administrators to review details about when and how often users access the features in a Siebel application. To capture information about this user access, administrators set up a component job to run at a scheduled date and time or at time intervals that they specify. Administrators can configure usage pattern tracking to apply to only the user events that they designate. They can also configure usage pattern tracking to apply to events that are associated with client scripts, such as browser scripts and JavaScripts, and with server scripts.

After the component job for usage pattern tracking runs, administrators can view information about the user events and event details in the Usage Pattern Tracking view of the Administration - Application screen.

For example, administrators can implement usage pattern tracking to:

- Monitor how often users use a Siebel application, an applet, or a business component so that they have reliable information to change application configuration and features and to simplify the user interface.
- Monitor how users use a feature in a Siebel application to facilitate user training and to gather details about the actions that lead to error conditions.
- Monitor feature usage after application upgrades or during development cycles to evaluate the usefulness of upgrades or new development and to optimize test cycles.

Usage pattern tracking is designed to minimize the impact on the performance of Siebel Business Applications. It is recommended that administrators consider the business requirements of their organizations, and monitor only the necessary events to minimize any adverse affect on performance.

Process of Setting Up Usage Pattern Tracking

To set up usage pattern tracking, perform the following tasks:

1. *Setting System Preferences for Usage Pattern Tracking*
2. *Configuring Usage Pattern Tracking*

Note: You must perform a 18.9 repository upgrade to capture user actions with usage pattern tracking and user input recording.

Setting System Preferences for Usage Pattern Tracking

Complete the procedure in this topic to set the system preferences for usage pattern tracking.

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

To set system preferences for usage pattern tracking

1. Navigate to the Administration - Application screen, then the System Preferences view.
2. Set the system preferences in the following table.

System Preference	Description
Enable UPT	Set this system preference to TRUE to implement usage pattern tracking.
UPT Max Record Cache	Set this system preference to the number of records for usage pattern tracking that are kept in memory. When memory exceeds the number of records that you specify for this system preference, the records are moved to .csv files for users at the following location: **`siebsrvr\upt\username`** . Eventually, the UPT Process workflow moves the information in the .csv files to tables in the Siebel database. For more information about these tables, see *Viewing Usage Patterns*. Available memory and the anticipated level of user activity determine the appropriate value for this system preference. Its minimum value is 100, and its maximum value is 10,000.
UPT Log Path	This is relevant only for Bulk Mode recordings, where the volume of recording is high. All user actions and user inputs from the user interface are recorded when Bulk Mode recording is enabled. This is the network share to store UPT records in .csv files. This setting overwrites the default location **`siebsrvr\upt`** when a valid network is specified. For more information about enabling Bulk Mode (background) recording, see *Capturing User Actions with Usage Pattern Tracking*.

3. Complete the following steps to create system preferences for the end-to-end events (EEEs) to include in usage pattern tracking (UPT):
   a. In the System Preference Name field, enter a name, such as UPTEEE1, UPTEEE2, for the pair of events in each end-to-end event.

b. In the System Preference Value field, enter a pair of events for each name in Step a, and separate the events with a comma.

   The first event designates the start of the end-to-end event, and the second event designates the end of the end-to-end event. Example event pairs include: WebLogin, WebLogout and ViewActivated, ViewDeactivated.

   You can obtain possible events by navigating to the Events view of the Administration - Runtime Events screen. Each value (Applet, Application, and BusComp) in the Object Type field of this view is associated with a set of events in the Events field of this view. Both of the events that you enter in an end-to-end event must be associated with the same object type. For information about the descriptions of event values, see *Siebel Personalization Administration Guide* .

c. In the System Preference Name field, enter a name of UPTEndToEndEventList.

d. In the System Preference Value field for the UPTEndToEndEventList name, enter each name that you created in Step a, and separate each name with a comma.

4. To implement the system preferences that you set, restart the Siebel Application Object Manager component.

For information about restarting Siebel Server components, see *Siebel System Administration Guide* .

Configuring Usage Pattern Tracking

To configure usage pattern tracking, perform the following tasks:

1. *Creating Action Sets for Events*
2. *Associating Action Sets With Events*
3. *Capturing User Actions with Usage Pattern Tracking*
4. *Restricting User Action Recording to Specific User or Responsibility*
5. *Interpreting User Actions from Usage Pattern Tracking Data*
6. *Controlling User Input Recording*

Creating Action Sets for Events

An action set includes the actions that are run when an event occurs. After you create an action set with one action for usage pattern tracking, you associate this action set with the events that you want to monitor. For more information about creating action sets, see *Siebel Personalization Administration Guide* .

This task is a step in *Configuring Usage Pattern Tracking*.

To create an action set for events

1. Navigate to the Administration - Runtime Events screen, then the Action Sets view.
2. In the Action Sets list, create a new record, and complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Name	Type a name for the action set.

3. In the Actions list, create a new record for the action in the action set, and complete the necessary fields.

Some of the fields are described in the following table.

Field	Comments
Name	Type a name for the action.
Action Type	Select the BusService action type for the action.
Sequence	Type a sequence number of 1 for the action.
Business Service Name	Type Usage Pattern Service for the business service of the action.
Business Service Method	Type UsageLog for the business service method of the action.

Associating Action Sets With Events

After creating the action set, you associate it with the events to include in usage pattern tracking. The business service method (UsageLog) in the business service (Usage Pattern Service) of the action set is called when the events occur.

This task is a step in *Configuring Usage Pattern Tracking*.

To associate the action set with events

1. Navigate to the Administration - Runtime Events screen, then the Events view.
2. In the Events list, create a new record for each event, and complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Sequence	Type a number to denote the order in which the action set associated with the event runs relative to the other action sets associated with the event.
Object Type	Select the appropriate object type for the event. Values include: Applet, Application, and BusComp.
Event	Select the appropriate event. The object type that you select determines the events that are available for selection. For information about the descriptions of event values, see *Siebel Personalization Administration Guide* . The following events for all object types are available for usage pattern tracking: ○ **UPTGeneric.** This event occurs when the server calls the TriggerUPTEvent application programming interface (API).

Field	Comments
	○ **UPTClientScript.** This event occurs when a client script, such as a browser script or JavaScript, calls the TriggerUPTEvent application programming interface (API). For more information, see *Browser Script Application Programming Interface* and *JavaScript Application Programming Interface*. ○ **UPTServerScript.** This event occurs when a server script calls the TriggerUPTEvent application programming interface (API). For more information, see *Server Script Application Programming Interface*.
Action Set Name	Select the action set name that you created in *Creating Action Sets for Events* of *Creating Action Sets for Events*.
Conditional Expression	Type a conditional expression to refine the data that applies to the event. You can click the select button in this field to access the Expression Designer dialog box where you can construct the expression. For example, if you want to monitor the event for only specific users, then you can specify those users in a conditional expression.

Capturing User Actions with Usage Pattern Tracking

User actions, such as editing field data, selecting a record or entering a keyboard shortcut, are activities that the user does in the application UI before the next request reaches the server. Administrators can configure the application to capture user actions in the sequence in which they occur. This is in addition to existing usage pattern data that is captured.

This topic describes how to enable the capturing of user actions. You can capture UPT data in either Unit Mode or Bulk Mode. The following table describes each mode by highlighting the differences between them.

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

Note: The feature described in this topic is available in Siebel CRM 18.9 Update and later releases.

Unit Mode	Bulk Mode
User initiated recording.	Recording in the background
Controlled by the end user using the Recording Panel	End user has no control (neither start nor stop) over the recording.
Recording is captured for one process or script at a time.	Continuous recording until stopped by the administrator.
Typically used by business administrators, test script authors, training manual writers, and so on.	Typically enabled for call center agents and other application users.
Generates logs for one recording at a time.	Generates a large amount of data.

To enable user action recording

1. Navigate to the Administration - Runtime screen, then the Action Sets view.
2. In the Action Sets list, query for the record: Recording.
3. Select the Unit Mode/Bulk Mode action and set the value for the Unit Mode/Bulk Mode profile attribute to TRUE.

   The value for the Unit Mode/Bulk Mode attribute is correctly set.
4. (Optional) Add a Siebel conditional expression to control whether recording is enabled for a specific user or set of users.

   According to the value set in the previous step, Unit Mode/Bulk Mode will be enabled or disabled for all users when the conditional expression is not used.
5. Navigate to the Administration - Runtime screen, then the Events view.
6. In the Events list, create a new record for an event, and complete the following fields:

Field	Comments
Sequence	Type a number to denote the order in which the action set associated with the event runs relative to the other action sets associated with the event.
Object Type	Select the object type: Application
Event	Select the event: Recording.
Action Set Name	Select the action set name created in *Creating Action Sets for Events*. This is the action set you create in the business service called Usage Pattern Service.

   The event called Recording is created.
7. Create an event for the object types whose events need to be tracked.
8. Go to the Applet menu and click Reload Runtime Events.
9. Log out of the application and then back in again for the changes to take effect.

Note: You can use the Unit Mode action for Enhanced UPT-KWD Recording Setup. It is recommended that you do not enable both Unit Mode action (a user-initiated recording) and Bulk Mode action (a background recording) for the same user. Users can see the recording bar with recording ON when both Unit Mode or Bulk Mode settings are in place. For more information on Record/Play automation, see *Testing Siebel Business Applications* .

Note: Enabling UPT is not compatible with test automation. To ensure that test scripts are correctly recorded (Unit Mode is typically used by test script authors to record test scripts), make sure there are no events with Action Set Name set to UPT (`'Action Set Name'=UPT`) and that the following system preferences are not used: UPTEEE1, UPTEEE2, and UPTEndToEndEventList.

Restricting User Action Recording to Specific User or Responsibility

You can restrict user action recording to specific users or user responsibility. The examples in the following procedure show you how to restrict user action recording.

To restrict user action recording to specific users or responsibility

1. Navigate to the Administration - Runtime screen, then the Action Sets view.
2. In the Action Sets list, query for the recording: Recording.

   The following use case scenarios are for illustrative purposes only. There are multiple ways to write Siebel expressions.

   - **Use Case 1:** To enable Unit Mode recording for all users:
     - Select the Unit Mode action and set the value for the Unit Mode profile attribute to TRUE.
     - Select the Bulk Mode action and set the value for the Bulk Mode profile attribute to FALSE.
   - **Use Case 2:** To enable Bulk Mode recording for all users:
     - Select the Unit Mode action and set the value for the Unit Mode profile attribute to FALSE.
     - Select the Bulk Mode action and set the value for the Bulk Mode profile attribute to TRUE.
   - **Use Case 3:** To enable Unit Mode and Bulk Mode recording for all users:
     - Select the Unit Mode action and set the value for the Unit Mode profile attribute to TRUE.
     - Select the Bulk Mode action and set the value for the Bulk Mode profile attribute to TRUE.
   - **Use Case 4:** To enable Unit Mode recording and restrict recording based on the Test Administrator user responsibility:
     - Create a Test Administrator responsibility and add some users to the responsibility.
     - Select the Unit Mode action and set the value for the Unit Mode profile attribute to TRUE, then add the following conditional expression:.

       ```
       InList('Test Adminstrator',GetProfileAttrAsList('User Responsibilities'))
       ```

     - Select the Bulk Mode action and set the value for the Bulk Mode profile attribute to FALSE.

     This enables user action recording (where the camcorder will be visible) only for those users who have the Test Administrator responsibility.
   - **Use Case 5:** To enable Bulk Mode recording and restrict recording based on the Test Administrator user responsibility:
     - Create a Test Administrator responsibility and add some users to the responsibility.
     - Select the Unit Mode action and set the value for the Unit Mode profile attribute to FALSE.
     - Select the Bulk Mode action and set the value for the Bulk Mode profile attribute to TRUE, then add the following conditional expression:

       ```
       InList('Test Adminstrator',GetProfileAttrAsList('User Responsibilities'))
       ```

     This enables Bulk Mode recording only for those users who have the Test Administrator responsibility.

Controlling User Input Recording

This topic describes how to control user input data, which is part of UPT records.

Data entered by users in the application UI is captured in UPT logs when Unit Mode/Bulk Mode is enabled. For certain deployments however, to ensure security compliance for example, user input data should not be stored in UPT logs. Administrators must decide whether to capture user input data in UPT logs or not. Administrators control this by configuring the Input Capture action and optionally a Siebel conditional expression (which controls the behavior at a granular level) in the application.

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

Note: The feature described in this topic is available in Siebel CRM 18.9 Update and later releases.

To control user input recording

1. Navigate to the Administration - Runtime Events screen, then the Action Sets view.
2. In the Action Sets list, query for the record: Recording.
3. Select the Input Capture action, and set the Input Capture profile attribute to FALSE.
4. (Optional) Add a Siebel conditional expression to control whether the recording is of a specific user or a set of users.

   According to the value set in the previous step, user input data is captured in the UPT log for all users when the conditional expression is not used.
5. Go to the Applet menu and click Reload Runtime Events.
6. Log out of the application and then back in again for the changes to take effect.

   After you log back in to the application, user entered data will no longer be seen in UPT logs.

Note: If the Input Capture action is set to FALSE to mask sensitive information, then KWD scripts will be generated without any input values. KWD scripts without input values fail on play back. However, you can add input values in the Test Script view.

Interpreting User Actions from Usage Pattern Tracking Data

This topic describes how user actions are recorded in the UPT logs.

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

Note: The feature described in this topic is available in Siebel CRM 18.9 Update and later releases.

User actions are captured in the UPT log as `uaseq1`, `uaseq2`, and so on, and are recorded under `UPT Details`. The following template is an example of how user actions are structured in the UPT log file, and the following table explains some of the log information:

```
<UPT Details>
<uaseq1>
<EUA>
<ParentRN>
<CurrentRN>
<OT>
<Value>
</EUA>
</uaseq1>

<uaseq2>
<OUA>
<ParentRN>
```

```
<Type>
<Operation>
</OUA>
</uaseq2>
</UPT Details>
```

The following table explains some of the log information:

Log Information	Description
uaseq1	All user actions are captured in the order in which the user rns actions in the application. The user actions are recorded sequentially, uaseq1, uaseq2, and so on.
EUA	This is an explicit user action with user input.
ParentRN	The repository name.
CurrentRN	The repository name of the current interface control on which the user is performing an action.
OT	The object type in which the user is performing the action.
Value	The value entered by the user.
OUA	Other User Action.
Type	This is a type of action where user input is required.
Operation	This is a user action such as a mouse click, or a keyboard shortcut.

The following is an example of UPT log data. In this example, the log file contains a record of a user updating the Location field in an Account applet:

```
@0`0`5`0`EUA`3``ParentRN`SIS Account List Applet`CurrentRN`Location`OT`JText`Value`San Francisco`rowid`4`
```

Also in this example, the following five user pattern tracking properties and the respective values are recorded:

- ParentRN: SIS Account List Applet
- CurrentRN: Location
- OT: JText
- Value: San Francisco
- rowid: 2

Note: A grave accent ( ) acts as a delimiter between the properties and the respective values. A sequence of tilde (~) , vertical bar (|) and caret (^) acts as a delimiter between two actions: ~|^

Usage Pattern Collection

Restart the Siebel server, login, and then continue with the use case for which the usage log is required. The usage log is stored in the network path specified by the UPT Log Path system preference, or in the following default location: `siebsrvr\upt\$username$`.

Unit Mode recordings are always stored in the default location. Bulk Mode recordings are stored in the UPT Log Path (if set) or in the default location.

Note: The feature described in this topic is available in Siebel CRM 18.9 Update and later releases.

Processing Usage Pattern

To process usage pattern tracking, perform the followings tasks:

1. *Activating the Workflow for Usage Pattern Tracking*
2. *Creating Job Templates for Usage Pattern Tracking*
3. *Creating Component Jobs for Usage Pattern Tracking*

Activating the Workflow for Usage Pattern Tracking

Complete the procedure in this topic to activate the workflow for usage pattern tracking. You designate this workflow in the job parameters of the component job that runs to capture information about usage pattern tracking.

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

To activate the workflow for usage pattern tracking

1. Complete the following steps to make sure that the appropriate component group and the appropriate component in that component group are enabled:
    a. Navigate to the Administration - Server Configuration screen, Enterprises, and then the Component Groups view.
    b. Make sure that the Workflow Management component group is enabled.

       When you select the record for this component group, the components associated with the component group appear in the Components list. The Workflow Process Batch Manager component in this component group must be active and enabled.
2. Make sure the UPT Process Workflow Process is active. For more information on Siebel workflows, see *Siebel Business Process Framework: Workflow Guide* .

Creating Job Templates for Usage Pattern Tracking

Complete the procedure in this topic to create a template for the component job that captures information about usage patterns.

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

To create a job template for usage pattern tracking

1. Navigate to the Administration - Server Configuration screen, then the Job Templates view.
2. In the Job Templates list, create a new record, and complete the necessary fields.
   Some of the fields are described in the following table.

Field	Comments
Name	Type a name of UPT Job Template.
Short Name	Type a short name of UPT JT.
Component	Select the Workflow Process Batch Manager component. Additional fields in the job template record are automatically populated. Do not change these default values.

3. In the Job Parameters list, create two parameters as follows:
   a. Select Method Name in the Name field of the first job parameter.
      Additional fields in this job parameter record are automatically populated.
   b. Select Workflow Process Name in the Name field of the second job parameter, and enter UPT Process in the Value field.
      Additional fields in this job parameter record are automatically populated.

Creating Component Jobs for Usage Pattern Tracking

You use the job template for usage pattern tracking to create a component job for usage pattern tracking. This component job captures information about usage patterns. You can set this component job to run only once at scheduled date and time or to run at regular time intervals that you specify. For information about administering component jobs, including creating, starting, deleting, cancelling, holding, resuming, and troubleshooting such jobs, see *Siebel System Administration Guide* .

This task is a step in *Process of Setting Up Usage Pattern Tracking*.

To create a component job for usage pattern tracking

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

2. In the Jobs list, create a new record, and select UPT Job Template in the Component/Job field.

   The job parameters that you set up in the job template appear in the Job Parameters list. Do not change these parameters or add more parameters to the list.
3. Populate additional fields in the Job Detail form as necessary.

These fields define how frequently the job is run and the conditions under which the job is run. The number of events that you include in usage pattern tracking and the anticipated level of user activity determine the appropriate values for these fields. For more information about these fields, see *Siebel System Administration Guide* .

Viewing Usage Patterns

After the component job for usage pattern tracking runs, information about user events and event details appears in the Usage Pattern Tracking view of the Administration - Application screen.

This view contains the data about usage pattern tracking that is stored in the S_USER_EVENT table and the S_USER_EVT_DTL table. The number of records in these tables depends on the events that you configure for usage pattern tracking. It is recommended that you periodically move data from these tables. Your movement frequency depends on available memory and the level of user activity.

For reporting purposes, you can click the cogwheel icon and select the Export option to export the data from the Usage Pattern Tracking view to another application, such as Microsoft Excel.

To view usage patterns

1. Navigate to the Administration - Application screen, then the Usage Pattern Tracking view.
2. In the User Events list, view information about the events associated with users.

   Some of the fields are described in the following table.

Field	Comments
User Name	Displays the user ID of the user who completed the event.
Session Id	Displays the ID of the session in which the user completed the event.
Event Name	Displays the name of the event that the user completed.
Event Start Date	Displays the date and time that the user started the event.
Event End Date	Displays the date and time that the user ended the event.

3. In the User Event Details list, view details about a selected event.

Details of Records for Usage Pattern Tracking

Administrators can review the details of records for usage pattern tracking in their work to generate reports for this feature. An example of the structure and attributes of a record for usage pattern tracking in the Siebel database follows:

```
<UPT>
 <Object Type> ; Application
 <Object Name> ; Siebel Universal Agent
 <Event Name> ; UPTServerScript
 <Event Source> ; Server Script
 <Event Context> ; Test UPT
 <Event Start Date> ; 07/30/2015 11:41:46
 <Event End Date> ; 07/30/2015 11:43:31
 <UPT Details> ;
 <Detail1>
 <Name> ; Test UPT Name
 <Value> ; Test UPT Value
 </Detail1>
 </UPT Details>
</UPT>
```

Information about the content in this structure follows:

- The Object Type attribute is a value of Applet, Application, or BusComp.
- The Object Name attribute is the name of the object.
- The Event Name attribute is a value selected from the Events view of the Administration - Runtime Events screen.
- The Event Source attribute is Browser Script, Server Script, or a user-defined value.
- The Event Context attribute is a short description of the event context.
- The Event Start Date attribute is a value that the Siebel application defines, and its format depends on the format in the locale setting. You cannot change this value.
- The Event End Date attribute is a value that the Siebel application defines, and its format depends on the format in the locale setting. You cannot change this value.
- The Name attribute is a name that provides more information about the event context.
- The Value attribute is a value that provides more information about the event context.

Application Programming Interfaces for Usage Pattern Tracking

This topic includes information about the application programming interfaces (APIs) for usage pattern tracking.

For more information about APIs for UPT, see:

- *Browser Script Application Programming Interface*
- *JavaScript Application Programming Interface*
- *Server Script Application Programming Interface*

Browser Script Application Programming Interface

The browser script application programming interface (API) follows:

```
theApplication(). TriggerUPTEvent (inputPropSet)
```

Example code for this API follows:

```
var uptRecord = CCFMiscUtil_CreatePropSet();
var details = CCFMiscUtil_CreatePropSet();
uptRecord.SetType("UPT");
uptRecord.SetProperty("Object Type", "Application");
uptRecord.SetProperty("Object Name", "Siebel Universal Agent");
uptRecord.SetProperty("Event Name", "UPTClientScript");
uptRecord.SetProperty("Event Sub Name", "Test");
uptRecord.SetProperty("Event Source", "Client Script");
uptRecord.SetProperty("Event Context", "Test UPT");
details.SetType("UPT Details");
details.SetProperty("Detail1", "Test UPT Value1");
details.SetProperty("Detail2", "Test UPT Value2");
uptRecord.AddChild(details);
theApplication().TriggerUPTEvent(uptRecord)
```

Information about the input property set follows:

- The Object Type property is a value of Applet, Application, or BusComp. This default value is Application.
- The Object Name property is a value that you specify. The default value is the application name from the configuration file.
- The Event Name property is a value of UPTGeneric, UPTClientScript, or UPTServerScript. The default value is UPTClientScript.
- The Event Sub Name property is a value that you specify. You can specify no value.
- The Event Source property is a value that you specify. The default value is Client Script.
- The Event Context property is a value that you specify.

JavaScript Application Programming Interface

The JavaScript application programming interface (API) follows:

```
SiebelApp.S_App.TriggerUPTEvent(inputPropSet)
```

Example code for this API follows:

```
var uptRecord = CCFMiscUtil_CreatePropSet();
var details = CCFMiscUtil_CreatePropSet();
uptRecord.SetType("UPT");
uptRecord.SetProperty("Object Type", "Application");
uptRecord.SetProperty("Object Name", "Siebel Universal Agent");
uptRecord.SetProperty("Event Name", "UPTClientScript");
uptRecord.SetProperty("Event Sub Name", "Test");
uptRecord.SetProperty("Event Source", "Client Script");
uptRecord.SetProperty("Event Context", "Test UPT");
details.SetType("UPT Details");
details.SetProperty("Detail1", "Test UPT Value1");
details.SetProperty("Detail2", "Test UPT Value2");
uptRecord.AddChild(details);
SiebelApp.S_App.TriggerUPTEvent(uptRecord)
```

Information about the input property set follows:

- The Object Type property is a value of Applet, Application, or BusComp. This default value is Application.
- The Object Name property is a value that you specify. The default value is the application name from the configuration file.
- The Event Name property is a value of UPTGeneric, UPTClientScript, or UPTServerScript. The default value is UPTClientScript.
- The Event Sub Name property is a value that you specify. You can specify no value.
- The Event Source property is a value that you specify. The default value is Client Script.
- The Event Context property is a value that you specify.

Server Script Application Programming Interface

The server script application programming interface (API) follows:

```
TheApplication(). TriggerUPTEvent (inputPropSet)
```

Example code for this API follows:

```
var uptRecord = TheApplication().NewPropertySet ();
var details = TheApplication ().NewPropertySet ();
uptRecord.SetType("UPT");
uptRecord.SetProperty("Object Type", "Application");
uptRecord.SetProperty("Object Name", "Siebel Universal Agent");
uptRecord.SetProperty("Event Name", "UPTServerScript");
uptRecord.SetProperty("Event Sub Name", "Test");
uptRecord.SetProperty("Event Source", "Server Script");
uptRecord.SetProperty("Event Context", "Test UPT");
details.SetType("UPT Details");
details.SetProperty("Detail1", "Test UPT Value1");
details.SetProperty("Detail2", "Test UPT Value2");
uptRecord.AddChild(details);
TheApplication().TriggerUPTEvent(uptRecord)
```

Information about the input property set follows:

- The Object Type property is a value of Applet, Application, or BusComp. This default value is Application.
- The Object Name property is a value that you specify. The default value is the application name from the configuration file.
- The Event Name property is a value of UPTGeneric, UPTClientScript, or UPTServerScript. The default value is UPTServerScript.
- The Event Sub Name property is a value that you specify. You can specify no value.
- The Event Source property is a value that you specify. The default value is Server Script.
- The Event Context property is a value that you specify.

8 Upload of UPT and UPT-IRM Intersect Data

Upload of UPT and UPT-IRM Intersect Data

This chapter covers information about how to upload usage pattern tracking (UPT) data as well as its intersection with incremental repository merge (IRM) data to the Siebel CRM database to reduce the cost of testing post upgrade of Siebel CRM. It includes the following topics:

- *Overview of UPT and IRM Data*
- *Process of Uploading and Intersecting Data*

Overview of UPT and IRM Data

The UPT data allows administrators to review details about when and how often users access the features in a Siebel CRM application. The process of performing UPT yields a set of .csv files.

> **Note:** The information in this chapter is applicable only when you run IRM after migrating from a prior Siebel CRM release in which UPT was enabled such as version 15.5 or later. For information about the specific releases (including applicable patchset releases) for which UPT can be enabled, see 2145521.1 (Article ID) on My Oracle Support. For more information about Usage Pattern Tracking, see *Usage Pattern Tracking* and for running IRM, see *Siebel Database Upgrade Guide* .

As a Siebel CRM database administrator, you also obtain a set of .csv files when you use IRM to apply Siebel Innovation Pack during database upgrade (see *Siebel Database Upgrade Guide*).

Execution of UPT is an optional but recommended process. IRM is a mandatory process for customers upgrading from a previous Siebel Innovation Pack to the current one. Both yield .csv files that you may upload to your Siebel CRM database for further analysis in the form of reports. The .csv files of UPT list the actual repository objects in use by end users. In the case of IRM, these files list the repository objects modified or newly added during the ongoing IRM process. The actual change to a repository object is termed direct change. This change may trigger an indirect change to other objects in its hierarchy. Both types of changes reflect in the IRM log (see *Siebel Database Upgrade Guide*) and the UPT-IRM Intersection report (see *Analytical Reports for UPT and UPT with IRM Intersection*).

> **Note:** The objects exported to the IRM .csv file are Business Objects, Business Components, Applets, Views, Web Pages, Schema and Workflows. The export is performed during the Upgrade Repository (upgrep) process once IRM is completed.

You can choose to perform only UPT to monitor and report usage data or IRM to upgrade to a Siebel Innovation Pack or both.

Benefits of Intersecting UPT-IRM Merge

It is useful to compare the UPT .csv with the IRM .csv files so as to focus testing only on objects that are in use by the customer as well as modified by IRM and not on all modified objects. If you choose to compare the two sets of .csv files,

the intersection will yield a list of repository objects that are used and modified. These objects are the ones most used by end users and, therefore, require more testing.

Note: To intersect UPT and IRM data, you need to migrate from Siebel CRM version 15.0 or 15.5 as UPT is enabled on the patchsets of these versions only.

When you intersect UPT data with IRM data, you obtain an accurate view of the actual product components used by a customer and the repository artifacts that IRM touches during the upgrade cycle. This targeted testing will help customers:

- Obtain data-backed targeted and specific investments so as to get predictable results.
- Reduce the cost of upgrades and cost of ownership through focused functional, integration, and performance testing post upgrade.

For example, UPT events may indicate that 10 applets across five views in two screens are the only objects used by a customer. IRM delta changes may be across 15 applets, 10 views, and 12 screens. The resultant intersection of UPT and IRM could be 6 applets, 3 views, and 1 screen. This would be generated as a report and be an output of the IRM Upgrade cycle. This will help the customer focus on testing the entities obtained solely from the intersection. The resultant saving will be on resources, time, and money.

Process of Uploading and Intersecting Data

At the broad level, the steps are to upload the data into the database and intersect it with IRM. To upload the UPT data and intersect it with the IRM data, perform the following tasks:

- *Installing the File Upload Utility*
- *Installing OBIEE*
- *Generating UPT and Performing IRM*
- *Uploading UPT and UPT-IRM Intersect Data*
- *Intersecting UPT and UPT-IRM Data*

Installing the File Upload Utility

The UPT data upload utility is multi-purpose as it can be used to both upload batches of .csv files and perform their intersect. Its purpose is to:

- Upload the UPT .csv files to the Siebel CRM database.
- Compare UPT .csv with IRM .csv files.
- Upload the intersected UPT-IRM .csv files to the Siebel CRM database.

For more information on how to install this utility, see *Analytical Reports for UPT and UPT with IRM Intersection*.

Installing OBIEE

You use Oracle Business Intelligence Enterprise Edition (OBIEE) to view the uploaded data in the form of prebuilt or custom reports.

For more information on installing OBIEE, see *Installing Oracle Business Intelligence*.

Generating UPT and Performing IRM

You must generate UPT and perform IRM, producing a set of .csv files from each process.

- To generate UPT-related .csv files, perform the steps in *Usage Pattern Tracking*
- To generate IRM-related .csv files, perform the steps in *Siebel Database Upgrade Guide* .

> **Note:** Place the generated .csv files in folders, such as `c:\UPTFiles` or `c:\IRMFIles`, on your local or remote machine.

Uploading UPT and UPT-IRM Intersect Data

Use this procedure to upload the data.

To upload UPT and UPT-IRM Intersect data to a Siebel CRM database

1. Create a folder on your local or remote machine, such as C:\UPT, to copy the database .jar and utility files.
2. Download the database-specific .jar file to this location as per your database as follows:
   - Oracle: ojdbc6.jar
   - MSSQL: sqljdbc4-2.0.jar
   - DB2: db2jcc.jar

   > **Note:** You can obtain the .jar files from the respective database clients.
3. Download your choice of data upload utility to the same folder.
   - To run the data upload utility from command prompt, download UPTFileUpload.jar.
   - To run the data upload utility from the user interface, download UPTUtilities.jar.

   > **Note:** You obtain the .jar files from the `SIEBEL_ROOT/dbsrvr/common` folder. You run them where Siebel Server is installed or copy them to another environment where Java 8 is installed. Ensure your system has JRE 1.8 or higher.
4. Navigate to the folder where you downloaded the utility.
   - To upload the UPT .csv files from the command prompt, enter as follows:

     ```
     java -jar UPTFileUpload.jar /s [Database Server] /f [CSV files folder path] /d
     [Database Type – Oracle, DB2UDB or MSSQL] /u [Database User] /p [Database
     Password] /h [Host Name] /o [Database Port] /r [Data Purpose] /t [Table Owner]
     ```

     For example:

     ```
     java -jar UPTFileUpload.jar /s dbixt1 /f c:/UPTFiles /d Oracle /u SMITH123 /p
     SMITH123 /h smith01ixt /o 1551 /r test /t SMITH123
     ```

> **Note:** To learn more about the arguments for the data upload utility, invoke its Help. You can run the script multiple times but it will load only newly added files or the files where user corrected errors shown in earlier parse. Ensure that the table owner has the table create, read, and write access.

- To upload from user interface, enter as follows at the command prompt to open the utility:

```
java -jar UPTUtilities.jar
```

> **Note:** Pass the parameters to the utility to enable upload of each .csv file.

5. The utility processes each .csv file and records its filename in any of the following three files as per processing status:
   - **ProcessedFiles.log**: logs files processed successfully along with the row count per file.
   - **UnProcessedFiles.log**: logs files that did not upload along with their error description.
   - **Fileupload.log**: logs all steps in file execution, including technical issues, such as incorrect folder or connectivity to a database, along with error description.
6. The processed files are stored in the folder created in the Note at Step 2.

Intersecting UPT and UPT-IRM Data

To view and analyze the .csv files, you can view them in any supporting editor or upload them to the Siebel CRM database. For more information on how to view UPT and IRM data on the Siebel CRM database, see *Analytical Reports for UPT and UPT with IRM Intersection*.

Performing an intersect of the UPT and IRM data provides:

- A list of objects from the UPT-IRM intersect indicating those that are used and modified and, therefore, require testing.
- Prebuilt reports, such as UPT-IRM Intersection, after loading data on OBIEE.
- UPT raw data to use with any analytics tool to generate custom reports.

To intersect UPT and UPT-IRM data

1. Perform the steps shown in *Uploading UPT and UPT-IRM Intersect Data*.

   > **Note:** Create a separate folder, such as `C:\IRMFiles`, in which to copy the IRM files.

   - Download the IntersectUPTMrg.jar to the same folder if you want to use the command prompt to intersect the .csv files or use the data upload utility for user interface indicated in *Uploading UPT and UPT-IRM Intersect Data*.
2. Navigate to the folder where you downloaded the utilities.
3. Intersect the UPT and IRM files from the file folders where they are stored.
   - To intersect the .csv files from the command prompt, enter the following command:

```
java -jar IntersectUPTMrg.jar /u [CSV files folder path] /m [IRM files folder
path] /l compareCSV.log /o [output folder]
```

     For example:

```
java -jar IntersectUPTMrg.jar /u C:/UPTFiles /m C:/IRMFiles /l compareCSV.log /o
```

```
upt_mrg
```

- To upload from user interface, invoke the data upload utility for user interface and navigate to the IRM tab.

4. The utility creates the upt_mrg folder in the same folder as the .jar of the utility and places the merged files in it.

> **Note:** These files will be used for further reporting and analysis as outlined in *Analytical Reports for UPT and UPT with IRM Intersection*.

9 Analytical Reports for UPT and UPT with IRM Intersection

Analytical Reports for UPT and UPT with IRM Intersection

This chapter includes information about how to view the usage pattern tracking (UPT) and incremental repository merge (IRM) data on the Oracle Business Intelligence Enterprise Edition (OBIEE) environment. It includes the following topics:

- *Analytical Reports for UPT and UPT with IRM Intersect Data*
- *Process of Configuring Reports*

> **Note:** OBIEE is the default reporting tool used with the report artifacts and catalog provided by Siebel. You can also do similar analysis with any tool of your choice because the UPT load utilities are designed to work with other database and analytical tools as well.

Analytical Reports for UPT and UPT with IRM Intersect Data

Siebel CRM consists of preconfigured reports that cover analysis of data collected by UPT. In addition, the reports also cover UPT-IRM intersection data and its analysis. Both sets of reports are described in the following table.

Report	Description
UPT - Build wise trending report	This is a dashboard of preconfigured trending reports across various builds and executions of UPT. It helps analyze the increase in or change to test coverage in every build for any given artifact. The trending reports provide analysis on certain metrics captured by UPT and the reports can be enhanced to include other trending data as well. Each report can be drilled down further. You can also filter to compare two or more builds or filter on Build Number or Event Method.
UPT Dashboard	This is the main dashboard displaying analytic reports in a single view. You can filter the dashboard on one or more build numbers and drill down each report. Some of the salient reports are: • **Application User View.** Displays count of a given user against any application such as number of times user SADMIN was used to log in to Siebel Communications Application for the test cases for a given build. • **Application Access.** Displays count of web login versus number of times a view was activated for various applications. • **Login Across Apps.** Displays count of various logins used for running the test cases across various applications.

Report	Description
	• **Applet Record Action.** Displays count of various artifacts such as applications, applet, or views used to run a set of test cases for a given QA execution of test cases.
UPT Graphical Reports	This dashboard contains graphical reports that can be filtered on build number. Some salient reports are: • **Applet Access.** Displays the number of times a given applet was accessed across test cases. • **Applet Displayed.** Displays the number of times a given applet was displayed and limits the report to applets that were displayed more than 500 times. • **Applet with Invoke Method.** Displays count of the number of times the invoke method for applets was used along with names of applets.
UPT - IRM Intersection	This dashboard is the intersection of IRM with UPT. It provides details on: • Repository artifacts that are new or modified and also used by a customer. This report can be filtered on the applications used by the customer. • Schema changes and Workflow Processes that are new or modified for a given upgrade path. These two artifacts are for the complete set of applications that Siebel supports and are not limited to any one application.

Process of Configuring Reports

This process helps you obtain prebuilt reports on uploaded UPT data and UPT-IRM intersected data. You can also create your own custom reports. The main benefit of projecting the uploaded data as reports is to aid in decision making on the objects that need to be further tested or developed.

For information on how the data is uploaded, see *Upload of UPT and UPT-IRM Intersect Data*.

To view the UPT and IRM data uploaded to the Siebel CRM database (see *Upload of UPT and UPT-IRM Intersect Data*) on the OBIEE environment, perform the following tasks:

1. *Installing OBIEE*
2. *Creating a Data Source Name (DSN)*
3. *Generating the Report from the RPD File*
4. *Viewing the UPT Reports*

Installing OBIEE

To view the pre-built reports based on the .csv files in the database, you must install OBIEE. For more information, see *Installing Oracle Business Intelligence*.

Note: You can also run custom reports using OBIEE or any other tool.

Creating a Data Source Name (DSN)

Create a DSN for the database chosen for UPT reports.

Note: The 64-bit DSN driver compatible with OBIEE is DataDirect 7.1.4 Oracle Wire Protocol.

Generating the Report from the RPD File

Use this procedure to generate the report.

To generate the report from the RPD file

1. Download the catalog and rpd files.
   a. Download UPT.catalog and UPT.rpd from the server common folder packaged with Siebel CRM to any folder on your local or remote machine.
   b. Run the admintool.cmd utility from:

      ```
      C:\Oracle\Middleware\bi\bitools\bin\
      ```

      Note: For UNIX, the utility is admintool.sh

2. Edit the rpd file.
   a. Navigate to File, Open, and then the Offline menu item to open UPT.rpd.

      Note: The temporary password to open the file is Siebel@123. Please change the password after initial login.

   b. Expand UPT in the Physical window.
   c. Right-click Connection Pool and select Properties.
   d. Update DSN, User Name, and Password.
   e. Click OK.

      If you want to verify if your setting is correct, right-click the S_USER_EVENT table and then click Update Row Count.

      If this update today's date, the connection is successful.
   f. Save your changes upon exit.

      Note: Fix errors, if any, upon exit. You can ignore warnings.

   g. Run the data-model-cmd.cmd utility, located in the OBIEE server, at:

      ```
      \ORACLE_HOME\bi\modules\oracle.bi.commandline.tools\scripts
      ```

      Note: For UNIX, the utility is data-model-cmd.sh

3. Upload UPT.rpd from the command prompt by entering the following command:

```
data-model-cmd.cmd uploadrpd -I <RPD location> -W <RPD password> -SI ssi -U <OBIEE
user login> -P <OBIEE user password> -S <OBIEE server name> -N 9502
```

For example:

```
data-model-cmd.cmd uploadrpd -I C:\UPT.rpd -W Siebel@123 -SI ssi -U weblogic -P
welcome1 -S xyz01mrc.us.abc.com -N 9502
```

Note: Ensure the Java path is set before you start upload.

Viewing the UPT Reports

The report reflects values such as the direct and indirect changes to repository objects to aid in analytics and decision making. For more information on these changes, see *Upload of UPT and UPT-IRM Intersect Data*. You can view other prebuilt report or create custom reports as well. To improve OBIEE performance and refresh of data, read about caching in *Installing Oracle Business Intelligence*.

Use this procedure to view the reports.

To view the UPT reports

1. Log in to OBIEE as Administrator.
2. Navigate to Catalog, My Folder, and then the Task menu item.
3. Click Unarchive.
4. Select UPT.catalog and then click OK to upload the file.
5. This creates the UPT folder under My Folder.
6. Navigate to the UPT-IRM Intersection report.

10 Creating and Administering iHelp

Creating and Administering iHelp

This chapter includes information about administering iHelp. It includes the following topics:

- *About iHelp*
- *Scenario for Administering iHelp*
- *Process of Administering iHelp*
- *Creating iHelp Item Records*
- *Designing iHelp*
- *Clearing the iHelp List Cache*
- *Activating, Revising, and Deactivating iHelp Items*
- *Translating iHelp Items*
- *Importing and Exporting iHelp Items*

About iHelp

iHelp is real-time step-by-step instruction that helps users complete tasks within the Siebel CRM application. iHelp is best used to provide instruction to first time or occasional users. For information about how to use iHelp, see *Siebel Fundamentals* . For information about Application Deployment Manager (ADM) and iHelp, see *Siebel Application Deployment Manager Guide* .

Note: iHelp might not be appropriate for enforcing standards because users are free to follow or not follow any step. For information about how to standardize user behavior, see *Siebel Business Process Framework: Task UI Guide* .

Scenario for Administering iHelp

This topic gives one example of how iHelp administration might be used. You might use iHelp administration differently, depending on your business model.

The agents in training in the North American call centers of a multinational company want step-by-step instructions on how to create activities.

The North American administrator creates an iHelp item to appear in the iHelp pane of the Activities and Accounts screens (screens frequently used by the agents). Because these instructions pertain only to call center agents, this iHelp item is set to be visible only to those users with the Call Center responsibility.

The North American administrator and the call center managers are the only people who modify this iHelp item; the call center managers provide the content of the iHelp steps, and the administrator restricts edit access by associating the Call Center access group with the iHelp item.

Various employees test the iHelp item. When the tests are complete, the administrator activates the iHelp item.

At the end of the month, a policy change occurs that effects some steps in the iHelp item. This policy change is handled by creating two versions of the iHelp item. One item is set to expire at the end of the month and the second item (with steps corrected for the new policy) is set to become active at the beginning of the next month.

In North America, the call centers operate in both English and French. The manager of the francophone call center revises the iHelp item, translating the text into French.

The European call centers use a different database, but they also want their call center agents to see this iHelp item. The North American administrator exports the iHelp item to a file and sends it to the European administrator. Then, the European administrator imports the item into the European database, adds responsibilities and access groups, and activates the iHelp item.

Process of Administering iHelp

To administer iHelp, complete the following tasks:

1. *Creating iHelp Item Records*
2. *Designing iHelp*
3. *Clearing the iHelp List Cache*
4. *Activating, Revising, and Deactivating iHelp Items*
5. *Translating iHelp Items*
6. *Importing and Exporting iHelp Items*

Creating iHelp Item Records

The first task in creating iHelp items is to create the iHelp item record.

In this task, you determine the following for the iHelp item:

- In which Siebel Business Applications the iHelp item appears
- In which screens the iHelp item appears
- Which users can see the iHelp item
- Which administrators can modify the iHelp item
- (Optional) Activation and expiration dates for the iHelp item
- If the iHelp item is downloaded to remote and local databases

You can create iHelp items in several ways. You can import and export the items, or you can manually create the items. If you manually create the items, then make sure that you test your iHelp items in either of the following ways:

- Create and test your iHelp item in the intended production environment. While you test, restrict the responsibilities associated with the iHelp item to restrict visibility of the item. For more information, about how to restrict responsibilities, see the following task about how to create an iHelp item record.

- Create and test your iHelp item in your development environment, then use ADM to deploy the item to production. For information about ADM and iHelp, see *Siebel Application Deployment Manager Guide* .

You can determine the database tables that store the data that you create in iHelp views. On the Administration - iHelp screen, navigate to a view, select Help from the application-level menu, then About View, and note the business components for the view. In Siebel Tools, the database table name appears in the Table column for a business component.

If you use the Applet Wizard to create an applet, then the HTML Type field for the controls and list columns is automatically set to Text. If you are using iHelp, then change the HTML Type field to Field.

This task is a step in *Process of Administering iHelp*.

To create an iHelp item record

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Name	Type the name that appears in the iHelp pane. Make sure that the name clearly identifies the iHelp item. Do not include any special characters such as colons or quotation marks in the Name.
Remote Support	Select a value to determine if items are downloaded. iHelp items can be downloaded to regional and local databases. Value include: o **All.** Items are downloaded to both regional and local databases. o **Regional.** Items are downloaded to regional databases only. o **None.** Items are not downloaded to any databases.
Application	Select the Siebel Business Applications in which you want the iHelp item to appear. For example, if you want the iHelp item to be used in Siebel Call Center, then set this field to Siebel Universal Agent (the internal name for the Call Center application). Make sure that all these Siebel Business Applications contain the screens and views needed for the iHelp item that you create.
Related Task	Select a task to which you want to link from the iHelp item. If you select a value in this field, then colored text appears in the iHelp item to indicate that you can use the task-based UI for this task. You cannot pass the current UI context to a related task. For example, if the user has selected a contact, and selects an add activity task from iHelp, then you cannot pass the selected contact to the Activities form.

Field	Comments
'Show Me' Location	Type the location of a file or a URL to open when a user clicks the Show me more link at the end of the iHelp item. If you type the location of a file in this field, then you must specify a relative path. If you type a URL, then you must use the HTTP protocol. You must also specify the protocol in the URL (include `http://`). If you do not type a value in this field, then a Show me more link does not appear in the iHelp item.
Private	Clear the check box to indicate any user with access to the Administration - iHelp screen can modify the iHelp item. If you want to restrict edit access for this iHelp item, then see Step 5.
Activation Date	(Optional) Select the date when the iHelp item first appears in the iHelp pane.
Expiration Date	(Optional) Select the date after which the iHelp item no longer appears in the iHelp pane.
Status	Displays the status of the iHelp item. The status changes when the Activate, Revise, and Deactivate buttons on the All Help Items view are clicked.
Version	Displays the version of the iHelp item. This field is automatically updated when an item of the same name is created or imported.
Description	(Optional) Type a description of the iHelp item. This description is for only the administrator. The text does not appear in the iHelp pane.

3. Set which users can see the iHelp items (in the iHelp pane or Map) by completing the following steps:
   a. Navigate to the Responsibilities view.
   b. Associate the responsibilities of those users who you want to see the iHelp item.
   c. Make sure the Active flag is selected for each responsibility.

      Note: Users also must have the Task Assistant Player View associated with at least one of their responsibilities. For more information about how to associate views and responsibilities with users, see *Siebel Security Guide* .

4. Specify the locations in the Siebel application where you want the iHelp item to appear.
   When you specify a location, you specify a combination of screens, business objects, and views. iHelp items are mapped to business objects. Business objects are often uniquely associated with a particular screen, but there are some exceptions. For example, business object home pages do not have this unique relationship. If you want an iHelp item to appear on both the Activities Home Page and other views under the Activities screen, then you must associate both of the following business objects with the iHelp item:
   - Action Home
   - Action

To specify the locations in the UI where you want the iHelp item to appear, perform the following steps:

a. Navigate to the Screens view.
b. Create a new record, and select a combination of screens, business objects, and views where you want the iHelp item to appear.

   You can select only a combination of screens, business objects, and views, which is common to all the Siebel Business Applications specified in the Application field.

5. If you want to restrict edit access for the item, then set the access groups to determine who can modify the iHelp item by completing the following steps:

   a. Navigate to the Access Groups view.
   b. Associate access groups with the iHelp item.

      Make sure that you belong to one of the access groups.
   c. Navigate to the More Info view, and select the Private check box in the form view.

      For more information about access groups, see *Siebel Security Guide* .

Adding Additional Help Topics to an iHelp Item

Complete the following procedure to add additional help topics to an iHelp item.

To add additional help topics to an iHelp item

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Select the iHelp item you want to work with, and then navigate to the Related iHelp view.
3. Create a new record on the Related iHelp form, select an iHelp item from the iHelp Item dialog box, and click OK.

You can use the numbers in the Order field for each help topic to specify the order in which the help topics appear in the iHelp item.

Designing iHelp

Assemble step-by-step iHelp instructions in the iHelp Designer by creating steps and connecting them with branches.

This task is a step in *Process of Administering iHelp*.

Creating an iHelp Step

Complete the following procedure to create an iHelp step.

To create an iHelp step

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Drill down on the Name field of the iHelp item.
3. In the iHelp Designer, move the Step or Start icon onto the grid.

The first step in any iHelp must be Start. The start step navigates the user to the correct view for the iHelp item. Only one Start step is allowed for each iHelp item.

4. In the Step form, complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Name	Type the name that appears on the step's icon in the iHelp Designer. The user does not see this name.
View	Select a view name if you want the step to: o Provide a hyperlink to a view. o Highlight buttons or fields on the view. **Note:** If you provide a hyperlink to a screen that is different from the main screen for the iHelp, then you might lose record context as you navigate to the other screen. For example, a user in the Contact Activities view of the Contacts screen, highlights an activity record and clicks an iHelp link to the Activities screen. In going to the Activities screen, the record context is broken. The highlighted activity is no longer selected, and the user must query for it again. If you remain in the same screen, then context is generally maintained. Only views that are common to all the Siebel Business Applications specified in the Application field are available for selection.
Caption	Type the text that appears in the step. Use the following tags to format step captions: o ** ** for bold. o ** ** for italics. o **<u> </u>** for underline. o **<v> </v>** for view navigation links. If you add these tags to text, then the text appears in bold and changes color, and has an underline when you point to the text. o **<a> ** for external hypertext links. For example, **Oracle**. If you add these tags to text, then the text appears in bold and changes color, and has an underline when you point to the text.
Section Label	(Optional) Type the section label that appears prior to the step text in bold, underlined text.
Description	(Optional) Type information for only the administrator's use. This description is not visible in the iHelp pane.

5. (Optional) Highlight a button or field by completing the following steps:

   a. Click the Field and Button Highlights folder.
   b. In the Field and Button Highlights list, create new records and complete the necessary fields.

6. (Optional) Create substeps by completing the following steps:

    a. Click the SubSteps folder.
    b. In the SubSteps list, create new records, and complete the Caption field.

    If you add substeps to a step, then an arrow appears at the end of the step caption. Click this arrow to show the substeps. Click the arrow again to hide the substeps.

    Note: You cannot add view navigation links to substeps.

Connecting Steps With Branches

Complete the following procedure to connect steps with branches.

To connect steps with branches

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Drill down on the Name field of the iHelp item.
3. In the iHelp Designer, move the Branches icon onto the grid.
4. Move the end points of the branch to connect two steps.
5. If multiple branches leave one step, then set conditions on the branches by completing the following steps:

    a. Click the Branches folder for the step.
    b. In the Branches list, complete the necessary fields.

    No Condition Expression is required for the last branch in the sequence. For information about the Branch Condition Expression Designer, see *Developing and Deploying Siebel Business Applications* .

Clearing the iHelp List Cache

iHelp loads all iHelp items to the iHelp Map and iHelp pane when the Siebel application is initialized. When you modify iHelp items, you might have to clear the iHelp List Cache before you can see changes to the iHelp item (in the iHelp pane).

This task is a step in *Process of Administering iHelp*.

To clear the iHelp List Cache

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Click the cogwheel icon, and select Clear iHelp List Cache.

Activating, Revising, and Deactivating iHelp Items

The Activate, Revise, and Deactivate buttons control:

- The status of the iHelp items
- Whether the items are visible in the iHelp pane and iHelp Map
- Whether the items can be edited

The following table describes the behavior of these buttons.

Button	When to Use	Effect	Changes Status From...	To...
Activate	The iHelp item is complete and ready for general use.	The iHelp item cannot be modified (although it can be deleted). The status and version no longer appear with the item name in the iHelp pane. After the status changes to Active, any active version of the item becomes Outdated.	In Progress	Active
Revise	You want to make changes to an active iHelp item.	The iHelp item is copied to a new record that can be edited. For the new record, deselects Active flag on Responsibilities view.	Active Inactive	In Progress
Deactivate	You no longer want the item to appear in the iHelp pane.	The iHelp item no longer appears in the iHelp pane or the iHelp Map.	Active	Inactive

This task is a step in *Process of Administering iHelp*.

To activate an iHelp item

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Select an in-progress iHelp item.
3. Click Activate.

Revising an Active iHelp Item

Complete the following procedure to revise an active iHelp item.

To revise an active iHelp item

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Select an active iHelp item.

3. Click Revise.

Tip: Reset the responsibilities for the in-progress iHelp item so that you can see and test the item that you are revising.

Deactivating an iHelp Item

Complete the following procedure to deactivate an iHelp item.

To deactivate an iHelp item

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Select an active iHelp item.
3. Click Deactivate.

Translating iHelp Items

When translating an iHelp Item, only the text strings that the user sees are translated. These text strings are:

- Item name
- Section labels
- Step captions
- Substep captions

If translation is not defined for a language, then the text from the base record appears.

This task is a step in *Process of Administering iHelp*.

To translate an iHelp item

1. Navigate to the Administration - iHelp screen, then the Translations view.
2. In the iHelp Items list, select an iHelp item.
3. In the Translations list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Display Name	Type the display name for the translation of the iHelp item name

4. Navigate to the Designer view.
5. For each step, complete the following steps:
   a. Open the Translations folder.

b. Create a record to the Translations list and complete the necessary fields.

6. For each substep, complete the following steps:

a. Open the Translations folder for the substep.
b. In the Translations list, create a new record, and complete the necessary fields.

Importing and Exporting iHelp Items

iHelp items can be exported and imported as XML files.

Export and import iHelp items to:

- Move iHelp items from one database to another database, for example when upgrading.
- Create backups of iHelp items.

You cannot move iHelp items between different types of Siebel repositories. For example, you cannot export from a Siebel Call Center application to a Siebel Automotive application. In general, make sure that all the Siebel Business Applications, screens, and views referenced in the exported item are available in the repository where the item is imported.

This task is a step in *Process of Administering iHelp*.

To export an iHelp item as an XML file

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. In the iHelp Items list, select an iHelp item.

> **Note:** Make sure that the name of the item does not contain any special characters such as colons or quotation marks.

3. Click the cogwheel icon, and select Export iHelp Item Definition.

Importing an iHelp Item

Complete the following procedure to import an iHelp item.

To import an iHelp item

1. Navigate to the Administration - iHelp screen, then the All iHelp Items view.
2. Click the cogwheel icon, and select Import iHelp Item Definition.
3. Browse for the iHelp item XML file and click Import.

   If an iHelp item of the same name already exists, then the imported iHelp item is imported as a new version of the item.

   After import, the iHelp Items list is filtered to show only the newly imported item.

> **Note:** Responsibility information and access group information are not exported or imported.

11 Alerts

Alerts

This chapter explains the procedures necessary to create alerts for Siebel Business Applications. It includes the following topics:

- *About Alerts*
- *Scenario for Using Alerts*
- *Creating Alerts*

About Alerts

Alerts provide a way for administrators and other users with access to the Alert Administration view to send long, complex, and customized messages directly to selected groups of recipients. Typically, these messages are time-critical, but also must have associations with data in the company database (for example, literature or products) and to be customized for the recipient.

For example, to communicate product pricing changes to a sales team with members around the world, a sales manager wants to be able to distribute new pricing structures and product information when they are approved. Traditionally, this distribution is done with email messages, phone calls, or mailed literature. This approach presents the following challenges:

- To provide the necessary details, you might have to distribute a large quantity of information, with file attachments or links provided by the manager.
- Different team members might require different price list or product information, depending on their organization, division, or position.
- Distributing information to remote team members might produce a communication lag time.

Features of alerts include the following:

- The abstract of alert messages appear in an applet on the recipients' home page, listed in order of the priority specified by the sender. Recipients can click the abstract to read the entire message.
- Literature items and products can be associated with alerts.
- Access to price list and product information available to different team members might be controlled by organization, division, or position.

Scenario for Using Alerts

This topic gives one example of how alerts might be used. You might use alerts differently, depending on your business model.

A multinational software development corporation uses the Siebel Sales application to automate their sales workforce. The company is organized geographically by division for the purpose of access control, and alerts are enabled.

An international sales manager has just received the go-ahead for a new set of software product bundles that include one new product. He must communicate these price changes to his company's sales force as soon as possible. Because pricing varies by geography, each of the four major geographical regions represented by his company's four sales divisions must receive a customized message about the new product bundles. He tells the Siebel administrator the details of the alert message that must be sent.

The Siebel administrator creates the alert message, and associates a price list and the new product with the message. She creates keywords that users are able to search on to find the message at a later date, if necessary.

When the Siebel administrator sends the alert, a customized message is sent to all international sales representatives, with the appropriate price list for their division associated. The sales representatives see the alert message on their home pages when they log in to the Web client or download alerts during synchronization. These users can navigate through the home page or Site Map to read the text and any associated literature items or products.

After sending the alert to the sales force, the Siebel administrator continues with other work. The Human Resources director has requested that employees be sent a weekly alert for the next month, reminding them to attend a benefits information session. The Siebel administrator creates this Human Resources alert, using the same process she used to create the sales force alert, but, instead of sending it as a single-message alert, she designates it to recur at weekly intervals.

Creating Alerts

When you create an alert, all designated connected users receive the alert at the date and time the alert is activated. Mobile users, such as sales field representatives, receive an activated alert after synchronization.

To create an alert

1. Navigate to the Administration - Alert screen, then the Alerts view.
2. In the Alerts list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Priority	Select the priority of the message. The priority of the message determines where the message appears in the list of alerts on the users' home pages. Messages with the highest priority are at the start of the list.
Keyword	Type the keywords that the user searches on to find this message.
Type	Select a value to determine who receives the alert, as follows: o Employee Home Page Alert. Displays the alert on all employees' home pages. o Partner Alert. Displays alerts to employees of registered partner companies.

Field	Comments
	○ Program Information. Displays the alert to self-registered, individual partners. ○ Public Information. Displays the alert to unregistered, anonymous users.
Abstract	Type a brief abstract that summarizes the message. This field appears as a hyperlink on the appropriate users' home pages.
Activation	Select the date when the message first appears to users.
Expiration	Select the date when the message no longer appears to users.
Partner Alert	Select the check box to indicate that the alert is seen by users in partner companies.
Employee Alert	Select the check box to indicate that the alert is seen by employee users.
All Users	Select this check box to indicate the alert is seen by all users, as indicated by the Employee Alert or Partner Alert check boxes. For example, if the Employee Alert check box is checked, and the All Users check box is checked, then all employees see the alert.
Message Body	Type in the text of the message, including HTML formatting code if needed. Alerts can be enhanced by using the following HTML formatting codes: ○ **text** for bold ○ **<u>text</u>** for underline ○ **text** for italics ○ ** text ** for font size ○ **** Clickable Text **** for a hyperlink to a Web page
Preview	Displays the message as it appears to users.

3. Drill down on the Abstract field in the new record.
4. If you want to add literature as an attachment, then complete the following steps:
   a. Navigate to the Literature view.
   b. In the Literature list, create a new record for the literature item.

      Note: Only literature of type Sales Tool can be added.

5. If you want to add a product as an attachment, then complete the following steps:
    a. Navigate to the Product view.
    b. In the Product list, create a new record for the product.
6. If you want to specify the recipients, then complete the following steps:
    a. Navigate to the Recipients view, then the Recipient Divisions or Recipient Positions view.
    b. Create new records to the Recipient List.

    Remember, if you select the All Users check box in Step 2, then the message is automatically sent to all recipients.

12 Administering and Using Inbox

Administering and Using Inbox

This chapter contains information about the Inbox, how users use the Inbox, and how administrators can make changes to the Inbox types that are already configured. It includes the following topics:

- *About the Inbox*
- *Scenarios for Administering and Using the Inbox*
- *Process of Administering the Inbox*
- *Reviewing All Inbox Items*
- *Deleting Inbox Items*
- *Setting Expiration Dates and Due Dates for Inbox Items*
- *Changing the Destination View for an Inbox Type*
- *Changing Inbox Downloading to Remote Databases*
- *Adding Inbox Translations*
- *Process of Using the Inbox*
- *Taking Action on Inbox Items*
- *Reviewing Completed Items*
- *Reviewing Submitted Items*

About the Inbox

The goals of the Inbox are to provide users with:

- A single screen that shows all approval and notification items assigned to them regardless of the screen where the item originated.
- Enough detailed information about the item so that users can act on the item from the Inbox and not have to navigate to other screens for more information.

The following table describes some terminology used in this chapter.

Term	Definition
Inbox item	Requests for approval and notification that are delivered to in Inboxes of users. Inbox items refer to other records, or to feature objects in the Siebel database that require review or approval. The term *Inbox item* is shortened to item in some text in this guide.
Deactivated Inbox item	An Inbox item that has been processed or has expired. The item no longer appears in the Inbox Items List view.

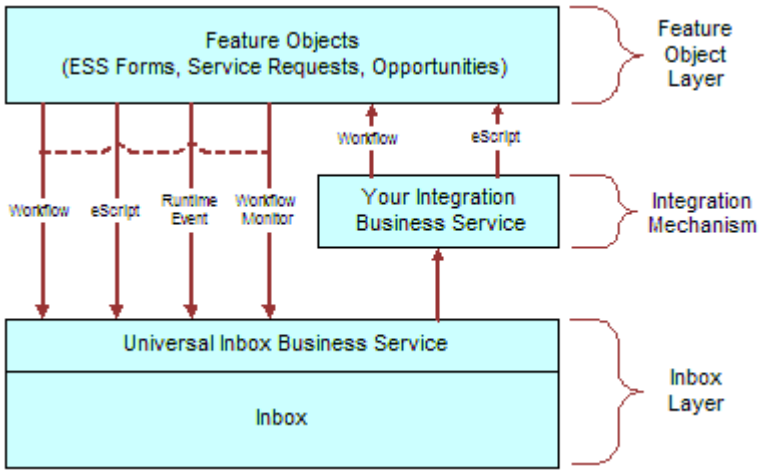
Term	Definition
Inbox screen	A screen in which users can perform the following tasks: • Take action on their current Inbox items. • View their completed items. • View their submitted items.
Inbox Items List	A view that displays Inbox items on which the user must act.
Submitted Items List	A view that displays deactivated Inbox items that have been submitted by the user.
Completed Items List	A view that displays deactivated Inbox items. Typically, the approval process is complete for these items.
Inbox action	The action that the user takes on the Inbox item. Typically, this action is approval, rejection, or acknowledgement.
Inbox type	A value that determines some characteristics of the Inbox item, such as the actions that can be taken on the item, and the expiration date for the item.
Destination view	A view that displays data from the feature object and that you access by drilling down on the Name field.
Feature object	The underlying entity that the Inbox record points to; for example, a service request record or, for ESS, a row in the SmartScript session table. When you drill down on the Name field of an item in the Inbox, you see the feature object.
ESS	The Siebel Employee Self-Service application. The Inbox is an important feature for this application. When this guide provides ESS-specific information, the information is noted as ESS-specific.
Universal Inbox	A term that is an alternative name for the Inbox.

How the Inbox Interacts with the Feature Objects

Inbox items contain references to feature objects.

The following image illustrates the interaction between feature objects and the Inbox, which is as follows:

- Feature objects (ESS Forms, Service Requests, Opportunities) interact with Inbox items through the methods of the Universal Inbox business service. These methods can be invoked using various (run-time event, workflow, eScript) mechanisms. For example, run-time events can monitor the business component operations of the feature object.
- The Inbox interacts with feature objects through Inbox actions that are defined as part of the Inbox type.
- Integration business service methods are invoked when users take action on Inbox items.



About the Universal Inbox Business Service

The Universal Inbox business service is the interface between the underlying feature object and the Inbox items. Universal Inbox business service methods handle creation, update, deactivation, and deletion of Inbox items. For information about the methods in Universal Inbox business service, see *Universal Inbox Business Service Methods*.

CAUTION: Do not interact with the Inbox through any channel other than the Universal Inbox Business Service.

Scenarios for Administering and Using the Inbox

This topic describes how the inbox might be used. You might use the inbox differently, depending on your business model. The examples provided in this topic apply to an approval process. However, similar logic applies to other items such as notification. This topic includes the following scenarios:

- *Managing Service Requests*
- *Approving Personnel Action Forms Requests Captured Using ESS*

Managing Service Requests

An organization has implemented an automated Inbox assignment and escalation policy for service requests. According to this policy, service requests are assigned using the area, and an Inbox item is created to notify the service request owner of each assignment. An Inbox item is also created for the manager of the service request owner. The item is created using the priority of the service request. The Inbox was configured when the Siebel application was initially rolled out, but this recent change in policy requires the administrator to perform some tasks.

The administrator changes the replication-level feature, which is currently set to Regional. The administrator changes the setting so that the Inbox items are downloaded to both regional and local databases.

In addition, the policy has to be implemented in Japanese installations, so the administrator adds the appropriate language translation.

Previous Inbox items have remained in the Inbox for too long, so the administrator reduces the item expiration period.

Finally, the administrator adds a new drill-down destination view for certain users who do not have access to the standard Service Request views.

Approving Personnel Action Forms Requests Captured Using ESS

The Human Resources (HR) manager at a company has outlined new personnel action policies for employees. Management has mandated that personnel change requests be filed electronically. Approvals are required in the following sequence:

1. A HR representative for the department in which the employee works
2. The immediate supervisor of the employee
3. The departmental vice president

This new policy is assigned to a Siebel administrator for implementation.

After using the Employee Self-Service feature to set up and activate the integrated Personnel Action Form (PAF), the administrator designs the approval flows for the business object using Siebel Business Process (Workflow) Administration. Using the Inbox, the administrator creates the required approval type. When a user submits this particular item, the approval type created by the administrator invokes the approval Workflow Process.

A manager at the company submits a PAF. The form is routed to the human resources representative, then the manager, and finally the vice president. Each approver can reject the form and send it back to the requestor. If approved, then the process flow results in an update of data fields.

Process of Administering the Inbox

To administer the Inbox, perform the following tasks:

- *Reviewing All Inbox Items*
- *Deleting Inbox Items*
- *Setting Expiration Dates and Due Dates for Inbox Items*
- *Changing the Destination View for an Inbox Type*
- *Changing Inbox Downloading to Remote Databases*
- *Adding Inbox Translations*

This topic includes some of the straightforward changes that the administrator can make to the Inbox types that have already been configured. For detailed information about how to set up and configure Inbox, see *Configuring the Inbox*.

Reviewing All Inbox Items

Administrators can view all the Inbox items. They can also take action on any Inbox item.

This task is a step in *Process of Administering the Inbox*.

To review all items

1. Navigate to the Administration - Inbox screen and one of the following views:
    - **All Inbox Items.** All items that are in users' Inbox Items Lists. The administrator sees one record for each owner.
    - **All Completed Items.** All items that are in users' Completed Items Lists. The administrator sees one record for each owner.
    - **All Submitted Items view.** All items that are in users' Submitted Items Lists. The administrator sees one record for each originator.
2. Navigate to the Detail view to see information about the feature object.
3. Navigate to the History view to see who owns the item and which owners have taken action on the item.

Deleting Inbox Items

The administrator can delete Inbox items in the All Submitted Items view. When an item is deleted, the item is deleted for all owners and for the user who submitted the item.

This task is a step in *Process of Administering the Inbox*.

To delete Inbox items

1. Navigate to the Administration - Inbox screen, then the All Submitted Items view.
2. Delete Inbox records as required.

Setting Expiration Dates and Due Dates for Inbox Items

Each Inbox item that is created is associated with an Inbox type. Fields in the Inbox type record determine the expiration and due dates for items of that type.

This task is a step in *Process of Administering the Inbox*.

To change how item expiration and due dates are set for Inbox items of a type

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.
2. In the Inbox Types list, select a record, and edit the fields in the following table.

Field	Comments
Default Queue Duration (Days)	Type a value that represents the number of days for the default queue duration. This field determines the due date for the item. When the item has been in the Inbox of the owner for more than this number of days, the Past Due check box appears selected.

Field	Comments
Item Expiration Duration (Days)	Type a value that represents the number of days for the item time expiration. This field determines the expiration date for the item. This field appears in the Submitted Items List view. By default, no action is taken when an item expires.

Changing the Destination View for an Inbox Type

If the Inbox item is set up to access a particular view by drilling down on the Name field, then you can change this destination view or add a new destination view. For example, if some users do not have responsibilities to see the current destination view, then you can add a destination view that they can see.

Multiple views can be associated with one Item type. Each view is assigned a sequence number. When users drill down on an Inbox item, the view that appears is the first view in the sequence that they have access to. Their responsibilities determine this view.

This task is a step in *Process of Administering the Inbox*.

Changing Inbox Downloading to Remote Databases

Inbox items can be set to download to regional and local databases. If your Inbox type is currently configured to download to remote databases, then you can change this setting.

> **Note:** If your Inbox type is not currently set to download to remote databases, then you can configure the inbox for use with remote databases. For more information, see *Configuring the Inbox for Use with Remote Databases*.

This task is a step in *Process of Administering the Inbox*.

To change remote downloading for an Inbox type

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.
2. Select the Inbox type.
3. In the More Info form, edit the Replication Level.

   Values include:

   - **All.** Downloads the Inbox items to the regional and local databases.
   - **Regional**. Downloads the Inbox items to the regional databases only.
   - **None**. Does not download items to the remote databases.

     > **Note:** If the Replication Level is currently set to None, then before you change the Replication Level, see *Configuring the Inbox for Use with Remote Databases*.

Adding Inbox Translations

If you have a multilingual Siebel application, and the Inbox is not currently supporting all languages, then you can use the Translations view to extend language support.

Create a translation record for each language supported in your multilingual application.

This task is a step in *Process of Administering the Inbox*.

To set up an Inbox translation

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.
2. Select the Inbox item, and navigate to the Translations view.
3. In the Translations list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Display Name	Type the display name for the translation of the Inbox Type name.

Process of Using the Inbox

To use the Inbox, perform the following tasks:

- *Taking Action on Inbox Items*
- *Reviewing Completed Items*
- *Reviewing Submitted Items*

Taking Action on Inbox Items

Users can take action on items that are sent to them for approval. The most typical actions are to approve, reject, and acknowledge items. The actions available to the user are determined by the Inbox type of the item.

This task is a step in *Process of Using the Inbox*.

To approve or reject an Inbox item

1. Navigate to the Inbox screen, then the Inbox Items List view.
2. From the visibility filter, select My Inbox Items or My Team's Inbox Items.

3. In the Inbox Items list, select the item that you want to approve or reject.

   Note: You can drill down on the Name field to review the feature object.

4. In the Action field, select the appropriate action, for example, Approved.
5. (Optional) In the Comments field, enter a brief explanation.

   When the record is saved, the business service and method defined in the Inbox type for the action are triggered.

Reviewing Completed Items

The History view lets users track the progress of the items through each stage of the approval process. For example, managers can review the approval decision and comments made by each approver.

This task is a step in *Process of Using the Inbox*.

To review items that have been previously approved

1. Navigate to the Inbox screen, then the Completed Items List view.
2. From the visibility filter, select My Completed Items or My Team's Completed Items.
3. In the Completed Items List, select the item that you want to review.
4. Drill down on the Name field to review the feature object.

Reviewing Submitted Items

Users can review the Inbox items that they have submitted. They can check the progress of an item, for example, to see who has approved the item and who has not.

This task is a step in *Process of Using the Inbox*.

To review submitted items

1. Navigate to the Inbox screen, then the Submitted Items List view.
2. From the visibility filter, select My Submitted Items or My Team's Submitted Items.
3. Review the Inbox items that you, or your team, have submitted.

13 Configuring the Inbox

Configuring the Inbox

This chapter contains information about configuring the Inbox. It includes the following topics:

- *Process of Setting Up and Configuring Inbox*
- *Planning for Inbox Configuration*
- *Creating Inbox Items*
- *Creating Inbox Types*
- *Setting Up Inbox Links to Views and SmartScripts*
- *Setting Up Inbox Actions*
- *Configuring the Inbox for Use with Remote Databases*
- *Setting Up Inbox Approval Translations*
- *Configuring the Toggle Applets for Inbox Views*
- *Configuring the Category Icon for the Inbox*
- *Setting the Log File for Troubleshooting*
- *Universal Inbox Business Service Methods*
- *Examples of Inbox Triggers*

Process of Setting Up and Configuring Inbox

To set up and configure the Inbox, perform the following tasks:

1. *Planning for Inbox Configuration*
2. *Creating Inbox Items*
3. *Creating Inbox Types*
4. *Setting Up Inbox Links to Views and SmartScripts*
5. *Setting Up Inbox Actions*
6. *Configuring the Inbox for Use with Remote Databases*
7. *Setting Up Inbox Approval Translations*

Planning for Inbox Configuration

Before you start configuring the Inbox, complete some research and planning.

This task is a step in *Process of Setting Up and Configuring Inbox*.

To plan an Inbox Configuration

1. Select the feature object you want to integrate with the Inbox.

   For example, Employee Self-Service forms, Service Requests, Opportunities.
2. Analyze how the object is currently accessed.

   Consider the following questions:

   a. Is the object accessed from the UI or from Workflow Processes? Is the object accessed from one place or many places?
   b. How is the object related to other objects? Do other objects depend on the object?
   c. What operations do users perform on the object?
3. Determine the integration mechanism by considering what must happen to the object after it enters the Inbox.

   The types of integration with the Inbox include:

   - **Inbound**. It is typically triggered through workflows, eScripts, run-time events, or Workflow Monitor agents.
   - **Outbound**. It is typically triggered through workflows and eScripts.

   For example, if users access the feature object in other ways besides using the Inbox, then synchronize (inbound) the Inbox with the object's current data. (See *How the Inbox Interacts with Feature Objects*.)
4. Consider the following best practices:

   - Interact with the Inbox only through the methods in the Universal Inbox business service.

     Do not edit the Inbox fields directly.
   - Do not customize the fields in the Inbox.
   - You cannot reactivate an Inbox item after the item has been deactivated for the owner.

     Instead, you must create a new Inbox item for that owner.

Creating Inbox Items

Inbox items are created by the Universal Inbox business service. Methods for this business service can be called using the following mechanisms:

- Workflows
- Workflow Monitor Agent
- eScripting
- Run-time events

The procedure in this topic shows how to configure the Siebel application to have Inbox items created in a certain screen or for a business component.

This task is a step in *Process of Setting Up and Configuring Inbox*.

To configure the Siebel application to create Inbox items

1. Review the information about the Inbox business service, methods and workflows at the end of this chapter.
2. Review the procedures for setting up Inbox types.
3. Use one of the methods provided in the list in this topic to call the Inbox business service and create Inbox items.

Creating Inbox Types

Each Inbox item that is created is assigned an Inbox type. The Inbox type sets the following characteristics for the Inbox item:

- Action Type

  The action type is the LOV type that determines the actions the user can choose to take on an Inbox.

  For example, there are the following LOV records for the UINBOX_STATUS_TYPE action type: Approved, Received, and Rejected. These records represent the actions that the user can take on an Inbox item of this type.

  > **Note:** Because the effect of the action is set for each Item type, this LOV type can be used for many Item types, but the effect of approving or rejecting can be different for each Item type.

- Category

  The category determines the icon that appears in the Category field for the item in the Inbox. The category field can be useful for querying and sorting Inbox item and Inbox type records. For information about editing the Category icon, see *Configuring the Category Icon for the Inbox*.
- Replication Level
- Integration Object Name
- Business Object Name
- Item Expiration Duration (Days)
- Default Queue Duration (Days)
- Views and SmartScripts that link to the Inbox item
- Effects of the actions that the user can choose

This task is a step in *Process of Setting Up and Configuring Inbox*.

To create an Inbox type

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.

2. In the Inbox Types list, create a new record, and complete the necessary fields in the More Info form.

   Some fields are described in the following table.

Field	Comments
Replication Level	Select None if you do not want to download Inbox items to remote databases. Otherwise, see *Configuring the Inbox for Use with Remote Databases*.
Integration Object Name	Select a value if an integration object is associated with the Inbox type. This field has is special logic.
Business Object Name	Select the feature object that the destination view belongs to.
Default Queue Duration (Days)	Type the number of days that the item can stay in the Inbox before the Past Due check box appears selected. This field determines the due date for the item.
Item Expiration Duration (Days)	Type the number of days that the item can stay in the Inbox before the item expires. By default, no action is taken when the item expires. The Expiration field appears in the Submitted Items List view.

Setting Up Inbox Links to Views and SmartScripts

Administrators can specify that drilling down on the Name field of Inbox items accesses a particular view. Administrators can change the destination view or add a new destination view. For example, if some users do not have responsibilities to see the current destination view, then you can add a destination view that they can see.

You can associate multiple views with an Item type. You assign a sequence number to each view. When users drill down on an Inbox item, the view that appears is the first view in the sequence that they have access to. Their responsibilities determine this view.

You can also specify a SmartScript to run when users drill down on the Name field. SmartScripts are primarily used for ESS integration with Inbox, for example, an ESS Summary Form SmartScript.

This task is a step in *Process of Setting Up and Configuring Inbox*.

Note: If you have set a Name Drilldown action, then view records you set up are ignored.

To set up views and SmartScripts for an Inbox type

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.
2. In the Inbox Types list, select a record, and then navigate to the Views view.

3. In the Views list, create a new record, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
View	Select the view to appear when users drill down on an Inbox item. Make sure that the view that you enter belongs to the Business Object specified for the Inbox type. For ESS, use the EmpSS Form Player view.
Sequence #	Type a number for the sequence in which to make the view available to the user.
SmartScript	Select the SmartScript to run in the view.

Setting Up Inbox Actions

Review the information in the following topics before setting up Inbox actions:

- *About Actions*
- *About Deactivate Item Upon Finish and Deactivate Owners Upon Finish Fields*

This task is a step in *Process of Setting Up and Configuring Inbox*.

