

# **Siebel 8.1.x Application Administration**

**Volume I • Student Guide**

D63799GC10  
Ed 1  
March 2010  
D66355

**ORACLE®**

**Copyright © 2010, Oracle and/or its affiliates. All rights reserved.**

**Disclaimer**

This document contains proprietary information and is protected by copyright and other intellectual property laws. You may copy and print this document solely for your own use in an Oracle training course. The document may not be modified or altered in any way. Except where your use constitutes "fair use" under copyright law, you may not use, share, download, upload, copy, print, display, perform, reproduce, publish, license, post, transmit, or distribute this document in whole or in part without the express authorization of Oracle.

The information contained in this document is subject to change without notice. If you find any problems in the document, please report them in writing to: Oracle University, 500 Oracle Parkway, Redwood Shores, California 94065 USA. This document is not warranted to be error-free.

**Restricted Rights Notice**

If this documentation is delivered to the United States Government or anyone using the documentation on behalf of the United States Government, the following notice is applicable:

**U.S. GOVERNMENT RIGHTS**

The U.S. Government's rights to use, modify, reproduce, release, perform, display, or disclose these training materials are restricted by the terms of the applicable Oracle license agreement and/or the applicable U.S. Government contract.

**Trademark Notice**

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

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

## Table of Contents

---

- Lesson 8 Controlling Access to Customer Data
- Lesson 11 Customizing the User Experience
- Lesson 12 Administering List of Values
- Lesson 13 Administering Initial Data
- Lesson 19 Administering Business Automation
- Lesson 23 Submitting Jobs
- Lesson 24 Siebel State Model
- Lesson 25 Administering Audit Trail
- Lesson 26 Setting System Preferences
- Lesson 27 Administering Assignment Manager

Unauthorized reproduction or distribution prohibited. Copyright© 2014, Oracle and/or its affiliates.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

## Controlling Access to Customer Data

8

Copyright © 2010, Oracle. All rights reserved.

ORACLE

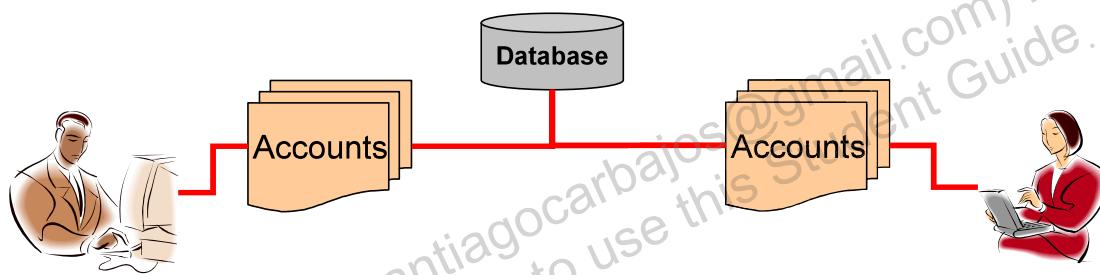
# Objectives

After completing this lesson, you should be able to:

- Describe visibility filters and how they limit what records the user sees

## Business Challenge

- Users often perform the same job functions but on different sets of data
  - For example, sales representatives need access to the records for their own accounts, but not each others'
- Access to some data in the enterprise needs to be restricted
  - Users should only see records they need to do their job



8 - 3

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Business Challenge

**Diagram:** The diagram depicts two users, both examining accounts in the database. Each user should see his or her own accounts, and not other users' accounts.

## Business Solution: Access-Controlled Views

- For customer data, the views accessed using a visibility filter drop-down list from an entity's list applet are all filtered using access control
  - For example; My Accounts, My Team's Accounts, All Accounts, and so forth
- These views may filter the records visible to a user based on:
  - The current user's User ID
  - An employee's current position
    - Non-employee users do not have positions assigned to them
  - An employee's current position's organization
  - The specific filtering mechanism depends on the view

## Relationship Between Views and Data

- Access to views is independent of access to data
  - However, a view may implement an access control mechanism
- The data displayed within a view is based on the access control mechanism for that view

The image contains two screenshots of the Siebel 'My Service Requests' view. Both screenshots have a yellow callout box pointing to the 'Owner' column, which is highlighted with a red border.

**Top Screenshot (Casey Cheng):**

SR #	Summary	Account	Owner
1-1323601	Environment: Production Special Consi	Bell Canada	CCHENG
1-1826242	How do I setup a networked printer on m	Marriott Internationa	CCHENG
1-1856014	Problem with resolution after self-installatir	Marriott Internationa	CCHENG

**Bottom Screenshot (Ted Arnold):**

SR #	Summary	Account	Owner
1-10E-3B	Onsite PM service for Server.	3Com	TARNOLD
1-1404156	Using Siebel Call center with Genesys C	Puma Sports, Inc.	TARNOLD
1-1404201	Dynamic Screen Pops not working on tr	Hydro-Quebec	TARNOLD

Both screenshots include a watermark: Santiago Carvajal (santiago.carvajal@unsw.edu.au) Guide to Siebel 8.1.x Application Administration

8 - 5

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Relationship Between Views and Data

**Screenshots:** The screenshots show the Service Requests for Casey Cheng and Ted Arnold. Both screenshots show the My Service Requests view, but the top screenshot shows the My Service Requests view when logged in as Casey Cheng, and shows only service requests belonging to Casey Cheng. The bottom screenshot shows the My Service Requests view when logged in as Ted Arnold, and shows only service requests belonging to Ted Arnold.

## Views and Access Control

- Most views have an access control mechanism associated with them
  - In particular, all views associated with the visibility filter dropdown list have an access control mechanism specified
  - Specified using the view's Visibility Applet and Visibility Applet Type in Siebel Tools
    - The Visibility Applet Type determines whether visibility depends on user ID, position, or organization
- A record can be restricted by more than one access control mechanism
- A view is preconfigured to use only one mechanism at a time
  - If you want to use another mechanism supported by the business entity, use a different view

ORACLE

8 - 6

Copyright © 2010, Oracle. All rights reserved.

### Views and Access Control

Visibility Applets and Visibility Applet Types are beyond the scope of this course. You should be aware that access control mechanisms are configured in Siebel Tools, and hence a developer can use Siebel Tools to tell you which access control mechanism is being used for a particular view.

**Creating New Access-Controlled Views:** A developer may use Siebel Tools to create a new access-controlled view, but you should first check whether one of the existing views satisfies your requirements.

## Available Visibility Filter Views

- For customer data that is access-controlled, users may have access to one or more of the visibility-filtered views:
  - My views
  - My Team's views
  - All views
  - All Across My Organizations views
  - All Across Organizations views
- Assigning the appropriate views to the appropriate responsibilities is critical for data access control



### Available Visibility Filter Views

**Screenshot:** The screenshot shows the Opportunities List view, with the visibility filter drop-down list expanded to expose the My Opportunities, My Team's Opportunities, All Opportunities, All Opportunities Across My Organizations, and All Opportunities Across Organizations views.

## My Views

- My views show records where your User ID or active position is directly associated with the record
  - For example, My Accounts or My Contacts
- For some records such as Accounts or Opportunities there is a team of positions associated with each record
  - The record appears in My View if your position is on the team

Account Name	Site	Status	Main Phone #
Boston Bakers			
➤ California Dreaming	Santa Cruz		

ORACLE

### My Views

**User or Position?** To determine whether a view uses user-based or position-based access control, consult the *Siebel Security Guide*, or ask your developer to examine the underlying business component's BusComp View Mode and the view's Visibility Applet Type using Siebel Tools.

**Screenshot:** The screenshot shows the My Accounts view, and notes that a sales agent only sees accounts for which the sales agent's position is on the account team.

## My Team's Views

- Are an additional view for managers that allow them to see records assigned to their direct and indirect reports
  - For records with teams of positions, only records where the primary is the direct or indirect report are displayed
  - Also shows records for which the manager is the primary
- Are typically assigned only to manager responsibilities
- Are implemented using the position hierarchy

Site	Main Phone #	Status
Santa Cruz		Active
		Active
		Active
		Active

ORACLE

### My Team's Views

**Screenshot:** The screenshot shows the My Team's Accounts view selected from the visibility filter drop-down list. This navigates the user to the My Team's Accounts view, which shows only those accounts for which the manager's direct or indirect reports are the primary position. This includes accounts for which the manager him- or herself has the primary position.

## My Personal Contacts View

- Is a special view used to display an employee's personal contacts
  - The My Contacts view displays Contacts for which the employee's position is on the contact team
    - A position-based view
  - The My Personal Contacts view displays Personal Contacts of the user
    - A person-based view
- Is separate from the other "My" views
  - Navigate to it using the link bar or site map, rather than the visibility filter drop-down list
  - It is based on a different business component from the other My Contacts views
    - Contact(Personal) rather than Contact

ORACLE

8 - 10

Copyright © 2010, Oracle. All rights reserved.

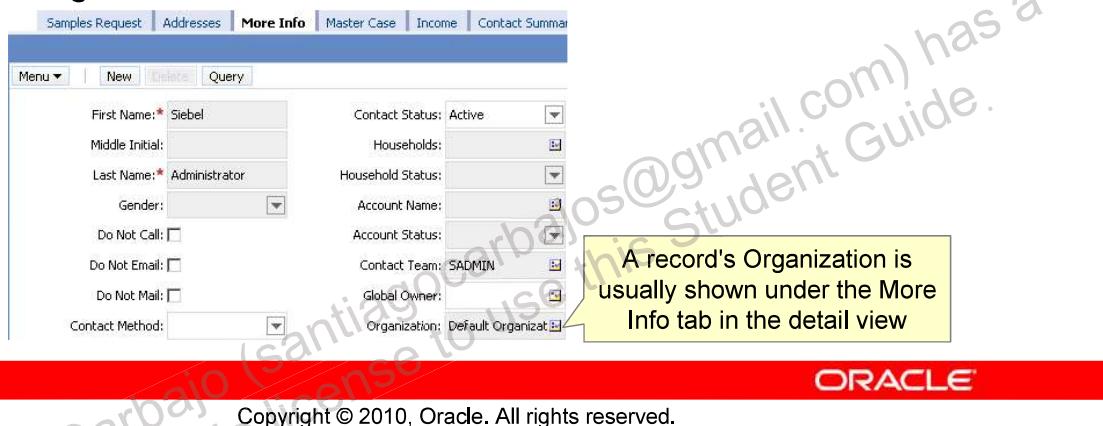
### My Personal Contacts View

**Personal Contacts:** Personal contacts are usually implemented to separate a user's private contacts from his or her publicly-visible contacts. For example, a CEO might have a list of personal contacts who should not be visible to anyone else in the company. These would be personal contacts of the CEO.

**Making a Personal Contact Public:** In the My Personal Contacts View, there is a Private checkbox. To convert a Personal Contact into a (public) Contact, uncheck the checkbox. This action cannot be undone.

# Customer Data and Organizations

- The All views are based on a record's organization(s)
  - By default, when a record is created it is associated with the organization of the creator's current position
- For most records, you may change the organization associated with the record using the More Info view
  - Many record types may be associated with multiple organizations



8 - 11

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Customer Data and Organizations

**Record Organization vs. Position Organization:** Because employees are stored as records in the database, there is some confusion relating to employee's organizations. The employee is assigned one or more positions, and each position is associated with an organization. This is the organization used for the employee's visibility access control. In other words, the records an employee sees are based on his or her current position's organization. However, the employee him- or herself is a record in the database, and this record is assigned to an organization. This filters visibility for people who wish to see the employee's record in the application. For example, SADMIN is an employee, with the Siebel Administrator position, which is assigned to the Default Organization. So when you are logged in as SADMIN, you see records belonging to the Default Organization. However, SADMIN is also a contact, and this contact is owned by an organization. By default, the SADMIN record belongs to the Default Organization, so there is no confusion. But you could modify the SADMIN record to belong to a different organization. This would not affect SADMIN's visibility, but would affect who could see the SADMIN contact record.

**Screenshot:** The screenshot shows the More Info view for the Siebel Administrator contact record. In the More Info applet, there is an Organization field with an MVG select button. Use the MVG select button to modify the organization(s) associated with this contact.

## All Views

- Are used to show all records belonging to your current organization
  - The organization of your current position
  - Not related to My or My Team's views, which are person- or position-oriented

SR #	Owner	Status	Organization
1-3376213	BBRAHMBH	Open	Default Organization
1-3376219	BBRAHMBH	Pending	Default Organization
1-3547227	SADMIN	Open	Default Organization
1-3559557	SADMIN	Open	Default Organization
1-3594142	SADMIN	Open	Default Organization
1-3606701	PSINGH	Closed	Default Organization

A service agent sees all of the service requests assigned to his or her organization, regardless of the owner.

8 - 12

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### All Views

**Screenshot:** The screenshot shows the All Service Requests view. This view shows all service requests belonging to the current employee's position's organization; in this case, the Default Organization. The owner of the service request is not used to filter records for this view.

## All Across My Organizations Views

- Are used to display all data from an organization and its child organizations
  - Based on the relationships specified by the organizational hierarchy
- Are typically restricted to users who need to access records at the enterprise level
  - Mid-level executives
  - Partners
- Are typically used for only a few types of records
  - For example, opportunities
  - In the All Opportunities Across My Organizations view, a sales manager sees all opportunities in his or her organization and all of its child organizations

## All Across Organizations Views

- Are used to show all records in the enterprise that are assigned an organization and position or person
  - Records that are not correctly assigned are not shown
- Are typically restricted to only those users who need to access records across the whole company
  - Top-level executives

SR #	Owner	Status	Organization
1-1693025	FRA_CCHE	Open	PCS France
1-1693031	SADMIN	Open	Default Organization
1-1693035	FRA_CCHE	Open	PCS France
1-1700934	DEU_CCHE	Open	PCS Germany
1-10E-3B	TARNOLD	Open	PCS Americas

## All Across Organizations Views

**Screenshot:** The screenshot shows the All Service Requests Across Organizations view for SADMIN, whose position of Siebel Administrator belongs to the Default Organization. Since all organizations are children of the Default Organization, this view shows all records that have organizations (and positions or persons) assigned, for example, records belonging to PCS France, PCS Germany, or PCS Americas.

## Administration Views

- Are used to administer data
  - For example, to modify the primary position on an account team
- Are separate from the views available in the visibility filter drop-down list
  - Use the link bar or site map to navigate to the administration views
- Display all database records, even those without a valid owner or organization
  - For example, records that have been imported but not yet assigned
- Should be restricted to administrators who require such access

## View Type Summary

Views	Description
My View	Displays records directly assigned to you based on your user ID or active position
My Personal Contacts View	Only displays personal contacts you own
My Team's View	Allows managers to see records assigned to their direct and indirect reports that are the primary owner based on the reporting structure
All View	Displays all of the records associated with your current position's organization
All Across My Organizations View	Displays records that are assigned to the user's current position's organization and its child organizations
All Across Organizations View	Displays all records in the enterprise with a valid organization and position or user
Administration Views	Display all records in the database, even those without a valid organization, position, or user

**ORACLE**

### View Type Summary

- My View: Displays records directly assigned to you based on user ID or active position.
- My Personal Contacts View only displays personal contacts you own.
- My Team's View (Manager's View): Allows managers to see records assigned to their direct and indirect reports that are the primary owner based on reporting structure.
- All View: Displays all records associated with the user's organization.
- All Across My Organizations View: Displays records that are assigned to the user's organization and its child organizations.
- All Across Organizations View: Displays all records in the enterprise with a valid owner.
- Administration Views: Display all records in the database, even those without a valid owner.

## Examples

- A user's position may be assigned to an account that is not assigned to that user's organization
  - The user sees the account in the My View
  - The user does not see the account in the All View

The image shows two Siebel application windows side-by-side. The left window is titled 'My Accounts' and the right is titled 'All Accounts'. Both windows have a similar header with 'New', 'Name', and 'Site' columns.

**My Accounts View (Left):**

New	Name	Account Team
*	Abbey General Cardiology	SADMIN
*	Abbey General Hospital	SADMIN
	Abbot Designs	SADMIN
*	Abbot School for Medicine	MAUSTIN
	Abitibi Consolidated Inc.	SADMIN
	Abrams Insurance Carriers	SADMIN

**All Accounts View (Right):**

New	Name	Site
>	Abbey General Cardiology	NJ
	Abbey General Hospital	NJ
	Abbey General Nephrology	NJ
	Abbey General Radiology	NJ

**Annotations:**

- A callout box above the 'My Accounts' table states: "SADMIN's current position is on the Account Team for Abbot School for Medicine, hence the record appears in the My Accounts view".
- A callout box above the 'All Accounts' table states: "The Abbot School for Medicine record is assigned to the Millennium Healthcare organization, while the Siebel Administrator position belongs to the Default Organization; hence, the record is not visible in the All Accounts view".

## Examples

Assigning accounts or opportunities to positions outside of their organizations is not uncommon; for example, suppose a company's top European sales representative just completed a sale to the European branch of a company. It would make sense to associate this sales representative's position with opportunities associated with the U.S. branch of that company, even if it is in a different organization.

**Screenshots:** The first screenshot shows the My Accounts view for the Siebel Administrator, SADMIN. The Abbot School for Medicine record appears, with MAUSTIN as the primary account team member. Because the Siebel Administrator position is on the account team for the record, the record appears in the My Accounts view. However, the Abbot School for Medicine record belongs to the Millennium Healthcare organization. Since the Siebel Administrator position belongs to the Default Organization, the Abbot School for Medicine record does not appear in SADMIN's All Accounts view, as shown in the second screenshot.

## Examples: Which Entities Use Which Type of Access Control?

- Some examples of access control:

Access Method	Single-Valued Access	Multi-Valued Access
User ID	Service Requests Expense Reports Personal Contacts	Assets Activities
Positions	Forecasts	Accounts Contacts Opportunities Quotes
Organizations	Consumers Forecasts	Contacts Accounts Opportunities

Team Access Control

## Examples: Which Entities Use Which Type of Access Control?

**Table:** The table has three columns: Access Method, Single-Valued Access, and Multi-Valued Access. Entities with single-valued access based on User ID include Service Requests, Expense Reports, and Personal Contacts. Entities with multi-valued access based on User ID include Assets and Activities. Entities with single-valued access based on position include Forecasts, while those with multi-valued access based on position include Accounts, Contacts, Opportunities, and Quotes. These are considered to use "team access control". Entities with single-valued access based on organization include Consumers and Forecasts, while those with multi-valued access based on organization include Contacts, Accounts, and Opportunities.

## Lesson Highlights

- Access to records may be restricted by user ID, position, organization, or a combination thereof
- Which records are shown depends on the view selected from the visibility filter drop-down list
- Multiple access control mechanisms may be in place for a single record
  - For example, both position-based and organization-based Access Control
  - Each access control mechanism is implemented in a different view

## Practice 8 Overview: Exploring Access Control

This practice covers the following topics:

- Exploring data visibility in the application using employees, positions, and organizations

# 11

## Customizing the User Experience

ORACLE

Copyright © 2010, Oracle. All rights reserved.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# Objectives

After completing this lesson, you should be able to:

- Administer tab layouts for responsibilities
- Administer view links for home pages
- Set user preferences to customize the user interface
- Reset user preferences

## Business Challenge: Customizing User Navigation

- Business Challenges:
  - Not all users should have the same screen tabs
    - For example, a sales representative would almost certainly want an Opportunities screen tab, but a call center representative would not
  - Different users might want different links or applets on their home pages
    - A sales representative would want a "My Opportunities" link, and an applet listing recently-viewed opportunities
    - That sales representative's manager would want a "My Team's Opportunities" link, and might not care about recently-viewed opportunities

## Business Solution: Customize User or Application Preferences

- Application administrators may perform global administration to:
  - Customize default tab layouts for responsibilities
  - Add links to commonly-accessed views to screen home pages
- Users may customize their User Preferences to:
  - Customize their personal tab layout
  - Add additional view links to their screen home pages
  - Modify the way applets are shown in their screen home pages
- Administrators may need to reset a user's preferences to the defaults



ORACLE

11 - 4

Copyright © 2010, Oracle. All rights reserved.

### Business Solution: Customize User or Application Preferences

**User Preferences:** You will find a large number of user preference settings under Tools > User Preferences. Many of these user preferences are discussed throughout this course. For example, in the lesson on users, positions, and organizations, you found that an employee could change his or her current position under Tools > User Preferences > Change Position.

**Reference:** For more information on setting user preferences, see "Setting User Preferences" in *Siebel Fundamentals*.

## Customize Default Screen Tab and View Tab Layouts

- Every responsibility has a default screen tab and view tab layout
  - The user sees the screen tab and view tab layout for his or her primary responsibility
- To modify a responsibility's screen tab and view tab layout:
  - Navigate to Administration - Application > Responsibilities > Tab Layout
  - Select a Responsibility to modify
    - It is possible to modify the tab and view layout for a seed responsibility
  - Select an application
  - Modify the screen tab and view tab layout



ORACLE

## Modify the Screen Tab Layout

- Specify the order of the tabs, and which tabs to show

The screenshot shows three stacked applets from the Siebel Application Administration interface:

- Top Applet:** Shows a list of responsibilities. One responsibility, "Siebel Administrator", is selected and highlighted in yellow. The list includes "Siebel System Administrator", "Default Organization", and "Yes".
- Middle Applet:** Shows a list of applications. One application, "Siebel Universal Agent", is selected and highlighted in yellow.
- Bottom Applet:** Shows a list of screen tabs. The tabs are listed by Order (1 to 5) and Name (Home, Accounts, Contacts, Service, Sales Orders). Each tab has a "Hide" checkbox. A yellow callout box points to the "Hide" checkbox for the "Sales Orders" tab, with the text "Show or hide screen tabs". Another yellow callout box points to the "Order" column, with the text "Modify the order in which the tabs are displayed".

11 - 6

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Modify the Screen Tab Layout

**Screenshot:** The screenshot shows Administration - Application > Responsibilities > Tab Layout. In the top applet, the Siebel Administrator responsibility is selected. In the middle applet, the Siebel Universal Agent application is selected. This is the formal name of the Siebel Call Center application (defined in Siebel Tools). The bottom applet lists the screen tabs available in the Siebel Call Center application, including Home, Accounts, Contacts, Service, and Sales Orders. Each screen tab is associated with an Order number, and you can modify these numbers to modify the order in which screen tabs are shown. Each screen tab also has a Hide checkbox. If it is checked, the screen tab is not shown; if it is unchecked, the screen tab is shown, either as a tab or in the screen tab drop-down list.

## Modify the View Tab Layout

- Select a screen
- Modify the order and/or visibility of view tabs
- Specify a default view
  - The view to which users navigate when they select the screen tab

The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with links: Home, Accounts, Contacts, Service, Opportunities, Quotes, Administration - Application, and Responsibilities. Below the navigation bar, there are two main applets:

- Screen Tab Layout:** This applet shows a table with one row selected: Order 2, Name Accounts. A tooltip over the 'Accounts' entry states: "Selecting the screen tab navigates you to the default view".
- View Tab Layout:** This applet shows a table with five rows:

Order	Name	Parent Category	Hide	Default View
1	Coverage Team	FINS Product Group		
2	Primary Product Group Members	FINS Product Group		
3	Accounts Home			
4	My Accounts	Account List		
5	More Info	Account List		

At the bottom of the interface, there is a red footer bar with the ORACLE logo and copyright information: "Copyright © 2010, Oracle. All rights reserved."

### Modify the View Tab Layout

**Parent Category:** The Parent Category helps determine where in the view hierarchy the view is located: Is it a view in the link bar, or a view in a view tab? This is configured in Siebel Tools, and cannot be modified by an administrator. An administrator can only modify the order, whether or not to hide the view, and what the default view is.

**Screenshot:** The screenshot shows the bottom half of Administration - Application > Responsibilities > View Tab Layout. The Screen Tab Layout applet is shown at the top, with the Accounts screen selected, and the View Tab Layout applet is shown at the bottom. Five views are listed in the View Tab Layout applet: Coverage Team with Order = 1, Primary Product Group Members with Order = 2, Accounts Home with Order = 3, My Accounts with Order = 4, and More Info with Order = 5. Accounts Home is the Default View, as indicated by a check mark in the Default View column. Selecting the Accounts tab navigates you to the default view.

## Customize the Screen Tab or View Tab Layout (User)

- By default, users see the tab layouts for their primary responsibility
- They may override these defaults under Tools > User Preferences > Tab Layout

The screenshot shows the Siebel User Preferences interface with the 'Tab Layout' tab selected. It displays two tables for customizing tab orders and visibility.