About Actions

There are several circumstances where a business service method can be invoked to act on an Inbox item. A different action type is used for each. The following table summarizes these actions.

Action	Invokes the Specified Business Service Method When...
Action Field Dropdown	The user takes action (edits the Action field on the Inbox item).
Name Drilldown	The user drills down on the Name field of the item. You can also use the Views view to configure this hyperlink. For more information about how to use the Views view to configure this hyperlink, see *Setting Up Inbox Links to Views and SmartScripts*.
Local Validation	The user, in a remote database, drills down on the Name field of the item. For more information, see *Configuring the Inbox for Use with Remote Databases*.
Initialize	Do not use this action unless you are upgrading. This action is provided for backward compatibility. For more information, see *Siebel Database Upgrade Guide* . This action invokes the Initialize method of the Universal Business Service. It creates an Inbox item and starts the defined method.

Action	Invokes the Specified Business Service Method When...
Transfer	The user transfers the Inbox item to another user.
Transfer Validation	The user transfers the Inbox item to another user, and the Transferable field for the Inbox Type is selected. In the preconfigured Siebel application, the Transfer action and Transfer Validation action are implemented only for task inbox items (the Task business object). These actions invoke the Transfer method of the Task Administration business service. If you want to implement these actions for another inbox item, then you must create for the appropriate business object a custom method in a business service or a custom Workflow Process to perform the action, and then set up the action to invoke this custom method or workflow.

About Deactivate Item Upon Finish and Deactivate Owners Upon Finish Fields

An Inbox item can be deactivated in the following ways:

- Deactivation can be done through one of the Universal Inbox Business Service methods.
- The Inbox type can be set up so that if the business method in the Actions record finishes without error, then the item is deactivated. For an example of an Inbox action setup, see *Examples of Inbox Triggers*.

  The item can be deactivated for all the owners or only for owner who takes the action, as follows:

  - If Deactivate Item Upon Finish is set, then when one owner takes action on the item, the item is deactivated for all owners, and all owners see the item in their Completed Items List.
  - If Deactivate Owners Upon Finish is set, then when one owner takes action, the item is deactivated (and moved to the Submitted Items List) for that owner alone. The item remains in the other owners' Inbox List.

To set up an Inbox action

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.
2. In the Inbox Types list, select the Inbox Type, and navigate to the Actions view.
3. In the Actions list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Action	Select a value for the action. For more information, see *About Actions*.
Business Service	Select the business service to use, for example, Workflow Process Manager.
Business Service Method	Select the method to invoke for the selected business service.

Field	Comments
Business Service Method Arguments	Type the arguments required to invoke the business service method. For example, if you use the Workflow Process Manager business service, then your workflow must contain the properties with the same argument names.
Deactivate Item Upon Finish	Select the check box to deactivate the Inbox item for all owners, after the method has successfully completed.
Deactivate Owners Upon Finish	Select the check box to deactivate the Inbox item for one owner, after the method has successfully completed.

In addition to the arguments passed in the Business Service Method Arguments field, the arguments in the following table are always passed to your custom business service or workflow.

Argument	Comments
ActionLIC	The value the user selected from the Action field. For example, if the Inbox Type has an Action Type of UINBOX_STATUS_TYPE, then the value of this argument is one of the following: Accepted, Received, or Rejected.
BusinessObjectName	The value of the business object name field for the Inbox type.
Employee Login	The login ID of the user who uses the Inbox type.
InboxItemId	The row ID of the Inbox item. This argument refers to the UInbox Item business component, which is used by the Submitted Items List view.
InboxTypeId	The row ID of the Inbox type.
InboxTypeName	The name of the Inbox type.
IntegrationObjectName	The value of the integration about name for the Inbox type. If the Inbox type has an integration object name, then the value of this field is passed in this argument.
ObjectId	The row ID of the business object name that is managed by the Inbox type. **Note:** This row ID is not the standard Object ID property that is available on every workflow.

Argument	Comments
OwnerInfoId	The row ID of the Inbox Item Task. This argument refers to the UInbox Item Task business component, which is used by the Inbox Items List and Completed Items List view.

Note: The Inbox Action passes the row ID of the feature object in ObjectId. Within a Workflow Process, the ID of the primary business component on which the process is based must be stored in the process properties Object ID. Note the space character in the Object ID process property name. Therefore, the Workflow Process first copies the content of ObjectId to Object ID, if necessary.

Configuring the Inbox for Use with Remote Databases

Inbox items can be downloaded to regional and local databases. The Inbox functionality downloads Inbox item records but does not download the underlying feature object.

CAUTION: The person who configures the Inbox must make sure that the feature object is downloaded. If the feature object is not downloaded, then remote users cannot view the underlying feature object in the Inbox item. For example, you must make sure that the service request records that the Inbox item points to are downloaded to the local database.

If your business processes require your users to download Inbox items to remote databases, then set up a Local Validation action. This action invokes a business service method that you define when a remote user attempts to view the underlying feature object.

The method that you define must return an argument to the Inbox, to tell the Inbox that the feature object is not present. The Inbox then displays an error message to the user and prevents the drilldown.

This task is a step in *Process of Setting Up and Configuring Inbox*.

To configure the Inbox for remote use

1. Define a business service with a business service method that does the following:
   a. Accepts the following arguments from the Inbox:
      - InboxItemId
      - OwnerInfoId
      - ObjectId
      - InboxTypeName
      - BusinessObjectName
      - IntegrationObjectName
      - Name-value pairs from the Inbox Parameters tables
   b. Looks for the feature object, and, if the feature object is found, then sets the output argument LocalValidationError to N.
2. Navigate to the Administration - Inbox screen, then the All Inbox Types view.

3. In the Inbox Types list, select the type record.
4. In the More Info form, set the Replication Level.

   Values include:

   - **All.** Set this value to download Inbox items to regional and local databases.
   - **Regional**. Set this value to download Inbox items to regional databases only.
5. Navigate to the Actions view.

   In the Actions list, create a new record, and complete the necessary fields. Some fields are described in the following table.

Field	Comments
Action	Select Local Validation.
Business Service	Select the business service that you defined in step 1.
Business Service Method	Select the business service method that you defined in step 1.
Business Service Method Arguments	Type the arguments for the business service method.

Setting Up Inbox Approval Translations

If your Siebel application is multilingual, then create a translation record for each language.

Use the Translations view to specify Inbox type names in other languages.

This task is a step in *Process of Setting Up and Configuring Inbox*.

To set up an Inbox translation

1. Navigate to the Administration - Inbox screen, then the All Inbox Types view.
2. In the Inbox Types list, select the approval record, and navigate to the Translations view.
3. In the Translations list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Display Name	Type the display name for translation of the Inbox type Name.

Configuring the Toggle Applets for Inbox Views

The Inbox supports dynamic toggle applets in three types of views. The following table shows these views.

Views Supporting Dynamic Toggle Applet	Toggle Applet Name	Corresponding Business Component for Views
Inbox items detail views	UInbox Item Task Toggle List Applet	UInbox Item Task
Completed items detail views		
Submitted items detail views	UInbox Item Toggle List Applet	UInbox Item

When you set up a dynamic toggle applet, you determine which type of form applet appears in the lower portion of the Inbox Detail views. Typically, the applet that is based on the business object of the underlying feature object is the most suitable applet.

For example, if you want to set up the Inbox for service request approvals, then you can create a dynamic toggle applet that displays the Service Request Detail Applet form applet when the business object for the Inbox type is Service Requests. Then you can create a link between the Inbox business components and the Service Request business component, so that the service request information can appear in the Inbox detail views.

To configure dynamic toggle applets for the Inbox

1. In Siebel Tools, create an applet child object for the appropriate toggle applet, as follows:
   a. Create a form applet. Make sure that an Applet Web Template is defined for the Edit mode of this applet.
   b. Set the value of the Auto Toggle Field to Item Type BusObj Name.
   c. Set the value of the Auto Toggle Value field to the business object of the Inbox type. For example, set the value to Service Request.

   For information about which toggle applet to create a child object for, see the previous table. For more information about how to configure toggle applets, see *Configuring Siebel Business Applications* .
2. Create links between the business component of the feature object and the UInbox Item and UInbox Item Task business components by completing the following steps:
   a. Create a link record.
   b. Complete the fields in the following table.

Field	Comments
Name	Displays the link name after the Parent Business Component and Child Business Component fields are completed.
Parent Business Component	Select UInbox Item Task or UInbox Item.

Field	Comments
Child Business Component	Select the business component for the dynamic toggle applet, for example, Service Request.
Source Field	Type the Item Object ID.
Destination Field	Type the ID of the feature object to appear in the dynamic toggle applet; usually this field is ID.

For more information about creating links, see *Configuring Siebel Business Applications* .

3. Associate the business component for the dynamic toggle applet with the two Inbox business objects UInbox ItemTask and UInbox Item History. For each link, perform the following steps:

   a. Create a business object component record.
   b. Complete the fields in the following table.

Field	Comments
Name	Type the name of the business component for the dynamic toggle applet, for example, Service Request.
Link	Type the name of the link from Step 2.

Configuring the Category Icon for the Inbox

You can change and add to the icons that appear in the Category field by editing the Inbox Category bitmap category. For more information about bitmap categories and working with images, see *Configuring Siebel Business Applications* .

To add Category icon for a Category field value

1. Add the icon image file, in Graphic Interchange Format (GIF), to the `images` directory.

   Base the size of your image on the existing Category icons in this directory, for example, icon_approval.gif.

2. In Siebel Tools, create a bitmap record for the Inbox Category bitmap category object, and complete the fields in the following table.

Field	Comments
Name	Type the language-independent code for the value, from the UINBOX_INBOX_TYPE LOV, for example, CAMPAIGNS.
Bitmap	Type the name of the file from Step 1.

Setting the Log File for Troubleshooting

For troubleshooting problems with the Inbox, set the Inbox log file to a verbose level. For information about log files, see *Siebel System Monitoring and Diagnostics Guide* .

To set the level of the Inbox log file for troubleshooting

- In Siebel Tools, set the Log Level for the Inbox log file (alias of InboxLog) to 5.

Universal Inbox Business Service Methods

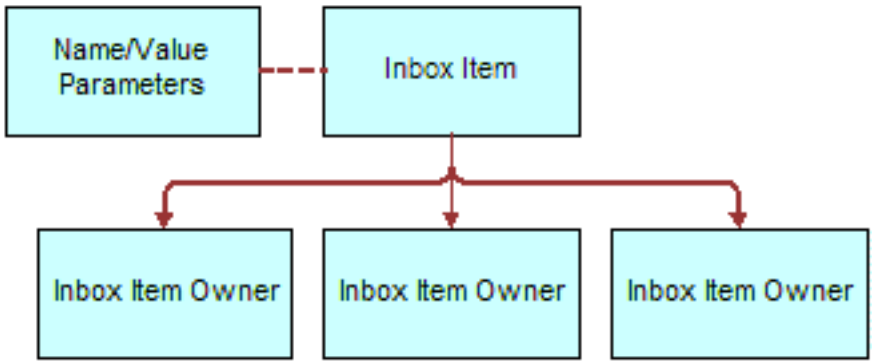
This topic discusses the Universal Inbox business service and lists its methods.

The following definitions apply to the Universal Inbox Business Service:

- **Inbox item and Inbox item owner.** For most of this chapter, the term *Inbox item* has been used synonymously with Inbox item owner. But to understand how the methods for the Universal Inbox business service work, it is necessary to distinguish between the Inbox item and the inbox item owner. This distinction follows:
  - **The Inbox item.** The record that appears in the Submitted Items views.
  - **The Inbox item owner.** The record that appears in Inbox Items and Completed Items views. Owner information is contained in this record. Typically there are one or more Inbox item owner records associated with one Inbox item record.
- **Name-value pairs.** In addition to the predefined fields that belong to the Inbox item records (such as type name and expiration date), there is provision to store additional data with the Inbox item in the form of name-value pairs. The name-value pairs are typically used to record data specific to the underlying feature object. The name-value pairs are stored in the Inbox Parameters table associated with the Inbox item.

The following figure shows the relationship between Inbox items and Inbox item owners:

- The Inbox Item record, and its Name and Value parameters, appears in the Submitted Items views.
- The Inbox Item Owner records appear in the Inbox Items and Completed Items views.



The following table describes the methods for the Universal Inbox business service.

Method Name	Description
CreateInboxEx	Creates an Inbox item and an Inbox item owner.
CreateInbox	Creates multiple Inbox items and multiple Inbox item owners.
CreateInboxItem	Creates multiple Inbox items.
CreateInboxOwner	Creates multiple Inbox item owners for an Inbox item.
IsInboxItemExisted	Checks if an Inbox item exists.
GetInboxItemInfo	Returns field values from an Inbox item and, if GetParams is true, then returns the name-value pairs for the Inbox item.
GetInboxParamInfo	Returns the name-value pairs for an Inbox item.
GetInboxOwnerInfoEx	Returns field values for an Inbox item owner.
GetInboxOwnerInfo	Returns field values for multiple Inbox item owners for an Inbox item, and returns information about the action status of the items.
SetInboxParamInfo	Inputs name-value pairs for an Inbox item.
UpdateInboxItemInfo	Updates field values for an Inbox item.
DeactivateInboxItem	Deactivates all Inbox item owners for an Inbox item and updates field values for that Inbox item.
DeactivateInboxOwner	Deactivates an Inbox item owner, and updates the field values for that Inbox item owner.
UpdateInboxOwnerInfo	Updates field values for an Inbox item owner.

Method Name	Description
DeleteInboxItem	Deletes an Inbox item and all associated Inbox item owners.
Initialize	Creates an Inbox item and starts the business service method defined in the Initialize action. This method is intended for use only by those upgrading from the 7.5.3 version of the Siebel application.
RouteInboxItem	Deactivates existing Inbox item owners and creates new Inbox item owners for an Inbox item. This method is intended for use only by those upgrading from the 7.5.3 version of the Siebel application. For more information about this method, see *Siebel Database Upgrade Guide* .

CreateInboxEx Method

This method creates an Inbox item and an Inbox item owner. The name-value pairs are put into the Inbox Parameters table.

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxName	Yes	This property is the name for the Inbox.
InboxTypeName	Yes	This property is the name of Inbox type.
InboxPartyId	Yes	This property is the party ID of the Inbox owner.
Comments	No	None.
ObjectId	Yes	This property is the object ID of the Inbox item.
InboxExpirationDuration	No	The duration is expressed in seconds.
InboxUTCExpirationTS	No	This property is the UTC timestamp.
ReplicationLevel	No	This property indicates whether this Inbox item must be routed when using remote databases. Select one of the following options: • All. Indicates HQ, Regional, Local. • Regional. Indicates HQ, Regional. • None. Indicates HQ.
OwnerPartyId	Yes	This property is the party ID of the Inbox owner.
OwnerPriority	No	None.

Property Name	Required	Comments
OwnerQueueDuration	No	The duration is expressed in seconds.
OwnerUTCStartWorkingTS	No	This property is the UTC timestamp.
OwnerActionLIC	No	This property is the language-independent code.
OwnerUTCDueTS	No	This property is the UTC timestamp.

Output Arguments

The following table shows the output arguments for this method.

Property Name	Comments
InboxItemId	This property is the row ID of the newly-created Inbox item.
OwnerInfoId	This property is the information ID for the Inbox owner.

CreateInbox Method

This method creates multiple Inbox items and multiple Inbox item owners. The name-value pairs are put into the Inbox Parameters table.

Input Arguments

The following table shows the input arguments for this method for the property set.

Property Name	Required	Comments
Child properties	No	Multiple children are allowed. See the following table.

The following table shows the input arguments for this method for the child property set.

Property Name	Required	Comments
InboxName	Yes	This property is the name for the Inbox.
InboxTypeName	Yes	This property is the name of Inbox type.

Property Name	Required	Comments
InboxPartyId	Yes	This property is the party ID of the Inbox owner.
ObjectId	No	This property is the object ID of the inbox item.
InboxExpirationDuration	No	The duration is expressed in seconds.
InboxUTCExpirationTS	No	This property is the UTC timestamp.
Comments	No	None.
Child properties	No	Multiple children are allowed. See the following table.

The following table shows the input arguments for this method for the grandchild property set.

Property Name	Required	Comments
OwnerPartyId	Yes	This property is the party ID of the Inbox owner.
OwnerPriority	No	None.
OwnerQueueDuration	No	The duration is expressed in seconds.
OwnerUTCDueTS	No	This property is the UTC timestamp.
OwnerUTCStartWorkingTS	No	This property is the UTC timestamp.
OwnerActionLIC	No	This property is the language-independent code.

Output Arguments

The following table shows the output arguments for this method for the property set.

Property Name	Comments
Child properties	Multiple children can be returned. See the following table.

The following table shows the output arguments for this method for the child property set.

Property Name	Comments
InboxItemId	This property is the row ID of the newly-created Inbox item.
Child properties	Multiple children can be returned. See the following table.

The following table shows the output arguments for this method for the grandchild property set.

Property Name	Comments
OwnerPartyId	This property is the party ID of the Inbox owner.
OwnerInfoId	This property is the information ID of the Inbox owner.

CreateInboxItem Method

This method creates multiple Inbox items. The name-value pairs are put into the Inbox Parameters table.

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxName	Yes	This property is the name for the Inbox.
InboxTypeName	Yes	This property is the name of Inbox type.
InboxPartyId	Yes	This property is the party ID of the Inbox owner.
ObjectId	Yes	This property is the object ID of the inbox item.
InboxExpirationDuration	No	The duration is expressed in seconds.
InboxUTCExpirationTS	No	This property is the UTC timestamp.
Comments	No	None.
ReplicationLevel	No	This property indicates whether this Inbox item must be routed when using remote databases. Select one of the following options: • All. Indicates HQ, Regional, Local.

Property Name	Required	Comments
		• Regional. Indicates HQ, Regional. • None. Indicates HQ.

Output Arguments

The following table shows the output arguments for this method.

Property Name	Comments
InboxItemId	This property is the row ID of the newly-created Inbox item.

CreateInboxOwner Method

This method creates multiple Inbox item owners for an Inbox item. If DeactivateOthers is true, then the method deactivates the current active Inbox item owners before creating new owners.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method for the property set.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the newly-created Inbox item.
ObjectId	No	This property is the object ID of the inbox item.
InboxTypeName	No	This property is the name of Inbox type.
DeactivateOthers	No	This property deactivates the current active Inbox item owners before creating new owners when the value is Yes (the default).
Child properties	No	Multiple children are allowed. See the following table.

The following table shows the input arguments for this method for the child property set.

Property Name	Required	Comments
OwnerPartyId	Yes	This property is the party ID of the Inbox owner.

Property Name	Required	Comments
OwnerPriority	No	None.
OwnerQueueDuration	No	The duration is expressed in seconds.
OwnerUTCDueTS	No	This property is the UTC timestamp.
OwnerUTCStartWorkingTS	No	This property is the UTC timestamp.
OwnerActionLIC	No	This property is the language-independent code.

Output Arguments

The following table shows the output arguments for this method for the property set.

Property Name	Comments
InboxItemId	This property is the row ID of the newly-created Inbox item.
DeactivateOthers	This property indicates whether or not the other owners have been deactivated.
Child properties (OwnerInfoOutput)	Multiple children can be returned. See the following table.

The following table shows the output arguments for this method for the child property set.

Property Name	Comments
OwnerPartyId	This property is the party ID of the Inbox owner.
OwnerInfoId	This property is the information ID of the Inbox owner.

IsInboxItemExisted Method

This method checks if an Inbox item exists.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item.
ObjectId	No	This property is the object ID of the Inbox item.
InboxTypeName	No	This property is the name of Inbox type.

Output Arguments

The following table shows the output arguments for this method.

Property Name	Comments
IsInboxItemExisted	A 1 indicates the Inbox item exists, and a 0 indicates it does not exist.
InboxItemId	This property is the row ID of the Inbox item.
HasActiveOwners	A 1 indicates the Inbox item has active owners, and a 0 indicates it does not have active owners.

GetInboxItemInfo Method

This method returns field values from an Inbox item and, if GetParams is true, then returns the name-value pairs for the Inbox item.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. The ID is not updated, but is used for searching.
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.

Property Name	Required	Comments
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.
GetParams	No	This property returns all name-value pairs if the value is Y.

Output Arguments

The following table shows the output arguments for this method.

Property Name	Comments
ObjectId	This property is the object ID of the Inbox item.
InboxTypeId	This property is the ID for the Inbox type.
InboxTypeName	This property is the name of Inbox type.
InboxName	This property is the name for the Inbox.
InboxPartyId	This property is the party ID of the Inbox owner.
Comments	None.
InboxUTCExpirationTS	This property is the UTC timestamp.
Name - value pairs	None.

GetInboxParamInfo Method

This method returns the name-value pairs for an Inbox item.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. The ID is not updated, but is used for searching.
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.

Output Arguments

The following table shows the output arguments for this method.

Property Name	Comments
Name - value pairs	None.

GetInboxOwnerInfoEx Method

This method returns field values for an Inbox item owner. If the Inbox item owner is in the screen-active business component record, then the method returns the values from the screen-active business component.

The method searches as follows:

1. OwnerInfoId
2. InboxItemId, OwnerPartyId
3. ObjectId, InboxTypeName, OwnerPartyId

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.
OwnerPartyId	No	This property is the party ID for the Inbox owner. It is not updated, but is used for searching.
InboxItemId	No	This property is the row ID of the Inbox item. It is not updated, but is used for searching.

Property Name	Required	Comments
OwnerInfold	No	This property is the information ID for Inbox owner. It is not updated, but is used for searching.

Output Arguments

The following table lists the output arguments for this method.

Property Name	Comments
OwnerInfold	This property is the information ID for Inbox owner.
OwnerPriority	This property is the owner priority for the Inbox item task.
OwnerActionLIC	This property is the language-independent code.
OwnerUTCDueTS	This property is the UTC timestamp.
OwnerComments	None.
OwnerStartWorkingTime	This property is the owner start working time for the Inbox item task.
OwnerEndWorkingTime	This property is the owner end working time for the Inbox item task.

=

GetInboxOwnerInfo Method

This method returns field values for multiple Inbox item owners for an Inbox item, and returns information about the action status of the items.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. It is not updated, but is used for searching.

Property Name	Required	Comments
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.
ActiveOwnerOnly	No	This property indicates that information is returned only for active owners. The default is TRUE.
EvaluateOR	No	This property evaluates the OR condition on all owners' actions using the Action that is passed in from the caller.
EvaluateAND	No	This property evaluates the AND condition on all owners' actions using the Action that is passed in from the caller.

Output Arguments

The following table shows the output arguments for this method for the property set.

Property Name	Comments
OREvalResult	This property is 1 if one or more owner's inbox tasks have OwnerAction equal to the input parameter EvaluateOr. Otherwise it is 0.
ANDEvalResult	This property is 1 if all the owner's inbox tasks have OwnerAction equal to the input parameter EvaluateAnd. Otherwise it is 0.
Child Properties	Multiple children can be returned. See the following table.

The following table shows the output arguments for this method for the child property set.

Property Name	Comments
OwnerInfoId	This property is the information ID for the Inbox owner.
OwnerPriority	None.
OwnerActionLIC	This property is the language-independent code.
OwnerUTCDueTS	This property is the UTC timestamp.
OwnerComments	None.

Property Name	Comments
OwnerStartWorkingTime	This property is the UTC timestamp.
OwnerEndWorkingTime	This property is the UTC timestamp.

SetInboxParamInfo Method

This method inputs name-value pairs for an Inbox item. The name-value pairs are put into the Inbox Parameters table.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. It is not updated, but is used for searching.
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.

UpdateInboxItemInfo Method

This method updates field values for an Inbox item. The name-value pairs are put into the Inbox Parameters table.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. It is not updated, but is used for searching.
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.
InboxName	No	This property is the name of the Inbox. The value passed cannot be empty.
InboxPartyId	No	This property is the party ID of the Inbox owner. The value passed cannot be empty.
ReplicationLevel	No	This property indicates whether this Inbox item must be routed when using remote mobile client. Select one of the following options: • All. Indicates HQ, Regional, Local. • Regional. Indicates HQ, Regional. • None. Indicates HQ.
Comments	No	None.
InboxExpirationDuration	No	The duration is expressed in seconds. The value passed cannot be empty.
InboxUTCExpirationTS	No	This property is the UTC timestamp. The value passed cannot be empty.

DeactivateInboxItem Method

This method deactivates all Inbox item owners for an Inbox item and updates field values for that Inbox item. The name-value pairs are put into the Inbox Parameters table.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Input Arguments

The following table shows the input arguments for this method for the property set.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. It is not updated, but is used for searching.
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.
InboxName	No	This property is the name of the Inbox. The value passed cannot be empty.
InboxPartyId	No	This property is the party ID of the Inbox owner. The value passed cannot be empty.
ReplicationLevel	No	This property indicates whether this Inbox item must be routed when using remote mobile client. Select from one of the following options: • All. Indicates HQ, Regional, Local. • Regional. Indicates HQ, Regional. • None. Indicates HQ.
Comments	No	None.
InboxExpirationDuration	No	The duration is expressed in seconds. The value passed cannot be empty.
InboxUTCExpirationTS	No	This property is the UTC timestamp. The value passed cannot be empty.
Child Properties	No	Multiple children are allowed. See the following table.

The following table shows the input arguments for this method for the child property set.

Property Name	Required	Comments
OwnerPartyId	No	This property is the party ID for the Inbox owner. It is not updated, but is used for searching.
OwnerInfold	No	This property is the information ID for the Inbox owner. It is not updated, but is used for searching.
OwnerPriority	No	None.
OwnerActionLIC	No	This property is the language-independent code.

Property Name	Required	Comments
OwnerComments	No	None.
OwnerStartWorkingTime	No	This property is the UTC timestamp. To set to the current time, enter a value of Y, T, or TRUE.
OwnerEndWorkingTime	No	This property is the UTC timestamp. To set to the current time, enter a value of Y, T, or TRUE.

DeactivateInboxOwner Method

This method deactivates an Inbox item owner and updates field values for that Inbox item owner.

The method searches as follows:

1. OwnerInfoId
2. InboxItemId, OwnerPartyId
3. ObjectId, InboxTypeName, OwnerPartyId

If there is SSASqlErrWriteConflict conflict, then clear the error message to show the error message on UI.

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.
OwnerPartyId	No	This property is the party ID for the Inbox owner. The ID is not updated, but is used for searching.
InboxItemId	No	This property is the row ID of the Inbox item. The ID is not updated, but is used for searching.
OwnerInfoId	No	This property is the information ID for the Inbox owner. The ID is not updated, but is used for searching.
OwnerPriority	No	None.
OwnerActionLIC	No	This property is the language-independent code.

Property Name	Required	Comments
OwnerComments	No	None.
OwnerStartWorkingTime	No	This property is the UTC timestamp. To set to the current time, enter a value of Y, T, or TRUE.
OwnerEndWorkingTime	No	This property is the UTC timestamp. To set to the current time, enter a value of Y, T, or TRUE.

UpdateInboxOwnerInfo Method

This method updates field values for an Inbox item owner.

The method searches as follows:

1. OwnerInfoId
2. InboxItemId, OwnerPartyId
3. ObjectId, InboxTypeName, OwnerPartyId

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name for the type of Inbox. It is not updated, but is used for searching.
OwnerPartyId	No	This property is the party ID for the Inbox owner. It is not updated, but is used for searching.
InboxItemId	No	This property is the row ID of the Inbox item. The ID is not updated, but is used for searching.
OwnerInfoId	No	This property is the information ID for the Inbox owner. It is not updated, but is used for searching.
OwnerPriority	No	None.
OwnerActionLIC	No	This property is the language-independent code.
OwnerQueueDuration	No	The duration is expressed in seconds.

Property Name	Required	Comments
OwnerUTCDueTS	No	This property is the UTC timestamp.
OwnerComments	No	None.
OwnerStartWorkingTime	No	This property is the UTC timestamp. To set to the current time, enter a value of Y, T, or TRUE.
OwnerEndWorkingTime	No	This property is the UTC timestamp. To set to the current time, enter a value of Y, T, or TRUE.

DeleteInboxItem Method

This method deletes an Inbox item and all associated Inbox item owners.

The method searches as follows:

1. InboxItemId
2. ObjectId + InboxTypeName

Usage Example

Call this method when the underlying feature object for the Inbox item has been deleted.

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
InboxItemId	No	This property is the row ID of the Inbox item. It is not updated, but is used for searching.
ObjectId	No	This property is the object ID of the Inbox item. It is not updated, but is used for searching.
InboxTypeName	No	This property is the name of Inbox type. It is not updated, but is used for searching.

Initialize Method

This method creates an Inbox item and starts the business service method defined in the Initialize action. This method is intended for use only by those upgrading from the 7.5.3 version of the Siebel application.

Input Arguments

The following table shows the input arguments for this method.

Property Name	Required	Comments
ItemType	Yes	None.
ItemDescription	Yes	None.
ItemObjectId	Yes	None.
ItemSubmittedBy	Yes	None.
ItemPriority	No	Not supported in version 7.7 of the Siebel application.
ItemQueueDuration	No	None.
ItemComments	No	None.

RouteInboxItem Method

This method deactivates existing Inbox item owners and creates new Inbox item owners for an Inbox item. This method is intended for use only by those upgrading from the 7.5.3 version of the Siebel application. For more information about this method, see Siebel Database Upgrade Guide.

Input Arguments

The following table shows the input arguments for this method for the property set.

Property Name	Required	Comments
ItemWorkflowInstanceId	Yes	None.
Child Properties	Yes	Multiple children are allowed. See the following table.

The following table shows the input arguments for this method for the child property set.

Property Name	Required	Comments
TaskOwnerId	Yes	This property is the ID for the task owner.

Property Name	Required	Comments
TaskStatus	No	This property is the status for the task.
TaskPriority	No	This property is the priority for the task.

Output Arguments

The following table shows the output arguments for this method for property set.

Property Name	Comments
InboxItemId	This property is the row ID of the newly-created Inbox item.
Child properties	Multiple children can be returned. See The following table.

The following table shows the output arguments for this method for the child property set.

Property Name	Comments
OwnerPartyId	This property is the party ID of the Inbox owner.
OwnerInfold	This property is the information ID of the Inbox owner.

Examples of Inbox Triggers

This topic includes the following samples of Inbox triggers:

- *Inbox - Service Demo Creation Workflow*
- *Inbox - Service Action Workflow*
- *Inbox - Service Detail Action Workflow*
- *Inbox Trigger Used in ESS*
- *Inbox Trigger Using Server Script*

About the Sample Workflows

The following pages describe three sample workflows that apply to service requests and that illustrate the use of the Inbox. You can use Siebel Tools to import the workflow files into the Siebel Sample Database, and try out the workflows. Additionally, you can import them into your own implementation and modify them for your business needs.

Where to Find the Sample Workflow Files

These sample workflows are provided as part of the sample database installation. You can find these workflow files in the `SIEBEL_CLIENT_HOME \SAMPLE\WORKFLOWS` directory. (For example, `C:\Program Files\Siebel\7.8\web client\SAMPLE \WORKFLOWS`)

The names of the files that contain the sample workflows are:

- Inbox - Service Demo Creation.xml
- Inbox - Service Action.xml
- Inbox - Service Detail Action.xml

Creating Inbox Types for Use with the Sample Workflows

If you want to try out the sample workflows in the Sample Database, then you must create the SRManager and SROwner Inbox types.

To create two Inbox types for use with the sample workflows

1. Create two Inbox types that use the field values in the following table.

Field Name	Value for First Inbox Type	Value for Second Inbox Type
Name	SROwner	SRManager
Business Object Name	Service Request	Service Request
Category	APPROVALS	APPROVALS
Default Queue Duration (Days)	0	0
Item Expiration Duration (Days)	0	0
Action Type	SR_STATUS	None

   For more information, see *Creating Inbox Types*.
2. Set up a link to the Service Request Detail View for the SROwner and the SRManager Inbox types.

   For more information, see *Setting Up Inbox Links to Views and SmartScripts*.

3. Create an Inbox Actions record for the SROwner Inbox type that uses the field values in the following table.

Field Name	Value
Action	Action Field Dropdown
Business Service	Workflow Process Manager
Business Service Method	RunProcess
Business Service Method Arguments	"ProcessName", "Inbox - Service Action"

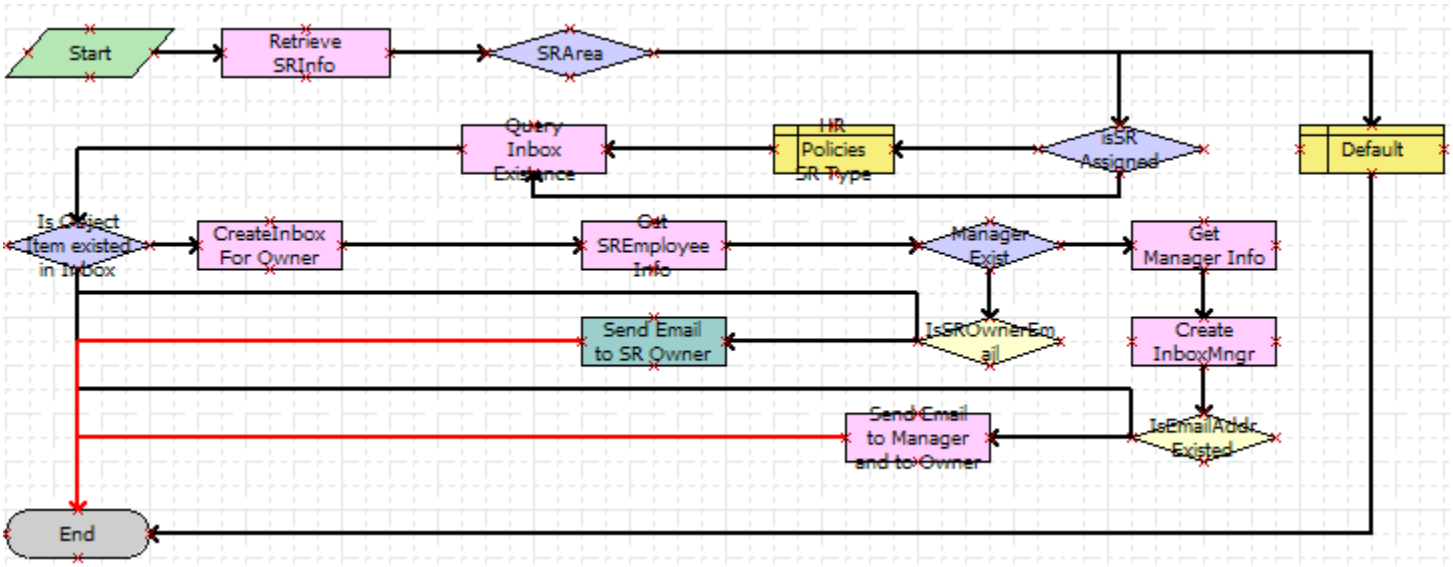
For more information, see *Setting Up Inbox Actions*.

Inbox - Service Demo Creation Workflow

This workflow assigns service requests and creates inbox items.The workflow acts only on service requests where Area is Network; service requests in all other areas are ignored.

If the service request does not have an owner, then it is assigned to APARKER. Inbox items and Inbox item owners are created for the service request's owner and the service request owner's manager. Both users are then sent email to notify them that there are new items in their Inboxes.

The workflow is triggered when a service request is created. The following image shows the diagram for this workflow.



Workflow Description

This workflow performs the following actions:

1. **Retrieve SRInfo.** This step retrieves data about the service request, for example, its area, status, and service request number.
2. **SRArea, isSR Assigned, HR Policies SR Type, Default.** If the service request is unassigned and value of the Area field is Network, then these steps assign the service request to APARKER.
3. **Query Inbox Existence, Is Object Item existed in Inbox.** These steps check if an Inbox item for this service request already exists.
4. **CreateInbox For Owner**. If an Inbox item does not already exist, then this step calls the CreateInboxEx method which creates an Inbox item of Inbox type SROwner, and an Inbox item owner. For more information, see *CreateInboxEx Method*.
5. **Get SREmployee Info.** This step retrieves the email address of the service request's owner.
6. **Manager Exist.** This step determines if the owner of the service request has a manager.
7. **Get Manager Info, Create InboxMngr, IsEmailAddrExisted, Send Email to Manager and to Owner.** If the owner of the service request has a manager, then:
    - These steps retrieve information about the manager.
    - These steps call the CreateInboxEx method to create an Inbox item of Inbox type SRManager, and an Inbox item owner.
    - These steps send email to both the manager and the owner of the service request.
8. **IsSROwnerEmail, Send Email to SR Owner.** If the owner does not have a manager, then these steps send email to the owner of the service request.

Inbox - Service Action Workflow

This workflow synchronizes the status for service requests and inbox items.

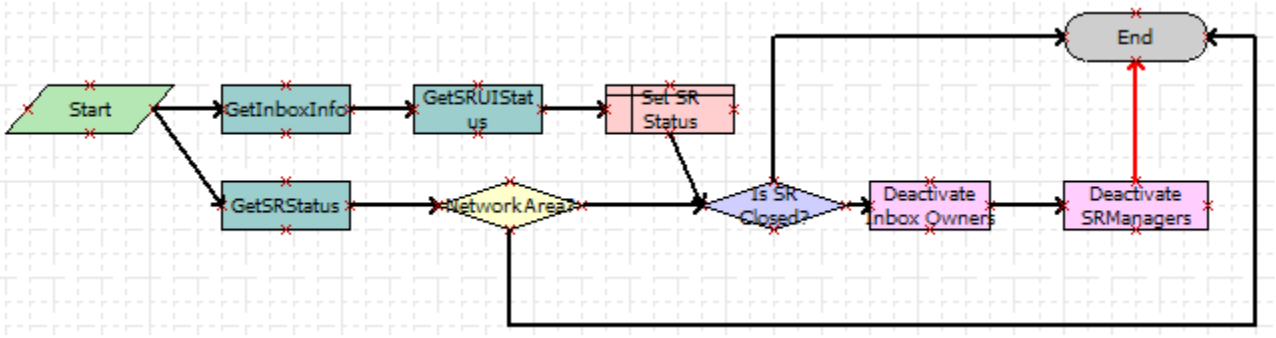
This workflow makes sure that changes to the service request records, where the value of the Area field is Network, and the Inbox item that is based on those service requests are synchronized:

- When a user takes action on a service request Inbox item, the status of the service request record is updated accordingly. For example, when the Inbox item is closed by its owner, the workflow changes the status of the underlying service request to closed.
- When a user changes the Status of a service request, the actions available for the corresponding Inbox item are appropriately updated. In this case, the Inbox items for both the owner and the manager are deactivated and removed from the Inbox.

The workflow starts when:

- The user takes action on a service request Inbox item.
- The run-time event attached to the WriteRecordUpdate event on the Service Request business component is triggered.

The following image shows the diagram for this workflow.



Workflow Description

This workflow performs the following actions:

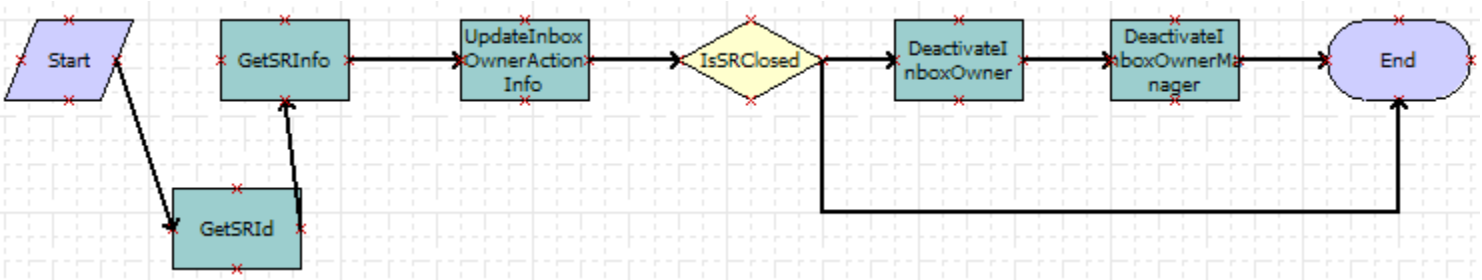
1. **GetInboxInfo**. This step retrieves a set of parameters about the Inbox item. One of the parameters is ObjectId, which is the ServiceRequestId. This step positions the Service Request business component on the ObjectId that has been passed in.
2. **GetSRUIStatus**. This step retrieves the action taken by the user on the service request Inbox item.
3. **Set SR Status**. This step updates the Status of the service request according to the action taken by the user on the Inbox item.
4. **GetSRStatus**. This step retrieves the status and area information about the service request.
5. **Network Area?** This step determines if the value of the Area field is Network. If not, then the workflow ends.
6. **Is SR Closed?, Deactivate Inbox Owners, Deactivate SRManagers.** If the service request is closed, then these steps call the DeactivateInboxItem method to deactivate Inbox item owners for the owner of the service request and their manager. For more information, see *DeactivateInboxItem Method*.

Inbox - Service Detail Action Workflow

This workflow updates inbox items for status changes made in the Detail view of the Inbox.

This workflow is triggered when a user changes the status of a service request from within the Inbox screen, Inbox Items List, and then the Detail view. This workflow updates the Inbox item of the service request according to the change made to the service request.

This workflow starts when the run-time event attached to the WriteRecordUpdate event on the Service Request business component of the UInbox Item Task business object is triggered. The following figure shows the diagram for this workflow.



Workflow Description

This workflow performs the following actions:

1. **GetSRId.** This step gets the service request row ID and the Inbox item ID.
2. **GetSRInfo.** This step gets the updated information from the service request record.
3. **UpdateInboxOwnerActionInfo.** This step calls the UpdateInboxOwnerInfo method to update the Inbox item owner. For more information, see *UpdateInboxOwnerInfo Method*.
4. **IsSRClosed, DeactivateInboxOwner, DeactivateInboxOwnerManager.** If the service request is closed, then these steps call the DeactivateInboxItem method to deactivate Inbox item owners for the owner of the service request and their manager. For more information, see *DeactivateInboxItem Method*.

Inbox Trigger Used in ESS

This topic includes a sample of SmartScript code.

This code is entered in the Script_Finish statement of the ESS Form (SmartScript). It can be accessed from the Administration - SmartScript screen, then the Scripts view in the HelpDesk application. For more information about Employee Self Service, see *Siebel HelpDesk Guide* .

The purpose of the script is to take data from the ESS Form (SmartScript) and some required arguments to invoke the Universal Inbox business service under the Initialize method. When the user submits the ESS Form (SmartScript), this eScript code is launched, invoking the Universal Inbox business service, and using the parameters specified in the eScript and the Inbox type to create an Inbox item.

```
function Script_Finish ()
{
 var szScriptSessionId;
 var szRequester;
 var svc;
 var indata;
 var outdata;
 var ssPage;
 var ssQuestion;
 var EmployeeLastName;
 var EmployeeFirstName;
 var RequestedChange;
 var PAFComments;
 var PAFPriority;
 var szSSLanguageCode;
 var szSSCurrencyCode;

 ssPage = GetPage("PAF Which Change");
 ssQuestion = ssPage.GetQuestion("Display Employee Last Name");

 EmployeeLastName = ssQuestion.GetCurrentValue();
 ssQuestion = ssPage.GetQuestion("Display Employee First Name");
 EmployeeFirstName = ssQuestion.GetCurrentValue();
 ssQuestion = ssPage.GetQuestion("PAF Change Requested");
 RequestedChange = ssQuestion.GetCurrentValue();
 ssQuestion = ssPage.GetQuestion("PAF Comments");
 PAFComments = ssQuestion.GetCurrentValue();
 ssQuestion = ssPage.GetQuestion("PAF Priority");
 PAFPriority = ssQuestion.GetCurrentValue();

 // Cancel saving everything to the database
 Cancel ();
```

```
 indata =TheApplication ().NewPropertySet ();
 outdata = TheApplication ().NewPropertySet ();

 // Get the login name of the user
 szRequester = TheApplication ().LoginName ();
 // Get SmartScript Save Session table ID.
 szScriptSessionId = GetSessionId ();

 szSSLanguageCode = GetParameter("Language");
 szSSCurrencyCode = GetParameter("Currency");

 indata.SetProperty ("SmartScriptLanguageCode", szSSLanguageCode);

 // ItemObjectId, ItemType, ItemSubmittedBy, and ItemDescription are the
 // required input arguments for the "Universal Inbox.Initialize"
 indata.SetProperty ("ItemObjectId", szScriptSessionId);
 // Item Type is the Approvals Inbox type defined in the
 // Approvals Inbox Administration screen
 indata.SetProperty ("ItemType", "Personnel Action Form");
 // Short Description of the inbox item
 indata.SetProperty ("ItemDescription", RequestedChange + " PAF" + " for " +
 EmployeeFirstName + " " + EmployeeLastName);
 indata.SetProperty ("ItemSubmittedBy", szRequester);

 // ItemQueueDuration, ItemPriority, and ItemComments are the
 // optional input arguments for the "Universal Inbox.Initialize"
 indata.SetProperty ("ItemQueueDuration", "129600");
 indata.SetProperty ("ItemPriority", PAFPriority);
 indata.SetProperty ("ItemComments", PAFComments);
 svc = TheApplication ().GetService ("Universal Inbox");
 svc.InvokeMethod("Initialize", indata, outdata);
}
```

Inbox Trigger Using Server Script

This topic includes a sample Server Script that calls Inbox methods.

This code is entered in the PreWriteRecord statement for the Project business component in Siebel Tools. The purpose of this code is to take data from the project record and some required arguments to invoke the Universal Inbox business service under the Initialize method. When the user changes the value of the Status field to For Approval, this eScript code is launched, invoking the Universal Inbox business service and using the parameters specified in the eScript and the Inbox type to create an Inbox item.

```
function BusComp_PreWriteRecord ()
{
 var FldProjectStatus = this.GetFieldValue("Status");
 if (FldProjectStatus == "For Approval")
 {
 var szScriptSessionId;
 var szRequester;
 var svc;
 var indata;
 var outdata;

 indata =TheApplication ().NewPropertySet ();
 outdata = TheApplication ().NewPropertySet ();

 // Get the login name of the user
 szRequester = TheApplication ().LoginName ();

 // ItemObjectId, ItemType, ItemSubmittedBy, and ItemDescription are the
```

```
 // required input arguments for the "Universal Inbox.Initialize"
 var FldProjectNum = this.GetFieldValue("Project Num");
 indata.SetProperty ("ItemObjectId", FldProjectNum);
 // Item Type is the Approvals Inbox type defined in the
 // Approvals Inbox Administration screen
 indata.SetProperty ("ItemType", "ChangeManagement");
 // Short Description of the inbox item
 indata.SetProperty ("ItemDescription", FldProjectNum);
 indata.SetProperty ("ItemSubmittedBy", szRequester);

 // ItemQueueDuration, ItemPriority, and ItemComments are the
 // optional input arguments for the "Universal Inbox.Initialize"
 indata.SetProperty ("ItemQueueDuration", "129600");
 indata.SetProperty ("ItemPriority", "High");
 indata.SetProperty ("ItemComments", "Change Management Project");
 svc = TheApplication ().GetService ("Universal Inbox");
 svc.InvokeMethod("Initialize", indata, outdata);
 }
 return (ContinueOperation);
}
```

14 Activities

Activities

This chapter contains information about activities. It includes the following topics:

- *About Activities*
- *Creating Activities (End User)*
- *Working with Others' Activities (End User)*
- *Delegating an Activity (End User)*
- *Viewing Activities Associated with Another Record Type (End User)*
- *About Configuring Owner and Employee Fields for Activities*

About Activities

You use activities to organize, track, and resolve a variety of tasks, from finding and pursuing opportunities to closing service requests. If a task requires multiple steps that one or more people might complete, then activities simplify the job. Activities can help:

- Define and assign the task.
- Provide information to complete the task.
- Track the progress of the task.
- Track costs and bill for the task.

The major advantages of breaking down a task into one or more activities include:

- The ownership of the problem can remain at the management level, when required.
- The employee looking at assigned activities can identify only the required information.
- Reporting is simplified.
- Activities can be assigned to more than one person.

Activities are used to represent tasks in many situations such as scheduling and recording meetings, appointments, and interactions with customers and prospects. If one task leads to follow-up tasks, then you can associate follow-up activity records with a parent activity record.

Activities can be viewed in several different locations, including the following:

- **My To Do List in the Activities screen.** This list shows all the user's activities, regardless of status. Access this list by navigating to the Activities screen and choosing My To Do List from the visibility filter.
- **My To Do's in the Calendar screen.** This list displays a subset of the data that appears in the My To Do List in the Activities screen, activities that have not been completed. For general information about using the Calendar screen, see *Siebel Fundamentals* .

Assignment Methods

Activities are assigned to employees. Activity assignment can occur in the following ways:

- Manual assignment.
- Automatic assignment to the creator of the activity (by populating the Owner field with the user ID of the activity's creator).
- Automatic assignment using Assignment Manager. For more information, see *Siebel Assignment Manager Administration Guide* .

Business Objects Associated with Activities

Siebel activity objects can be associated with other Siebel business objects. The following table show some common associations. In most cases, this association is with a set of activities defined by an activity plan and individual (or stand-alone) activities. In a few cases, an object is associated either with an activity template or with stand-alone activities (not both).

Screen Name	Business Object	Stand-Alone Activities	Activities from Templates
Accounts	Account	Yes	Yes
Agreements	Service Agreement	Yes	Yes
Assets	Asset Management	Yes	No
Campaigns	Campaign	Yes	No
Contacts	Contact	Yes	Yes
Messages	Messaging	Yes	No
Opportunities	Opportunity	Yes	Yes
Orders (Order Line Items view)	Order Entry	Yes	Yes
Preventive Maintenance	FS PM Plan Item	No	Yes
Programs	Program (DBM)	No	Yes
Projects	Project	Yes	Yes
Quality	Product Defect	Yes	No

Screen Name	Business Object	Stand-Alone Activities	Activities from Templates
Repairs	FS Repair	Yes	Yes
References	Reference	Yes	No
Service	Service Request	Yes	Yes

Creating Activities (End User)

Using activities, you can assess the investment in time and resources to maintain and grow account relationships. Sales managers also have a record of the activities of their sales representatives as they manage account relationships. Sales teams can use activities to avoid duplicating efforts across the team, and to share information about pending and completed activities.

Activities that are assigned specific dates and times appear on both the Activities and the Calendar screens. For more information, see *Siebel Fundamentals* .

Note: The My To Do filter allows you to view each activity that has been designated as a To Do item using the Display In field. Select My To Do List from the visibility filter to access this feature. You can further refine the To Do List by using the predefined queries that appear in the Queries drop-down list. For example, if you select the Uncompleted Activities query, then the To Do items that do not have a status of Done appear. You can also view uncompleted To Do items in the To Do list that appears on the calendar screen. This list, by default, shows only To Do items that are not yet complete.

To create an activity

1. Navigate to the Activities screen, then the Activity List view.
2. In the Activity List, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Description
New	Displays a star when ownership is changed from the activity creator to another user. This field is automatically cleared when the new owner views activity details by drilling down on the Type field.
Description	Type text for additional information about the activity.
Type	Select the activity type. Default values include Call, Correspondence, and Email.

Field	Description
Account	Select the account associated with the activity.
Due	Select the date and time by which the activity must be completed.
Status	Select a status for the activity. Default values include Acknowledged, Cancelled, Declined, Scheduled, and Completed.
Priority	Select a priority value for the activity. Default values include 1-ASAP, 2-High, 3-Medium, and 4-Low.
Comments	Type text for activity notes and information to share with the team.
Start	Select the date and time for the activity creation.
Duration	Select a value for the duration of the activity. Default values are in minute segments, for example 5, 10, 15, and 20.
End	Select the proposed date and time for the activity completion.
Private	Select the check box to indicate the activity is visible only to the users listed in the Employees field and the application administrator.
Opportunity	Select an opportunity for the activity.
Owner	Select the primary employee associated with the activity. The default value is the user ID for the creator of the activity. The new Owner value that you select replaces the primary employee that appears in the Employee field. Conversely, if you add a new primary to the Employee field, then this new primary appears in the Owner field.
Employees	Select the user ID of the activity creator. You can select multiple employees for an activity, but only one employee can be designated as primary.
Display In	Select a location value that determines where an activity appears. The field has the following values: o Calendar and Activities o To Do and Activities o Activities Only

Field	Description
	○ Communication and Activities For example, if you want an activity to appear in your calendar, then you must set the Display In field to Calendar and Activities, and make sure that the activity has a start time. If you set the Type field to To Do, then the Display In field automatically changes to To Do and Activities. On the home page, To Do activities appear in the My Activities list and do not appear in the My Calendar list. If you select Communication and Activities and the Email - Inbound type, then the activity appears in the Comm Inbound Item List Applet in the Inbound Item List view of the Communications screen.
Billable	Select the check box to indicate the activity is a revenue-generating event.
Alarm	Select the check box to set the activity reminder. A reminder dialog box appears when the activity is due. You can either set an alarm for an individual activity, or you can set a default alarm for all your activities. For more information, see *Siebel Fundamentals* .
Repeat Until	Repeat the activity until the value specified in this field. Select the date and time for the last interval of the final meeting in the series.
Repeat Frequency	Select a value for the interval at which the activity repeats. Default values include daily, weekly, monthly, and yearly.
Created	Displays the date and time the activity was created.
Created By	Displays the user ID of the user who created the activity.

3. Drill down on the Type field of the record, and navigate to the More Info view to complete more fields.

   Some fields are described in the following table.

Field	Comments
Activity #	Displays the account number associated with the selected account.
Global Owner	Select the employee who is responsible for the activity.
Meeting Location	Type the location information to share with the sales team. Examples of meeting locations are Conference Room B and Main Campus Facility.

Field	Comments
Cost Estimate	Type the monetary value associated with the activity.
Price List	Select the price list that is associated with a billable activity.
Rate List	Select the rate list associated with a billable activity.
Project	Select the project for the activity.
Category	Select a value to specify a category for the activity. Service related activities are often created by one individual (such as a call center agent) and completed by another individual (such as a service repair representative). Consequently, when a service related category value is selected (such as Diagnostic, Field Engineer Activity, Preventative Maintenance or Other), the owner of the activity is deleted so that the activity is unassigned. The user can then reassign the activity by adding a new value to the owner field. If you are using Siebel Assignment Manager, then the activity is automatically reassigned.
Audience	Select a value to specify the audience that can view the activity. Examples of values are employees, partners, and customers.

Working with Others' Activities (End User)

The following procedure describes how to work with another user's activity records, if that user has granted you permission to do so. For information about how to grant permission for another user to work with your activity records, see information about granting access to your calendar in *Siebel Fundamentals* .

To work with another user's activity records

1. Navigate to the Activities screen, then the Others' Activities List view.
2. In the drop-down list in the header, select the user whose activities you want to work with, and click Go.

   If you have add-and-modify access to the records, then the icon to create activities is available, and you can work with these records as your own. If you have not been granted permission to make changes, then this icon is inactive.

Delegating an Activity (End User)

If you work as part of a sales team or you are a sales manager, then you might manage the activities of other people. You can delegate an activity to another member of the sales team, an employee, or a partner.

To delegate an activity

1. Navigate to the Activities screen, then the Activity List view.
2. Select the activity that you want to delegate.
3. In the Owner field, select the individual to whom to assign the activity.

Reassigning or Removing Ownership of an Activity Using Employee Field

Complete the following procedure to reassign or remove ownership of an activity using the Employee field.

To reassign or remove ownership of an activity using the Employee field

1. Navigate to the Activities screen, then the Activity List view.
2. Select the activity that you want to reassign.
3. In the Employees field, add or remove employees as required, and designate one of the employees as the primary employee.

Assigning an Activity Using Assignment Manager

Complete the following procedure to assign an activity using Assignment Manager.

To assign an activity using Assignment Manager

1. Navigate to the Activities screen, then the Activity List view.
2. Select the activity that you want to reassign.
3. In the form, click the cogwheel icon, and select Assign.
4. In the Employees dialog box, select an employee to assign the activity to.

> **Note:** If the delegator uses Siebel Assignment Manager to reassign an activity, then the delegator is automatically removed from the employee list.

Viewing Activities Associated with Another Record Type (End User)

For example, users researching service requests can review the activities related to the selected service request in the Service Request Detail view. This view lists the completed and scheduled activities for the service request.

The procedure in this topic uses the Service Request screen as an example, but many other screens also have activity views.

To view activities for a service request

1. Navigate to the Service Requests screen, then the Service Request List view.
2. Drill down on the SR # (number) field of a service request record.
3. Navigate to the Activities view.

   The Activities list represents every scheduled task for the selected service request and the service request history.
4. (Optional) Create a new activity, and complete the necessary fields.
5. To see more information about an activity, drill down on the Type field of the activity record.

About Configuring Owner and Employee Fields for Activities

Depending on your business process, you might want to configure the Siebel application so that the Employees and Owner fields for activities are always empty when the activity is created. (The Owner field displays the primary from the Employee field.) Use Siebel Tools to set the predefault value of the Primary Owned By field (which maps to the Owner field that appears in the UI) in the Action business component to blank.

15 Activity Plans and Sales Methods

Activity Plans and Sales Methods

This chapter contains information about activity plans, activity templates, sales methods, and sales stages. It includes the following topics:

- *About Activity Templates and Activity Plans*
- *About Sales Methods*
- *About Activity Assignment*
- *Scenario for Managing Activity Plans*
- *Process of Administering and Using Activity Plans*
- *Defining a Sales Methodology*
- *Creating an Activity Template*
- *Creating TAS Customer Milestone Templates in a Localized Application*
- *Deleting an Activity Template*
- *Setting a Default Sales Methodology (End User)*
- *Using an Activity Plan (End User)*

About Activity Templates and Activity Plans

Activity templates are created by an administrator and are blueprints for sets of activities. Activity templates can be invoked by users to create activity plans. For information about creating activity templates for field service activities, see *Siebel Field Service Guide* .

You can select an appropriate activity template for the goal you want to achieve, which generates a list of activities associated with the activity template. This generated list of activities is an *activity plan*. An activity plan saves you from creating a new list of activities for each sales call, corporate visit, and special event. Typically, activity plans incorporate a company's best practices. Using activity plans, you can locate, assign, schedule, and track the progress of related activities.

For example, the following list of activities can serve as an activity template for a corporate visit with clients for product demonstrations:

- Book a conference room.
- Set an agenda.
- Confirm the date and time with the customer.
- Make arrangements for presenters.

This set of tasks, when defined as a template and applied to create the activity plan, helps sales team members follow the steps your company recommends to prepare for a corporate visit. The list drives critical tasks and defines the recommended lead time for each activity within the template.

Each activity template is associated (through its Type value) with a certain business object. See *Business Objects Associated with Activities* for a list of business object and screens that use activity templates. In activity plans views, only activity templates that have been associated with the active business object can be invoked. For example, on the Opportunity screen, only templates for opportunity activities are visible. Selecting a template creates all the activities defined by that template.

About Sales Methods

A sales method is an approach used in the sales process. The administrator sets up sales methods and sales stages that represent the organization's sales process. A method can encompass every stage associated with the sales process, from prospecting to forecasting to closing deals. You can set up as many methods and sales stages as your organization needs. Sales representatives can then use the method most appropriate for their opportunities.

Sales methods can differ even within one organization. For example, a sales method for dealing with complex multimillion dollar opportunities might include as many as fifteen stages, while a sales method of a low dollar opportunity might require only four.

Sales methods and stages are associated with only activity templates and assessment templates of type Opportunity.

About Activity Assignment

Activities created using activity templates can be automatically assigned to:

- The employee who is specified in the template.
- The employee who uses activity templates to create the activity. (This assignment is usual in a sales situation.)
- No employee. (This assignment is recommended when Assignment Manager is used to assign the activity.)

The following table shows how the values in the Employee and Category fields of the activity record in the Activity Template Details list determine the assignment.

If the Employee Is...	and the Category Is...	Then the Activity Is...
NOT NULL	Any value (NULL or NOT NULL)	Assigned to the employee who is specified in the Employee field of the template.
NULL	Field Engineer Activity Repair Activity, Preventive Maintenance, or Other	Not assigned. The Employee and Owner fields are blank in the created activity.
NULL	Not Field Engineer Activity, Repair Activity, Preventive Maintenance, or Other	Assigned to the employee who creates the activity (by applying the activity template).

Activities created directly in the Activities screen are similarly affected by the Category value. If the Category value is changed to Field Engineer Activity, Repair Activity, Preventive Maintenance, or Other, then the values of Owner and Category fields are deleted and set to NULL when the record is saved.

Scenario for Managing Activity Plans

This topic gives one example of how activity plan management might be used. You might use activity plan management differently, depending on your business model.

A sales organization has adopted a new sales methodology to improve the effectiveness of its salespeople. The business analyst has provided the administrator with a detailed document describing the sales method, the stages of the method, and the activities that each salesperson performs at each stage of the deal. The outline of the document looks as follows:

```
Our New Sales Method
> Stage 1, Prospecting, the lead discovery phase. (Status = Open)
> Stage 2, Qualification of the lead and working up the deal. (Status = Open)
> Stage 3, Closing the deal and entering the order. (Status = Won)
 > Activity 1, Prepare the quote within 2 days
 > Activity 2, Email the quote to manager for approval within 3 days
 > Activity 3, Create the contract within 1 week
> Stage 4, Lost deal. (Status = Lost)
```

The administrator creates a new sales method record (New Sales Method) and four associated sales stage records (Prospecting, Qualification, Closing, and Lost).

Next, she creates four new activity templates, one template for each stage. The activity template describes the activities and milestones that the salespeople perform at that stage.

Because the salespeople enter their own opportunity records, the administrator sets up the activity template details so that the salesperson who enters the opportunity is automatically assigned ownership of the activities.

Salespeople set their user preferences to specify that their default sales methodology is the New Sales Method, so that this methodology is automatically populated when they create their opportunities.

When salespeople enter their opportunity records and specify a sales stage, the activity template for that stage automatically generates and assigns the activities appropriate for the stage. Because lead times were set up in the activity template details, the due dates for the activities are automatically calculated using the date for the opportunity sales stage.

Process of Administering and Using Activity Plans

To administer and use activity plans and sales methods, complete the following tasks:

- *Defining a Sales Methodology*
- *Creating an Activity Template*
- *Creating TAS Customer Milestone Templates in a Localized Application*
- *Deleting an Activity Template*
- *Setting a Default Sales Methodology (End User)*
- *Using an Activity Plan (End User)*

Defining a Sales Methodology

Creating a sales methodology includes the following parts:

- Creating the sales method record
- Creating a sales stage record for each stage in the methodology

> **Note:** Sales methods and stages are associated with activity templates and assessment templates of type Opportunity. If you are not intending to create a template of this type, then you do not have to define a sales methodology.

You use the Sales Methods view of the Administration - Data screen to define sales methods and to create and associate sales stages with each of those methods.

This task is a step in *Process of Administering and Using Activity Plans*.

To create a sales method and associated sales stages

1. Navigate to the Administration - Data screen, then the Sales Methods view.
2. In the Sales Methods list, create a new record, and complete the necessary fields.
3. In the Sales Stages list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Phase	Select the value that best matches the stage you are currently adding. For example, the Prospecting stage best matches the lead discovery phase. This value is used for rolling up many different stages into phases. Phases simplify management and reporting of the sales cycle. The choices in this drop-down list are configured by using the SALES_STAGE_PHASE_TYPE type in the List of Values. For more information, see *Working with Lists of Values*. The default choices are: o A - Lead Discovery o B - Working the Deal o C - Closing o D - Lost Deal
Status	Select a status value. The choices in this drop-down list are configured by using the SALES_STAGE_STATUS type in the List of Values. The default choices are Open, Won, and Lost. For more information, see *Working with Lists of Values*.

Field	Comments
Quota Factor	Type the amount by which a sales representative's quota is multiplied for that sales stage. As you move deals from one stage to another stage, some deals fall out of the pipeline. To eventually close $1,000,000 in revenues, you might need $10,000,000 worth of stage 01 deals, or $5,000,000 worth of stage 04 deals, or $1,500,000 of stage 08 deals. Your quota factors in this case are 10 for stage 01, 5 for stage 04, and 1.5 for stage 08. In your Siebel application, a sales representative's quota is the sum total of the revenue quota objectives on all of the representative's active quota plans. The default value is 1.
Order	Type a number for the sales stage's position in the list of values in the Opportunities screen.
Win Probability	Type a number for the probability or likelihood (out of 100) that, after successfully completing this stage, the deal is eventually won. In theory, the later the stage, the higher the win probability is, because each stage brings the salesperson closer to winning the deal.
Duration	Type the number of days in a particular stage required for an average deal under average circumstances.
Stalled Deal Limit	Type the number of days that an opportunity can be in a particular sales stage. If the opportunity exceeds this limit, then you can consider the deal to be stalled. There is no effect on the sales stage or any other aspect of the opportunity.

Before the Sales Method and Sales Stage can be used, the cache might need refreshing. For more information, see *Clearing the Cache*.

Creating an Activity Template

You use the Activity Templates view of the Administration - Data screen to create activity templates. For information about creating service activity templates using the Service Details view, see *Siebel Field Service Guide* .

This task is a step in *Process of Administering and Using Activity Plans*.

To create an activity template without grandchild records

1. Navigate to the Administration - Data screen, then the Activity Templates view.

2. In the Activity Templates list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Sales Stage	If you are creating a template of type Opportunity, then select the sales stage with which you want to associate the activity template. When the sales stage is selected, the Sales Method field is automatically populated. When this sales stage (and sales method) are specified for an opportunity and Auto Trigger is selected, the activity template is used to automatically populate the Activity Plan view for that opportunity. For information about creating sales stages and methods, see *Defining a Sales Methodology*.
Type	Select a value that specifies where you want the template to be available. For example, select Account if you want to use this template to create activity plans for accounts, or Milestone for TAS customer milestones. The choices in this drop-down list are configured by using the TEMPLATE_OBJECT_TYPE type in the List of Values. For more information, see *Working with Lists of Values*.
Sales Method	Displays a value when the sales stage is selected.
Public	Ignore this field. There is no logic associated with it. You might choose to use it in conjunction with workflows and search specifications.
Auto Trigger	If you are creating a template of type Opportunity, then select the check box to have the activity plan automatically generated for opportunities with this sales stage.

3. Navigate to the Activity Template Details view.
4. In the Activity Templates Details list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Type	Select a value for the type of activity template. The choices in this drop-down list are configured by using the TODO_TYPE type in the List of Values. For more information, see *Working with Lists of Values*.
Duration	Select the time needed to complete the activity. This field determines the end time for the activity.
Lead Time	Type the lead time for the activity.

Field	Comments
Lead Units	Select the units of time to measure the lead time of the activity.
Employees	Select the user names of the people who are to perform the activity. For more information, see *About Activity Assignment*.
Alarm	Select the check box to indicate an alarm sounds when it is time for the activity.
Category	Select the category for the activity. For more information, see *About Activity Assignment*.
Lock Assignment	Select the check box to indicate the Employees field is locked so that assignment cannot be changed by Assignment Manager. (Assignment can still be manually changed, for example, by the administrator.)
Required	Select the check box to indicate that the activity must be completed. This field is for information only; there is no associated code.
Display In	Select a value to display the activity in the Calendar screen, the Activity screen, or in both screens.
Breakable	Select the check box to indicate breaks are permitted during the activity. This field is an input parameter to Siebel Scheduler. For more information, see *Siebel Field Service Guide* .
Lock Schedule	Select the check box to lock the schedule for the activity. This field is used for service activity templates. For more information, see *Siebel Field Service Guide* .
Work Time	Type the work time for the activity. This field is used for service activity templates. For more information, see *Siebel Field Service Guide* .

5. Create a new activity template detail record for each activity associated with the activity template.

Creating TAS Customer Milestone Templates in a Localized Application

The sample Target Account Selling (TAS) Customer Milestone activity template is available only in English. If you are running a localized version of the Siebel Sales application (a version in a language other than English), and are using the

Target Account Selling module, then you must create an activity template of type Milestone, as outlined in the following procedure.

This task is a step in *Process of Administering and Using Activity Plans*.

To translate a TAS Customer Milestone template for a localized application

1. Navigate to the Application - Data screen, then the Activity Templates view.
2. In the Activity Templates list, query for records of type Milestone where Milestone is the translation of the English word in the localization language.

   > **Note:** For the translation, see the Interface Terminology Look-up manual for your language, or, in the List of Values, look for the Display Value that corresponds to the Language-Independent Code for Milestone. For more information about List of Values, see *Working with Lists of Values*.

   The query finds the following six records:
   - 1-Request Offering(s)
   - 2-Evaluate Offering(s)
   - 3-Approve / Select
   - 4-Legal / Purchasing
   - 5-Implement
   - 6-Measure
3. For each of the six templates, complete the following steps:
   a. Navigate to the Activity Templates Detail view.
   b. Make sure that for each detail record, the Type is Recommended Activity where Recommended Activity is the translation of the English phrase in the localized language. (See note in Step 2.)
   c. (Optional) Translate the Description of each detail record into the localized language.
4. Add a milestone, and make sure that the six Activity Templates appear in the Event field drop-down list.

   For more information, see *Adding Customer Milestones*.

Deleting an Activity Template

You can delete an activity template.

> **Note:** If you delete an activity template, then the activities associated with activity plans that reference the template are not deleted. However, the reference to the activity template from the activity is deleted.

This task is a step in *Process of Administering and Using Activity Plans*.

To delete an activity template

1. Navigate to the Administration - Data screen, then the Activity Templates view.
2. In the Activity Templates list, select and delete the activity template record.

Setting a Default Sales Methodology (End User)

Users can set a default sales methodology in their preferences so that each time they create a new opportunity, their default sales methodology is populated for the opportunity record.

This task is a step in *Process of Administering and Using Activity Plans*.

To set a default sales methodology

1. From the application-level menu, select Tools, then User Preferences.
2. Navigate to the Price List & Sales Methodology view.
3. In the Sales Methodology field, select the methodology that you want to have as the default.

Using an Activity Plan (End User)

An activity plan defines the activities needed to implement a project or goal, or to resolve issues that frequently occur. For example, if a service-oriented activity plan is associated with a service request, then the plan might include a standard set of activities required to resolve the SR.

Activity plans use activity templates that establish the list of activities to be completed. Activity templates, created by administrators, can have various levels of details pertinent to each member of a team, such as requisitioning parts and tools, steps involved in the service activities, or special directions or instructions.

After an agent selects an activity plan, the steps are in place to help diagnose and resolve the customer's issues, and the agent can move to the next customer call. Either Assignment Manager or an administrator can assign the activities to the appropriate users.

This task is a step in *Process of Administering and Using Activity Plans*.

To create activities associated with an activity plan

1. Navigate to the Service Requests screen, then the Service Request List view.
2. In the Service Request list, select the service request, and drill down on the SR # (number) field.
3. Navigate to the Activity Plans view.
4. In the Activity Plans list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Planned Start	Select the start date and time for activities related to the service request.
Template	Select the appropriate activity template for the service request.

5. Save the activity plan.

   Activities associated with the plan automatically appear in the Activities view.

16 Assessments

Assessments

This chapter contains information about assessments. It includes the following topics:

- *About Assessment Templates*
- *Scenario for Using and Administering Assessments*
- *Process of Administering and Using Assessments*
- *Creating an Assessment Template*
- *Performing an Assessment (End User)*
- *Assessing an Opportunity for Target Account Selling (End User)*

About Assessment Templates

An assessment template is a model used to generate an assessment. Assessment templates can be created to assess opportunities, contacts, and accounts, as well as other areas of your application.

Assessments ask questions (in the form of attributes) and score the answers to determine a single total score or percentage, which measures or ranks an opportunity, a contact, an account, and so on.

Assessments are made up of one or more attributes. Each attribute has a name, a weight, a set of allowable values and a description field. For example, a common attribute for an account might be Credit History. The values for this attribute might include Excellent, Good, Average, and Poor. Each of these values carries a numerical score and, optionally, instructions for the user on how to select the correct value.

Typically, the administrator creates assessment templates, and users apply the templates and complete the assessments.

Scenario for Using and Administering Assessments

This topic gives one example of how assessments might be used. You might use assessments differently, depending on your business model.

A sales organization has adopted a new sales methodology to improve the effectiveness of its salespeople. The business analyst has provided the administrator with a detailed document describing the sales method.

Because the salespeople have too many opportunities to deal with at once, they prioritize their opportunities. To help them prioritize, the business analyst has created a standardized assessment document that he recommends all salespeople use to rank their opportunities. The outline of assessment document looks as follows:

```
Assessing a Lead at the Qualification Stage
> Attribute 1: Adaptability to New Technology, weight = 5
```

```
# Attribute 2: Number of potential users, weight = 7
 0 to 50, score = 0, Too small
 51 to 100, score = 1, Route to telesales
 101 to 500, score = 2, Route to middle market
 more than 500, score = 6, Pursue aggressively
# Attribute 3: Sponsor's stance, weight = 10
 Adversarial, score = -5, Strongly against us
 Weak, score = 0, Neutral or slight favor another vendor
 Moderate, score = 5, Willing to recommend our product
 Strong, score = 10, Believes we are the best choice
> Attribute 4: Lead's purchase profile and history, weight = 5
```

The administrator uses the information in this document to create an assessment template associated with the qualification stage. When a salesperson reaches the qualification stage of the deal, the Assessments view for that opportunity is automatically populated with the questions that need answers to assess and prioritize the opportunity.

Process of Administering and Using Assessments

To administer and use assessments, complete the following tasks:

- *Creating an Assessment Template*
- *Performing an Assessment (End User)*
- *Assessing an Opportunity for Target Account Selling (End User)*

Creating an Assessment Template

You use the Sales Assessment Templates view of the Administration - Data screen to create assessment templates.

This task is a step in *Process of Administering and Using Assessments*.

To create an assessment template

1. Navigate to the Administration - Data screen, then the Sales Assessment Templates view.
2. In the Assessment Templates list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Assessment	Type the name of the template.
Type	Select a value that specifies where you want the template to be available. For example, select Contact if you want to use this template to create an assessment plan for contacts. The choices in this drop-down list are configured by using the TEMPLATE_OBJECT_TYPE type in the List of Values. For more information, see *Working with Lists of Values*.

Field	Comments
Sales Stages	If you are creating a template of type Opportunity, then select sales stages with which you want to associate the assessment template. When one of these sales stages (and matching sales method) is specified for an opportunity, the assessment template is used to automatically populate the Assessments view for that opportunity.
Sales Method	Displays a value when a sales stage is selected.
Active	Select the check box to display the template name in the list of values for the Template Name field of the template type. For example, if the Type field is Contact, then select this check box to display the template name in the list of values for the Template Name field in the Assessments view of the Contacts screen.

3. In the Assessment Attributes list, create a new record for each attribute you want to assess.

   Some fields are described in the following table.

Field	Comments
Order	Type a number for the attribute's position in the Assessment Attributes list.
Name	Type the name of the attribute.
Weight	Type a number for the relative importance of the attribute.
Max Child	Displays the maximum score from the Attribute Values list.
Weight Times Score	Displays the product of the Weight and the Max Child values.

4. For each assessment attribute, create a record for each possible value of the attribute in the Attribute Values list.

   Some fields are described in the following table.

Field	Comments
Order	Type a number for the value's position in the Attribute Values list.
Value	Type the name of the value, for example, Excellent, Good, or Average.

Field	Comments
Score	Type the number of points that the value represents.
Description	Type additional information about the value to help the assessor.

These values appear in the Pick Attribute Value dialog box when the user applies the template. For information about using an assessment template, see *Assessing an Opportunity*.

How Assessment Scores Are Calculated

The total score for the assessment is determined by summing weighted scores for each assessment attribute as shown in the following equation:

$$\text{Total_Score} = \sum_{i=1}^{n} (\text{Weight}_i)(\text{Score}_i)$$

where: n is the number of assessment attributes in the template.

The score is also calculated as a percentage of the maximum score possible as shown in the following equation:

$$\text{Max_Total_Score} = \sum_{i=1}^{n} (\text{Weight}_i)(\text{Max_Score}_i)$$

where: Max_Scorei is the largest score for any value in the Attribute Values list for the ith attribute. This value is the Max Child value shown in the Assessment Attributes applet. For example, the largest score for Attribute 2 is 6 and the largest score for Attribute 3 is 10 in the assessment example in the *Scenario for Using and Administering Assessments*.

Performing an Assessment (End User)

You can perform assessments of accounts, contacts, and opportunities.

You can use account assessments to compare accounts, to compare accounts with a model, or to determine the information that is present or not present for an account. You complete the assessment by selecting the appropriate values for the different accounts.

The following procedure shows how to assess an opportunity, but the procedure is essentially the same for any screen where assessments can be performed.

An opportunity assessment helps you qualify opportunities and verify resource allocation. Using an assessment template, you can select values and attributes to assign a composite value to the opportunity.

> **Note:** In some companies, your Siebel application automatically generates assessments, but if this process has not been automated, then you can manually create assessments.

This task is a step in *Process of Administering and Using Assessments*.

To perform an assessment

1. Navigate to the appropriate Assessments view.

   For example, to assess an opportunity, navigate to the Opportunities screen, then the Opportunities List. Drill down on the Opportunity Name field for the opportunity that you want to assess, and navigate to the Assessments view.
2. In the Assessments list, create a new record, and complete the necessary fields.

   Alternatively, select a record from the list of assessments.
3. For each attribute in the Assessment Attributes list, select the appropriate value for the attribute from the drop-down list in the Value field.

   A composite assessment value for the item appears as a percentage value in the Percent field in the Assessments view. This percentage compares the value you entered with the maximum possible value for the item.

Assessing an Opportunity for Target Account Selling (End User)

Sales professionals can use the Assessments view to evaluate the opportunity using criteria developed by Siebel MultiChannel Services. Assessments must be completed before determining the best strategy. An assessment focuses on the following four key questions:

1. Is there an opportunity?
2. Can we compete?
3. Can we win?
4. Is it worth winning?

Sales professionals assess their organization's position and the position of their top competitors against these criteria. As the sales campaign progresses, sales professionals repeat this assessment and then compare the results to past assessments to evaluate and monitor their position at each sales stage. Use the Assessments form to rate the criteria.

This task is a step in *Process of Administering and Using Assessments*.

To begin an assessment

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field for the opportunity that you want to assess.
3. Navigate to the Target Account Selling view, then the Assessments view.

   The Assessments list includes all the assessments you and your sales team have performed to date. Use the Assessments list to compare opportunity assessments for your company and your competitors.
4. In the Assessments list, create a new record.

   In the new record, the Assessment For field defaults to Our Company for self assessments.
5. If you are assessing a competitor's position, then enter the competitor in the Assessment For field.
6. In the Assessments form, complete the assessment criteria questions.

17 Calendar

Calendar

This chapter describes the resource and calendar access tasks performed by the administrator. It includes the following topics:

- *About Calendar Resources*
- *About Calendar Access*
- *Scenarios for Administering Calendars*
- *Process of Administering the Calendar*
- *Setting Up Resources*
- *Adding and Modifying Calendar Access*
- *Deleting Calendar Access*
- *Configuring the Calendar Alarm*
- *Configuring the Calendar*

About Calendar Resources

Resources are typically items such as conference rooms and audiovisual equipment that are reserved and used by employees for meetings and other calendar activities. Resources have availability associated with them and can be invited as participants to calendar activities, in much the same way as employees and contacts are invited to calendar activities. The administrator is responsible for setting up and maintaining the list of resources. For more information about adding participants to activities, see *Siebel Fundamentals* .

About Calendar Access

Normally employees grant each other access to their calendars. However, there are various situations when the administrator might have to add, modify, or delete calendar access for employees. For information about granting access to calendars, see *Siebel Fundamentals* .

Scenarios for Administering Calendars

This topic describes how calendar administration might be used. You might use calendar administration differently, depending on your business model. This topic includes the following scenarios:

- *Administering Resources*

- *Administering Calendar Access*

Administering Resources

This topic includes the following scenarios requiring resource administration:

- Before the Siebel application is rolled out to users, the administrator creates resource records. He creates resource records for all the conference rooms for the various floors and buildings of the company's sites. He also creates resource records for the audio-visual equipment that employees might want to reserve for use at their meetings. For more information, see *Setting Up Resources*.
- After the Siebel application is rolled out, the company grows and more sites and conferences rooms are added. Old audio-visual equipment is discarded and new equipment is purchased. The administrator continues to maintain the list of resources, keeping it up-to-date. For more information, see *Setting Up Resources*.

Administering Calendar Access

This topic includes the following scenarios requiring calendar access administration:

- Employee A is out of the office unexpectedly. Employee B must view Employee A's calendar so that she can cancel his appointments. Employee B asks the administrator to give her access to Employee A's calendar. For more information, see *Adding and Modifying Calendar Access*.
- An executive has been granted access to many of his colleagues' calendars. When the executive moves to a new division, he no longer must access the calendars of these employees. He asks the administrator to clear the list by removing his name from all employees' Calendar Access List views. (Alternatively, the executive can contact all the employees whose calendars are on his Owner drop-down list and asked each of them to remove his name from their calendar access lists.) For more information, see *Deleting Calendar Access*.
- When an employee leaves the company, the administrator removes the employee's name from the Owner lists of other employees. For more information, see *Deleting Calendar Access*.

Process of Administering the Calendar

To administer the calendar, complete the following tasks:

1. *Setting Up Resources*
2. *Adding and Modifying Calendar Access*
3. *Deleting Calendar Access*

Setting up resources is completed before the users begin to set up meetings. Other tasks are completed according to the company's business needs.

Setting Up Resources

The following procedure describes how to administer resources for calendar activities.

This task is a step in *Process of Administering the Calendar*.

To administer resources for calendar activities

1. Navigate to the Administration - User screen, then the Resources view.
2. In the Resources list, create a new record, and complete the necessary fields.

   > **Tip:** If the Description and Site fields are not sufficient to identify the resource, then other fields can be added to the Resources list applet. For example, your company might want to add Building Number and Floor fields to help users find and identify resources. For information about creating fields and making fields visible, see *Configuring Siebel Business Applications* .

3. Edit and delete resource records as required.

Adding and Modifying Calendar Access

You can use the following Calendar Administration views to modify calendar access:

- Access Received lists all the calendars that the selected employee can access.
- Access Granted lists all the employees who can access the selected employee's calendar.

This task is a step in *Process of Administering the Calendar*.

To give Employee B access to Employee A's calendar

1. Navigate to the Administration - User screen, Employees, Calendar Administration, and then Access Granted.
2. In the Employees list, select the employee (Employee A).
3. In the Calendar Administration list, create a new record or select an existing record, and complete the fields in the following table.

Field	Comments
Last Name	Select the name of the Employee B who wants to access Employee A's calendar.
Update Access	Select the check box to indicate Employee B has read and write access to Employee A's calendar. Clear the check box to indicate Employee B has read-only access to Employee A's calendar.

Viewing All Calendars to Which an Employee Has Access

Complete the following procedure to view all the calendars to which an employee has access.

To view all the calendars to which an employee has access

1. Navigate to the Administration - User screen, Employees, Calendar Administration, and then Access Received view.
2. In the Employees list, select the employee.

The Calendar Administration list shows calendars to which the employee has access.

> **Note:** Records can be added, modified, and deleted from this view.

Deleting Calendar Access

For a selected employee, the administrator can delete all employees from the Access Granted or the Access Received list.

This task is a step in *Process of Administering the Calendar*.

To remove all employees from an employee's Owner drop-down list in Calendar view

1. Navigate to the Administration - User screen, Employees, Calendar Administration, and then Access Received view.
2. In the Employees list, select the employee.

   Make sure that you select the employee whose Owner drop-down list you want to clear.
3. Click the cogwheel icon in the Access Received list, and select Delete All.

   This command deletes all records in the list. The employee selected in the Employees list no longer has access to any calendars other than the employee's own.

   > **Note:** Alternatively, you can use the Delete Record command to remove just one selected employee from the employee's calendar owner drop-down list.

Removing an Employee From All Employees' Calendar Access List Views

Complete the following procedure to remove an employee from all employees' Calendar Access List views.

To remove an employee from all employees' Calendar Access List views

1. Navigate to the Administration - User screen, Employees, Calendar Administration, and then Access Granted.
2. In the Employees list, select the employee.

   Make sure that you select the employee that you want to remove from all employees' calendar access lists.
3. Click the cogwheel icon in the Access Granted list, and select Delete All.

   This command deletes all records in the list. The calendar of the employee selected in the Employees list can no longer be accessed by any other employees.

   > **Note:** Alternatively, you can use the Delete Record command to delete the employee from one selected employee's calendar access list.

Configuring the Calendar Alarm

To administer Calendar alarms, review the following topics:

- *Setting Alarm Manager Load Frequency*
- *Setting Retroactive Alarms*

Setting Alarm Manager Load Frequency

The Alarm Manager Load Frequency system preference determines how frequently the calendar alarm queries the server for alarm-enabled appointments. The default value is 60 minutes, but you might want to change this time to better suit your business needs. Querying the server less frequently results in fewer SQL calls. However, each SQL call takes longer to run. In certain cases, this trade-off results in improved performance. (Also, if the alarm frequency is less than the session time-out set in the Siebel Application Interface profile, then sessions never time out.) For information about how to edit system preferences, see *Setting System Preferences*.

Setting Retroactive Alarms

Retroactive alarms are alarms for past events that did appear before the event because the user was not logged in. By default, the Siebel application is set to display up to 14 days of past retroactive alarms for missed events. You can change the number of days for retroactive-alarm display by editing the RetroAlarmInterval user property of the Alarm Manager business service.

Configuring the Calendar

Some aspects of the Calendar feature that configurators or administrators can configure include:

- *Displaying Start and End Times for Calendar*
- *Displaying Fields, Colors, Drilldowns, and ToolTips*
- *Disabling Text Wrapping*
- *Specifying Day Summary ToolTip*
- *Showing and Hiding User Interface Components*
- *Changing User Interface Strings*
- *Changing Date Display Format*
- *Changing the First Day of the Week*
- *Overriding User Preferences*
- *Enabling and Disabling Calendar Editing*
- *Using Special Date Markers*
- *Specifying Extra Business Components*
- *Move Records from Other Applets into the Calendar*

- *Changing Controls in the Calendar Detail View*
- *Showing or Hiding Side Applets on the Life Sciences Calendar*

Displaying Start and End Times for Calendar

Two fields determine the start and end times that appear in the calendar applet. These two fields are specified by applet user properties. The following table shows these two fields.

Applet User Property	Description
Start Date	The name of the field that indicates the start date and time that appear in the calendar applet.
End Date	The name of the field that indicates the end date and time that appear in the calendar applet.

Displaying Fields, Colors, Drilldowns, and ToolTips

Review the following topics:

- *Displaying Fields for Calendar Records*
- *Displaying Field Color*
- *Displaying Field Drilldown*
- *Displaying Field ToolTip Text*

Displaying Fields for Calendar Records

You can configure one or more fields as display fields for calendar records. Field configuration is controlled by the Display Fields applet user property. The value of this user property is a list of comma-delimited business component fields that you want to appear for each record in the calendar. For the Activity Calendar, the default value is Description, which is the description of the activity that appears in the calendar.

Tip: If you want to display contents of multiple fields, then you can either configure multiple display fields, or create a calculated field that concatenates other fields, and set the concatenated field name as the value of the Display Fields user property. For example, multiple display fields are used for the calendar applet (CS CG Activity HI Calendar Applet) used by the Consumer Sector application.

Displaying Field Color

You can configure each display field to appear in a specified color and change the color dynamically. Use the Display Field Colors applet user property to configure the colors of the display fields. For information about this user property, see *User Properties for Calendar Fields, Colors, Drilldowns, and ToolTips*.

For example, the eEvents Event Calendar Applet has a value of Name for the Display Fields user property and a value of Event Type Color for the Display Field Colors user property. In the eEvents Event business component, Event Type Color has the following calculated field value:

```
IIF ([Event Type Color1] IS NOT NULL,[Event Type Color1],[Event Type Color2])
```

- Event Type Color1 has the following calculated field value:

```
IIF ([Event Type LIC] = "Seminar","#3366CC",IIF ([Event Type LIC] = "Restricted",
"#FF6633",IIF ([Event Type LIC] = "Fundraiser","#339933",IIF ([Event Type
LIC]="Trade Show","#9900CC",IIF ([Event Type LIC]="Benefit","#7AB8F6","")))))
```

- Event Type Color2 has the following calculated field value:

```
IIF ([Event Type LIC] = "Auction","#B2E5B2",IIF ([Event Type LIC] = "Conference",
"#CC66FF",IIF ([Event Type LIC] = "Cultural","#FF0066",IIF ([Event Type
LIC]="Presentation","#9999FF",IIF ([Event Type
LIC]="Recreation","#FF6633","#CC9933")))))
```

You can create different types of events (for example, conference events and cultural events) in the Events view of the Events screen, and then navigate to the Calendar view of the Events screen to see the events in the appropriate colors in the eEvents Event Calendar Applet.

Displaying Field Drilldown

You can specify a drilldown object for each Display Field through the Display Field Drilldown Object Names applet user property. The value of the user property is a comma-delimited list of drilldown objects defined for the applet.

Displaying Field ToolTip Text

When you position the mouse pointer over a display field in a calendar record, ToolTip text appears. The ToolTip content is configurable through the Display Field Name.Tooltip Fields applet user property, where Display Field Name is the name of the display field.

The user property value is a list of comma-delimited business component fields. The values of these business component fields appear as the ToolTip in the display field. By default, the name of the business component field is used as the label in the ToolTip text.

Make the label for a ToolTip field translatable by creating a control in the applet with the name Tooltip Field Label:Field Name. The caption of the control is used as the label for the ToolTip field. For example, for the business component Quote, field Name, the ToolTip label for the field is defined as a control of name ToolTip Field Label:Quote.Name, and the caption of the control is the label for this field.

Disabling Text Wrapping

Set the NoWrapDesc user property to Y to disable text wrapping in the activity description field of a calendar. Applets in which you can set this property include:

- Activity HI Calendar Applet
- Activity HI Outlook Calendar Applet
- LS Pharma Activity HI Calendar Applet

Specifying Day Summary ToolTip

For a day on the Weekly and Monthly Calendar, you can specify the format of the ToolTip that displays all the records for the day.

Day Summary ToolTip User Properties

The following table shows the applet user property for the Day Summary ToolTip.

Applet User Property	Description
`["Buscomp Name".]Day Summary Tooltip Template`	A template for the day summary ToolTip. ToolTip appears when you position the mouse pointer over the tile header (7 day weekly or monthly) or the day slot (5 day weekly).
`Action.Day Summary Tooltip Template`	[Planned] – [Planned Completion] [Type]: [Description] This is rendered as follows: 12:00PM – 1:00PM Appointment: Test eBiz 1:00PM – 2:00PM Training: Take course 2:00PM – 4:00PM Appointment: Design review

User Properties for Calendar Fields, Colors, Drilldowns, and ToolTips

The following table shows the Calendar user properties for the Calendar fields, colors, drilldowns, and ToolTips.

Applet User Property	Description
Display Fields	A list of comma-delimited business component fields that you want to appear for each record in the calendar. For the Activity Calendar, the default value is Description, which is the description of the activity that appears in the calendar.
Display Field Colors	Comma-delimited color strings or field names in the format of #RRGGBB. If the value is a color string, and the format is #RRGGBB, then it is interpreted as a color string. If the format is not #RRGGBB, then it is interpreted as a field name.
Display Field Drilldown Object Names	Comma-delimited drilldown object names. For example, the Quote. Display Field Drilldown Object Name Applet User Property Name can drilldown to the Quote Detail - Id, Quote Detail - Name User Property Value.
Display Field Drilldown Source Fields	Comma-delimited business component field names.
[“Display Field Name".]Tooltip Fields	A list of comma-delimited field names. Replace ["Display Field Name".] with the actual display field name. ToolTip appears when you position the mouse pointer over the record’s display field. For example, the Description.Tooltip Fields user property has the value of Type, Description, Planned, Planned Completion.

Applet User Property	Description
	The following is an example of the ToolTip that might appear: Type: Appointment Description: Test Start: 2/2/2004 12:30PM End: 2/2/2004 13:00PM

Showing and Hiding User Interface Components

The following table shows how to set user properties to show or hide the UI components. The HI Calendar Base Applet contains the default values for user properties for calendars. These user properties can be overwritten by the current applet.

Property	Description
Enable Daily	Set the Daily button to N to hide the button, and set to Y to show the button.
Enable Weekly	Set the Weekly button to N to hide the button, and set to Y to show the button.
Enable Monthly	Set the Monthly button to N to hide the button, and set to Y to show the button.
Enable New Button	Set the New button to N to hide the button, and set to Y to show the button.
Enable Today Button	Set the Today button to N to hide the button, and set to Y to show the button.
Enable Print Button	Set the Print button to N to hide the button, and set to Y to show the button.
Enable Date Picker	Set the Date Picker button to N to hide the button, and set to Y to show the button.
Enable Owner Picker	Set the Owner Picker button to N to hide the button, and set to Y to show the button.
Enable Timezone Picker	Set the Timezone Picker button to N to hide the button, and set to Y to show the button.

Changing User Interface Strings

By changing the user interface strings, which come from Siebel Tools configurations, you can change the user interface controls. This topic applies only to the HI Calendar Base Applet, and not to calendar applets that you configure to display records from extra business components. For more information, see *Specifying Extra Business Components*.

The HI Calendar Base Applet contains the basic UI strings for calendars and the repeating pop-up dialog. These UI controls can be overwritten by the current applet. The following table shows the applet controls.

Control Name	Caption
Daily Tab	Daily
Weekly Tab	Weekly
Monthly Tab	Monthly
New Button	New
Today Button	Today
Print Button	Print
Delete Button	Delete
5 Day Week Button	5 Day Week
7 Day Week Button	7 Day Week
New Account Call Button	New Account Call
New Contact Call Button	New Contact Call
New Meeting Button	New Meeting
Owner Label	Owner
Timezone Label	Time Zone
Private Label	(private)
No Description Label	(no description)
All Employee View Label	All Employees
Time Slot Label Tooltip	Click to create a new record
Tile Header Day Label Tooltip	Click to navigate to this day

Control Name	Caption
Tooltip Field Label:Description	Description
Tooltip Field Label:Meeting Location	Meeting Location
Tooltip Field Label:Comment	Comment:
Tooltip Field Label:Planned	Planned
Tooltip Field Label:Planned Completion	Planned Completion
Tooltip Field Label:Type	Type
Repeating Dialog Title	Edit Repeating Activities
Repeating Dialog Label 1	This appointment is part of a repeating series
Repeating Dialog Label 2	Please choose one of the following:
Repeating Dialog This Instance	Modify this instance
Repeating Dialog All Future Instances	Modify this and all future instances
Repeating Dialog OK Button	OK
Repeating Dialog Cancel Button	Cancel

Changing Date Display Format

The following table shows the LOVs used to change the display format for the days of the week, the days of the month, the print header for different views, and the 5 Day Weekly header.

To change...	Use...
Labels for the days of the week.	LOV type IDS_SSA_LOVTYPE_DAY_NAME with names from Monday to Sunday.
Labels for the months.	LOV type IDS_SSA_LOVTYPE_MONTH_NAME with names from January to December.
Formats of the print header for different views.	LOV type CAL_PRINTHEADER_FORMAT with the following names: Daily, Weekly, Monthly, WeeklyFromTo.

To change...	Use...
Format of other date displays.	LOV type CAL_DATEDISPLAY_FORMAT with the following names: • Daily. Controls the format of the date string that appears on the button row in the Daily calendar. • Weekly. Controls the format of the date string that appears on the button row in the Weekly calendar. • Monthly. Controls the format of the date string that appears on the button row in the Monthly calendar. • WeeklyFromTo. Controls the from and to format for the Weekly calendar. • HI - 5 Day Weekly Header. Controls the date format in 5 day weekly calendar header.

Changing the First Day of the Week

Use the First Day of Week applet user property to change the first day of the week. The following table shows the values for the First Day of the Week applet user property.

Use this value...	For....
0	Sunday
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday

Overriding User Preferences

You can use the applet user property to override all the user interface user preferences, which are used for calendars. The following table shows the applet user property.

User Property Name	Description
Default Calendar Mode	Language independent calendar mode (Daily, Weekly, or Monthly).

User Property Name	Description
Preferred Weekly Mode	Weekly mode (5 Day Weekly for a 5 day week, or 7 Day Weekly for a 7 day week).
Preferred Timeslot Interval	Timeslot interval in slot views.
Preferred Business Day Start Time	Start time of a business day.
Preferred Business Day End Time	End time of a business day.
Preferred Appointment Duration	Appointment duration when creating new appointments.

Enabling and Disabling Calendar Editing

The following list shows the consequences if the No Insert property or the No Update property is selected, or if the Calendar is based on multiple business components.

- If the No Insert property of the calendar applet is checked, then the icon to create new activities is disabled, and inline record creation is disabled. Inline record editing is allowed.
- If the No Update property of the calendar applet is checked, then inline editing is disabled. Inline record creation is still allowed.
- If the Calendar is based on multiple business components, then the icon to create new activities is disabled, inline record creation is disabled, and inline record editing is disabled. For details, see *Specifying Extra Business Components*.

Using Special Date Markers

You can use markers that can appear in 7-Day Weekly and Monthly calendars to mark certain days as special days. These markers are configured through the applet user property. The following table shows the user properties.

User Property Name	Description
Special Date Buscomp Name	The name of the business component to get special date info from.
Special Date Buscomp Start Date Field	The start date field.
Special Date Buscomp End Date Field	The end date field.
Special Date Buscomp Marker Field	A field that is used to generate the special date marker. By default, it is a piece of HTML that is inserted into an **<A>** element and put in the header of the day tile.

User Property Name	Description
Special Date Marker ToolTip	A comma-delimited list of field names.

Specifying Extra Business Components

You can configure a calendar applet to display records from multiple business components by specifying additional source business components using the Extra Source Buscomp Names applet user property. The following table describes this applet user property. For each extra source business component, you can specify properties such as its Start Date Field using the `[Buscomp Name].` notation. For example, to display both activities and quotes in a single calendar, you can configure the applet using the Action business component and then specify Quote as the extra source business component. Use the Quote.Start Date Field user property to specify the Start Date Field for Quote business component.

Applet User Property	Description
Extra Source Buscomp Names	The extra business components. You can specify user properties for each extra source business component using the `[Buscomp Name].` notation. For example, to specify the Start Date Field for Quote business component, you use `Quote.Start Date Field` user property. For each extra source business component, Start Date Field user property is required. There are two user properties that are specifically for extra source business components. • Visibility Mode • Search Specification For example, to specify the visibility mode and search specification for Quote business component, you use `Quote.Visibility Mode` and `Quote.Search Specification` user properties.

Move Records from Other Applets into the Calendar

A list applet in the Calendar view can be configured so that one or more records can be relocated from the list applet onto the calendar applet.

Relocation Action Behavior

The behavior of the relocation action is configurable. The following table shows an example of this behavior.

In the...	Relocate...
Pharma application	A record from the Activities list to the daily calendar applet updates the Planned Start date for the activity according to where it is dropped on the calendar.

In the...	Relocate...
Consumer Sector application	Records from the Activities list to the calendar applet creates a new record of type In Store Visit for the account, and associates appropriate activity records to the new In Store Visit record. If multiple records are relocated, then the account for the new record is based on the account of the last record in the relocated group.

Relocation User Properties

The following table shows the user properties set on the list applet that determine the relocation behavior.

Applet User Property	Description
Enable Drag And Drop	Set this user property to Y or N. The default is N.
Calendar Default Action	Set this user property to: • NewRecord to create a new calendar activity record when a record is relocated from the list applet to the calendar applet. (This behavior is also the default behavior, unless the Calendar Drag Method user property is set.) • UpdateTime to change the time field in the source record according where the record is dropped in the calendar applet. (No new record is created.) This behavior is seen in the Pharma application.
Calendar UpdateTime Field	If Calendar Default Action is UpdateTime, then set this user property to the time field in the source applet that you want to have updated by the relocation action. For example, in the Pharma application (Pharma Calendar Activity List Applet), this user property is set to Planned.
Calendar Drag Field, Calendar Drag Field1, Calendar Drag Field2, Calendar Drag Field3 ... Calendar Drag Field n	If Calendar Default Action is NewRecord, then set these user properties to copy data from the source record to the new calendar activity (target) record. The format for these user properties follows: Source_field_name,Target_field_name For example, to copy content from a field named Summary in the source record to the Description field in the calendar activity record, the Calendar Drag Field is Summary,Description.
Calendar Drag Associate	If Calendar Default Action is NewRecord, then set this user property to Y if you want to have the source records associated with the new (target) record. The relocated records become child records of the new calendar activity record.
Calendar Drag Child Associate Field	If Calendar Drag Associate is Y, then set this user property to the name of the field in the source records that is to associate them with the new calendar activity record. The field specified gets populated with the row ID of the new calendar activity record.
Calendar Drag Method	If the default calendar action does not meet your needs, then set this user property to your own method name to control the relocation action. If this user property is set, then the preceding user properties are ignored. For example, in the Consumer Sector application, this user property is set to the Drag And Drop Handler method.

Applet User Property	Description
Calendar Drag BusComp	If a method is supplied in the Calendar Drag Method user property, then set this user property to the name of the business component on which you want to invoke the method. If this user property is not specified, then the method is invoked on the current business component. For example, in the Consumer Sector application, this user property is set to the In Store Visit business component.
Calendar Drag BusObj	If a business component is supplied in the Calendar Drag BusComp user property, then set this user property to the name of the business object to use when retrieving the Calendar Drag BusComp business component. If this user property is not specified, then the current business object is used. However, it is better to specify a value for this business object, even if it is the same as the current business object. This setting makes sure that instantiating the Calendar Drag BusComp business component does not affect other business components within the current view. For example, in the Consumer Sector application, this user property is set to the In Store Visit business object.

Changing Controls in the Calendar Detail View

The Calendar Detail view (accessed by creating a new record in the daily, weekly, or monthly calendar views) has three buttons that are managed by the specialized class CSSSWEFrameGanttCalOUI in the GanttChart OUI Applet (the scheduling control applet). The following table shows the button name and the pop-up applet invoked by the button.

Button Name	Popup Applet Invoked
Add Employee	HI Gantt Chart Employee Pick Applet
Add Resource	HI Gantt Chart Resource Pick Applet
Add Contact	HI Gantt Chart Contact Pick Applet

Showing or Hiding Side Applets on the Life Sciences Calendar

The calendar pages for the Siebel Life Sciences application have list applets alongside the calendar applet. The Suppress Side Applets Calendar Types user property on the LS Pharma Activity HI Calendar Applet determines whether or not the side list applet appears. For example, you can choose to have the side list applet appear with the daily and weekly calendars but not with the monthly calendar.

To hide or show the side list applet on the LS Pharma HI Activity Calendar View

- For the LS Pharma Activity HI Calendar Applet, edit the Suppress Side Applets Calendar Types applet user property to include the calendars for which you want to hide the list applet.

  For example, set the value to Daily, Weekly5, Weekly7, Monthly to hide the side list applet on all the calendars.

18 State Models

State Models

This chapter is about how state models work and how to set up state models. It includes the following topics:

- *About State Models*
- *Scenario for Managing State Models*
- *Process of Setting Up State Models*
- *Configuring Business Components for State Models*
- *Creating State Models and State Transitions*
- *Activating State Models*
- *Configuring All Operations for Child Records*
- *About Criteria for State Transitions*

About State Models

State model functionality allows administrators to control the value of a field in a record by setting up for that field the allowed state values and the allowed transitions between those state values. For example, administrators can limit the Status field for a service request record to the following state values: Open, Closed, and Pending. Furthermore, administrators can limit the allowed transitions between those state values to the following transitions: Open to Pending, Open to Closed, and Pending to Closed.

For Siebel workflows, state models provide a data-driven method for extending control using state values for fields in records. For general information about Siebel workflows, see *Siebel Business Process Framework: Workflow Guide* .

The state model functionality consists of the following key elements:

- **State Model.** The state model is a blueprint of allowed state values and allowed transitions between those state values.
- **State Machine.** The state machine enforces the transitions between state values. The state value can designate the status of a record. The state value for a field in a record can also determine if the other field values in that record can be modified. For example, a record with a Status field value of Closed might be read-only, and the other field values in the record cannot be modified. The state machine reviews all criteria that administrators define for the transition of a state value before allowing that transition.
- **State Transitions.** State transitions define the allowed changes from one value to another value for a field in a record. For example, a record with a Status field value of Closed must be reopened. The Status field can transition from the Closed value to an Open value and from the Open value to a Pending value, but cannot transition directly from the Closed value to a Pending value.

  Administrators can set up criteria for state transitions. For example, they can specify that only certain users can initiate state transitions or that all users can initiate state transitions only if certain criteria are met.

Scenario for Managing State Models

This topic gives one example of how state model management might be used. You might use state model management differently, depending on your business model.

A company wants to configure its Siebel application to track suggestions from customers and employees about product enhancements. To implement this configuration, a developer creates a new Enhancements business component and a supporting Product Enhancements screen with views.

The administrator must set up a state model for this new business component. She uses Siebel Tools to check that the Enhancements business component is based on the CSSBCBase class. She discovers that the configurator already enabled the state model user property for this business component.

In the Siebel application, she creates a state model for the Status field (an LOV field) of the Enhancement business component. This state model contains the following allowed state values:

- **New.** She designates this state value as the default state value. When an enhancement idea is first received, the state value for the Status field of the record is always New.
- **Assigned.** She sets up this state value.
- **Accepted.** When she sets up this state value, she selects the check box for the No Delete field and the No Update field so that an accepted enhancement record is read-only and cannot be deleted or modified.
- **Rejected.** When she sets up this state value, she selects the check box for the No Delete field and the No Update field so that a rejected enhancement record is read-only and cannot be deleted or modified.

This state model contains the following allowed transitions between the state values:

- **From New to Assigned.** Managers assign enhancement suggestions to the most suitable employees for investigation. Therefore, she specifies that only managers can change the Status field value from New to Assigned.
- **From Assigned to Accepted.** Employees must write an assessment of each enhancement suggestion before accepting it. Therefore, she creates simple criteria indicating that users cannot change the Status field value for a record to Accepted if the Assessment field for the record is blank.
- **From Assigned to Rejected.** Employees must write an assessment of each enhancement suggestion before rejecting it. Therefore, she creates simple criteria indicating that users cannot change the Status field value for a record to Rejected if the Assessment field for the record is blank.

Finally, she activates the state model by restarting the server.

Process of Setting Up State Models

To set up state models, complete the following tasks:

1. *Configuring Business Components for State Models*

   This task is required only if the business component is not enabled for state models.
2. *Creating State Models and State Transitions*
3. *Activating State Models*

Configuring Business Components for State Models

Administrators can create state models for business components that meet the following criteria:

- The business components are state-model enabled in the preconfigured Siebel application.
- The business components are based directly on the CSSBCBase class and are enabled using the procedure in this topic.

  Oracle supports state model creation for business components that are based on the CSSBCBase class and its subclasses. Do not create or modify state models for the Enterprise Service Definitions, SRM Request, and SRM Repeating Request business components. These business components are used for server administration.

This task is a step in *Process of Setting Up State Models*.

Determining Whether Business Components Are Enabled for State Models

Complete the following procedure to determine whether a business component is enabled for state models.

To determine whether a business component is enabled for state models

1. Navigate to the Administration - Application screen, then the State Models view.
2. Create a new record, and click the select button in the Business Component field.
   - If the business component is listed in the Business Components dialog box, then the business component is enabled. You can create a state model for the business component. For more information, see *Creating State Models and State Transitions*.
   - If the business component is not listed in the Business Components dialog box, then the business component is not enabled. You can enable the business component. For more information, see the other procedure in this topic.
3. Delete or undo the new record.

Enabling Business Components for State Model Functionality

In Siebel Tools, administrators can enable a business component for state model functionality.

To enable a business component for state model functionality in Siebel Tools

1. Make sure that the business component is based on the CSSBCBase class.
2. Create a new business component user property with the following properties:
   - For the Name column, enter a value of State Model.
   - For the Value column, enter a value of Y.

Creating State Models and State Transitions

This topic describes how to create state models and state transitions for those models.

To create a state model for a field on a business component, the field must meet the following criteria:

- The field is an LOV (list of values) field or MLOV (multilingual list of values) field.
- The field has no dependencies on other fields.

For example, do not use a constrained LOV field or a calculated field.

This task is a step in *Process of Setting Up State Models*.

To create a new state model

1. Navigate to the Administration - Application screen, then the State Models view.
2. In the State Models list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Name	Type a name that uniquely identifies the state model.
Business Component	Select the business component for the state model. The dialog box for this field displays all of the business components that are enabled for state models. To enable additional business components, see *Configuring Business Components for State Models*.
Field	Select the name of the field for the state model. The dialog box for this field displays the fields that are defined for the business component.
Activation	Select the date on which the state model is enforced. **Note:** You can set up multiple state models for a field as long as the activation to expiration periods for each state model do not overlap.
Expiration	Select the date on which the state model is no longer enforced.

3. Navigate to the States view, in the States list create a new record for each state value for the field in the state model, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
State Name	Select the state value for the field in the state model.
Default	Select this check box to indicate that the State Name field is the default state value. The default state value specifies the value that is automatically populated in the state model field when a new record is created. **Note:** If the field in the state model is populated from Siebel Tools, then you cannot override this default in the state model.
No Delete	Select this check box to indicate that a record with a field in this state is read-only and cannot be deleted.
No Update	Select this check box to indicate that a record with a field in this state is read-only and cannot be modified. **Note:** If you select the No Delete and No Update fields for a state in the state model, then a record with MVG (multi-value group) fields that do not have a direct parent-child link between the parent field and the MVG applet is not read-only when the state for the record has the No Update or No Delete fields selected. To avoid confusion for users, you can remove MVG fields from the child applet.
Restrict Transition	Select this check box to indicate that only the transitions that you define for the state value are allowed. If you select this check box and do not define transitions, then the state value is an end state, and the state value cannot change to another state value. Clear this check box to indicate that the state value can transition to any other defined state value.

4. Navigate to the Transitions view, and complete the following steps:

   a. In the Transitions list, create a new record for each state transition that you want to restrict, and complete the necessary fields.

      Some fields are described in the following table.

Field	Comments
From State	Select a source state value in the state transition of the state model field.

Field	Comments
	Note: If you do not define a state transition for the State Name field that is the default value, then the field in the state model cannot change.
To State	Select a destination state value in the state transition of the state model field.
Public	Select this check box to indicate that all users are allowed to perform this state transition. If you select this check box, then the records in the Authorized Positions list are not in effect. For more information, see step b.
Rule Field	Select a field that controls the state transition. This field is frequently not the field in the state model, but another field in the business component for the state model.
Rule Operator	Select an operator for the field in the Rule Field.
Rule Value	Type the state value for the field in the Rule Field. The Rule Field, Rule Operator, and Rule Value fields allow you to specify simple criteria that must be met for the state transition to occur. For more information about creating simple criteria, see *About Criteria for State Transitions*.
Rule Expression	Type complex criteria that must be met for the state transition to occur. Users see an error message when they attempt to perform a state transition, and the transition does not satisfy the rule expression.

b. To restrict a state transition to a group of users (or positions), create records in the Authorized Positions list, and clear the check box in the Public field for the transition record.

Note: If the check box in the Public field is cleared, and if you do not create positions in the Authorized Positions list, then no users are allowed to perform the state transition.

Activating State Models

This topic provides information about activating state models.

How Are State Models Activated?

A new state model is not available to users until you start a new Siebel Application Object Manager server process. By restarting the server or the AOM server components, you start new AOM processes that obtain the new state model from the refreshed state model cache.

How Are State Models Activated for Mobile Users?

For mobile users who connect through Siebel Remote, the state model is available after a user synchronizes with the database server. State models are supported on regional nodes. For more information about support for regional nodes, see *Siebel Remote and Replication Manager Administration Guide* .

How Are State Models Enforced?

State models are enforced on the Siebel business logic level. Thus, state models are enforced for updates that you make through Siebel Visual Basic, Siebel eScript, and Workflow Processes. However, state models are not enforced for updates that do not go through Siebel Application Object Managers, such as updates that you make through Enterprise Integration Manager (EIM) or Workflow Policy programs.

How the AOM Reads State Model Objects

The AOM reads state model objects from the application data stored in the Siebel database.

> **Note:** If you distribute state models to other environments, then migrate the run-time database tables for the state model.

This task is a step in *Process of Setting Up State Models*.

To activate state models

1. Perform one of the following actions:
   - Restart the server.
   - Restart the AOM server components.
2. Clear the browser cache.

Configuring All Operations for Child Records

By default, users cannot delete child records when the No Delete field is selected for the state value of the parent record. Also, by default, users cannot add and modify child records when the No Update field is selected for the state value of the parent record.

Enabling All Operations for Child Records

To override the default behavior, administrators can complete the following procedure to enable all operations for child records.

To enable all operations for child records

- In Siebel Tools, set the Enable Child Modification user property for the State Model Cache business service to Y.

  Users can now delete child records, even when the No Delete field is selected for the state value of parent record. Also, users can now add and modify child records, even when the No Update field is selected for the state value of parent record.

Disabling All Operations for Specific Child Records

After they enable all operations for child records, administrators can complete the following procedure to disable all operations for specific child records.

To disable all operations for specific child records

- In Siebel Tools, set the State Model Enable Child Modification user property for the business component associated with specific child records to N.

  The default behavior applies to the child records associated with the business component.

Enabling All Operations for Specific Child Records

To override the default behavior, administrators can complete the following procedure to enable all operations for specific child records.

To enable all operations for specific child records

1. In Siebel Tools, make sure the Enable Child Modification user property for the State Model Cache business service is set to N (the default value).

   > **Note:** When you change this user property from Y to N, you disable all operations for child records for which you do not complete Step 2 of this procedure.

2. Set the State Model Enable Child Modification user property for the business component associated with specific child records to Y.

   Users can now delete child records associated with the business component, even when the No Delete field is selected for the state value of parent record. Also, users can now add and modify child records associated with the business component, even when the No Update field is selected for the state value of parent record.

About Criteria for State Transitions

Administrators can define the criteria that must be met for a state transition to occur. This topic includes an example of these criteria. The syntax for these criteria is the same as the syntax for calculated field values and for field validation in Siebel Tools. For more information about the syntax, see the information about operators, expressions, and conditions in *Siebel Developer's Reference* .

Example of Simple Criteria

Administrators can specify simple criteria in the Rule Field, Rule Operator, and Rule Value fields in the Transitions view in the State Model view of the Administration - Application screen.

For example, an administrator can create a state transition record to allow users to change the Status field of a service request from an Open value to a Closed value only when the value in the Sub-Status field of the service request is Resolved. The following table shows the values that the administrator enters in the fields of the state transition record.

Field	Value
From State	Open
To State	Closed
Rule Field	Sub-Status
Rule Operator	=
Rule Value	'Resolved'

19 Literature

Literature

This chapter is about administering and using literature in the Siebel application. It includes the following topics:

- *About Literature*
- *About Setting Up Literature Files*
- *Creating and Modifying Literature Files*
- *Creating Literature Records*
- *Creating Translation Records*
- *Creating Literature Item Kits*
- *About Making Literature Visible to Users*
- *Sharing Literature Through the Products Screen*
- *Sharing Literature Through the Competitors Screen*
- *Sharing Literature Through the Decision Issues Screen*
- *Sharing Literature Through the Correspondence Screen*
- *Sharing Literature Through Literature or Infocenter*

About Literature

Siebel Literature allows you to give your users access to sales and marketing literature, such as product brochures, technical reference papers, data sheets, and other types of literature items. Users view these documents using the application that created them, for example, Microsoft Word or Adobe Acrobat.

Literature items can also be grouped into literature kits. Literature kits can include items not normally thought of as literature, such as promotional hats, coffee mugs, or T-Shirts. These kits can then be made available for distribution through fulfillment centers. Literature kits are covered later in this chapter. For information about fulfillment, see *Siebel Correspondence, Proposals, and Presentations Guide* .

After you create literature records and associate documents with them, your employees can use literature in the following ways:

- Employees can use the Literature or Infocenter screen to search through all the literature that is available to them.
- You can associate literature with business objects such as products or decision issues. Then users can display the literature when they are looking at the record for the associated business object. For example, the user can navigate to the Product screen, select a product, and navigate to the Product Literature view to find all literature items associated with that product.
- When your employees use the Correspondence screen to create correspondence, they can include literature as enclosures. The user or fulfillment center can print this literature document, or it can use preprinted copies of literature such as glossy brochures. It can also enclose promotional items that are parts of literature kits.

- Employees can track literature associated with products, industries, accounts and competitors so that they appear on your Briefing pages.

About Setting Up Literature Files

To set up a literature file, you must do the following:

- Create the document in another program.
- Create a Literature record that includes the document in your Siebel application.

Note: You might want to create a literature record without associating a document with it. For example, if the record represents an item such as a hat or cup, which is part of a literature kit, then you probably do not associate a document with it.

Creating and Modifying Literature Files

Literature files can be created or saved using many kinds of software. The following file types are among the most common:

- Adobe Acrobat (PDF)
- Excel (XLS)
- Word (DOC)
- PowerPoint (PPT)
- Bitmap (BMP)
- JPEG (JPG)

To create a new literature file

1. Create a literature file in the appropriate software application.
2. Save the file on your hard drive.

Modifying an Existing Literature File

Complete the following procedure to modify an existing literature file.

To modify an existing literature file

1. Navigate to the Administration - Document screen, then the Literature view.
2. Select the literature file that you want to modify.

   Information about the file appears in the More Info form. You can use this form to change existing comments or characteristics; for example, Distribution Method.
3. Drill down on the File Name field for the literature file that you want to modify.

The actual literature file opens in the type of tool that was used to create it; for example, Word.

4. Modify the file, and save it locally.
5. Upload the modified file to the existing Literature record.

Creating Literature Records

After you have created a literature file, you must create a literature record in the Siebel database to make the file available to users.

To create a literature record

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, create a new record, and attach the literature file.

   The new file is added to the available literature. Appropriate information appears in the Literature list and the More Info form.
3. Enter the rest of the information required for the new record in the Literature list and the More Info form of the new record.

   Some fields are described in the following table.

Field	Comments
Name	Type a name for the literature record.
Description	Type a description of the document. Because literature items can be in any language, you might want to indicate the language of the item in this field (or in the Name field).
Literature Type	Select the type of the literature. You can create new literature types in the List of Values view of the Administration - Data screen. Because the Literature Type field is used to filter literature items in various applets (by setting the Search Specification property for the applet in Siebel Tools), be careful when editing the Literature Type field.
Size	Displays the size of the literature file. The size of the file that you select determines the information that appears. There is no restriction for file size except from your network and memory availability.
File Type	Displays the file type of the literature file, for example DOC or PDF. The type of the file that you select determines the information that appears.
Modified	Displays the date that the literature file was last modified.

Field	Comments
Update File	Select the check box to indicate that users' copies of the literature are automatically updated each time the original file is updated.
File Name	Select the document file. You can also manually enter the file name.
Synopsis	Type a synopsis of the document's content.
Release Date	Select the date when the document first appears in My Briefing.
Expiration Date	Select the date when the document no longer appears in My Briefing.
Author	Select the document's author.
Accounts	Select the accounts with which the literature is associated. The literature appears in the Account Briefing if the account is tracked by the user.
Competitors	Select the competitors with which the literature is associated. Use this field to allow the user to display the literature using the Competitors screen. If you also select the Internal field, then the literature appears in the Comparative Literature view of the Competitors screen. If you do not select the Internal field, then the literature appears in the Competitor's Literature view of the Competitors screen. The literature also appears in a Competitor Briefing if the competitor is tracked by the user.
Internal	Select the check box to indicate the document is internally sensitive and not intended for public distribution. o If Internal is selected, then the literature is not available as an enclosure in the Correspondence screen, and it appears in the Comparative Literature list of the Competitors screen. o If Internal is not selected, then the literature is available as an enclosure in the Correspondence screen, and it appears in the Competitive Literature list of the Competitors screen.
Local	Select the check box to indicate the document is available on the local file application for users of the Remote Client. If a document is not available locally, then the user can request it by selecting the Request field.
Request	Select the check box to indicate the literature is downloaded during each synchronization session for users of the Remote Client.

Field	Comments
Distribution Method	Select a value to specify whether or not the file is automatically downloaded to users of the Remote Client. o **Publish.** During each synchronization session, if your user does nothing, then the file is automatically downloaded. If your user explicitly skips the file, then the file is not downloaded in that synchronization session. o **By Request.** During synchronization, the user receives the record, but not the actual file. To receive the file, the user must select the Request field.
Industries	Select the industries associated with the literature. The literature appears in My Briefing if the user tracks the industry.
Products	Select the products associated with the literature. Use this field to allow the user to display the literature using the Products screen. The literature appears in My Briefing if the user tracks the product.
Organization	Select the organizations that have visibility to this data.
Web Display	Select a value to determine how to display the page if you are linking to a Web page. o **Frame.** Displays a link to the Web page. When the user clicks the link, the page appears in the current frame. o **Window.** Displays a link to the Web page. When the user clicks the link, the page appears in an expanded window. The user must use the Back button in the Web browser to return to Siebel ERM. o **New Window.** Displays a link to the Web page. When the user clicks the link, the page appears in a new browser window, allowing the user to switch between Siebel ERM and the Web page. o **In-Line.** Displays the entire Web page in the selected section of the portal page. Displaying Web pages in-line works best with simple Web pages. Large or complex pages, such as those that use JavaScript, can slow down the Siebel application and cause unexpected results. Be sure to test in-line pages before distributing them to users.

Creating Translation Records

Translated literature files can be created using any of the previously listed software tools. You can create a record in the Siebel application for any translated file associated with your document. For more information, see *Creating and Modifying Literature Files*.

To associate a translated document with a literature record

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, select an existing record.
3. Navigate to the Translations view.
4. In the Translation list, create a new record, and attach the translated document.

Make sure that the file name clearly indicates that this file is the translated file.

Creating Literature Item Kits

After you have created multiple literature files, you can combine individual files and other material to create literature item kits. This feature allows you to combine individual literature items into groups, so you can work with the group instead of with the individual files. Literature item kits are used only as enclosures in correspondence.

For example, you might have a set of literature items for prospective customers, including promotional brochures for your most popular products. You might also include items that are not documents. For example, a promotional kit for one of your products might include a brochure, a specifications sheet, a coffee cup, and a T-shirt.

Creating a literature item kit makes it easier to send this information out. When the user adds an attachment to correspondence, the user has to select only one literature item kit instead of all the individual items. Then the fulfillment center can mail all the items with the correspondence.

When you create a literature item kit, you create a Literature record that represents the entire kit, and you associate Literature Item records with it that represent the items in the kit. The fulfillment center can view the Literature record, but cannot view the Literature Item records. To let the fulfillment center know which items make up the kit, you can:

- **Pack kits together at the fulfillment center.** For example, you have a kit named Sales Promo that includes a brochure and a hat. The brochure and hat might be shrink wrapped together at the fulfillment center, or they might be stored in one bin at the fulfillment center, so the fulfillment center can select one of each item in the bin. Then, when the fulfillment center sees that it must fulfill the Sales Promo literature record, it mails the shrink-wrapped package or the items from this bin.
- **Make the Literature record a bill of materials.** You can include a document in the Literature record that describes all the Literature Items in the kit, or use the Literature records Description or Synopsis field to list all the Literature Items in the kit. For example, if the kit consists of a sales brochure and a hat, then you can create a Literature record that represents the entire kit, you can attach two Literature Item records to it that represent the brochure and the hat, and you might also use the description field of the Literature record to say the kit includes a brochure and a hat. Then the fulfillment center reads the description field and mails the items listed.

To create a literature item kit

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, create a new record or select an existing record.
   This record represents the literature item kit, so give it a name that indicates the kit contents.
3. Navigate to the Literature Items view.
   The fields that previously appeared in More Info are shown under the Literature list at the start of the view. The fields in the Literature Items list, in the middle of the view, display specific item information. The Component Items list appears at the end of the view.
4. In the Literature Items list, create a new record, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
Primary	Select the check box to indicate this item is the primary item in the kit.

Field	Comments
Physical Form	Type a description of the item's physical form. This field supports multiple values to allow for multiple physical forms. For a document, you might choose 8 1/2 x 11 and Microfiche.
# of Pages	Type the number of pages in the document, if applicable.
In Stock?	Select the check box to specify the item is in stock, if applicable.
Part #	Type the item's part number, if applicable.

5. In the Component Items list, create a new record, select the record to add in the Add Literature Component Items dialog box, and click Add.
6. In the Component Items list, create any other new records that are needed to create the kit.

About Making Literature Visible to Users

You can make literature visible to users in the following ways:

- **The Products Screen.** You can associate literature with a product, and the user can display it using the Products screen.
- **The Competitors Screen.** You can associate literature with a competitor, and the user can display it using the Competitors screen.
- **The Decision Issues Screen.** You can associate literature with a decision issue, and the user can display it using the Decision Issues screen.
- **The Correspondence Screen.** You can deselect the Internal field of a literature record and the user can select it as an enclosure in correspondence.
- **The Literature Screen or Infocenter.** You can make literature visible to users, so it is included in the list of literature that they see in the Literature or Infocenter screen.

Sharing Literature Through the Products Screen

Users who are salespeople find it useful to view literature about your products when they are viewing other information about the products. If you associate literature with a product, then users can view this literature when they view the product record in the Products screen.

To share literature through the Products screen

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, select a literature record or create a new literature record.

3. In the More Info form, select a product or part number in the Products field.

Sharing Literature Through the Competitors Screen

Salespeople find it useful to view their competitors' literature or to view literature that your company has prepared that compares your products with your competitors. If you associate literature with a competitor, then users can view this literature when they view the competitor record in the Competitors screen.

To share literature through the Competitors screen, you must associate it with a competitor. You must also decide whether to select the Internal flag, which determines whether it appears in the Comparative Literature List or the Competitive Literature list of the Competitors screen:

- If you select the Internal flag, then the literature appears in the Comparative Literature list, and it is not available as an enclosure in the Correspondence screen.
- If you do not select the Internal flag, then the literature appears in the Competitive Literature list, and it is available as an enclosure in the Correspondence screen.

Whether you select Internal depends on the type of literature:

- **Competitors' literature.** Your salespeople might want to use literature produced by competitors, such as sales brochures, to help them compare your products with the products of competitors. However, you do not want to distribute this literature outside your company. Select Internal, so the literature is not available in the Enclosures list of the Correspondence screen, but it appears in the Comparative Literature in the Competitors screen.
- **Comparative literature for internal use.** You might develop comparative literature internally, such as competitive intelligence, that is meant for use by your salespeople and that you do not want to distribute outside your company. Select Internal, so the literature is not available in the Enclosures list of the Correspondence screen, but it appears in Comparative Literature in the Competitors screen.
- **Comparative literature for external use.** You might develop comparative literature internally that is aimed at your customers, or you might have third party comparative reports that you want to distribute to your customers. Do not select Internal, so the literature is available in the Enclosures list of the Correspondence screen, and it also appears in Competitive Literature in the Competitors screen.

To share literature through the Competitors screen

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, select a literature record, or create a new literature record.
3. In the More Info form, select the competitors in the Competitors field.

   When users display this competitor record in the Competitors screen, they are able to see the literature in the Comparative Literature list if you select the Internal field in the More Info form or in the Competitive Literature list if you do not select this field.

Sharing Literature Through the Decision Issues Screen

Users who are salespeople find it useful to view literature about a decision issue when they are viewing other information about the decision issue. If you associate literature with a decision issue, then users can view this literature when they view the decision issue.

To share literature through the Decision Issues screen

1. Navigate to the Administration - Data screen, then the Decision Issues view.
2. In the Decision Issues list, select the decision issue to associate with the literature.
3. Navigate to the Literature view.
4. In the Literature list, create a new record, select the literature item to associate with the decision issue in the Add Literature dialog box, and click OK.

Sharing Literature Through the Correspondence Screen

Users might want to use literature as enclosures in correspondence. They might also use literature records that represent literature item kits as enclosures in correspondence.

Literature is available to users in the correspondence screen if the Internal field of the Literature record is not selected.

To share literature through the Correspondence screen

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, select a literature record, or create a new literature record.
   Make sure the Internal field of this record is not selected.
   When users create correspondence, they are able to add this literature as an enclosure.

Sharing Literature Through Literature or Infocenter

Your users can work with literature by displaying the Literature screen or Infocenter screen and searching the Literature list in that screen for the piece of literature they need.

You generally share literature with users by associating the user with access groups and associating literature with categories. But first you must create categories that include literature, create access groups that include users, and associate the categories with the access groups. For more information, see *Siebel Security Guide* .

After you have completed this preliminary work, you can assign literature to users as follows:

- When you produce new literature, associate it with the appropriate category and it is visible to all users in access groups associated with that category.
- When you hire new employees, associate them with the appropriate access group so that they have visibility to all the literature in categories associated with that category.

A business manager who administers literature can make it visible to users by associating it with the appropriate category in the Literature Administration screen. After it is assigned in this way, users in access groups associated with this category are able to display it in the Literature screen.

To associate literature with a category using the Literature Administration screen

1. Navigate to the Administration - Document screen, then the Literature view.

2. In the Literature list, select the record for the literature to associate with a category.
3. Navigate to the Category view.
4. In the Categories list, create a new record, select the category to associate with the literature item in the Add Category dialog box, and click OK.

Associating Literature With a Category Using Catalog Administration Screen

A business manager who administers literature can make it visible to users by associating it with the appropriate category in the Catalog Administration screen. After it is assigned in this way, users in access groups associated with this category are able to display it in the Literature screen.

To associate literature with a category using the Catalog Administration screen

1. Navigate to the Administration - Catalog screen, then the Catalog Administration view.
2. In the Catalogs list, drill down on the Name field of the catalog to associate with the literature.

   A Categories list appears.
3. Navigate to the Literature view.
4. In the Literature list, create a new record, select the literature item in the Add Literature dialog box, and click OK.

20 Global Target List Management

Global Target List Management

This chapter includes information about Global Target List Management. It includes the following topics:

- *About Global Target List Management*
- *Scenario for Managing Global Target Lists*
- *Process of Managing Global Target Lists*
- *Creating Target Lists by Querying (End User)*
- *Editing Target Lists (End User)*
- *Creating Target Lists By Combining Lists (End User)*
- *Applying Target Lists (End User)*
- *Creating Activities from Target Lists (End User)*
- *About Configuring Target Lists*

About Global Target List Management

This topic includes the following topics:

- *Global Target List Management Is for Siebel Industry Applications Only*
- *What Is Global Target List Management?*
- *What Kind of Lists Can Be Created?*
- *Where to Find More Information*

Global Target List Management Is for Siebel Industry Applications Only

The Global Target List Management applies only to Siebel Industry Applications, such as Siebel Life Sciences and Siebel Financial Services. Global Target List Management does not apply to Siebel Sales or Siebel Call Center.

What Is Global Target List Management?

Global Target List Management is used to create reusable lists of party entities (accounts, contacts, employees, positions, and prospects) from many different views in the Siebel application. These lists can be applied in various views and can be used to create activities.

Target lists differ from PDQs (saved queries) in that target lists are static; the saved list contains a specific set of records. The records returned by a PDQ can vary over time as edits are made to the Siebel database.

Global Target List Management builds on the general List Management features that are available for both Siebel Industry Applications and non-Siebel Industry Applications.

Tasks you can perform with Global Target List Management that you cannot perform with general List Management are:

- Create lists in many views (not just in the List Management view).
- Apply lists in many views.
- Create lists of accounts and positions.
- Generate activities for records in a list.

What Kind of Lists Can Be Created?

In the preconfigured Siebel application, you can create and apply target lists for contacts, accounts, positions, and employees.

However, the Siebel application can be configured for lists of prospects.

Where to Find More Information

You can find more information about the following functionality:

- General List Management functionality, including field descriptions and instructions for importing and exporting lists. For more information, see *Siebel Marketing User Guide* .
- Call List functionality, which is unique to Financial Services. For more information, see *Siebel Finance Guide* .
- Professional and account targeting, which is unique to Siebel Pharma. For more information, see *Siebel Life Sciences Guide* .

Scenario for Managing Global Target Lists

This topic gives one example of how global target list management might be used. You might use global target list management differently, depending on your business model.

An administrative assistant has been asked to send personalized birthday gifts to all of the company's top clients who have birthdays in the upcoming month, March. She uses Global Target List Management to help her create a set of activities, one activity for each gift she must purchase and send.

First, she notices that the company administrator has already prepared a list of the top clients. This top-client list is not a private list and so the list can be used by the administrative assistant.

Next, she queries for company contacts who have birthdays in March and saves these records to a private list, which she calls March-birthdays.

Then, she combines her March-birthdays list and the companies top-client list. The list resulting from this intersection contains the company's top clients who have birthdays in March.

The last step is to create an activity for each client in the final list. Each activity can be marked completed when the client's gift has been sent.

Process of Managing Global Target Lists

To manage global target lists, complete the following tasks:

- *Creating Target Lists by Querying (End User)*
- *Editing Target Lists (End User)*
- *Creating Target Lists By Combining Lists (End User)*
- *Applying Target Lists (End User)*
- *Creating Activities from Target Lists (End User)*

Creating Target Lists by Querying (End User)

The most usual way to create a target list is by querying and then saving to a target list some or all of the party records returned by the query.

The records that you save can be the records that are returned by the query. For example, if you query contacts, then you can save the contact records to a target list. The records that you save can also be the records that are associated with the records that are returned by the query. For example, if you query opportunities, then you can save the positions on the opportunities' sales teams to a target list. (You cannot save the opportunity records to a target list.)

This task is a step in *Process of Managing Global Target Lists*.

To create a target list by querying

1. Navigate to a screen where target lists are enabled.
2. Perform a query.
3. On the toolbar, click Save Target List.
4. Complete the necessary fields in the Save to List dialog box.

   Some fields are described in the following table.

Field	Comments
Based On	Select a value from the drop-down list. The choices available depend on the view. You can save the records themselves, for example contacts or accounts. Or, you can save the contacts or positions (team) associated with the records. If multiple contacts or positions can be associated with the records, then you can choose to save all or only the primary.
Private	Select the check box to indicate only you can view and apply this list. Clear the check box to indicate all users can view and apply this list.

Editing Target Lists (End User)

You can add and delete records from saved target lists.

This task is a step in *Process of Managing Global Target Lists*.

To edit a target list

1. Navigate to the List Management screen, then the Lists view.

   To navigate to this view, you can click Save and Edit in the Save to List dialog box described in Step 4 in the topic *Creating Target Lists by Querying (End User)*.
2. Drill down on the List Name field for a target list record.
3. Navigate to the appropriate view as described in the following table.

If the Target List Contains...	Then Use This View to Add or Delete from the List...
Accounts	Accounts
Team members	Positions
Contacts	All Contacts, My Contacts, or List Contacts and Prospects **Note:** The My Contacts view filters the list to show only your contacts.
Employees	Employees

Creating Target Lists By Combining Lists (End User)

You can create new lists by combining existing lists. Lists can be combined as unions or intersections.

This task is a step in *Process of Managing Global Target Lists*.

To create a target list by combining other lists

1. Navigate to the List Management screen, then the Lists view.
2. Select the lists you want to combine.
3. Click Create Union or Create Intersection.

Applying Target Lists (End User)

After you or an administrator create target lists, you can apply them. To apply a target list, you must be in a target list-enabled view.

When you apply a target list to a view, you do not add the records in the list to the view. Instead, you restrict the records that you can add to the view to only those records that exist in the target list.

This task is a step in *Process of Managing Global Target Lists*.

To apply a target list

1. Navigate to a screen where target lists are enabled.
2. On the toolbar, click Apply Target List.
3. In the Apply Target List dialog box, complete the following steps:
   a. Select one or more lists.
   b. Select the Respect Existing Query check box to preserve the current query.

      Records appear only if they are in both the list and the current query.
   c. Click OK, Union, or Intersection to apply the lists.

Creating Activities from Target Lists (End User)

From the List Management screen, you can create activities for each member in a list.

How fields for the activities are completed, including which fields are copied from the list member records, is determined by “activity templates”. These templates are set up by the Siebel administrator. In the preconfigured Siebel application, the “activity templates” can be applied only for lists of contacts. For more information, see *Setting Up Data Map Object “Activity Templates" for Target Lists*.

This task is a step in *Process of Managing Global Target Lists*.

To create an activity for each party in a list

1. Navigate to the List Management screen, then the Lists view.
2. Select a list record.
3. Click Create Activity.
4. In the Create Activity dialog box, select an “activity template”.

   “Activity templates” are described in the following table.

“Activity Template"	For each contact in the list, creates...
Customer Status Call	A high priority activity of type Call - Outbound.

"Activity Template"	For each contact in the list, creates...
Customer Status Email	A high priority activity of type Email - Outbound.
End Information Email	A medium priority activity of type Email - Outbound.
Targeted Call	An activity of type Targeted Call.

Note: These "activity templates" are data map objects created through the Data Transfer Utilities. They are not the same as the activity templates used to create activity plans.

About Configuring Target Lists

Some aspects of configuring Global Target List Management include:

- *Setting Up Data Map Object "Activity Templates" for Target Lists*
- *About Workflows for Global Target List Management*
- *Configuring Global Target List Management to Create Activities Asynchronously*
- *Enabling Application of Target Lists on an Applet*
- *Enabling Saving of Target Lists in an Applet*

Setting Up Data Map Object "Activity Templates#? for Target Lists

Some activity template data map objects are provided in seed data. These templates are listed in Step 4 in the topic *Creating Activities from Target Lists (End User)*.

You can edit these objects or create your own objects, using those provided as a model. For more information about Data Map Objects, see Siebel Finance Guide.

About Workflows for Global Target List Management

Four workflows for Global Target List Management are provided in seed data. The following table describes these workflows.

Workflow	Description
SLM Create Activity From List	This workflow can be used to create activities asynchronously. For more information, see *Configuring Global Target List Management to Create Activities Asynchronously*.

Workflow	Description
SLM Edit Call List Workflow	This workflow is triggered by the Save and Edit button in the Save to List dialog box. This workflow takes the user to the List Mgmt Lists View of the List Management screen.
SLM List Operation - Generic	This workflow is triggered when the Create Union and Create Intersection buttons are clicked. Modification of this workflow is not recommended.
SLM Update Parent	This workflow is triggered when a new member (such as a contact or an account) is added to a list. The workflow checks the content type of the new member and updates the Content field for the list if necessary. For example, if an account is added to a list of contacts, then the Content field changes to Hybrid. Modification of this workflow is not recommended.

Configuring Global Target List Management to Create Activities Asynchronously

In the preconfigured Siebel application, when the Create Activities for List command (Create Activity button) is invoked, activities are created synchronously. If your users typically create activities for long lists, then the response time for synchronous creation can be slow. To resolve this issue, you can configure the Siebel application to create the activities asynchronously.

To configure asynchronous activity creation from target lists

1. In Siebel Tools, change the On Close Invoke Parent Method user property for the SLM Create Activity Popup applet from the default value of ContinueCreateActivity to ContinueCreateActAsync.
2. Activate the SLM Create Activity From List workflow.

   For general information about Siebel workflows, see Siebel Business Process Framework: Workflow Guide.

Enabling Application of Target Lists on an Applet

You can configure list applets and association list applets so that target lists can be applied to them.

In order for a list applet to be configurable, the business component on which the applet is based must contain a multi-value ID field for the list category (accounts, contacts, employees, positions, or prospects).

To configure list and association list applets so that target lists can be applied

1. Create a multi-value link between the applet's business component and the List Mgmt Lists business component where:
   - Destination Business Component is List Mgmt Lists.
   - Destination Link is one of the following (as appropriate for the list category that is applied in the applet):

- SLM Account/List Mgmt Lists
- Contact/List Mgmt Lists
- Employee/List Mgmt Lists
- Position/List Mgmt Lists
- Prospects/List Mgmt Lists

For example, the SIS Account List Applet is based on the Account business component; it contains a List Mgmt Lists multi-value link, where Destination Link is SLM Account/List Mgmt Lists.

2. Create a multi-value field for the applet's business component where:
   - Multivalue Link is the multi-value link created in Step 1.
   - Field is ID.
3. For the applet's business component, create a TargetProp (or TargetProp 1, TargetProp 2, and so on) user property, and enter a value for the user property in the following form:

   ```
   "Entity Display Name", "Multi-Value Field Name", "List Category"
   ```

   where:
   - Entity Display Name is a name for the user property.
   - Multi-Value Field Name is the name of the field created in Step 2.
   - List Category is one of the display values defined for the SLM_LST_CATEGORY LOV: Accounts, Contacts, Employees, Positions, or Prospects.

   For example, `"Accounts", "List Mgmt List Id", "Accounts"`
4. Repeat Step 1 to Step 3 for each category of list that you want to apply to the applet.
5. (If you are configuring a list applet, then skip to Step 6.) If you are configuring an association list applet, then create an Apply List button for the applet by completing the following steps:
   a. Create the ButtonApplyList control for the applet.

      The values for the new control are described in the following table.

Field	Value
Name	ButtonApplyList
Caption	Apply List
HTML Type	MiniButton
Method Invoked	ShowPopup

b. Create two control user properties for the new ButtonApplyList control.

   The values for the two control user properties are described in the following table.

Field	Value for 1st User Property	Value for 2nd User Property
Name	Mode	Popup
Value	Edit List	SIA Apply Target List Applet - Simple

c. Edit the Applet Web Template for the association applet to add the new ButtonApplyList control to the applet's layout.

6. (Optional) Add an Apply List item to the menu for the cogwheel icon in the applet by completing the following steps:

   a. Create an Applet Menu Method Item for the applet.
   b. If the applet's business component contains:

      - Only one TargetProp user property, then set Command to Apply List Popup-Simple.
      - Multiple TargetProp user properties for the applet, then set the command property to Apply List Popup.

   c. Set Menu Text to Apply List.

Note: If you do not complete this step, then a target list can still be applied by using the Apply Target List button in the toolbar or by selecting File in the application-level menu, then Apply List.

Enabling Saving of Target Lists in an Applet

You can configure list applets so that target lists can be saved from them.

In order for a list applet to be configurable, the business component on which the applet is based must contain an ID field for the party entity that you want to save to the list.

To enable target list saving for a list applet

1. In Siebel Tools, create a Save Target List Source n user property for the applet, where n is a consecutive integer starting from 1.

   For example, the first user property that you create for the applet is named Save Target List Source 1, the second is named Save Target List Source 2, and so on.

2. Find or create the list column for the party entity that you want to save by completing the following steps:

   a. On the applet's business component, locate the ID field of the party entity.
   b. If the applet does not have a list column that maps to that ID field, then create the list column.

3. Enter a value for the user property of the following form:

   ```
   "List Column", "Saved Entity Name", "PrimaryOnly", "Extra Src Field 1", "Extra Dst Field 1", "Extra Src Field 2", "Extra Dst Field 2"
   ```

   where:

   - List Column is the name of a list column identified in Step 2. The Field value for this list column is the source business component field for the target list. This field must be an ID field.

     The Display Name value for this list column is used in the Based On drop-down list in the Save to List dialog box. (Required)
   - Saved Entity Name is the content of target list that you are saving (for example, Contact, Employee, Account, Position, or Prospect). (Required)
   - PrimaryOnly saves only the primary record of the multi-value group to the target list when the list column corresponds to a multi-value ID field. If this term is not specified or empty, then all records in the multi-value group are saved to the target list. This term is required only if the list column or the additional source field corresponds to a multi-value field.
   - Extra Src Field 1 is the name of an additional source field to save to the target list.(Optional)
   - Extra Dst Field 1 is the destination field name for Extra Src Field 1. This field must exist in the list member's applet and corresponding business component so that it can be seen in the List Management screen. This term is required only if Extra Src Field 1 is specified.
   - Extra Src Field 2 is the name of an additional source field to save to the target list.(Optional)
   - Extra Dst Field 2 is the destination field name for Extra Src Field 2. This term is required only if Extra Src Field 2 is specified.

   For example, these properties applied to the SIS Account List Applet follow:

   - `Save Target List Source 1 = "SLM Position - Primary", "Position", "PrimaryOnly"`

     Saves the primary team member on the accounts.
   - `Save Target List Source 2 = "SLM Contact", "Contact", " ", "Main Phone Number", "Acct Phone Number"`

     Saves all contacts and the main phone number of the account with each contact.

     > **Note:** For this example, the destination list member business component (SLM List Member - Contact) must have a field that can store the account phone number.

4. Repeat Step 1 and Step 3 to create a user property for each type of list that you want users to be able to create in that applet.

21 D&B Integration

D&B Integration

This chapter describes the integration of D&B data with your Siebel application. It includes the following topics:

- *About D&B Data*
- *Scenarios for Using D&B*
- *About the D&B D-U-N-S Number*
- *Integrating D&B Data*
- *Setting Up the Symbolic URL for Access to the D&B Database*
- *Configuring D&B Integration*
- *Field Mappings for Configuration of D&B Integration*

About D&B Data

D&B is a leading provider of business information. D&B's information and technology solutions help businesses find profitable customers, reduce credit risk, manage receivables, and manage vendors. D&B's database of commercial information consists of over 75 million records world wide.

For connected users, you can use your Siebel application to integrate with D&B data and reports. As a mobile client, you can access D&B data for accounts and contacts that have been promoted from D&B marketing data.

This integration allows you to:

- Use D&B marketing data within your Siebel application.
- Access D&B business and credit reports from within your Siebel application.

You can use this D&B data to support the following:

- **New Business or Customer Acquisition.** By querying on company size, line of business, and other criteria provided by D&B, you can generate lists of prospects to add to the sales pipeline or to support outbound marketing programs. By using the D&B corporate family linkage information, you can identify new prospects and opportunities within a company's extended family.
- **Customer Segmentation and Penetration.** You can profile specific market segments such as geography, industry, size, and other criteria to identify untapped opportunities or better align sales territories.
- **Customer Qualification.** Use your access to D&B business and credit reports to obtain detailed background and risk information about a company to focus sales efforts on higher-probability accounts and shorten the sales cycle.

Scenarios for Using D&B

This topic describes how D&B might be used. You might use D&B differently, depending on your business model. This topic includes the following scenarios:

- *Building and Growing Current Customer Relationships*
- *Acquiring New Businesses or Customers*
- *Managing Customer Satisfaction and Account Planning*
- *Searching D&B for New Account Information*

Building and Growing Current Customer Relationships

A company can increase market penetration across its existing customer base by determining how many relationships the company already has within a corporate family structure. Sales managers and representatives can use D&B D-U-N-S numbers to view the organizational hierarchies of clients and aggregate account attributes at each level.

For example, a sales representative plans to sell computers to 20 business locations and he discovers that there are locations for this company that he has not yet contacted. In another situation, the sales manager might want to see a rollup of opportunities and the potential revenue for each subsidiary and location for a specific company on a worldwide basis.

Acquiring New Businesses or Customers

Because a sales organization is always looking for more leads to new business, sales professionals can access company information in the Siebel D&B database, allowing them to generate prospects in their territories.

With D&B, the sales representative can query the Siebel D&B database using criteria to target new leads. The sales representative can query using demographic data, revenue profiles, or other criteria. After generating a list of leads, the sales representative can automatically add the companies and contacts to their company's accounts list. These promoted accounts and contacts are automatically updated when D&B updates occur.

Managing Customer Satisfaction and Account Planning

Standardizing customer information about the D&B D-U-N-S number gives you a means for house-holding your customer data and eliminating duplicate customer records. This elimination increases your ability to manage existing customer relationships because all opportunities for a customer are linked to the same customer record.

Add D&B's corporate family linkage, and you have the ability to manage and plan for customers at a local and global level. For example, you might want to see a roll up of all opportunities and potential revenue for all companies and locations related to a particular company worldwide.

Searching D&B for New Account Information

Sales professionals can access the D&B database in real time to find and retrieve new D&B account information that is immediately available for use within Siebel Sales. This information includes company demographic, corporate linkage, and address data maintained by D&B.

For example, a sales representative discovers a new opportunity, but the representative cannot find the account in either the Siebel account list or the D&B account list. Instead of creating a new account, the sales manager performs a real-time D&B search to obtain up-to-date, quality information that can be used to automatically establish a new Siebel account. Consequently, the sales team is provided with valuable information that they can use when working on the new opportunity.

About the D&B D-U-N-S Number

The D-U-N-S (Data Universal Numbering System) number is a crucial component of D&B data. A D&B D-U-N-S number is a nonindicative, nine-digit number assigned to each business location in the D&B database. Each D-U-N-S number has a unique, separate, and distinct operation and is maintained solely by D&B. Industries and organizations around the world use the D&B D-U-N-S number as a global standard for business identification and tracking.

Each company has a unique D&B D-U-N-S number associated with it. It acts as a unique identifier for a company in the D&B database.

To uniquely identify the association between different companies in the D&B database, each company also has associated D&B D-U-N-S numbers.

The categories of D&B D-U-N-S numbers include:

- D&B D-U-N-S Number. Each unique business location listed in the D&B database is assigned a D&B D-U-N-S number. This number is called DUNS Number in your Siebel application.
- Global Ultimate D-U-N-S. The D&B D-U-N-S number belonging to a business's worldwide ultimate parent company.
- Domestic Ultimate D-U-N-S. The D&B D-U-N-S number belonging to the highest-level family member within a specific country.
- Parent/HQ D-U-N-S. The D&B D-U-N-S number belonging to a business's immediate headquarters or parent.

These numbers allow D&B to establish the relationships between different companies.

Integrating D&B Data

Integrating D&B data into the D&B Account tables and the Siebel Account tables in the Siebel database involves the following tasks:

1. *Obtaining D&B Data*
2. *Loading D&B Data*
3. *Running the Siebel Update Server Components*

Administrators can integrate D&B data with Siebel UCM (Universal Customer Master) using the same process they use to integrate D&B data with the Siebel database. For real time integration, they insert the D&B record into the Source Data History (SDH) table in UCM (instead of promoting the D&B record directly into the base table). The UCM batch Workflow Processes the record from the SDH table. Alternatively, the real time connector workflow can process the record. For batch integration, administrators can create a D&B source file, and import the records in the same manner as they import records from any external application. For information about the ERD for UCM, see the applicable *Siebel Data Model Reference* on My Oracle Support.

Obtaining D&B Data

You must obtain the following data files from D&B:

- **The Marketing Data file.** This file contains detailed company information, such as the company's legal name, address, contact information, and so on.
- **The MRC file.** This file is a reference file, required by the Siebel D&B modules. This file contains information referenced by the demographic company data provided by D&B.

  MRC stands for Management Responsibility Code. The MRC file contains a list of lookup values for the contacts and their positions such as CEO, Vice President of Marketing, and so on. Each contact has an associated numerical code that is referenced by the D&B marketing data to determine the title or position of a company contact.
- **The SIC file.** This file is a reference file, required by the Siebel D&B modules. This file contains information referenced by the demographic company data provided by D&B.

  SIC stands for Standard Industrial Classification and is a code developed by the Federal government to describe the type of activity performed by the business at this location. The SIC file contains a list of SIC codes assigned and maintained by D&B along with their definitions. D&B's Primary SIC code indicates the line of business that provides the largest revenue contribution to the business. D&B also maintains and assigns six levels of subsidiary SIC codes to describe in greater detail additional lines of business activity for a company. By default, the SIC code provided in the SIC file and the Marketing Data file is the 4-digit SIC code.

Request these files in *Siebel format*, also referred to as 2202 or GDMDI data file format. D&B is able to provide files in this format without difficulty.

To obtain MRC and SIC files, send an email to the following address: dnb4siebel@dnb.com

In addition to MRC and SIC files, you can request D&B data layout documentation from D&B.

Loading D&B Data

After you have obtained the three D&B data files, you can start to load the data into the Siebel database. You can load the files in any order, but you must load all three files before running the Siebel update server component.

Data loading scripts and processes differ according to your database. When creating your data loading scripts, see the documentation provided by D&B and the applicable *Siebel Data Model Reference* on My Oracle Support.

> **Note:** When you integrate D&B data for the first time, you might want to obtain sample loading scripts for use as templates. For help obtaining sample loading scripts, create a service request (SR) on My Oracle Support. For more information, see *Loading D&B Data Using Sample Scripts*.

The scripts load D&B data into staging tables in the Siebel database. The following table shows these staging tables. For definitions of these tables, see the applicable *Siebel Data Model Reference* on My Oracle Support.

File	Upload Location
Marketing Data file	S_DNB_UPDATE table This table is used as a staging area for the un-normalized D&B Marketing data.
SIC file	S_DNB_SIC table
MRC file	S_DNB_MRC table

Because SIC and MRC files change rarely, updating D&B data usually requires deleting and reloading the D&B marketing data in the S_DNB_UPDATE table alone.

If you must load new versions of the SIC and MRC files, then you must delete the previously used staging tables.

The following table lists the D&B data to delete and to load.

If You Are...	Then...
Loading D&B data for the first time	• Load the following D&B data files: Marketing Data file, SIC file, and MRC file.
Updating D&B data with a new Marketing Data file, but the SIC and MRC files have not changed	• Delete data from the S_DNB_UPDATE table. • Load the Marketing file.
Updating D&B data with new Marketing Data, SIC, and MRC files	• Delete data from the S_DNB_UPDATE, the S_DNB_SIC, and the S_DNB_MRC tables. • Load the following D&B data files: Marketing Data file, SIC file, and MRC file.

After loading files, you must run the D&B Update Manager (D&B) and the D&B Update Manager (Siebel). For more information, see *About Siebel Update Server Components*.

Loading D&B Data Using Sample Scripts

This topic provides some guidance about how to use sample scripts for:

- *Loading D&B Data on Oracle*
- *Loading D&B Data on DB2*
- *Loading D&B Data on Microsoft SQL Server*

CAUTION: Before running scripts, check them against the D&B data layout documentation and against the S_DNB_UPDATE table columns. Then, modify the scripts as required. For information about the S_DNB_UPDATE table columns, see the applicable *Siebel Data Model Reference* on My Oracle Support.

Loading D&B Data on Oracle

Oracle installations require you to run SQLLOADER control files. You need the following control files:

- s_dnb_update.ctl (for loading Marketing Data file into S_DNB_UPDATE table)
- s_dnb_sic.ctl (required only if loading the SIC file)
- s_dnb_mrc.ctl (required only if loading the MRC file)

Note: This procedure assumes that you understand how to run SQLLOADER. SQLLOADER is described in the Oracle documentation.

To load D&B data if you are using Oracle

1. Verify that the column order of your D&B file matches the column requirements in the CTL file before running the loading script.
2. Truncate the appropriate staging tables.