**Screen Tab Layout:**

Order	Name	Hide
1	Home	
2	Accounts	

**View Tab Layout:**

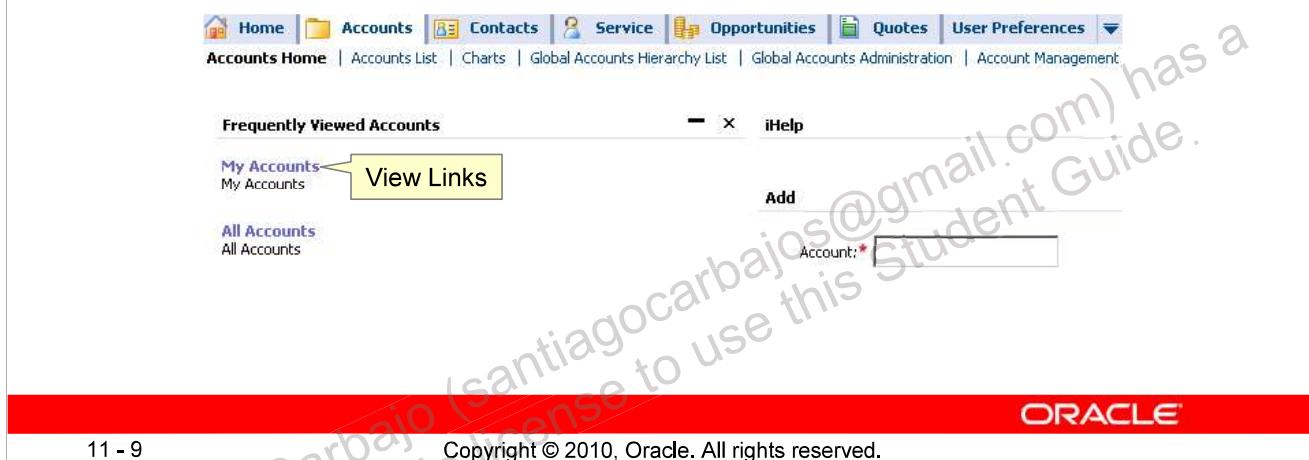
Order	Name	Parent Category	Hide	Default View
1	Accounts Home	Account List		✓
2	Attachments	Account List		
3	Briefing	Briefing		✓
4	All Accounts Across Organizations	Account List		

## Customize the Screen Tab or View Tab Layout (User)

**Screenshot:** The screenshot shows User Preferences > Tab Layout. Just like the administrative view, this view allows users to specify the order of their screen tabs and view tabs, as well as which to hide and which to show, and the default view for each screen. These preferences take precedence over the defaults set by an administrator.

## View Links

- Are the links listed under the "Frequently Viewed" heading on a screen's home page
  - For example, Frequently Viewed Accounts
- May be customized by administrators or users
  - View links added by administrators are visible to all users

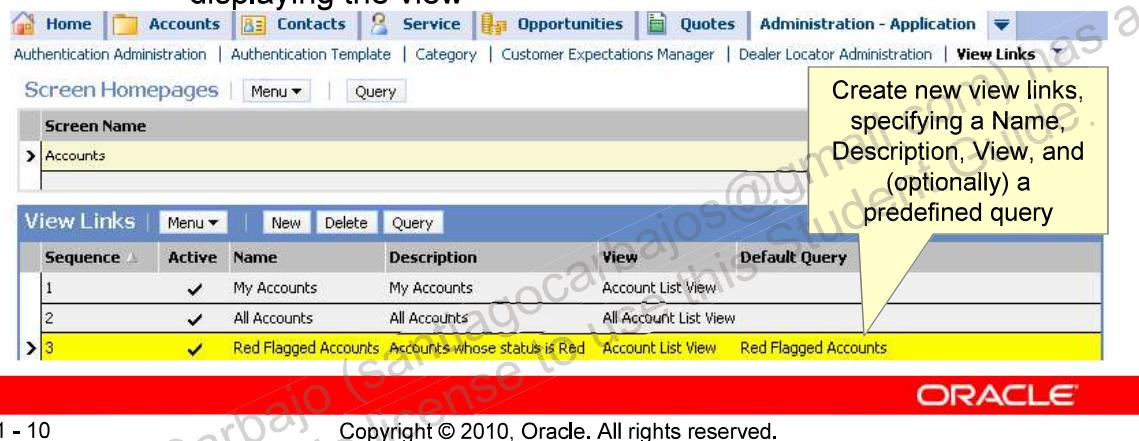


### View Links

**Screenshot:** The screenshot shows the Accounts Home page. Under 'Frequently Viewed Accounts', two view links are listed: My Accounts and All Accounts.

## Add View Links to Home Pages

- Add view links to all users' home pages by:
  - Navigating to Administration - Application > View Links
  - Selecting a screen home page
  - Creating or modifying view links for the home page
    - Specify a sequence number, name, and destination view
    - Optionally, specify a predefined query (PDQ) to perform when displaying the view



### Add View Links to Home Pages

**Predefined Queries:** Predefined queries (PDQs) will be discussed in greater detail in a subsequent lesson.

**Screenshot:** The screenshot shows Administration - Application > View Links. In the top applet, the Accounts screen home page is selected. In the bottom applet, a new View Link has been created with Sequence = 3, Active = Checked, Name = Red Flagged Accounts, Description = Accounts whose status is Red, View = Account List View, and Default Query = Red Flagged Accounts.

## Add View Links to Home Pages (User)

- Users may add private view links to their home pages by:
  - Navigating to Tools > User Preferences > View Links
  - Selecting a screen home page
  - Creating or modifying view links for the home page
    - Their view links are private, and are not visible to other users

The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with icons for Home, Accounts, Contacts, Service, Opportunities, Quotes, and User Preferences. The 'User Preferences' icon is highlighted. Below the navigation bar, there is a toolbar with buttons for My Logins, Profile, Availability, Behavior, Calendar, Change Position, Communications, Correspondence, Data Quality, and View Links. The 'View Links' button is also highlighted. The main area has two tabs: 'Screen Homepages' and 'View Links'. The 'View Links' tab is selected. It displays a table of view links with columns for Sequence, Public, Active, Name, Description, View, and Default Query. There are four rows in the table. Row 1: Sequence 1, Public checked, Active, Name 'User-created view links are not marked as Public', Description 'All Accounts with Sequence = 1', View 'Account List View', Default Query 'All Account List View'. Row 2: Sequence 2, Public checked, Active, Name 'All Accounts with Sequence = 2', Description 'All Accounts with Sequence = 2', View 'All Account List View', Default Query 'All Account List View'. Row 3: Sequence 3, Public checked, Active, Name 'Red Flagged Accounts', Description 'Red Flagged Accounts', View 'Account List View', Default Query 'Red Flagged Accounts'. Row 4: Sequence 4, Public checked, Active, Name 'Accounts Administration', Description 'Accounts Administration View', View 'Accounts Administration View', Default Query 'Account Administrat'. A yellow box highlights the 'Public' column, and a yellow arrow points from the 'Public' column to the 'Public' checkbox in the first row. A watermark 'Santiago Carbajo (santiago.carbajo@student-guide.com) has a' is diagonally across the screenshot.

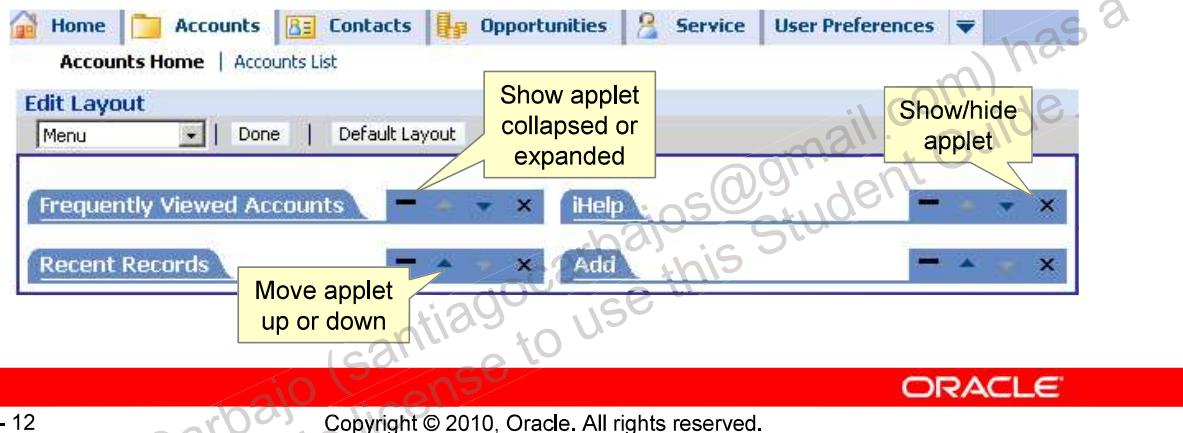
Sequence	Public	Active	Name	Description	View	Default Query
1	<input checked="" type="checkbox"/>		User-created view links are not marked as Public	All Accounts with Sequence = 1	Account List View	All Account List View
2	<input checked="" type="checkbox"/>		All Accounts with Sequence = 2	All Accounts with Sequence = 2	All Account List View	All Account List View
3	<input checked="" type="checkbox"/>		Red Flagged Accounts	Red Flagged Accounts	Account List View	Red Flagged Accounts
4	<input checked="" type="checkbox"/>		Accounts Administration	Accounts Administration View	Accounts Administration View	Account Administrat

## Add View Links to Home Pages (User)

**Screenshot:** The screenshot shows User Preferences > View Links, with the Accounts screen home page selected in the top applet, and four view links shown in the bottom applet: My Accounts with Sequence = 1, All Accounts with Sequence = 2, Red Flagged Accounts with Sequence = 3, and Accounts Administration with Sequence = 4. In the View Links applet, there is a Public column that was not visible in the administrative View Links applet. View links with the Public checkbox checked are the view links created by an administrator. These are visible to all users. View links created by a user in the User Preferences screen are not marked as Public, and are only visible to the user who created them.

## Modify the Home Pages (User)

- Users may edit their screen home pages to:
  - Show/hide any of the provided applets
  - Rearrange the order of the provided applets
- To modify a home page:
  - Navigate to the Home page
  - Click Edit Layout



## Modify the Home Pages (User)

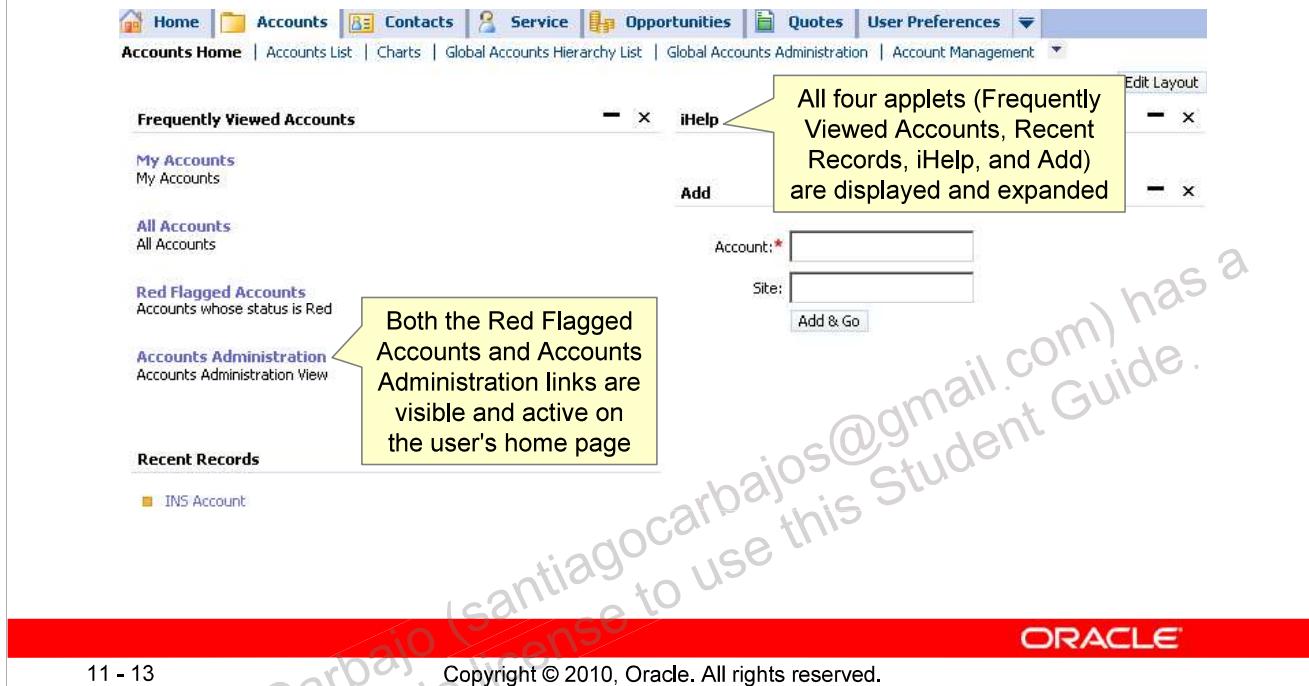
**Provided Applets:** Each home page contains several applets, provided as part of the as-delivered application. A developer using Siebel Tools may modify these applets. Such configuration is beyond the scope of this course.

**Default Layout:** The default layout for a home page is determined by a developer using Siebel Tools, and is beyond the scope of this course.

**Screenshot:** The screenshot shows the Accounts Home page being edited. For each applet, the leftmost icon allows the user to show the applet either expanded (showing a list of records) or collapsed (showing only the title). The middle two icons allow the user to move the applet up or down the page. The rightmost icon allows the user to show or hide the applet on the home page.

# The User Experience

- The user sees the home page that he or she customized:



## The User Experience

**Screenshot:** The screenshot shows the Accounts home page. All four applets (Frequently Viewed Accounts, Recent Records, iHelp, and Add) are displayed and expanded, and both the Red Flagged Accounts and Accounts Administration links are visible and active on the user's home page.

## Other User Preferences

- Profile allows users to:
  - Specify their contact information, including their time zone
  - Examine their positions and responsibilities
  - Specify their notification preferences
  - Add assignment skills to themselves
- Behavior allows users to:
  - Specify a default startup view
    - The user does not have to start on the Application Home Page
  - Specify confirmation settings:
    - Confirm before deleting a record
    - Prompt before interrupting a task
- Default queries allow a user to specify a default query for any view, not just those in view links

ORACLE

11 - 14

Copyright © 2010, Oracle. All rights reserved.

### Other User Preferences

**Assignment Skills:** Assignment skills are used by the Assignment Manager to assign entities (for example, Service Requests) to employees. Assignment Manager will be discussed in a subsequent lesson.

**Additional User Preferences:** Additional user preferences will be discussed in subsequent lessons.

## Reset a User's Preferences

- User preferences are stored in user preference files in the Siebel File System
  - In the userpref subdirectory
  - The format is <UserID>&<Application Name>.spf
    - For example, SADMIN&Siebel Universal Agent.spf
- A user may ask you to reset his or her preferences
  - For example, he or she may have made too many modifications
  - For example the file may become corrupted
- To reset a user's preferences, delete this file
  - A user's preferences will be restored to their default state

ORACLE

11 - 15

Copyright © 2010, Oracle. All rights reserved.

### Reset a User's Preferences

**View Links:** View link preferences are stored in the database, rather than the preferences file, hence a user's private view links are not reset when an administrator deletes his or her user preferences file. The user may delete these view links him- or herself.

**Restore Defaults:** A user can restore default settings individually; for example, he or she can navigate to the Accounts home page, click Edit Layout, and then click Default Layout. However, the user cannot restore all of his or her preferences to their default values at once; this is an administrative task.

**Siebel File System Location:** Note that users who have the Siebel Mobile or Siebel Developer Web Client installed have a local Siebel File System that is used when they connect to their local database. In this case, their user preferences are stored in the local Siebel File System, and they may reset their preferences themselves by deleting their preferences file.

## Lesson Highlights

- Administrators use Administration - Application to globally set:
  - The screen and view tab layout for each responsibility
  - The global home page view links
- Users use Tools > User Preferences to modify:
  - Their screen and view tab layout
  - Their home page layout
  - Their home page view links
  - The default view they navigate to on logging in
  - User preferences supersede application settings
- Application administrators may delete user preferences files to reset user preferences

## Practice 11 Overview: Exploring Application Customization

This practice covers the following topics:

- Modifying application settings to modify the user interface
- Modifying user preferences to modify the user interface
- Deleting the user preferences file

Unauthorized reproduction or distribution prohibited. Copyright© 2014, Oracle and/or its affiliates.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

## **Administering Lists of Values**

12

Copyright © 2010, Oracle. All rights reserved.

**ORACLE**

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# Objectives

After completing this lesson, you should be able to:

- Add, modify, or deactivate an item in a static picklist
- Modify and administer hierarchical static picklists

## Business Challenges and Solution

- Challenges:
  - Users want to enter data quickly
    - Especially repetitive data, such as the status of an account
  - Companies want accurate and consistent data
    - Users may make errors when entering this repetitive data; for example, a status of "Nwe Customer" instead of "New Customer"
    - Such errors may impact reporting, assignments, or other application functionality
- Solution:
  - Use a picklist: A drop-down list that allows the user to select a consistent value from a predefined list of acceptable values

## Review: A Static Picklist

- Displays a fixed list of values in a drop-down for user selection
  - The available values are controlled by an application administrator
  - The selected value is copied into the record
- Is bounded or unbounded
  - Bounded picklists force users to select a value in the picklist
  - Unbounded picklists allow users to enter other values
  - Whether a picklist is bounded or unbounded is controlled by a developer using Siebel Tools

### Review: A Static Picklist

**Copying the Value:** It is important to understand that static picklists copy their values into the selected field; for example, selecting "New Customer" from a static picklist would write the value "New Customer" into the database. Thus, if you later modified the value in the picklist to read "New Account", the value for that particular record would remain "New Customer" until you manually updated that record.

Dynamic picklists refer to other records in the database using a foreign key, and thus are updated when the record is updated. For example, if James Henton is a contact for the SAA Company account, and you modify James Henton's record to rename him Jim Henton, you would find Jim Henton as an SAA Company contact.

## Lists of Values (LOVs)

- The values available to a static picklist are stored in the "List of Values" (LOV) table
  - One table stores all of the values for all of the static picklists
  - The values available for a particular static picklist are determined by the Type field
    - Referred to in this lesson as the "LOV Type"

## To Administer a Static Picklist

1. Determine the LOV Type
2. Add or Modify Values in the LOV
3. Activate or Inactivate Values
4. Manage Hierarchical Picklists
5. Add Translations
6. Special Case: Phone Number Formats



## 1. Determine the LOV Type

- Navigate to the picklist you want to modify
- Make a note of the values displayed
  - Look for ones that are less common
- Once you have selected a value to query for, navigate to Administration - Data > List of Values



12 - 7

Copyright © 2010, Oracle. All rights reserved.

### 1. Determine the LOV Type

**Screenshot:** The screenshot shows the accounts list view, with the drop-down list expanded for the Status field of an account. The available statuses are Candidate, Qualified, Active, Contract Pending, Under Construction, Inactive, Red Customer, Marked for Deletion, and Former Customer. A "Red Customer" may be a less common value than "Qualified", which is the currently-selected value.

## 1. Determine the LOV Type

- Query the *Display Value* column for matching values
  - Provides a list of possible LOV types
- Query the *Type* column to see values associated with a particular LOV type
- Validate that the listed values match for the LOV type

The image consists of three screenshots illustrating the process of determining the LOV type for 'Red Customer'.

**Screenshot 1:** Shows the 'My Accounts' list applet. A callout box points to the 'Status' dropdown menu, which is expanded to show several options: Candidate, Disconnected, Qualified, Active, Contract Pending, Under Construction, Inactive, Red Customer, Marked For Deletion, and Former Customer. The 'Red Customer' option is highlighted. A callout box labeled '1. Pick a unique-looking value' points to it. Another callout box labeled '2. Search for that value' points to the dropdown menu.

**Screenshot 2:** Shows the 'List of Values' applet after a query for 'Red Customer'. The results table has columns: Type, Display Value, Language-Index, and Language Name. It shows two entries: 'ACCOUNT\_STATUS' with 'Red Customer' as the display value, and 'REFERENCE\_STAGE' with 'Red Customer' as the display value. A red dashed box highlights the 'ACCOUNT\_STATUS' row.

**Screenshot 3:** Shows the 'List of Values' applet after querying for 'ACCOUNT\_STATUS'. The results table has columns: Type and Display Value. It lists eight rows corresponding to the values in the dropdown menu: Candidate, Qualified, Disconnected, Active, Under Construction, Contract Pending, Inactive, Red Customer, and Marked For Deletion. A red dashed box highlights the first seven rows under 'Type'.

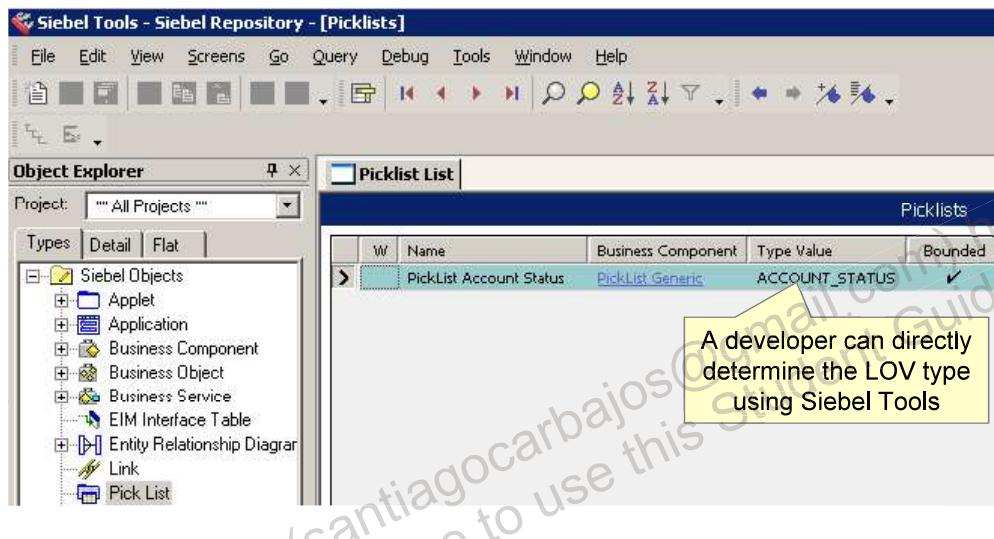
**Screenshot 4:** A summary step labeled '4. Validate'.

## 1. Determine the LOV Type

**Screenshots:** The first screenshot shows the accounts list applet, with the drop-down list for the status field expanded. The Red Customer value is highlighted, with a callout reading, "1. Pick a unique-looking value". The second screenshot, below the first, shows the List of Values applet after a query has been performed for a Display Value of "Red Customer". Two LOV types have been returned: ACCOUNT\_STATUS and REFERENCE\_STAGE. We assume that ACCOUNT\_STATUS is the correct LOV type, so the third screenshot to the right shows the List of Values applet after querying for a Type of "ACCOUNT\_STATUS". The returned display values are Candidate, Qualified, Disconnected, Active, Under Construction, Contract Pending, Inactive, Red Customer, and Marked For Deletion. These match the values we see in the picklist, so we are fairly certain that our LOV type is "ACCOUNT\_STATUS".

## Alternative 1 - Ask Your Developer

- Get the *Type Value* of the picklist from a developer who has access to Siebel Tools
- Query for this type in the administration view



12 - 9

Copyright © 2010, Oracle. All rights reserved.

### Alternative 1 - Ask Your Developer

**New Picklists:** If a developer creates a new static picklist, he or she must provide the LOV type to you. You then use it to create a brand new LOV (with a new unique Type).

**Screenshot:** The screenshot shows Siebel Tools with the PickList Account Status picklist selected. Under the Type Value of the record, the ACCOUNT\_STATUS LOV type is visible.

## Alternative 2 – Use the List of Values Explorer

- Navigate to Administration - Data > List of Values Explorer
  - Shows the same values as the List of Values, but in an explorer format
- Use the Explorer to search for the correct LOV type
  - Check previously-determined candidate LOV types

The screenshot shows the Siebel List of Values Explorer interface. The top navigation bar includes links for Home, Accounts, Contacts, Opportunities, Quotes, Sales Orders, Service, and Administration - Data. A sub-navigation bar below it lists Units of Measurement Administration, Order Action Types, Order Types, Activity Templates, Competitors, Decision Issues, and List of Values Explorer. The main area is titled "List of Values" and displays a table with three columns: Code, Display Value, and Language Name. The table contains eight rows corresponding to account status codes. On the left, a tree view shows the hierarchy of LOVs, with "ACCOUNT\_STATUS" expanded to show its child nodes: "Values" and several specific status codes like "Active", "Candidate", etc. A red banner at the bottom of the screen contains the text "12 - 10" and "Copyright © 2010, Oracle. All rights reserved.".