   For more information, see the table that lists D&B Data to Delete and Load in the topic *Loading D&B Data*.

   To optimize loading performance, drop all indexes on the S_DNB_UPDATE table and re-create them after the scripts have completed by using Siebel utilities ddlexp (to back up the indexes before dropping) and ddlimp (to re-create them).
3. Modify the SQL file as appropriate for:
   - The name of your database
   - The D&B filename and directory location
   - The database table owner
   - The user ID and password (with loading privileges) that you are using to load the data
4. Run SQLLOADER.

Loading D&B Data on DB2

DB2 installations require you to run DB2 IMPORT. You need the following SQL files:

- imp_update_new.sql (for loading Marketing Data file into S_DNB_UPDATE table)
- imp_sic_new.sql (required only if loading the SIC file)
- imp_mrc_new.sql (required only if loading the MRC file)

Note: This procedure assumes that you understand how to run DB2 IMPORT. DB2 IMPORT is described in the DB2 documentation.

To load D&B data if you are using DB2

1. Verify that the column order of your D&B file matches the column requirements in the SQL file before running the loading script.

2. Truncate the appropriate staging tables.

   For more information, see the table that describes D&B Data to Delete and Load in the topic *Loading D&B Data*.

   To optimize loading performance, drop all indexes on the S_DNB_UPDATE table and re-create them after the scripts have completed by using Siebel utilities ddlexp (to back up the indexes before dropping) and ddlimp (to re-create them).
3. Modify the SQL file as appropriate for:
   - The name of your database
   - The D&B filenames and directory location
   - The database table owner
   - The user ID and password (with loading privileges) that you are using to load the data
4. Run DB2 IMPORT.
5. (Optional) After running the import scripts, update the DB2 catalog statistics by executing RUNSTATS on the three tables that received the D&B data (S_DNB_MRC, S_DNB_SIC, S_DNB_UPDATE).

Loading D&B Data on Microsoft SQL Server

Microsoft SQL Server installations require you to run SQL scripts. You need the following format files and SQL scripts:

- For loading the Marketing Data file:
  - S_DNB_UPDATE.fmt. A format file to load the data into the tempS_DNB_UPDATE table
  - S_DNB_UPDATE.sql. An SQL script that loads the data into S_DNB_UPDATE table
- For loading the SIC file:
  - S_DNB_SIC.fmt. A format file to load the data into the tempS_DNB_SIC table
  - S_DNB_SIC.sql. An SQL script that loads the data into the S_DNB_SIC table
- For loading the MRC file:
  - S_DNB_MRC.fmt. A format file to load the data into the tempS_DNB_MRC table
  - S_DNB_MRC.sql. An SQL script that loads the data into the S_DNB_MRC table

Note: This procedure assumes that you understand how to run bcp (bulk copy process) or similar data-loading utility. The bcp utility is described in the Microsoft SQL Server documentation.

To load D&B data if you are using Microsoft SQL Server

1. Verify that the column order of your D&B file matches the column requirements in the SQL file before running the loading script.
2. Truncate the appropriate staging tables.

   For more information, see the table that describes D&B Data to Delete and Unload in topic *Loading D&B Data*.

   To optimize loading performance, drop all indexes on the S_DNB_UPDATE table and re-create them after the scripts have completed by using Siebel utilities ddlexp (to back up the indexes before dropping) and ddlimp (to re-create them).
3. Modify the SQL file as appropriate for:

- The name of your database
- The D&B filename and directory location
- The database table owner
- The user ID and password (with loading privileges) that you are using to load the data

4. Run bcp or another data loading utility.

About Siebel Update Server Components

When you load or reload D&B data, you must update the D&B Account tables and the Siebel Account tables in the Siebel database. This update is accomplished by running server components:

- D&B Update Manager (D&B). Moves D&B marketing data from the staging table (S_DNB_UPDATE) into the normalized D&B Account tables, which are the basis for the D&B All Accounts View. For more information, see the figure in the topic *Single Task Siebel Update Server Components*.
- D&B Update Manager (Siebel). Updates the records in the Siebel Account tables for accounts with matching D-U-N-S numbers. For more information, see the figure that shows how the D&B Account tables are mapped to the Siebel Account tables in the topic *Single Task Siebel Update Server Components*.
- A third component, D&B Update Manager MultiTask, is also provided. This component can be used in place of D&B Update Manager (D&B) or D&B Update Manager (Siebel) to run the update using multiple, parallel processes. For more information, see *Multiple Task Siebel Update Server Component*.

Overview of the Update Process

This topic outlines the process of loading D&B data from the staging tables to the D&B Account tables through to updating the Siebel account tables.

This process recommends using the D&B Update Manager MultiTask server component to run server component tasks in parallel. However, use of the single task D&B Update Manager (D&B) and D&B Update Manager (Siebel) server components is also documented in this chapter.

1. Make sure you have loaded the D&B data into the staging tables.

   For more information, see *Loading D&B Data* and *Loading D&B Data Using Sample Scripts*.

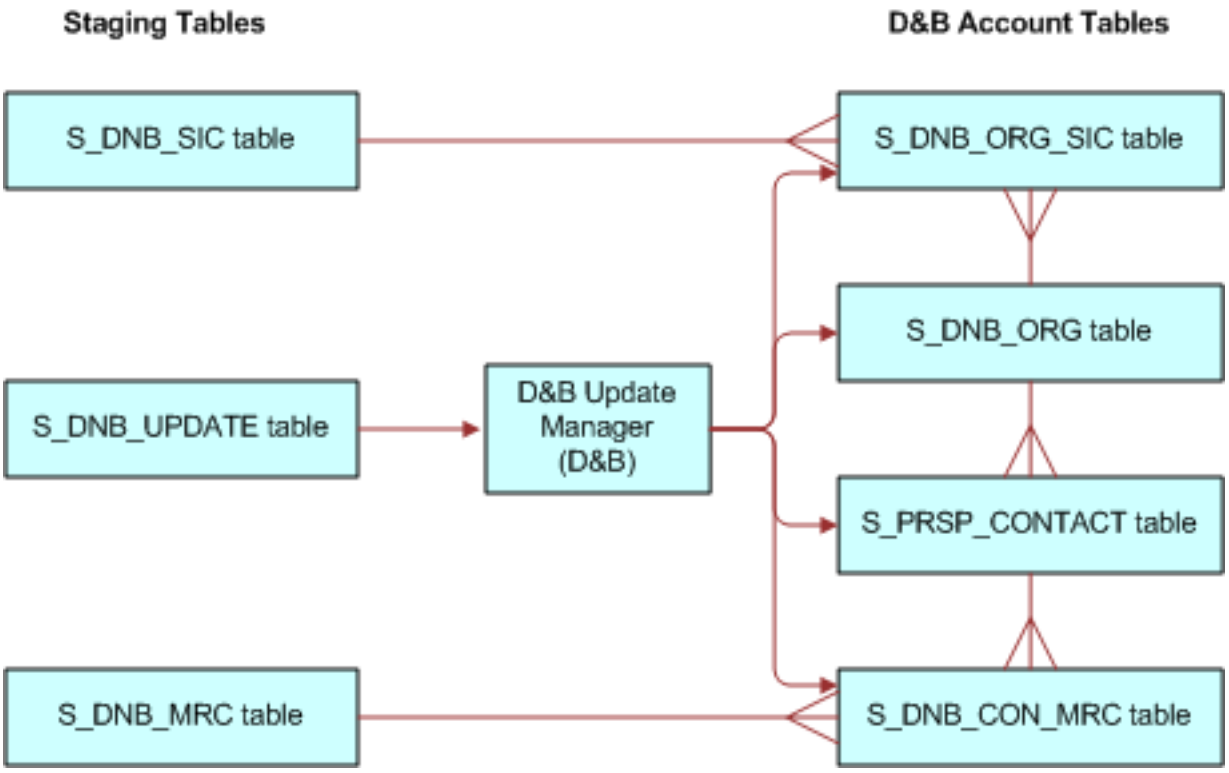
2. Update the D&B Account tables with data from the staging tables:
    a. To optimize performance, you can perform one of the following steps:
        - For first time data loading when there are no D&B records in the Siebel database, drop the indexes on the following D&B Account tables: S_DNB_ORG, S_DNB_ORG_SIC, S_DNB_CON_MRC, and S_PRSP_CONTACT.
        - For subsequent updates, drop the indexes on the S_DNB_ORG table only, all except for the indexes S_DNB_ORG_U1 (DUNS_NUM), S_DNB_ORG_P1 (ROW_ID), and S_DNB_ORG_M01 (the clustered index) on this table.
    b. Create a search specification on the D-U-N-S number to set up your preferred batch sizes and determine the corresponding D-U-N-S number ranges for each batch for loading the data from the staging tables to the D&B Account tables.
    c. Run concurrent D&B Update Manager (D&B) server tasks by running the D&B Update Manager MultiTask server component.

        For more information, see *Multiple Task Siebel Update Server Component* and *Running the Siebel Update Server Components*.
    d. Continue to run the concurrent D&B Update Manager (D&B) server tasks until all data is loaded into the D&B Account tables.
    e. If you dropped indexes on the D&B Account tables, then re-create them by using Siebel utilities ddlexp (to back up the indexes before dropping) and ddlimp (to re-create them).
3. Update the Siebel Account tables from the D&B Account tables for accounts with matching D-U-N-S numbers by executing concurrent D&B Update Manager (Siebel) server tasks using the D&B Update Manager MultiTask server component.

    For more information, see *Multiple D&B Update Manager (Siebel) Processes* and *Running the Siebel Update Server Components*.

Single Task Siebel Update Server Components

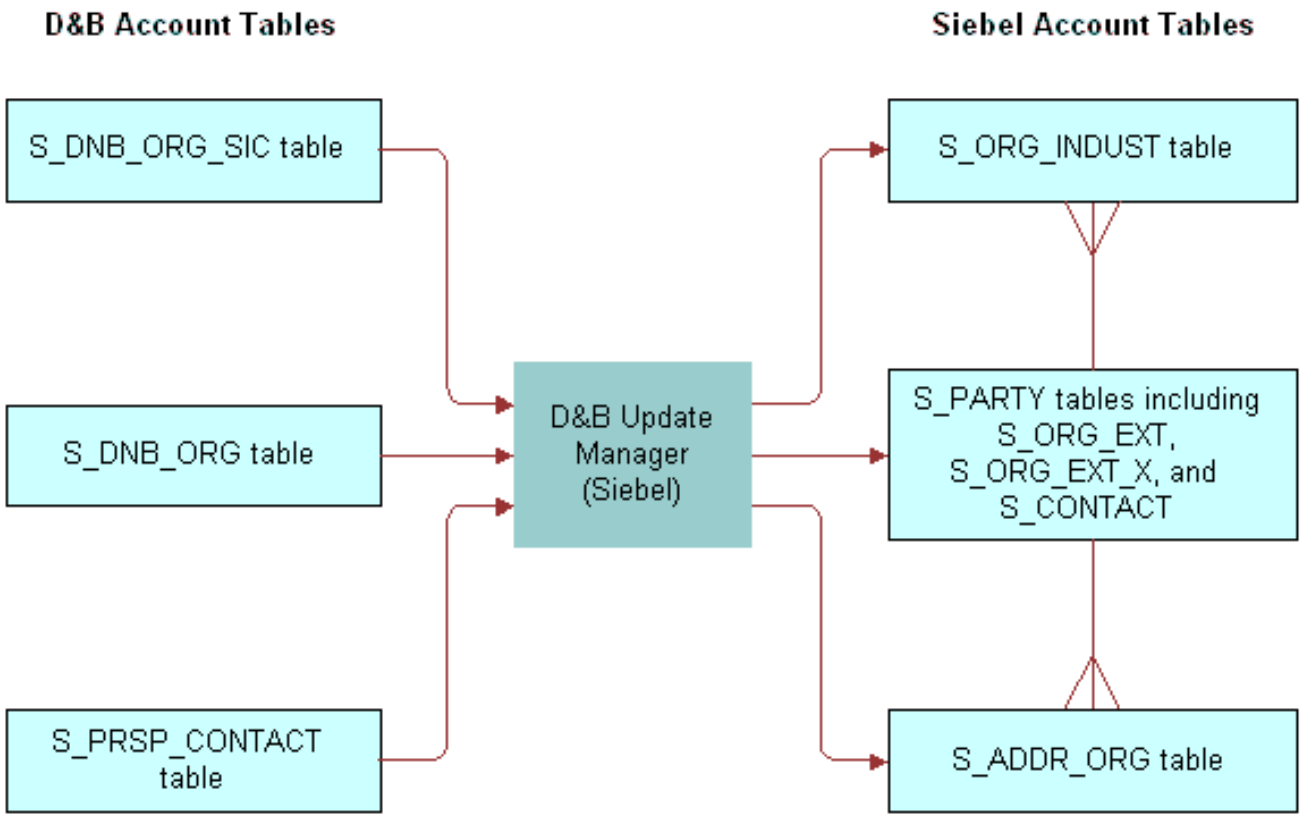
The update server components are part of the Dun and Bradstreet Enterprise Component Group. This group and each of its D&B Batch Components must be enabled. After enabled, each component can be run as a batch task. The following image shows how the staging tables are mapped to the D&B Account tables.



In this image, there are:

- Three staging tables: S_DNB_SIC, S_DNB_Update, and S_DNB_MRC.
- Four D&B Account tables: DNB_ORG_SIC, S_DNB_ORG, S_PRSP_CONTACT, and S_DNB_CON_MRC.
- Two one-to-many mappings, between staging and D&B Account tables, as follows:
  - From S_DNB_SIC to S_DNB_ORG_SIC.
  - From S_DNB_MRC to S_DNB_CON_MRC.
- Four one-to-one mappings, between staging and D&B Account tables, as follows:
  - From S_DNB_UPDATE (via D&B Update Manager) to S_DNB_ORG_SIC.
  - From S_DNB_UPDATE (via D&B Update Manager) to S_DNB_ORG.
  - From S_DNB_UPDATE (via D&B Update Manager) to S_PRSP_CONTACT.
  - From S_DNB_UPDATE (via D&B Update Manager) to S_DNB_CON_MRC.
- Three one-to-many mappings between D&B Account tables as follows:
  - From S_DNB_ORG to S_DNB_ORG_SIC.
  - From S_DNB_ORG to S_PRSP_CONTACT.
  - From S_PRSP_CONTACT to S_DNB_CON_MRC.

The following image shows how the D&B Account tables are mapped to the Siebel Account tables.



In this image, there are:

- Three D&B Account tables: DNB_ORG_SIC, S_DNB_ORG, and S_PRSP_CONTACT.
- Three Siebel Account tables: S_ORG_INDUST, S_PARTY (includes S_ORG_EXT, S_ORG_EXT_X, and S_CONTACT tables), and S_ADDR_ORG.
- Three one-to-one mappings, between D&B Account and Siebel Account tables, as follows:
  - From S_DNB_ORG_SIC (via D&B Update Manager) to S_ORG_INDUST.
  - From S_DNB_ORG (via D&B Update Manager) to S_PARTY.
  - From S_PRSP_CONTACT (via D&B Update Manager) to S_ADDR_ORG.

Default table mapping exists from the D&B Account tables to the Siebel Account tables that are used by the D&B Update Manager (Siebel) server component. For more information, see *Field Mapping for the D&B Update Manager Process*.

Multiple Task Siebel Update Server Component

You can use the server component DNBUpMgrMultiTask to spawn multiple Update Manager processes. Running several parallel processes helps you maximize your performance with large data loads and gives you greater scheduling flexibility. You can control the number of processes that are created by editing the dnbtask.cfg file. The dnbtask.cfg file contains two sections, a section to set tasks for the D&B Update Manager (D&B) process and a section to set tasks for the D&B Update Manager (Siebel) process.

The dnbtask.cfg file is located in the sqltempl subdirectory, in the server installation directory.

Multiple D&B Update Manager (D&B) Processes

By default the dnbtask.cfg file uses D-U-N-S number ranges to set up three simultaneous tasks. The DNBUpMgrDNB portion of the file looks as follows:

```
[DNB]
Task1 = ,100000000
Task2 = 100000000,200000000
Task3 = 200000000,
```

These three ranges translate into the following three DNBUpMgrDNB tasks, each taking care of loading records within a particular D-U-N-S number range:

- ,100000000 means D-U-N-S numbers < 100000000.
- 100000000,200000000 means D-U-N-S numbers >=100000000 and < 200000000.
- 200000000, means D-U-N-S numbers >=200000000.

Edit the file to change the number of parallel processes created or the range of D-U-N-S numbers updated.

CAUTION: If you use DNBUpMgrMultiTask to run multiple UpdateMgr processes, then you must make sure that processes running at the same time have mutually exclusive ranges. Unpredictable results occur if multiple processes collide.

Multiple D&B Update Manager (D&B) Processes with First Time Data Loading

The first time you load D&B data when there are no D&B records in the Siebel database, you can use a special SQL file (dnbinitial.sql) which is optimized to load only inserts. Consequently, data is loaded faster than when you use the dnbmaps.tsq file.

To use the dnbinitial.sql file, set the server component parameter DNBConfigFile to dnbinitial.sql. For examples, see *Running the Siebel Update Server Components*.

For subsequent updates, the DNBConfigFile is set to dnbmaps.tsq.

Note: The dnbinitial.sql file assumes that you dropped the indexes on the D&B Account tables when loading data. For more information, see *Loading D&B Data Using Sample Scripts*.

Multiple D&B Update Manager (Siebel) Processes

By default the dnbtask.cfg file uses the tables updated to set up five simultaneous tasks. The DNBUpMgrSieb portion of the file looks as follows:

```
[Siebel]
Task1 = UPDATE_SIEBEL_ACCOUNT
Task2 = UPDATE_INDUST, COMMIT, UPDATE_SIEBEL_INDUST, COMMIT,

UPDATE_SIEBEL_SYNONYM
Task3 = UPDATE_SIEBEL_ADDR_PHY, COMMIT, UPDATE_SIEBEL_ADDR_MAIL
Task4 = UPDATE_SIEBEL_CONTACT
Task5 = UPDATE_SIEBEL_LOC1, COMMIT, UPDATE_SIEBEL_LOC2, COMMIT, UPDATE_SIEBEL_LOC3
```

You can edit the file to change the number of parallel processes created. However, the order of the updates within individual tasks is important; for example UPDATE_INDUST must be done before UPDATE_SIEBEL_INDUST. Use caution when updating the DNBUpMgrSieb portion of the dnbtask.cfg file.

CAUTION: If you have modified the RTI configuration file to insert new accounts into the Siebel Accounts table, then do not run the multiple task process. Instead you must run the single task D&B Update Mgr (Siebel) server component. Make sure you have modified the dnbmaps.sql file used by the single task server component. The order of the updates is critical to data integrity if new accounts are being added.

Running the Siebel Update Server Components

You can run the Siebel update server components in the following ways:

- From within the Siebel application
- From a command line interface, using Siebel Server Manager

Note: If you have just installed the Siebel Server or if you have made changes to the Siebel Name Server, then you must synchronize before running the Siebel update server component. For more information about synchronizing server components, see *Siebel System Administration Guide* .

Tip: If you are going to run the D&B Update Mgr (Multi-task) component, then make sure that the maximum number of tasks (MaxTasks parameter) is set correctly to accommodate the number of tasks that you specified in the dnbtask.cfg file. For information about MaxTasks, see *Siebel System Administration Guide* .

Make sure that the D&B Update Manager (D&B) process is complete before you start the D&B Update Manager (Siebel) process. For general information about using Siebel Server Manager, see *Siebel System Administration Guide* .

Running the D&B Update Manager Server Component From Within Your Siebel Application (Single Task Process)

Complete the following procedure to run the D&B Update Manager (D&B) server component from within your Siebel application (single task process). For information about running server components, see *Siebel System Administration Guide* .

To run the D&B Update Manager (D&B) server component from within your Siebel application (single task process)

1. Check that the Dun and Bradstreet component group is enabled.
2. Submit a component job for D&B Update Mgr (D&B); make sure to set the Mode to Asynchronous.
3. When the D&B Update Mgr (D&B) is done, open the log directory.

   If there have been problems with the process, then you can review a log file. The log file is DNBUpMgrDNB_TaskNumber.log.

Running the D&B Update Manager Server Component From Within Your Siebel Application (Multiple Task Process)

Complete the following procedure to run the D&B Update Manager (D&B) server component from within your Siebel application (multiple task process).

To run the D&B Update Manager (D&B) server component from within your Siebel application (multiple task process)

1. Check that the Dun and Bradstreet component group is enabled.

2. Prepare a component job for D&B Update Mgr (Multi-task):
    - Make sure to set the Mode to Asynchronous.
    - Create a job parameter where Name is Task Code (Abbreviation is DNBTaskCode) and Value is DNB.
    - If the data is being loaded for the first time, then create a job parameter where Name is Configuration File Name (Abbreviation is DNBConfigFile) and Value is dnbinitial.sql.
3. Submit the component job.
4. When the process is done, open the log directory.

    If there have been problems with the process, then you can review a log file.

Running the D&B Update Manager Server Component From Within Your Siebel Application (Single Task Process)

Complete the following procedure to run the D&B Update Manager (Siebel) server component from within your Siebel application (single task process).

To run the D&B Update Manager (Siebel) server component from within your Siebel application (single task process)

1. Check that the Dun and Bradstreet component group is enabled.
2. Submit a component job for D&B Update Mgr (Siebel); make sure to set the Mode to Asynchronous.
3. When the D&B Update Mgr (Siebel) is done, open the log directory.

    If there have been problems with the process, then you can review a log file. The log file is DNBUpMgrDNB_TaskNumber.log.

Running the D&B Update Manager Server Component From Within Your Siebel Application (Multiple Task Process)

Complete the following procedure to run the D&B Update Manager (Siebel) server component from within your Siebel application (multiple task process).

To run the D&B Update Manager (Siebel) server component from within your Siebel application (multiple task process)

1. Check that the Dun and Bradstreet component group is enabled.
2. Prepare a component job for D&B Update Mgr (Multi-task):

    Make sure to set the Mode to Asynchronous.

    Create a job parameter where Name is Task Code (Abbreviation is DNBTaskCode) and Value is Siebel.
3. Submit the component job.
4. When the process is done, open the log directory.

    If there have been problems with the process, then you can review a log file.

Running the D&B Update Manager Server Component From a Command Line (Single or Multiple Task Process)

Complete the following procedure to run the D&B Update Manager (D&B) server component from a command line (single or multiple task process).

To run the D&B Update Manager (D&B) server component from a command line (single or multiple task process)

1. Log in to the server using Server Manager, and use a command with the following format:

```
 SIEBEL_ROOT\siebsrvr\bin\>srvrmgr /g gateway /e enterprise_name /u db_username /
p password /s siebserver
```

   An example follows:

```
>srvrmgr /g evlab6 /e siebel /u sadmin /p password /s evlab6
```

2. At the srvrmgr prompt, enter one of the following commands:
   - `start task for comp DNBUpMgrDNB` (for single task process)
   - `start task for comp DNBUpMgrMultiTask with DNBTaskCode=DNB` (for multitask process)
   - `start task for comp DNBUpMgrMultiTask with DNBTaskCode=DNB, DNBConfigFile=dnbinitial.sql`

   For initial data loading, see *Multiple D&B Update Manager (D&B) Processes with First Time Data Loading*.
3. During the DNBUpMgrDNB or DNBUpMgrMultiTask server process, monitor the status by entering the following list task command:

```
list task for comp DNB%
```

4. When the D&B Update Mgr (D&B) or D&B Update Mgr (Multi-task) server process is finished, open the log directory.

   If there have been problems with the process, then you can review log files. The log files are DNBUpMgrDNB_TaskNumber.log and DNBUpMgrMultiTask_TaskNumber.log.

Running the D&B Update Manager Server Component From a Command Line (Single or Multiple Task Process)

Complete the following procedure to run the D&B Update Manager (Siebel) server component from a command line (single or multiple task process).

To run the D&B Update Manager (Siebel) server component from a command line (single or multiple task process)

1. Log in to the server using Server Manager, and use a command with the following format:

```
 SIEBEL_ROOT\siebsrvr\bin\>srvrmgr /g gateway /e enterprise_name /u db_username /
p password /s siebserver
```

   An example follows:

```
>srvrmgr /g evlab6 /e siebel /u sadmin /p password /s evlab6
```

2. At the srvrmgr prompt, enter one of the following commands:

- `start task for comp DNBUpMgrSIEB` (for single task process)
- `start task for comp DNBUpMgrMultiTask with DNBTaskCode=Siebel` (for multitask process)

3. During the DNBUpMgrDNB or DNBUpMgrMultiTask server process, monitor the status by entering the following list task command:

   ```
   list task for comp DNB%
   ```

4. When the D&B Update Mgr (D&B) or D&B Update Mgr (Multi-task) server process is finished, open the log directory.

   If there have been problems with the process, then you can review log files. The log files are DNBUpMgrDNB_TaskNumber.log and DNBUpMgrMultiTask_TaskNumber.log.

Setting Up the Symbolic URL for Access to the D&B Database

When you have a connection to the Internet and have a D&B account set up already (with a user ID and password), you can:

- Obtain the most current account information by invoking real-time searches of the D&B database and online purchase.
- Access and order D&B business and credit reports.

To access D&B data live from your Siebel application through the D&B Web site, you must first contact D&B for a user ID, password, and payment options. Then you can set up your Siebel application to access the D&B database. For more information about D&B reports and about searching D&B for new accounts, see *Accessing Company Data and Reports with D&B*.

To set up the symbolic URL for D&B real-time search and update

1. Navigate to the Administration - Integration screen, then the WI Symbolic URL List.
2. From the visibility filter, select Symbolic URL Administration.
3. In the Symbolic URL list, select DNBGlobalAccess.
4. Make sure the URL is as follows:

   https://globalaccess.dnb.com/access/scripts/broker.asp
5. In the Symbolic URL Arguments list:
   a. Select the USERID record, and enter the user ID provided by D&B in the Argument Value field.

      Note: This field is not case-sensitive.

   b. Select the USERPASS record, and enter the password provided by D&B in the Argument Value field.

Setting Up the Symbolic URL for D&B Report Ordering

Complete the following procedure to set up the symbolic URL for D&B report ordering.

To set up the symbolic URL for D&B report ordering

1. Navigate to the Administration - Integration screen, then the WI Symbolic URL List.
2. From the visibility filter, select Symbolic URL Administration.
3. In the Symbolic URL list, select DNBReport.
4. Make sure that the Host Name is www.dnb.com and that the URL is as follows:

   https://reportserver/scripts/ProductRetriever
5. In the Symbolic URL Arguments list:

   a. Select the USERID record, and enter the user ID provided by D&B in the Argument Value field.

      Note: This field is not case-sensitive.

   b. Select the USERPSWD record, and enter the password provided by D&B in the Argument Value field.
6. From the visibility filter, select Host Administration.
7. In the list of HTTP hosts, make sure that there is a record where Name is www.dnb.com and Virtual Name is reportserver.

Configuring D&B Integration

The following table provides general guidance about configuration.

If You Must Customize the...	Then...
Single task server processes for D&B Update Manager (D&B) or D&B Update Manager (Siebel)	• Edit the dnbmaps.sql file in the ...`\siebelserver\SQLTEMPL` directory.
Multiple task server processes for D&B Update Manager (D&B) or D&B Update Manager (Siebel)	• Edit the dnbmaps.tsq file in the ...`\siebelserver\SQLTEMPL` directory.
Account promotion	• Configure the maps listed in *Field Mapping for Account Promotion and Prospect Lists*. • Determine and make corresponding changes, if necessary, in the update server processes.

Specific configuration topics include:

- *Update Server Process Configuration*
- *Account Promotion and Prospect List Creation Configuration*
- *Running the D&B Update Manager (D&B) Process Without Updating or Deleting Existing Data*
- *Running the D&B Update Manager (Siebel) Process Without Updating Account Name*
- *Running the D&B Update Manager (Siebel) Process Without Updating Account Location (Single Task)*
- *Running the D&B Update Manager (Siebel) Process Without Updating Account Location (Multiple Task)*

Tip: When debugging in your test environment, increase the event log level to 4 to see more details in the log file. However, it is strongly recommended that you set the level to 1 (the default) when you run in a production environment to prevent the log file from overflowing. For information about event logging, see *Siebel System Monitoring and Diagnostics Guide* .

Update Server Process Configuration

The D&B update server processes use the Batch Real-Time Integration (RTI) technology and the RTI configuration files (dnbmaps.sql for single task and dnbmaps.tsq for multiple tasks). You can edit the RTI configuration files to suit your business requirements.

The general syntax of the RTI maps specified in the configuration files is as follows:

```
UPDATE_SOME_TABLE.MOD1TABLE = [Target Table to update]
UPDATE_SOME_TABLE.MOD1WHERE = [A WHERE clause]
UPDATE_SOME_TABLE.MOD1INSERT = [TRUE/FALSE]
UPDATE_SOME_TABLE.MOD1UPDATE = [TRUE/FALSE]
UPDATE_SOME_TABLE.MOD1DELETE = [TRUE/FALSE]
UPDATE_SOME_TABLE.MOD1SQL = [A Valid SQL Query]
```

The RTI configuration files are located in the …`\siebelserver\SQLTEMPL` directory. For the default mapping for the D&B Update Manager (Siebel) server component, see *Field Mapping for the D&B Update Manager Process*.

Use caution when making changes to these RTI configuration files. It is recommended that you engage a qualified professional for your customization process.

CAUTION: Do not change the default DELETE setting in the existing UPDATE* sections. Do not set DELETE to TRUE. If your business need necessitates deleting rows in the target table as part of the D&B Update Manager process, then you can request help by creating a service request (SR) on My Oracle Support.

Account Promotion and Prospect List Creation Configuration

You can select specific fields that are populated by the D&B promotion to a Siebel account or by the D&B list-creation process. These fields are controlled by maps in the business component user properties within the DNB Account and DNB Contact business components. These maps are listed in *Field Mapping for Account Promotion and Prospect Lists*.

Using Siebel Tools, you can change, add, or delete source and destination field mapping. See the map descriptions in *Field Mapping for Account Promotion and Prospect Lists* to determine the map to use for a set of source and destination fields.

Use caution when making changes to these maps. It is recommended that you engage a qualified professional for your customization process.

CAUTION: Although the delete capability is available, it is recommended that you deactivate unwanted map entries instead of deleting them. This approach is safer and can be accomplished by checking or clicking the deactivate column for the unwanted entry.

You can create an entry using the following syntax:

```
Name Column: [MAP NAME]: [DESTINATION FIELD]
```

```
Value Column: [D&B SOURCE FIELD]
```

Note: Each map works only with a specific Destination Business Component and a specific Source Business Component.

Running the D&B Update Manager (D&B) Process Without Updating or Deleting Existing Data

Depending on your business process, you might want to run the D&B Update Manager (D&B) server component without updating or deleting any existing data in the S_DNB_ORG table. You edit the RTI configuration file to perform this task.

To edit the RTI configuration file so that existing data in the S_DNB_ORG table is not updated or deleted

1. Open the RTI configuration file (dnbmaps.sql for single task or dnbmaps.tsq for multiple task) in a text editor.
2. Search for the `UPDATE_DNB_ACCOUNT` section under `[Common]` heading.
3. Modify the section to look like the following:

```
UPDATE_DNB_ACCOUNT.Function = NONE
UPDATE_DNB_ACCOUNT.MOD1TABLE = S_DNB_ORG
UPDATE_DNB_ACCOUNT.MOD1WHERE = WHERE 1 = 1
UPDATE_DNB_ACCOUNT.MOD1INSERT = TRUE
UPDATE_DNB_ACCOUNT.MOD1UPDATE = FALSE
UPDATE_DNB_ACCOUNT.MOD1DELETE = FALSE
UPDATE_DNB_ACCOUNT.MOD1TXNLOG = FALSE
```

   If you are using the default file, then only change `UPDATE_DNB_ACCOUNT.MOD1UPDATE` from `TRUE` to `FALSE`.
4. Save and close the file.

Running the D&B Update Manager (Siebel) Process Without Updating Account Name

You might want to run the D&B Update Manager (Siebel) server component without updating the existing account names. You edit the RTI configuration file to perform this task.

To edit the RTI configuration file so that account names are not updated

1. Open the RTI configuration file (dnbmaps.sql for single task or dnbmaps.tsq for multiple task) in a text editor.
2. Search for `UPDATE_SIEBEL_ACCOUNT.MOD1SQL` under the Oracle, Oracle 8, Microsoft SQL Server, or DB2 statements.
3. Search for `dnb.BUSINESS_NAME` within the `UPDATE_SIEBEL_ACCOUNT.MOD1SQL SELECT` statement.
4. Comment out the line that begins `dnb.BUSINESS_NAME...` as shown.

```
UPDATE_SIEBEL_ACCOUNT.MOD1SQL =
SELECT acct.ROW_ID ROW_ID,
;dnb.BUSINESS_NAME NAME,
```

5. Save and close the file.

Running the D&B Update Manager (Siebel) Process Without Updating Account Location (Single Task)

You might want to run the D&B Update Manager (Siebel) server component without updating the existing account locations. You edit the RTI configuration file to perform this task. Complete the following procedure to edit the RTI configuration file so that account locations are not updated (single task).

To edit the RTI configuration file so that account locations are not updated (single task)

1. Open the dnbmaps.sql file in a text editor.
2. Search for the `UPDATE_SIEBEL = UPDATE_SIEBEL_ADDR_PHY...` statement.
   This statement specifies the Siebel Table Groups to be updated when D&B Update Manager (Siebel) server component is run.
3. Within this statement, remove `COMMIT, UPDATE_SIEBEL_LOC1, COMMIT, UPDATE_SIEBEL_LOC2, COMMIT, UPDATE_SIEBEL_LOC3.`
4. Save and close the file.

Running the D&B Update Manager (Siebel) Process Without Updating Account Location (Multiple Task)

You might want to run the D&B Update Manager (Siebel) server component without updating the existing account locations. You edit the RTI configuration file to perform this task. Complete the following procedure to edit the RTI configuration file so that account locations are not updated (multiple task).

To edit the RTI configuration file so that account locations are not updated (multiple task)

1. Open the dnbtask.cfg file in a text editor.
2. Under the `[Siebel]` section, comment out the line that begins `Task5` as follows:

```
;;Task5 = UPDATE_SIEBEL_LOC1, COMMIT, UPDATE_SIEBEL_LOC2, COMMIT,
UPDATE_SIEBEL_LOC3
```

3. Save and close the file.

Field Mappings for Configuration of D&B Integration

The following topics provide field mapping information:

- *Field Mapping for the D&B Update Manager Process*
- *Field Mapping for D&B Real-Time Updates*
- *Field Mapping for Account Promotion and Prospect Lists*

Field Mapping for the D&B Update Manager Process

D&B Update Manager (D&B) server component. For the table mapping for the D&B Update Manager (D&B) component, examine the appropriate tables (*Single Task Siebel Update Server Components*) using Siebel Tools. The default field mappings can be determined by examining the UPDATE_DNB* sections of the RTI configuration file (dnbmaps.sql or dnbmaps.tsq).

D&B Update Manager (Siebel) server component. The following three tables list the fields that are mapped when the D&B Update Manager (Siebel) server component is run. For more information, see *Single Task Siebel Update Server Components*.

The field mappings can also be determined by examining the UPDATE_SIEBEL* sections of the RTI configuration file. For information about changing these default mappings, see *Update Server Process Configuration*.

The following table shows the S_DNB_ORG table mapping for D&B Update Manager (Siebel).

From Column	To Table	To Column
DUNS_NUM	S_ORG_EXT	DUNS_NUMBER
BUSINESS_NAME	S_ORG_EXT	NAME
TRADESTYLE	S_ORG_SYN	NAME
SCND_TRADESTYLE	S_ORG_SYN	NAME
PHYS_STREET_ADDR	S_ADDR_ORG	ADDR
SECOND_STREET_ADDR	S_ADDR_ORG	ADDR
PHYSICAL_CITY	S_ADDR_ORG	CITY
PHYSICAL_STATE	S_ADDR_ORG	PROVINCE or STATE
PHYSICAL_ZIP	S_ADDR_ORG	ZIPCODE
COUNTRY_NAME	S_ADDR_ORG	COUNTRY
COUNTY_NAME	S_ADDR_ORG	COUNTY
MAIL_ADDRESS	S_ADDR_ORG	ADDR
MAIL_ADDRESS_2	S_ADDR_ORG	ADDR
MAIL_CITY	S_ADDR_ORG	CITY

From Column	To Table	To Column
MAIL_STATE	S_ADDR_ORG	STATE
MAIL_ZIP	S_ADDR_ORG	ZIPCODE
TELEPHONE	S_ORG_EXT	PH_NUM
FAX_NUMBER	S_ORG_EXT	FAX_PH_NUM
ANNL_SLS_AMT	S_ORG_EXT_X	ATTRIB_14
CURRENCY_CODE	S_ORG_EXT	BASE_CURCY_CD
EMPLOYEES_TOTAL	S_ORG_EXT_X	ATTRIB_26
EMPLOYEES_HERE	S_ORG_EXT	EMP_COUNT
YEAR_STARTED	S_ORG_EXT_X	ATTRIB_27
LOC_TYPE_STAT_IND	S_ORG_EXT	included in LOC
PUBLIC_PRIVATE_IND	S_ORG_EXT_X	ATTRIB_08
GLBLULT_DUNS_NUM	S_ORG_EXT	GLBLULT_DUNS_NUM
DOM_ULT_DUNS_NUM	S_ORG_EXT	DOM_ULT_DUNS_NUM
PAR_DUNS_NUM	S_ORG_EXT	PAR_DUNS_NUM
LINE_OF_BUSINESS	S_ORG_EXT_X	ATTRIB 03
PCT_GROWTH_SLS_3YR	S_ORG_EXT_X	ATTRIB_15

The following table shows the S_PRSP_CONTACT table mapping for D&B Update Manager (Siebel). The S_PRSP_CONTACT table contains information about the D&B contacts such as the name of the CEO and various company executives. D&B provides up to four contacts for each D&B account.

From Column	To Table	To Column
LAST_NAME	S_CONTACT	LAST_NAME
FST_NAME	S_CONTACT	FST_NAME

From Column	To Table	To Column
MID_NAME	S_CONTACT	MID_NAME
PER_TITLE	S_CONTACT	PER_TITLE
PER_TITLE_SUFFIX	S_CONTACT	PER_TITLE_SUFFIX
JOB_TITLE	S_CONTACT	JOB_TITLE
SEX_MF	S_CONTACT	SEX_MF

The following table shows the S_DNB_ORG_SIC table mapping for D&B Update Manager (Siebel). The S_DNB_ORG_SIC table contains the Standard Industrial Classification (SIC) code developed by the US Government. The code is assigned to businesses and other organizations by classifying and subdividing the activity performed by that establishment at that location. D&B provides up to six SICs for each D&B account. In the D&B Update Manager process, the primary SIC code is mapped to the S_INDUST table and all SIC codes are mapped to the S_ORG_INDUST table.

From Column	To Table	To Column
ROW_ID	S_INDUST	PR_INDUST_ID
	S_ORG_INDUST	INDUST_ID

The following table describes how address and contact information is updated by the D&B Update Manager (Siebel) process.

If This D&B Information Changes...	Then...
Street address City (Abbreviated) state	A new address record is added to the Address table.
Address information other than street address, city, or state	The address record is updated in the Address table.
Phone number Fax number	The address record is updated in the Address table.
Contact first name or Contact last name	A new contact record is added to the Contact table.

If This D&B Information Changes...	Then...
Contact information other than first or last name	The contact record is updated in the Contact table.

Field Mapping for D&B Real-Time Updates

When you purchase account information through the D&B Web site using the D&B real-time search and update feature in the Siebel application, certain fields in the Siebel business components are populated. These fields are a subset of the fields that are populated by the D&B Update Manager (D&B) server component. For example, D&B does not provide the contact first, last, and middle names fields in the real-time update.

The following table shows the fields that can be populated or updated when you purchase account information using the D&B real-time search and update feature.

D&B WorldBase Marketing Plus with Linkage	Siebel Business Component Name.Field Name
Business Structure Code (Location Type)	DNB Account.Location Type
Domestic Ultimate Name	DNB Account.Domestic Ultimate Business Name
Global Ultimate Name	DNB Account.Global Ultimate Business Name
Parent/HQ Business Name	DNB Account.Parent HQ Name
Physical State	DNB Account.State Name
Business Name	DNB Account.Business Name
Trade Style	DNB Account.Trade Style
Street Address	DNB Account.Physical Address
Mail Address	DNB Account.Mail Address
City Name	DNB Account.Physical City
Mail City Name	DNB Account.Mail City
Physical State/Province Abbreviation	DNB Account.Physical State
Mailing State/Province Abbreviation	DNB Account.Mail State

D&B WorldBase Marketing Plus with Linkage	Siebel Business Component Name.Field Name
ZIP/Postal Code	DNB Account.Physical Zip
Mail Postal/ZIP Code	DNB Account.Mail Zip
Country Name	DNB Account.Country Name
D&B D-U-N-S Number	DNB Account.DUNS Number
Telephone Number	DNB Account.Main Phone 2
Cable/Telex Code	DNB Account.Cable Telex Number
Facsimile Number	DNB Account.Main Fax 2
National ID	DNB Account.National Identification Number 2
SIC Code	DNB Account.SIC Code
Primary Local Activity Code	DNB Account.Primary Local Activity Code
Year Started	DNB Account.Year Started 1
Employees Here	DNB Account.Employee Here
Employees Total	DNB Account.Employee Total
Annual Sales US Dollars	DNB Account.Sales Volume
Annual Sales Local	DNB Account.Annual Sales Local Currency
Legal Status	DNB Account.Legal Status
Subsidiary Code	DNB Account.Subsidiary Indicator
Import / Export / Agent Ind.	DNB Account.Import Export Code
Global Ultimate D&B D-U-N-S Number	DNB Account.Global Ultimate DUNS
Global Ultimate Indicator	DNB Account.Global Ultimate Indicator

D&B WorldBase Marketing Plus with Linkage	Siebel Business Component Name.Field Name
Global Ultimate WorldBase Country Code	DNB Account.Global Ultimate Country Code
Domestic Ultimate D&B D-U-N-S Number	DNB Account.Domestic Ultimate DUNS
Headquarter/Parent D&B D-U-N-S Number	DNB Account.Parent HQ DUNS
HQ/Parent WorldBase Country Code	DNB Account.Parent/HQ Country Code

Field Mapping for Account Promotion and Prospect Lists

When users promote D&B accounts or create prospect lists from the D&B screen, fields in the DNB Account and DNB Contact business components are mapped to fields in other business components. The following table shows these maps. These maps can be viewed in detail in the Business Component User Properties window of Siebel Tools. For information about promoting accounts and creating prospect lists, see *Opportunities (End User)*.

User Property Prefix and Map Name	D&B Source Business Component	Siebel Destination Business Component	Process and Description
Account Map	DNB Account	Account	Promotion. Specifies the fields in DNB Account that is copied to Account business component.
Contact Map	DNB Contact	Contact	Promotion. Specifies the fields in DNB Contact that is copied to Contact business component.
Mailing Address Map	DNB Account	Business Address	Promotion. Specifies the mailing address fields in DNB Account that is copied to Business Address.
Physical Address Map	DNB Account	Business Address	Promotion. Specifies the physical address fields in DNB Account that is copied to Business Address.
Prospect Info Map	DNB Contact	List Mgmt Prospective Contact	Create Prospect List. Specifies the biological information (such as last name, first name, and so on).

User Property Prefix and Map Name	D&B Source Business Component	Siebel Destination Business Component	Process and Description
Prospect Contact Info Map	DNB Account	List Mgmt Prospective Contact	Create Prospect List. Specifies the contact information (such as company, address, phone number, and so on) fields in the DNB Account that is copied into the List Mgmt Prospective Contact.

22 D&B Integration (End User)

D&B Integration (End User)

This chapter describes how to use D&B data and reports to manage customer relationships, acquire new customers, and create high quality new account records. It includes the following topics:

- *Accessing Company Data and Reports with D&B*
- *Viewing D&B Aggregate Data for a Company*
- *Promoting a D&B Account*
- *Creating a Prospect List from D&B Data*
- *Viewing a D&B Report*
- *Using Global Integration to Add New D&B Accounts*

Accessing Company Data and Reports with D&B

The D&B screen allows you to access D&B marketing data as well as business and credit reports from within your Siebel application.

You can directly access D&B data for use in prospecting, qualifying leads, and generating marketing lists. You also can integrate D&B data and reports into your Siebel application, allowing you to perform the following tasks:

- Use D&B information to standardize data for your customer accounts.
- Access D&B business and credit reports.
- Search D&B for new accounts.
- Generate prospect lists from D&B relationships and demographic data.
- View account hierarchies and related opportunities across a corporate family structure.

Viewing D&B Aggregate Data for a Company

When you have the D&B account information loaded into your Siebel application, some views allow you to use the data and view company hierarchies. The following procedure explains how to view aggregate data for a company using the D&B screen.

> **Note:** D&B data for a company is read-only until the company is promoted to a Siebel account. For more information, see *Promoting a D&B Account*.

To view aggregate data

1. Navigate to the D&B screen.

2. In the D&B Accounts list, select the account for which you want to view the aggregate data.
3. In the More Info form, query for the accounts by specifying your criteria in the appropriate fields.

   A list of D&B accounts that meet your criteria appear.

   > **Note:** If the DUNS # (number) field does not appear in the list, then use the Columns Displayed option in the menu for the cogwheel icon to display the field.

Promoting a D&B Account

You can use the D&B list to locate accounts that are potential sales leads. After you identify accounts that meet your criteria, you can promote the accounts into your accounts list.

To promote a D&B account

1. Navigate to the D&B screen, then the D&B Accounts list.
2. In the D&B Accounts list, select the company or companies that you want to add to your accounts list.
   - To select a sequence of account records, hold down the SHIFT key and click the account records.
   - To select multiple accounts that are not in sequence, hold down the CTRL key and click the account records.
3. In the D&B Accounts list, click Promote Account.

   A check mark appears in the Promoted field and the company is added to your Siebel application.

   Drill down on the Business Name field to view the account profile and related contacts.

   > **Note:** The Data Validation Manager uses a set of user defined rules to validate business component data. When you promote one or more accounts, each account is created individually without consideration for parent and child relationships. The Duns number is checked, and the account name to check whether the account already exists in the account name is checked. Therefore, it is recommended that you exclude promoted accounts from the data validation business processing.

Creating a Prospect List from D&B Data

You can use D&B data to generate sales leads. One way to use sales leads is to create a prospect list for your telesales or sales team to contact.

To create a prospect list

1. Navigate to the D&B screen, then the D&B Account List view.
2. Select the company or companies that you want to include in your list, and then click Create D&B List.

   The contacts associated with the company or companies are added to a prospect list.
3. To view the prospect list, navigate to the D&B Lists view.

4. In the D&B Lists list, select the list and drill down on the List Name field to view accounts on the list.

Viewing a D&B Report

After a D&B report order is set up by your administrator, you can view business and credit reports from within your Siebel application. This information can also be viewed from the Accounts screen's D&B Reports view.

To view a D&B report

1. Navigate to the D&B screen.
2. In the D&B Accounts list, select the company for which you want to view reports.
3. Navigate to the Reports view.

   The D&B report for the selected company appears.

Using Global Integration to Add New D&B Accounts

After a D&B Global Integration access is set up by your administrator, you can access D&B real-time within your Siebel application and enter criteria to locate new accounts in the D&B database. Search criteria can include the business name with state or province and country information, D&B D-U-N-S number, local business ID, and telephone number.

When you run a search for new D&B accounts, the search criteria is sent to D&B's Global Integration, along with the user's D&B account name and password. When D&B receives the information, Global Integration automatically uses the criteria to select the single best search method to run. D&B calculates the criteria matches and returns the number to Siebel. If there are no matches for the criteria, then the requestor is notified.

At this point, you can opt to purchase the account information, or cancel the Global Integration search process. If an account is purchased, then data received from D&B is added to the Siebel D&B tables and is available in D&B All Accounts view.

Note: If the selected account already exists in your Siebel D&B database, then the account is not purchased.

To initiate D&B's Global Integration search

1. Navigate to the D&B screen, then the D&B Accounts List view.
2. Click Search D&B for New Account.
3. In the Search D&B dialog box, complete the necessary fields for the query.

   You must enter sufficient data to initiate a query in the United States. For example, in the Search D&B form you can enter the business name, state or province, and country name, the D-U-N-S number and country name,

the local business ID and country name, or the phone number and country name. If you enter only the business name, then the search fails because the data is insufficient.

The Search D&B query fields are described in the following table.

Field	Comments
Business Name	Type the business name and type or select the address information. The business name and address search is the most commonly used search method. At a minimum, the business name and country must be included. For Canadian businesses, the province must also be included. When you are searching for a business by name, do not use wildcard characters (*) for unknown characters in the name. Additional information such as town, street address, and postal code, can be included to increase the chances of finding an exact match.
Street Address	
City	
State/Province	
Country Name	
ZIP Code	
DUNS #	Type a known D&B D-U-N-S number to verify the identity of a business. The D&B D-U-N-S number must contain only nine numeric characters (no spaces, dashes, and so on). If you type a value in this field, then you must also select a value in the Country Name field.
Local Business ID	Type a value for the local business identifier. Many countries have their own numbering schemes to identify local businesses. Normally, this scheme is a government-sponsored schema for the purpose of business registration and tax filing. The local business ID submitted in a search must contain only numeric characters (no spaces, dashes, and so on). If you type a value in this field, then you must also select a value in the Country Name field. D&B Global Integration supports searching by the following local business identifiers. Australia-CAN Belgium-BTW/TVA France-SIREN Germany-Hr. Number Ireland-Company House Italy-CCIAA Netherlands-KvK Nr

Field	Comments
	Portugal-Fiscal Spain-CIF/NIF Sweden-Company House United Kingdom-Company House
Phone #	Type the telephone number as dialed from within the country, including the area code or city code if required. Do not include the international long distance code (country code). For example 9086655000 for a search in New Jersey, US; 9055686000 for a search in Ontario, Canada; 01494422000 for a search in High Wycombe, England; 0104009400 for a search in Rotterdam, Netherlands. The telephone number must contain only numeric characters (no spaces, dashes, and so on).

4. After you have entered the criteria, click Search D&B.
5. In the Search D&B list of results, select an account, and then click Purchase.

   You can click Refine Query to modify the query criteria, and you can click Cancel to return to the D&B Accounts list without purchasing.

   The purchased account is highlighted in the D&B Accounts list.

23 Contacts

Contacts

This chapter includes information about administering and using contacts. It includes the following topics:

- *About Contacts*
- *Scenario for Managing Contacts*
- *Adding a Contact*
- *Promoting a Personal Contact to a Contact*
- *Creating a Profile for a Contact*
- *Adding a Contact to a Synchronization List*
- *Assessing a Contact*
- *Synchronizing Account Information with External Applications*

About Contacts

Contacts are individuals with whom your company conducts business or expects to conduct business in the future. These individuals can be employees of other companies, independent consultants, vendors, or personal acquaintances. Contacts can be associated with several accounts, but a contact is the primary on only one account. Contacts can also be associated with numerous opportunities.

If your organization serves mostly individual consumers, or if you are answering inbound calls related to a marketing campaign, then use the Contacts screen when answering inbound calls. If your organization serves mostly businesses, then use the Accounts screen when answering general inbound phone calls.

This chapter describes how sales professionals can use the Contacts screen to record information about individuals who interact with their company.

Scenario for Managing Contacts

This topic gives one example of how contact management might be used. You might use contact management differently, depending on your business model.

In the course of a business day, a sales representative interacts with other professionals. These formal and informal exchanges can result in potential leads or sales opportunities.

A sales representative determines if her company has done business with a particular company by reviewing account and contact records. In cases where contacts are not listed, the sales representative creates new contact records in the Siebel Sales application, and associates the contacts with new or existing accounts.

If the possibility of doing business (an opportunity) arises, then the sales representative creates the opportunity and associates activities and contacts with the opportunity to help her track important milestones for obtaining and closing deals.

Adding a Contact

When a sales representative identifies an individual as a possible source for leads, that individual's information is added to Siebel Sales as a contact. Team members can access this contact information while they are working on potential business opportunities.

A contact team is a group of employees or partners who can view the contact information in the My Contacts view. If you work in a Mobile Web Client environment and are a member of the contact team, then the contact information is downloaded to your local database the next time you synchronize.

Use the following procedure to create a contact record.

To add a contact

1. Navigate to the Contacts screen, then the Contacts List view.

   A contact record appears on the My Contacts view only if you are on the contact team for the contact.
2. In the Contacts List, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Last Name	Type the contact's last name.
First Name	Type the contact's first name.
Account	Select the account with which the contact is associated.
Contact Method	Select the contact's preferred method of interaction. Default values include Email, Fax, Pager, and Phone.
Job Title	Type the contact's professional title.
Household Status	Displays the status of the household to which the contact is affiliated.
Organization	Select the organizations for the contact. You can associate multiple organizations with a contact, but your organization is the default organization. Your system administrator sets up organizations in your Siebel application.

Field	Comments
Middle Initial	Type the contact's middle initial.
Manager Last Name	Select the manager's last name. This field must have a value before you can perform an organizational analysis.
Account Status	Displays the status of the account with which the contact is associated.

3. Drill down on the Last Name field of the record, and navigate the More Info view to complete more fields.

   Some fields are described in the following table.

Field	Comments
Do Not Call	Select the check box to indicate to not telephone the contact.
Do Not Email	Select the check box to indicate to not send email to the contact.
Do Not Mail	Select the check box to indicate to not send mail to the contact.
Send Email Updates	Select the check box to indicate that the contact wants to receive email updates about products and services.
Comments	Type any additional information associated with the contact.
Contact Status	Select the status of the contact. Examples are Active, Qualified, Marked for Deletion.
Households	Select the households with which the contact is affiliated. Households allow you to track and target contact affiliations, and often these contacts share an address. For more information about households, see *Households*.
Contact Team	Select the employees for the contact team. This field displays a default value that is based on your user ID. After you create a contact, you are automatically listed as the primary team member. You can add individuals to the contact team by selecting them from the employee list. Only a manager or administrator can change the primary contact team member, or can delete the primary contact team member.
Global Owner	Select the name of the team member who is the global account owner. In cases of multinational or global companies, this field designates one main account team member to oversee the account.

Field	Comments
Registration Source	Displays a value for how the contact was registered. For example, the contact might have been registered at a particular marketing event.
Price List	Select the price list associated with the contact.
Disable Cleansing	Select the check box to not permit data cleansing.
Sync List	Select the user IDs of users who synchronize the contact with a personal information manager (PIM) such as Microsoft Outlook. This field requires Siebel Server Sync.
Sync	Displays a check to indicate the user has included the contact record in the user's Sync List. This field requires Siebel Server Sync.
Lock Assignment	Select the check box to lock the contact team assignment from reassignment by Siebel Assignment Manager.
Employee Flag	Displays a check to indicate that the contact is an employee of your company.
Time Zone	Select the time zone in which the contact works or lives.

Promoting a Personal Contact to a Contact

Contact records can be promoted from the My Personal Contacts view to the My Contacts view.

To promote a contact from My Personal Contacts to My Contacts

1. Navigate to the Contacts screen, then the Personal Contacts List view.
2. In the Contacts list, select the contact for promotion.
3. In the Contact form, clear the check box in the Private field.

   The Contact record appears in the My Contacts list.

> **Note:** You cannot designate a contact as Private (My Personal Contacts) from the My Contacts list.

Creating a Profile for a Contact

A profile consists of information that is collected about a contact. This information can include a contact's expenditure approval, hobbies, education, and the name of the contact's spouse.

To create a profile

1. Navigate to the Contacts screen, Contacts List, then the Profile view.
2. Query for the contact.
3. In the Profile form, complete the necessary fields.

Adding a Contact to a Synchronization List

A contact can be added to a list for synchronization with a personal information manager (PIM), for example, Microsoft Outlook, using Siebel Server Sync. For more information about synchronizing contacts, see *Siebel Server Sync Guide* .

To add a contact to a sync list

1. Navigate to the Contacts screen, then the Contacts List view.
2. In the Contacts list, drill down on the Last Name field of the contact to add to the sync list.
3. Navigate to the More Info view.
4. In the More Info form, click the cogwheel icon, and select Add to Sync List.

   A check mark appears in the Sync check box of the More Info form.

   You can also add a contact to a different sync list by selecting the contact in the Sync List field of the More Info form.

Removing a Contact From a Synchronization List

Complete the following procedure to remove a contact from the sync list.

To remove a contact from a sync list

1. Navigate to the Contacts screen, then the Contacts List view.
2. In the Contacts list, drill down on the Last Name field of the contact to remove from the sync list.
3. Navigate to the More Info view.
4. In the More Info form, click the cogwheel icon, and select Remove from Sync List.

   The check mark is removed from the Sync check box in the More Info form.

Assessing a Contact

You can use assessments to compare contacts with each other, compare them with a model, or to determine the information that is present for a contact. To perform the assessment, you enter values for the assessment attributes, and a composite assessment value for the contact is calculated. For information about how to perform an assessment, see *Performing an Assessment (End User)*.

Synchronizing Contact Information with External Applications

The Application Services Interface (ASI) feature allows you to synchronize the account data between a Siebel application and an external application in real time. This feature enables you to maintain consistent account information across your enterprise, and to eliminate manual entry of data in multiple applications.

If your Siebel administrator has set up real-time account integration between a Siebel application and another application, then you can use the Update External System command to send new and modified account information from the Siebel application to the other application in real time. For more information about ASI, see *Siebel Application Services Interface Reference* and *Integration Using ASIs*.

To synchronize contact information with an external application

1. Navigate to the Contacts screen, then the Contacts List view.
2. In the Contacts list, select a contact record.

   To create a new contact record, see *Adding a Contact*.
3. In the Contacts list, click the cogwheel icon, and select Update External System.

24 Integration Using ASIs

Integration Using ASIs

This chapter includes information about administering iHelp. It includes the following topics:

- *About ASIs*
- *Setting Up Account, Contact, and Household ASIs*
- *ASI Workflow Descriptions*

About ASIs

ASIs allow you to integrate Siebel Business Applications with other applications in real time. For general information about ASIs, see *Siebel Application Services Interface Reference* .

The Accounts, Contacts, or Households screens use ASIs to exchange data with any external application such as a back-office application. The following table shows these ASIs. You must set up these ASIs shipped with your Siebel application before they can be used. This chapter provides the procedures that you must perform to set up these ASIs. Depending on your business needs, you might choose to set up ASIs and activate workflows for some or all of the GUI commands listed in the following table.

Screen	GUI Command	Workflow	Outbound and Inbound ASI Pairs
Accounts	Update External System	Synchronize Account ASI	External Account Siebel Account
Accounts (Credit Profile view)	Refresh	Get Account ASI	
Contacts	Update External System	Synchronize Contact ASI	External Contact Siebel Contact
Households	Update External System	Synchronize Household ASI	External Household Siebel Household

Setting Up Account, Contact, and Household ASIs

To set up the prebuilt ASIs for Accounts, Contacts, and Households, perform the following tasks:

1. *Setting Up Web Services for Account, Contact, and Household ASIs*
2. *Activating Workflows for Account, Contact, and Household ASIs*

Other tasks you might want to perform include:

- **Extending ASIs.** For more information, see *Siebel Application Services Interface Reference* .
- **Deactivating fields in the ASIs.** For more information, see *Siebel Application Services Interface Reference* .
- **Customizing ASI workflows.** For more information, see *Siebel Business Process Framework: Workflow Guide* .

Setting Up Web Services for Account, Contact, and Household ASIs

To set up the Web services, you must set up both outbound and inbound Web services for the ASIs. The procedures that follow show you the steps required for each ASI.

Setting Up Outbound Web Services

Complete the following procedure to set up an outbound Web service.

To set up an outbound Web service

1. Navigate to the Administration - Web Services screen, then the Outbound Web Services view.
2. In the Outbound Web Services list, query to display the record with External Account, External Contact, or External Household in the Name field.
3. Verify that the fields in the Outbound Web Services list match those in the following table.

Namespace	Name	Status
`http://siebel.com/asi/`	One of the following: External Account External Contact External Household	Active

4. In the Service Ports list, create a new record, and complete the fields in the following table.

Field	Comments
Name	Type a name for the port.

Field	Comments
Service Display Name	Select External Account, External Contact, or External Household.
Transport	Select a value from the drop-down list.
Address	Displays a template address when you select a transport. Edit the address to which to send the data.
Binding	Select SOAP_RPC if a SOAP header is expected by the receiving application.

Setting Up Inbound Web Services

Complete the following procedure to set up an inbound Web service.

To set up an inbound Web service

1. Navigate to the Administration - Web Services screen, then the Inbound Web Services view.
2. In the Inbound Web Service list, query to display the record with Siebel Account, Siebel Contact, or Siebel Household in the Name field.
3. Verify that the fields in the Inbound Web Services list match those in the following table.

Namespace	Name	Status
`http://siebel.com/asi/`	One of the following: Siebel Account Siebel Contact Siebel Household	Active

4. In the Service Ports list, review the information in the fields for the service port and make any changes required for your Siebel application.
5. In the Operations list, review the information and make any changes required for your Siebel application.

Activating Workflows for Account, Contact, and Household ASIs

The following Workflow Processes are used for real-time integration of account, contact and household data:

- Synchronize Account ASI
- Get Account ASI
- Synchronize Contact ASI

- Synchronize Household ASI

You must activate these workflows. For information about activating workflows used by Account, Contact, and Household ASIs, see *Siebel Business Process Framework: Workflow Guide* . For a description of these workflows, see *ASI Workflow Descriptions*.

ASI Workflow Descriptions

This topic describes the Workflow Processes that are used to invoke the ASIs for account processes.

It is not necessary to modify these workflows, but you can modify them to suit your business model.

Synchronize Account ASI

This workflow submits the account information to the outside application to synchronize the information between the current and outside application.

- Query For Account By ID. Queries for the account on the current application using the object ID. Returns an account property set containing the account information.
- External Account Proxy. Calls the Synchronize method on the outside application, passing in the account property set. This step returns an account property set, which contains any changes the outside application made to the account.
- Synchronize Account. Takes the account property set returned by the previous step and synchronizes it with the account in the current application.

Synchronize Contact ASI

The Synchronize Contact ASI process is essentially the same as the Synchronize Account ASI process, except that contact replaces account.

Synchronize Household ASI

The Synchronize Household ASI process is essentially the same as the Synchronize Account ASI process, except that household replaces account.

Get Account ASI

This workflow queries the outside application to retrieve the latest information about the account. It returns the new information and synchronizes the account on the current application.

- Query Account By ID. Queries for the account on the current application using the object ID. Returns an account property set containing the account information.

- Isolate Integration ID. In the next step, the workflow uses a query by example. Query by example takes the property set and looks for an account with exactly the same values for the fields in the property set. If the account has changed on the outside application, then those values no longer match. The workflow must query by a value that does not change (the integration ID). Isolate Integration Id takes in a property set and removes all the fields, except the integration ID.
- External Account Proxy. Using the property set, which has only an integration ID now, this step queries by example on the outside applications. After it finds the account with that integration ID, it returns an account property set containing the account information.
- Synchronize Account. Takes the account property set returned by the previous step and synchronizes it with the account in the current application.

25 Web Services

Web Services

This chapter includes information about the Web service that enables you to access the Siebel database from Microsoft Word. It includes the following topics:

- *About the Word Web Service*
- *Seed Data for Word Web Service*
- *Requirements for Connecting Template to Siebel EAI*
- *Process of Configuring Word Web Service*
- *Downloading the Template for the Word Web Service*
- *Connecting the Word Template to Siebel EAI*
- *Process of Using Word Web Service to Perform a Mail Merge*
- *Getting the Data for a Mail Merge from the Siebel Database*
- *Refining Recipients for a Mail Merge*
- *Refining the Message for a Mail Merge*
- *Previewing Messages for a Mail Merge*
- *Printing or Sending Mail Merge Messages*
- *Logging Messages as a Siebel Activity*

About the Word Web Service

The Word Web service enables you to use the Word mail merge feature directly with your Siebel database. The Word Web service adds a custom toolbar to your documents. You can use the toolbar to perform your mail merge tasks. You can use the Word Web service to perform the following tasks:

- Create a list of mail merge recipients with data from your Siebel database.
- Refine your mail merge message and add fields to represent fields from your Siebel database.
- Preview your mail merge documents with the data fields populated with data from your Siebel database.
- Print or email your mail merge documents directly from Word.
- Log each mail merge event as an activity in your Siebel database.

By default, the following record types are supported:

- Accounts
- Activities
- Contacts
- Opportunities

- Service Requests

For information on supported versions of Microsoft Word, see *Siebel System Requirements and Supported Platforms* on Oracle Technology Network.

> **Note:** For Siebel CRM product releases 8.1.1.9 and later and for 8.2.2.2 and later, the system requirements and supported platform certifications, see the Certifications tab on My Oracle Support.

Users must have the macro-security level set to medium or lower to use this Web service.

Seed Data for Word Web Service

Siebel Business Applications include seed data for the Word Web service. The seed data includes the following items:

- A template file for the service.
- SAF files. These files are generated when you add templates as literature items. These files must be present to enable users to open the templates from the Literature view.

To enable users to open the Web service template from the Literature view

- Copy the *.SAF files from `$SIEBEL_ROOT/temp/SFA` into the `$FILESYSTEM` directory.

Downloading the Word Template

Complete the following procedure to download the Word template.

To download the Word template

1. Navigate to the Administration - Document screen, then the Literature view.
2. In the Literature list, select the Word template.
3. Drill down on the File Name field of the template, then save the file to your computer.

Requirements for Connecting Template to Siebel EAI

Before you can connect a Word template to the Siebel Enterprise Application Integration (EAI) component, you must make sure that the following conditions are met:

- Siebel Enterprise Server is running.
- Siebel Server or Siebel Gateway Server is running.
- Siebel EAI component group is enabled.
- Siebel Workflow Management component group is enabled.
- The Siebel Application Object Manager for the Siebel application with which you want to use the Word template is running.
- Seed data for inbound Web services is available.

- The Word template is available.

Process of Configuring Word Web Service

To configure the Word Web service, perform the following tasks:

1. *Downloading the Template for the Word Web Service*
2. *Connecting the Word Template to Siebel EAI*

Downloading the Template for the Word Web Service

The Word document template that is provided as seed data with Siebel Business Applications contains a toolbar and macros that you can use to work with data from your Siebel database in Word. For more information about how to download the Word template, see *Seed Data for Word Web Service*.

If you want help with customizing a template to your requirements, then contact your Oracle sales representative for Oracle Advanced Customer Services to request assistance.

This task is a step in *Process of Configuring Word Web Service*.

Connecting the Word Template to Siebel EAI

Before you can connect a Word template to the Siebel Enterprise Application Integration (EAI) component, you must make sure that particular conditions are met. For more information about these requirements, see *Requirements for Connecting Template to Siebel EAI*.

This task is a step in *Process of Configuring Word Web Service*.

To connect the Word template to Siebel EAI

1. In Word, open the document template.
2. Select File, then Properties.
3. Click the Custom tab.
4. Create custom properties with the values shown in the following table.

Custom Property	Value
SFAServer	`ServerName/eai_language` , where ServerName is the name of your server, and language is the language of the Siebel Application Object Manager. Include the DNS name of the server. For example, if your server name is abcdef, and your domain name is corp.xyz.com, then type abcdef.corp.xyz.com in this field.

Custom Property	Value
SFAProtocol	`http` or `https`
SFAPort	`port_number` , where port_number is the number of the port you want to use. Typically, this number is 80.

5. Save the document template.

Process of Using Word Web Service to Perform a Mail Merge

To use the Word Web service to perform a mail merge with data from the Siebel database, perform the following tasks:

1. *Getting the Data for a Mail Merge from the Siebel Database*
2. *Refining Recipients for a Mail Merge*
3. *Refining the Message for a Mail Merge*
4. *Previewing Messages for a Mail Merge*
5. *Printing or Sending Mail Merge Messages*
6. *Logging Messages as a Siebel Activity*

Note: After you log in to the Siebel database in this process, your session might time out. If this timeout occurs, then you must log in again.

Getting the Data for a Mail Merge from the Siebel Database

You can use the Word Web service to get contact information for a mail merge from your Siebel database. You perform the following actions to create the query to run:

- Select the business component from which you want contact information.
- Specify conditions to apply to the contact records. You can specify up to six conditions.
- Select the fields you require from the contact records. You can specify up to 40 fields.

When you run the query, the output is saved in a local area as the data source for your mail merge.

This task is a step in *Process of Using Word Web Service to Perform a Mail Merge*.

To get contact data from the Siebel database

1. In Word, open the document template.
2. Click Get Siebel Data, then select the type of information you want to include in mail merge.

Select one of the following options:

- Account
- Contacts
- Opportunity
- Service Request

Alternatively, if you have saved contact data previously, then select Use Saved List and select the list you require.

3. Enter your Siebel username and password, then click Login.
4. Specify any conditions that you want to apply to the data on the Filters tab of the Define List dialog box.
5. Click the Fields tab, then use the dialog to specify the fields that you want to include in the report.
6. Click OK.

Refining Recipients for a Mail Merge

After you save the contact data, you can review the list of recipients for your mail merge, and make modifications to the list if required.

This task is a step in *Process of Using Word Web Service to Perform a Mail Merge*.

To modify recipients

1. Open the Word document to which you added a data source in *Getting the Data for a Mail Merge from the Siebel Database*.
2. Click Refine Recipients.
3. Use the Mail Merge Recipients dialog to make modifications to the list of mail merge recipients.
4. Click OK.

   The changes to the list of contacts are saved in the data source.

Refining the Message for a Mail Merge

After you modify the list of contacts for your mail merge, you can modify the message. You can add fields from the data source to the message.

This task is a step in *Process of Using Word Web Service to Perform a Mail Merge*.

To modify the message

1. Open the Word document with which you associated contact data in *Getting the Data for a Mail Merge from the Siebel Database*.
2. To insert a data field from the data source, perform the following steps:
   a. Position the cursor where you want the data field to appear in the message.

b. Click Refine Message, then select Insert Siebel Field.
c. Select the field that you want to insert.

   The data fields are added to the message as fields, and are not populated with data from the data source yet.

3. To insert text from the Word AutoText feature, perform the following steps:
   a. Position the cursor where you want the AutoText item to appear in the message.
   b. Click Refine Message, then select AutoText.
   c. Select the AutoText item that you want to insert.
4. Click Save in the toolbar to save the document.

Previewing Messages for a Mail Merge

After you specify the data fields to include in the mail merge message, you can preview your mail merge messages with the data fields populated with data from the Siebel database.

This task is a step in *Process of Using Word Web Service to Perform a Mail Merge*.

To preview messages

1. Open the Word document to which you added a data source in *Getting the Data for a Mail Merge from the Siebel Database*.
2. Click Preview.
3. Click First Record, Last Record, Previous Record, and Next Record to preview your mail merge messages.

Printing or Sending Mail Merge Messages

After you preview your mail merge messages, you can merge all of the messages to one Word document, send all of the messages to a printer, or send all of the messages as email messages.

This task is a step in *Process of Using Word Web Service to Perform a Mail Merge*.

To print or send messages

1. Open the Word document to which you added a data source in *Getting the Data for a Mail Merge from the Siebel Database*.
2. Click Print or Send Message, and then select one of the menu items described in the following table.

Menu Item	Comments
Merge to Document	Merges all records from the data source, and adds each merged document into one Word document.
Merge to Printer	Merges all records from the data source, and prints each document.

Menu Item	Comments
Send as Email	Merges all records from the data source, and emails each document to an address specified in the data source. Use the Merge to E-mail dialog box to specify the field where the email address is stored in the data source, and other details of the email message.

Logging Messages as a Siebel Activity

After you send the mail merge to the contacts in the data source, you might want to log an activity record in your Siebel database to record the activity.

This task is a step in *Process of Using Word Web Service to Perform a Mail Merge*.

To log messages as a Siebel activity

1. Open the Word document to which you added a data source in *Getting the Data for a Mail Merge from the Siebel Database*.
2. Click Log as Siebel Activity.
3. In the Log as Siebel Activity dialog box, complete the fields in the following table.

Field	Maps to Siebel Activity Field
Date	Start Date
Description	Comments
Priority	Priority
Status	Status
Subject	Description
Type	Type

4. Click Save.

   An activity record for the communication event is created in the Siebel database for each recipient or contact. The record contains the message to the recipient or contact, with the merged fields relevant to the recipient or contact.

26 Accounts

Accounts

This chapter covers how to work with accounts in Siebel Business Applications. It includes the following topics:

- *About Accounts*
- *Scenario for Managing Accounts in Siebel Sales*
- *Scenario for Managing Accounts in Siebel Call Center*
- *Creating an Account*
- *Associating a Contact with an Account*
- *Associating an Activity with an Account*
- *Associating an Opportunity with an Account*
- *Assessing an Account*
- *Synchronizing Account Information with External Applications*
- *Viewing Account Credit Profiles*

About Accounts

An account is a business external to your company. An account represents a current or potential client, a business partner, or a competitor.

You work with accounts through the Accounts screen. Sales representatives use the Accounts screen and the associated views as the primary navigation tool for customer interactions. Call center agents use the Accounts screen to record information about companies and other organizations that interact with your company.

If your organization serves mostly businesses, then use the Accounts screen when answering general inbound phone calls. If your organization serves mostly individual consumers, or if you are answering inbound calls related to a marketing campaign, then use the Contacts screen when answering inbound calls.

Scenario for Managing Accounts in Siebel Sales

This topic gives one example of how account management in Siebel Sales might be used. You might use account management in Siebel Sales differently, depending on your business model.

At a vendor site, a sales representative meets a prospect. After a brief discussion, the sales representative determines that the prospect is interested in learning more about the products and services that the sales representative's company sells. The sales representative sets up a sales call with the prospect.

During the sales call, the sales representative asks numerous questions to determine the account structure of the prospect's business and to decide how best to meet the prospect's needs.

The sales representative learns that the prospect's business has four locations, and that each service is billed through the main office, and each location receives a billing statement.

After the meeting, the sales representative returns to the office and begins creating the account structure for the prospect's business.

Scenario for Managing Accounts in Siebel Call Center

This topic gives one example of how account management in Siebel Call Center might be used. You might use account management in Siebel Call Center differently, depending on your business model.

The Accounts screen and views often provide the central navigation point to help call center agents research customers and respond to inbound calls. The type of call determines which view is used by the agent in the Siebel application. The following situations provide examples of how the Accounts screen is used:

- The call center agent must see the existing account information, including the products owned by the account, to assist a caller with a service request or to follow up on a service request.
- A caller contacts the call center in response to a sales campaign. Assuming the caller is unknown, the call center agent creates a new account. First, the agent records the account name, address, and other important information. Then, the agent adds a contact or enters other information about the new account. Finally, the agent associates the contact with the campaign that resulted in the call.
- A call center agent wants to enter information about a prospective account. For example, the agent might call a prospective customer to find out if the customer located requested information on the company's Web site, and whether the customer requires any additional information. The agent adds notes that can be used by a sales representative or schedules follow-up activities to help manage the account relationship.

Creating an Account

After you identify a business relationship, you add an account to your application. As the business relationship develops, you can update the account to track important details, such as individual contacts, opportunities, and service requests.

Before you add a new account, search the accounts list to make sure that the account does not already exist.

> **Note:** When a company changes names or merges with another company, you must transfer account names and contacts to the new account name. Contact your implementation team for more information about how to rename an account. For help renaming an account, create a service request (SR) on My Oracle Support.

To create an account

1. Navigate to the Accounts screen, then the Accounts List view.

2. In the Accounts List, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Account Name	Type a name that identifies the account.
Site	Type the location of the account.
Parent	Select a parent account if the account is a subsidiary of a larger company.
Status	Select the account status. Default values include Active, Contract Pending, Gold, and Inactive.
Account Type	Select the type of account. Default values include Commercial, Competitor, Consultant, and Customer.
Account Team	Select the employees assigned to work with this account. If a call center user is not a member of the Account Team, then that user does not receive information about this account during the Mobile Web Client synchronization.
Address	Select or type the first line of account address. This value appears in some Contacts screen views and Account screen views for contacts that are associated with this account.
URL	Type the Universal Resource Locator (URL) for the account Web site.

3. Drill down on the Name field of the record, and navigate to the More Info view to complete more fields.

   Some fields are described in the following table.

Field	Comments
Industries	Select the types of business engaged in by the account.
PO Approved	Select the check box to indicate the Purchase Order (PO) has been approved.
PO Auto-Approval Limit	Type the amount for which a Purchase Order can be automatically approved.
Shipping Information	Type text for additional shipping details.
Shipping Terms	Select a value for the terms of shipping. Default values include Due, FOB, TBD, and No Charge.

Field	Comments
Price List	Select a price list associated with the account. Your application administrator uses criteria your company defines to establish price lists.
Organization	Displays the name of the organization with which the account is associated.
Current Volume	Type a monetary amount that represents the account's current sales volume.
Potential Volume	Type a monetary amount that represents the account's potential sales volume.
Synonyms	Select a synonym for the account. Use this field for alternate names for the account. For example, an account record for International Business Machines might have IBM as an entry in the Synonym field. This field assists in querying or in using Siebel Data Quality.
Partner	Select the check box to indicate the account is a business partner.
Competitor	Select the check box to indicate the account is a competitor.
Disable Cleansing	Select the check box to not permit data cleansing.
Territories	Select a sales territories associated with the account.
Lock Assignment	Select the check box to lock the sales team assignment from reassignment by Siebel Assignment Manager.
Assignment Area Code	Type an area code for the account. This code indicates that a sales representative from the same area code can be assigned to the account.
Assignment Country Code	Type a country code for the account. This code indicates that a sales representative from the same country code can be assigned to the account.
DUNS#	Displays the Data Universal Numbering System (D-U-N-S) numeric serial number for a company. The D-U-N-S number is unique for each company.
Parent/HQ DUNS	Displays the D-U-N-S number for the account's parent account.