Code	Display Value	Language Name
Active	Active	English-American
Candidate	Candidate	English-American
Contract Pending	Contract Pending	English-American
Customer	Customer	English-American
Inactive	Inactive	English-American
Marked For Deletion	Marked For Deletion	English-American
Qualified	Qualified	English-American
Red Customer	Red Customer	English-American

### Alternative 2 - Use the List of Values Explorer

**Screenshot:** The screenshot shows the List of Values Explorer with the ACCOUNT\_STATUS LOV type selected. The values of Active, Candidate, Contract Pending, Customer, Inactive, Marked for Deletion, Qualified, and Red Customer match those of the picklist. (Customer was not visible in the previous screenshot, but is an available value for account status if you scroll down in the picklist).

## 2. Add or Modify Values in an LOV

- Use Copy Record to create a new record:
  - Type: LOV type that differentiates the lists of values
  - Display Value: Value to be displayed
  - Language-Independent Code: Usually the same as the Display Value
  - Order: The display sequence of the value
- Modify the display value or order to change an existing record
- In either case, click Clear Cache to clear the cache

The screenshot shows the Siebel Application Administration interface. The top navigation bar includes Home, Accounts, Contacts, Opportunities, Quotes, Sales Orders, Service, and Administration - Data. Below the navigation is a sub-menu for Units of Measurement Administration, Order Action Types, Order Types, and Activity Types. The main area is titled "List of Values". A tooltip "Click Clear Cache after modifying any LOVs" is positioned over the "Clear Cache" button in the toolbar. The table displays three rows of data:

Type	Display Value	Order	Language-Independent Code	Language Name	Parent LIC
ACCOUNT_STATUS	Bronze	3	Bronze		
ACCOUNT_STATUS	Contract Pending	5	Contract Pending		
PARTNERSHIP_STAGE	Contract Pending		Contract Pending		

A red callout box contains the text "For example, add Bronze to the Account Status list". The bottom right corner features the ORACLE logo.

12 - 11

Copyright © 2010, Oracle. All rights reserved.

### 2. Add or Modify Values in an LOV

**Note:** Modifying a list of values does not update records that were populated with the old value. For example, if you modify a "Platinum" account status to read "Diamond", existing records will still have a "Platinum" account status.

**Screenshot:** The screenshot shows the Administration - Data > List of Values view. A new record of type ACCOUNT\_STATUS has been created, with a Display Value and a Language-Independent Code of "Bronze" and an Order of 3. This indicates that "Bronze" will be the third available status in the account status drop-down list. Click Clear Cache after modifying any LOVs.

### 3. Activate or Inactivate Values

- List of Values records must be Active to be displayed
- To activate or inactivate a record:
  - Query for the record
  - Check or uncheck the Active check box
  - Click Clear Cache to display the change
  - Inactive entries will no longer appear in the picklist



The screenshot shows the Siebel Administration - Data > List of Values view. The table has columns: Type, Display Value, Active, Order, Language-Independent Code, Language Name, and Part. A red box highlights the 'Active' column for the row where Type is ACCOUNT\_STATUS and Display Value is Bronze. The 'Active' checkbox is unchecked. Other rows show values like Candidate, Qualified, Active, Customer, Contract Pending, and Inactive, all with checked Active status.

Type	Display Value	Active	Order	Language-Independent Code	Language Name	Part
ACCOUNT_STATUS	Candidate	✓	1	Candidate	English-American	
ACCOUNT_STATUS	Qualified	✓	2	Qualified	English-American	
ACCOUNT_STATUS	Active	✓	3	Active	English-American	
ACCOUNT_STATUS	Bronze	<input type="checkbox"/>	3	Bronze	English-American	
ACCOUNT_STATUS	Customer	✓	4	Customer	English-American	
ACCOUNT_STATUS	Contract Pending	✓	5	Contract Pending	English-American	
ACCOUNT_STATUS	Inactive	✓	6	Inactive	English-American	

1 - 9 of 9

**ORACLE**

12 - 12

Copyright © 2010, Oracle. All rights reserved.

### 3. Activate or Inactivate Values

**Recommended Practice:** Recommended practice is to deactivate LOV records rather than deleting them. This ensures you have a record of LOV values a user might have used.

**Screenshot:** The screenshot shows the Administration - Data > List of Values view, with the Active column now visible. (It was not shown in previous screenshots). The record with a Type of ACCOUNT\_STATUS and a Display Value of Bronze has its Active value unchecked; this indicates that it will not be visible in the account status picklist.

# Guidelines for Inactivating Values

- Do not deactivate seed list of values types or values that you do not recognize
  - Many are used internally by the Siebel application
  - Always make sure you are modifying the appropriate LOV
- Be aware of data inconsistencies when deactivating individual values
  - For example, consolidating the "Bronze" and "Silver" account statuses to "Silver" would leave existing "Bronze" accounts intact

Type	Value	Language	Language Name	Parent L1C	Order
PRICER_MASTER_PRICE_LIST_ID	1-D0D8	Master Price List	English-American	1	1
PRICER_OBJECT_TYPE	Other	Other	English-American	1	1

Copyright © 2010, Oracle. All rights reserved.

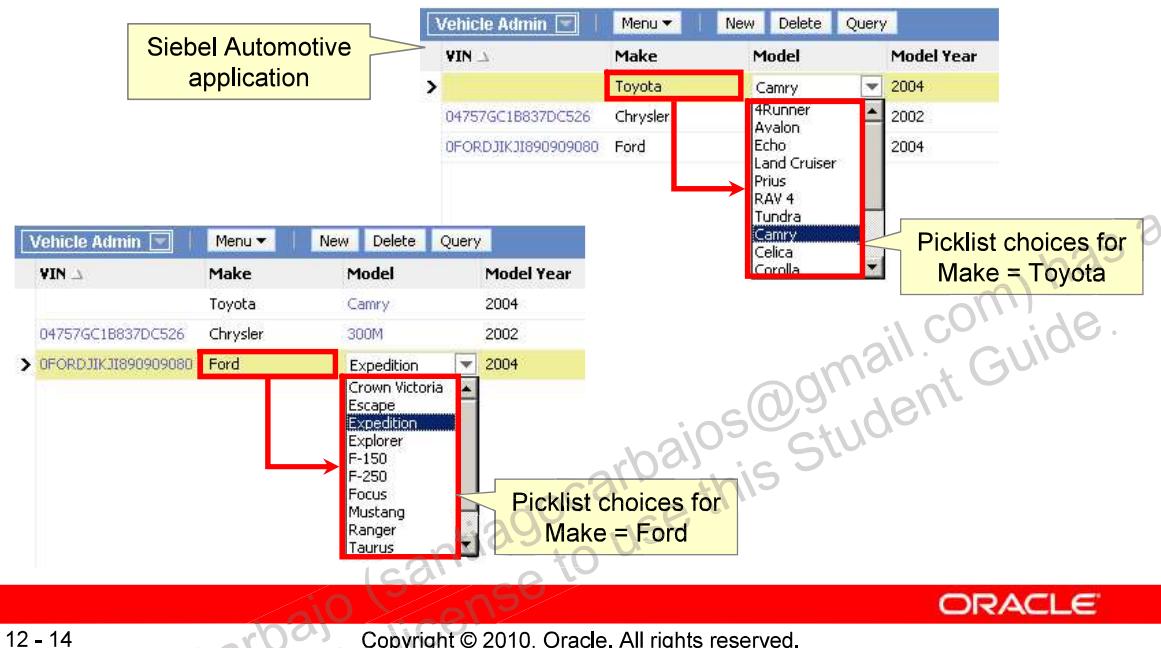
## Guidelines for Inactivating Values

**LOV Use:** The seed data includes many LOV types and values that are used internally by the application, and must not be modified. A good rule of thumb is to ask, "Did I create this value?", and, "Do I know where this value is used?" If the answer to both questions is, "No", it is probably not a good idea to deactivate it.

**Screenshot:** The screenshot shows the Administration - Data > List of Values view with the PRICER\_MASTER\_PRICE\_LIST\_ID LOV type selected. This particular LOV type is used to specify the master price list, so it is critical not to deactivate it.

## Review: Hierarchical Picklists

- Display values that are constrained by the value in another picklist



### Review: Hierarchical Picklists

**Screenshots:** The top screenshot shows the vehicle administration list applet from the Siebel Automotive application with three records listed. The visible columns are VIN (vehicle identification number), Make, Model, and Model Year. The top record has a Make of Toyota, and its Model drop-down list is expanded, showing various Toyota models, including 4Runner, Avalon, Echo, Land Cruiser, Prius, RAV 4, Tundra, Camry, Celica, and Corolla. Camry is the currently-selected model. The bottom screenshot shows the third record selected, which has a Make of Ford. Once again, its Model drop-down list is expanded, but this time it shows various models of Fords, including Crown Victoria, Escape, Expedition, Explorer, F-150, F-250, Focus, Mustang, Ranger, and Taurus. Thus, the values available in the Model picklist depend on the value selected in the Make picklist.

## 4. Manage Hierarchical Picklists

- Determine the parent LOV type
  - For example, for vehicle model it is AUTO\_MAKE\_TYPE
- Determine the child LOV type
  - For example, for vehicle make it is also AUTO\_MAKE\_TYPE
  - If you cannot easily determine it, consult your developer
- For the child value, set the *Parent LIC* to match the parent's *Language-Independent Code*

The screenshot shows the Siebel List of Values applet with the following details:

- Header:** Home, Accounts, Contacts, Opportunities, Sales Orders, Administration - Data, List of Values.
- Sub-Header:** Units of Measurement Administration, Project Mappings, Projects, Fulfillment Centers, List of Values.
- Table Headers:** Type, Display Value, Language-Independent Code, Parent LIC, Language Name.
- Data Rows:**

Type	Display Value	Language-Independent Code	Parent LIC	Language Name
AUTO_MAKE_TYPE	4Runner	4Runner	Toyota	English-American
AUTO_MAKE_TYPE	Avalon	Avalon	Toyota	English-American
AUTO_MAKE_TYPE	Echo	Echo	Toyota	English-American
AUTO_MAKE_TYPE	Land Cruiser	Land Cruiser	Toyota	English-American
AUTO_MAKE_TYPE	Prius	Prius	Toyota	English-American
AUTO_MAKE_TYPE	RAV 4	RAV 4	Toyota	English-American
- Text Overlay:** "Picklist choices for Make = Toyota" is displayed on the left side of the table.
- Bottom Bar:** ORACLE logo.
- Page Footer:** 12 - 15, Copyright © 2010, Oracle. All rights reserved.

### 4. Manage Hierarchical Picklists

**Screenshot:** The screenshot shows the list of values applet with a list of records of type AUTO\_MAKE\_TYPE. The Display Values are 4Runner, Avalon, Echo, Land Cruiser, Prius, and RAV 4, which are some of the picklist choices for Model when the Make is Toyota. For every record shown, the Parent LIC value is Toyota, confirming that these are available models when Make = Toyota.

## 4. Manage Hierarchical Picklists

- To add a new child item, add a new record and set the appropriate Type, Display Value, Language Independent Code, and so on
    - Parent LIC needs to be set to the LIC for the appropriate parent picklist entry

1. Create a new record for the Toyota Estima and clear the cache

Type	Display Value	Language-Independent Code	Parent LIC	Language Name	Order	Active
AUTO_MAKE_TYPE	Estima	Estima	Toyota	English-American	11	<input checked="" type="checkbox"/>
AUTO_MAKE_TYPE	4Runner	inner	Toyota	English-American	1	<input checked="" type="checkbox"/>
			Toyota	English-American	2	<input checked="" type="checkbox"/>

2. The Estima record is then available in the Model picklist

Vehicle Admin	New	Delete	Query
VIN	Make	Model	Model Year
1GKDM19W2YB1234	Toyota	RAV 4	2004
1GKDM19W2YB159E	Toyota	Tundra	2004
1GKDM19W2YB165E	Toyota	Camry	2004
1GKDM19W2YB6865	Toyota	Celica	2004
		Corolla	2004
		Highlander	2004
		MR2 Spyder	2004
		Sequoia	2004
		Sienna	2004
		Tacoma	2004
		Estima	2004

#### **4. Manage Hierarchical Picklists**

**Screenshots:** The top screenshot shows the list of values applet with a new record with Type = AUTO\_MAKE\_TYPE, Display Value = Estima, Language-Independent Code = Estima, Parent LIC = Toyota, and Order = 11. If you create this new record and then click Clear Cache, then the Estima will appear in the Model drop-down list when the Make = Toyota, as shown in the bottom screenshot.

## 5. Add Translations

- For additional languages, create a new record with the same Type, Language-Independent Code (LIC), and (if necessary) Parent LIC, but a different Display Value and Language Name
  - The Display Value will be determined by the user's current language setting
  - If a Display Value for that language has not been created, the Language-Independent code is displayed instead

Type	Display Value	Language-Independent Code	Language Name	Parent LIC
ACCOUNT_STATUS	Closed	Closed	English-American	
ACCOUNT_STATUS	Ferme	Closed	French	

Add a French translation for "Closed"; notice that the Language-Independent Code for both translations is "Closed"

ORACLE

### 5. Add Translations

**Translating Existing Values:** Recall that when a user selects a value from a picklist, the value itself is stored in the field. For example, if an English-speaking user selects an Account Status of Closed, a French-speaking user who logs into the French version of Siebel Call Center will still see that Account Status as "Closed", rather than "Ferme". He or she could then select "Ferme" from the Account Status drop-down list, and the next time the English-speaking user accessed the account, he or she would see the status as "Ferme". To avoid this issue, a system configurator can enable Multi-Lingual Lists of Values (MLOVs), which store the Language-Independent Code in the field and provide real-time translation to the user's language. However, this has a significant performance impact, so it is disabled by default. For details see "Localizing Lists of Values and Multilingual Lists of Values" in the *Global Deployment Guide*, or consider taking Oracle University's Siebel Installation course.

**Screenshot:** The screenshot shows the list of values applet with two records: Both have Type = ACCOUNT\_STATUS and Language-Independent Code = Closed. The top record has Display Value = Closed and Language Name = English-American, while the bottom record has Display Value = Ferme and Language Name = French. The user will see only one of these two display values in his or her drop-down list, depending on whether he or she has his or her language set to French or English-American.

## 6. Special Case: Phone Number Formats

- Available phone number formats are managed by the PHONE\_FORMAT LOV type
  - For example, (000) 000-0000 for U.S. or Canadian telephone numbers, or 00-000-0000 for some European countries
- To specify a phone number format:
  - Create a new list of values record of Type PHONE\_FORMAT
  - Specify the display format for the phone number
    - Use zeroes (0) to specify digits
    - Use # to specify optional digits
    - Use any other non-alphanumeric characters to specify formatting
      - For example, (##) 0000.000 would display a nine-digit phone number as (12) 3456.789, and would accept seven- or eight-digit numbers as well
  - Specify the international country code in the Order field

ORACLE

12 - 18

Copyright © 2010, Oracle. All rights reserved.

### 6. Special Case: Phone Number Formats

**Phone Number Formats and Computer Telephony Integration (CTI):** It is important to remember that many CTI systems are dependent on phone number formats for proper behavior. Before creating or modifying any phone number formats, consult your CTI administrators to ensure they are aware of any changes you are making.

**Country Codes:** The Siebel seed data includes phone number formats and country codes for most countries. To modify the phone number format for an existing country code, deactivate the existing record and create a new record with the same code. This ensures that in case of error, you can immediately return to the previous format.

## Phone Number Formats: The User Experience

- If a user enters fewer digits than required, an error message is displayed
  - Caveat: If the user specifies an international number, the error message is not displayed
- If a user enters more digits than required, the extra digits are recorded as an extension number
  - For example, in the U.S., 1234567890123 is displayed as (123) 456-7890 x123
- If a user uses the + prefix, the number is presumed to be an international number
  - Formatted according to the first 2 digits, assumed to be the country code of the international number
  - For example, +91123456789 has a country code of India (91), and is formatted as +9112-345-6789

ORACLE

12 - 19

Copyright © 2010, Oracle. All rights reserved.

## Phone Number Formats: The User Experience

**International Formatting:** The country code is prefixed to the phone number format. For example, the format for India is entered in the application as 00-000-0000, so 123456789 would be formatted as 12-345-6789. With the +91 international prefix, the number is formatted as +9112-345-6789, as displayed above.

**Non-Numbers:** A user can use the ?0 prefix to avoid formatting entirely; for example ?0+9112345678 and ?0HelloWorld are both accepted and displayed exactly as entered, including the ?0.

## Other System Values

- Many common system picklist values are administered using separate views, rather than through LOV administration
- Examples:
  - Currencies
  - Industries
  - Languages
  - Locales
  - Periods
  - Time Zones
  - ZIP Codes

12 - 20

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Other System Values

**Reference:** *Application Administration Guide: Ongoing Application Administration.*

These settings are also discussed in a subsequent lesson.

## Lesson Highlights

- Static picklists are administered through administration screens and rely on LOVs for their values
- The Type value controls which records are part of the LOV and must match the value in Siebel Tools
- The Language-Independent Code (LIC) uniquely determines which Display Values will be shown in the drop-down list
- One picklist can be in a parent-child relationship with another by setting the Parent LIC
- Many other system values used in picklists are administered using separate views

## Practice 12 Overview: Exploring LOV Administration

This practice covers the following topics:

- Administering lists of values
- Creating a new phone number format

## 13 Administering Initial Data

ORACLE

Copyright © 2010, Oracle. All rights reserved.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# Objectives

After completing this lesson, you should be able to:

- Describe the methods available for adding initial data to a Siebel CRM application
- Administer this initial data

## Technical Challenge: Entering Initial Data

- A large amount of initial data must be entered into the application before users can use it
  - Currencies, ZIP codes, languages
  - The company's organizational structure
  - Users, employees, and positions
  - Products, literature, and price lists
  - Catalogs and categories
  - And so forth

## Technical Solution 1: Seed Data

- Much of the critical data necessary to work within a Siebel CRM application is included as seed data:
  - Currencies
  - ZIP codes
  - Languages
- In most deployments, you can use this data as-is
  - It is possible to add additional currencies, ZIP codes, or languages by administering the application

## Technical Solution 2: Importing Data

- Your company may use a data specialist to import the initial data
  - For example, using Enterprise Integration Manager (EIM)
- You may need to administer the data post-import
  - For example, to verify the company structure

### Technical Solution 2: Importing Data

**Reference:** For more information on EIM, consult the *Enterprise Integration Manager Administration Guide*, or consider taking Oracle University's Siebel Enterprise Integration Manager course.

## Technical Solution 3: Manually Entering Data

- For smaller companies, it may be more efficient to manually create the records
  - Also true for small amounts of data
- For both imports and manual entries, it is critical to understand the order in which to create data
  - For example, you should not create a position before you have created that position's division
    - Otherwise, you have to do additional administration at a later time
- The remainder of this lesson focuses on the types of initial data, in what order to create them, and how to administer them

## Enter or Administer Initial Data

- Add Views and Responsibilities
- Add Countries, Currencies, or Languages
- Add Locales
- Add Periods
- Edit Time Zones
- Create the Company Hierarchy, Including Positions
- Create Employees and Users, and add Employee Skills
- Create Catalogs, Categories, and Access Groups
- Add Expense Types and Payment Terms
- Add ZIP Codes and Industries
- Add Contact Us Information



## Add Views and Responsibilities

- Administer any new views created by your development team
  - Add them to the list of views in the application
  - Add them to at least one responsibility
- Create new responsibilities as specified by your business analyst
  - Recall: The existing seed responsibilities cannot have views added or removed
- If necessary, modify the screen and view tab layout for each responsibility
- Details on these tasks were in previous lessons
- Views and responsibilities have no dependencies, except on each other

## Add Countries, Currencies, or Languages

- Seed countries are specified in a list of values
  - Administering lists of values is described in a subsequent lesson
- Seed currencies are listed under Administration - Data > Currencies
  - If necessary, you may add currencies by specifying a name, three-letter code, issuing country, and symbol
- Seed languages are listed under Administration - Data > Languages
  - If necessary, add languages by specifying a name and three-letter code
  - Caveat: This does not provide translation, nor add language-specific strings to the application

ORACLE

13 - 9

Copyright © 2010, Oracle. All rights reserved.

### Add Countries, Currencies, or Languages

**Adding a Supported Language:** Consult the *Installation Guide* for your platform and the *Global Deployment Guide* for instructions on adding additional languages to a Siebel Enterprise; alternatively, take Oracle University's *Siebel Installation* course. Adding supported languages adds string translations and language-specific application object managers to support the language.

**Why Create a Language Code for an Unsupported Language?** Although translation to unsupported languages is not supported globally, there are areas where you can create language-specific scripts. For example, SmartScripts may be manually translated into the new language, and users can select that language to see the translation. Also, call center agents can specify that they speak that language, allowing service requests to be routed to them based on language.

**Dependencies:** Currencies depend on their issuing countries; that is, you must create the countries first.

## Add Locales

- A locale is a set of rules guiding how common data is displayed to the user
  - Right-to-left or left-to-right text
  - Date, number, currency, and time formats
  - International dialing code
- Every application object manager is associated with a locale
- Seed locales are listed under Administration - Data > Locale
- Create or modify locales as necessary to support your application
  - For example, the seed data does not include a French Canadian locale

ORACLE

13 - 10

Copyright © 2010, Oracle. All rights reserved.

### Add Locales

**Modifying the Locale of an Application Object Manager:** To modify the locale of an Application Object Manager, modify its Locale Code parameter. This task should be performed by a system administrator. For more information, see the *System Administration Guide*, or consider taking Oracle University's *Siebel System Administration* course.

**Mobile or Developer Web Client:** The locale for the Mobile or Developer Web Client is determined by the locale setting of the operating system on which it is running, rather than by a Siebel parameter.

**Dependencies:** Locales require an international dialing code, which is administered using a list of values. You may need to add an international dialing code to this list of values to support a new dialing code.

## Add Periods

- Periods are time periods used in your business
  - For example, Q1 2009 or Jan. 2010
  - Periods are used in forecasting, time sheets, incentive compensation, and expense reports
- Create periods under Administration - Data > Periods
  - Specify a name, start and end dates, type, and description
  - Optionally, specify subunits
    - For example, months in a quarter

## Edit Time Zones

- Time zones determine users' local times
  - Default times are based on the Siebel Server's time zone
    - Users override this under User Preferences
    - The seed data includes existing time zones
- Administer time zones under Administration - Data > Time Zone Administration
  - Modify a time zone's name or abbreviation
  - Activate or deactivate a time zone
  - Modify the Universal Time Coordinated (UTC) offset or Daylight Savings Time (DST) settings for a time zone

ORACLE

13 - 12

Copyright © 2010, Oracle. All rights reserved.

### Edit Time Zones

**Universal Time Coordinated (UTC) Time Stamps:** By default, UTC encoding is enabled for all Siebel application object managers. This translates the user's local time to UTC time before storing the record in the database. Hence, all timestamps in the database are UTC time, and are consistent. When another user accesses the record, the UTC time is translated to his or her time, so all users have a consistent view as to when a record was created or modified. A time zone specifies an offset from UTC time.

**Default Times:** By default, the time a user sees using the Siebel Web client is based on the operating system time of the machine running the Siebel Server running that application object manager session. The time a user sees using the Siebel Developer or Mobile Web client is the time of his or her local machine's operating system. The user can change this under Tools > User Preferences > Profile.

**Reference:** For more information on UTC Time Stamps, see "Deploying with Global Time Zone" in the *Global Deployment Guide*.

## Summary: Localization

- The language a user sees is specified by the URL suffix of the application
  - For example, [http://SiebelWeb.oracle.com/callcenter\\_enu](http://SiebelWeb.oracle.com/callcenter_enu) specifies a language of ENU, or U.S. English
- The times a user sees are specified by the Siebel Server's time zone, or by the user's personal preferences
- The user's locale is specified by the Locale Code parameter of the application object manager
  - For example, the Call Center Object Manager (ENU) specifies a locale code of ENU, or the United States
    - Do not confuse the locale code with the language code, even though they usually match
  - This locale code specifies the time, date, currency, and number formats a user sees

ORACLE

13 - 13

Copyright © 2010, Oracle. All rights reserved.

### Summary: Localization

Technically, the language is specified as a parameter of the application object manager. For example, the Call Center Object Manager (ENU) component includes a Language Code parameter that is set to ENU (the language), and a Locale Code that is also set to ENU (the locale). However, changing the language code of a language-specific application object manager is strongly discouraged.

## Create the Company Hierarchy, Including Positions

- Create the Internal Division hierarchy
  - Each Internal Division requires a currency
- Label some divisions as organizations
- Create the position hierarchy
  - Each position must be assigned to a division
- Details were in a previous lesson

13 - 14

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Create the Company Hierarchy, Including Positions

**Dependencies:** Internal divisions and organizations require currencies. Positions require divisions.

## Create Employees and Users

- Create employees
  - Employees require at least one position and responsibility
- Create users
  - Users require at least one responsibility
- Perform the necessary authentication administration
- Details on creating employees and users were in a previous lesson

13 - 15

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Create Employees and Users

**Dependencies:** Both employees and users require responsibilities. Employees also require positions.

## Create Employee Skills (Optional)

- Employee skills are used to help determine which employee should perform a task
  - Used by Assignment Manager
- To create an employee skill:
  - Navigate to Administration - User > Employees
  - Select an employee who should have that skill
  - Under the Assignment Skill view tab, create a new record
  - Select an appropriate skill type
    - For example, Language, Product, or Product Line
  - Add an appropriate skill item
    - For example, ENU or SLR Cameras

ORACLE

13 - 16

Copyright © 2010, Oracle. All rights reserved.

### Create Employee Skills (Optional)

**Assignment Manager:** Assignment manager is discussed in greater detail in a subsequent lesson.

**Use of Employee Skills:** Employee skills are used in several areas, including Project Management and Assignment Management. Typically, a business analyst will tell you which skills to assign to which employees. Employees may also administer their own skills.

**Dependencies:** Employee skill items are based on the employee skill type, but have "sensible" dependencies; for example, you cannot specify a Product skill item before entering the product in the database.

## Create Catalogs, Categories, and Access Groups

- Create catalogs and categories
  - Details were in a previous lesson
- Create access groups to access private catalogs and categories
  - Recall, access groups may include positions, organizations, user lists, or households
    - Positions, organizations, and user lists were discussed in a previous lesson
    - Households are discussed over the next few slides

13 - 17

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Create Catalogs, Categories, and Access Groups

### Dependencies:

- Access groups require positions, organizations, user lists, or households.
- User lists require users.
- Households require contacts.

## Households

- Are sets of economically-affiliated Contacts
  - For example, an extended family living in a single home
- May be associated with records that are more appropriate to entire households than single contacts:
  - Activities
  - Service Requests
  - Assets
  - Opportunities
  - Agreements

## Create a Household

- Navigate to Households > List
- Create a new record with the name of the household
- Drill down on the household record and add contacts
  - Specify one contact as the head of household
- Add optional information, such as:
  - The household address(es)
  - Household revenue, income, wealth, segment (economic class), and status (value to your company)
  - The organization that interacts with the household
  - A team of employees assigned to work with this household

## Working with Households

- Activities can be associated with entire households
  - For example, schedule a service appointment
- Service requests, opportunities, activities, agreements, and assets for all household members are shown in the view tab applets
  - These records are still associated with individual contacts, but are all displayed in the Households screen
    - No need to look from contact to contact to find critical information

## Create Expense Types and Payment Terms

- Expense types are used when employees create expense reports
  - The seed data includes a large number of expense types
- Create new expense types under Expense Reports > Expense Types
  - Specify the type (for example, gasoline), the report category (for example, car expenses), and a summary category (for example, travel)
- Payment terms are payment terms for your customers
  - For example, pay within 30 days, pay within 60 days, or so forth
- Create payment terms under Administration - Data > Orders > Payment Terms

ORACLE

13 - 21

Copyright © 2010, Oracle. All rights reserved.

### Create Expense Types and Payment Terms

**Failing to Pay On Time:** The Siebel application does not include any as-delivered behavior if customers fail to pay on time. Your developers must implement business processes to handle this situation.

**Dependencies:** Expense types and payment terms have no dependencies.

## Add ZIP Codes and Industries

- Administer ZIP codes under Administration - Data > ZIP Code Administration
  - The seed data includes United States ZIP codes
  - This view is also used to administer international postal codes
    - Not included in the seed data
    - Add a new record with the correct city, postal code (in the ZIP Code field), and country
- Administer industries under Administration - Data > Industries
  - Accounts may be assigned one or more industries

13 - 22

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Add ZIP Codes and Industries

**Dependencies:** New Industries should be created before Accounts.

**Industries:** Your business analyst should tell you if your application requires any new industries.

## Add "Contact Us" Information

- Recall: Users may select Help > Technical Support to see support information
- Add this information under Administration - Application > System Preferences
  - Query for System Preference Name = Technical Support
  - Available fields are:
    - Technical Support (Voice) = Your company's contact or technical support phone number
    - Technical Support (FAX) = Your company's contact or technical support FAX number
    - Technical Support (URL) = Your company's Web address
    - Technical Support (Alt. 1) and Technical Support (Alt. 2) = Additional fields (strings) for your company's use

ORACLE

13 - 23

Copyright © 2010, Oracle. All rights reserved.

### Add "Contact Us" Information

Note that these system preferences apply across the entire Siebel Enterprise; that is, if you set these preferences for the Siebel Call Center application, the same preferences will apply in the Siebel Sales application.

## Lesson Highlights

- You must administer certain data before users access the application
  - If necessary, add views and/or responsibilities
  - If necessary, create or edit data records for:
    - Countries, currencies, languages, time zones, locales, industries, or ZIP codes
    - Seed data is usually sufficient for these record types
  - Create the company hierarchy, including positions
  - Create employees and users
  - If necessary, add supporting information:
    - Employee Skills
    - Periods
    - Expense Types and Payment Terms
  - Add Contact Us Information

## Practice 13 Overview: Exploring Initial Data

This practice covers the following topics:

- Exploring the initial data you may need to administer for an application
- Exploring households

# **Siebel 8.1.x Application Administration**

**Volume II • Student Guide**

D63799GC10  
Ed 1  
March 2010  
D66356

**ORACLE®**

# 19

## Administering Business Automation

Copyright © 2010, Oracle. All rights reserved.

ORACLE

# Objectives

After completing this lesson, you should be able to:

- Define business services
- Describe and activate workflows
- Describe and activate inbound Web services

## Business Challenge: Automation

- Many aspects of the Siebel application require automation, especially for integration with other applications:
  - When a user clicks "Submit Order", the order is transferred to an order fulfillment application
  - When a user selects "Generate Approvals", the Siebel application populates the appropriate Inboxes with approval items
  - When a new service request is generated by a Call Center agent, it is assigned to a technician with the appropriate technical skills
- In particular, business processes are frequently automated in whole or in part
  - A business process is a series of activities executed to achieve a specific business objective

## Business Solution: Automation Methods

- Business services are small programs providing functionality in the application
  - For example, update a field in a business component or format data for export to another application
  - The as-delivered application includes hundreds of business services available for use
- Workflows automate steps in a business process
  - Many workflow steps use business services
- Web services provide communication with other applications:
  - Transfer data
  - Invoke processing

### Business Solution: Automation Methods:

All of the automation methods discussed in this lesson are discussed in far greater detail in Oracle University's Siebel Business Automation course.

## A Siebel Business Service

- Is a unit of functionality that is reusable and globally accessible
  - For example, the ISS Shipping Cost Service computes shipping charges corresponding to a company's shipping policies
- Enables business logic to be executed repeatedly in multiple different context
  - The business logic is not restricted to a specific object, such as a business component, applet, or so forth
- Can be invoked by many Siebel processes
  - Workflows, tasks, Inbox item actions, and so forth
- May be included in the as-delivered Siebel application, or may be created by your developers

ORACLE

19 - 5

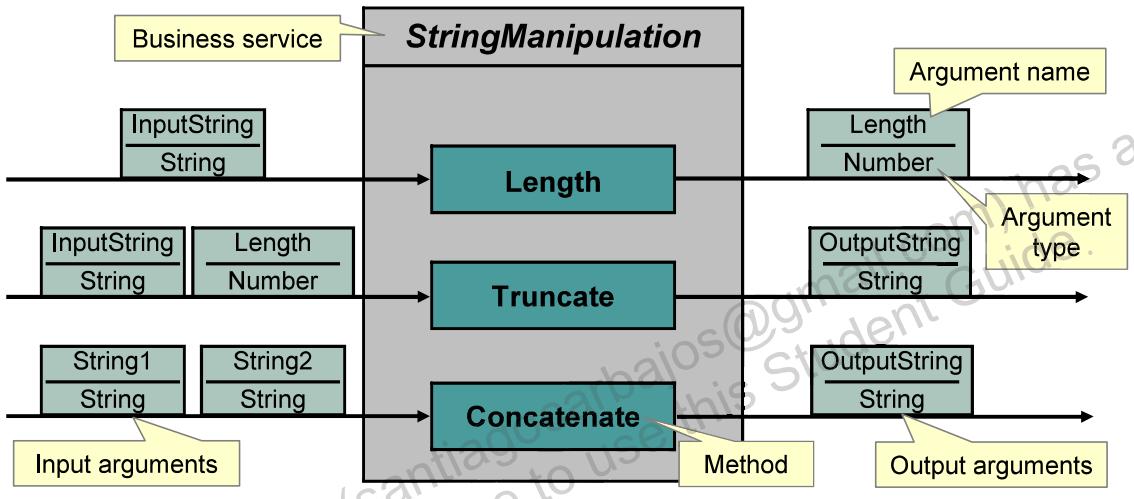
Copyright © 2010, Oracle. All rights reserved.

### A Siebel Business Service

**Reference:** For a list of as-delivered business services, consult the *Siebel Business Process Framework: Workflow Guide*.

## Business Service Methods

- A business service consists of one or more operations called methods
  - Each method has a set of input and output arguments, each with a specified type

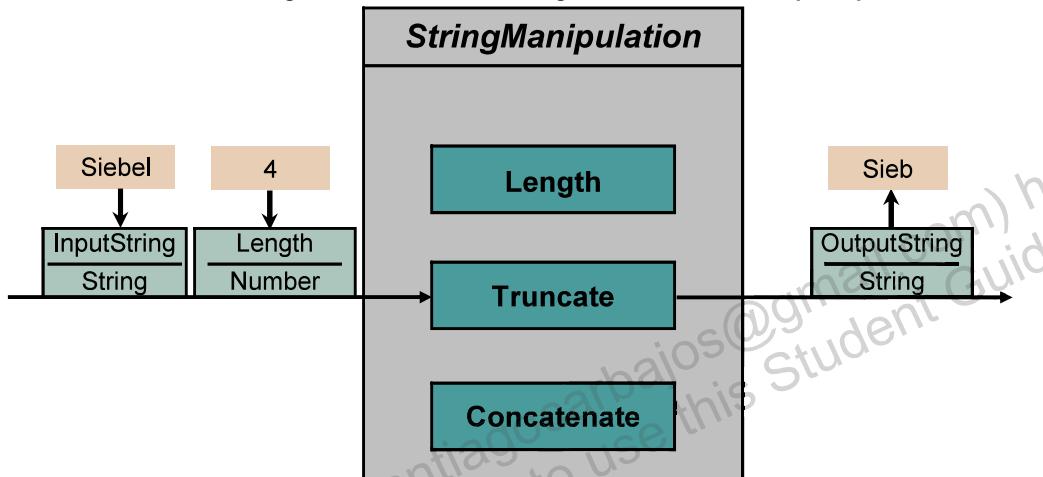


### Business Service Methods

**Diagram:** The diagram depicts the StringManipulation business service as a large grey rectangle in the center of the diagram. The StringManipulation business service includes three methods: Length, Truncate, and Concatenate, as indicated by dark green boxes within the StringManipulation box. The input argument for the Length method is InputString, of type String, as indicated by a lighter green box on the left. The output argument for the Length method is Length of type Number, as indicated by a lighter green box on the right, with a pair of callouts indicating the argument name and the argument type. Similarly, the Truncate method has String InputString and Number Length as inputs, and String OutputString as an output. Finally, Concatenate has String String1 and String String2 as inputs, and String OutputString as its output.

## Invoking a Method

- Involves:
  - Assigning values to the input parameters
    - Not all input parameters are required to have values
  - Retrieving the values assigned to the output parameters



19 - 7

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Invoking a Method

**Diagram:** The diagram depicts the StringManipulation business service as a large grey rectangle in the center of the diagram. The StringManipulation business service includes three methods: Length, Truncate, and Concatenate, as indicated by dark green boxes within the StringManipulation box. The input arguments for the Truncate method are String InputString and Number Length. In this example, they are being set to InputString = Siebel, Length = 4, as indicated by orange boxes. In this case, the output String OutputString has a value of Sieb, as indicated by an orange box.

## Administrative Interface

- As an application administrator, to invoke a business service, you will usually:
  - Select a business service name; for example **Workflow Process Manager**
  - Select a business service method; for example **RunProcess**
  - Add business service method arguments as name-value pairs in a comma-delimited string; for example  
**"ProcessName", "ISS Post Approval Workflow (Agreement)", "SendEmail", "FALSE"**



19 - 8

Copyright © 2010, Oracle. All rights reserved.

### Administrative Interface

**Business Service Name, Method, and Arguments:** Typically your developer or business analyst will provide you with the name, method, and arguments to use to invoke a business service.

**Inbox Types:** You will learn more about Inbox types in a subsequent lesson.

**Screenshot:** The screenshot shows Administration - Inbox > All Inbox Types > Actions. In the bottom applet, the record shown has Business Service = Workflow Process Manager, Business Service Method = RunProcess, Business Service Method Arguments = "ProcessName", "ISS Post Approval Workflow (Agreement)", "SendEmail", "FALSE". This indicates that the RunProcess method of the Workflow Process Manager business service will be invoked with arguments ProcessName = "ISS Post Approval Workflow (Agreement)", SendEmail = "FALSE". You will frequently be asked to invoke the RunProcess method of the Workflow Process Manager business service in order to start a workflow.

## A Siebel Workflow Process

- Is an ordered set of steps executed in response to a defined set of conditions
  - Typically used to automate parts of business processes in a Siebel application
  - Workflows may invoke business services as steps
- Is created in Siebel Tools by developers and deployed to a Siebel Enterprise
- Must be activated before it can execute
  - May be done automatically as part of its deployment
  - May require an application administrator to perform the activation

19 - 9

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### A Siebel Workflow Process

**Reference:** The *Siebel Business Process Framework: Workflow Guide*.

**Siebel Task UI Activation:** Siebel Task UI is a facility that extends business process automation to user interactions. A Task consists of multiple interactive operations with branching and decision logic. Tasks may also need to be activated by an application administrator. The process for activating a task is almost identical to that for activating a workflow process.

# Activating Workflow Processes

- To activate a deployed workflow:
  - Navigate to Administration - Business Process > Workflow Deployment > Repository Workflow Process
  - Select the appropriate workflow and click Activate
  - The workflow should appear in the child applet
  - If the workflow has already been activated, a new version with an incremented Version number will appear

The screenshot shows the Siebel Application Administration interface. The top navigation bar includes links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, Administration - Business Process, and Workflow Deployment. The main content area is titled "Repository Workflow Processes". A red box highlights the "Activate" button in the toolbar. Another red box highlights the row for "UDA Acknowledgement" in the main table, which shows it is completed and part of the "Application Deploym" group. Below this, a child applet titled "Active Workflow Processes" displays a single row for "UDA Acknowledgement" with Version 0, Deployment Status Active, and Activation Date/Expiry information. A red circle with an arrow points from the "UDA Acknowledgement" row in the main table to the corresponding row in the child applet. The bottom of the screen shows a red footer bar with the ORACLE logo and copyright information: "19 - 10 Copyright © 2010, Oracle. All rights reserved."

## Activating Workflow Processes

**Seed Workflows:** The as-delivered Siebel application includes hundreds of seed workflows, but it does not have any of these workflows activated. You may be asked to activate many as-delivered workflows as part of the application's initial deployment.

**Deployment Status:** Be sure that the Deployment Status in the bottom applet reads Active. This confirms that the workflow is currently active.

**Deactivating a Workflow Process:** To deactivate a workflow process, select it in the Active Workflow Processes (child) applet and select Deactivate Process from the applet-level menu.

**Activating a Task:** To activate a Task:

- Navigate to Administration - Business Process > Task Deployment > Active Tasks
- Select the appropriate task and click Activate
- The activated task should appear in the Active Tasks child applet

**Screenshot:** The screenshot shows Administration - Business Process > Workflow Deployment > Repository Workflow Process. In the top applet, the UDA Acknowledgement workflow is selected, and it and the Activate button are highlighted in red. In the bottom applet, the UDA Acknowledgement workflow is highlighted in red with Version = 0, indicating that this is the first time this workflow has been activated.

## Runtime Events

- Many workflows or business services are invoked when a user performs an action
  - For example, when the user saves a Quote, check to see whether the quote total is over \$1 million, and, if so, submit the quote for approval
- Runtime events are the mechanism used to trigger these responses
  - A user performs an action in the Siebel application
  - The runtime events list is checked to determine whether a runtime event is associated with this action
  - If so, the action associated with the runtime event (invoke a business service or start of workflow) is performed
- As an application administrator, you may be asked to reload runtime events as new workflows are deployed

**ORACLE**

19 - 11

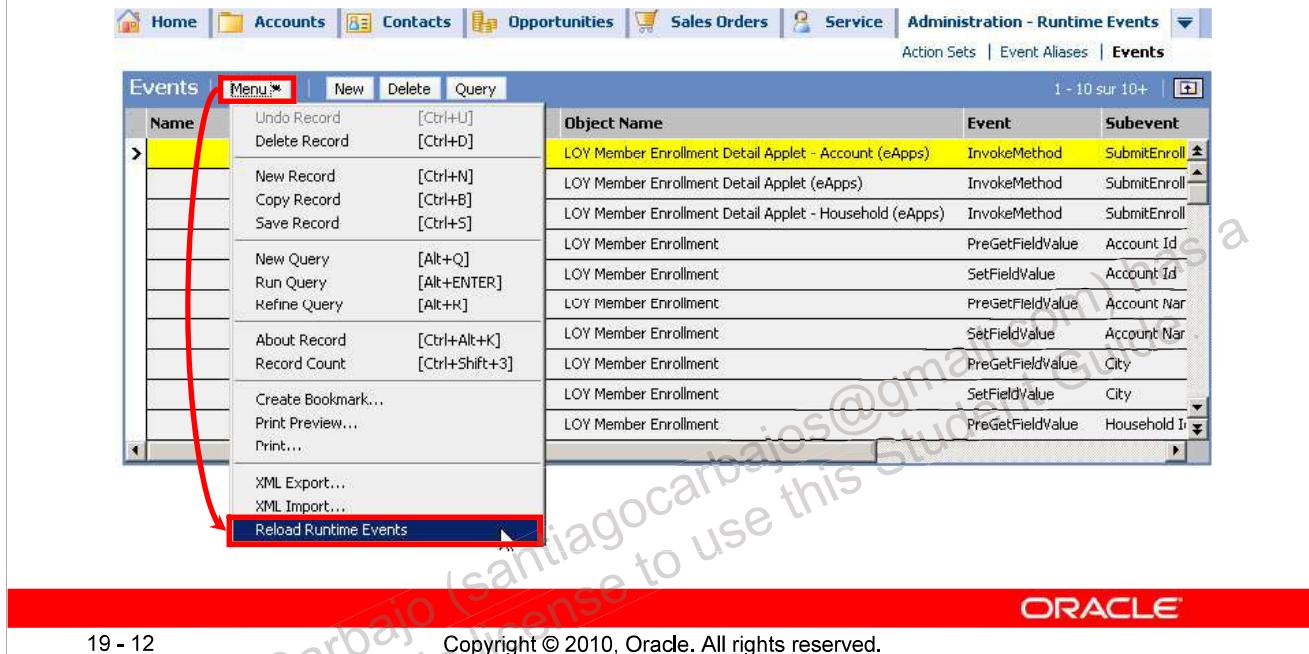
Copyright © 2010, Oracle. All rights reserved.

### Runtime Events

Reference: "Tracking Run-Time Events" in the *Siebel Personalization Administration Guide*.

## Reload Runtime Events

- Navigate to Administration - Runtime Events > Events
- From the applet-level menu, select Reload Runtime Events



19 - 12

Copyright © 2010, Oracle. All rights reserved.

### Reload Runtime Events

**Modification:** The applet-level menu in the screenshot has been modified for clarity.

**Example:** A developer creates a workflow that performs some processing on new Accounts; for example, it might change the account status, or send an e-mail to notify a manager that a new account has been created. The developer configures the workflow to be triggered when a user creates a new account, which is a NewRecord runtime event. Then:

- The developer deploys the workflow
- You activate the workflow
- You reload runtime events

The next time a user creates a new account, the runtime event fires, and the workflow is invoked.

**Screenshot:** The screenshot shows Administration - Runtime Events > Events. The applet-level menu is expanded, and Reload Runtime Events is selected.

## Web Services

- Are software components that provide well-defined units of application functionality between servers
  - For example, send an order from the Siebel application to an order processing application, and start order processing
- Are independent of the client's platform, operating system, and programming language
  - The communications standard is public and well-defined
- Have published descriptions of how to invoke them
  - Clients import these structures to invoke these services

## Web Service Protocols

- Terminology you should be familiar with:
  - eXtended Markup Language = XML
    - The format of the message content; for example, the order
  - Simple Object Access Protocol = SOAP
    - The format for the message: The "wrapping" for the content
  - Web Services Description Language = WSDL
    - The description of the Web service itself: What can it do? What content is it expecting? In what format?

## Siebel Web Services

- Come in two types:
  - Inbound Web Services: Expose Siebel functionality to other applications
    - For example, the Siebel Simple Product Web service allows external applications to browse and/or modify Siebel products
  - Outbound Web Services: Functionality exposed by other applications and used by the Siebel application for additional processing
    - For example, to submit an order to an order processing application
    - Typically, outbound Web services are administered by integration specialists, rather than application administrators

19 - 15

Copyright © 2010, Oracle. All rights reserved.

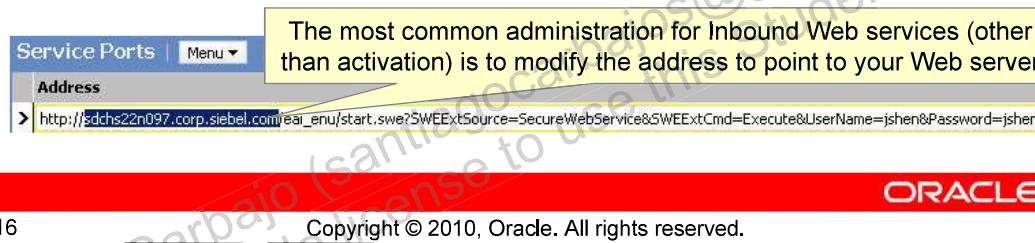
ORACLE

### Siebel Web Services

**Reference:** "Web Services" in *Integration Platform Technologies: Siebel Enterprise Application Integration*.

## Administering Inbound Web Services

- To administer a Siebel Inbound Web service:
  - Navigate to Administration - Web Services > Inbound Web Services
  - Query for the Web service to be administered
  - Perform administration:
    - Modify the Address field of the Service Port(s) to point to your enterprise's Web server
    - Change the Status from Inactive to Active to activate the Web service
    - Generate the WSDL file for the Web service and provide it to another development team



19 - 16

Copyright © 2010, Oracle. All rights reserved.

### Administering Inbound Web Services

**Creating Inbound Web Services:** In addition to many seed Inbound Web services, Siebel Developers may deploy new Siebel Web services using Siebel Tools. These new Web services must be administered by an application administrator to make them available to other applications.

**Screenshot:** The screenshot shows the Service Ports applet for an Inbound Web service. The Address field is shown, with sdchs22n097.corp.siebel.com highlighted. Your most common administrative task (other than activating the Web service itself) is to modify this address to point to your Web server.

## Restricting Access to Business Automation

- Business challenge: You may not want all users to be able to invoke all business services, workflows, or tasks
  - Especially important when exposing Inbound Web services
    - For example, an anonymous user should be able to browse products using the Siebel Simple Product Inbound Web service, but should not be able to create or delete products using it
- Business solution: Restrict access using responsibilities
  - To limit one responsibility, add specific business services or tasks to that responsibility
    - Under Administration - Application > Responsibilities
  - To restrict access to business services or tasks, specify restricted access for that business service or task
    - Under Administration - Application > Business Service Access
    - Under Administration - Application > Tasks > Responsibilities

ORACLE

19 - 17

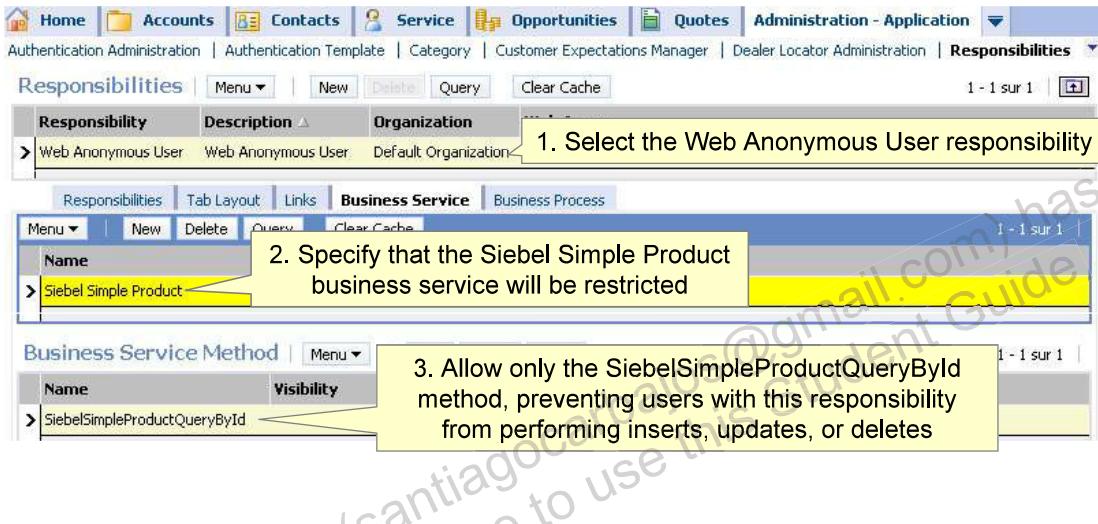
Copyright © 2010, Oracle. All rights reserved.