Field	Comments
Domestic Ultimate DUNS	Displays the D-U-N-S number for the domestic ultimate, which is the highest member in the hierarchy for the same business entity within the same country. A case can be its own domestic ultimate.
Global Ultimate DUNS	Displays the D-U-N-S number for the global ultimate, which is the highest member in the hierarchy for the same business entity worldwide.
Reference	Select the check box to indicate the account offers a reference for your company's products or services.
Reference Stage	Select a value for the account stage according to your sales or other methodology. Default values include Project Planning and Strategy, Analysis and Design, Testing and Production Pilot, Rollout, and On Hold.
Referenceable as of	Select the date that the account first became a reference.

4. Navigate to other views to complete more fields.

   Some fields are described in the following table.

Field	Comments
Address Line 2	Type the second line of account address. This value appears in some Contacts screen views and Account screen views for contacts that are associated with this account.
Expertise	Select the area of expertise for the account. Default values include Technology, Quality Control, and Client Management.
Global Owner	Displays the user ID of the team member who is the global account owner. In cases of multi-national or global companies, this field designates one main account team member to oversee the account.
Inventory Location	Type the physical location of the inventory.
Location Type	Select the type of facility operated by the account at the specified site.
Parent Site	Displays the location of the company of which the account is a subsidiary.

Associating a Contact with an Account

As you work with a prospective account, you develop business relationships with the contacts associated with an account.

Contacts can belong to multiple accounts, and only one account can be the primary account. Deleting a contact record in the Accounts screen's Contacts view only removes the contact's association with the account. The original contact record is still available in the Contacts list.

To associate a contact with an account

1. Navigate to the Accounts screen, then the Accounts List view.
2. In the Accounts list, drill down on the Name field of the account.
3. Navigate to the Contacts view.
4. In the Contacts list, add an existing contact, select the contact from the Add Contacts dialog box, and click OK.

Associating an Activity with an Account

An activity is a task or event that is generally, but not always, performed for a contact, an account, or an opportunity. You attend meetings, calls, presentations, and perform other activities associated with an account. You can use the Activities list to enter and track account-related activities. If the activity has a time associated with it, then the activity appears in the Activities list and Calendar.

An account can have numerous activities associated with it. You can associate an activity with an account to track which activities you have completed and track those you want to accomplish in the future as you manage the account relationship.

To associate an activity with an account

1. Navigate to the Accounts screen, then the Accounts List view.
2. In the Accounts list, drill down on the Name field of the account associated with the activity.
3. Navigate to the Activities view.
4. In the Activities list, create an activity record to associate with the account.
   For information about how to add an activity, see *Creating Activities (End User)*.

Associating an Opportunity with an Account

Accounts are a source of business for your company. An opportunity is a potential revenue-generating event and the opportunity record stores information that you can use to manage accounts.

To associate an opportunity with an account

1. Navigate to the Accounts screen, then the Accounts List view.

2. In the Accounts list, drill down on the Name field of the account.
3. Navigate to the Opportunities view.
4. In the Opportunities list, create an opportunity record to associate with the account.

   For information about how to add an opportunity, see *Creating an Opportunity*.

Assessing an Account

You can use assessments to compare accounts with each other, compare them with a model, or to determine the information that is present or not present for an account. To perform the assessment, you enter values for the assessment attributes. The Siebel application calculates a composite assessment value for the account. For information about how to perform an assessment, see *Performing an Assessment (End User)*.

Synchronizing Account Information with External Applications

The Application Services Interface (ASI) feature allows you to synchronize the account data between a Siebel application and an external application in real time. This feature enables you to maintain consistent account information across your enterprise, and to eliminate manual entry of data in multiple applications.

If your Siebel administrator has set up real-time account integration between a Siebel application and another application, then you can use the Update External System command to send new and modified account information from the Siebel application to the other application in real time. For more information about ASI, see *Siebel Application Services Interface Reference* and *Integration Using ASIs*.

If an account has associated contacts, then you must synchronize the contacts with the external application separately. For more information, see *Synchronizing Contact Information with External Applications*.

To synchronize account information with an external application

1. Navigate to the Accounts screen, then the Accounts List view.
2. In the Accounts list, select an account record.

   To create a new account record, see *Creating an Account*.
3. In the Accounts list, click the cogwheel icon, and select Update External System.

Viewing Account Credit Profiles

If your organization uses a back-office application or another external credit management application to store customer credit information, then you can use the Credit Profile read-only view to get the most current account credit profile information.

The Accounts screen's Credit Profile view allows you to improve employee productivity by providing visibility to complete customer information within your Siebel application, and streamlines the quote-to-cash process by allowing the sales professional to identify potential credit problems early.

This procedure assumes that your Siebel administrator has completed the work necessary to allow real-time account integration through Application Service Interfaces (ASI). For information about how to set up the Web services administration to communicate with the external application, ASI structures, configuring and customizing the ASI, see Application Services Interface Reference and *Integration Using ASIs*.

To view account credit profile information

1. Navigate to the Accounts screen, then the Accounts List view.
2. Query the Account Name field for the account with the credit profile that you want to view.
3. In the Accounts list, drill down on the Name field of the account.
4. Navigate to the Credit Profile view.

   The Credit Profile form appears and includes information about credit status, risk category, credit limit, and so on. Fields in this form are read-only, except for the Skip Credit Check and Credit Auto Approval Limit fields. For more information about how to use these fields, see *Siebel Order Management Guide* .
5. Click Refresh to update the information in the Credit Profile form.

27 Global Accounts

Global Accounts

This chapter describes the administration and management tasks associated with Siebel Global Accounts. It includes the following topics:

- *About Global Accounts*
- *Scenario for Using and Administering Global Accounts*
- *Process of Using and Administering Global Accounts*
- *Generating a Default Hierarchy*
- *Creating a Custom Hierarchy*
- *Assigning a Custom Hierarchy to an Organization*
- *Updating a Custom Hierarchy*
- *Updating a Custom Hierarchy by Processing Deleted Records*
- *Configuring Error Log Files for Hierarchy Changes*
- *Adding Business Objects to the Global Accounts Hierarchy View*
- *Viewing Global Accounts (End User)*

About Global Accounts

Siebel Global Accounts is a module that provides sales professionals with global account-level visibility into the interactions that the company's sales organization and partner's sales organizations have had with the account. Users can view all accounts, opportunities, activities, contacts, and account team members across the account hierarchy on one screen, allowing sales professionals to build a deep understanding of target accounts.

Global Account hierarchies are not provided preconfigured with your Siebel application. They must be set up by an administrator. The administrators can set up the following kinds of account hierarchies:

- **Default.** This type of account hierarchy is based solely on the accounts' Parent fields. This account hierarchy is self-maintaining in that when the Parent field of any account is updated, the default hierarchy is also updated. After set up, the default hierarchy is applied to all organizations that do not already have an organization.
- **Custom.** This type of hierarchy is created by the administrator, either by modifying the default hierarchy or from the beginning. After set up, this hierarchy is independent of the accounts' Parent fields, and must be updated by the administrator when changes occur.

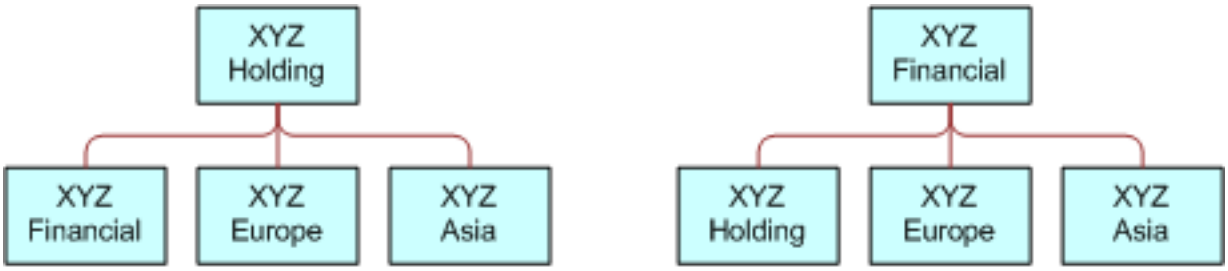
Scenario for Using and Administering Global Accounts

This topic gives one example of how global accounts might be used. You might use global accounts differently, depending on your business model.

A midsized company, Corp 123, wants to view consolidated data at the global account level. This company has a sales organization and a financial organization set up in its Siebel application. The accounts administrator sets up two account hierarchies, one hierarchy for each organization. These hierarchies allow users to view the opportunities and contact information associated with parent accounts.

The sales organization uses the default hierarchy, which is based on the Parent account field. For various reasons, the financial organization requires a modified version of the account hierarchy. One of these reasons is that some accounts' billing structures are different from the accounts' purchasing structures. For example, in the case of XYZ Inc., the following four XYZ accounts are customers of Corp 123: the XYZ Holding company, two regional subsidiaries, and a financial company. The 123 sales organization wants to view the account hierarchy where all accounts report to the parent holding company. Because all account billing for the XYZ companies is funneled through XYZ Financial, Corp 123's financial organization wants to view the account hierarchy where all accounts report to the XYZ Financial. The following image shows the two hierarchies as follows:

1. *Sales Hierarchy.* XYZ Holding has the following accounts: XYZ Financial, XYZ Europe, and XYZ Asia.
2. *Finance Hierarchy.* XYZ Financial has the following accounts: XYZ Holding, XYZ Europe, and XYZ Asia.



The default hierarchy used by the sales organization automatically updates when new accounts are added or Parent fields are changed. However, the accounts administrator updates the finance hierarchy on a weekly basis as new accounts are added and the structure of existing accounts changes.

The global accounts manager wants to review all opportunities at Corp 123. The global accounts manager navigates to the Accounts screen, and then the Global Accounts view. In this view, the manager can see the opportunities for Corp 123.

The global accounts manager can use the Enterprise Selling process (ESP) module to develop global account strategies. For information about how to use ESP with global accounts, see *Enterprise Selling Process*.

Process of Using and Administering Global Accounts

To use and administer global accounts, perform the following tasks:

1. *Generating a Default Hierarchy*
2. *Creating a Custom Hierarchy*
3. *Assigning a Custom Hierarchy to an Organization*
4. *Updating a Custom Hierarchy*
5. *Updating a Custom Hierarchy by Processing Deleted Records*
6. *Configuring Error Log Files for Hierarchy Changes*
7. *Adding Business Objects to the Global Accounts Hierarchy View*
8. *Viewing Global Accounts (End User)*

Generating a Default Hierarchy

Follow this procedure to set up a default hierarchy. After generated, this default hierarchy is automatically assigned to organizations without an account hierarchy. To change the account hierarchy assigned to an organization, see *Assigning a Custom Hierarchy to an Organization*.

> **Note:** Use the Generate Hierarchy function for hierarchy structures only with a small number of accounts, preferably fewer than 100,000.

This task is a step in *Process of Using and Administering Global Accounts*.

To create a default hierarchy

1. Navigate to the Accounts screen, then the Global Accounts Administration view.
2. In the Account Hierarchy list, click Generate Hierarchy.

   > **Tip:** If the generated hierarchy does not appear in the Account Relationships lists, then refresh the view by navigating to a different view and then returning to the Global Accounts view.

   A new account hierarchy is created. You can see error log data after you click Generate Hierarchy if an administrator configures this error log file. For more information, see *Configuring Error Log Files for Hierarchy Changes*.

   Some fields are described in the following table.

Field	Comments
Name	Displays the default name from your user ID and the date.
Default	Select the check box to indicate that the account hierarchy is the default. The default hierarchy is assigned to all organizations without an account hierarchy and is updated when new Parent fields on the account records are added or modified.

3. In the Account Relationships list, review the hierarchy records.

   > **Note:** If users are using the Siebel application when you generate the account hierarchy, then they must log off and log on again to see the default account hierarchy in the rollup views

Adding the Generate Hierarchy Business Service to a Batch Workflow Policy

The following procedure shows how to add the Generate Hierarchy business service to a batch Workflow Policy.

To add the Generate Hierarchy business service to a batch Workflow Policy

1. Create the Workflow Policy, if not already done so, in Siebel Tools or Web Tools.
2. Configure the Workflow Policy to call the Generate Hierarchy business service.
3. Use the Process Simulator to test that the Workflow Process works correctly.

   > **Note:** The Process Simulator shows a list of services that have previously been inspected in the simulator. If inspecting a business service for the first time, then it will not appear in this list so you must manually add the business service and any associated method(s) to execute the business service in the simulator.

4. Set the status of the Workflow Process to Active in the Workflow Deployment View.

   For information about how to create and configure a Workflow Policy, use the Process Simulator, and set the status of a Workflow Process, see *Siebel Business Process Framework: Workflow Guide* .

   > **Note:** If you create the business service in Siebel Tools or Web Tools, then deliver it through the Workspace delivery process as part of the Developer Workspace. This publishes the business service and creates the equivalent runtime definition. You can then use the Siebel Migration Application to move the respective Workspace version from the Integration Workspace or the main Workspace.

5. Run the Workflow Policy as a batch component in the Siebel application, as follows:

   a. Navigate to the Administration - Server Management screen, then the Jobs view.
   b. In the Jobs view, create a new job with a Component/Job value of Workflow Process Manager.
   c. In the Job Parameters list, add a parameter for the new job using the details in the following table.

Field	Comments
Name	Select a value of Workflow Process Name.
Value	Type the name of the Workflow Policy you created in Step 1.

   d. In the Job Detail form, select the time and date when you want the job to start in the Scheduled Start field.
   e. In the Jobs view, click Submit Job.

      The job automatically starts at the scheduled time, and a Task ID is generated for the job.
   f. To track the execution of the task, select the job with the Task ID that you want to track in the Jobs view, and navigate to the Tasks view.

      You can view the details of the task in the Tasks view and in additional views for the Tasks view.

Enabling Users to Add Accounts with No Parent to the Default Hierarchy

If your users must add accounts that have no parent account to the default hierarchy, then follow this procedure.

To enable users to add accounts with no parent account to the default hierarchy

1. In Siebel Tools, select the Dynamic Hierarchy Direct Relationship business component.
2. Set the value of the DynHierarchy LoadAllAccounts user property to Y.
3. Select the Account business component, then select the Parent Account Id field.
4. Set the value of the ForceActive property for the Parent Account Id field to TRUE.
5. Deliver your changes to the Siebel Runtime Repository.

Creating a Custom Hierarchy

You can create a custom hierarchy by starting from the beginning and creating a series of new records in the Account Relationships list or by generating a hierarchy. For more information, see *Generating a Default Hierarchy*.

This task is a step in *Process of Using and Administering Global Accounts*.

To create a custom hierarchy

1. Navigate to the Accounts screen, then the Global Accounts Administration view.
2. In the Account hierarchy list, create a new record, and complete the necessary fields.
   Do not check the Default field.
3. In the Account Relationships list:
   a. Create new records for each of the highest level parent accounts.
      Leave the Parent Account field blank for each of these records.
   b. Create new records for the child accounts, entering values in the Parent Account field for each record.

Creating a Custom Hierarchy Based on the Default Hierarchy

Complete the following procedure to create a custom hierarchy that is based on the default hierarchy.

To create a custom hierarchy based on the default hierarchy

1. Create an account hierarchy.
   For more information, see *Generating a Default Hierarchy*.
2. Select the account hierarchy record, and make sure that the Default field is not selected.
3. In the Account Relationships list, edit the Parent Account field for existing accounts, and create new relationship records as required.
   Accounts without parent accounts are at the start of the hierarchy and must be entered before their child records can be completed.

Assigning a Custom Hierarchy to an Organization

An organization uses the default hierarchy unless a custom hierarchy has been assigned to it.

This task is a step in *Process of Using and Administering Global Accounts*.

To assign a custom hierarchy to an organization

1. Navigate to the Administration - Group screen, then the Organizations view.
2. Select the organization with the account hierarchy that you want to change.
3. In the form in the lower part of the screen, in the Account Hierarchy field, select the custom hierarchy that you want the organization to use when viewing global accounts.

Updating a Custom Hierarchy

Custom hierarchies are static and must be updated by the administrator. Update an account hierarchy in the following ways:

- Edit the account relationships in the current hierarchy.
- Update the hierarchy to the default (parent account) hierarchy, and then edit the account relationships in the hierarchy.

This task is a step in *Process of Using and Administering Global Accounts*.

To update a custom hierarchy

1. Navigate to the Accounts screen, then the Global Accounts Administration view.
2. Select the account hierarchy record.
3. Perform one of the following steps:
    - In the Account Relationships list, edit the Parent Account fields for existing accounts, and create new relationship records as required.
    - In the Account Hierarchy list, click Update Hierarchy to return the hierarchy to the default, and in the Account Relationships list, edit the Parent Account fields for existing accounts, and create new relationship records as required.

      You can see error log data after you click Update Hierarchy if an administrator configures this error log file. For more information, see *Configuring Error Log Files for Hierarchy Changes*.

Adding the Hierarchy Update Business Service to a Batch Workflow Policy

The following procedure shows how to add the Hierarchy Update business service to a batch Workflow Policy.

To add the Hierarchy Update business service to a batch Workflow Policy

1. Create the Workflow Policy, if not already done so, in Siebel Tools or Web Tools.
2. Configure the Workflow Policy to call the Update Hierarchy business service.

3. Use the Process Simulator to test that the Workflow Process functions correctly.

   Note: The Process Simulator shows a list of services that have previously been inspected in the simulator. If inspecting a business service for the first time, then it will not appear in this list so you must manually add the business service and any associated method(s) to execute the business service in the simulator.

4. Set the status of the Workflow Process to Active in Workflow Deployment View.

   For information about how to create and configure a Workflow Policy, use the Process Simulator, and set the status of a Workflow Process, see *Siebel Business Process Framework: Workflow Guide* .

   Note: If you create the business service in Siebel Tools or Web Tools, then deliver it through the Workspace delivery process as part of the Developer Workspace. This publishes the business service and creates the equivalent runtime definition. You can then use the Siebel Migration Application to move the respective Workspace version from the Integration Workspace or the main Workspace.

5. Run the Workflow Policy as a batch component in the Siebel application, as follows:

   a. Navigate to the Administration - Server Management screen, then the Jobs view.
   b. In the Jobs view, create a new job with a Component/Job value of Workflow Process Manager.
   c. In the Job Parameters list, add a parameter for the new job using the details in the following table.

Field	Comments
Name	Select the value Workflow Process Name.
Value	Type the name of the Workflow Policy you created in Step 1.

   d. In the Job Detail form, select the time and date when you want the job to start in the Scheduled Start field.
   e. In the Jobs view, click Submit Job.

      The job automatically starts at the scheduled time, and a Task ID is generated for the job.
   f. To track the execution of the task, select the job with the Task ID that you want to track in the Jobs view, and navigate to the Tasks view.

      You can view the details of the task in the Tasks view and in additional views for the Tasks view.

Updating a Custom Hierarchy by Processing Deleted Records

When you perform the update hierarchy procedure, the records that are deleted using Enterprise Integration Manager (EIM) are not processed. This procedure results in some records not having a parent record. To delete these records, update the custom hierarchy by processing the deleted records.

The Update Hierarchy function uses the new entries in the relationship table S_DYN_HRCHY_REL to update only the denormalized table S_DYNHR_RPT_REL. This function does not affect the user interface; the function affects only the data processing.

Before updating the hierarchy with deleted records, configure the Update with Deletion button in Siebel Tools. For information about configuring a button control, see *Configuring Siebel Business Applications* .

This task is a step in *Process of Using and Administering Global Accounts*.

To configure the Update with Deletion button

1. In Siebel Tools, click Applet in the Object Explorer, select Dynamic Hierarchy Admin List Applet, and then lock the object so that you can change it.
2. In the Object Explorer, navigate to the Applet, then create a control with the following properties:

   Name = Update Hierarchy With Deletion Button

   Caption = Update Hierarchy With Deletion

   HTML Type = MiniButton

   Method Invoked = UpdateHierarchyWithDeletion
3. Right-click the applet and select Edit Web Layout.

   The Web Layout Editor displays.
4. Change the template mode in the Controls/Columns window to Edit List.

   Note: The Controls/Columns window displays the available controls; including the one you created in Step 2.
5. Relocate the new button control onto an available location. When you release the mouse, the button displays.
6. Click Save and then close the Web Layout Editor.
7. Deliver your changes to the Siebel Runtime Repository.
8. Unlock the object.
9. To view the new object in Siebel CRM, navigate to Accounts, then the Global Accounts Administration view.

Updating a Custom Hierarchy

Complete the following procedure to update a custom hierarchy.

To update a custom hierarchy

1. Navigate to the Accounts screen, then the Global Accounts Administration view.
2. Select the account relationships record that you want to update.
3. Click Update Hierarchy with Deletion.

   You can see error log data after you click Update Hierarchy with Deletion if an administrator configures this error log file. For more information, see *Configuring Error Log Files for Hierarchy Changes*.

Configuring Error Log Files for Hierarchy Changes

A user can see error log data after clicking the Generate Hierarchy button, the Update Hierarchy button, and the Update Hierarchy with Deletion button if an administrator configures error log files for these hierarchy changes.

This task is a step in *Process of Using and Administering Global Accounts*.

To configure error log files for hierarchy changes

1. Navigate to the Administration - Server Configuration screen, then Servers view.
2. In the Components view, select the Sales Object Manager (ENU) component.
3. In the Events view, change the Log Level field to 5 for the following Event Type records:
    - Generate Hierarchy Event Logging
    - Update Hierarchy Event Logging
    - Update Hierarchy With Deletion Event Logging

Adding Business Objects to the Global Accounts Hierarchy View

Users often want additional business objects to appear in the hierarchy. The business objects, such as forecasts, revenues, and service requests, already exist. Administrators must configure these business objects for the hierarchy using Siebel Tools. Users then change their preferences to view the objects in their hierarchies.

This task is a step in *Process of Using and Administering Global Accounts*.

To add a new node to the hierarchy tree

1. Navigate to the Administration - Data screen, then the List of Values view.
2. Query for records in which the Type field is GLOBACC_USERPREF.
3. Create a new record with the field values shown in the following table.

Field	Value
Type	GLOBACC_USERPREF
Display Value	The name of the object (for example, Forecasts or Revenues)
Language Name	The language of the object in the tree

Field	Value

Note: You can verify that you correctly added the new node by navigating to the User Preferences screen, then Global Accounts view. The new node must appear in the list of global account tree objects.

Configuring the Tree Node

Complete the following procedure to configure the tree node.

To configure the tree node

1. In Siebel Tools, navigate to Business Component in the Object Explorer, select the business component for the node that you want to add to the tree, lock the project for that business component, and then copy and rename that business component.

   For example, copy the Service Request business component and rename the copied business component Global Account Service Request.
2. Configure the join, field, and user properties records for the new business component by completing the following steps:

   a. Navigate to Business Component, then Join:

      - Add a join record with an Alias field of DynHierarchy Visibility Position and a Table field of S_ACCNT_POSTN. Select the Outer Join Flag for the new record.
      - Add a join record with an Alias field of DynHierarchy Visibility Organization and a Table field of S_ORG_BU. Select the Outer Join Flag field the new record.

   b. Navigate to Business Component, then Field:

      - Add a field record with a Name field of Dynamic Hierarchy ID, a Join field of S_DYNHR_RPT_REL, and a Column field of DYN_HRCHY_ID.
      - Add a field record with a Name field of DynHierarchy Visibility Position ID, a Join field of DynHierarchy Visibility Position, and a Column field of POSITION_ID.
      - Add a field record with a Name field of DynHierarchy Visibility Organization ID, a Join field of DynHierarchy Visibility Organization, and a Column field of BU_ID.

   c. Navigate to Business Component, then Business Component User Prop:

      - Add a user property record with a Name field of DynHierarchy Hierarchy ID Field and a Value field of DynHierarchy Hierarchy ID.
      - Add a user property record with a Name field of DynHierarchy Visibility Position ID Field and a Value field of DynHierarchy Visibility Position ID.
      - Add a user property record with a Name field of DynHierarchy Visibility Organization ID Field and a Value field of DynHierarchy Visibility Organization ID.

Note: You can model the join, field, and user properties records of the new business component after comparable records in the Global Account Opportunity business component.

3. Navigate to Link, select the Global Account/Opportunity link, lock the project for that link, and then copy and rename that link 3 times as follows:

    a. For the first copy, change the Name field to Global Account/name of the business component that you copied in Step 1, and select this business component name in the Child Business Component field.

    For example, change the Name field to Global Account/Service Request, and select Service Request in the Child Business Component field.

    b. For the second copy, change the Name field to Global Account/the name of the business component that you created in Step 1 (Hierarchy Denorm), and select this business component in the Child Business Component field.

    For example, change the Name field to Global Account/Global Account Service Request (Hierarch Denorm), and select Global Account Service Request in the Child Business Component field.

    c. For the third copy, change the Name field to Global Account/the name of the business component that you created in Step 1, and select this business component name in the Child Business Component field.

    For example, change the Name field to Global Account/Global Account Service Request, and select Global Account Service Request in the Child Business Component field.

4. Navigate to Business Object, select the Global Account Hierarchy business object, navigate to Business Object, then Business Object Component:

    a. Add a business object component record with a Bus Comp field of the name of the business component that you copied in Step 1 and a Link field of the link that you created in Step 3 part a.

    For example, add a business component record with a Bus Comp field of Service Request and a Link field of Global Account/Service Request.

    b. Add a business object component record with a Bus Comp field of the name of the business component that you created in Step 1 and a Link field of the link that you created in part Step 3 part b.

    For example, add a business component record with a Bus Comp field of Global Account Service Request and a Link field of Global Account/Global Account Service Request (Hierarchy Denorm).

5. Create in UI objects, such as applets, views, and screen views, and then add those objects to the Siebel application.

    For more information, see *Configuring Siebel Business Applications* .

6. Navigate to Applet, select the Global Accounts Hierarchy Tree Applet, navigate to Applet, Tree, and then Tree Node, select the Opportunity Node, and then copy and rename that node.

    For example, rename the copied node Service Requests Node.

7. Configure the new node:

    a. In the Applet field, select the list applet for the name of the business component that you created in Step 1.
    b. In the Business Component field, select the name of the business component that you created in Step 1.
    c. In the Display Name field, change the display name for the node.

    > **Note:** The display name must be the same as the LOV name for the node.

    d. In the HTML Closed Bitmap field and the HTML Open Bitmap field, select the appropriate values.
    e. In the Label Field field, select a label for the node.
    f. In the Position field, enter the next available position for the node.

8. Deliver your changes to the Siebel Runtime Repository.

9. Unlock the objects.

Verifying the New Node

Complete the following procedure to verify the new node.

To verify the new node

1. Navigate to the User Preferences screen, then the Global Accounts view.
2. If necessary, deselect the Hide column for the new object.
3. Navigate to the Accounts screen, then the Global Accounts Hierarchy view to see the new tree node.

Viewing Global Accounts (End User)

Available as an option, Global Accounts allow users to see (but not change) opportunities, activities, contacts, and account team information for an account and its subsidiary accounts.

Global Accounts consist of a parent account, the child accounts, the child accounts' children, and so on. These hierarchies are determined in one of the following ways:

- Hierarchies are determined by the value in the parent field on the Account Record.
- Hierarchies are determined by the administrator who creates custom hierarchies.

Global Accounts are created and maintained by the administrator. If an account has no child account or the administrator has not defined a hierarchy for an account, then a message appears advising you that the selected record is not included as part of your defined hierarchy. For more information about how global-account hierarchies are created, see *Creating a Custom Hierarchy*.

This task is a step in *Process of Using and Administering Global Accounts*.

To view global accounts information

1. Navigate to the Accounts screen, then the Global Accounts Hierarchy List view.
2. From the visibility filter, select My Global Accounts.
   Other visibility filter options include All Global Accounts, and All Global Accounts Across Organizations.
   Following the listing of the global accounts, the explorer in the first section shows the hierarchy of the account, subaccounts, contacts, opportunities, activities, and account team, and the list in the second section shows the associated records.

   > **Note:** Navigate to the User Preferences screen, then the Global Accounts view, to hide objects or make visible additional objects, such as service requests, quotes, orders, and assets.

Accounts in the Global Accounts Hierarchy List View

Different accounts appear in the Global Accounts Hierarchy List view because Siebel Business Applications use different SQL code to generate the Global Accounts Hierarchy List view, depending on whether you define a hierarchy.

If you define a global account hierarchy, then the Global Accounts Hierarchy List view displays that hierarchy. If you define a hierarchy and use EIM to import records, then the accounts do not appear in the Global Accounts Hierarchy List view unless you update the global account hierarchy. To update the global account hierarchy, select the account hierarchy record, then click Update Hierarchy.

If you do not define a global accounts hierarchy, then the Global Accounts Hierarchy List view uses the Parent fields of the accounts to display the account hierarchy. If you do not define a hierarchy and use EIM to import records, then the Global Accounts Hierarchy List view uses the Parent fields of the accounts to display the accounts.

28 Opportunity Workflows

Opportunity Workflows

This chapter covers setting up and managing opportunity workflows. It includes the following topics:

- *About Opportunity Workflows*
- *Setting Up Opportunity Notification Workflows*
- *Activating the Opportunity Notification Workflow Processes and Policies*
- *Rerouting an Opportunity Using Workflows*
- *Modifying Opportunity Workflows*
- *Setting Up the Get Manager Email*

About Opportunity Workflows

Opportunity workflows enhance lead routing and provide sales professionals with greater visibility into their sales activities. These workflows are run from the Opportunities screen. An opportunity record describes important information about the opportunity such as the account, potential revenue of the deal, the probability of closure, the lead status and sales stage, the sales team primary, and the expected close date. The Opportunities screen allows you to manage and track information associated with a potential revenue-generating event.

Opportunity workflows allow managers to manage opportunities by tracking potential high-income opportunities, informing managers about sales teams actions regarding an opportunity, and notifying sales team when an opportunity meets a set of criteria.

The predefined opportunity workflows allow you to use email to capture information related to the opportunity and distribute timely notifications to key members of the sales team. These workflows help improve the efficiency and effectiveness of the sales cycle while also providing sales representatives and sales managers greater visibility into sales activities. The email notification process is activated only if the opportunity has a possible revenue of more than $50,000.

The seven predefined opportunity workflows are:

- Opportunity Assigned Notification Process
- Opportunity Inactive Notification Process
- Opportunity Lost Notification Process
- Opportunity Pending Notification Process
- Opportunity Won Notification Process
- Create rerouted Oppty Activity
- Get Manager Email

You can use Siebel Audit Trail to track the changes that have been made to the opportunity records. For information about configuring, implementing, testing, and monitoring workflows, see *Siebel Business Process Framework: Workflow Guide* . For more information about how to audit opportunities, see *Siebel Audit Trail*.

Setting Up Opportunity Notification Workflows

Follow these steps to correctly set up the opportunity workflows:

- In Siebel Tools, revise all Siebel workflows so that they are editable and have a status of In Progress. All Siebel workflows are initially inactive and cannot be edited. Make any necessary changes and activate the workflows. For more information about how to revise Siebel workflows, see *Siebel Business Process Framework: Workflow Guide* .
- Verify that the Workflow Server component and the Communication Manager component are enabled and running. For detailed instructions, see *Siebel System Requirements and Supported Platforms* on Oracle Technology Network.

  > **Note:** For Siebel CRM product releases 8.1.1.9 and later and for 8.2.2.2 and later, the system requirements and supported platform certifications, see the Certifications tab on My Oracle Support.

- Create an Opportunity Notification Profile communications profile for the Internet SMTP/POP3 Server driver. Enter the appropriate values in the From Address and in the SMTP Server parameter overrides for the profile. For more information about implementing and configuring outbound communications integrations for your Siebel Business Applications, including creating profiles for the Internet SMTP/POP3 Server driver, see *Siebel Email Administration Guide* .
- Set up and activate the workflows and policies.
  - Activate the opportunity Workflow Processes. For more information, see *Activating the Opportunity Notification Workflow Processes and Policies*.
  - Modify Opportunity workflows, as necessary. For more information, see *Modifying Opportunity Workflows*.
  - Set up the Create Reroute Oppty Activity. For more information, see *Rerouting an Opportunity Using Workflows*.
  - Set up the Get Manager Email. For more information, see *Setting Up the Get Manager Email*.
- Load the run-time events for the emails. For more information about run-time events, see *Siebel Business Process Framework: Workflow Guide* .
- Generate the triggers. For more information about how to generate triggers, see *Siebel Business Process Framework: Workflow Guide* .
- Run the workflow monitoring agent. For more information about the workflow monitoring agent, see *Siebel Business Process Framework: Workflow Guide* .

Activating the Opportunity Notification Workflow Processes and Policies

There are five different Workflow Processes that generate automatic emails. All of these processes must have the communication profile specified.

- Opportunity Assigned Notification Process

- Opportunity Inactive Notification Process
- Opportunity Pending Notification Process
- Opportunity Lost Notification Process
- Opportunity Won Notification Process

The following procedure sets up this automatic notification process. For general instructions on how to set up workflows, see *Siebel Business Process Framework: Workflow Guide* .

To set up the opportunity workflows

- For each of these workflows, make sure to:
  - Revise the workflow.
  - Set the Communication Profile to Opportunity Notification Profile.
  - Activate the workflow.
  - Clear the Expiration field.

Opportunity Assigned Notification Process

This workflow sends an email message to both the primary sales representative and the sales representative's direct manager when a new lead is assigned to a sales representative. The email provides the basic information about the opportunity, including the opportunity ID and account, the primary revenue amount, and the number of days allowed before the lead is withdrawn and rerouted. The sales representative is directed to the Opportunities screen for further details.

Opportunity Inactive Notification Process

This workflow sends out an email notice when the sales representative has accepted a lead by changing the Status field to Accept, but has not taken any action on the lead for 30 consecutive days. An email reminder is sent to both the sales representative and the sales representatives direct manager. The notice reminds the sales representative that if no action is taken on the lead within seven days, then the lead is withdrawn from the queue and rerouted.

The default time lapse between when the lead is accepted (or last worked on) and when the email is delivered is 30 days. To modify this default value, edit the Duration Days property for the workflow in Siebel Tools.

Note: In the preconfigured application, reassignment of leads is manually executed. You might want to create a workflow that automatically reassigns the lead to a sales manager or administrator after a specified amount of time.

Opportunity Pending Notification Process

This workflow sends an email notice when the sales representative has not responded or taken action on the opportunity for five days. This notification occurs when the sales representative has not changed the Status field from pending to accept, reject, or reroute. The email is sent to both the primary sales representative and the sales

representative's direct manager. The email reminds the sales representative to act on the lead or risk having the lead withdrawn from the queue.

To modify the time lapse between lead assignment and email delivery

1. Navigate to the Administration - Business Process screen, then the Workflow Policies view.
2. Query for the Email Notification of Pending Oppty policy.
3. Verify that this policy is activated, and modify the Duration and Units fields.
4. Activate the workflow, and run the Workflow Monitor Agent.

   For more information, see *Siebel Business Process Framework: Workflow Guide* .

Opportunity Lost Notification Process

This workflow sends an email message to both the primary sales representative and the sales representative's direct manager when an opportunity is closed with a loss. The status of the opportunity must change to lost before the email notice is generated. The email refers to the Opportunities screen and asks the sales representative to update the Reason field.

Opportunity Won Notification Process

This workflow sends an email message to both the primary sales representative and the sales representative's direct manager when an opportunity is closed with a win. The status of the opportunity must change to win before the email notice is generated. The email refers to the Opportunities screen and asks the sales representative to update the Reason field.

Rerouting an Opportunity Using Workflows

The Create Rerouted Oppty Activity workflow is run when a sales representative receives a lead and changes the Status field to Reroute. The workflow creates a new Activity record with a Type of Reroute for the designated sales operator. This informs the sales operator that a specific opportunity has been requested for rerouting. All reassigned opportunities are listed in the Activities view as rerouted activities.

> **Note:** If a sales manager or sales administrator is responsible for rerouting leads, then you can modify the workflow so that the Create Rerouted Oppty Activity is assigned to the sales manager or administrator. You can also create a workflow that reassigns the lead to a sales manager or administrator.

To set up the opportunity reroute activity

- Revise the Create Rerouted Oppty Activity Workflow Process.

  Replace the value of the Default String field in the Sales Operator Login record with the username of the sales operator to receive the activity. Remember that the username is case-sensitive.

Modifying Opportunity Workflows

An administrator can modify the opportunity workflows. The administrator can make the following changes:

- Modify the text of the email.
- Change the notification time.
- Set the lead notification restrictions.
- Add other Siebel fields.

Note: The opportunity workflows are shipped as seed data. To modify a workflow, make a copy of the original workflow, and then modify the copy.

To modify the text of an opportunity workflow email

- In the Send Out Emails step of the workflow, edit the value of the Message Body input argument.

  The text includes field placeholders for data from the opportunity record. These placeholders appear as follows:

  "+[Placeholder field]+"

Restricting Conditions for Delivery of Emails

Complete the following procedure to restrict conditions for delivery of emails.

To restrict conditions for delivery of emails

1. Navigate to the Administration - Business Process screen, then the Workflow Policies view.
2. Select one of the following email notification policies:
   - Email Notification of Assigned Oppty
   - Email Notification of Inactive Oppty
   - Email Notification of Lost Oppty
   - Email Notification of Pending Oppty
   - Email Notification of Won Oppty
3. In the Conditions list, select a condition, or create a new condition.
4. Change the values in the Operation and Value fields to modify the condition.

   For example, to send email notifications for leads that have a high lead quality, create the record in the following table.

Field	Value
Condition Field	Opportunity Lead Quality

Field	Value
Operation	=
Value	1-excellent

Stop Sending Email Notifications to a Sales Representative's Manager

Complete the following procedure to stop sending email notifications to a sales representative's manager.

To stop sending email notifications to a sales representative's manager

- Edit the workflow so that there is a single connector between Start and End.

  Delete all other arrows.

Setting Up the Get Manager Email

This process identifies the manager of the sales representative so that the manager can receive a copy of the five email notifications that are delivered. Because the Get Manager Email process is part of the five notification processes, the Get Manager Email process must be activated for the other processes to function correctly.

An email is sent to the sales representative and the appropriate manager for each of the notification workflows.

29 Opportunities (End User)

Opportunities (End User)

This chapter describes how users use opportunities. It includes the following topics:

- *About Opportunities*
- *Scenarios for Managing Opportunities*
- *About Opportunities Lead Assignment*
- *About Lead Response*
- *About Lead Qualification, Sales Methods, and Stages*
- *Process of Managing Opportunities*
- *Creating an Opportunity*
- *Changing the Primary Sales Team Member*
- *Monitoring Significant Opportunity Transactions*
- *Assessing an Opportunity*
- *Viewing Decision Issues for an Opportunity*
- *Associating a Contact with an Opportunity*
- *Managing Activities Associated with an Opportunity*
- *Associating a Product with an Opportunity*
- *Creating a Quote from an Opportunity*
- *Creating an Organization Analysis*
- *Viewing Opportunity Charts*
- *Setting Up Lead Sources for Opportunities*

About Opportunities

An opportunity is defined as a potential revenue-generating event. Opportunity-related information is recorded and tracked in the views associated with the Opportunities screen. This chapter describes how sales professionals can use the Opportunities screen to perform the following tasks:

- Receive and respond to new leads that are assigned to you.
- Create new opportunities and enter related information such as accounts, contacts, activities, and products.
- View, qualify, and update opportunities assigned to you and your sales team (if you are a manager).
- Track the status of an opportunity through the sales cycle from creation to closure.
- Share information about the opportunity with sales team members.
- Generate quotes, presentations, and other types of information needed to close the deal.

Scenarios for Managing Opportunities

This topic describes how opportunity management might be used. You might use opportunity management differently, depending on your business model. This topic includes the following scenarios:

- *Converting Opportunities to Leads*
- *Tracking Opportunities*
- *Generating Quotes for Opportunities*

Converting Opportunities to Leads

A company uses Siebel Marketing to develop a campaign as part of a new product introduction. During the campaign, a telemarketing agent uses Siebel Call Center to contact prospects associated with the campaign. During her conversations with prospects, the agent qualifies leads by determining whether each prospect is interested in the new product offering. When a prospect expresses interest in learning more about the new product, the agent creates a new lead.

Using Siebel Assignment Manager, the lead is automatically routed to the sales representative who is most qualified to work on the lead and whose schedule can accommodate the new assignment.

When the sales representative logs in to the Siebel Sales application, she sees the new lead in the Opportunities list on her home page. Drilling down on the lead takes the sales representative to the Opportunities screen. After reviewing details about the lead, such as the customer information, probability of closing, and the products that the customer is interested in purchasing, the sales representative decides to accept the lead by changing the Status field to Accept.

After the sales representative accepts the lead, she begins to work on the lead by assembling members of the sales team, conducting further research on the customer and its requirements, coordinating and recording activities, uploading agreements, and generating proposals and presentations for the customer. As the sales representative works through the sales cycle, she updates information about the sales stage, and keeps private notes and notes that she shares with other members of the sales team. Eventually, the sales representative develops a quote from the Opportunities screen. When the customer accepts the quote, it is converted into an order.

> **Note:** Siebel Marketing, Siebel Call Center, Siebel Sales, and Siebel Quotes are fully integrated, separately licensed product offerings. You must license these products to access the views.

Tracking Opportunities

At a trade show, a sales representative meets a prospective customer who might be a lead for a new business opportunity. When the sales representative returns to the office, he discovers the company is listed in Siebel Sales as an account, but the person he met is not listed as a contact.

The sales representative proceeds to add the prospective customer as a contact, and then creates the opportunity. He then schedules meetings and creates associated activities, and enters other potential contacts associated with the opportunity.

As the sales process continues, the sales representative gathers and updates information about the account, its contacts, and the opportunity that he is pursuing. As the relationship grows, the sales representative can add, view, and share stored information and key knowledge with other members of the sales team.

Generating Quotes for Opportunities

A sales representative is assigned to the sales team for an opportunity. As the sales representative gathers product information about the customer requirements, she enters that information in the Siebel Sales application. After she presents to the customer, the customer indicates that the representative's company is on the short list for the deal, and that the representative can submit a quote.

The sales representative automatically creates a quote. The quote is based on the information she has already entered into the Siebel Sales application. After she generates the quote, she synchronizes the quote information with the revenues associated with the opportunity. By making sure these numbers are in sync, the sales representative establishes that the data associated with her opportunity is current and that her forecasts are accurate.

About Opportunities Lead Assignment

As a sales representative, you can view new leads in the Opportunities list on your home page, or you can navigate to the Opportunities screen to view new leads that you did not create but were assigned to you. A lead might be assigned to you in the following ways:

- A lead is generated through a campaign and automatically routed using Siebel Assignment Manager and predefined rules.
- A lead is entered into the Siebel application by an administrator and automatically routed using Siebel Assignment Manager and predefined rules.
- An opportunity is created by a sales manager or sales representative who adds you to the sales team.

In each of these cases, you are able to view the lead or opportunity because you have been added to the sales team, either as the primary on the sales team or as a sales team member. If you are receiving a lead for the first time and you are the primary on the sales team, then the Status field in the More Info view is set to Pending by default. You can accept, reject, or reroute the lead by changing the value in the Status field.

If the administrator has activated the email notifications, and has enabled predefined processes, then these processes can send email messages to you to alert you of the following events:

- You have received a new lead and must accept, reject, or reroute the lead within seven days.
- You received a new lead five days ago and must accept, reject, or reroute the lead within two days.
- You have accepted a lead but have not worked on the lead in 30 days.
- You have won the sales opportunity and can enter the reason in the Siebel application.
- You have lost the sales opportunity and can enter the reason in the Siebel application.

The wording of the emails and the wait periods can be modified. Opportunity Workflows sends email only if the opportunity has revenue greater than $50,000. For more information, see *Opportunity Workflows*.

About Lead Response

After you, as a sales representative, receive a lead, you can choose to accept, reject, or reroute the lead.

- **Rejecting the Lead.** You can reject a lead by changing the Status field to Reject in the More Info view. Enter the reason for rejecting the lead in the Reason field. The lead remains in your queue until it is reassigned by your manager.
- **Rerouting the Lead.** If you decide to reroute a lead by changing the Status field in the More Info form to Reroute, then a Reroute activity is automatically created. Enter the reason for rerouting the lead in the Reason field. The lead remains in your queue until it is rerouted by your manager.
- **Accepting the Lead.** You can accept a lead by changing the Status field in the More Info form to Accept. Enter the reason for accepting the lead in the Reason field.

About Lead Qualification, Sales Methods, and Stages

When you, as a sales representative, accept a lead, you can begin to work on the lead in the Opportunities screen. The records in the Opportunities list include both leads and opportunities. Leads are defined as opportunities that have not yet been qualified.

Lead qualification status is indicated in the Sales Stage field. The list of values in the Sales Stage field varies depending on which sales method you are using.

A sales method is a formalized approach or methodology used during the sales process. A sales method can encompass all activities associated with the sales process, from prospecting to forecasting to closing deals. This approach allows sales representatives to use the method most appropriate for their opportunities.

The application administrator establishes values in your Siebel application that represent the sales methods and sales stages for your company. It is a recommended business practice to designate a default sales method in your Siebel application. This practice allows a sales method to be associated with each opportunity and aids in charting and reporting accuracy.

Sales methods can differ within a company. For example, a sales method for managing a complex multimillion dollar opportunity might include 15 stages, while a sales method for a simple low-dollar opportunity might require only four stages.

Your application administrator creates and implements the sales stages that your company uses. For more information about creating or implementing sales methods, see *Defining a Sales Methodology*.

The following table shows sales methodologies (Accelerated, Default, Standard), and the associated sales stage for each methodology (for example, 01 - Prospecting). The table also shows if the record is a lead or is an opportunity at each sales stage.

Accelerated	Default and Standard	Lead or Opportunity
01 - Prospecting	01 - Prospecting	Lead
	02 - Potential Lead	Lead

Accelerated	Default and Standard	Lead or Opportunity
02 - Qualification	03 - Qualification	Opportunity
	04 - Opportunity	Opportunity
	05 - Building Vision	Opportunity
	06 - Short List	Opportunity
	07 - Selected	Opportunity
03 - Closing	08 - Negotiation	Opportunity
	09 - Closed or Won	Opportunity
04 - Lost	09 - Closed or Lost	Opportunity

Note: The Portfolio Management Process sales methodology does not focus on opportunities and so is not present in the previous table.

Process of Managing Opportunities

To manage opportunities, perform the following tasks:

- **Create an opportunity.** For more information, see *Creating an Opportunity*.
- **Change the primary team member.** For more information, see *Changing the Primary Sales Team Member*.
- **Monitor transactions.** For more information, see *Monitoring Significant Opportunity Transactions*.
- **Assess opportunities.** For more information, see *Assessing an Opportunity*.
- **Manage decisions.** For more information, see *Viewing Decision Issues for an Opportunity*.
- **Add contacts.** For more information, see *Associating a Contact with an Opportunity*.
- **Add activities.** For more information, see *Managing Activities Associated with an Opportunity*.
- **Associate products.** For more information, see *Associating a Product with an Opportunity*.
- **Create quotes.** For more information, see *Creating a Quote from an Opportunity*.
- **Performing an organization analysis.** For more information, see *Creating an Organization Analysis*.
- **Adding attachments and notes.** For more information, see *Siebel Fundamentals* .
- **Generate and viewing charts and reports.** For more information, see *Viewing Opportunity Charts*. While you are in a view, click Reports in the toolbar to access the available preconfigured reports for the data in that view. For more information about reports, see *Siebel Reports Guide* .

- **Set up lead sources.** For more information, see *Setting Up Lead Sources for Opportunities*.

Creating an Opportunity

Create a new record each time you identify an opportunity.

Note: Each time a new opportunity record is created, a primary Revenue record is automatically created for the opportunity.

This task is a step in *Process of Managing Opportunities*.

To create an opportunity

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. In the Opportunities List, create a new record, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
Revenue	Type the currency amount of the opportunity. If you are using the Products, Quotes or Revenue views, then you can make sure your summary revenues are calculated and are in sync. This amount affects forecasting.
Committed	Select the check box to indicate a high probability that the deal will close, and that the deal will be included in your revenue forecast.
Probability %	Select a percentage for the confidence you have that the deal will close with the specified revenue on the specified close date. The sales stage of the opportunity determines an automatic adjustment of the probability. You can manually override the probability value.
Sales Method	Select the sales methodology.
Sales Team	Select the employees in the sales team for the opportunity. Only the manager of the primary sales team member, or an administrator, can change or delete the sales team member identified in the Primary field. You can set a Priority flag for individual members of the sales team. If an opportunity is a priority for all team members, then the Priority Flag is set in the Opportunity List and Explorer views.
Currency	Select the currency type associated with the opportunity. The selected value does not affect forecasting.

Field	Comments
Sales Stage	Select the sales stage associated with the selected sales method.
Lead Partner	Select the lead partner. This field is automatically populated when the source of the opportunity is a campaign with a lead partner. If you create an opportunity from a response, and the response had a campaign associated with it, then the opportunity inherits the lead partner from the campaign. If you create a new opportunity and select a campaign as the source, then the opportunity inherits the campaigns lead partner, if it has a lead partner.
Close Date	Select the expected date on which the opportunity closes. The default date is the same as the Created Date. It is important to modify the date, if the opportunity closes on a different date, because this date is used in revenue forecasting.
Primary	Displays the user ID of the primary sales team member. This value defaults to your user ID if you are creating a new opportunity.
Executive Priority	Select the check box to indicate a significant opportunity. Sales executives can query for high-priority opportunities for tracking purposes.
Revenue Type	Select a value for the kind and source of the expected revenue. For more information, see *About Revenue Class and Revenue Type*.
Territory	Displays the territory for the opportunity. The default value is based on the territories that your company defines. Your system administrator controls the territory assignment function set up by your sales manager.
Revenue Class	Select a value for the quality of the expected revenue. For more information, see *About Revenue Class and Revenue Type*.
Channel	Select the sales channel from which the opportunity comes.

3. Drill down on the Opportunity Name field of the record, and navigate to the More Info view to complete more fields.

   Some fields are described in the following table.

Field	Comments
Source	Select the source of the sales lead for the opportunity. Typical source values include specific events, campaigns, or conferences.
Source Type	Displays the category of the primary source. For example, a specific seminar that is the source of the opportunity is identified with a value of Seminar in this field.
Organization	Select the organizations associated with the opportunity. The default value is the organization name associated with the person creating the opportunity. Your system administrator sets up organizations in your Siebel application. You can associate multiple organizations with an opportunity.
Partner Approval Status	Select the approval status of the lead partner for the opportunity.
Expected Value	Displays a currency value that is calculated using the potential revenue field multiplied by the value in the probability field. A lower percentage in the probability field reduces the expected value that is included in your revenue forecast.
Best Case	Type the amount the deal might generate in the best-case scenario. This amount is higher than the value in the Revenue field.
Worst Case	Type the currency amount the deal might generate in the worst-case scenario. This amount is lower than the value in the Revenue field.
Cost	Type the amount of expense associated with the opportunity.
Margin	Displays the revenue amount minus the cost amount.
Reason Won/Lost	Select a value for the reason that the opportunity was accepted, rejected, rerouted, won, or lost.

About Revenue Class and Revenue Type

Revenue Class and Revenue Type fields appear on both the Opportunity and the Revenue forms. These two fields are the same fields, which means changes made in the Opportunity form are reflected on the Revenue form and changes made in the Revenue form appear in the Opportunity form.

The Revenue Class and Revenue Type lists of values are based on the internal business process for each company. The standard values can be adapted to your business, or the lists of values changed by your application administrator to reflect the stages of your company's sales process and the manner in which your company recognizes revenue.

- **Revenue Class Field.** Your company can define the quality of the revenue at a specific time by setting the list of values in the Revenue Class field to reflect the sales stages you use. Sample values are Pipeline, Upside, Expected, Committed, and Closed. For more information about the Revenue Class field, see *Siebel Forecasting Guide* .
- **Revenue Type Field.** Your company might want to differentiate between kinds of revenues and their sources. For example, your company might classify revenue by Software, Consulting, and Hardware categories, or by Booked versus Billed revenue, which are defined in the list of values. Defining revenue types allows you to query revenues or view charts sorted by the category of the revenue. For more information about the Revenue Type field, see *Siebel Forecasting Guide* .

About Split Revenue

A revenue split allows you to forecast how revenue from an opportunity is split between multiple sales representatives. The Split Revenue field indicates that the revenue is split in the Revenues view. For more information about the Split Revenue field, see *Siebel Forecasting Guide* .

Changing the Primary Sales Team Member

The administrator or manager of the primary sales representative can change the person assigned as the primary member of the sales team.

This task is a step in *Process of Managing Opportunities*.

To change a primary team member

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. From the visibility filter, select My Team's Opportunities.
3. In the Opportunities list, drill down on the Opportunity Name field of the opportunity record.
4. Navigate to the More Info view.
5. In the More Info form, click the select button in the Sales Team field.
6. In the Team Members dialog box, select the Primary check box for the team member.

Note: If you have access to the Administration - Data screen, then you can change a primary team member assignment on that screen.

Monitoring Significant Opportunity Transactions

Sales executives can monitor significant opportunity transactions by querying for opportunities flagged as Executive Priority. These flagged opportunities can be tracked by the executive team regardless of the revenue or forecast

commitment. Tracking high-priority opportunities helps the executive maintain the most accurate quarterly revenue forecast and plan involvement in the most promising opportunities.

This task is a step in *Process of Managing Opportunities*.

To flag an opportunity as an executive priority

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. In the Opportunities list, select the opportunity.
3. In the Opportunities list, use the Columns Displayed option in the menu for the cogwheel icon to display the Executive Priority field.
4. In the opportunity record, click the check box in the Executive Priority field.

Assessing an Opportunity

You can use assessments to compare opportunities with each other, compare them with a model, or to determine the information that is present or not present for an opportunity. To perform the assessment, you enter values for the assessment attributes. The Siebel application calculates a composite assessment value for the opportunity. For information about how to perform an assessment, see *Performing an Assessment (End User)*.

This task is a step in *Process of Managing Opportunities*.

Viewing Decision Issues for an Opportunity

Decision issues are specific areas of interest that can influence a prospect's buying decision during the sales cycle. These decision issues provide you with an opportunity to present the advantages of your solution to the customer.

You can track these decision issues using the Opportunity screen's Decision Issues view, and use this information to develop your sales strategy and address customer concerns. For more information, see *Decision Issues*.

This task is a step in *Process of Managing Opportunities*.

Associating a Contact with an Opportunity

As you work with an opportunity, you want to maintain information about the contacts associated with the opportunity. For more information about contacts, see*Contacts*.

You can use the Contacts view from the Opportunity screen to store and review contact-related information for an opportunity.

This task is a step in *Process of Managing Opportunities*.

To associate a contact with an opportunity

1. Navigate to the Opportunities screen, then the Opportunities List view.

2. In the Opportunities list, drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Contacts view.
4. In the Contacts list, add an existing contact, select the contact from the Add Contacts dialog box, and click OK.

> **Note:** To select a sequence of contact records, hold down the SHIFT key and click the contact records. To select multiple contacts that are not in sequence, hold down the CTRL key and click the contact records.

Managing Activities Associated with an Opportunity

The Opportunities screen's Activities view allows you to track activities at the opportunity level, maintain a calendar and To Do list for the opportunity, and delegate activities related to the opportunity to your sales team. For more information about Activity Plans and associated activities, see *Activities*.

This task is a step in *Process of Managing Opportunities*.

Associating a Product with an Opportunity

Specific products can be associated with an opportunity. For example, if a customer is interested in purchasing a new software suite, then this information can be specified in the Products view.

After the product is associated with the opportunity, you can drill down on the Product field of the product record to review additional information such as product features and prices.

Later, this data can be used when you are building a presentation, quote, or proposal for the opportunity.

This task is a step in *Process of Managing Opportunities*.

To associate a product with an opportunity

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. In the Opportunities list, drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Products view.
4. Create a new record, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
Auto Quote	Select the check box if you want to include the product in automatic quotes generated for the opportunity.
Quantity	Type the number of product units that the customer wants to purchase.
Net Price	Type the price of the item minus discounts.

Field	Comments
Revenue	Displays the revenue for the opportunity, calculated as the Quantity multiplied by the Net Price.
Covered Product	Select the covered product only if the product (specified in the Product field) is a service product.
Summary	Select the check box to indicate that the product is a summary product. For example, if the opportunity is for a computer, then select the Summary check box for the computer product, but not for the CPU, monitor, keyboard, and mouse products that make up the computer product. This Summary field also appears (read-only) in the Revenues screen, then List view.

Creating a Quote from an Opportunity

Using the Quotes view, you can automatically create and revise quotes for the opportunity. For more information about quotes and orders, see *Siebel Order Management Guide* .

This task is a step in *Process of Managing Opportunities*.

To create a quote from an opportunity

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Products view, add a product in the Products list, and complete the necessary fields.
   a. In the Auto Quote field, select the check box to display a check mark.
   b. In the Quantity field, type the number of product units the customer wants to purchase.

      For more information, see *Associating a Product with an Opportunity*.
4. Navigate to the Quotes view, and click Automatic Quote in the Quotes list.

   A quote record is automatically created, with some fields completed and a status of In Progress.
5. For the quote record, complete the following steps:
   a. If no price list is associated with the account, then select a price list in the Price List field.

      If a price list is associated with the account, then the Price List field is automatically populated. For more information about price lists, see *Siebel Pricing Administration Guide* .
   b. Drill down on the Name field.

      You can change the automatically generated name for a name that is more meaningful in the quote details form.
6. In the Line Items list for the quote, add line items, click the cogwheel icon, and select Reprice.

The Reprice function makes sure that the quote total reflects the prices from the price list, and multiplies those prices by the quantities that you enter in the products view.

7. In the Quote form, click the cogwheel icon, and select Update Opportunity, and then return to the Opportunity form.

   The Update Opportunity function verifies that the opportunity's revenue line items are in sync with the quote line items.

   Tip: Use the History icon or the thread bar to navigate back to the Opportunity form.

Updating Opportunity Revenues

Complete the following procedure to update opportunity revenues.

To update opportunity revenues

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Revenues view, then the List view.
4. In the Revenues list, click the cogwheel icon, and select Update Opportunity.

   After this process is completed, the revenue amounts that appear in the Products, Revenues, and Quotes views are synchronized and the Opportunity's Revenue field displays a calculated sum of the individual revenue line items associated with the opportunity.

Note: Siebel Quotes is a separately licensed product offering. You cannot access the Quotes view if you have not licensed this product.

Creating an Organization Analysis

You can automatically create organization charts to help you analyze your key contacts and develop your relationship strategy to win the opportunity.

Siebel Sales automatically generates organization charts using the contacts associated with each opportunity. When you update contact information, your changes are reflected in the organization chart. You can update contact information from either the Opportunities screen or from the Contacts screen.

This task is a step in *Process of Managing Opportunities*.

To add existing contacts to the organization analysis

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Organization Analysis view.
4. Use the form at the start of the screen to query for the opportunity.
5. In the Organization Chart view, create a new record, select one or more contacts in the Add Contacts dialog box, and click OK.

Note: To select a sequence of contact records, hold down the SHIFT key, and click the contact records. To select multiple contacts that are not in sequence, hold down the CTRL key, and click the contact records.

Creating New Contact for the Organizational Analysis

Complete the following procedure to create new contacts for the organization analysis.

To create new contacts for the organization analysis

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Organization Analysis view.
4. In either the default Organization Chart view or in the Contacts list (toggle view), create a new record.
5. In the Add Contacts dialog box, create a new record.
6. In the new contact record enter the contact information in the fields, and then save the record.

   Note: If you create a new contact directly from the Organization Chart view, then you must save the record to return to the Organization Chart view.

   The following table shows the shading that appears in the contact node in the organization chart for each value in the Level of Influence field.

Field Value	Shading
Low	None (no shading)
Political Structure (Medium)	50% shading (or light gray)
Inner Circle (High)	80% shading (or dark gray)

Creating the Organization Hierarchy

From the Organization Chart view, you can create the organization hierarchy to indicate professional relationships within the organization.

To create the organization hierarchy

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Organization Analysis view.
4. In the organization chart, click the dot at the end of the node for a manager, and relocate that dot to the other dot at the start of the node for the subordinate.
   A line that reflects the reporting relationship between the contacts appears.

5. Repeat Step 4 for each contact until you complete the organization chart.

> **Note:** The reporting relationships are also stored in the Contacts list (toggle view). Information about the manager of the contact appears in the Manager Last Name field and Manager First Name field. Use the Columns Displayed option in the menu for the cogwheel icon to display these fields.

Drawing Lines of Influence

You can track the political structure in a customer organization by identifying lines of influence between contacts. Tracking lines of influence helps you identify contacts who are not highly ranked (and are easier to access) but have significant influence on key decision makers.

Information about lines of influence is automatically updated in the Relationships view of the Contacts screen. You can add lines of influence in the Relationships view.

To draw lines of influence

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of the opportunity record.
3. Navigate to the Organization Analysis view.
4. In the organization chart, click the dot at the side of the node for a contact, and relocate that dot to the other dot at the side of the node for another contact.

   A line that reflects the influence between the contacts appears.
5. Repeat Step 4 for each contact until you draw all lines of influence.
6. To delete a line that reflects an influence, click the line, and select Delete in the Actions list.

Viewing Opportunity Charts

Several charts are available that support analysis of opportunities data. The data can be depicted in a variety of formats such as pie graph, bar graph, and so on.

The following table describes each opportunity analysis chart.

Chart	Description
Activity Analysis	Displays the number of activity types for the selected record.
Current Opportunity Analysis	Displays a scatter diagram of the selected opportunity by revenue and probability. The end chart displays sales stage.
Lead Analysis	Displays the number of opportunities or revenue by organization or primary sales representative. The data is segmented by lead quality.
Lead Source Analysis	Displays the number of opportunities, revenue, or average revenue by time period. The data is segmented by lead source.

Chart	Description
Lead Source Pipeline Analysis	Displays the number of opportunities by sales stage and lead source.
New Business Analysis	Displays the number of opportunities, revenue, or average revenue over a time period.
Opportunity Analysis	Displays the number of opportunities by product, source, territory, and competitor.
Pipeline Analysis	Displays the number of opportunities or revenue by sales stage, organization, revenue size, or sales method.
Probability Cluster Analysis	Displays a scatter diagram of your opportunities by revenue and probability.
Rep Analysis	Displays the number of opportunities, revenue, or average revenue by sales representative. The data can be segmented by sales stage and win probability.
Revenue Analysis by Rep	Displays the number of opportunities and revenue by sales representative.
Sales Method Bar	Displays the number of opportunity products or revenue by sales method. The data is segmented by sales stage.
Sales Pipeline Analysis	Displays the percentage of revenue quota and percentage of count quota.
Sales Pipeline Phases Analysis	Displays sales pipeline phases and the percentage of revenue quota or count quota achieved for each phase.

This task is a step in *Process of Managing Opportunities*.

Viewing the Opportunity Sales Pipeline Analysis Chart

The Sales Pipeline Analysis works by evaluating the total revenue and count of opportunities by a selected sales methodology and then evaluating the total against each applicable quota.

Note: The Sales Pipeline Analysis Chart considers only active Quota plans, regardless of duration.

To display sales pipeline analysis information

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. From the visibility filter, select an Opportunities list.

   For example, you might select All Opportunities.
3. In the Opportunities list, query for a value in the Sales Method field.
4. Navigate to the Charts view.
5. In the Charts list, select Sales Pipeline Analysis from the drop-down list.

6. From the secondary drop-down list, select either % of Count Quota or % of Revenue Quota, and then click Go.

   Note: Pipeline charts cannot be copied by relocating (as pie and bar charts can).

Viewing the Sales Pipeline Phases Analysis Chart

The Sales Pipeline Phases chart provides an overall view of the revenue generated for opportunities in an organization. Sales phases are basic components used to group stages together into basic sales categories.

To view the sales pipeline phases analysis chart

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. From the visibility filter, select an Opportunities list.
3. In the Opportunities list, query for a value in the Sales Method field.
4. Navigate to the Charts view.
5. In the Charts list, select Sales Pipeline Phases Analysis from the drop-down list.
6. From the secondary drop-down list, select either % of Count Quota or % of Revenue Quota, and then click Go.

Setting Up Lead Sources for Opportunities

Lead sources for opportunities are created, modified, and deleted through the Lead Sources Administration view of the Opportunities screen.

The following procedure describes how to add lead sources so that they can be associated with opportunities.

In addition, campaigns automatically appear as lead sources of type Marketing Campaign. For more information about Campaigns, see *Siebel Marketing User Guide* .

This task is a step in *Process of Managing Opportunities*.

To create a lead source

1. Navigate to the Opportunities screen, then the Lead Sources Administration view.
2. Create a new record, and complete the necessary fields.

   Some of the fields are described in the following table.

Field	Comments
Start Date	Select the start date of the campaign.
End Date	Select the end date of the campaign.
Description	Type a brief description about the campaign.

Field	Comments
Source	Type the source of the campaign. For example, a new product line, a marketing seminar, and so on.
Objective	Type the objective of the campaign.
Target	Type the target customer base for the campaign
Type	Select the type of the campaign. For example, marketing campaign, direct marketing, and so on.

30 Households

Households

This chapter describes how call center agents can use the Households screen to record information about groups of individual consumers who interact with the agents' company. It includes the following topics:

- *Household Contact Tracking*
- *Scenario for Managing Households*
- *Process of Managing Households*
- *Adding a Household Record*
- *Adding Contacts to a Household*
- *Adding Activities to Household Records*
- *Storing and Viewing Information About Households*
- *Synchronizing Household Information with External Applications*

Household Contact Tracking

A household is a collection of individual consumers who are economically affiliated and who share common purchasing or service interests. Individuals might be related to each other and might belong to other households. Typically, a household shares the same residential address. Siebel Call Center allows an organization to address the complexity of dynamic households by tracking all household information through the appropriate household contact. If contacts leave a household to join another household, then their associated information moves with them.

The Households screen displays information about customer households. You can use the Households screen and its related views to work with the following kinds of information:

- Contacts (household members)
- Activities
- Attachments
- Service Requests
- Notes
- Assets
- Opportunities
- Agreements

The Household views summarize information that relates to all the individual contacts who are members of the household. For example, you might want to view a list of all the service requests from a particular household, regardless of which household member made the request.

The Household More Info view and the Household Contacts view allow editing, but other Household views are read-only.

If you want to add activities, service requests, notes, attachments, assets, opportunities, and agreements, then you must navigate to the Household Contact list and drill down on the appropriate field to reach a view where you can enter the necessary information.

Household information is closely related to information about contacts, and is similar to information about accounts. Other chapters in this guide provide more detailed information about how to use the Contacts and Accounts screens.

Scenario for Managing Households

This topic gives one example of how household management might be used. You might use household management differently, depending on your business model.

Call center agents commonly use the Households screen in a business-to-consumer setting. Viewing household information allows for cross-selling, upselling, and sell-through opportunities. Combined with Oracle's Siebel Marketing and Oracle Business Intelligence, the Households screen provides the basis for consumer segmentation and analysis.

The Households screen displays market segment information about the household as a whole and a summary of information about the individual contacts who are household members. Call center agents use the Households screen to identify and capture demographic information about a household, and also to review assets, products, activities, and contact information associated with the household. This information helps the agent assess the customer's data and history to better meet the customer's needs.

Process of Managing Households

To manage households, perform the following tasks:

- *Adding a Household Record*
- *Adding Contacts to a Household*
- *Adding Activities to Household Records*
- *Storing and Viewing Information About Households*
- *Synchronizing Household Information with External Applications*

Adding a Household Record

Use the following procedure to add a household record.

This task is a step in *Process of Managing Households*.

To add a household

1. Navigate to the Households screen, then the List view.
2. In the list and the form following it, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Fields	Comments
Household #	Displays a unique identifier for the household.
Name	Type a name that identifies the household. Typically this name is the last name of one or more contacts who are members of the household.
Type	Select the type of people that make up the household. Typical values include Family - Children, Family - No children, Family - Senior Citizen, and Single.
Category	Select the value of the household to your organization. Available values are Platinum, Gold, Silver, and Standard.
Segment	Select the general economic class of the household, or home-ownership status. Typical values are White Collar, Blue Collar, Rural, Own Residence, and Renter.
Status	Select the current stage in the customer interaction life cycle. Defaults to Active for a new household record.
Team	Select the employees assigned to work with this household. If a call center user is not a member of the household team, then that user does not receive information about this household during Mobile Web Client synchronization.
Organization	Select the organization that interacts with the household.
Income	Type the total income from all members of the household.
Head of Household	Select the name of the main decision-maker for the household. Available values are all the contacts for the household.
Revenue	Type the amount of revenue your organization obtains from this household.
Wealth	Select the estimated total wealth of the household.
Size	Type the total number of people in the household.
Address	Displays the address of the primary household contact.
City	Displays the name of the city where the primary household contact resides.

Fields	Comments
State	Displays the name of the state where the primary household contact resides.
Zip Code	Displays the zip code of the primary household contact.

Adding Contacts to a Household

Contacts are individuals associated with a household. Agents can specify one person in the household as the head of household and then identify the others as spouse, child, or dependent parent.

This task is a step in *Process of Managing Households*.

To add contacts to a household

1. Navigate to the Households screen, then the List view.
2. Drill down on the Name field of the household record to which to add the contacts.
3. Navigate to the Contacts view.
4. In the Contacts list, perform one of the following steps to specify the contact to add:
   - Add an existing contact to the household, select the contact from the Add Contacts dialog box, and click OK.
   - Create a new record in the Contacts list.

   Some of the fields are described in the following table.

Field	Comments
Primary	Select the check box to designate the current contact as the main decision-maker for the household.
Income	Type the contact's income. This value is not used to calculate the household's total income.
Relationship	Select the role of the contact within the household.
Households	Select one or more households in which the contact is a member.
Alias	Type the contact's nickname if you create a new contact for the household.
Employee Flag	Displays a check box that indicates the contact is an employee of your company.

Field	Comments

Specifying Addresses for Household Contacts

Complete the following procedure to specify an address for the household contact.

To specify an address for the household contact

1. Navigate to the Households screen, then the List view.
2. Drill down on the Name field of a household record.
3. Navigate to the Contacts view, select the contact in the Contacts list, and drill down on the Last Name field.
4. Navigate to the Addresses List view, create a new record in the Address list, and complete the necessary fields.
5. Click the thread bar to return to the Contacts view of the Households screen, and then scroll down to display the Contact form.
6. In the Contact form, complete the following steps:

    a. Click the select button in the Address field to display the Contact Addresses dialog box.
    b. In the Contact Addresses dialog box, select the Primary check box for the contact's main address, and click OK.
    c. In the Contact form, complete additional fields.

    Some of the fields are described in the following table.

Field	Comments
Account	Select the business or organization associated with the contact.
Site	Displays the site of the account associated with the contact.
Address	Select the contact's address or addresses. The procedure for entering the addresses to appear in this field is described in Step 4.
Email	Type the contact's email address.

Note: In the Households screen, a contact's address is the residential or personal address. In the Contacts screen, the address in the Contact form is the address of the account associated with the contact. In the Addresses List view of the Contacts screen, you can specify a contact's other addresses. You can select household addresses only from these individual contact addresses.

Adding Activities to Household Records

Add activity records to household records to track appointments, meetings, email messages, and other tasks related to households. The following procedure describes how to add an activity from the Household screen. For more information about activities, see *Activities*.

This task is a step in *Process of Managing Households*.

To add an activity for a household

1. Navigate to the Households screen, then the List view.
2. Drill down on the Name field of the household record to which to add the activity.
3. Navigate to the Contacts view.
4. In the Contacts list, select the contact, and then drill down on the Last Name field.
   The Activities view for the Contacts screen appears.
5. In the Activities list, create a new record, and complete the necessary fields.
   The fields are described in *Activities* .

Storing and Viewing Information About Households

The following types of information can be indirectly related to a household by associating the information with the contact record for any member of the household:

- Attachments
- Notes
- Opportunities
- Service Requests
- Agreements
- Assets

The Household screen's views that correspond to these types of information are read-only. The information must be stored and modified using Contact screen views.

This task is a step in *Process of Managing Households*.

Storing Information Related to Household Contacts

Complete the following procedure to store additional information related to a household contact.

To store additional information related to a household contact

1. Navigate to the Households screen, then the List view.
2. Drill down on the Name field of a household record.
3. Navigate to the Contacts view.

4. In the Contacts list, drill down on the Last Name field to display the Contacts screen.
5. Navigate to the following views for the type of information you want to add:
    - Attachments
    - Notes
    - Opportunities
    - Service Requests
    - Agreements
    - Assets
6. In the view list, create a new record, and complete the necessary fields.

    If the contact who is associated with Attachments, Notes, Opportunities, Service Requests, Agreements, or Assets leaves the household, then the information stays accessible through the Household screen if users register the contact's departure by adding an exit date to the Household Contact record. If a user deletes the Household Contact record for the departing contact, then the information associated with that contact is no longer associated with the contact's former household.

Viewing Information Related to Households

Complete the following procedure to view additional information related to a household.

To view additional information related to a household

1. Navigate to the Households screen, then the List view.
2. Drill down on the Name field of a household record.
3. Navigate to the following views for the type of information you want to view:
    - Attachments
    - Notes
    - Opportunities
    - Service Requests
    - Agreements
    - Assets

    The corresponding list appears.

Synchronizing Household Information with External Applications

The Application Services Interface (ASI) feature allows you to synchronize the household data between a Siebel application and an external application in real time. This feature enables you to maintain consistent household information across your enterprise, and to eliminate manual entry of data in multiple applications.

If your Siebel administrator has set up real-time household integration between a Siebel application and another application, then you can use the Update External System command to send new and modified household information from the Siebel application to the other application in real time. For more information about ASI, see *Siebel Application Services Interface Reference* and *Integration Using ASIs*.

This task is a step in *Process of Managing Households*.

To synchronize household information with an external application

1. Navigate to Households, then the Household List.
2. In the Household list, select a household record.

   To create a new household record, see *Adding a Household Record*.
3. In the Household list, click the cogwheel icon, and select Update External System.

31 References

References

This chapter describes how sales professionals can use the References screen to access accounts that can be designated as references, and to associate contacts, activities, profiles, and notes with each reference. It includes the following topics:

- *Scenario for Managing References*
- *Process of Managing Accounts and References*
- *Designating an Account as a Reference*
- *Associating an Activity with a Reference*
- *Associating a Contact with a Reference*
- *Associating an Attachment with a Reference*
- *Viewing Reference Activities in the Calendar*
- *Adding a Note to a Reference*
- *Adding Profile Information to a Reference*
- *Searching for References*
- *Viewing Reference Asset and Profile Charts*

Scenario for Managing References

This topic gives one example of how reference management might be used. You might use reference management differently, depending on your business model.

A sales representative is attempting to win a 2,500-seat software sales opportunity for his company. In a series of meetings with the prospect, the sales representative demonstrates his product line and submits a quote. The sales representative receives a call from the prospective customer requesting a chance to speak with existing software customers as a point of reference before agreeing to the terms of the quote.

The sales representative searches the list of references, and performs a query to find accounts that meet specific criteria. The accounts must be designated as referenceable, in the same industry as the prospective customer, and listed as maintenance in the sales stage.

The sales representative finds companies that meet the criteria. She selects a company for the reference, and telephones the primary representative to get permission to use the customer as a reference. The representative agrees and sets up a conference call to discuss the opportunity with the prospect.

Process of Managing Accounts and References

The References screen provides you with customer reference information that you can use as a sales tool when managing sales, marketing, and public relations initiatives. As a sales team member, providing potential customers with a list of referenceable accounts adds immediate legitimacy to any sales situation and gives you a competitive advantage. You also can use the References screen to determine the best reference for a current initiative.

You can use the References list to search for accounts that are referenceable. A calendar view of reference activities is also available.

To manage accounts and references, perform the following tasks:

- *Designating an Account as a Reference*
- *Associating an Activity with a Reference*
- *Associating a Contact with a Reference*
- *Associating an Attachment with a Reference*
- *Viewing Reference Activities in the Calendar*
- *Adding a Note to a Reference*
- *Adding Profile Information to a Reference*
- *Searching for References*
- *Viewing Reference Asset and Profile Charts*

Designating an Account as a Reference

You can mark an account as referenceable using the check box in the account record's Reference field. During the reference process, you can set the reference stages.

This task is a step in *Process of Managing Accounts and References*.

To designate an account as a reference

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the More Info view.
4. In the Account details form, select the Reference check box.

Associating an Activity with a Reference

In the Activities view, you can see each activity associated with an account. Activities associated with a reference appear in the Calendar view. Reference record fields provide information about the primary representative, the corporate sponsor, and so on. For more information about using the Calendar, see *Siebel Fundamentals* .

This task is a step in *Process of Managing Accounts and References*.

To associate an activity with a reference

1. Navigate to the References screen, then the Reference List view.
2. Drill down on the Stage field of a reference record.
3. Navigate to the Activities view.
4. In the Activities list, create a new record, and complete the necessary fields.