### Restricting Access to Business Automation

**Default:** By default, all responsibilities can invoke all business services, business processes, and tasks. Your business analyst may ask you to restrict some of these, whether or not an Inbound Web service is involved.

## Example: Prevent the Web Anonymous User from Modifying Products

- To restrict the Web Anonymous User from using the Siebel Simple Product Inbound Web service to do anything other than query for products:



## Example: Prevent the Web Anonymous User from Modifying Products

**Multiple Responsibilities:** Recall that users with multiple responsibilities have the least restrictive settings of all of their responsibilities, so a user with a second responsibility that allowed access to the other business service methods could use those methods.

**Business Service Method Applet:** It is important to create at least one Business Service Method record; otherwise the application defaults to allowing all business service methods for the specified business service.

**Screenshot:** The screenshot shows Administration - Application > Responsibilities > Business Service. To restrict the Web Anonymous User responsibility's access to a business service, first select the Web Anonymous User responsibility in the top applet. Next, create a new business service record in the middle applet and specify the business service to restrict; in this case, the Siebel Simple Product business service.. Finally, in the bottom applet, specify which business service methods will be allowed; in this case, only the SiebelSimpleProductQueryById method is allowed. This prevents users with this responsibility from performing inserts, updates, or deletes using this business service.

## Lesson Highlights

- Siebel business services are reusable units of application functionality
  - Contain one or more methods
  - Each method has input and output arguments
- Siebel workflows automate business processes
  - May invoke business services
  - May be invoked by runtime events
- Web services allow different applications to communicate with one another using a standardized protocol
  - You may be required to modify and activate Inbound Web services

## Practice 19 Overview: Enabling Workflows and Web Services

This practice covers the following topics:

- Activating a workflow
- Enabling a Web service that uses that workflow

# 23

## Submitting Jobs

ORACLE

Copyright © 2010, Oracle. All rights reserved.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

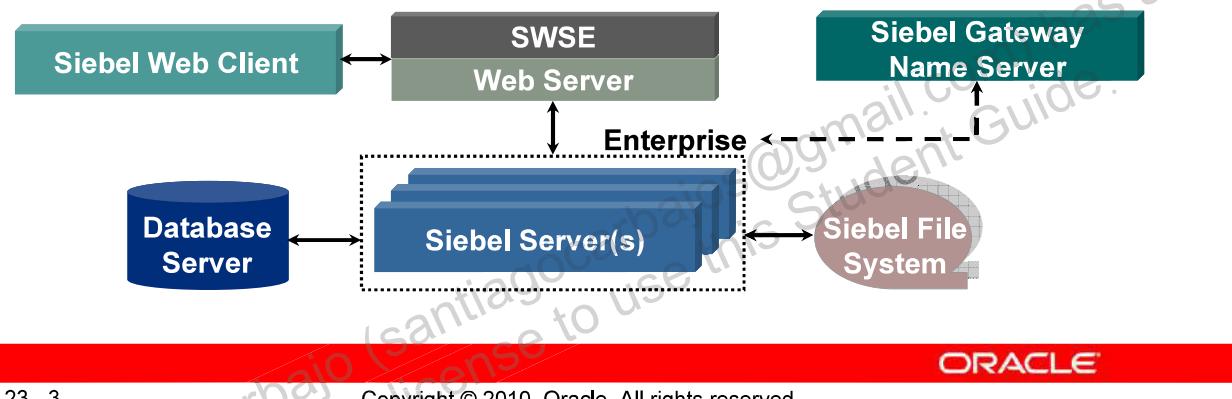
# Objectives

After completing this lesson, you should be able to:

- Define component groups and parameters
- Create, submit, and monitor a job
- Create and use a job template

## Review: The Siebel Web Architecture

- The Siebel Web architecture consists of a Web Client, Web server with Siebel Web Server Extension (SWSE) installed, Gateway Name Server, and Enterprise containing one or more Siebel Servers
  - Each Siebel Server includes its own set of components: programs that run on the server to provide application functionality



23 - 3

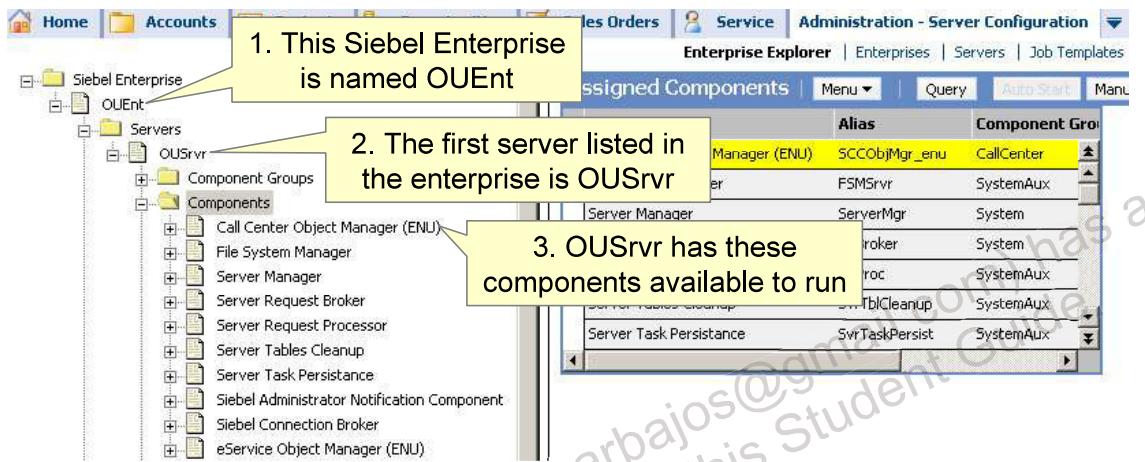
Copyright © 2010, Oracle. All rights reserved.

## Review: The Siebel Web Architecture

**Diagram:** The diagram shows the Siebel Web client as a light blue box in the upper left, connecting to the Web server with SWSE installed (as a grey box to its right, connected by a black double arrow). The Web server connects to the Siebel Enterprise below it, represented by a dotted line, that contains a group of Siebel Servers represented by blue boxes. To the left of the Enterprise is the Database Server in dark blue, and to the right is the Siebel File System in pink. Finally, the Enterprise also connects to the Siebel Gateway Name Server in the top right (a greenish-blue box).

## Examining the Siebel Enterprise

- View the Siebel Enterprise hierarchy using Administration - Server Configuration > Enterprise Explorer



## Examining the Siebel Enterprise

**Screenshot:** The screenshot shows Administration - Server Configuration > Enterprise Explorer. At the top level is the Siebel Enterprise. In the screenshot, it is named OUEnt. OUEnt is expanded, exposing the Servers folder. Within the Servers folder, the top server is OUSrvr. OUSrvr is expanded to expose its Component Groups and Components folders. The Components folder is expanded to list the components available to run on OUSrvr.

# Component Groups

- Are logical groupings of components
  - Components are enabled or disabled in groups by a system administrator
- Support major functional areas of the application
  - For example, Siebel Call Center, Siebel Remote, or Assignment Management

The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, Administration - Server Configuration, and other options like Enterprise Explorer, Enterprises, Servers, and Job Templates. Below the navigation bar is a sidebar titled "Enterprise Explorer" which lists the structure of the enterprise, including Siebel Enterprise, OUEnt, Servers, and Component Groups. Under Component Groups, several groups are listed: Siebel Financial Services, Siebel High Tech Industrial Manufacturing, PIM Server Integration Management, Marketing Server, Field Service, and Workflow Management. To the right of the sidebar is a main pane titled "Enterprise Component Groups". This pane contains a table with columns for Name, Alias, and Number of Components. The data in the table is as follows:

Name	Alias	Number of Components
Siebel Financial Services	Fins	9
Siebel High Tech Industrial Manufacturing	HTIM	
PIM Server		
Marketing S		
Field Service		
Workflow M		
Application Deployment Manager	ADM	3

A yellow callout box points to the "Number of Components" column in the table, with the text: "The detail pane provides additional information such as the number of components in each group".

23 - 5

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Component Groups

**Enabling and Disabling Component Groups:** For more information on enabling or disabling component groups, or on component groups in general, consult the *Siebel System Administration Guide*, or consider attending Oracle University's Siebel System Administration course.

**Screenshot:** The screenshot shows Administration - Server Configuration > Enterprise Explorer. At the top level, Siebel Enterprise is expanded, exposing the OUEnt enterprise. OUEnt is expanded, exposing the Servers and Component Groups folders. The Component Groups folder is expanded, exposing the component groups available to the enterprise, including Siebel Financial Services, Siebel High Tech Industrial Manufacturing, PIM Server Integration Management, and so forth. In the right pane, the Enterprise Component Groups list applet is shown. It also lists the component groups available to the enterprise, but it provides additional details, such as the number of components included in that component group.

# Executing Components

- When a component executes, it is called a task
  - Multiple instances of the same component may run simultaneously
- Components execute in one of three modes:
  - Batch components run once until completion
    - Requests for batch component executions are called jobs
    - Usually initiated by user action, event, or workflow
    - For example, data loads or database extracts
  - Background components run continuously in the background
    - Periodically "wake up" and execute
    - For example, transaction processor for tracking changes to the database
  - Interactive components run in response to client requests
    - For example, application object managers

ORACLE

23 - 6

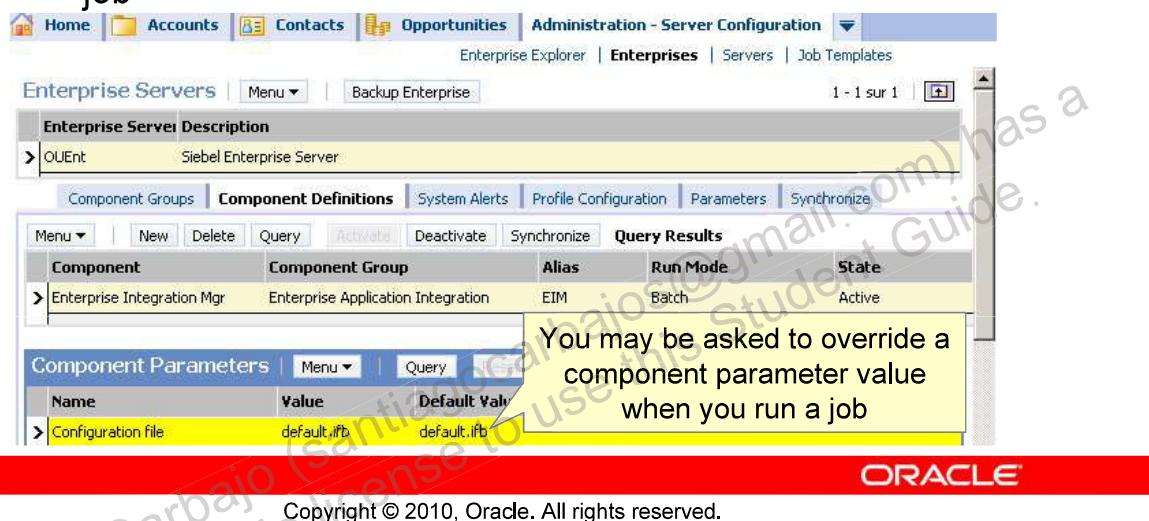
Copyright © 2010, Oracle. All rights reserved.

## Executing Components

**Job Roles:** As an application administrator, you may be asked to run or schedule batch components. That is the subject of the remainder of this lesson. System administrators typically configure and manage background and interactive components. For more information, consult the *Siebel System Administration Guide*, or consider taking Oracle University's Siebel System Administration course.

## Component Parameters

- Are input arguments for tasks
- Are configured by a system administrator
- May be overridden when running a batch component (job)
  - For example, change the configuration file for a data import job



### Component Parameters

**Screenshot:** The screenshot shows Administration - Server Configuration > Enterprises > Component Definitions. At the top is the Enterprise Servers applet, showing the OUEnt enterprise. In the middle is the Component Definitions applet, with the Enterprise Integration Mgr component selected. This component is a batch component used to perform data imports and exports. The bottom applet is the Component Parameters applet, with the Configuration file parameter selected. Its value is default.ifb. You may be asked to override this component parameter value when you run a job.

# Jobs

- Are requests to the server to run a task for a batch component
  - Example jobs:
    - Import data using Enterprise Integration Manager
    - Assign records to users using Assignment Manager
- May be scheduled to run periodically
  - For example, a batch import/export job that runs nightly
- Are managed from Administration - Server Management > Jobs

23 - 8

Copyright © 2010, Oracle. All rights reserved.

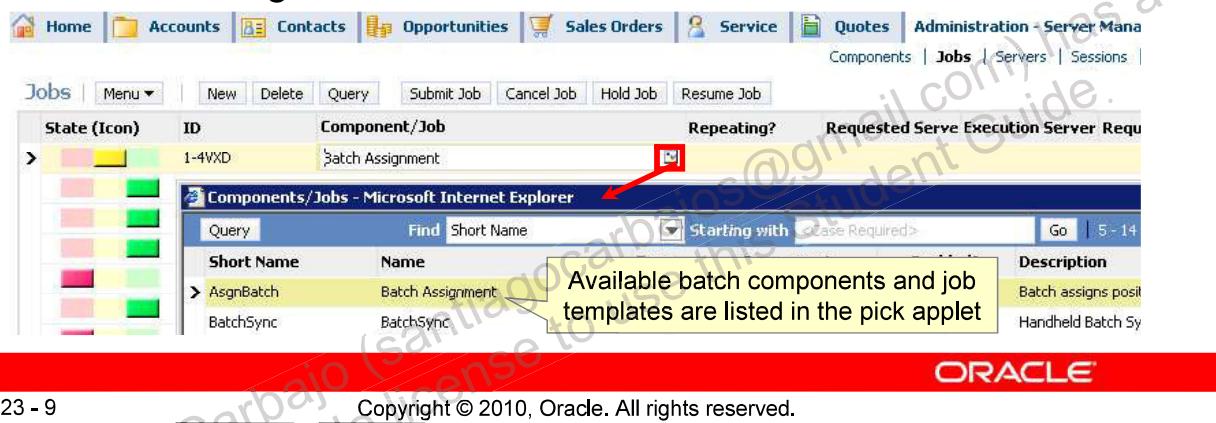
ORACLE

## Jobs

**Enterprise Integration Manager:** Enterprise Integration Manager is a framework for importing and exporting data for the Siebel application.

## Create Jobs

- Create a new job by:
  - Navigating to Administration - Server Management > Jobs
  - Creating a new record
  - Selecting either a batch component or a job template from the pick applet
- Alternatively, copy an existing job to copy its parameters and settings



### Create Jobs

**Job Templates:** Job templates are covered later in this lesson.

**Screenshot:** The screenshot shows Administration - Server Management > Jobs. A new record is being created. A red highlight indicates that if you click the Select button in the Component/Job field, a Components/Jobs applet is displayed, as shown. This applet lists the available batch components and job templates. In the screenshot, the Batch Assignment component has been selected.

## Set Job Parameters

- Specify the parameters for the job

The screenshot shows the Siebel Application Administration interface. At the top, there's a navigation bar with tabs like 'Jobs', 'Menu', 'New', 'Delete', 'Query', 'Submit Job', 'Cancel Job', 'Hold Job', 'Resume Job', and 'Query Results'. Below this is a table titled 'Jobs' with columns: State (Icon), ID, Component/Job, Repeating?, Requested Server, Execution Server, Request Key, Mode, and Status. One row is selected with ID '1-4VXD' and Component/Job 'Batch Assignment'. A red arrow points from the text '1. Create and define job parameters' to the 'Assignment Object Name' field in the 'Job Parameters' applet, which has a red border. A callout box labeled '1. Create and define job parameters' is positioned over this field. Another callout box labeled '2. The specific parameters, as well as which are optional and which are required, depend on the batch component or job template you selected' is positioned over the 'Job Parameters' applet itself. The bottom of the screen shows a red banner with 'ORACLE' and the copyright notice 'Copyright © 2010, Oracle. All rights reserved.'

### Set Job Parameters

**Default Parameters:** If you do not specify a parameter for the job, the job will use the parameter from the underlying component, if it has been set.

**Parameter Values:** If you create a Job Parameter for a parameter that has already been set (for example, by a system administrator), the value populates with the current value of the parameter. You may change this value. This overrides the parameter value for this job only; it does not change the value of the parameter for future jobs.

**References:** For a list of Siebel Server components and parameters, see the appendices of the *Siebel System Administration Guide*. For more detailed information on the batch component you are working with, consult the appropriate guide. For example, if you are submitting an assignment job, consult the *Assignment Manager Administration Guide* for more information on how to set its parameters.

**Screenshot:** The screenshot shows the bottom portion of Administration - Server Management > Jobs. In the top applet (Jobs), a Batch Assignment job is being created. The middle applet (Job Detail) is obscured by the Job Parameters select applet. The bottom applet (Job Parameters) has a new record, Assignment Object Name. A red highlight indicates that if you click the Select button in the Name field of a Job Parameter record, the Job Parameters select applet is shown. You can then select the job parameter from the list. The specific parameters shown, as well as which are required and which are optional, depend on the batch component or job template.

## Set Job Options

- Optionally, set repeating, error handling, and server preferences

The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with links like Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Server Management. Below the navigation bar, a table lists jobs. One job is selected, showing details in a modal dialog. The modal dialog has tabs for 'Job Detail' and 'Repeating Instances'. The 'Job Detail' tab is active, displaying fields such as Component/Job (Batch Assignment), Requested Server (OUSrvr), and Repeating? (checked). A callout box points to the 'Requested Server' field with the text: 'Requested Server = The server on which you would like the job to run'. Another callout box points to the 'Description' field with the text: 'Optionally, set repeating jobs to expire'. The 'Repeating Instances' tab is also visible, showing a repeating info section with various configuration options like Repeat Unit (Days), Repeat Interval (1), and Retry settings. The Oracle logo is at the bottom right of the page.

### Set Job Options

**Requested Server:** If the requested server is available, it will run on that server. Otherwise, the job will run on a different available server. Once the job runs, the Execution Server field is populated with the server on which the job ran.

**Screenshot:** The screenshot shows Administration - Server Management > Jobs. The Requested Server is OUSrvr. On the left is the Expiration field, which can be set to have repeating jobs expire after a certain time. To the right is the Repeating Info section, which includes a checkbox for whether or not a job is repeating, a Repeat Unit field (set to Days in the screenshot), a Repeat Interval field (set to 1), a Repeat From field (set to Scheduled Start), and a Repetitions field (empty, indicating that the job should repeat forever, or at least until the expiration date). To the far right is the Retry section, which includes a checkbox for whether or not to retry the job if there is an error, a Sleep Time field for the number of seconds to wait before retrying the job (set to 300 in the screenshot), a Number of Retries field (set to 3), and a Current Num of Retries field (showing 0) used to show an administrator how many times the job has been retried.

## Submit the Job

- Click the Submit Job button to submit a job
  - The job's status should change to Queued
- Perform a query to ensure the job has been submitted to a server
  - If it remains queued for too long, the component may not be enabled on any server in the enterprise
    - Alternatively, the server could simply be very busy
- Manage the job from the same view
  - Cancel, hold, or resume the job



### Submit the Job

**Screenshot:** The screenshot shows Administration - Server Management > Jobs, with the Batch Assignment job selected. The Submit Job is to the right of the Query button. There are three other buttons to the right of Submit Job: Cancel Job, Hold Job, and Resume Job.

## Manage a Job

- The options for managing a job are:
  - Delete: Deletes the job record without submitting it
    - You may only delete a job with a Status of Creating
  - Cancel Job: Cancels the job and prevents it from further processing
    - You may only Cancel a job with a Status of Queued or On Hold
    - The job will be deleted after the Delete Interval specified in the job options
  - Hold Job: Prevents the job from further processing
    - You may only Hold a job with a Status of Queued
    - Unlike cancelled jobs, held jobs may be resumed
  - Resume Job: Resume a held job
    - You may only Resume a job with a status of On Hold

ORACLE

23 - 13

Copyright © 2010, Oracle. All rights reserved.

### Manage a Job

Reference: "Administering Siebel Server Run-Time Operations" in the *Siebel System Administration Guide*.

## Monitor the Job

- From Administration - Server Management > Jobs, minimal job monitoring is available:
  - Check the Status, Execution Server, Current Number of Retries, and Completion Code (if available)
  - Review the repetition history of repeating jobs using the Repeating Instances view tab
  - Review the parameters with which you ran the job
  - Identify the Task ID of the task created to run the job
- For more detailed monitoring, monitor the job as a server task

## Monitoring Tasks

- Recall: When any component executes, it is called a task
- All tasks are managed under Administration - Server Management > Tasks
  - This includes submitted jobs
- Additional information in the Tasks view includes:
  - The operating system Process ID of the task
  - The task log
  - A detailed Status of what the task is currently doing
  - State values and statistics such as memory use, in addition to all of the task's parameters



23 - 15

Copyright © 2010, Oracle. All rights reserved.

### Monitoring Tasks

**Screenshot:** The screenshot shows Administration - Server Management > Tasks, with the Batch Assignment job now appearing as a task.

## Manage the Job as a Task

- From the Administration - Server Management > Tasks view, you can stop running tasks
  - Click the Stop button once to stop the task normally
  - Click the Stop button three times to send an immediate Kill signal
- Caveat: Stopping jobs may leave the database in an undesirable state, and you will need to re-run the job
  - For example, you might end up performing a partial data import or generating only certain workflow triggers in the database

## Job Templates

- Job templates are predefined sets of parameters for use with a batch component
- Multiple job templates can exist for the same component
  - For example, weekly assignments versus daily assignments
  - Both assignment jobs run the same component; only the set of input parameters is different

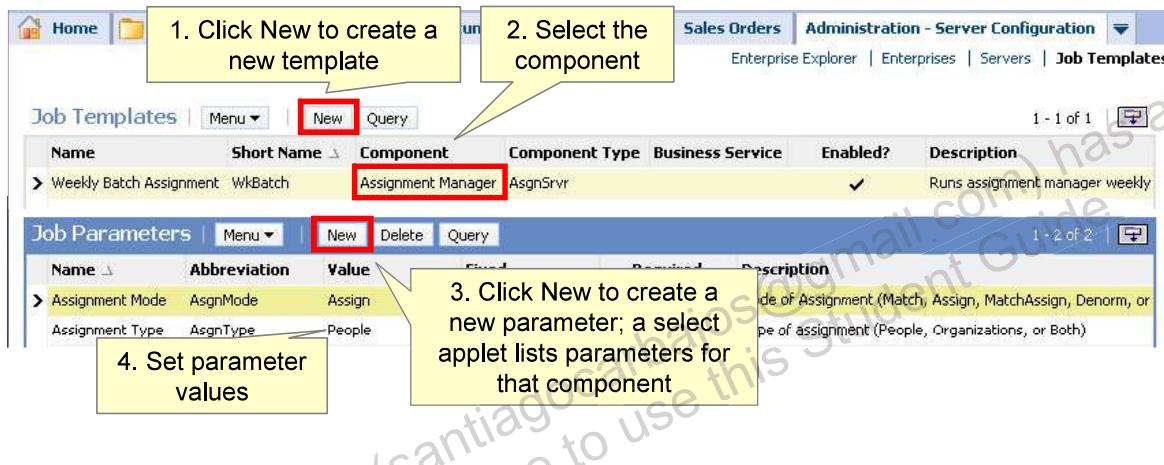
The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with links for Home, Accounts, Contacts, Opportunities, Quotes, Sales Orders, Administration - Server Configuration, Enterprise Explorer, Enterprises, Servers, and Job Templates. The main area has two tables. The first table, titled 'Job Templates', shows a single row for 'Weekly Batch Assignment' with a short name of 'WkBBatch', component 'Assignment Manager', business service 'AsgnSrvr', and a checked 'Enabled?' status. A yellow callout box points to this row with the text: 'This job template is specific to the Assignment Manager component'. The second table, titled 'Job Parameters', shows two rows: one for 'Assignment Mode' (value 'Assign') and another for 'Assignment Type' (value 'People'). The bottom of the screen features a red footer bar with the ORACLE logo and copyright information: '23 - 17 Copyright © 2010, Oracle. All rights reserved.'

### Job Templates

**Screenshot:** The screenshot shows Administration - Server Configuration > Job Templates. A Weekly Batch Assignment job template has been created in the top applet, that is based on the Assignment Manager component. In the bottom applet, two Job Parameters have been created: One with Name = Assignment Mode, Value = Assign, and the second with Name = Assignment Type, Value = People.

## Create a Job Template

- Navigate to Administration - Server Configuration > Job Templates
- Specify the batch component to be used and enter the job-specific parameters



23 - 18

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Create a Job Template

**Screenshot:** The screenshot shows Administration - Server Configuration > Job Templates. First, you click New in the top applet to create a new job template. Second, you select the batch component for the template. Third, you create parameters for the job by clicking New in the bottom applet and using the select applet that appears to select parameters.. Finally, you specify values for each parameter you selected.

## Use a Job Template

- To use a job template:
  - Navigate to Administration - Server Management > Jobs
  - Create a new job
  - Select the job template as the Component/Job
    - The job parameters will populate with the template's parameters
  - If desired, add additional job parameters, or override the template's parameters by modifying them for this job
  - Submit the job

## Lesson Highlights

- A component group is a set of components that is enabled or disabled on each server
  - A system administrator enables or disables component groups
- A running component is called a task, and may run in one of three modes:
  - Batch, Interactive, or Background
  - A request to run a batch component is called a job
- Create and submit a job under Administration - Server Management > Jobs
- Monitor a job under Administration - Server Management > Tasks
- Use Job Templates to create jobs with similar parameters

## Practice 23 Overview: Creating Jobs and Job Templates

This practice covers the following topics:

- Creating, submitting, and monitoring a job
- Creating a job template and using it to create and submit a job

Unauthorized reproduction or distribution prohibited. Copyright© 2014, Oracle and/or its affiliates.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# 24

## Siebel State Model

ORACLE

Copyright © 2010, Oracle. All rights reserved.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

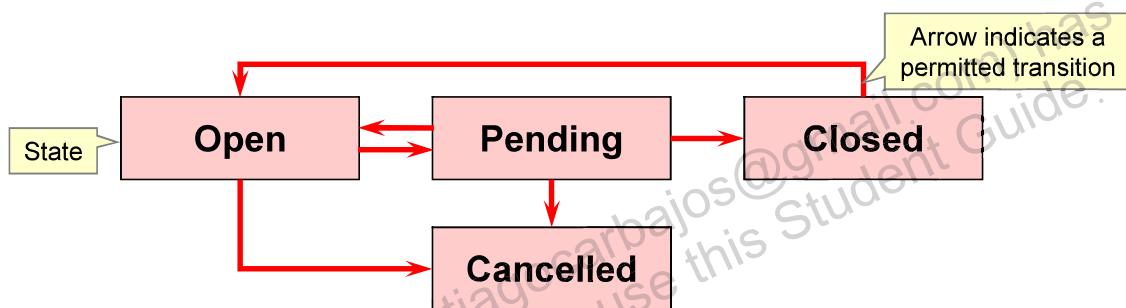
# Objectives

After completing this lesson, you should be able to:

- Describe how state models can enforce business logic
- Create a new state model

## Business Entities and Life Cycles

- Many business entities have a life cycle described by:
  - A set of states (values of one of the entity's fields)
  - A set of allowed transitions between the states
- For example: A service request could have a life cycle defined in terms of these values of the Status field:
  - Open, Pending, Closed, Cancelled



24 - 3

Copyright © 2010, Oracle. All rights reserved.

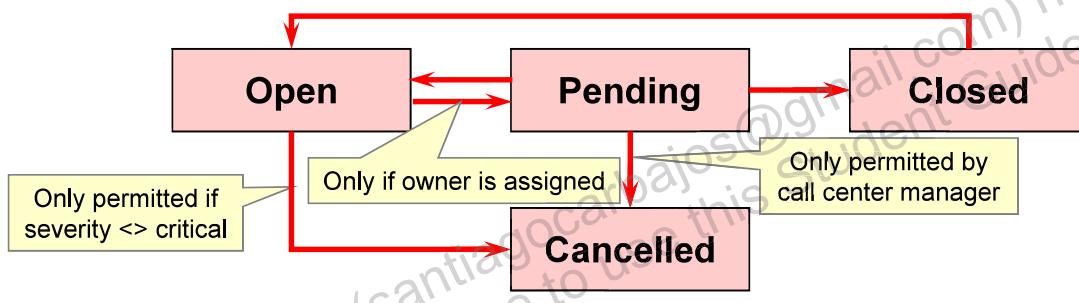
ORACLE

## Business Entities and Life Cycles

**Diagram:** The diagram shows the four service request statuses (Open, Pending, Closed, and Cancelled) as pink boxes, with Open, Pending, and Closed on top from left to right, and Cancelled on the bottom. Red arrows indicate permitted transitions. Open can transition to Pending or Cancelled. Pending can transition to Open, Closed, or Cancelled. Closed can transition to Open. And Cancelled cannot transition.

## Business Challenge: State Transitions

- A company's business policies may restrict transitions between states
  - Direct transitions between all states may not be permitted
  - Not everyone may be permitted to invoke a specific transition
  - Transitions may be subject to conditions
- Need a way to incorporate such restrictions into the life cycle of an entity



24 - 4

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Business Challenge: State Transitions

**Diagram:** The diagram shows the four service request statuses (Open, Pending, Closed, and Cancelled) as pink boxes, with Open, Pending, and Closed on top from left to right, and Cancelled on the bottom. Red arrows indicate permitted transitions. Open can transition to Pending or Cancelled. Pending can transition to Open, Closed, or Cancelled. Closed can transition to Open. And Cancelled cannot transition. The transition from Open to Cancelled is only permitted if the severity  $\neq$  critical, the transitions between Open and Pending are only allowed if an owner is assigned, and the transition from Pending to Cancelled is only permitted by a call center manager.

## Business Solution: The Siebel State Model

- A Siebel state model captures and enforces restrictions on transitions
  - Defines rules and conditions that specify allowed transitions
    - Uses declarative configuration as opposed to scripting
  - Is implemented using the Siebel client rather than Siebel Tools
    - Does not involve compiling and deploying a new SRF file

24 - 5

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Business Solution: The Siebel State Model

Reference: "State Models" in the *Siebel Applications Administration Guide*.

## State Model

- A state model consists of:
  - A set of states that correspond to the possible values of a single-value field
  - Requires a bounded picklist defined in the List Of Values table

The screenshot shows the Siebel Application Administration interface. The top applet is titled "SR Status State Model" and displays basic information: Name (SR Status State Model), Activation (9/22/2008 11:24:15), Expiration (9/22/2009 12:02:44), Created By (SADMIN), Business Component (Service Request), Field (Status), and Comments (Restrict status transitions for service requests). The bottom applet is titled "States for this state model" and lists four states: Cancelled, Closed, Open, and Pending. Each state has columns for State Name, Default, No Delete, No Update, Restrict Transition, and Description. A red box highlights the "State Name" column, and a yellow box highlights the "States for this state model" tab. A red arrow points to a "More" button.

24 - 6

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### State Model

**Flags for States:** Flags in the state applet, such as No Update and No Delete, are discussed later in this lesson.

**Bounded List of Values:** A single-value field can only be used with a state model if it has a bounded picklist. A bounded picklist requires a user to select a value from the picklist: the user cannot enter any other value.

**Screenshot:** The screenshot shows Administration - Application > State Models. The SR Status State Model is selected. In the top applet, the Business Component of Service Request and Field of Status are highlighted. The States view tab is selected, and in the bottom applet the State Names listed are Cancelled, Closed, Open, and Pending. In addition to State Name, the columns are Default, No Delete, No Update, Restrict Transition, and Description.

## State Model: Transitions

- A state model also defines a set of allowed transitions, which can be restricted
  - Can only be executed by authorized positions
  - Can only be executed when a condition is satisfied

The screenshot shows the SR Status State Model in the Siebel interface. The 'Transitions' tab is selected. The table lists transitions from one state to another, with columns for From State, To State, Public, Rule Field, Rule Operator, Rule Value, and Rule Expression. Annotations highlight specific rows:
 

- A row where Rule Value is "1-Critical" is labeled "Condition on transition".
- A row where Rule Value is NULL is labeled "Unrestricted".
- A general callout states "Only selected positions allowed to make transition".

From State	To State	Public	Rule Field	Rule Operator	Rule Value	Rule Expression
Open	Cancelled	<input checked="" type="checkbox"/>	Severity	<>	"1-Critical"	
Pending	Cancelled	<input type="checkbox"/>				
Pending	Open	<input checked="" type="checkbox"/>				
Closed	Open	<input checked="" type="checkbox"/>				
Pending	Closed	<input checked="" type="checkbox"/>				
Open	Pending	<input checked="" type="checkbox"/>	Owner	<>	NULL	

ORACLE

24 - 7 Copyright © 2010, Oracle. All rights reserved.

### State Model: Transitions

**Screenshot:** The screenshot shows Administration - Application > State Models. The SR Status State Model is selected. The Transitions view tab is selected, and in the bottom applet the first two columns are From State and To State, indicating the transitions. The other columns are Public, Rule Field, Rule Operator, Rule Value, and Rule Expression. The first record has From State = Open, To State = Cancelled, Public = Checked, Rule Field = Severity, Rule Operator =  $\neq$ , and Rule Value = "1-Critical". This indicates that the transition from Open to Cancelled is only allowed if the Severity field does not have a value of 1-Critical. The second record has From State = Pending, To State = Cancelled, and Public = Not checked. Only selected positions are allowed to make this transition. The third record has From State = Pending, To State = Open, and Public = Checked. Since there are no conditions, this transition is always allowed. Similarly, the fourth record has From State = Closed, To State = Open, and Public = Checked, and the fifth record has From State = Pending, To State = Closed, and Public = Checked. The fifth record is highlighted, and labeled as Unrestricted. The final record shown has From State = Open, To State = Pending, Public = Checked, Rule Field = Owner, Rule Operator =  $\neq$ , and Rule Value = NULL. This indicates that a state change from Open to Pending is only allowed if the Owner field is not NULL.

## Enabling the Siebel State Model

- Only certain business components are enabled for state model in the as-delivered application
  - For example, neither Accounts nor Contacts have state models enabled in the as-delivered application, while Activities and Service Requests do
- A developer can use Siebel Tools to enable other business components for state model

24 - 8

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Enabling the Siebel State Model

**Reference:** For more information on enabling the state model for other business components, see "Configuring Business Components for State Models" in the *Siebel Applications Administration Guide*, or consider taking Oracle University's Siebel Business Automation course.

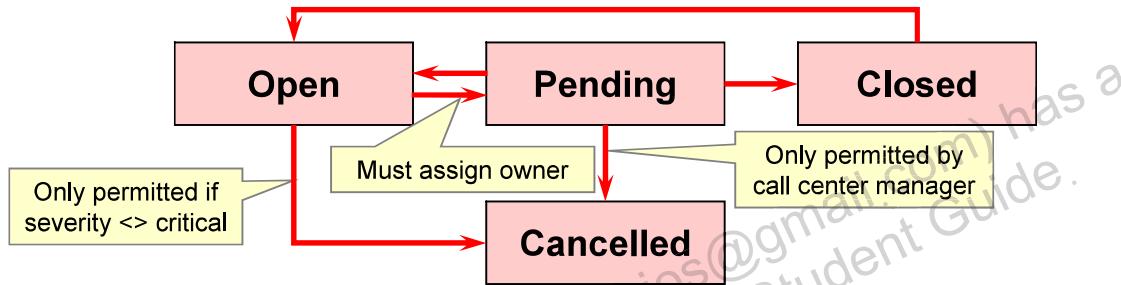
## Create a State Model

1. Design the desired life cycle
2. Create a new state model
3. Specify allowed states
4. Specify allowed transactions and restrictions
5. Specify authorized positions
6. Test the state model



## 1. Design the Desired Life Cycle

- Review relevant business policies to identify restricted transitions
- Document the allowed transitions and corresponding restrictions



### 1. Design the Desired Life Cycle

**Who designs the Life Cycle:** Typically, your business analyst will design the desired life cycle and provide you with the completed diagram.

**Diagram:** The diagram shows the four service request statuses (Open, Pending, Closed, and Cancelled) as pink boxes, with Open, Pending, and Closed on top from left to right, and Cancelled on the bottom. Red arrows indicate permitted transitions. Open can transition to Pending or Cancelled. Pending can transition to Open, Closed, or Cancelled. Closed can transition to Open. And Cancelled cannot transition. The transition from Open to Cancelled is only permitted if the severity  $\neq$  critical, the transitions between Open and Pending are only allowed if an owner is assigned, and the transition from Pending to Cancelled is only permitted by a call center manager.

## 2. Create a New State Model

- Navigate to Administration - Application > State Models
- Create a new state model record
  - Specify the business component and "state" field

Name	Business Component	Field	Activation	Expiration	Comments
SR Status State Model	Service Request	Status	9/22/2008 11:24:15 AM	9/22/2009 12:02:44 PM	Restrict status transitions for service requests

ORACLE

24 - 11 Copyright © 2010, Oracle. All rights reserved.

### 2. Create a New State Model

The Activation and Expiration fields are used to control when a state model is active.

**Screenshot:** The screenshot shows Administration - Application > State Models. A new record has been created with Name = SR Status State Model, Business Component = Service Request, Field = Status, Activation = 9/22/2008 11:24:15 AM, Expiration = 9/22/2009 12:02:44 PM, and Comments = Restrict status transitions for service requests. The Name, Business Component, and Field fields are highlighted.

### 3. Specify the Allowed States

- Navigate to the States view
- Create a record for each allowable value of the "state" field
  - Specify one state as the default initial state in which new records are created

The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Application. Below the navigation bar, a sub-navigation bar includes Authentication Administration, Authentication Template, Category, Customer Expectations Manager, and State Models. The main area displays two windows. The top window is titled 'SR Status State Model' and shows details for the model: Name: SR Status State Model, Activation: 9/22/2008 11:24:15, Created By: SADMIN, Business Component: Service Request, Expiration: 9/22/2009 12:02:44, Field: Status, and Comments: Restrict status transitions for service requests. The bottom window is titled 'States' and lists four states: Cancelled, Closed, Open, and Pending. The 'Open' state is highlighted with a red box around its 'Default' checkbox, which is checked, indicating it is the default state. Other columns include 'No Delete', 'No Update', 'Restrict Transition', and 'Description'. A watermark 'Sanantiago Carbajo (santiago.carbajo@gmail.com) has a license to use this student guide.' is diagonally across the screen.

### 3. Specify the Allowed States

Fields that appear in the States applet include:

- *Default*: The initial state when new records are created.
- *No Delete*: Records in this state cannot be deleted.
- *No Update*: Records in this state are read-only.
- *Restrict Transition*: Transitions involving this state are restricted by the state model; restrictions are specified in the Transitions applet.
- *Description*: Any notes on states.

**Screenshot:** The screenshot shows Administration - Application > State Models. The SR Status State Model is selected. The States view tab is selected, and in the bottom applet the State Names listed are Cancelled, Closed, Open, and Pending. In addition to State Name, the columns are Default, No Delete, No Update, Restrict Transition, and Description. The Default checkbox is checked for the Open state, indicating that this is the default state for new service requests.

## 4. Specify Allowed Transitions and Conditions

- Navigate to the Transitions view
- Create a record for each allowable transition
  - Select the from and to states using the drop-down list
  - Specify restrictions on who can execute the transition
  - Specify conditions required before the transition can occur

From State	To State	Public	Rule Field	Rule Operator	Rule Value	Rule Expression
Closed	Open	<input checked="" type="checkbox"/>				
Open	Cancelled	<input checked="" type="checkbox"/>	Severity	<>	"1-Critical"	
Open	Pending	<input checked="" type="checkbox"/>	Owner	<>	NULL	
Pending	Cancelled	<input checked="" type="checkbox"/>				
Pending	Closed	<input checked="" type="checkbox"/>				
Pending	Open	<input checked="" type="checkbox"/>				

1. Select the from state  
2. Select the to state  
3. Unset Public if transition is restricted to certain users  
4. Add any additional conditions on transition

ORACLE

24 - 13 Copyright © 2010, Oracle. All rights reserved.

### 4. Specify Allowed Transitions and Conditions

**Specifying Conditions:** There are two ways of specifying conditions for a transition: Either specify the Rule Field, Rule Operator, and Rule Value as shown above, or enter a complex expression in the Rule Expression field, using the same syntax as for calculated fields or field validation in Siebel Tools.

**Screenshot:** The screenshot shows the Transitions applet of Administration - Application > State Models. The first record has From State = Closed, To State = Open, and Public = Checked. Since there are no conditions, this transition is always allowed. The second record has From State = Open, To State = Cancelled, Public = Checked, Rule Field = Severity, Rule Operator = <>, and Rule Value = "1-Critical". This indicates that the transition from Open to Cancelled is only allowed if the Severity field does not have a value of 1-Critical. The third record has From State = Open, To State = Pending, Public = Checked, Rule Field = Owner, Rule Operator = <>, and Rule Value = NULL. This indicates that a state change from Open to Pending is only allowed if the Owner field is not NULL. The fourth record has From State = Pending, To State = Cancelled, and Public = Not checked. Only selected positions are allowed to make this transition. The fifth record has From State = Pending, To State = Closed, and Public = Checked. The final record shown has From State = Pending, To State = Open, and Public = Checked. You first select the from state, then the to state, then unset the Public checkbox if you wish to restrict the transition to certain users, and finally add any additional conditions on the transition.

## 5. Specify Authorized Positions

- For transitions not marked Public, specify positions allowed to make the transition in the Authorized Positions applet

The screenshot shows two Siebel application windows. The top window is titled 'Transitions' and displays a grid of state transitions. A specific row where 'From State' is 'Pending' and 'To State' is 'Cancelled' has a red box around it. A yellow callout bubble points to this row with the text 'Transition restricted'. The bottom window is titled 'Authorized Positions' and displays a grid of positions. A single row for 'Call Center Manager' is highlighted with a yellow box. A yellow callout bubble points to this row with the text 'Specify positions allowed to make the transition'. Both windows have standard Siebel navigation bars at the top.

From State	To State	Public	Rule Field	Rule Operator	Rule Value	Rule Expression
Closed	Open	<input checked="" type="checkbox"/>				
Open	Cancelled	<input checked="" type="checkbox"/>	Severity	<>	"1 Critical"	
Open	Closed	<input checked="" type="checkbox"/>				
Open	Pending	<input checked="" type="checkbox"/>	Owner	<>	NULL	
Pending	Cancelled	<input type="checkbox"/>				
Pending	Closed	<input checked="" type="checkbox"/>				

Position	Division	Position Type
Call Center Manager	PCS Sales	Manager

## 5. Specify Authorized Positions

**Screenshot:** The screenshot shows the bottom half of Administration - Application > State Models > Transitions. In the Transitions applet, the record with From State = Pending, To State = Cancelled, and Public = Unchecked is selected. This record has its transition restricted. Below the Transitions applet, the Authorized Positions applet specifies the positions that are allowed to make the transition. The only position listed is the Call Center Manager position.

## 6. Test the State Model

- Make sure the state model activation and expiration dates are valid
  - Only one state model based on a given field can be active at any given time
- Create one or more test records and verify that the business policy is correctly implemented
  - A new state model is effective when a new application object manager process starts
    - The new process reads the updated state model cache

## Lesson Highlights

- A state model restricts the life cycle of a business component (BC)
  - Defines a set of states and allowed transitions between them
- State models:
  - Are built in the Siebel client using declarative configuration
  - Do not require recompiling the .srf file
- Transitions between states can be restricted:
  - Not allowed at all
  - Allowed under only certain conditions
  - Allowed by only certain positions
- Some as-delivered BCs are enabled for state model
  - Developers can enable others for state model using Siebel Tools

## Practice 24 Overview: Creating a Siebel State Model

This practice covers the following topics:

- Creating and testing a state model

Unauthorized reproduction or distribution prohibited. Copyright© 2014, Oracle and/or its affiliates.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

## 25 Administering Audit Trail

ORACLE

Copyright © 2010, Oracle. All rights reserved.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# **Objectives**

After completing this lesson, you should be able to:

- Describe Audit Trail
- Administer Audit Trail
- Monitor Audit Trail

## Business Challenges

- Companies need a way to track and inspect changes made to data
  - May be needed to comply with legal requirements
  - Can be used to analyze the life cycle of a record
- Companies need a way to know if data has been viewed or exported
  - Can identify risks to sensitive information

## Business Solution: Audit Trail

- Creates a history of changes made to Siebel data and captures:
  - Who accessed the item
  - Which operation was performed
  - When the operation was performed
  - How the item was changed
- Records who viewed or exported data
- May impact performance depending upon the audit scope

25 - 4

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Business Solution: Audit Trail

**Reference:** "Audit Trail" in the *Siebel Applications Administration Guide*.

**Siebel Remote:** Audit trails are also generated when users synchronize their local databases.

# Audit Scope

- Determines the amount of data tracked
- Can be set to audit:
  - Specified fields
  - Operations (such as read, update, new, delete, and export)
  - Operations performed during a specific time
  - Operations performed by certain responsibilities, positions, or employees

25 - 5

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Enabling/Disabling Audit Trail

- Navigate to Administration - Application > System Preferences
- Set EnableAuditing to TRUE or FALSE
  - The default is TRUE
  - Enables auditing for actions such as read, write, or delete
- Set EnableEimAuditing to TRUE or FALSE
  - The default is FALSE
  - Enables auditing for bulk data imports and exports

System Preference Name	System Preference Value	Description
EnableAuditing	TRUE	Enable/Disable Auditing.
EnableEimAuditing	FALSE	Enable/Disable Auditing for the EIM component.

## Enabling/Disabling Audit Trail

**Enterprise Integration Manager (EIM):** EIM Is a utility used to transfer large amounts of data into or out of the Siebel database. For more details, see the *Enterprise Integration Manager Administration Guide*.

**Exporting Data:** For smaller data sets, there are other ways to export data; for example, running a report or exporting a spreadsheet. For more details, see "Sharing Information" in *Siebel Fundamentals*.

**Screenshot:** The screenshot shows Administration - Application > System Preferences, with the EnableAudting and EnableEimAuditing records shown. EnableAuditing has its System Preference Value = TRUE, while EnableEimAuditing has its System Preference Value = FALSE.

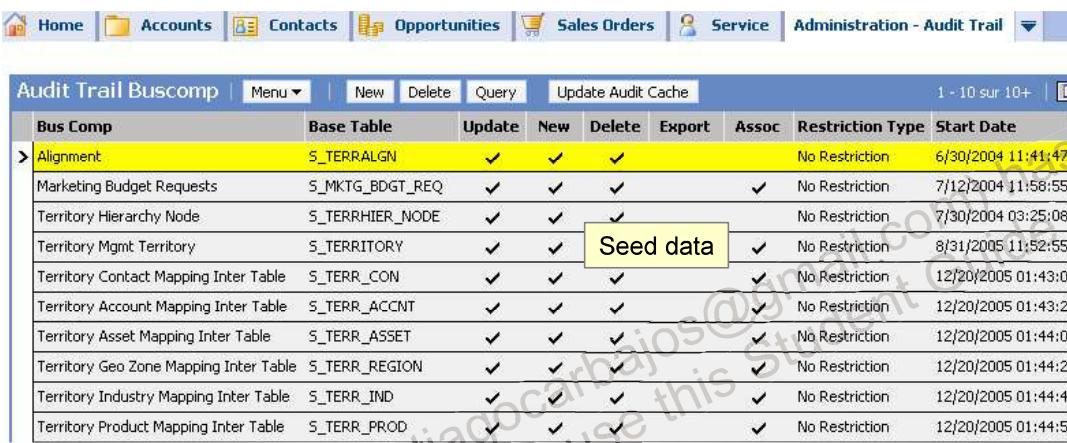
## Administer Audit Trail

1. Create or Edit the Audit Item
2. Configure Read Audits
3. Restrict the Audit Scope
4. Update the Audit Cache
5. Test the Audit Item



## 1. Create or Edit the Audit Item

- Navigate to Administration - Audit Trail
- Examine the seed data entries to determine whether or not the business component in which you are interested is already configured for auditing



The screenshot shows the Siebel Administration - Audit Trail page. At the top, there is a navigation bar with links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Audit Trail. Below the navigation bar is a toolbar with buttons for Menu, New, Delete, Query, and Update Audit Cache. A status bar at the top right indicates "1 - 10 sur 10+" and has a refresh icon. The main area is a grid table titled "Audit Trail Buscomp". The columns are: Bus Comp, Base Table, Update, New, Delete, Export, Assoc, Restriction Type, and Start Date. The "Bus Comp" column lists various business components, and the "Base Table" column lists their corresponding database tables. The "Update", "New", and "Delete" columns contain checkmarks. The "Export" column has a dropdown arrow. The "Assoc" column contains checkmarks. The "Restriction Type" column shows "No Restriction" for most entries. The "Start Date" column shows dates ranging from 6/30/2004 to 12/20/2005. One row, "Territory Mgmt Territory", has a yellow box around it with the text "Seed data" overlaid. The bottom of the page has a red footer bar with the ORACLE logo and a copyright notice: "Copyright © 2010, Oracle. All rights reserved." There is also a watermark across the page that reads "Santiago Carbajo (santiacocarba) No se permite el uso de esta imagen sin autorización".