   For more information, see *Activities*.

Associating a Contact with a Reference

You can designate a specific contact within a referenceable account. This contact can provide you with reference information or the individual can be the point-of-contact for activities associated with the account.

This task is a step in *Process of Managing Accounts and References*.

To associate a contact with a reference

1. Navigate to the References screen, then the Reference List view.
2. Drill down on the Stage field of a reference record.
3. Navigate to the Contacts view.
4. In the Contacts list, perform one of the following steps:
   - Add an existing contact, select the contact from the Add Contacts dialog box, and click OK.
   - Create a new record in the Contacts list, and complete the necessary fields for the contact.

Associating an Attachment with a Reference

The Attachments view lists attachments associated with a reference account. You can add new attachments or view attachments associated with the account. Reference Attachments include account attachments and reference attachments.

This task is a step in *Process of Managing Accounts and References*.

To associate an attachment with a reference

1. Navigate to the References screen, then the Reference List view.
2. Drill down on the Stage field of a reference record.
3. Navigate to the Attachments view.
4. In the Attachments list, create a new record.

Viewing Reference Activities in the Calendar

The Calendar view details all reference activities associated with the account. In the calendar, you can view, by month, the number of reference activities associated with the account. This view allows you to manage the number of initiatives for the account and determine if the customer is being contacted too often. For information about adding a reference activity to the calendar, see *Associating an Activity with a Reference*.

This task is a step in *Process of Managing Accounts and References*.

To view reference activities in the calendar

1. Navigate to the References screen, then the Reference List view.
2. Drill down on the Stage field of a reference record.
3. Navigate to the Calendar view.

   The reference form appears with the calendar.
4. Drill down on the link for an activity in the calendar to view details about that activity.

Adding a Note to a Reference

The Reference screen's Notes view allows you to add notes to the selected reference account. Notes can be shared with others, and notes can be designated as private. Reference notes are visible in both the Account screen and the Reference screen. If you create a note in either the Accounts screen or the Reference screen, then the note is accessible in both views.

This task is a step in *Process of Managing Accounts and References*.

To add a note to a reference

1. Navigate to the References screen, then the Reference List view.
2. Drill down on the Stage field of a reference record.
3. Navigate to the Notes view, then the Private Notes or Shared Notes view.
4. In the Notes list, create a new record, and complete the necessary fields.

Adding Profile Information to a Reference

The Profile view allows you to update the account with information about the assets owned by the account, and information about the service profile. The service profile is a list of all external products the account is using in its operating environment. For example, if your company sells application software, then you might add information about the server hardware and end-user operating system used in conjunction with your products.

This task is a step in *Process of Managing Accounts and References*.

To add profile information to a reference

1. Navigate to the References screen, then the Reference List view.
2. Drill down on the Stage field of a reference record.
3. Navigate to the Profile view.

   The Profile list and the Service Profile list appear.
4. In the Profile list, create a new record, and complete the necessary fields.
5. In the Service Profile list, create a new record, and complete the necessary fields.

Searching for References

Use the All References Read Only and All References Across Organizations Read Only lists to search for references applicable to your accounts. These views are read-only; you cannot modify information, and a contacts list is not available. To use the reference contact information, contact the reference owner, whose User ID appears in the Primary Rep field.

This task is a step in *Process of Managing Accounts and References*.

To search for references

1. Navigate to the References screen, then the Reference Read Only List view.
2. In the References list, query for the references by specifying criteria in the appropriate fields.
3. In the reference record, drill down on the Primary Rep field to view reference owner information.

Viewing Reference Asset and Profile Charts

Reference charts provide a graphical analysis of referenced account assets and profiles. The Asset Analysis chart provides a graphical view of the assets. The Account External Product - Reference List chart provides a graphical representation of the profile information associated with all reference accounts. Both charts are read-only.

This task is a step in *Process of Managing Accounts and References*.

To view asset and profile analysis charts

1. Navigate to the References screen, then the Asset Analysis view or the Account External Product - Reference List view.

   The reference assets or reference profile list appears with the analysis chart.
2. In the chart, select the type (3D, 2D) from the drop-down list, and then click Go.

32 Categories

Categories

This chapter describes how to use predefined categories to sort and search for specific criteria, and enter information that defines a personal sales approach and style. It includes the following topics:

- *Scenario for Managing Categories*
- *Adding a Category*
- *Searching by Category*

Scenario for Managing Categories

This topic gives one example of how category management might be used. You might use category management differently, depending on your business model.

A sales representative wants to track information to help manage relationships with current and potential customers. Categories, which can be designated as private or shared with the sales team, provide the sales representative with a way to organize information about an account, opportunity, or contact.

The sales representative can track the most active accounts by creating a Hot Accounts category, and then select that category for each account that she wants to add to her active list.

The sales representative also can view a list of all the opportunities she has closed over a period of time. If she sets up a Closed category, then she can see which opportunities she has closed during the previous year.

Sales professionals also can use categories to track personal information about contacts. For example, a sales representative can record hobbies, such as golf or tennis, and designate that category for contacts she plans to invite to her company-sponsored sporting events. In addition, she can track family names or add contacts to a Holiday List category that allows her to create a seasonal mailing list.

> **Note:** The categories discussed in this chapter are not the same as the categories associated with Catalog administration which are used primarily for access control. For information about this other kind of category, see *Siebel Order Management Guide* .

Adding a Category

You can add categories to accounts, contacts, and opportunities. The procedure that follows explains how to add a category for accounts. You can add a category for contacts or opportunities by navigating to the appropriate screen. Category information can be shared with other members of the sales team or kept private.

To add an account category

1. Navigate to the Accounts screen, then the Accounts List.
2. Query the list for the account to which you want to add a category, and drill down on the Name field for that account.
3. Navigate to the Categories view.
4. In the categories list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Category	Select an existing category or create a new category.
Category Rank	Type a numeric value that defines the category.
Value	Select a value or create a new value to assign to the category.
Private	Select the check box to restrict sales team members from seeing how you have categorized the account. When the check box is selected, the category is private. Clear the check box to designate the category as Public allowing access by team members.

Searching by Category

You can use the categories you and your team have defined to search for specific accounts, opportunities, and contacts. Sales professionals can track information about accounts, opportunities, and contacts using the Categories screen and associated views.

To search by category

1. Navigate to the Category screen, then the view that relates to the information that you require.

   For example, if you want to find the accounts associated with a particular category, then navigate to the Account Categories view.
2. Query for the appropriate category.

   The accounts, opportunities, or contacts associated with the category appear in the categories list.

33 Competitors

Competitors

This chapter describes how to use the Competitors screen to examine comparisons of your company and competitors, view comparative literature of your products and those of your competitors, and associate a competitor with an opportunity. It includes the following topics:

- *Scenario for Managing Competitors*
- *Associating a Competitor with an Opportunity*
- *Viewing Competitor Comparisons*

Scenario for Managing Competitors

This topic gives one example of how competitor management might be used. You might use competitor management differently, depending on your business model.

A sales representative logs into the Siebel Sales application and discovers a newly qualified opportunity. He navigates to the Competitors view to review the competition for the opportunity. One competitor is listed for the deal. The sales representative is not familiar with the company and drills down on the Name field for the competitor to learn more.

In the Company Comparisons view, the representative can view a side-by-side comparison of his company and the competitor's company as well as a comparison of products. He can access competitive intelligence documents compiled by his company about this competitor, and the literature items that the competitor has published.

A colleague in Telesales calls the sales representative and indicates that there is a new competitor trying to win the deal. The sales representative adds the new competitor to the opportunity to allow the sales team to research the new competition.

Associating a Competitor with an Opportunity

Associating a competitor with an opportunity notifies the sales team about the competition for the deal and provides the team with a link to the information it needs to deliver a consistent, winning sales strategy.

To associate a competitor with an opportunity

1. Navigate to the Opportunities screen, then the Opportunities List.
2. Drill down on the Opportunity Name field for the opportunity record to which you want to add a competitor.
3. Navigate to the Competitors view.
4. In the Competitors list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Primary	Select this check box to indicate that the competitor is the primary rival for the deal.
Name	Select the competitor's company name. You can drill down on this field to navigate to the Competitors screen to obtain more information about the competitor.
Threat	Select a value established by your company to specify the value of the competitor's threat. Default values include 1-Low, 2-Medium, 3-High, 4-Very High.
Status	Select a value established by your company to specify the prospect's interest level in the competitor's offerings. Default values include Some Interest, Evaluation in Progress, Existing Relationship, and Not Satisfied.
Comments	Type additional information about the competitor.

Viewing Competitor Comparisons

In many sales situations it is necessary to discuss competitive information with a prospect. Using the Competitors screen, you can view comparisons about companies, products, and services, and also find literature to prepare for sales calls.

In competitive sales situations, it is imperative for the sales representative to have information about competitors to strengthen the sales strategy and differentiate the company's image and offerings.

To view competitor comparisons

1. Navigate to the Competitors screen, then the Competitor List view.
2. Drill down on the Competitor field of a competitor record.
3. Navigate to the Account Comparisons view.

   The Company Comparison, Competitor's Literature, and Comparative Literature lists appear.
4. In the Competitor's Literature list, select the literature item you want to view, and then drill down on the Name field.
5. In the Comparative Literature list, select the literature item you want to view, and then drill down on the Name field.

34 Decision Issues

Decision Issues

This chapter describes how to use the Decision Issues view to associate customer questions and concerns with an opportunity. It includes the following topics:

- *About Decision Issues*
- *Scenario for Managing Decision Issues*
- *Creating Decision Issues*
- *Associating Decision Issues with an Opportunity*

About Decision Issues

Decision issues are the criteria a prospective customer uses to evaluate a potential supplier and product before making a decision to buy.

Decision issues are specific areas of interest that can influence a prospect's buying decision. Customers and prospective customers can ask questions and express concerns about the solutions you propose, and your company in general, during the sales cycle. Decision issues provide you with an opportunity to develop a sales strategy and address customer concerns.

Scenario for Managing Decision Issues

This topic gives one example of how decision issue management might be used. You might use decision issue management differently, depending on your business model.

A sales representative logs into the Siebel Sales application and discovers a new opportunity for a software module his company sells. The 2,500-seat opportunity has been qualified by a colleague in the Telesales department, and the sales representative wants to move forward with the opportunity. The sales representative reviews the list of contacts, and then calls the main prospect to introduce himself and gather some initial requirements. After this conversation, the sales representative adds two new decision issues which are important to this prospect (customer references and search engines in the software).

Creating Decision Issues

Typically the administrator sets up the list of decision issues. Users associate these decision issues with other records, but cannot edit the decision issue text.

To create a decision issue

1. Navigate to the Administration - Data screen, then the Decision Issues view.
2. Create a new record, and complete the necessary fields.
3. Navigate to the following views to add details to the decision record:
   - Related Issues view
   - Literature view

     Select the Auto Update check box if you want to update associated literature when source literature files are updated.
   - Attachments view

Associating Decision Issues with an Opportunity (End User)

After you qualify an opportunity, you can associate the related decision issues with the opportunity and rank the decision issues in order of importance to the prospect.

Note: Your application administrator enters decision issue data that has been defined in your company. For more information, see your application administrator.

To associate a decision issue with an opportunity

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record associated with the decision issue.
3. Navigate to the Decision Issues view.
4. In the Decision Issues list, create a new record, and complete the necessary fields.

35 Enterprise Selling Process

Enterprise Selling Process

This chapter describes how a sales professional can use Siebel Enterprise Selling Process (ESP) methodology from Siebel MultiChannel Services to penetrate, cover, and grow large strategic accounts (especially global accounts). It includes the following topics:

- *About Enterprise Selling Process*
- *About Using ESP Methodology to Manage Accounts*
- *Scenario for Managing Enterprise Selling Process*
- *Process of Managing Enterprise Selling Process*
- *Adding ESP Business Unit and Service Unit Information*
- *Adding ESP Business and Service Unit Offerings*
- *Conducting an ESP Organizational Analysis*
- *Charting the Organization's Reporting Structure*
- *Adding Partners for ESP Analysis*
- *Viewing the BU/SU Offering Summary*
- *Adding ESP Objectives*
- *Adding ESP Account Plan Highlights*
- *Viewing an ESP Manager's Review*

About Enterprise Selling Process

Enterprise Selling Process is a separately licensed module that integrates with the Siebel Sales application.

The ESP module helps sales professionals identify the customer's business drivers and initiatives, uncover opportunities in key business and service units, develop global account strategies, manage key executive and partner relationships, and coordinate team activities.

The ESP module is designed to support users who are already familiar with the ESP methodology, which is based on the learning programs offered by Siebel MultiChannel Services. Users first complete an initial account analysis to select the units, opportunities, and partners, using the tools provided in the ESP workshop. After the analysis, the business units, opportunities, and partners are entered and tracked using the Siebel ESP module.

About Using ESP Methodology to Manage Accounts

Siebel Enterprise Selling Process (ESP) software provides support for the Enterprise Selling Process methodology from Siebel MultiChannel Services. The software module allows account teams to better make use of the ESP account management methodology to penetrate, cover, and grow large strategic accounts (especially global accounts). Using

the software, sales professionals can be more effective at identifying the customer's business drivers and initiatives, uncovering opportunities in key business and service units, developing global account strategies, managing key executive and partner relationships, and coordinating team activities.

The Siebel Enterprise Selling Process software module provides the following features:

- Support for the Enterprise Selling Process methodology
- An overview of Account Plan Highlights, such as the goal, the value proposition, and the critical success factors for driving business in the account
- A set of objectives for driving business in the account and an action plan for achieving each objective
- Analysis of the offerings that address each business and service unit's needs, along with the associated revenue from Installed Base, Current, and Potential Opportunities
- Automatic creation of an organization chart that visually shows an analysis of key players and their relationships
- Automatic creation of ESP reports including the Account Map and Account Plan

Scenario for Managing Enterprise Selling Process

This topic gives one example of how ESP management might be used. You might use ESP management differently, depending on your business model.

An account manager has completed the ESP methodology workshop. At the end of the workshop, she develops a plan for her account. She plans to use the ESP software module to enter her account plan information to share with her team, and to track performance over the next several quarters against the plan.

The account manager begins by launching Siebel Sales and navigating to the Accounts screen. She selects the targeted account from the list of accounts, and then moves to the Enterprise Selling Process view to begin her account analysis.

First, the account manager enters the account's business and service units and key information about each unit such as the unit's culture, her company's level of relationship with the unit, and the strategy she plans to apply to the unit. Consequently, she provides her team with important sales information about each unit that sales team members plan to contact.

Then, the account manager enters information about the potential, current, and installed base opportunities by offering for each unit. This information helps the team understand where they have coverage and penetration in each unit and with which offerings. After the account's units and opportunities are mapped, the account manager analyzes the organizational structure within the account. The account manager defines both the formal and informal organizational structures and determines who is important within the account and whom the team must spend more time with to close the identified opportunities.

The account manager continues by analyzing the partners involved with this account so she can identify and use partnership capabilities within the key business and service units. The manager uses her analysis to enter her value proposition, goal, critical success factors and objectives for the account. She then enters activities that are necessary to meet each objective, and assigns objectives to the appropriate team member. Consequently, the account manager can coordinate with her team in a goal-oriented fashion.

When the account manager is ready to share her Account Plan, she runs the report and emails it to her team and manager. Her manager can also review the report online and enter her comments in the Manager's Review form.

Process of Managing Enterprise Selling Process

The Enterprise Selling Process (ESP) module consists of eight views. Information provided in these views comprises the overall account plan. The ESP Account Plan and the ESP Account Map reports can be automatically generated from the ESP module. The tasks associated with the eight ESP views describe how to use the Enterprise Selling Process module.

To manage the Enterprise Selling Process, perform the following tasks:

1. *Adding ESP Business Unit and Service Unit Information*
2. *Adding ESP Business and Service Unit Offerings*
3. *Conducting an ESP Organizational Analysis* and *Charting the Organization's Reporting Structure*
4. *Adding Partners for ESP Analysis*
5. *Viewing the BU/SU Offering Summary*
6. *Adding ESP Objectives*
7. *Adding ESP Account Plan Highlights*
8. *Viewing an ESP Manager's Review*

While you are in a view, click Reports in the toolbar to access the available preconfigured reports for the data in that view. For more information about reports, see *Siebel Reports Guide* .

Adding ESP Business Unit and Service Unit Information

The Business Unit and Service Unit (BU/SU) Overview helps you segment the account into more manageable business and service units. Each business or service unit in your account has different characteristics that affect your ability to sell into the unit. This view helps you profile each unit to determine these characteristics. It also helps you to make decisions about where to apply your resources and how to successfully integrate into the organization.

This task is a step in *Process of Managing Enterprise Selling Process*.

To add BU/SU overview information

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the BU/SU Overview view, and create a new record.

   The following table describes the fields to complete.

Field	Comments
Business / Service Unit	Type a name for the business or service unit.
Culture	Select a value that defines the culture (sales environment and sales approach) favored by the business or service unit. Examples are Entrepreneurial, Individualistic, Bureaucratic, and Collaborative.

Field	Comments
Strategy Type	Select a value that defines your strategy to penetrate, cover and grow the relationship with the business or service unit. The values are Create, Exit, Expand, Protect, and Pursue.
Initiatives	Type a description of the initiatives on which you plan to focus for the business or service unit. Example are improve ROI by 10% and increase customer satisfaction.
Level of Relationship	Select a value for your company's perception of its relationship with the business or service unit. Examples are Problem Solver, Trusted Advisor, and Credible Source.
Marketing	Type information about an existing marketing campaign or new marketing campaign that you want to apply or develop for this business or service unit.

Field values are discussed during methodology training, and are available as part of the methodology documentation.

4. Repeat Step 4 for each Business or Service Unit in the account.

> **Note:** If you are using ESP to analyze an account that has associated child accounts, then the child accounts automatically appear in the BU/SU Overview list.

Adding ESP Business and Service Unit Offerings

The Offerings view helps sales professionals to identify opportunities to sell their offerings (products and services) into key business or service units in the account. The sales professional can use this view to maintain a balance of current and future revenue in the account. It also helps to identify opportunities for greater account penetration.

This task is a step in *Process of Managing Enterprise Selling Process*.

To add offerings

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the BU/SU Overview view.
4. Drill down on the Business/Service Unit field of the unit record to which you want to add offerings.

   The name of the unit you drilled down on appears in the Account form at the start of the screen. The Offerings view appears. To add offerings, the Account Type must be ESP BSU. When the Account Type is set to ESP BSU, the icon to create a new record is inactive in the BU/SU Offering Summary view and in the Objectives view. This behavior is controlled by the business component user property Parent Read Only Field.

5. In the Offerings list, create a new record.

   The following table describes the fields to complete.

Field	Comments
Potential Oppty Name	Select an existing opportunity. You can also create a new opportunity. A potential opportunity has long-term revenue implications and ties to the customer's business initiative. The opportunity can occur and can be classified as unqualified.
Potential Oppty Revenue	Type the revenue classified as Potential that is associated with the opportunity. **Note:** You can enter the revenue associated with potential opportunities without creating a new opportunity in the Siebel database.
Current Oppty Name	Select an existing opportunity. You can also create a new opportunity. A current opportunity is in the sales cycle and has a significant associated revenue or market value. The opportunity can be the result of a new or installed business.
Current Oppty Revenue	Type the revenue classified as Current that is associated with the opportunity.
Install Base Name	Select an existing opportunity. You can also create a new opportunity. An installed base opportunity can be categorized in one or more of the following groups: - Servicing and maintaining - Upgrades, add-ons - Contract extensions - Non-competitive
Install Base Revenue	Type the revenue classified as Install Base that is associated with the opportunity.
Value to Customer	Select a numeric value to indicate your assessment of how critical the initiative is to the enterprise's overall strategy.
Value to Us	Select a numeric value after evaluating the following factors: - Short-term revenue potential - Future revenue potential - Profitability - Degree of risk - Strategic value

6. When you have finished identifying opportunities in the unit for your offerings, navigate back to the BU/SU Overview view, select a new unit, and repeat Step 4 and Step 5.

Conducting an ESP Organizational Analysis

Sales professionals conduct an ESP organizational analysis to identify the most influential people for an account or unit and to record information about managing relationships with these people.

This task is a step in *Process of Managing Enterprise Selling Process*.

To conduct an ESP organizational analysis

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view.

   You can conduct an organizational analysis for an account or for a business or service unit.
4. If you want to conduct an organizational analysis for an account, then perform the following steps:

   a. Navigate to the Organizational Analysis view.

      The Organization Chart view appears showing any contacts associated with the account.
   b. Proceed to Step 6 of this procedure.
5. If you want to conduct an organizational analysis for a business or service unit, then perform the following steps:

   a. Navigate to the BU/SU Overview view.
   b. Drill down on the Business/Service Unit field of unit record for which you are conducting an organizational analysis.

      The name of the unit appears in the Account form at the start of the screen, and the Offerings view automatically appears.
   c. Navigate to the Organizational Analysis view.

      The Organization Chart view appears showing any contacts associated with the unit.
   d. Proceed to Step 6 of this procedure.

6. From the drop-down list in the Organizational Analysis view, select Contacts to see the contacts for the account or unit, and complete the following steps:
   a. (Optional) In the Contacts list, add a contact.

      You can create a new contact record in the Add Contacts dialog box.

      > **Note:** You can also add a contact or create a new contact record in the Organization Chart view. If you create a new contact record in the Organization Chart view, then you must save the record to return to the Organization Chart view.

   b. In the Contacts list, review and change the field values for each contact using the criteria in the ESP methodology training program.

      The following table shows the shading that appears in the contact node in the organization chart for each value in the Level of Influence field.

Field Value	Shading
Low	None (no shading)
Political Structure (Medium)	50% shading (or light gray)
Inner Circle (High)	80% shading (or dark gray)

Charting the Organization's Reporting Structure

After conducting an ESP organizational analysis, sales professionals can create organization charts that visually summarize the organization's reporting structure. Using the Organizational Analysis view, sales professionals can depict the structure and politics of the organization and then use this information to build and expand their relationship with the customer.

The organization chart displays nodes (boxes) that contain information for each of the contacts you analyze and associate with the account or unit. The node includes information about the contact, such as the contact's title, and other information from the organizational analysis.

This task is a step in *Process of Managing Enterprise Selling Process*.

To create the organization chart

1. Navigate to the Organization Chart view.

   For more information, see *Conducting an ESP Organizational Analysis*.
2. In the organization chart, click the dot at the end of the node for a manager, and relocate that dot to the other dot at the start of the node for the subordinate.

   A line that reflects the reporting relationship between the contacts appears.

3. Repeat Step 2 for each contact until you complete the organization chart.

   Note: The reporting relationships are also stored in the Contacts list (toggle view). Information about the manager of the contact appears in the Manager Last Name field and Manager First Name field. Use the Columns Displayed option in the menu for the cogwheel icon to display these fields.

4. To delete a line that reflects a reporting relationship, click the line, and select Delete in the Actions list.
5. To delete a node from the organization chart, select Contacts from the drop-down list in the Organizational Analysis view, and delete the record for the contact.

Using the Organization Chart to Draw Lines of Influence

You can track the political structure in the account or unit organization by identifying lines of influence between contacts. Tracking lines of influence helps you identify contacts who are not highly ranked (and are easier to access) but have significant influence on key decision makers.

Information about lines of influence is automatically updated in the Relationships view of the Contacts screen. You can add lines of influence in the Relationships view.

To draw lines of influence on the organization chart

1. Navigate to the Organization Chart view.

   For more information, see *Conducting an ESP Organizational Analysis*.
2. In the organization chart, click the dot at the side of the node for a contact, and relocate that dot to the other dot at the side of the node for another contact.

   A line that reflects the influence between the contacts appears.
3. Repeat Step 2 for each contact until you draw all lines of influence.
4. To delete a line that reflects an influence, click the line, and select Delete in the Actions list.

Adding Partners for ESP Analysis

The Partners view helps you to analyze and execute key partnership strategies while identifying and using partnership capabilities across the enterprise. This view also helps you develop initiatives used to engage key partners.

This task is a step in *Process of Managing Enterprise Selling Process*.

To add a partner

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the BU/SU Overview view.
4. Drill down on the Business/Service Unit field of the unit record to which to add partners.

   The name of the unit appears in the Account form at the start of the screen. The Account Type must be ESP BSU to add partners to the unit.

   The Offerings list appears after the Account form.
5. Navigate to the Partners view.

6. In the Partners view, create a new record, and complete the necessary fields.

   Note: Partners are stored as Accounts in the Siebel database. The Partner flag is checked in the Add Accounts dialog box.

Adding a Contact

Complete the following procedure to add a contact.

To add a contact

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the Partners view.
4. In the Partners list, select the partner, and drill down on the Name field.
5. In the Contacts list, perform one of the following steps:
   - Add an existing contact, select the contact from the Add Contacts dialog box, and click OK.

     Note: You can select multiple contacts by holding down the SHIFT key and selecting multiple contacts.

   - Create a new record in the Contacts list, and complete the necessary fields for the contact.

Adding Activities

Complete the following procedure to add activities.

To add activities

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the Partners view.
4. In the Partners list, select the partner, and drill down on the Name field.
5. In the Contacts list, drill down on the Last Name field.

   The Contacts detail form and Activities view appears.
6. In the Activities list, create a new record, and complete the necessary fields.

   If you select Calendar and Activities in the Display In field, then you must specify a start date and time for the record to appear in the Calendar.

   To delegate the activity, select the owner of the activity in the Owner field. For more information, see *Activities*.

Viewing the BU/SU Offering Summary

The BU/SU Offering Summary is a read-only view that allows you to see all the offerings (and associated opportunities) you have added to each business and service unit in the account.

Note: Verify that the account name in the Account form does not show one of your units. You must select the main account for which you are conducting the ESP analysis to see all the offerings by unit.

This task is a step in *Process of Managing Enterprise Selling Process*.

To view BU/SU offerings

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the BU/SU Offering Summary view.

   The offerings associated with each unit in the account appear. You can also see the potential, current, and installed base opportunities for each offering associated with each unit.

Adding ESP Objectives

The Objectives view helps the sales professional to develop an initial plan for the account. Sales professionals can create specific types of objectives (for example, Business Development, Revenue, and Cross-Account) for each unit or resource to improve strategic planning and account team coordination.

The defined objectives link to an Action Plan form that sales professionals can use to develop action plans to achieve each objective they set. Moreover, the sales professional can verify that the action plan is implemented, because the activities assigned in the Action Plan form automatically appear in the assignee's activities list.

This task is a step in *Process of Managing Enterprise Selling Process*.

To add objectives

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the Objectives view, and create a new record.

   The following table describes some of the fields to complete.

Field	Comments
Unit or Resource	Type the unit or resource for which you are creating the objective. Units can be a business or service unit, opportunities, offerings, or groups of units. Examples of resource names are Marketing, Customer Satisfaction, or Partners.
Objective Type	Select the type of objective. Select from the Cross Account, Revenue, and Business Development objective types.
Objective	Type the objective for the unit or resource.
Strategy	Type a statement explaining how to achieve the objective.

Field	Comments

4. In the list, create a new record, and complete the necessary fields.
5. Drill down on the Unit or Resource field.

   The Objective details form appears with the Action Plan list.
6. In the Action Plan list, create a new record, and complete the necessary fields.

   The Actions you create in the Action Plan list appear in your Activities, Calendar, and To Do List. The Display In value that you select determines the actions that appear. To appear in the Calendar, the start date for the action must be entered.

Adding ESP Account Plan Highlights

The Account Plan Highlights view allows the sales professional to enter the achievement goals for the account. The sales professional can communicate the strategic plans for the account to the sales team and to sales management, using the following fields:

- **Goal**. The account goal is a statement that describes the level of business you want with the customer within the next few years. Express the goal, if possible, in terms of relationship and revenue.
- **Value Proposition.** The value proposition is a statement that describes your value to the customer. The value proposition is written from the perspective of the customer.
- **Critical Success Factor.** Specific to the ESP Account Plan, critical success factors are the events or resources necessary to the success of your plan.

This task is a step in *Process of Managing Enterprise Selling Process*.

To add account plan highlights

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the Account Plan Highlights view.
4. In the forms, complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Goal	Type text describing the goal of the account plan.
Value Proposition	Type text describing the value proposition for the account plan.
Critical Success Factors	Type text describing the critical success factors for the account plan.

Viewing an ESP Manager’s Review

The sales manager uses the Manager's Review view to enter an assessment of the sales professional's ESP account plan. The manager can add comments in the Manager’s Review, which includes the date of each review.

The sales representative and other nonmanagers have read-only access to this view.

This task is a step in *Process of Managing Enterprise Selling Process*.

To view a manager’s review

1. Navigate to the Accounts screen, then the Accounts List view.
2. Drill down on the Name field of an account record.
3. Navigate to the Enterprise Selling Process view, then the Manager’s Review view.

36 Target Account Selling

Target Account Selling

This chapter describes how sales professionals can use Target Account Selling (TAS) methodology from Siebel MultiChannel Services to help win deals. It includes the following topics:

- *About Using Target Account Selling to Manage Opportunities*
- *Scenarios for Managing Target Account Selling*
- *Process of Managing Target Account Selling*
- *Completing a TAS Overview*
- *Assessing an Opportunity*
- *Developing Strategy with TAS Competitive Analysis*
- *Conducting a TAS Organizational Analysis*
- *Mapping the Organization's Reporting Structure*
- *Developing a Relationship Strategy*
- *Adding Customer Milestones*
- *Viewing PRIME Activities*
- *Adding Notes to Opportunities*

About Using Target Account Selling to Manage Opportunities

Target Account Selling is a separately licensed module that integrates with the Siebel Sales application.

The Target Account Selling module provides full support for the Target Account Selling (TAS) sales methodology. Using the Target Account Selling methodology and the Target Account Selling module, sales professionals can perform the following functions:

- Assess opportunities, relationships with key customer contacts, and their competitive position.
- Develop competitive and relationship strategies to win the deal.
- Execute the strategy and track progress against the action plan.

The Siebel Target Account Selling software module provides the following features:

- Full support for the Target Account Selling methodology
- Automatic creation of the organization map that allows you to view both the formal hierarchy and lines of influence in the customer organization and that helps sales professionals develop relationship strategy.
- Support in identifying and ranking the decision criteria of each contact
- Team planning to make sure that key Customer Milestones are addressed
- Automatic creation of the TAS Opportunity Plan. The report can be configured to print selected sections.

- Automatic creation of the TAS Initial Plan
- The TAS Opportunity Plan template that generates an editable Microsoft Word file (available to customers who have the separately licensed Proposal Generator)

Scenarios for Managing Target Account Selling

This topic describes how Target Account Selling (TAS) management might be used. You might use TAS management differently, depending on your business model. This topic includes the following scenarios:

- *Assessing Opportunities*
- *Developing Competitive and Relationship Strategies*
- *Executing Strategies*

Assessing Opportunities

A sales representative meets with a customer and discovers a new opportunity. The sales representative plans to use the Target Account Selling (TAS) methodology from Siebel MultiChannel Services (MCS) to develop a sales strategy for this new deal. TAS is supported by her Siebel Sales application, allowing the sales representative to analyze the opportunity and its multiple decision makers.

The sales representative selects the opportunity within Siebel Sales, and navigates to the Target Account Selling views to begin the process. She sees several views that she can use to profile and assess the opportunity, develop her value proposition and competitive strategy, and create a detailed action plan to achieve her goals.

She begins by developing an overview of the opportunity. She enters some high-level information, including a profile of the account and the opportunity. This information provides strategic insight that her sales team can use and helps her to connect the project to the customer's business drivers. The sales representative also enters details about her goal for the opportunity, the solution she is offering, and the business value this solution provides. She continues by entering a description of the compelling event that is causing the customer to act to help her determine the customer's sense of urgency to close the deal. She concludes by summarizing her high-level strengths and weaknesses for the deal.

Now that she has a general overview of the opportunity, she begins to assess her position using the TAS criteria that Siebel MCS has developed from analyzing the best practices of top sales professionals. She also rates the position of her key competitors using these criteria.

Developing Competitive and Relationship Strategies

Next, the sales representative begins to analyze her competitors for the opportunity and to determine the strategy to use to win the deal.

She continues by analyzing the prospect's organization. She maps both the formal and informal structures so that she can be sure she is spending time with the right contacts. When she completes the analysis, she views the organization map that summarizes her assessment and identifies key players and relationships she can use to close the deal.

Now that she knows who to talk to, the sales representative begins to develop a relationship strategy. She enters the business and personal agenda, as well as key decision issues, for each contact. This preparation helps her to determine the message to deliver to each contact.

Executing Strategies

The sales representative is now prepared to develop her action plan to win the opportunity. First, she navigates to the Customer Milestones view to document key events or milestones in the customer's buying process. This view helps her plan the activities that she and her sales team will take to address the customer's requirements at each milestone. Then, she enters key action steps and resources needed and assigns the actions to members of her sales team. She can choose to have the activities appear in her calendar, activities, or To Do list, or in those of another assignee. She navigates to the PRIME Activities view where she can see all the activities she created to meet customer milestones, and add action items required to win the deal. She also makes some additional notes about the opportunity and makes the notes available for the entire team to view.

The sales representative's manager requests a copy of the TAS Opportunity Plan. The sales representative configures the report to display relevant sections of the Opportunity Plan, generates the report, and then emails it to her manager.

Process of Managing Target Account Selling

Siebel Target Account Selling (TAS) consists of eight views that automate the steps in the TAS methodology. The TAS Initial Plan report and the TAS Opportunity Plan report can be generated from the TAS module.

The TAS Opportunity Plan template is available with Siebel Proposal Generator (a separately licensed module), which automatically creates the Opportunity Plan using Microsoft Word. The tasks associated with the Target Account Selling views describe how to use the Target Account Selling module.

To manage Target Account Selling, perform the following tasks:

1. *Completing a TAS Overview*
2. *Assessing an Opportunity*
3. *Developing Strategy with TAS Competitive Analysis*
4. *Conducting a TAS Organizational Analysis*
5. *Mapping the Organization's Reporting Structure*
6. *Developing a Relationship Strategy*
7. *Adding Customer Milestones*
8. *Viewing PRIME Activities*
9. *Adding Notes to Opportunities*

While you are in a view, click Reports in the toolbar to access the available preconfigured reports for the data in that view. For more information about reports, see *Siebel Reports Guide* .

Completing a TAS Overview

The Overview view provides a starting point that sales professionals can use to consolidate their observations about the account and opportunity and share strategic insights with their sales teams.

Using this view, sales professionals can profile their customers' important business initiatives and requirements. In addition, sales professionals can summarize the strategic goal, value proposition, and overall position.

This task is a step in *Process of Managing Target Account Selling*.

To complete a TAS overview

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view.
4. In the first form, complete the necessary fields.

   Some fields are described in the following table.

   You can position the pointer on the information icon to see information about the view.

Field	Comments
Customer's Business Profile	Type a description of the customer's business conditions. Identify the customer's major lines of business, affiliations, products, and markets. Include information about recent mergers and acquisitions. **Note:** If this opportunity is a new opportunity, then you must create a new record and associate it with an account before you can enter text in the Customer's Business Profile field. For more information, see *Opportunity Workflows*.
Customer's Revenue	Type the customer's annual revenues or sales.
Fiscal Year End	Select the month and day in which the customer's 12-month accounting period ends.
Customer's Profit	Type the customer's annual profit.

5. In the Overview form, complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Opportunity Profile	Type a description of the customer's project or application. Identify the customer's business objectives for the project, the total cost and budget for the project, and how the project affects the customer's overall business.
Customer's Compelling Event	Type a description of the driving influence for the customer to make a decision or change the current situation. Identify the payback if the customer makes a change, or the consequences if the customer does not act. Note the specific date associated with the consequences or payback.
Critical Success Factors	Type the actions you, the competition, and your customer must complete for you to win this opportunity.

Field	Comments
Our Strengths	Type the business, organizational, and political issues that give your sales team an advantage in the deal.
Goal	Type a description of your projected, long-term position with the customer. Identify how a closer relationship with you advances the attainment of their business goals. Include the long-term gain for your business such as future or strategic value.
Our Solution	Type a description of the solution you plan to offer to the customer. Address how the solution works in the customer's environment and how it meets their compelling event. Include any alliances or business partner solutions required to make it operational for the customer.
Our Weaknesses	Type the business, organizational, and political issues that might put your sales team at risk in the deal.
Our Unique Business Value	Type a description of your value proposition. Make sure it is specific to this customer, defines a measurable business result, and creates credibility by proving your ability to deliver. The value proposition differentiates you from your competitors. Confirm the value proposition with the customer.

Assessing an Opportunity

Sales professionals can use the Assessments view to evaluate the opportunity using criteria developed by Siebel MultiChannel Services. Assessments must be completed before determining the best strategy. An assessment focuses on the following four key questions:

- Is there an opportunity?
- Can we compete?
- Can we win?
- Is it worth winning?

Sales professionals assess their organization’s position and the position of their top competitors against these criteria. As the sales campaign progresses, sales professionals repeat this assessment and then compare the results to past assessments to evaluate and monitor their position at each sales stage.

After some assessments are performed and you are familiar with the criteria and methodology, use the Assessments form to rate the criteria.

This task is a step in *Process of Managing Target Account Selling*.

To begin an assessment

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record that you want to assess.
3. Navigate to the Target Account Selling view, then the Assessments view.
   The Assessments list includes all the assessments you and your sales team have performed to date. Use the Assessments list to compare opportunity assessments for your company and your competitors.
4. In the Assessments form, create a new record.
   In the new record, the Assessment For field defaults to Our Company for self assessments.
5. If you are assessing a competitor's position, then specify the competitor in the Assessment For field.
6. In the Assessments form, complete the assessment criteria questions.

Developing Strategy with TAS Competitive Analysis

The Competitive Analysis view helps sales professionals to develop competitive strategy. For each competitor, the sales team can evaluate strengths and weaknesses and anticipate the competitor's strategy. The view also help the sales team to assess its own position against the competitor and to refine its strategy to win the deal.

Note: If you are analyzing a competitor's strategy, then enter the information in the Competitors list.

When you determine your strategy, enter a summary in the Our Competitive Strategy text field in the Competitive Analysis view.

This task is a step in *Process of Managing Target Account Selling*.

To add competitive analysis information

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view, then the Competitive Analysis view.
4. In the Competitors list, create a new record, and complete the necessary fields.
   After you have analyzed your competitors, you determine your strategy in the deal. Evaluate the anticipated action of your competitor to enter your strategy in the Our Competitive Strategy field.

Conducting a TAS Organizational Analysis

Sales professionals conduct a TAS organizational analysis to identify the most influential people for an opportunity and to record information about managing relationships with these people.

This task is a step in *Process of Managing Target Account Selling*.

To conduct a TAS organizational analysis

1. Navigate to the Opportunities screen, then the Opportunities List view.

2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view, then the Organizational Analysis view.

   The Organization Map view appears showing any contacts associated with the opportunity.
4. From the drop-down list in the Organizational Analysis view, select Contacts.

   The contacts for the opportunity appear.
5. (Optional) In the Contacts list, add a contact.

   You can create a new contact record in the Add Contacts dialog box.

   > **Note:** You can also add a contact or create a new contact in the Organization Map view. If you create a new contact record in the Organization Map view, then you must save the record to return to the Organization Map view.
6. In the Contacts list, review and change the field values for each contact using the criteria in the TAS methodology training program.

   The following table shows the shading that appears in the contact node in the organization map for each value in the Type of Influence field.

Field Value	Shading
Low	None (no shading)
Political Structure (Medium)	50% shading (or light gray)
Inner Circle (High)	80% shading (or dark gray)

Mapping the Organization's Reporting Structure

After conducting a TAS organizational analysis, sales professionals can create organization maps that visually summarize the organization's reporting structure. Using the Organizational Analysis view, sales professionals can depict the structure and politics of the organization and then use this information to build and expand their relationship with the customer.

The organization map displays the nodes (boxes) containing information for each of the contacts you analyze and associate with the opportunity. The node includes information about the contact, such as the contact's title and other information from the organizational analysis.

This task is a step in *Process of Managing Target Account Selling*.

To create the organization map

1. Navigate to the Organization Map view.

   For more information, see *Conducting a TAS Organizational Analysis*.

2. In the organization map, click the dot at the end of the node for a manager, and relocate that dot to the other dot at the start of the node for the subordinate.
   A line that reflects the reporting relationship between the contacts appears.
3. Repeat Step 2 for each contact until you complete the organization map.

   Note: The reporting relationships are also stored in the Contacts list (toggle view). Information about the manager of the contact appears in the Manager Last Name field and Manager First Name field. Use the Columns Displayed option in the menu for the cogwheel icon to display these fields.

4. To delete a line that reflects a reporting relationship, click the line, and select Delete in the Actions list.
5. To delete a node from the organization map, select Contacts from the drop-down list in the Organizational Analysis view, and delete the record for the contact.

Using the Organization Map to Draw Lines of Influence

You can track the political structure in a customer organization by identifying lines of influence between contacts. Tracking lines of influence helps you identify contacts who are not highly ranked (and are easier to access) but have significant influence on key decision makers.

Information about lines of influence is automatically updated in the Relationships view of the Contacts screen. You can indicate lines of influence in the Relationships view.

To draw lines of influence on the organization map

1. Navigate to the Organization Map view.
   For more information, see *Conducting a TAS Organizational Analysis*.
2. In the organization map, click the dot at the side of the node for a contact, and relocate that dot to the other dot at the side of the node for another contact.
   A line that reflects the influence between the contacts appears.
3. Repeat Step 2 for each contact until you draw all lines of influence.
4. To delete a line that reflects an influence, click the line, and select Delete in the Actions list.

Developing a Relationship Strategy

Information captured in the Relationship Strategy view helps sales professionals develop a relationship strategy for each of the key players for an opportunity. The view allows sales teams to share their understanding of the business and personal decision issues for each contact.

This task is a step in *Process of Managing Target Account Selling*.

To add relationship strategy information

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view, then the Relationship Strategy view.
4. In the Contacts list, create a new record, and complete the following steps:
   a. From the Add Contacts dialog box, select the contact or contacts you want to add, and click OK.

> **Note:** All contacts added in the organization map automatically appear in the Contacts list, and all contacts added in the Contacts list appear in the organization map.

b. Complete the Business Agenda, Personal Agenda and Relationship Strategy fields for each contact.

   You complete this information only for the key players in the organization. Role, level of influence, and rank determine the key players in the organization.

5. Add decision criteria by completing the following steps:
   a. In the Relationship Strategy list, select a contact.
   b. In the Decision Criteria list, create a new record, and complete the necessary fields.

> **Note:** The administrator might want to create a Custom record that users can select from the list of decision criteria. This record can be used to track issues that are unique to the contact and do not already exist in the Siebel database.

Adding Customer Milestones

Milestones are formal steps in the customer's buying process. The Customer Milestones view helps sales professionals identify and track customer requirements that must be met as the sales cycle progresses. After the milestones are set, use the Our Activities list to target specific activities to accomplish to meet each milestone. These activities might include formal presentations, product demonstrations, benchmarks, proposals, and other activities required to make the sale.

Milestones are similar to Activity Plan templates that are created with predefined activities. For example, the initial milestone, Request Offering, is associated with recommended activities to be performed by you and your sales team. These activities might include understanding the problem or opportunity, defining the customer's Compelling Event and confirming the budget, completing an opportunity assessment, and developing an organization map for the customer's business.

A sample of customer milestone types is included with the Siebel Sales application. Your administrator can change the milestones to suit your business needs. You and your sales team can create, edit and delete activities associated with the milestones that address the opportunity.

This task is a step in *Process of Managing Target Account Selling*.

To add a milestone

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view, then the Customer Milestones view.
4. In the Customer Milestones list, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Event	Select the type of event.

Field	Comments
	A set of suggested activities appears in the Our Activities list. You must save the type of event for the activities to appear.
Description	Type a description of the milestone event.
Customer Responsibility	Select the customer contact who is the key contact and owner of the milestone event.

5. Repeat Step 4 until you have entered all key milestone events.

   Review the recommended activities for each milestone before adding new milestones.

Adding Associated Activities to Each Milestone

Complete the following procedure to add associated activities to each milestone.

To add associated activities to each milestone

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view, then the Customer Milestones view.
4. In the Customer Milestones list, select a milestone record.
5. In the Our Activities list, create a new activity record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Type	Select the activity type.
Resources	Type a description of the resources required to support the activity.
Owner	Select a new owner of the activity, if necessary. Your user ID appears in this field by default.
In Display	Select a value to indicate where you want the activity to appear. If you select Calendar and Activity as the display method, then you must enter a start date for the activity so that it appears in the calendar.

Viewing PRIME Activities

The PRIME Activities view helps sales professionals develop the necessary action steps to execute the strategy and win the opportunity. The PRIME acronym underscores the initiatives that are used:

- Prove your value.
- Retrieve missing information.
- Insulate against competition.
- Minimize your weaknesses.
- Emphasize your strengths.

These activities can be assigned with due dates to members of the sales team and automatically appear in individual calendars and activity lists. Use this view to update the entire sales team, and to measure progress while implementing the sales strategy.

All the activities created in the PRIME Activities view automatically appear in the Activities view associated with the opportunity. Your sales organization might want to standardize on one of these views.

Activities created in the Our Activities list in the Milestones view also appear in the PRIME Activities list, providing a method for tracking. (In the Customer Milestones list, you must select the milestone to see the associated activities.)

Using this view, you can create activities that are not specific to milestones, such as follow-up actions associated with assessments and the organizational analysis.

This task is a step in *Process of Managing Target Account Selling*.

To add PRIME activities

1. Navigate to the Opportunities screen, then the Opportunities List view.
2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Target Account Selling view, then the PRIME Activities view.
4. In the list, create a new record, and complete the necessary fields.

   Identify the actions and resources required to implement your strategy, and then select a member of your sales team who is responsible for the activity.

Adding Notes to Opportunities

The Notes view consolidates comments (for example, notes and directions) created by various members of the sales team. These notes can be marked for general viewing or can be kept private. The Notes view allows the sales team to aggregate and track observations about the opportunity throughout the sales process.

This task is a step in *Process of Managing Target Account Selling*.

To add a note

1. Navigate to the Opportunities screen, then the Opportunities List view.

2. Drill down on the Opportunity Name field of an opportunity record.
3. Navigate to the Notes view, then the Public Notes view or Private Notes view.
4. In the Notes view, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Description	Type the text for the note.
Created	Displays the date and time that you create the note.

37 Managing Portfolios

Managing Portfolios

This chapter describes how a portfolio manager can use the Portfolio Management Process (PMP) methodology in Siebel Business Applications to manage accounts and complex relationships with customers and partners. It includes the following topics:

- *About the Portfolio Management Process*
- *Scenario for Managing a Portfolio*
- *Roadmap for Managing Portfolios*
- *Creating a Portfolio Plan*
- *Process of Segmenting Accounts*
- *Process of Analyzing the A Accounts*
- *Process of Analyzing B, C, and D Accounts*
- *Performing a Manager Review of a Portfolio Plan*
- *Adding Solutions to Portfolio Plans*

About the Portfolio Management Process

PMP is an account-based, structured methodology for sales professionals who manage a portfolio of accounts, and who must be responsible for, penetrate, retain, and grow those accounts. A portfolio contains a set of accounts organized by industry application, geographic location, and so on. Typically, a *portfolio* contains strategically important accounts that represent high-potential business for the sales organization.

PMP is designed to help portfolio managers perform the following activities:

- Analyze accounts in their portfolio to reveal the accounts with highest revenue potential.
- Engage the high-potential accounts in their portfolio.
- Direct and manage resources to close as much business as possible.
- Manage complex relationships with customers and partners.

PMP separates a group of accounts into four segments. The following table shows these segmentation groups.

Group	Comments
A	Accounts that offer significant sales potential and deserve significant sales effort.
B	Accounts that make a significant current revenue contribution and are meeting targets.
C	Accounts that are valued, but do not make a significant contribution and offer limited future potential.

Group	Comments
D	Accounts that have little or no revenue potential today. Insufficient data exists to accurately assess potential.

PMP plots the accounts in each group on a segmentation map. Each quadrant corresponds to an A, B, or C segment. PMP plots the D segment separately.

The PMP methodology is integrated with Siebel Business Applications. The PMP methodology integrated in Siebel Business Applications is licensed from, and is the intellectual property of, The TAS Group.

Scenario for Managing a Portfolio

This topic gives one example of how portfolio management might be used. You might use portfolio management differently, depending on your business model.

A portfolio manager has ten accounts and must analyze the accounts, and decide how best to focus the resources.

The portfolio manager logs in to Siebel Sales and navigates to the Portfolio Management Process view. The manager creates a new portfolio plan. A portfolio plan is the means by which portfolio managers capture their intentions about how to drive revenue from a portfolio.

The manager adds ten accounts to the plan, and then performs the following tasks to segment the accounts:

1. **Assesses current revenue.** The portfolio manager enters the period for which she wants to assess the revenue for the account. The revenue for this period appears in the Siebel application, separated into closed and committed revenue.

   The portfolio manager then selects a current revenue breakpoint. This breakpoint determines which accounts are considered to be more significant from a revenue point of view. This breakpoint also determines which accounts appear in the first and second halves of the segmentation map.
2. **Assesses future potential.** For each account, the portfolio manager enters a score against a set of criteria. The Siebel application then uses the scores that portfolio manager enters to calculate a future potential score for each account.

   The portfolio manager then selects a future potential breakpoint. This breakpoint determines which accounts are considered to be more significant from a future potential point of view. This breakpoint also determines which accounts appear in the starting and ending halves of the segmentation map.

For each account, the Siebel application takes the current revenue value and the future potential score and plots the account on the portfolio segmentation map. The breakpoints segment the accounts into A, B, C, and D accounts.

Next, the portfolio managers analyze each of the A accounts. They review the business units and service units (BU/SU) for each account to make sure that all of the units are included. They then segment the units. To segment the units, they assign each unit scores to reflect the importance of the unit to the portfolio managers, and to the customers. The Siebel application uses these scores to plot a BU/SU segmentation map.

The portfolio managers then review the BU/SU segmentation map and select the units where they want to identify the potential opportunities. For each selected unit, they analyze the business drivers, related initiatives, and critical success factors.

Next, the portfolio managers review and update more information to complete the A account analysis. They also review and update the equivalent information for the B, C, and D accounts to complete the analysis of the B, C, and D accounts.

The information that the portfolio managers review and update for all the account groups includes:

- Current and installed base opportunities
- Organizational structure
- Marketing plan information
- Partner information
- Objective strategy and action plan information

The portfolio manager can view the portfolio segmentation map. The manager of the portfolio manager can now review the portfolio plan and approve the plan.

Roadmap for Managing Portfolios

To manage portfolios, perform the following processes and tasks:

1. *Creating a Portfolio Plan*
2. *Process of Segmenting Accounts*
3. *Process of Analyzing the A Accounts*
4. *Process of Analyzing B, C, and D Accounts*
5. *Performing a Manager Review of a Portfolio Plan*
6. *Adding Solutions to Portfolio Plans*

Creating a Portfolio Plan

You can create a portfolio plan to group your accounts together.

This task is a step in *Roadmap for Managing Portfolios*.

To create a portfolio plan

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. In the portfolio plan list, create a new record, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
Portfolio Name	Type a unique name for the portfolio plan.
Status	Select the status of the portfolio plan from the drop-down list.
Period From	Select the start date of the period for which the plan is active.

Field	Comments
Period To	Select the end date of the period for which the plan is active.
Completion Date	Select the date by which the portfolio plan is due to be completed.
Next Review Date	Select the date of the next management review between the portfolio manager and the portfolio manager's manager.
Currency Code	Select the currency to use for revenue amounts for the portfolio plan.
Owner	Select the owner of the portfolio plan.
Portfolio Plan Goal	Type the goals for the portfolio plan.
Critical Success Factor	Type the factors that are important for the success of the portfolio plan.

3. Drill down on the Portfolio Name field of a portfolio plan record to see more fields.
Some fields are described in the following table.

Field	Comments
Last Revenue Calculation	Displays the date of the most recent revenue calculation.
Revenue Assessment From	Select the start date of the period for which you want to analyze revenue.
Revenue Assessment To	Select the end date of the period for which you want to analyze revenue.
Revenue Benchmark	Select the amount of the total current revenue. This value determines which accounts are considered to be more significant and less significant. It also determines which accounts appear in the first section of the segmentation map and the second section of the segmentation map.
A Account Breakpoint	Select the future potential score. This score determines which accounts are considered to be more significant and less significant. It also determines which accounts appear on the starting half of the segmentation map and the ending half of the segmentation map.

4. To add accounts to the portfolio plan, perform the following steps:
   a. Navigate to the Segmentation view, then the Revenue Assessment view.

b. Create a new record, and select an account in the Account field.

   The other fields are automatically populated.

While you are in a view, click Reports in the toolbar to access the available preconfigured reports for the data in that view. For more information about reports, see *Siebel Reports Guide* .

Process of Segmenting Accounts

To segment accounts, perform the following tasks:

1. *Assessing Current Revenues*
2. *Assessing the Future Potential of Accounts*
3. *Viewing the Portfolio Segmentation Map*

This process is a step in *Roadmap for Managing Portfolios*.

Assessing Current Revenues

To assess the current revenue of your accounts, you must review the current closed and committed revenue, then choose a benchmark that determines which accounts are more significant from a revenue perspective.

This task is a step in *Process of Segmenting Accounts*.

To assess the current revenue of an account

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Enter the period for which you want to analyze the revenue in the Revenue Assessment From and Revenue Assessment To fields.
4. Navigate to the Segmentation view, then the Revenue Assessment view.
5. Click Calculate Revenues.

   The revenues for each account appear in the Segmentation view.

   Some fields are described in the following table.

Field	Comments
Closed Revenue	Displays the aggregate revenue from opportunities with a Sales Stage value of 09 - Closed/Won, for the time period specified in Step 3.
Committed Revenue	Displays the revenue from the opportunities where the Sales Stage value is not 09 - Closed/Won or 09 - Closed/Lost, and where the PMP Revenue Type is set to Installed Base or Current, for the period specified in Step 3.
Total Current Revenue	Displays the sum of the Closed Revenue and Committed Revenue fields.

You can add more accounts to the portfolio. For information about how to add accounts to a portfolio, see *Creating a Portfolio Plan*.

6. Select a current revenue value that separates the high-revenue accounts from the low-revenue accounts in the Revenue Benchmark field.

Assessing the Future Potential of Accounts

To assess the future potential of your accounts, you must assign scores for numerous criteria for the account. The future potential score for the account is calculated from the scores for the criteria.

This task is a step in *Process of Segmenting Accounts*.

To assess the future potential of an account

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the Segmentation view, then the Account Assessment view.
4. Select the account that you want to assess.
5. In the Criteria list, use the drop-down lists to assign a value to each of the criteria.

   The values are described in the following table.

Value	Description
1	High
0	Low
?	Unknown

   The future potential score for the account is automatically calculated and appears in the list of accounts.
6. Repeat Step 4 and Step 5 for all the other accounts that have future potential you want to assess.
7. In the Account Breakpoint field, select a score that separates the accounts with a high-future potential score from the accounts with a low-future potential score.

Viewing the Portfolio Segmentation Map

After you assess the current revenue and future potential of your accounts, the Siebel application plots the results on a segmentation map. Use the segmentation map to decide how to allocate your sales resources.

This task is a step in *Process of Segmenting Accounts*.

To view the segmentation map of a portfolio

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the Segmentation view, then the Map view.

Process of Analyzing the A Accounts

To analyze the A accounts, perform the following tasks:

1. *Entering Details of the Account*
2. *Assessing Business Units and Service Units*
3. *Analyzing Selected Units*
4. *Reviewing Opportunities*
5. *Reviewing Organizational Analysis*
6. *Reviewing Marketing Events*
7. *Reviewing Partners*
8. *Reviewing Objectives and Action Plans*

This process is a step in *Roadmap for Managing Portfolios*.

Process of Analyzing B, C, and D Accounts

To analyze B, C, and D accounts, perform the following tasks:

1. *Entering Details of the Account*
2. *Reviewing Opportunities*
3. *Reviewing Organizational Analysis*
4. *Reviewing Marketing Events*
5. *Reviewing Partners*
6. *Reviewing Objectives and Action Plans*

This process is a step in *Roadmap for Managing Portfolios*.

Entering Details of the Account

You must enter details for each of your A, B, C, and D accounts.

This task is a step in *Process of Analyzing the A Accounts* and *Process of Analyzing B, C, and D Accounts*.

To enter details of a portfolio account

1. Navigate to the Accounts screen, then Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the appropriate account planning view.

4. Complete the necessary fields in the account planning view.

   Some fields are described in the following table.

Field	Comments
Account	Displays the name of the account.
Actual Account Type	Select the type of account.
Importance To You Breakpoint	(A Account only) Displays the value that distinguishes the accounts on the starting side of the segmentation map and the ending side of the segmentation map.
Importance To Customer Breakpoint	(A Account only) Displays the value that distinguishes the accounts in the first section of the segmentation map and the second section of the segmentation map.
Account Team	Displays the team responsible for the account.

Assessing Business Units and Service Units

To assess the business units and service units of an account, you must assign a value that indicates the value of the unit to you and to the customer. After you assess the units, you can view a BU/SU segmentation map. You can use the segmentation map to identify the units that you want to include in your analysis. To include a business or service unit on the map, select the Pursue field for the unit.

This task is a step in *Process of Analyzing the A Accounts*.

To assess the business units and service units of an account

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the A Account Planning view, then the BU/SU Segmentation view.
4. Select Assessment from the drop-down list at the start of the BU/SU Segmentation view.

   The BU/SU Segmentation view displays the business and service units for the account.
5. Complete the necessary fields in the BU/SU Segmentation view.

   Some fields are described in the following table.

Field	Comments
Business/Service Unit	Select a subaccount of the selected account. Alternatively, to create a new business unit or service unit, type the name of the unit.

Field	Comments
Unit Type	Select whether the unit is a business unit or a service unit.
Importance To You	Select the value that indicates the importance of the unit to you.
Importance To Customer	Select the value that indicates the importance of the unit to the customer.
Pursue?	Select this option if you want to include the business unit or service unit in your analysis. If you select this option, then the unit is included in the Selected Unit Analysis view. For more information about how to analyze units, see *Analyzing Selected Units*.

Viewing the Segmentation Map of Business Units and Service Units

Complete the following procedure to view the segmentation map of business units and service units.

To view the segmentation map of business units and service units

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the A Account Planning view, then the BU/SU Segmentation view.
4. Select Map from the drop-down list at the start of the BU/SU Segmentation view.

   The BU/SU Segmentation view displays the BU/SU segmentation map for the account. A box (square shape) represents a service unit. A box standing on its corner (diamond shape) on the map represents a business unit.

Analyzing Selected Units

After you select the business units and service units that you want to work with, you must analyze these units, and add the business driver, initiative, and critical success factor information.

This task is a step in *Process of Analyzing the A Accounts*.

To analyze selected business units and service units

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the A Account Planning view, then the Selected Unit Analysis view.

   You can review the fields in the Selected Unit Analysis view. For more information about the fields, see *Assessing Business Units and Service Units*.
4. To add information about the business drivers for the BU/SU, create a new record in the Drivers list, and type the driver information in the Driver field.
5. To add information about the business initiatives for a driver, select the driver, create a new record in the Business Initiatives list, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Business Initiatives	Type the business initiative associated with the business unit or service unit.
Critical Success Factor	Type the critical success factor associated with the business initiative.

Reviewing Opportunities

You can review the opportunities associated with your accounts, and new opportunities if required.

This task is a step in *Process of Analyzing the A Accounts* and *Process of Analyzing B, C, and D Accounts*.

To review opportunities for selected units

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the appropriate account planning view, then the Opportunities view.
   The current opportunities for the selected units appear.
4. To add an opportunity, create a new record, and complete the necessary fields.
   For information about the fields, see *Opportunities (End User)*.

Reviewing Organizational Analysis

You can review the contacts associated with an account or unit. You can add contacts, and you can create an organization chart to reflect the structure of contacts in an account or unit.

This task is a step in *Process of Analyzing the A Accounts* and *Process of Analyzing B, C, and D Accounts*.

To review organizational analysis

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the appropriate account planning view, then the Organizational Analysis view.
4. Select Contacts from the drop-down list at the start of the Organizational Analysis view.
   The current contacts for the selected accounts or units appear.
5. Add a contact, and complete the necessary fields.
   Some fields are described in the following table.

Field	Comments
Decision Orientation	Select the orientation of the contact when the contact makes a decision.

Field	Comments
Adaptability to Change	Select the value that best describes how receptive the contact is to change.
Coverage	Select the value that best describes how much communication you have had with the contact.
Your Status	Select the value that best describes your relationship with the contact.
Level of Influence	Select the value that best describes the level of influence that the contact has within the organization.
Business Agenda	Type your understanding of the business agenda of the contact.
Personal Agenda	Type your understanding of the personal agenda of the contact.
Relationship Strategy	Select the strategy to follow for the contact.

6. To view or draw an organization chart of the business unit or service unit, select Organization Chart from the drop-down list at the start of the Organizational Analysis view.

   For more information about how to create an organization analysis, see *Creating an Organization Analysis*.

Reviewing Marketing Events

You can review and update the marketing events associated with an account or unit. You can view the marketing events for a particular account or unit, or you can view marketing events for all units.

This task is a step in *Process of Analyzing the A Accounts* and *Process of Analyzing B, C, and D Accounts*.

To review marketing events for selected accounts or units

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the appropriate account planning view, then the Marketing Events view.

   The current marketing events for the selected accounts or units appear.

4. To add a marketing event, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Created Date	Displays the date on which you created the marketing event record. The date distinguishes the marketing event from other marketing events.
Event	Select the type of event.
Target	Type information about the target audience.
Expected Results	Type information about the expected results.

Viewing Marketing Events for a Portfolio Plan

Complete the following procedure to view marketing events for a portfolio plan.

To view marketing events for a portfolio plan

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the All Marketing Events view.

   All marketing events that are associated with accounts in the portfolio plan appear. For information about the fields in this screen, see *Reviewing Partners*.

Reviewing Partners

You can review and update the partners associated with an account or unit. You can view the partners for a particular account or unit, or you can view partners for all units.

This task is a step in *Process of Analyzing the A Accounts* and *Process of Analyzing B, C, and D Accounts*.

To review partners for selected units

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the appropriate account planning view, then the Partners view.

   The current partners for the selected units appear.

4. To add a partner, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Partner	Select a partner. Only accounts that have the Partner field selected are available for selection.
Partner Type	Select the partner type.
Relationship with Partner	Select the value that best describes your relationship with the partner.
Partner Relationship with Account	Select the value that best describes the relationship of the partner to the customer.
Partner Alignment with Competitors	Select the value that best describes the relationship of the partner with your competitors.
Competitors	Select your competitors for the customer account.
Relationship Owner	Displays the owner of the customer account.

Viewing Partners for a Portfolio Plan

Complete the following procedure to view partners for a portfolio plan.

To view partners for a portfolio plan

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the All Partners view.

   All partners that are associated with accounts in the portfolio plan appear. For information about the fields in this screen, see *Reviewing Partners*.

Reviewing Objectives and Action Plans

You can review the objective strategy and actions (OSA) associated with an account. You can add objective strategy information and action plans to the account.

This task is a step in *Process of Analyzing the A Accounts* and *Process of Analyzing B, C, and D Accounts*.

To review objective strategy and action plans

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.

3. Navigate to the appropriate account planning view, and select the account on which you want to work.
4. Navigate to the OSA view.

   The current objective strategy and action plans for the selected account appear.
5. To add objective strategy information, use the fields at the start of the OSA view.

   Some fields are described in the following table.

Field	Comments
Unit or Resource	Type the unit or resource to which the objective applies. For example, the objective might be for business units, service units, opportunities, offerings, or groups of units. Alternatively, the objective might be for resources such as marketing, customer satisfaction, or partners.
Objective	Type the objective of the action plan.
Strategy	Type information about how to achieve the objective.

6. To add an action plan, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Action	Type details of the action.
Planned Outcome	Type details of the expected outcome of the action.
Due	Select a date by which the action plan is due to be completed.
Status	Select the status of the action plan.
Owner	Select the owner of the action plan from the list of employees.
Activity Type	Select the type of activity which is planned.
Start	Select the date when the action plan starts.
Strategy Component	Select the strategy element of which the action plan is a part.
Resources	Type details of the resources required to implement the action plan.

Performing a Manager Review of a Portfolio Plan

When portfolio managers complete a portfolio plan, they can then request their manager to review and approve the plan.

Note: After you perform a manager review, you might want to update the Next Review Date field for the portfolio plan.

This task is a step in *Roadmap for Managing Portfolios*.

To perform a manager review of a portfolio plan

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.
3. Navigate to the Manager's Review view.
4. To add a review record, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Review Date	Select a date on which the review occurs.
Reviewer	Select the contact who performs the review.
Status	Select the status for the portfolio plan. For example, to approve a portfolio plan, select Approved from the Status drop-down list.

Adding Solutions to Portfolio Plans

You can associate solutions with your portfolio plans, and specify whether or not to include the solution in the segmentation map.

This task is a step in *Roadmap for Managing Portfolios*.

To add a solution to a portfolio plan

1. Navigate to the Accounts screen, then the Portfolio Management Process view.
2. Drill down on the Portfolio Name field of the portfolio plan record.

3. Navigate to the Solutions view.
4. To add a solution, create a new record, and complete the necessary fields.

   Some fields are described in the following table.

Field	Comments
Solution	Select the solution to associate with the portfolio plan.
Show in Report	Select this option to include this solution in the segmentation map.

38 System Preferences and Component Parameters

System Preferences and Component Parameters

This chapter lists some key system preferences and component parameters in your Siebel Business Applications. It includes the following topics:

- *System Preferences for Siebel Business Applications*
- *Component Parameters for Siebel Business Applications*

System Preferences for Siebel Business Applications

The following table describes some key system preferences for Siebel Business Applications. For information about how to change system preferences, see *Setting System Preferences*.

Preference	Description
ActivationLoadBalancerConfig	Set this preference to the Configuration ID for the load splitter configuration that you want to use for activating territory alignments. For use with the Assignment Manager's load splitter. For more information about load splitter, see *Siebel Assignment Manager Administration Guide* . For more information about activating territory alignments, see *Siebel Territory Management Guide* .
Activity Hierarchy: Max Levels	Specifies the maximum number of levels for the Activity Hierarchy.
Alarm Manager Load Frequency	Specifies the number of minutes the Siebel application waits before rechecking for alarms. The default value is 60.
AllowOverReceipts	If this preference is set to TRUE, then the received quantity can be greater than the shipped quantity. Also, for an internal order, when the Process Receipt command is invoked, the pick ticket can be closed only when the received quantity is equal to or greater than the shipped quantity. For more information about shipping and receiving, see *Siebel Field Service Guide* .
Always Show Message Bar Alerts	Obsolete.
Allow Non Owner Modify Calendar	If this preference is set to TRUE, a non-owner can edit the Calendar event. If the preference is set to FALSE, a non-owner cannot edit the Calendar event.
Asgn:Inherit Org Candidates	If this preference is set to TRUE, then the organization candidates on an assignment rule can be copied to rules that inherit from the assignment rule. After the rule is inherited, any change to the organization candidate of the original rule has no effect on the inherited rule.

Preference	Description
Auto Mgr Calendar Access	Permits the employee's manager access to the employee's calendar, even if the employee does not explicitly give the manager access. The default value is True.
Calendar Team Primary	Determines the employee calendars that an employee manager can access. This preference applies only if you set the Auto Mgr Calendar Access preference to True. A value of True indicates the manager can access the calendars of only the employees who are primary employees in the position hierarchy of the manager. A value of False indicates the manager can access the calendars of all employees in the position hierarchy of the manager.
CSM Logging	Enables logging of merge transactions. Merge transactions are created when connected users combine or merge two or more business components, such as accounts or opportunities, into one business component. Information from this log can be used to relink orphaned records created when the merge process is crossed with an update process during a synchronization. This preference is applicable only if the installation uses Siebel Remote or Replication Manager. The default value is False.
DB2: Default Opt Level	Specifies the default optimization level which defines the optimizing algorithm that DB2 uses to run SQL statements.
DBX: Vis Rules per Statement 1	Specifies the number of visibility or routing rules checked for each SQL statement processed by the Database Extract component for the first SQL statement with header information.
DBX: Vis Rules per Statement N	Specifies the number of visibility or routing rules checked for each SQL statement processed by the Database Extract component for other SQL statements.
Default Campaign Source Code	Specifies the default campaign for Web offers used in Siebel Marketing. All offers that are a part of the default campaign appear in the Featured Offers applet in Siebel Marketing.
Default EC Procedure	Obsolete.
Default Offer Code	Specifies the code to track the click path of a customer on the Marketing Web site who does not select a specific offer.
Default Pricing Procedure	Obsolete.
Default Time Zone	Specifies the default time zone for all users of the Siebel database. When a user logs in, the Time Zone field of the User business component is checked. If the field is empty, then the Default Time Zone system preference is checked. The default value is UTC.

Preference	Description
Enable UPT	For more information, see *Usage Pattern Tracking*.
Enable ST Script Engine	Obsolete. You no longer need to set this system preference to TRUE. This system preference is always set to TRUE - to enable the Strong Typing (ST) eScript engine. Siebel eScript is a scripting language that application developers use to write simple scripts to extend Siebel Business Applications. The Strong Typing eScript engine provides improved performance, scalability, and enhanced functionality when running scripts. For more information about the ST eScript engine, see *Using Siebel Tools* .
EnableAuditing	For more information, see *Siebel Audit Trail*.
EnableEimAuditing	For more information, see *Siebel Audit Trail*.
Entitlement: Pricing Dates	If this preference is set to False or NULL, then date verification is skipped when entitlement pricing terms are checked in the Verify Entitlement process. (This preference is similar to the Entitlement: Verify Dates system preference except that this preference applies to entitlement pricing terms and the other preference applies to entitlement service terms.)
Entitlement: Verify Consumer	For more information, see *Siebel Field Service Guide* .
Entitlement: Verify Dates	For more information, see *Siebel Field Service Guide* .
Entitlement: Verify Product	For more information, see *Siebel Field Service Guide* .
ETL Analysis End ETL Analysis Start ETL Date Format	ETL Date format specifies the way dates are interpreted. The other two preferences specify the date range for which the Exchange Rates are adjusted. This range does not indicate that only the data created within this range is extracted. Select the earliest date for the Analysis Start Date (when the transactions might have begun). In addition to considering the created and modified dates, consider other relevant dates such as order date. Setting this date to an early value such as 19700101 (January 1, 1970) does not affect the processing time. A similar logic applies for choosing Analysis End Date. Enter the values in the format defined by ETL Date Format. The default Analysis End value is 20101231. The default Analysis Start value is 19940101. The default Date Format value is YYYYMMDD.
ETL Base Exchange Currency	Specifies the currency in which all the financial data is converted. While the OLTP supports transactions in many different currencies, the data in the OLAP is converted to a single currency for analysis purposes. The Exchange rates are derived from the Exchange Rates table in the OLTP. The default value is USD.
ETL Default Continent	Specifies the value for any address that does not have Continent defined. Set this preference to a value, which is used if the value of Continent is not defined in the OLTP. The default value is North America.
ETL Default Country	Specifies the value for any address that does not have the Country defined. Set this preference to a value, which is used if the value of Country is not defined in the OLTP.

Preference	Description
	The default value is USA.
ETL Default Currency	Specifies the value for currency code that is used if the currency code for a specific financial transaction is not set. The default value is USA.
ETL Default Language	Specifies the language code used when language translation occurs when looking up the List of Values table. The default value is ENU.
ETL LOV Maximum Value ETL LOV Minimum Value	Set these preferences to the maximum and minimum values for bucketing of fields. Instead of indicating the number of employees at an account is 45, 96, the values can be bucketed to 0-50, 50-100 and so on. In the List of Values, if the minimum and maximum values are not specified, then the values of these preferences are used. The default values are 9999999999 and 0.
ETL Unknown Exchange Rate	Specifies the value used when an exchange rate for a currency to the Datamart Default Currency is undefined in the OLTP. The default value is 1.
Forecast: Auto-Forecast	Creates subordinates' forecasts to be used in a rollup forecast, if the subordinates have not created forecasts themselves.
Forecast: Use Server Task	Sends forecast processing requests to the Siebel Server for batch processing. If the value is False, then requests are processed locally.
FSAssetSwap SubComponents	If this preference is set to TRUE, then the subcomponent assets of the source asset are shifted to the target asset when an activity part tracker transaction is committed.
FSDB:Override Service Region	Specifies the maximum monetary value accepted in Auction Item, Bid, and Fee currency fields.
Internal DUNS Number	Specifies your company's DUNS number.
LOGMGR:Vis Rules per Statement	Set this preference to 20 for implementation that use any database other than Oracle. The default value is 50.
MRG:Docking Timestamp Source	For more information, see *Siebel Remote and Replication Manager Administration Guide* .
MRG:Inter Table Conflict Res	For more information, see *Siebel Remote and Replication Manager Administration Guide* .
MRG:Inter Table Merge Rule	For more information, see *Siebel Remote and Replication Manager Administration Guide* .
MRG:System Conflict Resolution	For more information, see *Siebel Remote and Replication Manager Administration Guide* .

Preference	Description
MRG:Txns per Commit	For more information, see *Siebel Remote and Replication Manager Administration Guide* .
MRG:User Friendly Notification	For more information, see *Siebel Remote and Replication Manager Administration Guide* .
PSP Pricing Var Map - Context	For more information, see *Siebel Pricing Administration Guide* .
PSP Pricing Var Map - Row Set	For more information, see *Siebel Pricing Administration Guide* .
PSP Pricing Var Map - XA	For more information, see *Siebel Pricing Administration Guide* .
ProposalReportSleepTime	Set this preference to lengthen the time to write the records so that all of the records are included in the report. If a report in a section of a proposal contains a large number of records, then the document server can stop the srviewer before all of the records are written to the resulting HTML file.
Quick Print Application	Determines which application is used by quick print. Allowed values are HTML and EXCEL. This preference can be overridden by the Quick Print Application user preference.
Quick Print Output Format	Set this preference to HTML, CSV, or Tab, as appropriate for the quick print application that you are using.
RepositoryType	Siebel OOTB Runtime Repository is shipped as a loadable unit (DLL/SO). When the EnableSafeBoot component parameter is set to TRUE, the OOTB Runtime Repository is used. For Mobile Web Client, set RepositoryType to RUNTIME along with EnableSafeBoot. For more information, see *Configuring Siebel Business Applications* .
RunAlignmentLoadBalancer Config	Set this preference to the Configuration ID for the load splitter configuration that you want to use for running territory alignments. For use with the Assignment Manager's load splitter. For more information about load splitter, see *Siebel Assignment Manager Administration Guide* . For more information about running territory alignments, see *Siebel Territory Management Guide* .
SalesHierarchy:UseServerTask	If this preference is set to TRUE, then the Sales Hierarchy operation runs as a server task.
Satmetrix Key Value	Specifies a string provided by Satmetrix to customers of Siebel Satmetrix Surveys. Required for generating encrypted tokens that are part of URLs for displaying survey reports.
Sch:Break Time Id	Specifies the Row ID of the work type to be used when calculating the schedule cost where activities contain breaks. The default value is -1. To find the Row ID, navigate to the Administration - Data screen, then the Work Type view, select the record, select Help from the application-level menu, select About Record, and note the value for the row number.
Sch:Default Constraint Set	Specifies the Row ID of the constraint set to be used where no constraint set is associated with the service region loaded. The default value is -1.

Preference	Description
	To find the Row ID, navigate to the Scheduling Administration screen, then the Constraint Sets view, select the record, select Help from the application-level menu, select About Record, and note the value for the row number.
Sch:Default Cost Function	Specifies the Row ID of the cost function to be used where no cost function is associated with the service region loaded. The default value is -1. To find the Row ID, navigate to the Scheduling Administration screen, then the Cost Functions view, select the record, select Help from the application-level menu, select About Record, and note the value for the row number.
Sch:Default Parameter Set	Specifies the Row ID of the parameter set to be used where no cost function is associated with the service region loaded. The default value is -1. To find the Row ID, navigate to the Scheduling Administration screen, then the Parameter Sets view, select the record, select Help from the application-level menu, select About Record, and note the value for the row number.
Sch:Default Time Window	Specifies the Row ID of the time window to be used where no cost function is associated with the service region loaded. The default value is -1. To find the Row ID, navigate to the Scheduling Administration screen, then the Time Window view, select the record, select Help from the application-level menu, select About Record, and note the value for the row number.
SecThickClientExtAuthent	For more information, see *Siebel Security Guide* .
SM WebIntelligence Server	Specifies the URL that points to the Web Intelligence server that serves up reports for Oracle Business Intelligence.
SqlStyle	Specifies the SQL statements to use with this implementation (Oracle, Microsoft SQL Server, Informix, or Sybase). Case-sensitive.
SSASqlErrRsltsDiscarded	Specifies the message that appears to the user when there are more rows than can be returned. For more information, see *Implementing Siebel Business Applications on DB2 for z/OS* .
Strict Date Format	Set this preference to the date format that you require to implement a strict date format. For example, to implement DD/MMM/YYYY date format, enter DD/MMM/YYYY. When you implement a strict date format, users can enter dates only in a format you specify, and all dates appear in this format.
SubSqlStyle	Specifies an SQLStyle that falls within a family of similar database products.
Technical Support (Alt. 1)	Specifies the telephone numbers to appear in the Siebel Technical Support dialog box. Update this number to match your internal help desk number. The alternate numbers (Alt. 1 and Alt. 2) provide expansion for pager numbers and email addresses. Set the value to None to leave it blank in the dialog box.
Technical Support (Alt. 2)	Specifies the telephone numbers to appear in the Siebel Technical Support dialog box. Update this number to match your internal help desk number. The alternate numbers (Alt. 1 and Alt. 2) provide expansion for pager numbers and email addresses.