Audit Trail Buscomp								
		Menu	New	Delete	Query	Update Audit Cache	1 - 10 sur 10+	
Bus Comp	Base Table	Update	New	Delete	Export	Assoc	Restriction Type	Start Date
> Alignment	S_TERRALGN	✓	✓	✓		✓	No Restriction	6/30/2004 11:41:47
Marketing Budget Requests	S_MKTG_BDGTR_REQ	✓	✓	✓		✓	No Restriction	7/12/2004 11:58:55
Territory Hierarchy Node	S_TERRHIER_NODE	✓	✓	✓		✓	No Restriction	7/30/2004 03:25:08
Territory Mgmt Territory	S_TERRITORY	✓	✓	✓		✓	No Restriction	8/31/2005 11:52:55
Territory Contact Mapping Inter Table	S_TERR_CON	✓	✓	✓		✓	No Restriction	12/20/2005 01:43:0
Territory Account Mapping Inter Table	S_TERR_ACCT	✓	✓	✓		✓	No Restriction	12/20/2005 01:43:2
Territory Asset Mapping Inter Table	S_TERR_ASSET	✓	✓	✓		✓	No Restriction	12/20/2005 01:44:0
Territory Geo Zone Mapping Inter Table	S_TERR_REGION	✓	✓	✓		✓	No Restriction	12/20/2005 01:44:2
Territory Industry Mapping Inter Table	S_TERR_IND	✓	✓	✓		✓	No Restriction	12/20/2005 01:44:4
Territory Product Mapping Inter Table	S_TERR_PROD	✓	✓	✓		✓	No Restriction	12/20/2005 01:44:5

ORACLE

25 - 8      Copyright © 2010, Oracle. All rights reserved.

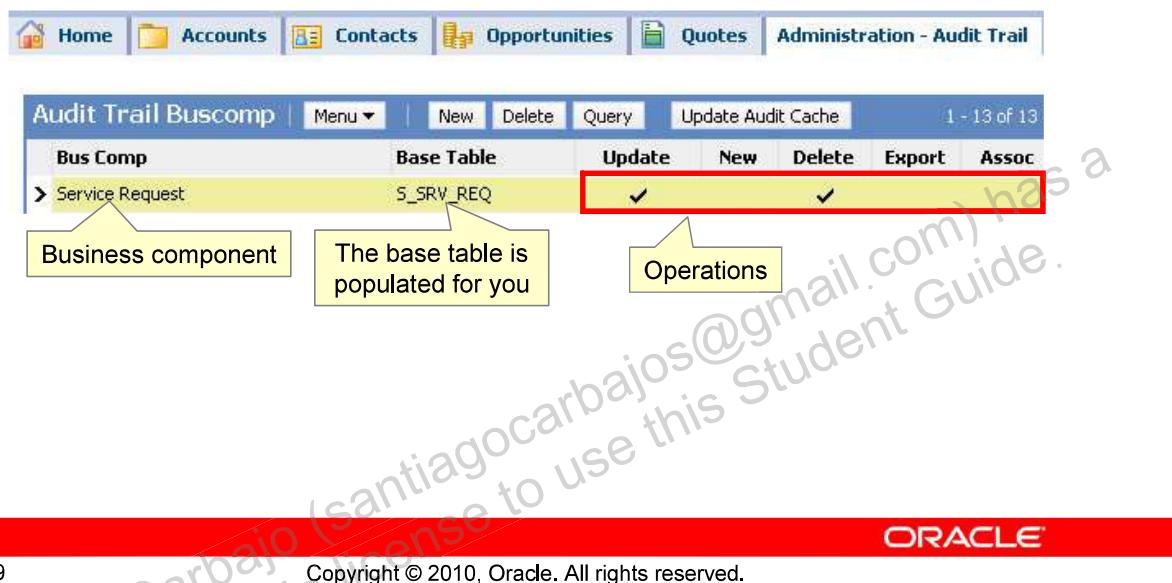
### 1. Create or Edit the Audit Item

**End Date:** If there is an existing seed data entry for the business component you need to audit, you still need to examine its settings to ensure it is auditing the fields in which you are interested. Also, you must make sure it does not have an end date set; otherwise, it will not be active.

**Screenshot:** The screenshot shows Administration - Audit Trail. The seed data is listed, including the Alignment, Marketing Budget Requests, Territory Hierarchy Note, and many more business components.

## 1. Create the Audit Item

- If necessary, create a new record, specifying:
  - The business component to audit
  - The operations to audit



### 1. Create the Audit Item

**Operations:** The five operations that can be audited are:

- **Update:** Records when a record is updated.
- **New:** Records when a new record is created.
- **Delete:** Records when a record is deleted.
- **Export:** Records when a record is exported.
- **Assoc:** Records when a parent-child relationship involving the record is changed; for example, when a Contact is associated with an Account. This requires additional configuration of the parent-child relationship under Administration - Audit Trail. For details, see "Specifying Parent-Child Associations for Audit" in the *Siebel Applications Administration Guide*.

**Screenshot:** The screenshot shows Administration - Audit Trail. A new record has been created with Bus Comp = Service Request, Base Table = S\_SRV\_REQ, Update = Checked, New = Not Checked, Delete = Checked, Export = Not Checked, and Assoc = Not Checked. The business component is Service Request. Once you choose a business component, the base table is populated for you.

## 1. Create the Audit Item

- Under the Field view tab, specify the fields to audit
  - The field names in the field selection applet match those used in the business component definition in Siebel Tools
  - If you are unsure of a field name, consult your developer

The screenshot shows the Siebel Administration - Audit Trail interface. At the top, there is a navigation bar with links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Audit Trail. The main window has two tabs: 'Audit Trail Buscomp' and 'Query Results'. The 'Audit Trail Buscomp' tab is active, showing a list of Service Request records. One record is selected, and its details are shown in a modal dialog. The 'Field' tab is highlighted in red. Below the main list, there is another table titled 'Query Results' with a 'Field' column also highlighted in red. A yellow callout box points to this 'Field' column with the text 'Fields to audit'. The bottom of the screen shows a red footer with the ORACLE logo and copyright information.

Field	Read Field Value	Reading	Table Name	Column Name	Join
Closed Date			S_SRV_REQ	ACT_CLOSE_DT	
Recommendation			S_SRV_REQ	RECOMMENDATION	
Status			S_SRV_REQ	SR_STAT_ID	

Fields to audit

ORACLE

Copyright © 2010, Oracle. All rights reserved.

### 1. Create the Audit Item

**Screenshot:** The screenshot shows Administration - Audit Trail, with the Field view tab selected. In the top applet, the Service Request record is selected. In the bottom applet, the three fields being audited are Closed Date, Recommendation, and Status. The Field view tab and Field column are highlighted. The Field column lists the fields to audit.

## 2. Configure Read Audits

- Read Audits record who sees which data field values
  - Set *Reading* to audit read operations
  - Set *Read Field Value* to store the value read during read operations

The screenshot shows the Siebel Administration - Audit Trail interface. At the top, there are tabs for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Audit Trail. The Administration - Audit Trail tab is selected. Below the tabs, there are two main sections: 'Audit Trail Buscomp' and 'Field'. In the 'Audit Trail Buscomp' section, a Service Request record is selected. In the 'Field' section, a table lists fields and their audit settings. The 'Abstract' field is highlighted with a red box around the 'Read Field Value' and 'Reading' columns, both of which have checkmarks. Other fields listed are Closed Date, Recommendation, and Status.

Field	Read Field Value	Reading	Table Name	Column Name	Join
Abstract	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S_SRV_REQ	SR_TITLE	
Closed Date			S_SRV_REQ	ACT_CLOSE_DT	
Recommendation			S_SRV_REQ	RECOMMENDATION	
Status			S_SRV_REQ	SR_STAT_ID	

At the bottom of the interface, there is a red banner with the ORACLE logo and the text 'Copyright © 2010, Oracle. All rights reserved.'

### 2. Configure Read Audits

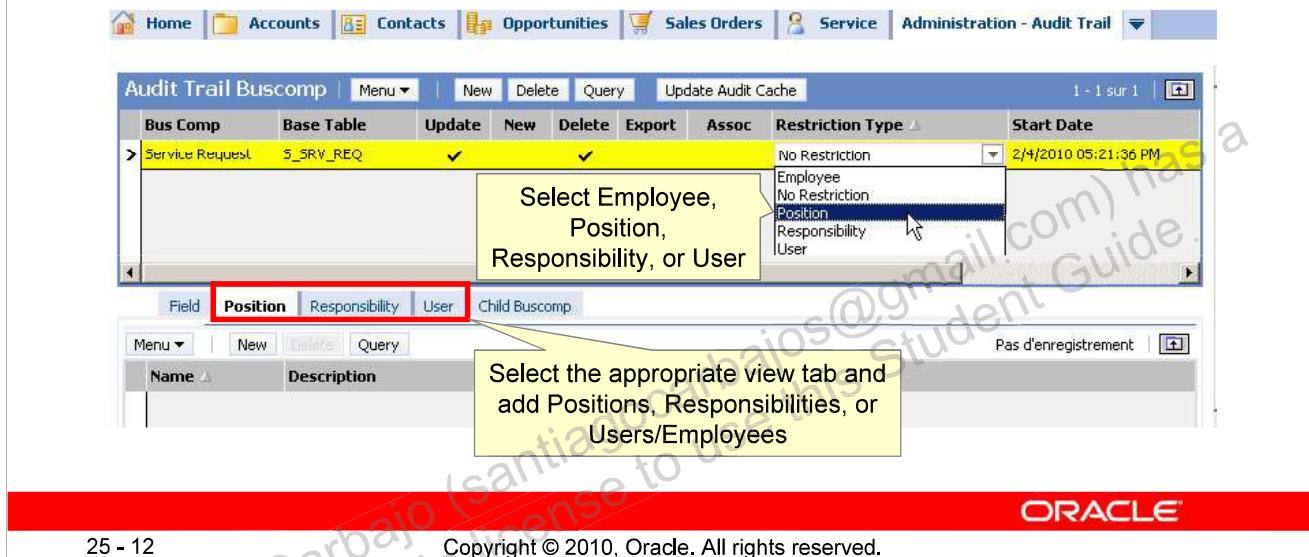
**Caveat:** Read audits are invoked whenever records are read or accessed, even if no changes are made. This can cause a large number of audit records to be generated. Carefully weigh the need for this versus the cost of capturing and storing all of the data.

**Read Audits of List Applets:** When a list applet is used to view records, a read audit is triggered only for the active record in the list, rather than all records in the list. You will see an example of this in the practice. Thus, it is important to be aware that users may read the data from the columns of a record in the list applet without triggering a read audit for that record, as long as they do not select the record.

**Screenshot:** The screenshot shows Administration - Audit Trail, with the Field view tab selected. In the top applet, the Service Request record is selected. In the bottom applet, four records are shown: Abstract, Closed Date, Recommendation, and Status. The Abstract record has its Read Field Value and Reading fields checked, indicating that the Abstract has a read audit on it: Every time a user reads the abstract, an audit record will be produced.

### 3. Restrict the Audit Scope

- If appropriate, limit the auditing to certain users
  - Set the Restriction Type in the parent record
  - Select the Position, Responsibility, or User view tab and create records to limit the scope of the auditing



### 3. Restrict the Audit Scope

**Screenshot:** The screenshot shows Administration - Audit Trail, with the Position view tab selected. In the top applet, the Service Request record is selected. Its Restriction Type field's drop-down list is expanded. You can select a Restriction Type of Employee, No Restriction, Position, Responsibility, or User. There are no records in the bottom applet, but the Position, Responsibility, and User view tabs are highlighted. Once you have selected a Restriction Type in the top applet, select the appropriate view tab and add Positions, Responsibilities, or Users/Employees.

### 3. Restrict the Audit Scope

- If appropriate, limit the date range for the audit
  - Set the Start and End dates
    - Start Date defaults to creation time

The screenshot shows the Siebel Administration - Audit Trail interface. The top navigation bar includes links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Audit Trail. The main title is "Audit Trail Buscomp". The table displays a single record for a "Service Request" with the base table "S\_SRV\_REQ". The "Start Date" field contains the value "2/4/2010 05:21:36 PM", which is highlighted with a red box. The "End Date" field is empty. The table has columns for Bus Comp, Base Table, Start Date, End Date, Update, New, Delete, Export, and Ass. The "Start Date" and "End Date" columns are grouped together and highlighted by the red box. The bottom of the screen features a red footer bar with the ORACLE logo and copyright information: "Copyright © 2010, Oracle. All rights reserved." A watermark with the text "Santiago Carbajo (santiagocarbajos@gmail.com) has a non-transferable license to use this Student Guide." is diagonally across the page.

### 3. Restrict the Audit Scope

**Screenshot:** The screenshot shows Administration - Audit Trail. The Service Request record is selected, and its Start Date and End Date fields are highlighted.

## 4. Update the Audit Cache

- Click Update Audit Cache to clear the cache and make the audit item available



### 4. Update the Audit Cache

**Screenshot:** The screenshot shows Administration - Audit Trail. The Service Request record is selected, the Update Audit Cache button is highlighted.

## 5. Test the Audit Item

- Edit the record to trigger the audit
  - For example, change one or more of the fields that are being audited on a Service Request

The screenshot shows the Siebel Service Requests List interface. At the top, there's a navigation bar with links like Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Audit Trail. Below the navigation bar, the main area displays a service request record with the ID 1-139737. The interface is divided into several tabs: SR Information, Status and Ownership, Summary, and Detailed Description. The SR Information tab contains fields such as SR #, Last Name, First Name, Site, CSN #, and Contact Account. The Status and Ownership tab is currently active, showing the status as 'Closed' and the closed date as '2/4/2010 06:00:17 PM'. Both of these fields are highlighted with a red box. The Summary tab contains additional details like Sub Status, Priority, Owner, Creator, Group, and Organization. The Detailed Description tab is partially visible. At the bottom of the screen, there's a red banner with the text 'Copyright © 2010, Oracle. All rights reserved.' and the Oracle logo.

### 5. Test the Audit Item

**Screenshot:** The screenshot shows the service request details applet for a service request. Several of the audited fields are highlighted, including Closed = 2/4/2010 06:00:17 PM and Status = Closed.

## Monitor the Changed Data

- Navigate to Audit Trail > Audit Trail Items
- Locate items by querying or sorting by date
- Inspect the data

The screenshot shows the Siebel Audit Trail Items screen. The top navigation bar includes Home, Accounts, Contacts, Opportunities, Sales Orders, Service, Quotes, and Audit Trail. Below the navigation is a toolbar with Audit Trail Items, Export Audit Items, and Read Audit Items. The main area is titled "Audit Trail Items" with tabs for Menu and Query. A "Sort by date" button is at the top right. The data grid displays two rows of audit trail items. The first row has Employee Login "SADMIN", Business Component "Service Request", Field "Closed Date", Operation "Modify", Old Value "<empty>", New Value "2/4/2010 06:00:17 PM", and Date "2/4/2010 06:04:21 PM". The second row has Employee Login "SADMIN", Business Component "Service Request", Field "Status", Operation "Modify", Old Value "Open", New Value "Closed", and Date "2/4/2010 06:04:21 PM". Three callout boxes point to specific fields: "Who made the change" points to Employee Login; "Query for Service Request" points to Business Component; and "Data changes" points to the Date column. The bottom of the screen shows a red footer with "ORACLE" and copyright information: "Copyright © 2010, Oracle. All rights reserved." and "25 - 16".

Employee Login	Business Component	Field	Operation	Old Value	New Value	Date
SADMIN	Service Request	Closed Date	Modify	<empty>	2/4/2010 06:00:17 PM	2/4/2010 06:04:21 PM
SADMIN	Service Request	Status	Modify	Open	Closed	2/4/2010 06:04:21 PM

### Monitor the Changed Data

**Decoding Audit Data:** Audit trail data is stored in an encoded form in the Siebel database, and must be decoded if you wish to export it for analysis. For information on decoding audit trail data, see, "Decoding Siebel 8.x Audit Trail Data" on Oracle Support.

**Archiving Audit Data:** To archive audit trail data, you must decode it as well. For more information, see, "Siebel 8 Audit Trail - Archiving" on Oracle Support.

**Screenshot:** The screenshot shows Audit Trail > Audit Trail Items. Two records are shown. Both have Employee Login = SADMIN, indicating who made the change. Both have Business Component = Service Request. When searching for Audit Trail records, you should query for the business component in which you are interested. The first record then has Field = Closed Date, Operation = Modify, Old Value = <empty>, New Value = 2/4/2010 06:00:17 PM, and Date = 2/4/2010 06:04:21 PM. This indicates that the Closed Date was changed from nothing to 2/4/2010 6:00:17 PM at 6:04:21 PM on the same day. The second record has Field = Status, Operation = Modify, Old Value = Open, New Value = Closed, Date = 2/4/2010 06:04:21 PM, indicating that the service request was changed from Open to Closed at the same time.

## Audit Trail is Audited

- Notice that Audit Trail Items are audited
- Changes are tracked

Employee Login	Business Component	Field	Operation	Old Value	New Value	Date
SADMIN	Audit Trail Field	Read Flag	Modify	Y		2/4/2010 05:30:12 PM
SADMIN	Audit Trail Buscomp		Associate			2/4/2010 05:30:02 PM
SADMIN	Audit Trail Field	Field	New Record	Abstract		2/4/2010 05:30:02 PM
SADMIN	Audit Trail Field	Audit BC Name	New Record	Service Request		2/4/2010 05:30:02 PM
SADMIN	Audit Trail Buscomp		Associate			2/4/2010 05:24:18 PM
SADMIN	Audit Trail Field	Field	New Record	Status		2/4/2010 05:24:18 PM
SADMIN	Audit Trail Field	Audit BC Name	New Record	Service Request		2/4/2010 05:24:18 PM

25 - 17      Copyright © 2010, Oracle. All rights reserved.      ORACLE

## Audit Trail is Audited

**Screenshot:** The screenshot shows Audit Trail - Audit Trail Items after a query for Business Component = Audit Trail has been run. Eight records are shown, with business components of either Audit Trail Field or Audit Trail Buscomp. This indicates that the Audit Trail itself is audited.

## Examining Read Audits

- Example: Audit the reading of opportunity fields to determine who is examining opportunities
- First, configure the Opportunity business component to support read audits on the desired fields

The screenshot shows the Siebel Application Administration - Audit Trail interface. At the top, there are tabs for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Audit Trail. The Administration - Audit Trail tab is selected. Below the tabs is a toolbar with New, Delete, Query, Update Audit Cache, and Query Results buttons. The Query Results button is highlighted. The main area displays two tables. The top table, titled 'Audit Trail Buscomp', has columns for Bus Comp, Base Table, Update, New, Delete, Export, Assoc, Restriction Type, and Start Date. A single row is shown for 'Opportunity' with 'S\_OPTY' as the base table and 'No Restriction' as the restriction type. The bottom table, titled 'Query Results', has columns for Field, Read Field Value, Reading, Table Name, Column Name, and Join. Three rows are listed: 'Name' (Read Field Value: checked, Reading: checked), 'Primary Revenue Win Probability' (Read Field Value: checked, Reading: checked), and 'Sales Stage' (Read Field Value: checked, Reading: checked). A red box highlights the 'Read Field Value' and 'Reading' columns. A yellow callout box points to the bottom table with the text 'Records viewing of this data'. The Oracle logo is at the bottom right of the interface.

### Examining Read Audits

**Audit Triggering:** The read audit is triggered when the record becomes active (is the current record). For a list view this is the first record in the list. If you select a different record, that will trigger the read audit for that record.

**Clearing the Cache:** Do not forget to update the audit cache every time you modify an audit trail record.

**Screenshot:** The screenshot shows Administration - Audit Trail, with the Field view tab selected. The Opportunity record is selected in the top applet. In the bottom applet, the Name, Primary Revenue Win Probability, and Sales Stage fields are shown, and have both Read Field Value and Reading checked. This records reading of these fields.

## Examining Read Audits

- Navigate to Audit Trail > Read Audit Items
- Inspect the data

The screenshot shows the Siebel Application Administration interface. At the top, there is a navigation bar with links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, Quotes, and Audit Trail. The Audit Trail link is highlighted with a red box. Below the navigation bar is a sub-menu for 'Audit Trail Items' with a red box around it. The main area contains two tables. The first table, titled 'Read Audit Items', lists three records. The second table, titled 'Field Details', lists three fields for record 1-1WXF. A yellow callout box points from the 'Who read the data' column in the top table to the 'Employee Login' column in the bottom table. Another yellow callout box points from the 'What SADMIN saw' column in the bottom table back to the 'Who read the data' column in the top table. The bottom table has a red box around the first row.

Record Id	Date	Field Name	Field Value
1-1WXF	2/4/2010 07:10:56 PM	Primary Revenue Win 10	10
1-1WXF	2/4/2010 07:10:56 PM	Sales Stage	02 - Potential Lead
1-1WXF	2/4/2010 07:10:56 PM	Name	Activity Template Test Opportunity

### Examining Read Audits

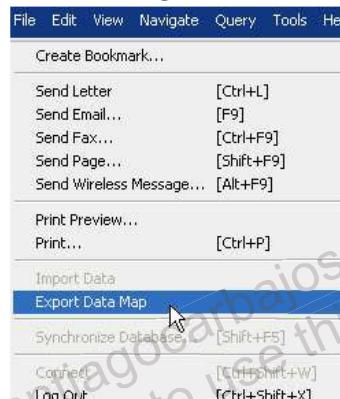
**Screenshot:** The screenshot shows Audit Trail > Read Audit Items. In the top applet, three records are shown, all with an Employee Login of SADMIN. This indicates who read the data. The top record is selected. In the bottom applet, three records are shown. The first has Field Name = Primary Revenue Win Probability and Field Value = 10. The second has Field Name = Sales Stage and Field Value = 02 - Potential Lead. The third has Field Name = Name and Field Value = Activity Template Test Opportunity. These are the values that SADMIN saw.

## Auditing Exports

- Example: Audit the exporting of opportunity records:

Audit Trail Buscomp		Menu ▾	New	Delete	Query	Update Audit Cache
Bus Comp	Base Table	Update	New	Delete	Export	
> Opportunity	S_OPTY	✓	✓	✓	✓	✓

- Triggered by user selecting File > Export Data Map:



### Auditing Exports

**Screenshots:** The top screenshot shows Administration - Audit Trail with the Opportunity record selected and the Export checkbox checked. The bottom screenshot shows the application-level File menu expanded, and the Export Data Map menu item selected.

## Monitoring Export Audits

- Navigate to Audit Trail > Export Audit Items
- Inspect the data

The screenshot shows two overlapping application windows. The top window is titled 'Export Audit Items' and displays a table with one row selected. The selected row shows 'Employee Login: SADMIN', 'Business Component: Opportunity', 'Record Count: 3', and 'Date: 2/4/2010 07:18:17 PM'. The bottom window is titled 'Export Audit Detail' and contains fields for Employee Login, Business Component, Record Count, and Date, along with a 'Record IDs' field. A callout box points to the 'Record Count' field with the text 'Number of records exported'. Another callout box points to the 'Record IDs' field with the text 'ROW\_IDs of exported records'. The Oracle logo is visible at the bottom right of the interface.

Employee Login: SADMIN      Business Component: Opportunity      Record Count: 3      Date: 2/4/2010 07:18:17 PM

Record IDs: 1-1WXF,1-1WWH,1-21H4

Employee Login: SADMIN  
Business Component: Opportunity  
Record Count: 3  
Date: 2/4/2010 07:18:17 PM

Number of records exported

ROW\_IDs of exported records

ORACLE

25 - 21

Copyright © 2010, Oracle. All rights reserved.