Preference	Description
	Set the value to None to leave it blank in the dialog box.
Technical Support (FAX)	Specifies the fax number to appear in the Siebel Technical Support dialog box. Update this number to match your internal help desk fax number. Set the value to None to leave it blank in the dialog box.
Technical Support (URL)	Specifies the support URL to appear in the Siebel Technical Support dialog box. Update this URL to match your internal help desk Web address. Set the value to None to leave it blank in the dialog box.
Technical Support (Voice)	Specifies the voice number to appear in the Siebel Technical Support dialog box. Update this number to match your internal help desk number. Set the value to None to leave it blank in the dialog box.
Time Slice Report Format	For more information, see *Siebel Product Administration Guide* .
Universal Time Coordinated	Enables global time zone support for the entire Siebel application. Set this preference to TRUE to enable global time zone support. The default setting is TRUE. **Note:** This setting is a one-time setting. After you enable global time zone support in a production environment, do not disable it. If you intend to operate your deployment with the Global Time Zone feature enabled, then you must also set the operating system of your database servers to UTC time, or its equivalent. Although enabling this feature is optional, it is strongly recommended that you operate your production environment with Global Time Zone enabled. For more information about enabling Global Time Zone, see *Siebel Global Deployment Guide* .
UPT Max Record Cache	For more information, see *Usage Pattern Tracking*.
User Group	Specifies the User Group grantee for database access privileges. This preference is used in the DDL Sync step in Oracle's Siebel Tools where the schema for the Siebel application is defined.

Component Parameters for Siebel Business Applications

The following table describes some key component parameters for Siebel Business Applications. For information about how to change component parameters, see *Siebel System Administration Guide* .

Parameter	Description
DefaultNavigation	This parameter allows the application to start with the preferred navigation control. The available options are: NAVIGATION_SIDE, NAVIGATION_TREE, or NAVIGATION_TAB. Change the parameter as follows: `change param DefaultNavigation=NAVIGATION_TREE for comp SCCObjMgr_enu` Changing the value of DefaultNavigation will not affect the Siebel Web Tools application in any way. For more information, see *Siebel Fundamentals Guide* .
EnableSafeBoot	Siebel OOTB Runtime Repository is shipped as a loadable unit (DLL/SO). When the EnableSafeBoot parameter is set to TRUE, the OOTB Runtime Repository is used. • For Mobile Web Client, set EnableSafeBoot to TRUE along with the RepositoryType system preference. • For Siebel Enterprise Server, set EnableSafeBoot as follows: `change param EnableSafeBoot=TRUE for comp SCCobjMgr_enu` Siebel Web Tools runs in safe boot mode by default so changing the value of EnableSafeBoot will not affect Siebel Web Tools in any way. For more information, see *Configuring Siebel Business Applications* .
ManifestSafeLoad	ManifestSafeLoad can be set to TRUE or FALSE as follows: • If set to TRUE, the application starts with only the Oracle provided manifest records (that is, seeded records in the manifest). • If set to FALSE (the default value), the application starts with both custom-configured and seeded records in the manifest. Change the parameter as follows: `change param ManifestSafeLoad=TRUE for comp SCCObjMgr_enu` Changing the value of ManifestSafeLoad will not affect the Siebel Web Tools application in any way. For more information, see *Configuring Siebel Open UI* .

EBCDICCodePage	If you are using an EBCDIC code page for DB2 on z/OS, then you must set this parameter to specify that you are using this type of code page. This parameter changes the sort order to ASCII in your EBCDIC database, which prevents intermittent Workspace delivery failures related to the sort order of WS_SRC_ID records.
	
	Set the parameter at the component level as follows:
	
	`change param EBCDICCodePage=TRUE for comp component_name`
	
	Set the parameter at the enterprise level as follows:
	
	`change entparam EBCDICCodePage=True`
	
	In the case of Siebel Tools and Siebel Remote Web client, set the EBCDICCodePage parameter in the [Siebel] section of the respective .cfg file as follows:
	
	`[Siebel]`
	`EBCDICCodePage=True`

Parameter	Description
	For more information, see *Siebel Installation Guide* and *Siebel Database Upgrade Guide for DB2 for z/OS* .

39 Siebel Runtime Repository Version Rollback

Siebel Runtime Repository Version Rollback

This chapter describes how to use the Siebel Runtime Repository Version Rollback feature in the Siebel application to revert to the last known good version of a deployed application's metadata (Siebel repository definitions). It includes the following topics:

- *About the Runtime Repository Version Rollback Feature*
- *Marking MAIN Workspace Versions as Stable or Unstable*
- *Rolling Back to the Last Stable Version of an Application*
- *Rolling Back to Any Other Stable Version of an Application*
- *Exiting Rollback Mode*
- *Using Siebel Runtime Repository Version Rollback in Siebel Web Tools*

Note: Siebel Runtime Repository Version Rollback applies only to Runtime Repository (RR) environments, such as QA or production. This feature is available in Siebel CRM 20.3 Update and later releases and uses the seamless repository delivery framework. For more information about the seamless repository delivery framework, see *Siebel Installation Guide* and *Siebel Database Upgrade Guide* .

About the Runtime Repository Version Rollback Feature

If issues are found with the latest deployed version of an application, then administrators can roll back to the last published stable version of the application's metadata (RR definitions) and activate that version for all users without any downtime. The rollback only applies to the application's metadata that is deployed in RR tables. Other application artifacts which may have been migrated at the same time but are not deployed in the RR are not rolled back: artifacts such as the manifest, JavaScript files, schema, Workspace-enabled seed data or LOVs, as well as tasks that are deployed in workflow deployment tables.

Note: As of Siebel CRM 20.8 Update, browser scripts and workflows are part of the Workspace-versioned object definition in RR tables (so rollback is supported for browser scripts and workflows). As of Siebel CRM 22.7 Update, tasks are part of the Workspace-versioned object definition in RR tables (so rollback is supported for tasks).

Do not perform a rollback if you are unsure whether the latest version of these artifacts is consistent with the last stable version of the application's metadata which will become active if you do a rollback, as it may lead to inconsistent application behavior.

Rolling back to a previously published stable version of an application's metadata is required in the following circumstances:

- If an unstable MAIN Workspace version is published where users can start the application and navigate to the Workspace Dashboard view.

  In this case, administrators can go to the Workspace Dashboard view and roll back to the last stable version of the application. All active user sessions will have to log out of the application and then back in again to load the stable version set by administrators.
- If an unstable MAIN Workspace version is published and users cannot start the application. For example, either the login page does not appear or users cannot log in to the application.

  In this case, administrators can change the application object manager component level parameter WorkspaceBranchName to the Workspace version to roll back to.

  > **CAUTION:** If the application is not in rollback mode and you cannot start the application, then it is recommended that you use the WorkspaceBranchName server parameter to go into rollback mode. If you are already in rollback mode, then setting this parameter has no effect because it does not update the rollback version number in the ACTIVE_VER column of the S_WORKSPACE table. The value (rollback version number) in the ACTIVE_VER column of S_WORKSPACE is read by the component at user login or component startup. Clicking the Rollback button on the UI updates the rollback version in the ACTIVE_VER column of S_WORKSPACE.

An example of the command syntax to use when rolling back to a previously published stable version of the Runtime Repository follows.

```
change param WorkspaceBranchName=<Workspace_name> for comp <OBjMgr_lang>
```

To specify a specific version, use the following command syntax:

```
change param WorkspaceBranchName=<Workspace_name>/<Workspace_version> for comp <OBjMgr_lang>
```

For example, if 2 is a stable version in the `MAIN` Workspace, then use the following command:

```
change param WorkspaceBranchName=MAIN/2 for comp SCCOBjMgr_enu
```

After the command is run, when users next log in to the application, the application starts with the specified Workspace version without any downtime. There is no need to restart the Application Object Manager component or the Siebel Server services to reflect changes. For more information about setting parameters for components, see *Siebel System Administration Guide* .

> **Note:** Rolling back to the last published stable version of an application's metadata is different from rolling back to a previously installed software release (that is, performing a rollback uninstallation), which is described in *Siebel Installation Guide* .

Marking MAIN Workspace Versions as Stable or Unstable

The following procedure describes how to mark the MAIN Workspace versions of an application as stable or unstable using the Stable Version check box. Marking a Workspace version as stable or unstable gives administrators time to fix issues in an unstable Workspace while ensuring that another stable Workspace is available for Siebel users.

Administrators can use the Stable Version check box on the Workspace Dashboard view to manually mark a Workspace version as stable (described in the following procedure) or they can set the Stable WS Version Duration system preference which will automatically mark a Workspace version as stable after a specified time period (in days) has elapsed. For example, setting Stable WS Version Duration to 10 will automatically mark a Workspace version as stable if the application has been running successfully on that version for 10 days.

If the application did not run on the Workspace version for the configured duration (for example, because a newer version was deployed before the duration elapsed), then the system will not automatically mark the Workspace version as stable. Administrators can manually mark a Workspace version as stable as long as there is no newer version set as stable. The default value for Stable WS Version Duration is 15 and the minimum value is 1.

> **Note:** Only administrators can perform this task. The Stable Version check box is enabled only for RR environments (such as, QA or production) containing more than one Workspace version. It is disabled for DR (development) environments.

To mark MAIN Workspace versions as stable or unstable

1. Log in to the Siebel application.
2. Click the cube icon on the application banner to navigate to the Workspace Dashboard view.
3. Select a Workspace version and then set the Stable Version check box to No in the Workspace Version pane to indicate that this Workspace version is unstable and should not be used.

   Repeat this step as required to mark other Workspace versions as unstable.
4. Select a Workspace version and then set the Stable Version check box to Yes in the Workspace Version pane to indicate that this Workspace version is stable and can be used.

   > **Note:** When the Stable Version flag is set to Yes for the latest version of a Workspace in a production (RR) environment, the Stable Version flag will be read-only for older versions of the environment.

Rolling Back to the Last Stable Version of an Application

The following procedure describes how to roll back to the last stable version of an application.

> **Note:** Only administrators can perform this task. The Rollback button is enabled only for RR environments (such as, QA or production) containing more than one Workspace version. It is disabled for DR (development) environments.

To roll back to the last stable version of an application

1. Log in to the Siebel application.
2. Click the cube icon on the application banner to navigate to the Workspace Dashboard view.
3. Click Rollback to roll back to the last stable version of the MAIN Workspace.

   When you do this, the application goes into rollback mode and the latest version of the MAIN Workspace is internally marked unstable. The application will remain in rollback mode until you exit rollback mode, see *Exiting Rollback Mode*.

   All active user sessions will have to log out of the application and then back in again to load the stable version set by administrators. When users next log in to the application, the application will start with the selected stable version of the application without any downtime.

   > **Note:** If no Workspace versions are marked as Stable in a production (RR) environment and a user clicks Rollback, then the application will roll back to the base version (0) of the Workspace by default.

Rolling Back to Any Other Stable Version of an Application

The following procedure describes how to roll back to any other stable version of an application.

> **Note:** Only administrators can perform this task. The Activate button is enabled only for RR environments (such as, QA or production) containing more than one Workspace version. It is disabled for DR (development) environments.

To roll back to any other stable version of an application

1. Log in to the Siebel application.
2. Click the cube icon on the application banner to navigate to the Workspace Dashboard view.
3. Select the stable version that you want to roll back to and then click Activate to roll back to the selected stable version.

   When you do this, the application goes into rollback mode. The application will remain in rollback mode until you exit rollback mode, see *Exiting Rollback Mode*.

   All active user sessions will have to log out of the application and then back in again to load the stable version set by administrators. When users next log in to the application, the application will start with the selected stable version of the application without any downtime.

Exiting Rollback Mode

The following procedure describes how to exit or come out of rollback mode by using the Activate button to activate the latest version of an application on which, for example, an incremental migration containing fixes has completed successfully.

If the rollback was carried out by setting the WorkspaceBranchName component level parameter, then to exit rollback, you must reset the component parameter to MAIN without any version. Use the following command to start the application with the latest version of Workspace MAIN:

```
change param WorkspaceBranchName=MAIN for comp SCCOBjMgr_enu
```

Note: Only administrators can perform this task. The Activate button is enabled only for RR environments (such as, QA or production) containing more than one Workspace version. It is disabled for DR (development) environments.

To exit rollback mode

1. Log in to the Siebel application.
2. Click the cube icon on the application banner to navigate to the Workspace Dashboard view.
3. Select the latest Workspace version containing, for example, all recent fixes and then click Activate to activate that Workspace version.
4. Log out of the application and then back in again.

   Doing this brings the application out of rollback mode (if applicable) and into normal mode immediately without any downtime. Activating the latest Workspace version switches the application into normal mode always regardless of whether the application was in rollback mode or not.

   Note: Normal mode is where the (stable version of an) application's metadata is deployed.

   All active user sessions will have to log out of the application and then back in again to load the newly activated version set by administrators. There is no need to restart the Application Object Manager component or Siebel Server services to reflect changes.

Using Siebel Runtime Repository Version Rollback in Siebel Web Tools

The Runtime Repository Version Rollback feature is also available in Siebel Web Tools and operates exactly the same way as it does in the Siebel application. If an unstable MAIN Workspace version is published and the application login page or Workspace dashboard does not appear, you can use Siebel Web Tools to roll back to the last published stable version of the application's metadata (RR definitions) because Siebel Web Tools starts with safeboot dlls.

Administrators can use the Runtime Repository Version Rollback feature from the Workspace Dashboard view in Siebel Web Tools to do the following:

1. Mark the MAIN Workspace versions of an application as stable or unstable.

   You click Stable Version on the Workspace Version pane to set the stable version of a MAIN Workspace on or off.
2. Activate the stable version or latest version of the MAIN Workspace.

   You click Activate on the Workspace menu to activate any stable version or latest version of the MAIN Workspace in the production environment.

3. Roll back the application to the last stable version of the MAIN Workspace.

   You click Rollback on the Workspace menu to roll back the changes, in a production environment, to the last stable version of the runtime MAIN Workspace.

40 Oracle AI for Siebel CRM

Artificial Intelligence (AI) Services for Siebel CRM

This topic describes some sample Artificial Intelligence (AI) use cases and how to setup and configure Oracle Cloud Infrastructure (OCI) AI Services for Siebel CRM.

- *About Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services*
- *Accessing Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services*
- *Process of Setting Up Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services*
- *Artificial Intelligence (AI) Services Use Cases*
- *Siebel REST APIs for Artificial Intelligence (AI) Services*

About Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services

Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services is a collection of services with prebuilt machine learning models that make it easier for developers to apply AI to applications and business operations. Using OCI AI Services make it possible for developers to easily add machine learning to applications without slowing down application development.

The fully managed AI services include:

- **OCI GenAI.** Helps users build Generative AI use cases with underlying Large Language Models(LLMs). Refer the GenAI section for complete details
- **OCI Vision.** Provides pre-trained computer vision models for image recognition and document analysis tasks.

Integration of the following OCI AI Services with Siebel CRM is currently supported:

- **OCI Language**, which is an AI service that applies AI and sophisticated text analysis to understanding textual information.

  The OCI Language AI service performs text analysis at scale to understand the unstructured text in documents, customer interactions, and support tickets. It does this by leveraging named entity recognition (NER) to identify specific entities such as names of people, organizations, locations, dates, and times. This service supports the *Detect Personal Identifiable Information (PII) and Private Health Information (PHI)* use case. The masking options supported are –Mask, Replace, or Remove. For more information, see *Use Case 1: Identify and Flag PII/ PHI in Service Request Description*.

- **OCI Speech**, which uses automatic speech recognition to convert speech/audio files to text transcriptions.

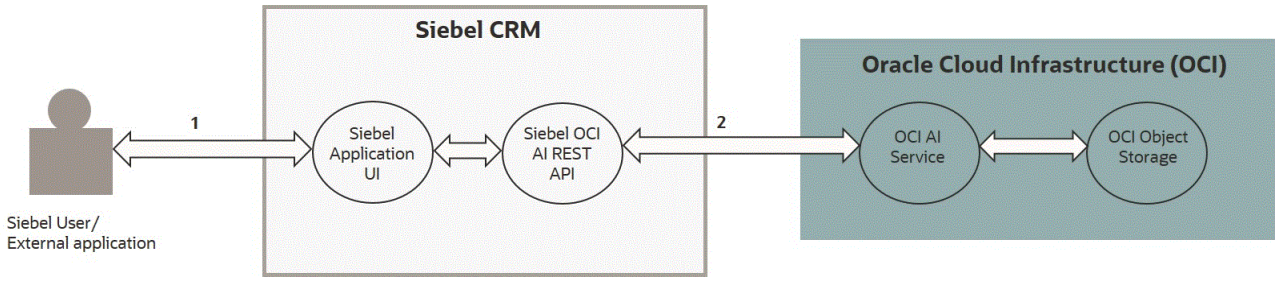
  The OCI Speech AI service converts file-based audio data containing human speech into highly accurate text transcriptions, and can be used to enhance the analysis of audio content. Some of the supported languages are English, Spanish, French, German, Italian. For the complete list of supported languages for different models, refer the OCI documentation. In addition to Oracle Speech model, the OCI Speech service now supports the

Whisper model from OpenAI. For more information, see *Use Case 2: Transcribe Customer Calls and Attach Text File to Service Request*.

Accessing Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services

There are three ways to use and access OCI AI Services:

1. You can use OCI AI Services via Siebel Application as shown in the following *reference architecture* for OCI AI Services.
2. You can use OCI AI Services directly via Siebel REST API – for more information, see *Siebel REST APIs for Artificial Intelligence (AI) Services*.
3. You can use OCI AI Services via customer components in Siebel CRM.



Reference architecture for OCI AI Services

As shown in this reference architecture, a typical flow for using OCI AI Services is as follows:

1. On the Siebel CRM side:
   - The Siebel CRM client (user or external application) invokes the Siebel OCI AI Service via the Siebel UI.
   - Siebel OCI AI REST API can also be directly invoked via any Siebel component (such as a Workflow) or via any external self-service application layer.
2. On the OCI side:
   - Siebel REST API completes the required pre-processing, authenticates with OCI, and invokes the OCI AI Service via OCI Java SDK to get the required response using AI/ML (Machine Language).
   - When the post-processing completes, the required response is returned to the client.
   - OCI AI Services also use the OCI Object Storage for certain use cases (for example, especially for Speech).

Process of Setting Up Oracle Cloud Infrastructre (OCI) Artificial Intelligence (AI) Services

To set up and configure OCI AI Services, perform the following tasks.

- *Enable Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services*
- *Configure Authentication for Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services*

- *Uptake of AI/ML powered features with OCI Java SDK 3.54.0*
- *Configure Seed Data and Business Service Access*
- *Configure the Oracle Cloud Infrastructure (OCI) Language AI Service*
- *Configure the Oracle Cloud Infrastructure (OCI) Speech AI Service*

Enable Oracle Cloud Infrastructure (OCI) Artificial Intelligence (A) Services

Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) services are not enabled out-of-the-box. To use OCI AI services, you must enable certain system preferences as shown in the following procedure.

To enable the OCI AI Services

- Configure the system preferences as shown in the following table.

System Preference	Value
EnableOCIAILanguage	Set to Y to enable OCI Language AI Service. Set to N to disable OCI Language Service.
EnableOCIAISpeech	Set to Y to enable OCI Speech AI Service. Set to N to disable OCI Speech Service.

Configure Authentication for Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services

Complete the steps in the following procedure to configure authentication for Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) services.

To configure authentication for OCI AI services

1. Download the configuration file and the .pem file from OCI.

   In the configuration file, make a note of the credential details for the following parameters: user/userId, region, fingerprint, compartmentId, and tenancy.
2. Navigate to Siebel's internal Tomcat's webapps folder:

   - On Windows: `"<siebel home path>\ses\applicationcontainer_internal\webapps"`

     `// For example:`

```
"C:\2022_06\ses\applicationcontainer_internal\webapps"
```

- On Unix: `"<siebel home path>/ses/applicationcontainer_internal/webapps"`

```
// For example:
"/export/home/sblqa1/2022_06/ses/applicationcontainer_internal/webapps"
```

3. Open the 'ociconfig.properties' file in the internal Tomcat's webapps folder and update the following parameter values as required:

```
user=<CHANGE_ME>
 fingerprint=<CHANGE_ME>
 tenancy=<CHANGE_ME>
 region=<CHANGE_ME>
 compartmentId=<CHANGE_ME>
 key_file=<CHANGE_ME>
```

   The value of the key_file should be the location of the .pem file. It is recommended that you keep the .pem file in the same location as the 'ociconfig.properties' file.
4. Verify that the 'ociconfig.properties' file includes the location for the *private key(.pem)* file and ensure that the path is valid.
5. Open the 'ociconfig.properties' file and check the [GENAI] section. If any LLM needs to be changed, please update the same. Similarly, please check the [SPEECH] section. If any Language needs to be added for either Oracle or Whisper model, please add the same. The [GENAI] and [SPEECH] sections will look like below:

```
[GENAI]
llama_chat_model = meta.llama-3.3-70b-instruct
llama_vision_model = meta.llama-3.2-90b-vision-instruct
cohere_chat_model = cohere.command-r-08-2024
cohere_embed_model = cohere.embed-multilingual-v3.0
custom_endpoint_id_cohere = <CHANGE_ME>
custom_endpoint_id_llama = <CHANGE_ME>
genai_endpoint = https://inference.generativeai.us-chicago-1.oci.oraclecloud.com
genai_region = US_CHICAGO_1

[SPEECH]
LanguageMappingOracleModel = ENU:EnUs#ENG:EnGb#DEU:DeDe#ESN:EsEs#FRA:FrFr#ITA:ItIt#PTB:PtBr
LanguageMappingWhisperModel = ENU:en#ENG:en#DEU:de#ESN:es#FRA:fr#ITA:it#PTB:pt
```

6. Import the necessary OCI digital certificate files to siebel trustore and keystore as required – example commands for importing two OCI certificates follow.

   Import the certificate files (digcert1.cer and digicert2.cer) from the command prompt as follows:

   - On Windows:

```
<Java JDK path>\bin>keytool -importcert -keystore <siebel home path>
\ses\applicationcontainer_internal\siebelcerts\siebeltruststore.jks -storepass siebel
-file <certificate path>\digicert1.cer -alias "oci-digi01"

<Java JDK path>\bin>keytool -importcert -keystore <siebel home path>
\ses\applicationcontainer_internal\siebelcerts\siebeltruststore.jks -storepass siebel
-file <certificate path>\digicert2.cer -alias "oci-digi02"
```

   - On Unix:

```
<Java JDK path>/bin>keytool -importcert -keystore <siebel home path>
/ses/applicationcontainer_internal/siebelcerts/siebeltruststore.jks -storepass siebel
-file <certificate path>/digicert1.cer -alias "oci-digi01"

<Java JDK path>/bin>keytool -importcert -keystore <siebel home path>
```

```
/ses/applicationcontainer_internal/siebelcerts/siebeltruststore.jks -storepass siebel
-file <certificate path>/digicert2.cer -alias "oci-digi02"
```

7. Restart Tomcat.

Uptake of AI/ML powered features with OCI Java SDK 3.54.0

Complete the steps in the following procedure for the uptake of AI/ML powered features with OCI Java SDK 3.54.0.

1. Navigate to **Siebel Internal Tomcat** in the Siebel build and go to the **webapps** folder as mentioned in the below path to find the `oci-java-sdk.zip` file:
   `<Siebel Internal Tomcat's installedLocation>/ses /applicationcontainer_internal/webapps.`

   for e.g. in Linux: `/scratch/home/sblqa1/2023_08C004/ses/applicationcontainer_internal/webapps`

   for e.g. in Windows: `C:\2023_08C004\ses\applicationcontainer_internal\webapps`
2. The OCI Java SDK JARS zip `oci-java-sdk.zip` will be present in the above location. Please unzip the file to find the JAR files.
3. Copy the JAR files to **lib** folder in the deployed Siebel WAR. Please refer the path as mentioned:
   `<Siebel Internal Tomcat's installed Location>/ses/applicationcontainer_internal /webapps/siebel/WEB-INF/lib`

   for e.g. in Linux:

   `/scratch/home/sblqa1/2023_08C004/ses/applicationcontainer_internal/webapps/siebel/WEB-INF/lib`

   for e.g. in Windows:

   `C:\2023_08C004\ses\applicationcontainer_internal\webapps\siebel\WEB-INF\lib`
4. Increase the Tomcat JVM Heap size as (and if) required. It can be set to 4GB (Min/Max) or to higher/lower values depending on the build configuration/shape.

   In Linux, the JVM Heap can be set with the help of JAVA_OPTS which can be defined in `setenv.sh` as mentioned, `JAVA_OPTS = %JAVA_OPTS% -Xms4096m -Xmx4096m`

   In Windows, the `tomcat9w.exe` can be run from Tomcat's bin folder to set the values adequately. Please follow these steps:

   - Navigate to the bin folder of Tomcat's installed location as mentioned, `<Siebel Internal Tomcat's installed Location>\bin`
   - Run the exe from this location as below to open a GUI popup, `> tomcat9w.exe //ES//<Tomcat Service Name>`
   - Select the **Java** tab and change the JVM Heap size Min and Max values in Initial memory Pool and Maximum Memory Pool field values respectively.
   - Save the GUI.
   - In the java tab, Java Options end the below command in the end - `Djdk.jar.maxSignatureFileSize=16000000.`
   - Save and close the tab.
5. Restart the Tomcat.

Configure Seed Data and Business Service Access

Make sure that the following Business Services (and their responsibilities) have been added to Siebel CRM and grant the necessary Business Services access to them as shown in the following procedure:

- **SiebelOCIAIWebService,** which is required to enable the Siebel REST API framework for the AI service.
- **SiebelOCIAIService,** which is required to enable the *out-of-the-box* Siebel Application UI use cases.

To configure the seed data and business service access

1. Navigate to the Administration - Application screen, then the Business Service Access view.
2. Create a new record, add the SiebelOCIAIWebService business service and save the record.
3. Create another new record, add the SiebelOCIAIService business service and save the record.
4. In the (Access By Responsibility) Responsibilities applet, add the Siebel Admin responsibility for each new record (created in step 2 and step 3).
5. In the Business Service Method applet, add the respective methods for each new record (created in step 2 and step 3). For example, add the InvokeOCIAI method.
6. Save the records, clear the cache and log out of the application (and back in again) for the changes to take effect.

The following table describes the SiebelOCIWebService and SiebelOCIAIService business services in more detail.

Name	Display Name	Class	Business Service Method	Business Service Method Display Name
SiebelOCIAIWebServ	SBL_OCI_AI_JAVA_ SERVICE	CSSJavaBusinessSer	InvokeOCIAI	SBL_OCI_AI_INOVKE
SiebelOCIAIService	SBL_OCI_AI_SERVICE	CSSOCIAIService*	SBL_OCI_AI_ INOVKE	SBL_OCI_AI_INOVKE
CSSOCIAIService	ClientAppCommonSVDll	Service	CSSWEUIService	

The SiebelOCIAIService Business Services uses the class described in the following table.

Name	DLL	Object Type	Super Class
CSSOCIAIService	ClientAppCommonSVDll	Service	CSSWEUIService

Configure the Oracle Cloud Infrastructure (OCI) Language AI Service

Complete the steps in the following procedure to configure the Oracle Cloud Infrastructure (OCI) Language AI service – so that PII will be detected.

To configure the OCI Language AI service

- Modify the relevant user properties in the 'Service Request' Business Component (such as the Business Component field) as required.

  The following table describes the user properties to modify and their values.

BC User Property Name	BC User Property Value
BatchDetectLanguagePiiEntities_Param_1	text:FIELD=Description
BatchDetectLanguagePiiEntities_Param_2	output:FIELD=PII Flag
BatchDetectLanguagePiiEntities_Param_3	mode:MASK [Supported options:MASK, REPLACE & REMOVE]
BatchDetectLanguagePiiEntities_Param_4	isUnmaskedFromEnd:true
BatchDetectLanguagePiiEntities_Param_5	leaveCharactersUnmasked:3
BatchDetectLanguagePiiEntities_Param_6	maskingCharacter:*
BatchDetectLanguagePiiEntities_Param_7	modifyText:false
BatchDetectLanguagePiiEntities_Param_8	domain:ALL (or PII/PHI)
BatchDetectLanguagePiiEntities_Param_9	documentType: <CHANGE_ME> (value like EHR)
BatchDetectLanguagePiiEntities_Param_10	speciality: <CHANGE_ME> (value like paediatrics)
BatchDetectLanguagePiiEntities_Param_11	compartmentId: <CHANGE_ME>

- For REPLACE masking option, additional Business User properties need to be added as follows:

BC User Property Name	BC User Property Value
BatchDetectLanguagePiiEntities_Param_12	replaceWith:#Not to be Disclosed

- Other properties that need to be specified when configuring the OCI Language AI service for Text Classification are listed in the following table.

BC User Property Name	BC User Property Value
BatchDetectLanguageTextClassification_Param_1	text:FIELD=Description (or any other Field name which has the text content to be classified - Field name should be taken from Applet →List →List Column Value)
BatchDetectLanguageTextClassification_Param_2	endpointId:<CHANGE_ME> (OCID of the custom ML Language model trained on customer data)
BatchDetectLanguageTextClassification_Param_3	compartmentId:<CHANGE_ME>
BatchDetectLanguageTextClassification_Param_4	output:FIELD=Area,Sub-Area (or any other Field names where classified label to be populated)
BatchDetectLanguageTextClassification_Param_5	modelDelimiter:/ (or any other Delimiter to be used to separate output Fields in the custom data during Model

Configure the Oracle Cloud Infrastructure (OCI) Speech AI Service

Complete the steps in the following procedure to configure the Oracle Cloud Infrastructure (OCI) Speech AI service.

To configure the OCI Speech AI service

1. Whisper will be the default model used by Siebel for Speech-to-text transcription. To change the model to Oracle, the 'modelType' parameter in the Business Component User Property can be added with value as 'ORACLE'.
2. Modify the relevant user properties in the 'Service Request Attachment' Business Component as required – such as the Input and Output Bucket and Prefix locations to upload the input (audio) and output (text) file.

   The following table lists the user properties to modify.

BC User Property Name	BC User Property Value
CreateTranscriptionServices_Param_1	inputFileName:FIELD=ActivityFileName
CreateTranscriptionServices_Param_2	inputFileExt:FIELD=ActivityFileExt

BC User Property Name	BC User Property Value
CreateTranscriptionServices_Param_3	namespace:<CHANGE_ME>
CreateTranscriptionServices_Param_4	compartmentId:<CHANGE_ME>
CreateTranscriptionServices_Param_5	inputBucket:<CHANGE_ME>
CreateTranscriptionServices_Param_6	outputBucket:<CHANGE_ME>
CreateTranscriptionServices_Param_7	inputPrefix:<CHANGE_ME>
CreateTranscriptionServices_Param_8	outputPrefix:<CHANGE_ME>
CreateTranscriptionServices_Param_9	inputFilePath:<CHANGE_ME>
CreateTranscriptionServices_Param_10	outputFilePath:<CHANGE_ME>
CreateTranscriptionServices_Param_11	jobDisplayName:<CHANGE_ME>
CreateTranscriptionServices_Param_12	jobDescription:<CHANGE_ME>
CreateTranscriptionServices_Param_13	jobMaxRetries:<CHANGE_ME>
CreateTranscriptionServices_Param_14	targetLanguageCode:<CHANGE_ME> //not seeded by default

3. Other properties that need to be specified (such as namespace, compartmentId, and job description) when configuring the OCI Speech AI service are listed in the following table.

User Property	Value
NameSpace	OCI Namespace of the User/Administrator.
CompartmentId	Root Compartment of the OCI bucket.
InputBucket	The Bucket in OCI to where the Audio File will be uploaded.
InputPrefix	Folder (or Folder hierarchy) inside the InputBucket in OCI under which the Audio File is stored.
OutputBucket	The Bucket in OCI where the Transcribed Text File will be stored.
OutputPrefix	Folder (or Folder hierarchy) inside the OutputBucket in OCI under which the Text File will be stored.
JobDisplayName	Name of the Transcription Job as desired by the User/Administrator. If no value is supplied, OCI will have a default Job name

User Property	Value
JobDescription	Description of the Transcription Job. If no value is supplied, then the field remains as empty in OCI.
JobMaxRetries	The default value is 4. For larger speech files, change the value to a higher number as required.
InputFileName:FIELD	The Business Component Field which is mapped to the Input File Name that needs to be transcribed.
InputFileExt:FIELD	The Business Component Field which is mapped to the File Extension format of the Input File.
InputFilePath	Input path for the file which needs to be transcribed from OCI Bucket<optional user property which is considered only in case of New URL>.
OutputFilePath	Output Path of the transcribed file <optional user property which is considered only in case of New URL>.

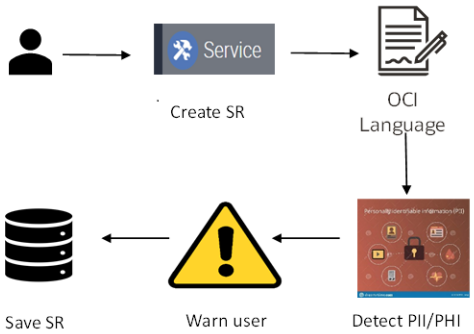
Artificial Intelligence Services (AI) Use Cases

This topic describes the following sample Artificial Intelligence (AI) use cases:

- *Use Case 1: Identify and Flag PII/PHI in Service Request Description* – supported by the OCI Language AI service.
- *Use Case 2: Transcribe Customer Calls and Attach Text File to Service Request* – supported by the OCI Speech AI service.

Use Case 1: Identify and Flag PII in Service Request Description

In this scenario (illustrated in the following image), the OCI Language AI service checks whether the service request (SR) description field contains any PII/PHI, and if so, warns the user before saving the SR to the system.



As shown in this image, a typical flow involved in using the OCI Language AI service to identify and flag PII/PHI in the service request (SR) description is as follows:

1. A call center agent creates an SR, for example, where the Description field contains the following PII information:

   ```
   The customers MEDICAL RECORD NUMBER is MRN:56453241-A and can be reached at 9989898989 or
    charles@gmail.com.
   ```

2. When the SR is saved:

   a. Siebel invokes the OCI Language AI service to check the Description field to see if it contains any PII/PHI information.
   b. If the Descriptions field contains PII/PHI information, then Siebel warns the user before saving the SR with a message similar to the following:

      ```
      Personally Identifiable Information
      TELEPHONE_NUMBER: 9989898989
      EMAIL: charles@gmail.com
      MEDICAL_RECORD_NUMBER: MRN:56453241-A

      OK
      ```

   c. When the user clicks OK to this message, the PII Flag field value for the SR changes to Y.

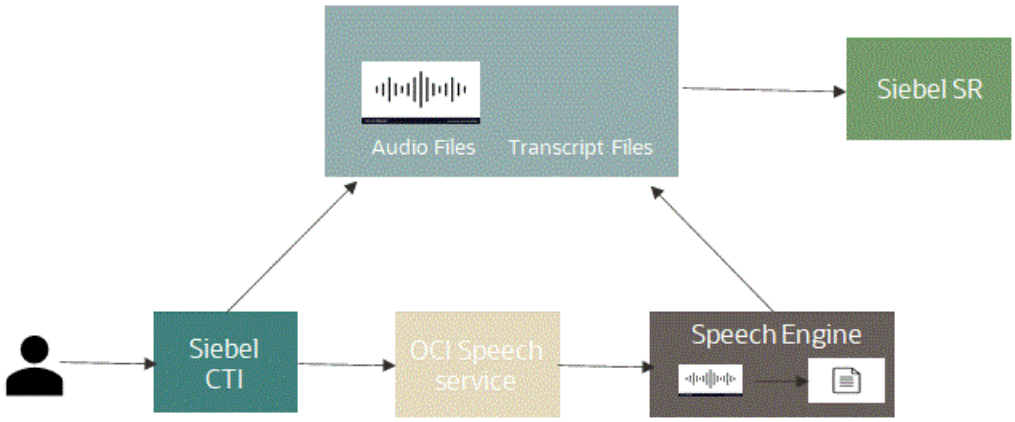
You can extend this functionality to any Siebel business component. Currently, only one field per business component is supported to extract PII from input text, for example, as follows:

- The 'Description' field in the 'Service Request' business component.
- The 'Comment' field in the 'Quote' business component.

However, administrators can configure a list of PII/PHI to be identified in the configured field.

Use Case 2: Transcribe Customer Calls and Attach Text File to Service Request

In this scenario (illustrated in the following image), the OCI Speech AI service automatically converts file-based audio data into highly accurate transcriptions.



As shown in this image, a typical flow involved in using the OCI Speech AI service to transcribe customer calls and attach the text file to the service request (SR) is a follows:

1. A call center agent records a conversation with a customer.
2. The call center agent attaches the conversation (audio file) to an SR.

   You can use either the New File or New URL button to attach an audio file to an SR and (in both cases) you must specify the entire path to the audio file. The audio file can be in the following formats - WAV, AAC, AC3, AMR, AU, FLAC, M4A, MKV, MP3, MP4, OGA, OGG, WEBM. For example:

   - Click New File to add a wav file (oracle-advertising.wav) from your local machine.
   - Click New URL to add the full URL path to the speech file (in .wav format) from the OCI object storage: `https://objectstorage.ap-mumbai-1.oraclecloud.com/n/siebeldev/b/priyabucket-20220414-1900/o/oracle-advertising.wav`.
3. The call center agent clicks Transcribe.

   Doing this invokes the OCI Speech AI service which transcribes the audio in the wav file to text (in a txt file).
4. The txt file, containing the transcribed audio from the wav file, is attached to the SR.

   Click the Attachment Name field to download the txt file, .

You can extend this functionality to any Siebel business component. Currently, only one audio file can be transcribed at a time.

Siebel REST APIs for Artificial Intelligence (AI) Services

The Oracle Cloud Infrastructure (OCI) Language and Speech AI Services can be called via Siebel REST APIs:

- The Language API detects Personal Identifiable Information (PII) from single or multiple text inputs.
- The Speech API transcribes speech/audio content to text and allows you to upload/download files between OCI Object storage and the Siebel Server local file system.

Siebel REST API can be used by Siebel internal and external clients to invoke OCI AI Services, for example as follows (for various use cases), where SiebelOCIAIWebService is the Web Service name and InvokeOCIAI is the Web Service method:

```
https://<hostname:port>/siebel/v1.0/service/SiebelOCIAIWebService/InvokeOCIAI
```

The API Request payload must contain the 'Context' parameter and the OCI AI Domain followed by the specific functionality in that domain. For example, use the `Speech:CreateTranscriptionServices` context parameter to transcribe AI speech to text.

The context parameters for Language are as follows:

- `Language:BatchDetectLanguageEntities`
- `Language:BatchDetectDominantLanguage`
- `Language: BatchDetectLanguagePiiEntities`
- `Language:BatchDetectLanguageSentiments`
- `Language:BatchDetectLanguageTextClassification`
- `Language:BatchLanguageTranslation`

For more information about using the Siebel REST APIs for AI Services, see the following topics and *Siebel REST API Guide* .

- *Siebel REST API for the Language AI Service*
- *Siebel REST API for the Speech AI Service*
- *Utility APIs and Methods Supporting the Speech AI Service Configure Authentication for Oracle Cloud Infrastructure (OCI) Artificial Intelligence (AI) Services*

Siebel REST API for the Language AI Service

The REST API for Language AI service supports named entity recognition (NER) with an option to select custom PII. Note the following about using this API:

1. You can specify to detect one or more named entities in the text.
2. You can specify to detect PII entities only by mentioning them in the request payload.
3. Input text (including batch loads) is analyzed for named entities.
4. The response is filtered based on the PII list specified.

   If no PII is specified, then all named entities will be recognised in the response.
5. The request parameters to use when calling the Language NER API are described in the following table.

Request Parameter	Description
key	This parameter refers to the document index (SR Id or other identifier). The value is in the format **doc_<index>** where **<index>** is an integer. Some example values are doc1, doc2, and so on.
text	The input text from which the named entities are to be recognised.
PII	The subset of named entities – which you can select from the entire list of Named Entities.

6. The output parameters for the Language NER API service are described in the following table.

Output Parameter	Description
Status	The status of the operation.
OPCRequestId	The request/transaction ID maintained by the OCI. This identifier is also used by any debug or DevOps operation.
key	Refers to the document index using the SR Id or other identifier.
Entities	An array of named entities identified by OCI in the text. Each array element has a 'type' and 'text' element where:

Output Parameter	Description
	○ **type** refers to the type of named entity (such as PHONE_NUMBER, EMAIL, ORG, EVENT, and so on). ○ **text** refers to the exact text (word/number) representing the entity.

Sample API to be Invoked (POST)

```
https://<hostname:port>/<siebel>/<v1.0>/service/SiebelOCIAIWebService/InvokeOCIAI
```

Sample Request Payload

```
{

"body" :
 {
 "Context": "Language:BatchDetectLanguageEntities",
 "BatchDetectLanguageEntities_Param_1":
 {
 "documents":[
 {
 "key": "doc1",
 "text":"Oracle has partnered with zoom for the best audio experience. Please select computer audio when
 joining the meeting. You can download the Zoom mobile app on iOS or Android for HD audio. Zoom interface is
 very simple and intuitive to use. For educational vieos on other amazing Oracle Products, please reach out
 to edus_in@oracle.com"
 },
 {
 "key": "doc2",
 "text": "Red Bull Racing Honda is a car company."
 } ,
 {
 "key":"doc3",
 "text": "In 2020 people worldwide moved to working remotely because of the COVID-19 pandemic. As a
 result, collaborative tools like video conferencing, email and chat have become critical, as they allow
 employees to perform their jobs from home. However, the human element of work has been much more difficult
 for workforces to navigate, bringing mental health and burnout challenges to the forefront. To support
 current remote workforce challenges, organisations are turning to emerging technologies such as artificial
 intelligence (AI), machine learning (ML), and chatbots in partnership with Workforce Intelligence to
 benefit million of users."
 } ,
 {
 "key":"doc4",
 "text": "OCI recently added new services to existing compliance program including SOC, HIPAA, and ISO to
 enable our customers to solve their use cases. We also released new white papers and guidance documents
 related to Object Storage, the Australian Prudential Regulation Authority (APRA), and the Central Bank
 of Brazil. These resources help regulated customers better understand how OCI supports their regional and
 industry-specific compliance requirements. Not only are we expanding our number of compliance offerings and
 regulatory alignments, we continue to add regions and services at a faster clip."
 }
 ]
 },
 "BatchDetectLanguageEntities_Param_2":"pii:email,phone_number,org"
 }
}
```

Other entity types (such as URL, IPADDRESS, and so on) can be specified for example as follows:

```
"Context": "Language:BatchDetectLanguageEntities",
"BatchDetectLanguageEntities_Param_2":"pii:email,phone_number,org,person,URL,IPADDRESS"
```

The following will detect and return all PII entity information in the given text documents:

```
"Context": "Language:BatchDetectLanguageEntities",
"BatchDetectLanguageEntities_Param_3":"PII"
```

Sample Corresponding Response Payload


```
{
 "Status": "Success",
 "OPCRequestId": "850E5831E5BE437FA6DE27EE61583F77/2D62DEA891C61E675399E2F20BACC56F/
E749D506C91009EE9B90BF8E7714E7B7",
 "documents": {
 "Response": [
 {
 "key": "doc4",
 "entities": [
 {
 "type": "ORG",
 "length": "3",
 "offset": "0",
 "text": "OCI",
 "subType": "null",
 "score": "1.0"
 },
 {
 "type": "ORG",
 "length": "3",
 "offset": "73",
 "text": "SOC",
 "subType": "null",
 "score": "1.0"
 },
 {
 "type": "ORG",
 "length": "5",
 "offset": "78",
 "text": "HIPAA",
 "subType": "null",
 "score": "1.0"
 },
 {
 "type": "ORG",
 "length": "3",
 "offset": "89",
 "text": "ISO",
 "subType": "null",
 "score": "1.0"
 },
 {
 "type": "ORG",
 "length": "42",
 "offset": "231",
 "text": "Australian Prudential Regulation Authority",
 "subType": "null",
 "score": "1.0"
 },
 {
 "type": "ORG",
 "length": "12",
 "offset": "290",
 "text": "Central Bank",
 "subType": "null",
 "score": "0.9999995827674866"
 },
 {
 "type": "ORG",
 "length": "3",
```

```
"offset": "377",
"text": "OCI",
"subType": "null",
"score": "1.0"
}
]
},
{
"key": "doc3",
"entities": {
"type": "ORG",
"length": "22",
"offset": "586",
"text": "Workforce Intelligence",
"subType": "null",
"score": "1.0"
}
},
{
"key": "doc2",
"entities": {
"type": "ORG",
"length": "21",
"offset": "0",
"text": "Red Bull Racing Honda",
"subType": "null",
"score": "1.0"
}
},
{
"key": "doc1",
"entities": [
{
"type": "ORG",
"length": "6",
"offset": "0",
"text": "Oracle",
"subType": "null",
"score": "1.0"
},
{
"type": "ORG",
"length": "6",
"offset": "277",
"text": "Oracle",
"subType": "null",
"score": "1.0"
},
{
"type": "EMAIL",
"length": "18",
"offset": "315",
"text": "edus_in@oracle.com",
"subType": "null",
"score": "0.9752325245161998"
}
]
}
]
}
}
```


Sample API to be Invoked (POST)

```
https://<siebel server or host>:<host port>/siebel/v1.0/service/SiebelOCIAIWebService/InvokeOCIAI
```

Example:

```
https://phoenix201061.appsdev1.fusionappsdphx1.oraclevcn.com:16690/siebel/v1.0/service/
SiebelOCIAIWebService/InvokeOCIAI
```

authentication : `sadmin/ldap`

Sample Payload for Sentiment Analysis

```
//Request payload:
{
 "body": {
 "Context": "Language:BatchDetectLanguageSentiments",
 "BatchDetectLanguageSentiments_Param_1": {
 "documents": [
 {
 "key": "doc1",
 "text": "Oracle has partnered with zoom for the best audio experience. Please select computer audio when
 joining the meeting. You can download the Zoom mobile app on iOS or Android for HD audio. Zoom interface is
 very simple and intuitive to use. For educational vieos on other amazing Oracle Products, please reach out
 to edus_in@oracle.com"
 }
 ]
 }
 }
}
```

Sample Corresponding Response Payload

```
{
 "Status": "Success",
 "OPCRequestId":
 "E20E0932B4054EACBE6BB33F0A3CC146/43994C43A1BED9FA5C8AFA622AE952E5/5B6D9C80A0325E6DF47BD7A871756495",
 "documents": {
 "Response": {
 "key": "doc1",
 "documentSentiment": "Positive",
 "Sentiments": {
 "positive": "0.97745436",
 "negative": "0.0",
 "mixed": "0.022545636",
 "neutral": "0.0"
 }
 }
 }
}
```

Sample Payload for Text Classification

```
//Request payload
{
 "body": {
 "Context": "Language:BatchDetectLanguageTextClassification",
 "BatchDetectLanguageTextClassification_Param_1": {
 "documents": [
 {
 "key": "doc1",
 "text": "Oracle has partnered with zoom for the best audio experience. Please select computer audio when
 joining the meeting. You can download the Zoom mobile app on iOS or Android for HD audio. Zoom interface is
 very simple and intuitive to use. For educational vieos on other amazing Oracle Products, please reach out
 to edus_in@oracle.com"
 },
 {
 "key": "doc2",
```

```
 "text": "OCI recently added new services to existing compliance program including SOC, HIPAA, and ISO to
 enable our customers to solve their use cases. We also released new white papers and guidance documents
 related to Object Storage, the Australian Prudential Regulation Authority (APRA), and the Central Bank
 of Brazil. These resources help regulated customers better understand how OCI supports their regional and
 industry-specific compliance requirements. Not only are we expanding our number of compliance offerings and
 regulatory alignments, we continue to add regions and services at a faster clip."
 },
 {
 "key": "doc3",
 "text": "Red Bull Racing Honda is a car company."
 }
 ]
 }
 }

}
```

Sample Corresponding Response Payload

```
{
 "Status": "Success",
 "OPCRequestId":
 "7A0A64D4CD2841808B250320F28A2ECC/89E562C0784B8EA5F48B8FB5FA463FF3/20A50715BA04A46CC7398C9B856F53E8",
 "documents": {
 "Response": [
 {
 "key": "doc3",
 "TextClassification": {
 "label": "Autos and Vehicles/Motor Vehicles",
 "score": "0.371180564"
 }
 },
 {
 "key": "doc2",
 "TextClassification": {
 "label": "Business and Industry/Business Operations",
 "score": "0.193597227"
 }
 },
 {
 "key": "doc1",
 "TextClassification": {
 "label": "Computer and Electronics/Software",
 "score": "1.0"
 }
 }
 ]
 }
}
```

Sample Payload for Detection of Dominant Language

```
//Request payload
{
 "body": {
 "Context": "Language:BatchDetectDominantLanguage",
 "BatchDetectDominantLanguage_Param_1": {
 "documents": [
 {
 "key": "doc1",
 "text": "Oracle has partnered with zoom for the best audio experience. Please select computer audio when
 joining the meeting. You can download the Zoom mobile app on iOS or Android for HD audio. Zoom interface is
 very simple and intuitive to use. For educational vieos on other amazing Oracle Products, please reach out
 to edus_in@oracle.com"
 },
```

```
 {
 "key": "doc3",
 "text": "Buongiorno! Oggi vi presento la mia famiglia. Io sono il padre, mi chiamo Gennaro Pirlo, ho
 trentasette anni, e lavoro come scrittore e giornalista da quando ne avevo venti.Mia moglie si chiama
 Antonella Totti, ha trentacinque anni ed è una splendida attrice di teatro.La nostra famiglia è composta
 anche da altre due persone, i nostri figli, Manuela che ha diciassette anni, e Marco che ha quindici anni,
 e poi c'è anche Tremendo, il cane che vive con noi da nove anni, ed è parte della famiglia. Viviamo tutti
 nella nostra splendida casa con un grande giardino."
 }
 ]
 }
 }

}
```

Sample Corresponding Response Payload

```
{
 "Status": "Success",
 "OPCRequestId": "E3DAADACD8784125AAA7BC38316813E4/1714D759EB3309119E0C4E7ADC9390E0/
F170A38C6C089C7FF7289EA4D3F9897F",
 "documents": {
 "Response": [
 {
 "key": "doc3",
 "languages": {
 "name": "Italian",
 "code": "it",
 "score": "1.0"
 }
 },

 {
 "key": "doc1",
 "languages": {
 "name": "English",
 "code": "en",
 "score": "1.0"
 }
 }
 ]
 }
}
```

Sample Payload for Language Translation

```
//Request payload
{
 "body": {
 "Context": "Language:BatchLanguageTranslation",
 "BatchLanguageTranslation_Param_1": {
 "documents": [
 {
 "key": "doc1",
 "text": "Oracle has partnered with zoom for the best audio experience. Please select computer audio when
 joining the meeting. You can download the Zoom mobile app on iOS or Android for HD audio. Zoom interface is
 very simple and intuitive to use. For educational vieos on other amazing Oracle Products, please reach out
 to edus_in@oracle.com"
 }
 ]
 },
 "BatchLanguageTranslation_Param_2": "TargetLanguageCode:it"
 }
```

```
}
```

Sample Corresponding Response Payload

```
{
 "Status": "Success",
 "OPCRequestId":
 "19CFED98A2F140C7B60F264C8D62CEB4/3E01A076AF57008E32532C2CA3934FD9/4544F0D0E7F084C36AA821B6565102E3",
 "documents": {
 "Response": {
 "key": "doc1",
 "LanguageTranslation": {
 "translatedText": "Oracle ha stretto una partnership con zoom per offrire la migliore esperienza audio.
 Selezionare l'audio del computer quando si partecipa alla riunione. È possibile scaricare l'app mobile Zoom
 su iOS o Android per l'audio HD. L'interfaccia Zoom è molto semplice e intuitiva da usare. Per conoscere
 gli eventi formativi su altri straordinari prodotti Oracle, contatta edus_in@oracle.com"
 }
 }
 }
}
```

Sample Payload for LanguagePiiEntities

```
//Request Payload
{
 "body": {
 "Context": "Language:BatchDetectLanguagePiiEntities",
 "BatchDetectLanguagePiiEntities_Param_1": {
 "documents": [
 {
 "key": "doc1",
 "text": "A SWIFT (Society for Worldwide Interbank Financial Telecommunication) code, also known as a BIC
 (Bank Identifier Code) number is HDFC000009"
 }
 ]
 },
 "BatchDetectLanguagePiiEntities_Param_2": "mode:MASK",
 "BatchDetectLanguagePiiEntities_Param_3": "isUnmaskedFromEnd:true",
 "BatchDetectLanguagePiiEntities_Param_4": "leaveCharactersUnmasked:3",
 "BatchDetectLanguagePiiEntities_Param_5": "maskingCharacter:*"
 }
}
```

Sample Corresponding Response Payload

```
{
 "Status": "Success",
 "OPCRequestId": "3E866FFD9FDB4F92B2093DD55CA1713D/
E7A63B05AB6FF208BE87332C70321DE5/4A1C05FCCDE9A3F23FD13B14CBDBBB4A",
 "documents": {
 "Response": {
 "key": "doc1",
 "entities": {
 "type": "BANK_SWIFT",
 "length": "10",
 "maskedText": "A SWIFT (Society for Worldwide Interbank Financial Telecommunication) code, also known as a
 BIC (Bank Identifier Code) number is *******009",
 "languageCode": "en",
 "offset": "129",
 "text": "HDFC000009",
 "score": "0.9926007986068726"
 }
 }
 }
```

For more information about using the Siebel REST API for Language AI Service, see *Siebel REST API Guide* .

Siebel REST API for the Speech AI Service

The following describes how the REST API for Speech AI service is used:

1. You call the REST API for Speech AI service via the Speech CreateTranscription API.

   This API allows you to select an audio file present in the Server's local file system. The other request parameters to use when calling the Speech CreateTranscription API are described in the following table.

Request Parameter	Description
InputFile	The Audio File to be transcribed to text.
InputFilePath	The Audio File path in the Server's local file system. The path should be accessible by the Siebel Server and local to its file system.
NameSpace	OCI Namespace of the User/Administrator.
CompartmentId	Root Compartment of the OCI bucket.
InputBucket	The Bucket where the Audio File will be uploaded. If the InputFilepath is empty, then the API will directly take the Audio file from this bucket.
InputPrefix	Folder (or Folder hierarchy) inside the InputBucket where the Audio File is present.
JobDisplayName:	Name of the Transcription Job as desired by the User/Administrator. If no value is specified, OCI will use a default job name.
JobDescription	Description of the Transcription Job. If no value is specified, then the field remains empty in OCI.
OutputBucket	The Bucket where the Transcribed Text File will be stored.
OutputPrefix	Folder (or Folder hierarchy) inside the OutputBucket where the Text File is stored.
OutputFile	The transcribed Text File name.
OutputFilePath	The transcribed Text File path in the Server's local file system. Siebel Server must be able to access this location.

Request Parameter	Description
JobHeartbeatTimer	The heartbeat interval to check for the Transcription Job. The default value is 10000 milliseconds (=10 seconds). Do not add this parameter to the request payload; allow the default value to persist. In the case of large or small audio files, change the default value by adding the parameter to the request payload
JobMaxRetries	The maximum retries to check for the status of the Transcription Job from OCI. The default value is 4. Do not add this parameter to the request payload; allow the default value to persist. In the case of large or small audio files,change the default value by adding the parameter to the request payload. In the case where MaxRetries is exhausted and the Transcription Job has not yet finished (JobStatus is 'In Progress'), the API returns adequately with the Job Id and the necessary details to query the Job further.

2. After the Speech CreateTranscription API completes authentication, the audio file is uploaded to the OCI bucket.
3. A Transcription Job is then created which takes the audio file from the InputBucket and converts it to a text file.

   If the job succeeds straightaway, then the transcribed text file is stored in the OutputBucket. The API will further query this location, get the JSON file and download it to the Siebel Server local file system in either JSON or text format (for end user consumption).

   If the job takes longer to complete, then the API returns a Job Status of In Progress in the Response payload. The client will then have to fetch the JobStatus and download the transcribed file once the job completes. These additional actions require the client to call the following API:

   - DownloadUtility – for more information, see *Utility APIs and Methods Supporting the Speech AI Service*.
4. The output parameters for the Speech CreateTranscription API are described in the following table.

Request Parameter	Description
Status	Status of the operation.
OutputBucket	The bucket where the Transcribed Text File is stored.
OutputPrefix	The folder name (and path) where the Transcribed File is present in the OCI bucket.
ObjectLocation	The Transcribed File name along with the complete folder path (or folder hierarchy) under the OutputBucket.
OutputPath	The Transcribed File (in JSON/Text format) with complete path to the Server local file system where it has been downloaded from the OCI bucket.
NameSpace	OCI Namespace of the User/Administrator.

Request Parameter	Description
OCID	OCID of the User/Administrator.
OPCRequestId	The Request/transaction ID maintained by OCI. This identifier will be used for any debug or DevOps operation.

Sample API to be Invoked (POST)

```
https://<hostname:port>/<siebel>/<v1.0>/service/SiebelOCIAIWebService/InvokeOCIAI
```

Sample Request Payload on Windows

```
"body" :
 {
 "Context": "Speech:CreateTranscriptionServices",
 "CreateTranscriptionServices_Param_1" : "namespace:siebeldev",
 "CreateTranscriptionServices_Param_2" : "inputBucket:bucket-20220414-1900",
 "CreateTranscriptionServices_Param_3" : "outputBucket:bucket-20220414-1900",
 "CreateTranscriptionServices_Param_4" : "jobDisplayName:DEMOJob",
 "CreateTranscriptionServices_Param_5" : "outputPrefix:DEMOPrefix",
 "CreateTranscriptionServices_Param_6" : "compartmentId:ocid1.tenancy.oc1..XXXXX",
 "CreateTranscriptionServices_Param_7" : "inputFile:oracle-advertising.wav",
 "CreateTranscriptionServices_Param_8" : "jobDescription:Invoke OCI Speech",
 "CreateTranscriptionServices_Param_9" : "inputFilePath\\Users\\2024_10C002\\AIMLfiles",
 "CreateTranscriptionServices_Param_10" : "inputPrefix:Demo",
 "CreateTranscriptionServices_Param_11" : "outputFilePath: C:\\Users\\2024_10C002\\AIMLfiles ",
 "CreateTranscriptionServices_Param_12" : "outputFile:oracle-advertisingOracleWAV2.json",
 "CreateTranscriptionServices_Param_13" : "jobHeartbeatTimer:100000",
 "CreateTranscriptionServices_Param_14" : "jobMaxRetries:30",
 "CreateTranscriptionServices_Param_15" : "inputFileName:FIELD=ActivityFileName",
 "CreateTranscriptionServices_Param_16" : "inputFileExt:FIELD=ActivityFileExt",
 "CreateTranscriptionServices_Param_17" : "targetLanguageCode:ENU"
 }
```

Sample Corresponding Response Payload on Windows

```
{
 "OutputPath": C:\\Users\\2024_10C002\\AIMLfiles\\oracle-advertisingOracleWAV2.json",
 "ObjectLocation": "DEMOPrefix/job-aXXt3alfa/siebeldev_bucket-20220414-1900/oracle-advertising.wav.json",
 "Namespace": "siebeldev",
 "OutputBucket": "bucket-20220414-1900",
 "OCID": "ocid1.aispeechtranscriptionjob.oc1.apmumbai1.amaXXXXyixjjrmrt3alfa",
 "OPCRequestId": "bom-1:NMuIKvBVFOIWyAVGASsRU5XXXXXXXXX7vkF8Ld_b0GO",
 "Status": "success",
 "JobStatus": "Succeeded",
 "OutputPrefix": "DEMOPrefix/job-amaaaaaa4n2rr5iarea72dfoh75XXXXXXXmrt3alfa/"
}
```

Sample Request Payload on Unix

```
"body" :
 {
 "Context": "Speech:CreateTranscriptionServices",
 "CreateTranscriptionServices_Param_1" : "namespace:siebeldev",
 "CreateTranscriptionServices_Param_2" : "inputBucket:bucket-20220414-1900",
 "CreateTranscriptionServices_Param_3" : "outputBucket:bucket-20220414-1900",
```

```
 "CreateTranscriptionServices_Param_4" : "jobDisplayName:DEMOJob",
 "CreateTranscriptionServices_Param_5" : "outputPrefix:DEMOPrefix",
 "CreateTranscriptionServices_Param_6" : "compartmentId:ocid1.tenancy.oc1..XXXXX",
 "CreateTranscriptionServices_Param_7" : "inputFile:oracle-advertising.wav",
 "CreateTranscriptionServices_Param_8" : "jobDescription:Invoke OCI Speech",
 "CreateTranscriptionServices_Param_9" : "inputFilePath:/scratch/home/sblqa1/2024_10C002/AIMLfiles",
 "CreateTranscriptionServices_Param_10" : "inputPrefix:Demo",
 "CreateTranscriptionServices_Param_11" : "outputFilePath:/scratch/home/sblqa1/2024_10C002/AIMLfiles",
 "CreateTranscriptionServices_Param_12" : "outputFile:oracle-advertisingOracleWAV2.json",
 "CreateTranscriptionServices_Param_13" : "jobHeartbeatTimer:100000",
 "CreateTranscriptionServices_Param_14" : "jobMaxRetries:30",
 "CreateTranscriptionServices_Param_15" : "inputFileName:FIELD=ActivityFileName",
 "CreateTranscriptionServices_Param_16" : "inputFileExt:FIELD=ActivityFileExt",
 "CreateTranscriptionServices_Param_17" : "targetLanguageCode:ENU"
}
```

Sample Corresponding Response Payload on Unix

```
{
"OutputPath": "/scratch/home/sblqa1/2024_10C002/AIMLfiles/oracle-advertisingOracleWAV2.json",
 "ObjectLocation": "DEMOPrefix/job-XXXX /siebeldev_bucket-20220414-1900_OnJune15/oracle-
advertising.wav.json",
"Namespace": "siebeldev",
"OutputBucket": "bucket-20220414-1900",
"OCID": "ocid1.aispeechtranscriptionjob.oc1.ap-mumbai-1.amaaaaaaXXXXXXXrt3alfa",
"OPCRequestId": "bom-1:NMuIKvBVFOIWyAVGASsRXXXX_b0GO",
"Status": "success",
"JobStatus": "Succeeded",
"OutputPrefix": "DEMOPrefix/job-amaaaaaa4n2rr5iarea72dfXXXXXlfa/"
}
```

Utility APIs and Methods Supporting the Speech AI Service

A separate utility service is used to upload a file to OCI and to download a file from OCI. For more information, see the following topics:

- *Upload API Utility*
- *Download API Utility*

Upload API Utility

A separate utility service is used to upload a file to OCI. The typical steps involved in this are as follows:

1. You choose to upload the audio file from the Server's local file system to the OCI bucket (InputBucket parameter).
2. You then call the Speech AI service API with an empty InputFilePath.
3. The Speech AI service API takes the audio file directly from the OCI bucket.
4. In the Request Payload, configure the following parameters:
    - **FilePath.** This parameter must specify the source/input audio file location in the Siebel Server local file system.
    - **FileName.** This parameter must specify the audio file name.
    - **Prefix.** This parameter, also known as the target/output location, must specify the OCI folder/prefix name (and path) where the audio file will be uploaded to in the OCI bucket.

Download API Utility

A separate utility service is used to download a file from the OCI bucket to the Siebel Server local file system. The following parameters must be configured in the Request Payload:

- **ObjectLocation.** This parameter must specify the source/OCI location of the object (audio file).
- **OutputFilePath.** This parameter must specify the target location on the Siebel Server local file system for the transcribed Text File.
- **OutputFile.** This parameter must specify the transcribed Text File name (text or json).

Generative AI Service for Siebel CRM

This topic describes some sample Generative AI use cases and how to setup and configure Oracle Cloud Infrastructure (OCI) Generative Service for Siebel CRM.

- *About Oracle Cloud Infrastructure (OCI) Generative AI Service*
- *Accessing Oracle Cloud Infrastructure (OCI) Generative Service*
- *Process of Setting Up Oracle Cloud Infrastructure (OCI) Generative AI Service*
- *Generative AI Service Use Cases*
- *Siebel REST APIs for Generative AI Service*

About Oracle Cloud Infrastructure (OCI) Generative AI Service

Oracle Cloud Infrastructure (OCI) Generative AI is a fully managed service that provides a set of state-of-the-art, customizable large language models (LLMs) that cover a wide range of use cases, including chat, text generation, summarization, and creating text embeddings.

The OCI Generative AI service includes the following foundational models:

- **Chat**

  Ask questions and get conversational responses through an AI chatbot.
- **Generation**

  Prompt the large language models (LLMs) to generate text or extract information from your text.
- **Summarization**

  Summarize text with your instructed format, length, and tone.
- **Embedding**

  Convert text to vector embeddings to use in applications for semantic searches, recommender systems, text classification, or text clustering.

  Integration of Generative AI Service with Siebel CRM currently supports the following types of use cases:

  - **Sentiment Analysis**

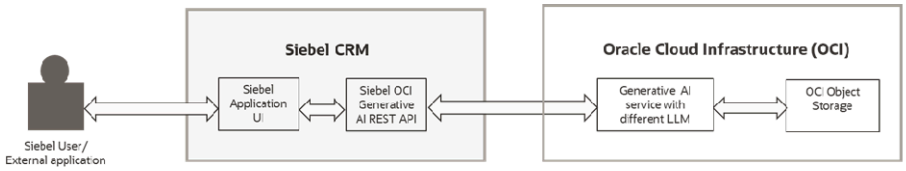
Analyze the mood or tone of text and extract indicators of sentiment, such as positive, negative, or neutral. For more information, see *Use Case 1: Analyze Sentiment at Service Request and Activities Level*.

- **Summarization**

  Generate executive summaries for documents that are too long to read, or summarize any type of text. For more information, see *Use Case 2: Generate Transfer and Closing Summary*.

Accessing Oracle Cloud Infrastructure (OCI) Generative Service

There are many ways to use and access OCI Generative Service - invoke use cases from Siebel UI/components like Workflow, Script/externally via REST API. You can use OCI Generative AI Service directly via Siebel REST API – for more information, see *Siebel REST APIs for Generative AI Service*.



As shown in this reference architecture, a typical flow for using OCI Generative AI Service is as follows:

1. On the Siebel CRM side:
   - You (user/external app) invoke the Siebel OCI AI Generative AI service via Siebel user interface (UI).
   - It can also be directly invoked via any Siebel component like Workflow or via any external self-service application layer (For example: Postman API client).
2. On the OCI side:
   - Siebel REST API does the required pre-processing, authenticates with OCI, and invokes the Generative AI Service via OCI Java SDK to get the required response using AI/ML.
   - Post-processing is done, and the required response is returned to the client.

Process of Setting Up Oracle Cloud Infrastructure (OCI) Generative AI Service

To set up and configure OCI Generative AI Service, perform the following tasks.

- *Enable Oracle Cloud Infrastructure (OCI) Generative AI Service*
- *Configure Authentication for Oracle Cloud Infrastructure (OCI) Generative AI Service*
- *Select Large Language Model*
- *Specify the Large Language Model (LLM) prompts*
- *Trigger use cases*
- *Configure and activate Runtime Event for Closing Summary*
- *Configure and activate Runtime Event for Transfer Summary*

- *Configure and activate Runtime Event for Sentiment Analysis at Activities Level*
- *Configure and activate Runtime Event for Sentiment Analysis at Service Request Level*
- *Configure Business Component User Properties for Summarization*
- *Configure Business Component User Properties for Sentiment Analysis*
- *Display Summary*
- *Configure Business Component User Properties for Multimodal AI*
- *Configure Business Component User Properties and activate Runtime Event for GSAT Score*

Enable Oracle Cloud Infrastructure (OCI) Generative AI Service

To enable Oracle Cloud Infrastructure (OCI) Generative AI Service

- Set the below System preference.

Name	Value
EnableOCIAIGenAI	N (to be changed to 'Y' to activate feature)

- By default, it is disabled.
- Generative AI use cases that are not required can be disabled .
- Create seed data as required for different use-cases (using the database setup wizard or through manual configuration).
- Select a model and configure parameters for prompts.
- OCI Generative AI provides a set of pre-trained models. You can create new custom models or create new versions of existing custom models with your own dataset.

Generative AI Service can be consumed through:

- On-demand (access pretrained LLMs and embedding models).
- Dedicated AI clusters (deploy pretrained LLMs or fine-tuned custom models exclusive to your tenancy).

Configure Authentication for Oracle Cloud Infrastructure (OCI) Generative AI Service

To configure authentication for OCI Generative AI Service

The following configurations for RunTime Event, BC User properties, Applet/View/Screen/Link/BO configurations are given for the OOTB use case. Please configure the same accordingly for your use cases.

1. Download the Authentication file from OCI which has the Credential details like user ID, fingerprint, and tenancy.
2. Rename the file `Config` to `ociconfig.properties` and place it in the Siebel's internal Tomcat's webapps folder. The file should be a ‘properties’ file with the name as `ociconfig`.
3. Ensure that the `ociconfig.properties` file includes the location of the private key(.pem) file and make sure that the path mentioned is valid.
4. Import the necessary Certificates as required to both internal, external Tomcats and add it to the Siebel keystore or truststore.

5. Restart the Tomcats.

Select Large Language Model

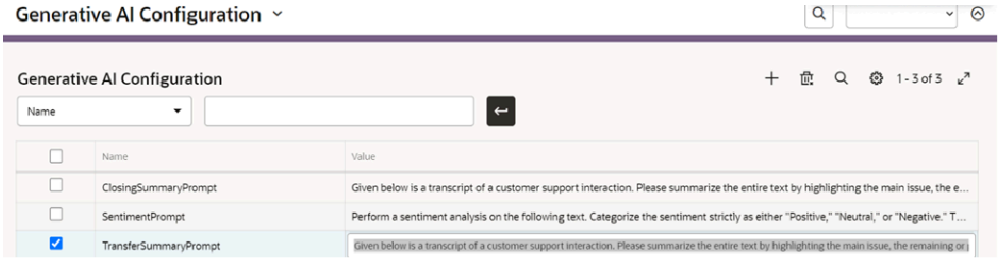
- Cohere Command R is the Out-of-the-box Large Language Model (LLM).
- Sentiment Analysis' and 'Summarization' use cases leverage the *Chat* functionality if COHERE command-r (cohere.command-r-XXXX) LLM is used.
- 'Summarization' use case leverages the *Summarize* functionality when COHERE command (cohere.command-r-XXXX) LLM is used.
- To change Generative AI Region and the corresponding endpoint (from US-CHICAGO-1), the below Business Service(*SiebelOCIAIWebService*) User Properties can be altered. Restart the Tomcat for the changes to be reflected.

BS User Property Name	Value
GenAIRegion	**<CHANGE_ME>** eg: AP-MUMBAI-1
GenAIRegionEndpoint	**<CHANGE_ME>** eg: <ocid.xxxxx>

Specify the Large Language Model (LLM) prompts

Following are specified LLM prompts:

- New View named *Generative AI Configuration List View* has been created with the below parameters to specify the LLM prompts:



- Configuration for command-r Large Language Model (LLM) is shown below:

Name	Value
ClosingSummaryPrompt	Given below is a transcript of a customer support interaction. Please summarize the entire text by highlighting the main issue, the exact device or account details, and the actions undertaken to resolve it. Ensure that the summary maintains the contextual history accurately and does not infer or create any conclusions about the customer's state of mind or satisfaction unless explicitly stated by the customer. Avoid adding any information that is not clearly present in the interaction.

Name	Value
TransferSummaryPrompt	Given below is a transcript of a customer support interaction. Please summarize the entire text by highlighting the main issue, the remaining or pending concern, the exact device or account details, and the actions undertaken to resolve it. Ensure that the summary maintains the contextual history accurately and does not infer or create any conclusions about the customer's state of mind or satisfaction unless explicitly stated by the customer. Avoid adding any information that is not clearly present in the interaction.
SentimentPrompt	Perform a sentiment analysis on the following text. Categorize the sentiment strictly as either Positive, Neutral, or Negative. The output of the sentiment analysis should definitely begin with one of these three words: Positive, Neutral, or Negative.

Note: Other custom parameters like ClosingSummaryPreambleOverride can be added in this section with corresponding entries in the BC User Property.

Trigger use cases

Following are some trigger use cases:

- Out-of-the box Generative AI use cases are controlled by Siebel Runtime Events.
  - Each use case (Sentiment Analysis / Summarization) can be individually Enabled/Disabled. By default, all the use cases are enabled.
  - Each of the two Summarization use-cases (Closing / Transfer Summary) can be Enabled/Disabled based on different Runtime events.
  - Summarization should have the Context set to *GenAI:SummarizeChatText* or *GenAI:Chat* while using command-R LLM.
  - Sentiment Analysis should have the Context set to *GenAI:GenerateChatText* or *GenAI:Chat* while using command-R LLM.
- Runtime Events work in conjunction with the Business Component User Properties in Out-of-the-box scenarios.
- Out-of-the-box Service Request and Action Business Component's have Runtime Events and corresponding Business Component User Properties.

Configure and activate Runtime Event for Closing Summary

Runtime Events with details of Event, Action Set and corresponding Action for Closing Summary is shown below:

Name	Active	Description
OCI Generative AI Service Closing Summary	True	Trigger when Activity Type is changed to Closing Summary

Actions to be populated as below which is used by Closing Summarization use cases while using the COHERE command-r (`cohere.command-r-XXXX`) LLM.

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context
ClosingSummary	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:SummarizeChatText

Actions to be populated as below which is used by Closing Summarization use cases while using the COHERE command (`cohere.command-r-xxxx`) LLM.

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context
ClosingSummary	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:SummarizeText

Events:

Seq	Object Type	Object Name	Event	Subevent	Conditional Expression	Action Set
1	BusComp	Action	SetFieldValue	Type	SystemPreference("EnableOCIAIGenAI") = "Y" AND [Type] = LookupValue ('TODO_TYPE' , 'CLOSING SUMMARY') AND GetProfileAttr('Me.ActiveViewName')='Service Request Detail View'	OCI Generative AI Service Closing Summary

Configure and activate Runtime Event for Transfer Summary

Runtime Events with details of Event, Action Set and corresponding Action for Transfer Summary is shown below:

Name	Active	Description
OCI Generative AI Service Transfer Summary	True	Trigger when Activity Type is changed to Transfer Summary

Actions to be populated as below which is used by Transfer Summarization use cases while using the COHERE command-r (`cohere.command-r-xxxx`) LLM.

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context
TransferSummary	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:SummarizeChatText

Actions to be populated as below which is used by Transfer Summarization use cases while using the COHERE command (`cohere.command-r-xxxx`) LLM.

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context
TransferSummary	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:SummarizeText

Events:

Seq	Object Type	Object Name	Event	Subevent	Conditional Expression	Action Set
2	BusComp	Action	SetFieldValue	Type	SystemPreference("EnableOCIAIGenAI") = "Y" AND [Type] = LookupValue ('TODO_ TYPE' , 'TRANSFER SUMMARY') AND GetProfileAttr('Me.ActiveViewName')='Service Request Detail View'	OCI Generative AI Service Transfer Summary

Configure and activate Runtime Event for Sentiment Analysis at Activities Level

Runtime Events with the details of the Event, Action Set and corresponding Action for Sentiment Analysis at Activities level is shown below:

Name	Active	Description
OCI Generative AI Service Activity Sentiment	True	Trigger when Activity Type is changed to Call - Inbound or Email - Inbound

Actions:

Actions to be populated as below which is used by Sentiment use cases while using the COHERE command-r (`cohere.command-r-XXXX`) LLM.

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context
ActivitySentimen	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:GenerateChatText

Actions to be populated as below which is used by Sentiment use cases while using the COHERE command (`cohere.command-r-XXXX`) OR LLAMA 70b (`meta.llama-XXXX`).

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context
ActivitySentiment	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:GenerateText

Events:

Seq	Object Type	Object Name	Event	Subevent	Conditional Expression	Action Set
3	BusComp	Action	SetFieldValue	Type	SystemPreference("EnableOCIAIGenAI") = "Y" AND ([Type] = LookupValue ('TODO_TYPE' , 'Call - Inbound') OR [Type] = LookupValue ('TODO_TYPE' , 'Email - Inbound')) AND GetProfileAttr('Me.ActiveViewName')='Service Request Detail View'	OCI Generative AI Service Activity Sentiment

Configure and activate Runtime Event for Sentiment Analysis at Service Request Level

Runtime Events with the details of the Event, Action Set and corresponding Action for Sentiment Analysis at Service Request level is shown below:

Name	Active	Description
OCI Generative AI Service SR Sentiment and Classification	True	Trigger when Service Request is saved

Actions to be populated as below which is used by Sentiment use cases while using the COHERE command-r (`cohere.command-r-XXXX`) LLM.

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context	Conditional Expression
ServiceRequestSentiment	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:GenerateChatText	SystemPreference("EnableOCIAIGenAI") = "Y"

Actions to be populated as below which is used by Sentiment use cases while using the COHERE command (`cohere.command-r-XXXX`) OR LLAMA 70b (`meta.llama-XXXX`).

Name	Action Type	Seq	Active	BS Name	BS Method	BS Context	Conditional Expression
ServiceRequestSentiment	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:GenerateText	SystemPreference("EnableOCIAIGenAI") = "Y"

Events :

Seq	Object Type	Object Name	Event	Subevent	Conditional Expression	Action Set
1	BusComp	Service Request	WriteRecord	N/A	[Description] IS NOT NULL	OCI Generative AI Service SR Sentiment and Classification

Configure Business Component User Properties for Summarization

The below configurations for RunTime Event, BC User properties, Applet/View/Screen/Link/BO configurations are given for the OOTB use case. Please configure the same accordingly for your use cases.

Business Component User Properties for Closing and Transfer Summary leveraging COHERE command-r LLM is shown here:

BC User Property Name	BC User Property Value
SummarizeChatText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]

BC User Property Name	BC User Property Value
SummarizeChatText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
SummarizeChatText_Param_3	lovInfo:BC_FIELD=Type;LOV_TYPE=TODO_TYPE;LOV_LIC=CLOSING SUMMARY,TRANSFER SUMMARY [This parameter is used to pick the appropriate Localization value]
SummarizeChatText_Param_4	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
SummarizeChatText_Param_5	inputFromOtherBC:BUSCOMP=Service Request,FIELD=Abstract;BUSCOMP=Order Entry - Orders,FIELD=Order Priority,Account [This is the list of other BC fields whose input values will be send to the LLM along with that of the primary BC. Please note that all the other BC's should be part of the same BO]
SummarizeChatText_Param_6	output:FIELD=Description;MAX_FIELD_LENGTH=250 [This is the BC field to which the LLM response will be populated. Please modify the MAX_FIELD_ LENGTH based on the respective BC Field length]
SummarizeChatText_Param_7	prompt:CLOSING SUMMARY=ClosingSummaryPrompt;TRANSFER SUMMARY=TransferSummaryPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
SummarizeChatText_Param_8	minimumInputCharLength:250 [This is the minimum input length to the LLM]

Business Component User Properties for Closing and Transfer Summary leveraging other Large Language Models (LLM) is shown here:

BC User Property Name	BC User Property Value
SummarizeText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
SummarizeText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
SummarizeText_Param_3	lovInfo:BC_FIELD=Type;LOV_TYPE=TODO_TYPE;LOV_LIC=CLOSING SUMMARY,TRANSFER SUMMARY [This parameter is used to pick the appropriate Localization value]
SummarizeText_Param_4	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
SummarizeText_Param_5	inputFromOtherBC:BUSCOMP=Service Request,FIELD=Abstract;BUSCOMP=Order Entry - Orders,FIELD=Order Priority,Account

BC User Property Name	BC User Property Value
	[This is the list of other BC fields whose input values will be send to the LLM along with that of the primary BC. Please note that all the other BC's should be part of the same BO]
SummarizeText_Param_6	output:FIELD=Description;MAX_FIELD_LENGTH=250 [This is the BC field to which the LLM response will be populated. Please modify the MAX_FIELD_LENGTH based on the respective BC Field length]
SummarizeText_Param_7	additionalCommand:CLOSING SUMMARY=ClosingSummaryPrompt;TRANSFER SUMMARY=TransferSummaryPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
SummarizeText_Param_8	minimumInputCharLength:250 [This is the minimum input length to the LLM]
SummarizeText_Param_9	extractiveness:CLOSING SUMMARY=ClosingSummaryExtractiveness;TRANSFER SUMMARY=TransferSummaryExtractiveness
SummarizeText_Param_10	format:CLOSING SUMMARY=ClosingSummaryFormat;TRANSFER SUMMARY=TransferSummaryFormat
SummarizeText_Param_11	length:CLOSING SUMMARY=ClosingSummaryLength;TRANSFER SUMMARY=TransferSummaryLength

Configure Business Component User Properties for Sentiment Analysis

The above configurations for RunTime Event, BC User properties, Applet/View/Screen/Link/BO configurations are given for the OOTB use case. Please configure the same accordingly for your use cases.

Business Component User Properties for Sentiment Analysis at Activities level leveraging COHERE command-r LLM is shown here:

BC User Property Name	BC User Property Value
GenerateChatText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
GenerateChatText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
GenerateChatText_Param_3	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
GenerateChatText_Param_4	prompt:SentimentPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
GenerateChatText_Param_5	output:FIELD=Sentiment [This is the BC field to which the LLM response will be populated.]
GenerateChatText_Param_6	lovInfo:LOV_TYPE=GENAI_SENTIMENT;LOV_LIC=POSITIVE,NEGATIVE,NEUTRAL

BC User Property Name	BC User Property Value
	[This parameter is used to pick the appropriate Localization value]
GenerateChatText_Param_7	outputToOtherBC:BUSCOMP=Service Request,FIELD=Sentiment [This is the list of other BC fields whose input values will be send to the LLM along with that of the primary BC. Please note that all the other BC's should be part of the same BO]
PrivateFields	Modified Value: Service Address Name, Repeating Type LIC, **SentimentValue**

Business Component User Properties for Sentiment Analysis at Activities level leveraging other Large Language Models (LLM) is shown here:

BC User Property Name	BC User Property Value
GenerateText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
GenerateText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
GenerateText_Param_3	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
GenerateText_Param_4	prompt:SentimentPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
GenerateText_Param_5	output:FIELD=Sentiment [This is the BC field to which the LLM response will be populated.]
GenerateText_Param_6	lovInfo:LOV_TYPE=GENAI_SENTIMENT;LOV_LIC=POSITIVE,NEGATIVE,NEUTRAL [This parameter is used to pick the appropriate Localization value]
GenerateText_Param_7	outputToOtherBC:BUSCOMP=Service Request,FIELD=Sentiment [This is the list of other BC fields whose input values will be send to the LLM along with that of the primary BC. Please note that all the other BC's should be part of the same BO]
PrivateFields	Existing Value: Service Address Name,Repeating Type LIC Modified Value: Service Address Name,Repeating Type LIC,SentimentValue

Business Component User Properties for Sentiment Analysis at Service Request level leveraging COHERE command-r and other Large Language Models (LLM) is shown here:

BC User Property Name while using the COHERE command-r (`cohere.command-r-XXXX`) LLM	BC User Property Value
GenerateChatText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
GenerateChatText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
GenerateChatText_Param_3	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
GenerateChatText_Param_4	prompt:SentimentPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
GenerateChatText_Param_5	output:FIELD=Sentiment [This is the BC field to which the LLM response will be populated.]
GenerateChatText_Param_6	lovInfo:LOV_TYPE=GENAI_SENTIMENT;LOV_LIC=POSITIVE,NEGATIVE,NEUTRAL [This parameter is used to pick the appropriate Localization value]
PrivateFields	SentimentValue

BC User Property Name while using the COHERE command (`cohere.command-r-XXXX`) OR LLAMA 70b (`meta.llama-XXXX`) LLM	BC User Property Value
GenerateText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
GenerateText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
GenerateText_Param_3	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
GenerateText_Param_4	prompt:SentimentPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
GenerateText_Param_5	output:FIELD=Sentiment [This is the BC field to which the LLM response will be populated.]
GenerateText_Param_6	lovInfo:LOV_TYPE=GENAI_SENTIMENT;LOV_LIC=POSITIVE,NEGATIVE,NEUTRAL [This parameter is used to pick the appropriate Localization value]

BC User Property Name while using the COHERE command (`cohere.command-r-XXXX`) OR LLAMA 70b (`meta.llama-XXXX`) LLM	BC User Property Value
PrivateFields	SentimentValue

Display Summary

New Pop-Up Applet Generative AI Response Popup Applet with corresponding Business Component, Class and WebTemplate has been created to display the Summary.

Generative AI Response Popup Applet Configuration

Business Component

Name	Class	New / Existing
GenAI Response	CSSBCVGenAIPopup	New

Class

Name	DLL	New/Existing
CSSBCVGenAIPopup	SSCABCBC	New

New Business Service User Property has been created to refer to the Popup Applet.

Name	Value	New / Existing
GenAIPopUpApplet	Generative AI Response Popup Applet	New

Configure Business Component User Properties for Multimodal AI

To configure Business Component User Properties: Use Case 1

The above configurations for RunTime Event, BC User properties, Applet/View/Screen/Link/BO configurations are given for the OOTB use case. Please configure the same accordingly for your use cases.

1. **Required Seed Data changes:**
   a. Click on **Sitemap**.
   b. Navigate to **Administration- Application** > **Views**.
   c. Navigate to **Generative AI Configuration List** View and create a new record as per the following table:

Prompt Name	Prompt Value
ClosingSummaryPrompt	Given below is a transcript of a customer support interaction. The customer support interaction can contain an attached image or document as well. Please holistically summarize the entire text and the image data. The summary should highlight the main issue, the exact device or account details, and the actions undertaken to resolve it. Do mandatorily summarize the image or document if present. Ensure that the summary maintains the contextual history accurately and does not infer or create any conclusions about the customer's state of mind or satisfaction unless explicitly stated by the customer. Strictly avoid adding any information that is not clearly present in the interaction. Please look for the image or document attachment. The textual data is given below:
TransferSummaryPrompt	Given below is a transcript of a customer support interaction. The customer support interaction can contain an attached image or document as well. Please holistically summarize the entire text and the image data. The summary should highlight the main issue, the remaining or pending concern, the exact device or account details, and the actions undertaken to resolve it. Do mandatorily summarize the image or document if present. Ensure that the summary maintains the contextual history accurately and does not infer or create any conclusions about the customer's state of mind or satisfaction unless explicitly stated by the customer. Strictly avoid adding any information that is not clearly present in the interaction. Please look for the image or document attachment.

2. **Required Repository Changes:**
   a. Create Business Component User Properties.
   b. Add following Business Component User Properties while using the LLAMA (meta.llama-XXXX) LLM:

BC User Property Name	BC User Property Value
SummarizeChatText_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
SummarizeChatText_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]

BC User Property Name	BC User Property Value
SummarizeChatText_Param_3	lovInfo:BC_FIELD=Type;LOV_TYPE=TODO_TYPE;LOV_LIC=CLOSING SUMMARY, TRANSFER SUMMARY [This parameter is used to pick the appropriate Localization value]
SummarizeChatText_Param_4	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
SummarizeChatText_Param_5	inputFromOtherBC:BUSCOMP=Service Request,FIELD=Abstract;BUSCOMP=Order Entry - Orders,FIELD=Order Priority,Account [This is the list of other BC fields whose input values will be send to the LLM along with that of the primary BC. Please note that all the other BC's should be part of the same BO]
SummarizeChatText_Param_6	output:FIELD=Description;MAX_FIELD_LENGTH=250 [This is the BC field to which the LLM response will be populated. Please modify the MAX_FIELD_LENGTH based on the respective BC Field length]
SummarizeChatText_Param_7	prompt:CLOSING SUMMARY=ClosingSummaryPrompt;TRANSFER SUMMARY=TransferSummaryPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
SummarizeChatText_Param_8	minimumInputCharLength:250 [This is the minimum input length to the LLM]
SummarizeChatText_Param_9	runtimeType:LLAMA [This is the minimum input length to the LLM]
SummarizeChatText_Param_10	imageUrl:BUSCOMP=Service Request Attachment,FIELD=ActivityFileName,SORT_SPEC=ActivityFileDate(DESC) [This is the input Field to specify the Image Attachment to the LLM]

> **Note:** SummarizeChatText_Param (1-8) are available out of the box. Whereas, SummarizeChatText_Param (9-10) requires configuration.

3. **Modify `ociconfig.properties` file, make the following entry in the [GENAI] section:**

```
multimodal_image_type = png,jpg,jpeg
multimodal_max_image_size = 5242880
multimodal_image_for_summarize = true
```

To configure Business Component User Properties: Use Case 2

1. **Required Seed Data changes:**
   a. Click on **Sitemap**.
   b. Navigate to **Administration- Application** > **Views**.
   c. Navigate to **Generative AI Configuration List** View and create a new record as per the following table:

Prompt Name	Prompt Value
ExtractImagePrompt	Analyze the provided image and extract the address details. Extract the mentioned Address, City, State, Zip Code and the Country from the image. Do not extract any information which is not present in the image. The response should contain only the address, city, state, zip code and the country details. Display the attribute name, followed by a colon and its value and then leave a line space after each attribute. Do not include any other text in the response.

2. **Required Repository Changes:**
   a. Create Business Component User Properties for Service Request Attachment.

BC User Property Name	BC User Property Value
ExtractImageChat_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
ExtractImageChat_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
ExtractImageChat_Param_3	prompt:ExtractImagePrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
ExtractImageChat_Param_4	imageUrl:BUSCOMP=Service Request Attachment,FIELD=ActivityFileName [This is the BC field whose input value will be send to the LLM]
ExtractImageChat_Param_5	runtimeType:LLAMA [Type or provider of the LLM like LLAMA]
ExtractImageChat_Param_6	outputToOtherBC:BUSCOMP=GenAI Image Extract Response BC,FIELD=Address Maint - New Addr Line 1:Address,Address Maint - New City:City,Address Maint - New Country:Country,Address Maint - New State:State,Address Maint - New Zip Code:Zip Code; [This user property is used when we need to populate the output to other BC, apart from the current BC.]. FIELD=<BC Field>:<Param from LLM Response>

BC User Property Name	BC User Property Value
Named Method 1	"Extract", "INVOKESVC", "Service Request Attachment", "SiebelOCIAIService", "InvokeOCIAI", "'Context'", "'GenAI:ExtractImageChat'" [This is the BS Method invoked on click of the Button to perform functionality like Extracting content from an image]

3. **Modify `ociconfig.properties` file, make the following entry in the [GENAI] section:**

```
multimodal_image_type = png,jpg,jpeg
multimodal_max_image_size = 5242880
multimodal_image_for_summarize = true
```

Configure Business Component User Properties and activate Runtime Event for GSAT Score

Configure Seed Data for GSAT

The above configurations for RunTime Event, BC User properties, Applet/View/Screen/Link/BO configurations are given for the OOTB use case. Please configure the same accordingly for your use cases.

Follow these steps:

1. Click on **Sitemap**.
2. Navigate to **Administration- Application** > **Views**.
3. Navigate to **Generative AI Configuration List** View and create a new record as per the following table:

Prompt Name	Prompt Value
GSATPrompt	Provide the Agent Effort Score, Empathy Score, Customer Effort Score and Agent Knowledge Score Satisfaction Score by evaluating the following. Assign a score exactly in single digit from 1 to 5 for each criterion and should not be in fractions, with 1 being minimal effort and 5 being maximum effort. The scores should reflect the customer's feedback and comments. Also, provide Resolution Achievement(Yes or No) based on whether the customer's issue was fully resolved by the end of the interaction. Below is the customer's feedback:

4. Add responsibility to the **Service Request AI Info** View.

> **Note:** Make sure to launch application with `/editseeddata` for all Seed data changes.

   a. Click on **Sitemap**.
   b. Navigate to **Administration - Application** > **Views**.
   c. Create a new record as:

View	Description
Service Request AI Info View	Service Request AI Info View

   d. Add **Siebel Administrator** responsibility to this record using responsibilities child applet.

e. Once responsibility is added, drilldown on **Siebel Administrator** which takes you to **Responsibilities** View.
f. Click on **Clear cache** button.

Activate Runtime Event for GSAT

1. Click on **Sitemap**.
2. Navigate to **Administration- Runtime** Events.
3. Navigate to Action Sets view to find the below configuration:

Action Sets for GSAT use case

Name	Active	Description
OCI Generative AI Service GSAT Data	True	Trigger when SR status is changed to Closed

Actions to be populated as below which is used by GSAT use case

Name	Action Type	Sequence	Active	BS Name		
GSAT	BusService	1	True	SiebelOCIAIService	InvokeOCIAI	GenAI:G

Events:

Sequence	Object Type	Object Name	Event	Subevent	Conditional Expression	Action Set
1	BusComp	Service Request	SetFieldValue	Status	SystemPreference('' = "Y" AND [Status] = LookupValue ('SR_STATUS' , 'Closed') AND [Description] IS NOT NULL	OCI Generative AI Service GSAT Data

Creating a New Field

Create a new filed using the following values:

Name	Column	Calculated	Calc Value	Force Active	Length	Predefault Value	Postdefault Value	Type
Agent Effort Score	AGNT_EFRT_SCR	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_NUMBER
Agent Effort Score Reason	AGNT_EFRT_SCR_RN	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_TEXT

Name	Column	Calculated	Calc Value	Force Active	Length	Predefault Value	Postdefault Value	Type
Agent Knowledge Score	AGNT_ KNWLDG_SCR	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_ NUMBER
Agent Knowledge Score Reason	AGNT_ KNWLDG_ SCR_RN	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_TEXT
Customer Effort Score	CSTMR_ EFRT_SCR	N/A	N/A			N/A	N/A	DTYPE_ NUMBER
Customer Effort Score Reason	CSTMR_ EFRT_SCR_RN	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_TEXT
Empathy Score	EMPATHY_ SCR	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_ NUMBER
Empathy Score Reason	EMPATHY_ SCR_RN	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_TEXT
Resolution Achievement	RSLTN_ ACHVMNT	N/A	N/A	N/A	30	N/A	N/A	DTYPE_TEXT
Resolution Achievement Reason	RSLTN_ ACHVMNT_ RN	N/A	N/A	N/A	N/A	N/A	N/A	DTYPE_TEXT
Parent BC Name	N/A	True	ParentBCName	True	N/A	N/A	N/A	N/A
Parent Row Id	PAR_ROW_ID	N/A	N/A	N/A	15	Parent: 'Service Request.Id'	N/A	DTYPE_ID
Parent Type Code	PAR_TYPE_CD	N/A	N/A	N/A	75	N/A	Field: 'Parent BC Name'	DTYPE_TEXT

To create new record under Business Object:

1. Query for the business object 'Service Request'.
2. Under Business Object Component, create new record as:

Business Component	Link
AI Information BC	Service Request/AI Information BC

Screen View

1. Query for the screen 'Service Request Screen'.

2. Under Screen View, create a new record as:

Name	View	Type	Parent Category	Sequence	View Text-String Reference	Menu Text-String Reference
Service Request AI Info View	Service Request AI Info View	Detail View	Service Request List	191	SBL_AI_ASSIST	SBL_AI_ASSIST

Configure Business Component User Properties for GSAT

Business Component User Properties for GSAT:

BC User Property Name	BC User Property Value
GenerateChatGSAT_Param_1	compartmentId: <CHANGE_ME> [Pick the value from OCI tenancy or OCI configuration file]
GenerateChatGSAT_Param_2	servingMode:ON_DEMAND [Possible values are ON_DEMAND or DEDICATED]
GenerateChatGSAT_Param_3	input:FIELD=Description [This is the BC field whose input value will be send to the LLM]
GenerateChatGSAT_Param_4	inputFromOtherBC:BUSCOMP=Action,FIELD=Description,Comment [This is the list of other BC fields whose input values will be send to the LLM along with that of the primary BC. Please note that all the other BC's should be part of the same BO]
GenerateChatGSAT_Param_5	prompt:GSATPrompt [This is the input prompt to the LLM which is/are defined in the Administration - Generative AI screen]
GenerateChatGSAT_Param_6	outputToOtherBC:BUSCOMP=AI Information BC,FIELD=Agent Effort Score:Agent Effort Score,Agent Knowledge Score:Agent Knowledge Score,Customer Effort Score:Customer Effort Score,Empathy Score:Empathy Score,Resolution Achievement:Resolution Achievement [This is the BC field to which the LLM response will be populated. Please modify the MAX_FIELD_LENGTH based on the respective BC Field length]
Always Enable Child: AI Information BC	TRUE

Generative AI Service Use Cases

This topic describes the following sample Generative AI use cases:

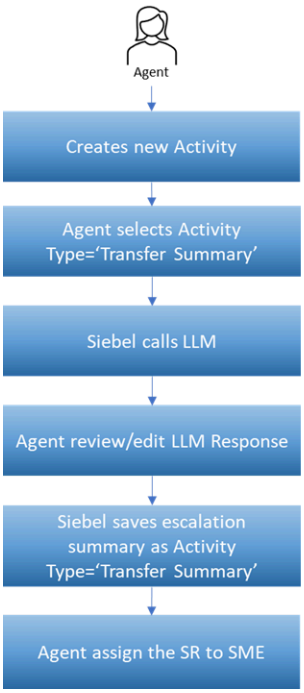
- *Use Case 1: Analyze Sentiment at Service Request and Activities Level*.
- *Use Case 2: Generate Transfer and Closing Summary*.
- *Use Case 3: Multimodal AI*
- *Use Case 4: Generated Satisfaction Score*

Use Case 1: Analyze Sentiment at Service Request and Activities Level

In this scenario, Generative AI Service extracts the individual aspects in the inbound communication (e-mail, call) received by a call center agent and classifies each of the aspects into one of the polarity classes - positive, negative, and neutral. You can perform Sentiment Analysis at Service Request level and Activities level. However, Sentiment at Activities level takes precedence over Service Request level during analysis.

Use Case 2: Generate Transfer and Closing Summary

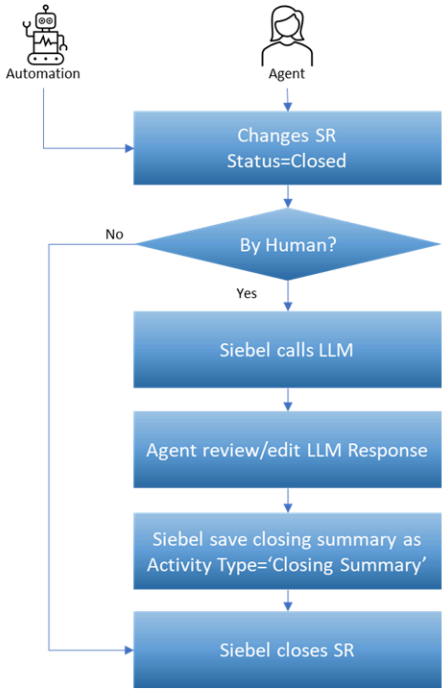
In this scenario (illustrated in the following image), Generative AI automatically generates a Summary of the conversation, highlighting key points, action items, and resolutions. Transfer Summary for another Agent is generated in case Call Center Agent needs to escalate/transfer Service Request to another Agent and a Closing Summary to be sent to customer is generated in case of a successful resolution.



As shown in the above image, a typical flow involved in generating a Transfer Summary is a follows:

1. User needs to create new activity and select `Type=Transfer` Summary.
2. Siebel will trigger call to the configured Large Language Model to generate summary based on all inbound and outbound communications.

3. User will have an opportunity to review and edit response before saving Transfer Summary and assigning Service Request to another agent.



As shown in the above image, a typical flow involved in generating a Closing Summary is a follows:

1. User needs to create new activity and select `Type=Closing` Summary.
2. Siebel will trigger call to the configured Large Language Model to generate summary based on all inbound and outbound communications between call center agent and customer.
3. User will have an opportunity to review and edit response before saving Closing Summary.

Use Case 3: Multimodal AI

In this scenario, Generative AI integrates and processes multiple types of data such as text, and images—to generate more comprehensive insights and responses. This bridges the gap between vision and language, interpreting the context, and delivering results in a contextually relevant response.

Use Case Scenario 1: Closing or Transfer Summary

After completing all the work associated with a Service Request and issue is resolved, Agent can generate a Closing Summary. Transfer Summary for another Agent is generated in case Agent needs to transfer Service Request to another Agent.

- Create new activity and select `Type=Closing Summary / Type=Transfer Summary`.
- Drawer window displays the `Closing / Transfer Summary`.
- User will have an opportunity to review and edit response before saving `Closing / Transfer Summary`.

Note:

1. After a new Closing / Transfer Summary activity is selected, Siebel will trigger call to the configured Large Language Model (LLM) to generate a Closing / Transfer Summary based on all inbound, outbound communications and Service Request Attachments (images)
2. Currently, only the last uploaded Attachment(image) in the Service Request Attachment Applet is sent to the Large Language Model (LLM)
3. The file formats supported are JPEG, JPG, PNG

Use Case Scenario 2: Creating a Service Request

While entering the necessary fields associated with a Service Request, Agent can use AI model to to automatically detect predefined values, extract text from documents uploaded and auto-populate in the respective field

- In the Service Requests list, create a new record and save
- In the Attachments applet, click Add File / Add URL
- Click Extract button
- Pre defined values are auto-populated in the respective fields
- User will have an opportunity to review and edit before saving

Note:

1. After Extract button is clicked, Siebel will trigger call to the configured Large Language Model (LLM) to extract text, and other key data from the image
2. Currently, you can pass only a single image per Large Language Model (LLM) call for extraction
3. The file formats supported are JPEG, JPG, PNG

Configuration and Authentication

To configure Generative AI capabalities

- To enable and configure Generative AI capabilities, set the following System Preference:

Name	Vaue
EnableOCIAIGenAI	N (to be changed to 'Y' to activate feature)

Note: By default it is disabled.

- Create seed data, as required (using the database setup wizard or through manual configuration)

To authenticate Generative AI

- Download the Authentication file from OCI which has the Credential details like userId, fingerprint, and tenancy.
- Rename the file `config` to `ociconfig.properties` and place it in Siebel's internal Tomcat's webapps folder.
- Ensure that the `ociconfig.properties` file includes the location of the private key (`.pem`) file.
- Import the necessary certificates as required to both internal and external Tomcats and add it to the Siebel Keystore and Truststore.

Use Case 4: Generated Satisfaction Score

In this scenerio, Generative AI produces intelligent real-time insight by aggregating across a variety of important customer satisfaction indicators. Indicators like, Customer Effort, Agent Effort, Agent Knowledge, and Empathy are evaluated after every interaction or purchase. It is measured on a 5 point scale, where 1 indicates minimal effort and 5 represents maximum effort.

Configuration and Authentication

To configure Generative AI capabalities

- To enable and configure Generative AI capabilities, set the following System Preference:

Name	Vaue
EnableOCIAIGenAI	N (to be changed to 'Y' to activate feature)

> **Note:** By default it is disabled.

To authenticate Generative AI

- Download the Authentication file from OCI which has the Credential details like userId, fingerprint, and tenancy.
- Rename the file `Config` to `ociconfig.properties` and place it in Siebel's internal Tomcat's webapps folder.
- Ensure that the `ociconfig.properties` file includes the location of the private key (`.pem`) file.
- Import the necessary certificates as required to both internal and external Tomcats and add it to the Siebel Keystore and Truststore.

Siebel REST APIs for Generative AI Service

Generative AI REST API can be invoked from any external client or internal Siebel artifacts like Workflow, Business Service, and script.

- SiebelOCIAIWebService supports the Generative AI capabilities (existing Service has been enhanced for Generative AI).
- Business Service Access to be given for *SiebelOCIAIWebService* with correct Responsibility.
- REST API endpoint with verb as POST is as below:

  `https://<hostname>:<port>/siebel/v1.0/service/SiebelOCIAIWebService/InvokeOCIAI`

- Authentication credential is same as that of the Siebel environment (mentioned in the ‘hostname’ of the REST endpoint).
- Supported functionalities with different Large Language Models are Chat (GenerateChatText / SummarizeChatText), GenerateText, SummarizeText, and EmbedText.

Following topics are a part of this topic:

- *REST API for Chat*

- *REST API for Generate Text*
- *REST API for Summarize Text*
- *REST API for Embed Text*

REST API for Chat

```
//Request payload with COHERE command-r
{
 "body": {
 "Context": "GenAI:Chat", //OR "GenAI:GenerateChatText" OR "GenAI:SummarizeChatText"
 "Chat_Param_1": "prompt:Write some facts about Oracle India Pvt Ltd" ,
 "Chat_Param_2": "compartmentId:ocid1.tenancy.oc1..XXXXXX",
 "Chat_Param_3" : "runtimeType:COHERE",
 "Chat_Param_4" : "maxTokens:3500",
 "Chat_Param_5" : "temperature:0",
 "Chat_Param_6" : "servingMode:ON_DEMAND",
 "Chat_Param_7" : "isEcho:true",
 "Chat_Param_8" : "isStream:false"
 }
}

//corresponding Response Payload
{
 "Status": "Success",
 "Output": "CohereChatResponse(super=BaseChatResponse(super=BmcModel(__explicitlySet__=[finishReason,
 chatHistory, text, prompt])), text=1. Oracle India Pvt Ltd is the Indian subsidiary of the American
 multinational computer technology company Oracle Corporation.\n\n2. Oracle India has its headquarters in
 Bangalore, Karnataka. The facility spans across 9 acres and is one of the largest owned by an international
 software company in India.\n\n3. The Indian subsidiary was established in 1994 and has played a significant
 role in Oracle's global strategy.\n\n4. Oracle India Pvt Ltd is a significant research and development hub
 for the company, focusing on product development, support, and management. It has contributed significantly
 to various Oracle products and technologies.\n\n5. The company has multiple offices across India, including
 locations in Gurgaon, Hyderabad, Mumbai, and New Delhi, employing thousands of professionals.\n\n6. Oracle
 India offers a wide range of job opportunities, from software development and engineering to sales,
 marketing, and customer support.\n\n7. It has a strong focus on training and development, providing
 extensive opportunities for employees to enhance their skills and grow professionally.\n\n8. Oracle India
 actively engages in corporate social responsibility initiatives. It has partnered with NGOs and local
 communities to support education, environment sustainability, and social empowerment programs. . . . .",
 "OPCRequestId": "21F32E8D687AAAAAAA/BE22BA603BB123C5E5BBBBBBB/FCCDA06F70EF3CCFCCCCCCCC"
}
```

REST API for Generate Text

```
//Request payload with cohere.command-r-XXXX or LLAMA 70b
{
 "body": {
 "Context": "GenAI:GenerateText",
 "GenerateText_Param_1": "prompt:Write an essay about Indian Sub continental summer in the style of
 Rabindranath Tagore" ,
 "GenerateText_Param_2": "compartmentId:ocid1.tenancy.oc1..XXXXXXX",
 "GenerateText_Param_3" : "runtimeType:COHERE",
 "GenerateText_Param_4" : "maxTokens:2000",
 "GenerateText_Param_5" : "temperature:1"
 }
}

//corresponding Response Payload
{
 "Status": "Success",
 "Output":
 "CohereLlmInferenceResponse(super=LlmInferenceResponse(super=BmcModel(__explicitlySet__=[generatedTexts,
 timeCreated])), generatedTexts=[GeneratedText(super=BmcModel(__explicitlySet__=[id,
 text])id=6f9e7893-4456-4766-89aa-c08d43b04476, text= The Indian Subcontinental summer arrives with a
```

vibrant explosion of life, a dazzling feast for the senses that leaves one utterly enchanted. The air is thick with the fragrant scent of blossoming flowers, their vivid colors painting the landscape in vibrant hues. As the sun rises, it casts a golden glow upon the earth, awakening every creature and nurturing the fertile soil that lies beneath.\n\nIn this sultry season, the days stretch on forever, enveloping all in an embrace of relentless warmth. The relentless beating of the sun's rays on the earth's surface conjures forth an incessant chorus of shimmering heat waves that rise and fall like a rhythmic symphony. Yet, amidst this engulfing warmth, nature reveals her ingenious ways of offering solace.\n\nTrees, lush and leafy, provide a much-needed refuge from the piercing sun. Their outstretched branches sway gently in the breeze, inviting passersby to seek shelter beneath their leafy canopy. Here, in this natural sanctuary, a cool breeze whispers through the foliage, carrying with it a refreshing aroma that invigorates the soul.
\n . . . . . , likelihood=null, finishReason=null, tokenLikelihoods=null)], timeCreated=Wed Jun 26 03:56:25 PDT 2024, prompt=null)",
"OPCRequestId": "21F32E8D687AAAAAAA/BE22BA603BB123C5E5BBBBBBB/FCCDA06F70EF3CCFCCCCCCCC"
}

REST API for Summarize Text

```
//Request payload with cohere.command-r-XXXX
{
 "body": {
 "Context": "GenAI:SummarizeText",
 "SummarizeText_Param_1": "input:Customer says Hi, I recently upgraded my plan to include international calling, but I'm unable to dial overseas numbers. I've checked the documentation and made sure that the number I'm dialing is correct and follows the proper format, but it still isn't working. Can you please help me troubleshoot? Support says Yes, of course. International calling can sometimes be tricky. I would love to help you with this matter. To get started, may I please have your account number and phone number associated with the plan. Customer says Account is 123456 and phoneis 987-654-3210. Support says Thank you. I see that you have an outstanding balance on your account which could be causing the restriction on international calling. To resolve this, you need to pay the balance upfront. Unfortunately, I am unable to process payments, but I'll transfer you to our payment support team who will be able to assist you further and remove the restriction once the payment is complete.Customer says Can you please transfer me immediately? I really need to make this call today.Support says Absolutely! Our payment support team will be better equipped to help you with your urgent matter. Please remain on the line, and you'll be connected to an available agent shortly. If you get disconnected accidentally, you can reach them directly at 456-7890 ext. 2345. We apologize for any inconvenience this has caused." ,
 "SummarizeText_Param_2": "compartmentId:ocid1.tenancy.oc1..XXXXXX"

 }


//corresponding Response Payload
{
 "Status": "Success",
 "Output": "The customer recently upgraded their plan to include international calling, but they are unable to dial overseas numbers. The support representative asks for the customer's account number and phone number (123456 and 987-654-3210 respectively) and determines that the customer has an outstanding balance on their account, which is causing the restriction. To resolve this, the representative can't process the payment themselves, so they transfer the customer to the payment support team who can assist them in paying the balance and removing the restriction. The customer is transferred immediately and given a direct line to the payment support team in case they get disconnected. \n\nWould you like me to help the customer with any other issues?",
 "OPCRequestId": "21F32E8D687AAAAAAA/BE22BA603BB123C5E5BBBBBBB/FCCDA06F70EF3CCFCCCCCCCC"
}
```

REST API for Embed Text

```
//Request payload with cohere.command-r-XXXX
{
 "body": {
 "Context": "GenAI:EmbedText",
 "EmbedText_Param_1": "prompt:If the problem still persists, might need to debug the code. Please set Immediate Post to True for the field Interest in the event. If it did not resolve the issue,try to activate the Total field in the quote BC. This is the new SR in your queue." ,
```

```
 "EmbedText_Param_2": "compartmentId:ocid1.tenancy.oc1..XXXXXXX"

 }
}


//corresponding Response Payload
{
 "Status": "Success",
 "Output": "EmbedTextResult(super=BmcModel(__explicitlySet__=[embeddings, modelId, modelVersion,
 id])id=f16ba6a6-0368-47a4-9384-0089a83064f2, inputs=null, embeddings=[[1.3017578, 0.011962891, -0.39868164,
 -1.3125, 1.1777344, -1.2578125, -1.9111328, -1.7558594, 2.2617188, -1.8447266, 2.2578125, -0.76708984,
 -2.15625, -2.1992188, 1.6982422, 0.82177734, -1.0625, -0.32788086, 0.17468262, -0.2487793, 0.15112305,
 0.59716797, 3.0429688, 0.11425781, -0.54589844, 1.3798828, 1.2939453, 0.7680664, -1.0263672, 0.9848633,
 0.98046875, -0.36328125, -0.6352539, 0.33325195, -1.6826172, 0.03955078, -3.0664062, 0.24401855,
 -2.1816406, 2.6816406, -1.2578125, 0.77197266, -1.0341797, 0.088378906, -0.5395508,
 . . .
 25, 1.1748047, 0.53027344, 0.019500732, 0.79589844, 1.2939453, 1.6904297, -0.50146484, -0.1138916,
 -0.9296875, 1.2880859, -0.85302734, 0.69677734, -2.9550781, 1.9208984, 0.82666016]], modelId=cohere.embed-
english-light-v2.0, modelVersion=2.0)",
 "OPCRequestId": "21F32E8D687AAAAAAA/BE22BA603BB123C5E5BBBBBBB/FCCDA06F70EF3CCFCCCCCCCC"
}
```

Accessing Large Language Models (LLMs) with APIs

The API-based integration methodology enables developers to connect the Siebel CRM application to large language models (LLMs) that support their specific Generative AI use-cases. It provides a single interface to access LLMs from various model providers including Cohere and Meta models available on Oracle Cloud Infrastructure (OCI).

- *About API based Integration*
- *Setting up and configuring API access*

About API based Integration

The API-based integration provides the option to call different Generative AI endpoints The APIs can be invoked using external clients like Postman or from any Siebel interface layer (For Example: Siebel UI).

The API request includes “provider” and “model” as parameters. In addition to this, other configuration parameters that are required vary depending on the model provider and the chosen LLM.

Setting up and configuring API access

This topic explains the following:

- *Token-based and API key-based authentication*
- *Invoking Generative AI use cases from Siebel UI*
- *Passing JSON Parameters*
- *Making API calls using Postman*
- *Repository changes*

Token-based and API key-based authentication

To use access token authorization:

- Provide the credential (Authorization) details in the ociconfig.properties file, as per your respective provider.
- Update Authorization header Bearer value. Here <token> is just for reference.
- You can also authorize via api_key.
- For example:

```
[AUTH]
Authorization=api_key <value>
```

- Import the necessary certificates if required in your environment or as mandated by the provider.

Provider	ociconfig.properties

OCI	`[AUTH]`
	`user=<oci_user_id>`
	`fingerprint=<oci_user_finger_print>`
	`tenancy=<tenancy_id>`
	`region=<region>`
	`key_file=<.pem file path>`

OpenAI	`[AUTH]` `Authorization=Bearer <token>`

Google	`[AUTH]`
	`Authorization=Bearer <token>`
	`X-goog-user-project=<project_id>`

Invoking Generative AI use cases from Siebel UI

To invoke Generative AI use cases from Siebel UI:

- Create Business Component User Prop as shown below:

  Note: User Prop “provider” and “model” are mandatory.

- An example is shown below for the Sentiment Analysis use case from Action Business Component for OCI Generative AI endpoints.

BU User Property Name	BC User Property Value
GenerateChatText_Param_1	compartmentId:ocid1.tenancy.oc1..XXXXXXXXXXX
GenerateChatText_Param_2	servingMode:ON_DEMAND
GenerateChatText_Param_3	input:FIELD=Description
GenerateChatText_Param_4	prompt:SentimentPrompt
GenerateChatText_Param_5	output:FIELD=Sentiment

BU User Property Name	BC User Property Value
GenerateChatText_Param_6	lovInfo:LOV_TYPE=GENAI_SENTIMENT;LOV_LIC=POSITIVE,NEGATIVE,NEUTRAL
GenerateChatText_Param_7	outputToOtherBC:BUSCOMP=Service Request,FIELD=Sentiment
GenerateChatText_Param_8*	provider:oci**
GenerateChatText_Param_9*	cohere.command-r-XXXX**

- An example is shown below for the Sentiment Analysis use case from Service Request Business Component for sample Model Provider.

BU User Property Name	BC User Property Value
GenerateChatText_Param_1	compartmentId:ocid1.tenancy.oc1..XXXXXXX
GenerateChatText_Param_2	servingMode:ON_DEMAND
GenerateChatText_Param_3	input:FIELD=Description
GenerateChatText_Param_4	prompt:SentimentPrompt
GenerateChatText_Param_5	output:FIELD=Sentiment
GenerateChatText_Param_6	lovInfo:LOV_TYPE=GENAI_SENTIMENT;LOV_LIC=POSITIVE,NEGATIVE,NEUTRAL
GenerateChatText_Param_7*	provider:openai**
GenerateChatText_Param_8*	model:gpt-4o**

*New Parameters to be added (remaining are out-of-the-box parameters)

**Specify value based on “provider” and “model”

Passing JSON Parameters

To send JSON parameters in GET and POST requests:

- Define the JSON parameters such as path, action and so on as shown below

Parameter Name	Definition
Path	Specify the URI published by the LLM provider
Action	Supported POST and GET
requestPayload	Input payload published by the LLM provider need to be enclosed within this parameter
Prompt	Dynamic texts sent by the client (Siebel, Postman, and so on) would be substituted
responseField	Response text parameter name, can differ across the provider + model combinations

Parameter Name	Definition
	Example: For Cohere, the response field is “text”, for OpenAI response field is “content” and so on. It is used to display the response in UI

- An example is shown here for outbound calls in JSON format for OCI Cohere Command R

JSON File Name	JSON File Contents

oci_cohere.command-r-08-2024	<pre>{
	"path": "https://inference.generativeai.us-chicago-1.oci.oraclecloud.com/20231130/actions/chat",
	"requestPayload": {
	"chatRequest": {
	"apiFormat": "COHERE",
	"message": "<prompt>"
	},
	"compartmentId": "<compartmentId>",
	"servingMode": {
	"modelId": "cohere.command-r-08-2024",
	"servingType": "ON_DEMAND"
	}
	},
	"action": "POST",
	"responseField": "text"
	}</pre>

- An example is shown here for outbound calls in JSON format for a sample Model Provider

JSON File Name	JSON File Contents

google_gemini-1.5-flash-001.json	<pre>{
	"path": "*https://us-central1- aiplatform.googleapis.com/v1/projects/suryageminiproject1/locations/us-central1/publishers/google/models/gemini-1.5-flash-001:generateContent*",
	"action": "POST", "responseField":
	"text", "requestPayload": { "contents": [{ "role": "user", "parts":
	[{ "text": "<prompt>" }] }] }}</pre>

Making API calls using Postman

- An example is shown here for making API calls using Postman for OCI.

URL	Body

https://%3Chost-%20name%3E/Siebel/v1.0/service/%20SiebelGenericAIWebService/InvokeGenericAI	<pre>{ "body": {
	"provider": "oci",
	"prompt": "What is helidon SE",
	"model": "cohere.command-r-08-2024",
	"compartmentId":"ocid1.tenancy.oc1..**********"
	}
	}</pre>

- An example is shown here for making API calls using Postman for sample Model Provider

URL	Body

OpenAI	<pre>"body": {
	"provider": "openai",
	"prompt": "Tell me the capital of Karnataka",
	"model": "gpt-4o"
	}</pre>

Repository changes

- Create a new Business Service 'SiebelGenericAIWebService' and define the Business Service at the Application User Prop.
- Grant 'Business Service Access' to the new Business Service 'SiebelGenericAIWebService'.

Business Service:

Name	Project	Class	Display Name – String Reference
SiebelGenericAIWebService	EAI Business Services	CSSJavaBusinessService	SBL_GENERIC_AI_WEB_SERVICE

Business Service User Prop:

Name	Value
@class	com.siebel.ociaiservice.GenericAIWebService

41 Oracle Knowledge Management Integration for Service Requests for Other Siebel Applications

Enabling Oracle Knowledge Management Integration for Service Requests for other Siebel Applications

You can enable Out of the Box Siebel Field Service Application for Oracle Knowledge Management Integration.

If you want to enable it for other Siebel Application, for example; Call Center, Sales, Public Sector etc, follow these steps:

1. Create Workspace in Siebel Web Tools.
2. Go to Application Object and query for Application where Oracle Knowledge Management Integration need to be enabled.

   > **Note:** For Call Center application, it is **Siebel Universal Agent**, and for Siebel Sales it is **Siebel Sales Enterprise**.

3. Expand to Application User Property
4. Add Client Business Service User Property as mentioned in the table, for Business Service “KM Integration Service”.

Application User Property	Value
`ClientBusinessService<N>`	KM Integration Service

   > **Note:** The value of N would depend on how many entries are added for “ClientBusinessService”.

5. Version the workspace, submit and deliver the workspace changes.

   These changes need to be done to all Siebel applications customer is using in their Siebel enterprise.
6. Set System Preference “Enable KM Service Integration” to Y.
7. Restart the Siebel Servers, you can now use the Knowledge Management Integration.

Troubleshooting

On Service Request Screen Views in case, you see error:

An error occurred invoking method “SearchArticle” for Knowledge Management Web Service.(SBL-SCH-00520)

Resolution: Make sure above steps are followed for your Siebel Application.

42 Siebel Intelligent Data Archival

Siebel Intelligent Data Archival

This chapter covers the following topic:

- *Overview of Siebel Intelligent Data Archival*
- *Component Parameters and Data Flow*
- *Installing Siebel Intelligent Data Archival*
- *Deploying the Archival Microservice Package*
- *Configuring Helidon Microservices*
- *Configuring Archival Source*
- *Archival Rule Lifecycle*
- *Retrieving Archived Data Records*
- *Best Practices for Configuring Archival Rule*

Overview of Siebel Intelligent Data Archival

The **Siebel Intelligent Data Archival** provides an automated, configurable, and secure approach to offload infrequently accessed data from the primary Siebel database.

This solution helps optimize system performance by offloading rarely accessed data typically 80–90% of historical records while ensuring compliance with data retention policies. With configurable archival rules and secure access to archived data, organizations can:

- **Reduce active database size**, improving Siebel performance and responsiveness.
- **Minimize upgrade downtime**, as smaller databases lead to faster schema and data migrations.
- **Lower total cost of ownership (TCO)** by reducing storage, backup, and maintenance requirements.
- **Ensure compliance and audit-readiness** by retaining historical data in a structured, retrievable format.

Key Functionalities

The **Siebel Intelligent Data Archival** in Siebel CRM 25.12 emcompasses:

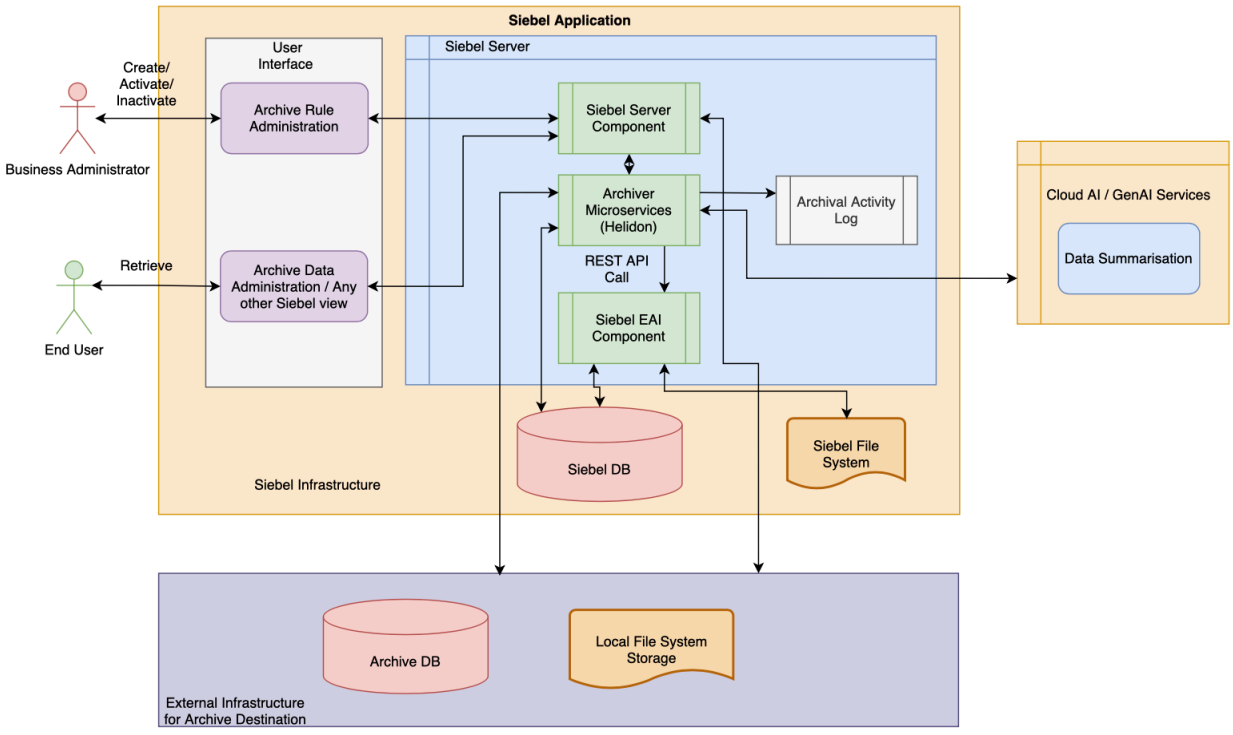
Functionalities	Description
Comprehensive Archival Framework	End-to-end solution to archive Siebel data from Production Database based on customizable organizational rules.
Supports On-Prem and Cloud Deployments	Works seamlessly across both on-premises and cloud environments.
Compatible Databases	Compatible Databases : Oracle

Functionalities	Description
Parent-Child Archival Capability	Option to archive related child entities along with parent entity for maintaining referential consistency.
Attachment Archival Support	Ability to archive File System attachments associated with Siebel records.
Field based Summary Retrieval	Ability to define certain fields that contain the data summary. Helps in quickly understanding the archived data
AI-based Summary Retrieval	Enables retrieval of summarized insights from archived data instead of full datasets using OCI AI integration.
Full Data Retrieval on Demand	Provides flexibility to retrieve the archived data in real time and view them in Siebel Application.
Configurable Archival Destinations	Supports multiple destinations. Database and File System for archival storage.

Component Parameters and Data Flow

The **Siebel Intelligent Data Archival** is a modular, microservices-driven framework that integrates seamlessly with the Siebel CRM application to perform secure, rule-based archival of data and attachments. The architecture leverages **Siebel REST infrastructure, Helidon microservices** for archival, summarization, and retrieval. Optional OCI AI/GenAI capabilities are also used to get the Intelligent Data Summary.

The high-level solution overview is depicted in the following diagram:



Summary of End-to-End Flow

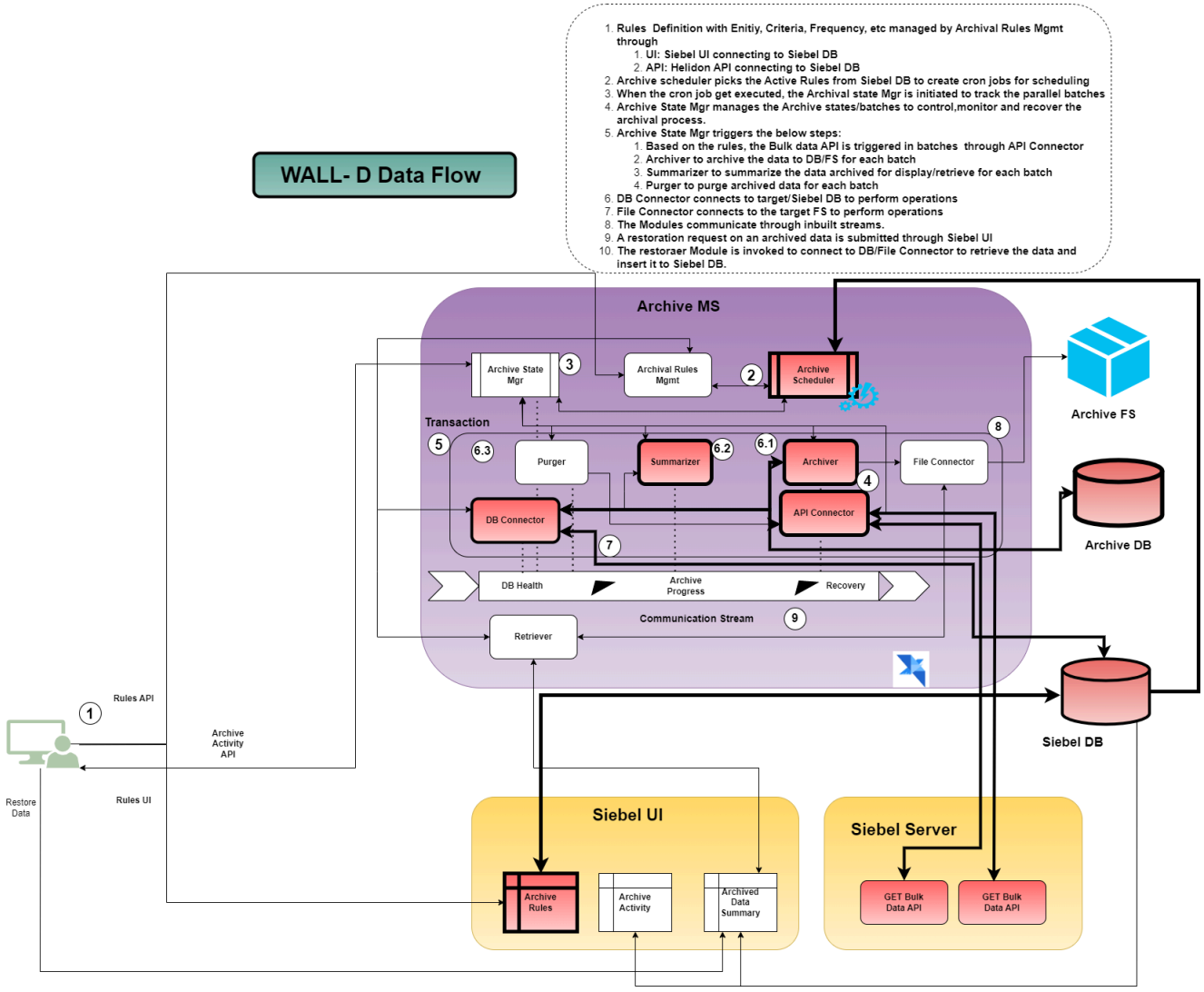
1. **Rule Definition:** Business Administrator defines archival rules in Siebel.

2. **Archival Trigger:** Activating the Rule will store and schedule the rule from Helidon microservices.
3. **Microservice Invocation:** Helidon Microservices perform Siebel REST API calls.
4. **Data Movement:** REST response is read by Helidon which contains details of data/attachments from Siebel DB and File System.
5. **Archival Storage:**Data is written back to configured archived destination.
6. **AI Summarization (Optional):** OCI AI Summarisation feature is used to get data summary.
7. **Audit Logging:** Archival activity is logged back in Siebel.
8. **Retrieval:** End users retrieve summaries or complete records as needed.

About Helidon Microservices

The Helidon-based Microservice acts as the core engine for executing archival operations. It receives trigger requests from Siebel via REST API calls, processes eligible data, and performs the transfer to the designated archival target.

Following is the detailed workflow of Helidon Microservices internal architecture and data movement.



Installing Siebel Intelligent Data Archival

This release delivers both Siebel application updates and an external microservice deployment package to enable the archival framework.

Nature of Changes

Category	Description
Binary Changes	Core Siebel binaries have been enhanced to support archival orchestration via new Archival Administration views. New siebel-data-archival.zip package containing • siebel-data-archival.jar to setup Helidon microservices. • siebel-data-archival.zip also includes ArchivalDBSetup.jar to setup schema on target DB
Seed Data Changes	New seed data entries are delivered to enable rule-based archival configuration and monitoring within Siebel.
Repository (NEO) Changes	Repository changes under the **NEO model** include new metadata objects that support rule management, integration, and logging
Schema Changes	Database schema changes introduced as part of post-install setup.

These changes establish the Siebel-side framework required for integration with the external Helidon based Data Archival Microservices.

Prerequisites

Before installation and configuration:

- Verify Siebel REST API endpoints are configured and functional.
- Install Java21 on the target machine for running the Helidon microservice.
- Ensure secure network communication between the Siebel server and the Helidon host.

PostInstall Database Setup

After applying the latest Siebel patch:

1. Run the Post Install DB Setup utility included in the update package.

   This step introduces the required schema objects (tables, indexes, and sequences) for archival rule management and logging.

Steps for Target DB Setup

1. Unzip siebel-data-archival.zip from `<Siebel Build>\ses\siebsrvr\BIN\siebel-data-archival.zip`.
2. ArchivalDBSetup.jar is packaged inside siebel-data-archival.zip. Make sure ArchivalDBSetup.jar is present in the same folder as siebel-data-archival.jar .

3. ojdbc11-23.6.0.24.10.jar is packaged as part of siebel-data-archival.zip under \libs. Provide the FS path for ojdbc11-23.6.0.24.10.jar in the following command after unzipping it.
4. Provide the Target DB details using command line arguments.
5. It should connect to the DB and create tables and sequences by executing the following command.

Windows:

Command:

```
java -cp "<fs>\ArchivalDBSetup.jar;<fs>\libs\ojdbc11-23.6.0.24.10.jar"
com.siebel.siebarchivaldbsetup.ArchivalDBSetup -h <server> -o <port> -s
<instance> -u <tableowner> -p <tableowner_password> Example : java -cp
"C:\siebel-data-archival\target\ArchivalDBSetup.jar;C:\siebel-data-archival\target\libs
\ojdbc11-23.6.0.24.10.jar"
com.siebel.siebarchivaldbsetup.ArchivalDBSetup -h
phoenix248484.appsdev.fusionappsdphx1.oraclevcn.com -o 1551 -s qa484 -u ORA484130 -p ORA484130
```

Linux:

Command:

```
java -cp "<fs>/ArchivalDBSetup.jar:<fs>/libs/ojdbc11-23.6.0.24.10.jar"
com.siebel.siebarchivaldbsetup.ArchivalDBSetup -h <server> -o <port> -s
<instance> -u <tableowner> -p <tableowner_password> Example : java -cp
"/scratch/home/sblqa1/DA/ArchivalDBSetup.jar:/scratch/home/sblqa1/DA/libs
/ojdbc11-23.6.0.24.10.jar" com.siebel.siebarchivaldbsetup.ArchivalDBSetup -h
phoenix248484.appsdev.fusionappsdphx1.oraclevcn.com -o 1551 -s qa484 -u ORA484130 -p ORA484130
```

Deploying the Archival Microservice Package

Once Siebel 25.12 is installed and the database setup is complete:

1. Locate the external deployment package:

   ```
   <Siebel Build>\ses\siebsrvr\BIN\siebel-data-archival.zip
   ```
2. Copy `siebel-data-archival.zip` to the target Helidon host.
3. Extract the contents:

   ```
   unzip siebel-data-archival.zip
   ```

   Resulting structure:

   ```
   /libs

   ArchivalDBSetup.jar

   siebel-data-archival.jar
   ```
4. The `libs` directory contains all required third-party dependencies, including the Helidon runtime and JDBC drivers.

Configuring Helidon Microservices

Following are the steps for Helidon side setup and configuration:

1. Copy the Siebel application certs and save in the FS path.
2. Import the certificate from FS path into "cacerts" of java directory
   a. Java Certificate Location: eg:<jre21>\lib\security\cacerts

      command : <Keytool command>
3. Copy .jks files from Siebel application to Helidon FS path
4. Unzip Helidon Jar
5. configure application.yaml (Refer below steps)
6. Start the Helidon jar

Setting Up Helidon

1. **Helidon Deliverables:**
   a. Copy the `siebel-data-archival.zip` from Siebel Build `<Siebel Build>\ses\siebsrvr\BIN\`
   b. Unzip siebel-data-archival.zip, it contains

      i. \libs
      ii. siebel-data-archival.jar
      iii. application.yaml
      iv. logging.properties
      v. ArchivalDBSetup.jar

Configuring Helidon Server

Yaml Config Sample:

```
server:
 port: <port>
 host: localhost
 tls:
 enabled: true
 private-key:
 keystore:
 type: "JKS"
 key.alias: "<>"
 passphrase: "<>"
 resource:
 path: <path_to_keystorejks>
 truststore:
 type: "JKS"
 key.alias: "<>"
 passphrase: <>"
 resource:
 path: <path_to_truststorejks>
```

Configuring Helidon Logging

Siebel Data Archival leverages Helidon-based microservices for request orchestration and API interactions. To enable consistent, readable, and supportable logging output across these services, you must configure the Helidon runtime to use `java.util.logging` with a standardized formatter and log level definition.

The following sample `logging.properties` file illustrates the recommended configuration for Helidon logs:

```
handlers=java.util.logging.ConsoleHandler
java.util.logging.SimpleFormatter.format=%1$tY.%1$tm.%1$td %1$tH:%1$tM:%1$tS.%1$tL %5$s%6$s%n

# Global logging level. Can be overridden by specific loggers
.level=SEVERE

# Logging level for Helidon WebServer
io.helidon.webserver.level=SEVERE
```

Descriptions:

- **ConsoleHandler**
  Directs all logging output to the console, ensuring logs are immediately visible when services run in containerized or command-line environments.
- **SimpleFormatter.format**
  Defines a timestamped, compact log format aligned with operational standards. The format includes year, month, day, time down to milliseconds, followed by the log message and any associated stack trace.
- **Global Log Level (.level)**
  Sets the default logging level for the entire Helidon application. The recommended level for production environments within the Data Archival solution is `SEVERE`, ensuring only critical events are captured.
- **Helidon WebServer Log Level**
  Allows specific refinement for the Helidon WebServer component. By defining `io.helidon.webserver.level`, administrators can enforce the same severity threshold or override it as required.

Configuring Archival Source

Configuring Archival Source Database

Configure the source Database (DB) from which Data will be archived. The DB is directly used to create summarization and job related data.

> **Note:** Ensure the details are under db: sourceDB: section

Yaml Config Sample:

```
db:
 sourceDB:
 source: "jdbc"
 connection:
 #
 # Oracle configuration
```

```
#
url: "jdbc:oracle:thin:@<hostname>:<port>:<service_name>"
username: "<username>"
password: "<passwd>"
poolName: "myoracle"
initializationFailTimeout: -1
connectionTimeout: 20000
```

Refer to *https://helidon.io/docs/v4/se/guides/dbclient* for more details.

Configuring Archival Source API

Configure the Siebel server Application where EAI component is enabled for the Data Archival to access the Data APIs. The Data APIs in this server is used to query the data that is archived and to delete the data once archived.

> **Note:** Ensure the details are under app: section

- `numberOfParallelSubJobs`: Number of parallel sub jobs to be run at a time in the helidon Server. This will depend on your hardware.
- `batchSize`: Number of records to be processed by a sub job as a batch.

Yaml Config Sample:

```
app:
 numberOfParallelSubJobs: 1
 hostname: <siebel_server_host>
 port: <Siebel_server_port>
 batchSize: 1
```

Configuring Siebel Security

security: Type of security implemented in Siebel EAI Component. Example: sso

Define the details for the required security type required.

```
sso:
 userspec: <SIEBEL_SSO_USERSPEC>
 anonusername: <SIEBEL_USERNAME>
```

Refer to, *https://helidon.io/docs/v4/se/guides/security-oidc* for more details on security.

Configuring Archival Target

1. Configure the Archival Targets for the Data Archival. Two types of targets are supported: FileSystem and Database.
    a. Configure the target DBs under archivalTarget: targetDB: section as DB1, DB2, ...
    b. Configure the target FileSystems under archivalTarget: targetFileSystem: section as FT1, FT2, ...

    > **Note:** NFS/FS path that can be accessed from the machine hosting the Helidon server should be provided for targetfileSystem

Yaml Config Sample:

```
archivalTarget:
 targetDB:
 DB1:
 source: "jdbc"
 connection:
 #
```

```
# Oracle configuration
#
url: "jdbc:oracle:thin:@<hostname>:<port>:<service_name>"
username: "<username>"
password: "<passwd>"
poolName: "myoracle"
initializationFailTimeout: -1
connectionTimeout: 20000

DB2:
source: "jdbc"
connection:
#
# Oracle configuration
#
url: "jdbc:oracle:thin:@<hostname>:<port>:<service_name>"
username: "<username>"
password: "<passwd>"
poolName: "myoracle"
initializationFailTimeout: -1
connectionTimeout: 20000
targetfileSystem:
FT1: "<Path1>"
FT2: "<Path2>"
```

Configuring AI Summarization

Configure the Server where Siebel AI Services are set up for AI summarization under ai: section

Yaml Config Sample:

```
ai:
 hostName: <hostname>
 port : <port>
 compartmentId: "<Compartment ID>"
```

Refer to *Artificial Intelligence (AI) Services for Siebel CRM* for AI Setup and configurations.

Configuring AI Summarization Scheduler

Configure the time slot between which the AI summarization job has to be scheduled under aiScheduler: section. Format: HH:MM:SS

Yaml Config Sample:

```
aiScheduler:
 startTime: "00:00:00" # HH:mm:ss
 endTime: "00:00:00" # HH:mm:ss
```

Configuring Siebel System Preferences

1. Update the HostURL in the **Administration - Application** > **System Preferences**.
   - System Preference Name: Data Archive Service URL
   - System Preference Value: https://<host name>:<port name>/

   Note: Update the host name and port name where the siebel-data-archival.jar is running.
2. Restart Siebel Server after adding System preference.

Archival Rule Lifecycle

The **Archival Rule Framework** in Siebel CRM 25.12 allows administrators to define, activate, and manage archival jobs through the Administration – Data Archive screens.

Each rule defines what data to archive, when to archive it, and how to process associated child entities and attachments.

Archival rules can target either a Database or File System and can optionally include AI Summarization and Attachment Archival.

The Data archival views are placed under a new responsibility: **Data Archive Administrator**. For more information, see *Assigning a Responsibility to a Person*

Creating an Archive Rule

1. Log in to the Siebel Application as an administrator.
2. Ensure the logged in user has the new "Data Archive Administrator" responsibility.
3. Navigate to **Administration – Data Archive** > **Archive Rules**.
4. Click **New** to create a new archival rule record.
5. Enter a unique name for the archival rule (e.g., *Service Request Archive Rule*).
6. Enter the Integration Object (IO) name representing the business entity to be archived (e.g., *Service Request IO*). The IO must contain all Integration Components (ICs) that represent the entity hierarchy to be archived.

   View Mode user property for Archival IO will have to be set to "All". So that Archival user will have access to archive all eligible records.

   Cascade Delete Configuration : Ensure any **Business Components (BCs)** marked with *Cascade Delete* or *Deep Delete* are included in the IO to prevent orphaned data or incomplete archival.
7. Specify how often the archival job should run.
8. Select Daily, Weekly, Monthly, or Yearly. Determines recurrence of archival execution.
9. The date when the archival rule becomes active.
10. The date when the archival rule expires. Once reached, the rule automatically becomes inactive.
11. Defines the time window for job execution on each occurrence. The job only runs during this time window based on the defined recurrence.
12. Define the filter expression for data selection. Use the Expression Designer to choose BC fields and logical conditions. The final expression must be REST API compatible (Siebel REST query format). Example: `[Status] = "Closed" AND [Created] < TimestampAdd(SQL_TSI_YEAR, -2, GetDate()).`
13. Select where archived data will be stored:

    Archive Database: Stores records in the target database schema.

    File System: Stores records as JSON files in the file system.
14. Enter the target configuration name defined in the Helidon application.yaml (e.g., `DB1`, `FT1`).
15. Provide a detailed description of the archival rule purpose and configuration.

Defining Parent Entity Relationships

Parent entity information is used for displaying archived data in Siebel under associated records (e.g., Archived SRs under Account).

1. Enter the list of parent entities associated with the data entity.
2. Use the Expression Designer to select the parent key fields (e.g., `Account Id, SR Id`).
3. Enter as a comma-separated list of field names. Example: `Account Id, SR Id`.

Configuring Archival Options

The following table explains the fields and description:

Field	Description
Archive Options	Select the archival behavior: **Archive with Delete:** Archives the entity and its hierarchy, then deletes the data from Siebel DB. **Direct Delete:** Deletes the data directly from Siebel without archiving. *Use with caution*
Retrieval Required	Defines retrieval behavior: **Yes with Summary:** Data archived in target; summarized in source. Parent entities summarized as key-value pairs. **Yes without Summary:** Data archived but not summarized; parent entities remain unaffected. **No:** Data archived with no summarization or retrieval capability.
Summary Type	Choose from available options of “Field based” summary or “AI Based” summary.
AI Summary Prompt	Provide custom AI prompt tuning text for the summarization model. Example: *“Summarize the customer’s issue resolution history and outcome.”*

Archiving Attachments

Follow these steps:

1. Enable this option to include file attachments in archival.
2. Define attachment fields in the following format: `Parent IC.Attachment IC.DTYPE_ATTACHMENT Field`

   Example 1:

   For Service Request attachments:`Service Request.Service Request Attachment.Activity Attachment Id`

   Example 2:

   For multiple attachments (e.g., SR, Quote, and Action):

```
Service Request.Service Request Attachment.Activity Attachment Id, Quote.Quote
 Attachment.Quote Attachment Id, Action.Action Attachment.Activity Attachment Id
```

Note: In Web Tools, navigate to the Integration Object being archived, query Integration Component Field for `Data Type = DTYPE_ATTACHMENT`, and use those field paths in this configuration.

Activating an Archival Rule

To activate a configured rule:

1. Navigate to **Administration – Data Archive** > **Archive Rules.**
2. Select the rule record to be activated.
3. Verify all mandatory fields and configurations are complete:
    - Data Entity
    - Criteria
    - Archive Target
    - Target Config
    - Frequency, Start/End dates
    - Archive Options
    - Summary Type
    - Retrieval Required
4. Click the **Activate** button.
5. Once successfully activated, the rule status turns **Green** and the Activation Date is auto-populated.
6. The rule becomes eligible for execution by the Data Archive Scheduler within the defined time window.

Inactivating an Archival Rule

To inactivate or expire a rule:

1. Navigate to the Archive Rules view.
2. Select the active rule you wish to deactivate.
3. Click **Deactivate** (or modify the End Date to future date on which the rule becomes inactive.).
4. The rule's status changes to Red (Inactive) and the Expiration Date is updated automatically.
5. The rule will no longer be considered for execution by the scheduler.

Retrieving Archived Data Records

This section describes how to configure Siebel to expose archived data and retrieve archived attachments for analysis, compliance, or reinstatement.

The **Siebel Intelligent Data Archival** framework not only archives data securely but also allows controlled **retrieval and visibility of archived records** within Siebel.

Retrieval can be configured at the UI level (via Archive BCs) for end users and can also be executed at the data level for attachments, depending on the archival target (Database or File System).

Exposing Archived Data in Siebel UI

Archived data can be displayed under its respective parent entities (such as Accounts, Service Requests, or Orders) using **Child Archive Business Components (BCs)**.These BCs are linked to the main parent BC to show historical archived records alongside active records.

Steps to Expose Archived Data:

1. Determine the **parent entity** under which archived data needs to be displayed (e.g., show archived Service Requests under Account).
2. Create a new Business Component (BC) representing the archived data.

   Define its data source as the `S_ARCHIVE_DATA` table.

   Apply a **Search Specification** on the **Data Entity** field to filter archived records relevant to that object.
3. Create a Link between the Parent BC and the Child Archive BC. The link should be based on the Parent Entity ID defined in the corresponding Archive Rule (for example, `Account Id`, `SR Id`).
4. Add the newly created Child Archive BC to the Parent Business Object (BO). Use the Link created in Step 3 to establish the relationship.
5. Create a new **Applet** based on the Child Archive BC to display archived records.- Include relevant fields (e.g., Archive Date, Archived By, Summary, Description).
6. Add the applet to an existing or new View under the parent object (e.g., Account Service Request List View). This will enable users to see both live and archived records in context.
7. Add a **Retrieve** button to the archive applet to allow users to initiate data retrieval.

   Configure the button properties as follows:

   Control: `Retrieve`

   HTML Type: `MiniButtonEdit`

   Method Invoked: `ShowPopup`

   Runtime: `Y`

   Show Pop-up: `Y`
8. Add Control User Property.

   Configure the control with the following user property:

   Mode: Base

   Popup: Data Archive Retrieve Object Popup Applet

Attachment Retrieval

Attachments associated with Siebel business entities, such as Service Requests, Quotes, or Activities, can also be archived and retrieved as part of the Siebel Intelligent Data Archival.

During archival, attachments are stored in Base64-encoded format to preserve data integrity and ensure transportability across storage mediums (Database or File System).

Attachment Retrieval for Database Archive Target

For archival rules that target a Database, all attachments are stored in the `S_ARCH_ATT_STORE` table.

Steps to follow:

1. Identify the Target Data Entity.
2. Use the following SQL command to extract the Base64-encoded attachment data from the archive table:
```
select ATT_OBJ_DATA from
S_ARCH_ATT_STORE where ARCH_OBJ_ID
= <Object ID>
```
3. Use a Base64 decoder to decode the ATT_OBJ_DATA value and to obtain the attachment content.

Attachment Retrieval for File System Archive Target

For archival rules that target the File System, attachments are stored as Base64-encoded files under the defined archival destination directory.

Each archived attachment is associated with a Main Job ID, Batch ID, and Object ID that correspond to the archival job execution.

1. Identify the Target Data Entity and Object ID.
2. Identify the **Main Job ID** and **Batch ID** associated with the Object ID. These values are recorded in:-
    - The Archival Activity Log in Siebel
    - Helidon logs can be viewed in console.
3. Locate the archive file path in the configured target File System as per the following structure:
`<FileSystem_Path>\Base_Service_Request_Archival\Main_Job_<MainJobID>\Batch_<BatchID>\<ObjectID>`
4. Use a Base64 decoder to decode the ATT_OBJ_DATA value and to obtain the attachment content.

Data Restoration

Use standard EIM approach to restore the archived data. Refer to, *Importing Data*

Best Practices for Configuring Archival Rule

Proper configuration of archival rules is critical for achieving optimal system performance and data integrity.

Test and Validate in Non-Production Environments

- Always create and validate new archival rules in a Development (DEV) or Test environment before deploying them to Production.
- Verify that archival logic, frequency, and target connections work as expected without impacting live data.

Define Criteria for Stable and Inactive Data

- Configure archival criteria that filter out older, inactive, or closed records that are unlikely to change.
- Avoid archiving data that may still be updated or queried frequently — doing so can lead to inconsistent parent-child relationships or record reprocessing issues.

Schedule Archival During Off-Peak Hours

- Configure the archival job execution window to run during off-peak business hours.
- This minimizes load on Siebel servers, REST interfaces, and the underlying database.

Revalidate Rules After Metadata or Repository Changes

- Any change in Siebel metadata — such as field renaming, column mapping, or Integration Object modifications — can invalidate existing archival rules.
- After such updates, review all active archival rules and ensure they reference the correct Integration Objects (IOs), fields, and relationships.
- If a rule is no longer valid, inactivate it and create a new rule reflecting the updated metadata.

Ensure Complete Hierarchy in Archival IO

- Confirm that all related child entities are properly included in the Integration Object used for the archival rule:
  - **1:M (One-to-Many)** relationships must be explicitly configured to prevent orphaned child records.
  - **M:M (Many-to-Many)** relationships require inclusion of intersection table entities; otherwise, restoring data may require manual reconstruction of intersection records.

Maintain Referential Integrity During Restoration

- When archiving entities that are referenced by other active Siebel objects (e.g., Contact, Account, or Order), ensure restoration processes update dependent foreign keys to newly generated IDs.
- This prevents broken references and maintains referential integrity in restored data.

Understand and Account for Business Validations

- Archival follows Siebel Business Component and Business Service validations.
- Some entities may enforce rules preventing deletion of active or dependent records (e.g., an active Promotion or Service Request).
- If such validations prevent deletion:
  - Review Siebel logs for details.
  - Manually delete or deactivate the records preventing archival.
  - Future Siebel releases will introduce enhanced data recovery and exception-handling support for such cases.

Archival Process Best Practices

The archival process involves multiple sequential stages — Query, Archival, Summarization, and Delete.

Following the practices below ensures safe and efficient archival execution and cleanup.

If an Archival Job Fails

When an archival job fails, the corrective action depends on the stage where the failure occurred:

Stage	Description	Recommendation Action
Query	Data extraction from Siebel REST API.	No cleanup required — data remains unchanged.
Archival	Data transfer to target database or file system.	No cleanup required — partial data, if any, can be overwritten on re-run.
Summarization	Data summarization in the source Siebel environment.	Identify the failed `Batch ID` in the target system (DB or File System) and delete all

Stage	Description	Recommendation Action
		archived records associated with that batch to prevent duplicate summarization.
Delete	Source record deletion after archival completion.	Search for the `Batch ID` in the target system and remove the related archived records. Additionally, query the Summary table in Siebel and delete the corresponding summarized records.

After cleanup, review Helidon and Siebel logs to correct the underlying issue (such as a validation error, network interruption, or timeout), then re-trigger the archival job.

Operational and Performance Recommendations

- **Monitor System Health:**

  Regularly check Siebel and Helidon service logs (`eai.log`, `data-archival.log`) for latency or failed job patterns.
- **Use Separate Archival Targets per Environment:**

  Configure distinct database schemas or file system paths for DEV, TEST, and PROD to avoid cross-environment data overlap.
- **Retain Logs for Audit:**

  Archive **Archive History**, **Archival Activity Log**, and **Helidon system logs** periodically for auditing and performance analysis.
- **Monitor Network and REST Performance:**

  Use the `/metrics` and `/health` endpoints in Helidon to monitor REST response times, job frequency, and error rates.
- **Avoid Overlapping Rules:**

  Ensure that no two archival rules overlap in frequency or criteria for the same entity set. Overlaps can cause duplicate archiving and inconsistent summaries.
- **Backup Before Initial Archival Run:**

  Take a full backup of Siebel database and file system before running new archival rules for the first time in Production.
- **Regularly Review Expired Rules:**

  Deactivate and purge expired or unused archival rules from the system to improve scheduler performance.

Recovery and Maintenance

- **Validate Restoration Flow:**

  Test the data retrieval and restoration workflow periodically to confirm end-to-end data recovery works as expected.
- **Automate Cleanup:**

  Develop scripts to automatically purge failed batch records and log entries older than a defined retention period.
- **Security and Access Controls:**

Restrict access to archival configuration, logs, and target storage locations to authorized administrators.

- **Version Alignment:**

  Ensure the Siebel version, Helidon service version, and Java runtime version remain aligned as per Siebel 25.12 release certification.