### Monitoring Export Audits

**Screenshot:** The screenshot shows Audit Trail > Export Audit Items. In the top applet, a record with Employee Login = SADMIN, Business Component = Opportunity, Record Count = 3, and Date = 2/4/2010 07:18:17 PM is selected. In the bottom applet, in addition to the Employee Login, Business Component, Record Count, and Date fields, there is a Record IDs field. The Record Count field indicates the number of records exported, and the Record IDs field lists the ROW\_IDs of these records.

## Lesson Highlights

- Enable or disable auditing via system preferences
- Create Audit Trail records to audit specific business component operations
- Define business component fields for which you wish to capture read access or changes
- Audit Trail records are automatically audited
- Use Audit Trail views to monitor the data captured

## Practice 25 Overview: Administering Audit Trail

This practice covers the following topics:

- Administering and monitoring audit trail items

Unauthorized reproduction or distribution prohibited. Copyright© 2014, Oracle and/or its affiliates.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

## Setting System Preferences

26

ORACLE

Copyright © 2010, Oracle. All rights reserved.

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# Objectives

After completing this lesson, you should be able to:

- Describe some of the commonly-used system preferences
- Administer system preferences

## Customizing Application Behavior

- There are four general mechanisms for customizing application behavior:
  - A developer can use Siebel Tools to customize the Siebel Repository and Siebel Repository File
  - A system administrator can modify parameters
  - An application administrator can modify system preferences
  - An application or system administrator may perform configuration specific to an area of the application:
    - Create and administer state models
    - Administer the Universal Inbox
    - Configure Assignment Manager
    - And so forth
- This lesson focuses on system preferences

26 - 3

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Customizing Application Behavior

**Parameters:** In a previous lesson, you learned that server components have parameters that you can override when submitting jobs. In fact, there are also enterprise-level and server-level parameters, so parameters can be used to customize overall enterprise behavior, behavior on a particular server, or behavior for a particular component.

#### References:

For more information on customizing the Siebel Repository using Siebel Tools, see *Configuring Siebel Business Applications*, or consider taking Oracle University's Siebel Tools course.

For more information on setting parameters, see the *Siebel System Administration Guide*, or consider taking Oracle University's Siebel System Administration course.

This lesson focuses on setting some of the more commonly-used system preferences. For a complete list of system preferences, see "System Preferences" in the *Siebel Applications Administration Guide*.

## Review: System Preferences Seen in this Course

- You have already encountered several system preferences in this course:
  - Technical Support fields
    - To support the "Contact Us" information under Help > Technical Support
  - BI Publisher Reports preferences
    - *BIP Delete After Days* to determine how long to wait before deleting reports from the Siebel File System
    - *BIP Report Wait Time* to determine how long to wait when trying to run a report
  - Audit Trail preferences
    - *EnableAuditing* to enable/disable standard auditing
    - *EnableEimAuditing* to enable/disable auditing for Enterprise Integration Manager

## Modifying System Preferences

- To modify a system preference:
  - Navigate to Administration - Application > System Preferences
  - Query for the desired system preference
    - For example, *Technical Support (Voice)*
  - Modify the System Preference Value
    - For example, set to (510) 555-1234
- Caveat: Changes to many of these preferences require a restart of the Application Object Manager to take effect
  - For example, the Technical Support preferences

The screenshot shows the Siebel Application Administration interface. The top navigation bar includes links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Application. The Administration - Application link is currently selected. Below the navigation bar, there are links for Authentication Administration, Authentication Template, Category, Customer Expectations Manager, and System Preferences. The main content area is titled "System Preferences" and contains a table with three columns: "System Preference Name", "System Preference Value", and "Description". A single row is visible, showing "Technical Support (Voice)" as the name, "(510) 555-1234" as the value, and "This is our main corporate number." as the description. The bottom of the screen features a red footer bar with the ORACLE logo and copyright information: "Copyright © 2010, Oracle. All rights reserved."

### Modifying System Preferences

**Description:** Consider modifying the system preference description to include any changes you make.

**Screenshot:** The screenshot shows Administration - Application > System Preferences, with the Technical Support (Voice) record shown. The System Preference Value = (510) 555-1234, and the Description = This is our main corporate number.

## Additional System Preferences

- Selected additional system preferences include:
  - Default MVG Exists Query
  - Auto Mgr Calendar Access and Forecast: Auto-Forecast
  - Default Time Zone and Universal Time Coordinated
  - Strict Date Format
  - Quick Print Application and Quick Print Output Format
  - Other preferences



## Default MVG Exists Query

- *Default MVG Exists Query affects users' queries*
  - Default Value = TRUE
  - Recall: This system preference determines whether or not queries on MVG fields use EXISTS() by default
    - For example, if this value is TRUE, querying the Address field in the account form applet for addresses containing "Street" would return accounts that had any addresses containing the word "Street"
    - If this value is FALSE, then querying the Address field in the account form applet for "Street" would only return accounts whose primary addresses contain the word "Street"
  - Modifying this system preference requires restarting the AOM

## Auto Mgr Calendar Access and Forecast: Auto-Forecast

- These settings improve a manager's user experience:
  - *Auto Mgr Calendar Access* grants managers access to their subordinates' calendars, even if the subordinate does not explicitly give permission
    - Prevents the manager from being unable to see his or her subordinates' calendars
    - Default Value = TRUE
  - *Forecast: Auto-Forecast* creates subordinates' forecasts to be used in a rollup forecast, if the subordinates have not created forecasts themselves
    - Prevents the manager from making forecasts with missing data
    - Default Value = TRUE

## Default Time Zone and Universal Time Coordinated

- Both of these settings affect time zones
  - *Default Time Zone* determines the default time zone for users
    - Default Value = UTC
    - Users override this setting under their own user preferences
  - *Universal Time Coordinated* determines whether or not all records in the database have their timestamps converted to UTC time before being stored
    - Default Value = TRUE
    - Provides timestamp consistency, at the cost of a small amount of overhead to convert timestamps from UTC to local time for display
- These settings require a restart after they have been modified

## Strict Date Format

- *Strict Date Format* forces users to enter dates in a specific format, and forces all dates to be displayed in this format
  - Overrides the Locale setting
  - For example, DD/MM/YYYY
  - Default value = no

## Quick Print Application and Quick Print Output Format

- The Quick Print button  in the Global Toolbar allows a user to quickly print data from a view
- *Quick Print Application* determines to which application to send the data for printing
  - Default Value = HTML (your default Web browser)
  - Available values are HTML or EXCEL
- *Quick Print Output Format* determines how to format the output data
  - Default Value = HTML
  - Available values are HTML, CSV, or Tab
- Users may override these settings in their user preferences

26 - 11

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Quick Print Application and Quick Print Output Format

The Quick Print button looks like a printer icon.

## Other Preferences

- *Enable ST Script Engine* enables the Strong Typing (ST) script engine, which provides enhanced performance, scalability, and functionality
  - Default Value = TRUE
  - You may be asked to disable this engine to support legacy scripts
- *Internal DUNS Number* is your company's 9-digit Data Universal Numbering System number, used to uniquely identify your company

## Lesson Highlights

- Application administrators modify application behavior by setting system preferences
  - Usually requires restarting the Application Object Manager (AOM) for the changes to take effect
- There are dozens of system preferences, modifying everything from the information displayed in the user's Technical Support window to the period of time before deleting a BI Publisher report from the Siebel File System

## Practice 26 Overview: Examining System Preferences

This practice covers the following topics:

- Examining system preferences
- Modifying a system preference and testing the result

# Administering Siebel Assignment Manager

27

Copyright © 2010, Oracle. All rights reserved.

ORACLE

Santiago Carbajo (santiagocarbajos@gmail.com) has a  
non-transferable license to use this Student Guide.

# **Objectives**

After completing this lesson, you should be able to:

- Describe Assignment Manager
- Administer assignment rules
- Test assignment rules

## Siebel Assignment Manager

- Allows companies to automatically assign business data to the most appropriate positions, people, and organizations
- Consists of:
  - Administrative functionality to define assignment rules
  - Server components to automatically assign business data according to the rules
- Can be run in different modes:
  - Batch: Assign a large group of records at once
  - Dynamic: Assign records as they are created
  - Interactive: Provide a list of qualified candidates to a user, allowing to user to select to whom to assign the record

27 - 3

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### Siebel Assignment Manager

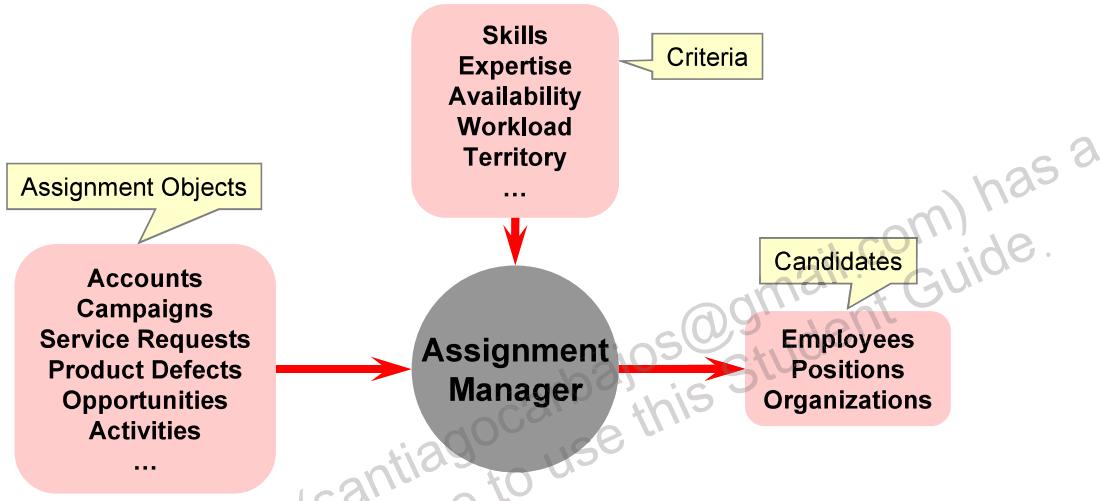
**Reference:** For more information on Siebel Assignment Manager, consult the *Siebel Assignment Manager Administration Guide*, or consider taking Oracle University's Siebel Business Automation course.

## Administering Assignment Manager

- As an application administrator, you may be asked to:
  - Create or modify assignment rules
    - Requires understanding the various pieces that make up an assignment rule
  - Run batch assignments

# Assignment Rules

- Assignment Manager uses assignment rules to assign data
  - Rules assign one or more candidates to assignment objects based on one or more criteria



27 - 5

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## Assignment Rules

An **Assignment Object** represents the object being assigned. Several assignment objects are configured in as-delivered Siebel applications. Others may be configured by a developer using Siebel Tools during application customization.

**Assignment Candidates** consist of a combination of employees, positions, and organizations. For example, accounts can be assigned to both positions and organizations.

**Assignment Criteria** express conditions that must be satisfied for data to be assigned, and are expressed in terms of attributes of a rule's assignment objects and/or candidates. For example, one criterion might be that Account State = CA and Account Product = A product that the candidate has expertise for. Assignment rules often include multiple criteria.

**Diagram:** In a pink box on the left, the diagram lists assignment objects, such as Accounts, Campaigns, Service Requests, Product Defects, Opportunities, Activities, and so forth. In a pink box on top, it lists example criteria, such as skills, expertise, availability, workload, and territory. Both assignment objects and criteria are inputs for Assignment Manager, as indicated by red arrows from each pink box leading into a gray circle labeled Assignment Manager. Objects are then assigned to candidates, including employees, positions, and organizations, shown in a pink box on the right.

## Assignment Rules: Key Concepts

- Rule Groups
- Assignment Objects
- Person Candidate Source
- Comparison Method
- Scoring
- Assignee Filter



## Rule Groups

- Are used to sort assignment rules into logical groups
  - For example, a "North America Assignment Rules" rule group and an "EMEA Assignment Rules" rule group
- Are used to determine which rules Assignment Manager uses during processing
- Are typically optional
  - Rule groups are only required when using delegated assignment
  - Your business analyst should tell you whether or not your company is implementing rule groups, and into which rule group to put each rule
  - If your company is not implementing rule groups, use Default Rule Group for all assignment rules

ORACLE

27 - 7

Copyright © 2010, Oracle. All rights reserved.

### Rule Groups

**Reference:** For more information on rule groups, see "Assignment Rule Administration" in the *Siebel Assignment Manager Administration Guide*. For more information on delegated assignment, see "Assignment Rule Administration for Delegated Assignment" in the same guide.

## Assignment Objects

- Are object definitions created in Siebel Tools to support Assignment Manager
  - There are dozens of assignment objects in the seed data, including Accounts, Contacts, Quotes, Orders, Service Requests, and so forth
- Are available from a pick applet when creating assignment rules
  - You can easily check whether or not an assignment object is available, without having to consult your developer
- Have "attributes" rather than "fields"
  - To assist in your understanding, consider an assignment object attribute very similar to a business component field

## Person Candidate Source

- Determines the set of possible candidates that can be assigned to data by this rule

Candidate Source	Action
All People	Consider every employee/position as a candidate
From Rule	Consider only employees/positions listed explicitly as a candidate in the rule
Team Name	Consider the members of a team as candidates Implements dynamic assignment

### Person Candidate Source

**Hierarchical Assignment:** In addition to the three sources listed above, there are a large number of hierarchy-driven rules available. These are associated with territory management, and are beyond the scope of this course. For more information on territory management, see the *Siebel Territory Management Guide*.

**Dynamic Assignment:** Dynamic assignment will be discussed later in this lesson.

**Organization Candidate Source:** There is also an Organization Candidate Source for identifying candidate organizations. The only options are "All Organizations" or "From Rule". This determines which organization(s) to assign to the object.

**Table:** The table has two columns: Candidate Source on the left, and Action on the right.

- All People = Consider every employee/position as a candidate
- From Rule = Consider only employees/positions listed explicitly as a candidate in the rule
- Team Name = Consider the members of a team as candidates. Implements dynamic assignment.

## Comparison Method

- Determines how a rule is evaluated
  - Expressed in terms of object and candidate attributes

Comparison Method	Action
Compare to Object	Checks if an assignment object attribute of a record matches a value specified in rule
Compare to Person	Checks if an attribute of an assignment candidate matches a value specified in a rule
Compare Object to Person	Checks if a record attribute matches that attribute of an employee or position candidate
Compare to Organization	Checks if an organization attribute matches a value specified in a rule
Compare Object to Organization	Checks if record attribute matches that attribute of an organization candidate

ORACLE

### Comparison Method

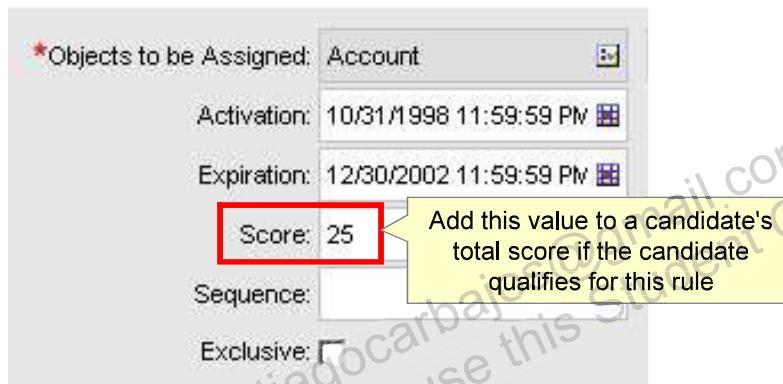
**Example:** An example of Compare Object to Person is provided later in this lesson.

**Table:** The table has two columns: Comparison Method on the left, and Action on the right.

- Compare to Object = Checks if an assignment object attribute of a record matches a value specified in rule
- Compare to Person = Checks if an attribute of an assignment candidate matches a value specified in a rule
- Compare Object to Person = Checks if a record attribute matches that attribute of an employee or position candidate
- Compare to Organization = Checks if an organization attribute matches a value specified in a rule
- Compare Object to Organization = Checks if record attribute matches that attribute of an organization candidate.

## Scoring

- Is a mechanism used to rank candidates for potential assignment
  - Rules can specify passing scores
  - Assign higher scores to more important criteria and lower scores to less important criteria



### Scoring

**Screenshot:** The screenshot shows a close up of an assignment rule's detail applet, showing six fields, including "Objects to be Assigned" = Account, Activation = 10/31/1998 11:59:59 PM, Expiration = 12/30/2002 11:59:59 PM, Score = 25, Sequence = <empty>, and Exclusive = unchecked. The score of 25 is highlighted. Assignment Manager adds this value to a candidate's total score if the candidate qualifies for this rule.

## Assignee Filter

- Determines how candidates that qualify are selected for assignment
  - Multiple candidates might qualify
  - Some rules may allow multiple candidates to be assigned

Assignee Filter	Action
All, above minimum	Assign all candidates with a score higher than the rule's passing score
All, must assign	Assign the highest scoring candidate as well as any others with scores higher than the rule's passing score
One, best fit	Assign the candidate with the highest score (must score higher than the rule's passing score)
One, random	Assign a single qualifying candidate by random selection

**ORACLE**

### Assignee Filter

**Table:** The table has two columns: Assignee Filter on the left, and Action on the right.

- All, above minimum = Assign all candidates with a score higher than the rule's passing score
- All, must assign = Assign the highest scoring candidate as well as any others with scores higher than the rule's passing score
- One, best fit = Assign the candidate with the highest score (must score higher than the rule's passing score)
- One, random = Assign a single qualifying candidate by random selection.

## Example: Create an Assignment Rule to Assign Service Requests to Employees

1. Review the Assignment Rule Design
2. Create the Rule Group
3. Create the Rule
4. Specify the Criteria
5. Specify the Candidates
6. Associate Skills with Candidates

More 

## 1. Review the Assignment Rule Design

- Determine the criteria to assign a candidate to a service request
  - Matching criteria include:
    - A skill match between the candidate and the service request
    - Location
    - Availability
    - Workload
- Determine the set of eligible candidates
  - Alternatively, consider all available employees

**Assignment Object:** Service Request

**Candidates:** All available employees

**Criteria:** The candidate's product skills must include the product associated with the service request

ORACLE

### 1. Review the Assignment Rule Design

**Designing the Assignment Rule:** It is likely that a business analyst will design the assignment rule for you, and will provide you with the necessary criteria to administer the rule.

**Text Box:** The text box lists the Assignment Object = Service Request, Candidates = All service agents, and Criteria = The candidate's product skills must include the product associated with the service request.

## 2. Create the Rule Group

- If the rule group specified for the rule does not exist:
  - Navigate to Administration - Assignment > Rule Groups List
  - Create a new rule group and specify its name
    - By default, the creator of the rule group is its owner
    - Optionally, specify a parent rule group to create a rule group hierarchy
    - Rule group hierarchies and ownership are used for delegated assignment

Name	Parent Rule Group	Owner Position	Owner Login	Activation	Expiration	Description
North America Assignment Rules	Siebel Administrator	SADMIN				
Default Rule Group		Siebel Administrator	SADMIN			

27 - 15

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## 2. Create the Rule Group

**Screenshot:** The screenshot shows Administration - Assignment > Rule Groups List. A new rule group has been created, with Name = North America Assignment Rules, Owner Position = Siebel Administration, and Owner Login = SADMIN. To create a new rule group, create a new rule group record and specify a name.

### 3. Create the Rule

- Navigate to Administration - Assignment > Assignment Rules List and create a new rule:
  - Specify a name
  - Assign a rule group
  - Select the assignment object(s)
  - Set the Person Candidate Source
  - Set the Assignee Filter

The screenshot shows the 'Assign Service Request' form in the Siebel interface. The 'Assignment Rules List' tab is selected in the top navigation bar. The form fields are as follows:

- Name: \* Assign Service Request
- Rule Group: \* North America Assignment (highlighted with a red box)
- Description: (empty)
- Objects to be Assigned: \* Service Request (highlighted with a red box)
- Candidate Details (button):
- Activation: (checkbox checked)
- Expiration: (checkbox checked)
- Score: (checkbox checked)
- Sequence: (checkbox checked)
- Person Candidates Source: All People (highlighted with a red box)
- Organization Candidates Source: (checkbox checked)
- Assignee Filter: \* One, Best Fit (highlighted with a red box)
- Assign only one candidate (checkbox checked)

A yellow callout box points to the 'Person Candidates Source: All People' field with the text 'Consider all employees'. A green callout box points to the 'Assignee Filter: \* One, Best Fit' field with the text 'Assign only one candidate'.

27 - 16

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### 3. Create the Rule

**One rule or many?** In some circumstances, you may be asked to create multiple rules for the same type of assignment. For example, when assigning accounts to sales teams, you may need to create a separate rule for each sales region, because the criteria for each sales region are different; for example, criteria for the West sales region should be different from those for the East sales region. Assigning service requests based on product skill, as done in this example, requires only one rule, because the criteria are the same for all service request assignments.

**Screenshot:** The screenshot shows Administration - Assignment > Assignment Rules list, with the Assign Service Request form applet selected. The Rule Group = North America Assignment Rules, Objects to be Assigned = Service Request, Person Candidates Source = All People, indicating that all employees should be considered for assignment, and Assignee Filter = "One, Best Fit", indicating that only one candidate should be assigned.

## 4. Specify the Criteria

- Under the Criteria view tab, create a new Rule Criterion (assignment object attribute) to be used to assign data
- Specify the comparison method
  - For Compare Object to Person, the assignment object attribute is compared to the candidate's skill attribute of the same name

The screenshot shows the Siebel Criteria applet interface. The top navigation bar includes tabs for Criteria, Employee Candidates, Position Candidates, Workload Distribution, Organization Candidates, and Organization Workload Distribution. Below the tabs is a toolbar with New, Delete, Query, and Create From Templates buttons. A status bar at the top right indicates "1 - 1 of 1". The main area displays a table with one row. The columns are labeled: Rule Criterion, Comparison Method, Inclusion, Required, Score, and Minimum Score. The first column contains "Product", the second contains "Compare Object to Person", the third contains "Include", the fourth contains "Always", and the last two are blank. A yellow callout box points to the "Compare Object to Person" value with the text: "Qualify only employees with skill in the service request's product". At the bottom of the screen, there is a red banner with the ORACLE logo and copyright information: "Copyright © 2010, Oracle. All rights reserved.".

Rule Criterion	Comparison Method	Inclusion	Required	Score	Minimum Score
Product	Compare Object to Person	Include	Always		

Qualify only employees with skill in the service request's product

ORACLE

Copyright © 2010, Oracle. All rights reserved.

### 4. Specify the Criteria

**Candidate Skills:** Available Assignment Skills for candidates (for example, Product or Industry) are configured using Siebel Tools. Notify your developer if you do not have a required assignment skill in the Skill drop-down list for employees.

**Screenshot:** The screenshot shows the Criteria applet for the new Assign Service Request rule. A new record has been created with Rule Criterion = Product, Comparison Method = Compare Object to Person, Inclusion = Include, Required = Always, and Score and Minimum Score blank. This criterion qualifies only employees with skill in the service request's product.

## 5. Specify the Candidates

- When considering a restricted set of candidates for assignment, set Person Candidate Source = From Rule
  - Navigate to the Employee Candidates view
  - Add a new record for each employee to be considered
- Otherwise set Person Candidate Source = All People
  - Do not explicitly add any employees to rule

The screenshot shows the 'Assign Service Request' detail applet. At the top, there are fields for 'Name' (Assign Service Request), 'Rule Group' (North America Assignment), and 'Description'. Below these are sections for 'Activation', 'Expiration', 'Score', and 'Exclusive'. A note says 'Do not add any employees'. On the right, there are fields for 'Person Candidates Source' (set to 'All People'), 'Organization Candidates Source', 'Assignee Filter' (One, Best Fit), 'Late Passing Score' (0), and 'Check Employee Calendar'. At the bottom, tabs include 'Criteria', 'Workload Distribution', 'Organization Workload Distribution', 'Employee Candidates' (which is highlighted with a red box), 'Position Candidates', and 'Organization Candidates'. A message 'S Do not add any employees' is overlaid on the interface. The Employee Candidates tab has a yellow background.

27 - 18

Copyright © 2010, Oracle. All rights reserved.

ORACLE

## 5. Specify the Candidates

**Screenshot:** The screenshot shows the detail applet for Assign Service Request, with the Employee Candidates view tab selected. In the top applet, the Person Candidates Source = All People. The Employee Candidates applet has no records. If you select All People as your source, you do not need to specify any candidates in the candidates applet. Adding candidates has no effect.

## 6. Associate Skills with Candidates

- Navigate to Administration - User > Employees Assignment Skills
- Select a skill and assign values that apply to the user

The screenshot shows the Siebel Application Administration interface. The top navigation bar includes Home, Accounts, Contacts, Opportunities, Quotes, Sales Orders, Service, and Administration - User. The Administration - User applet is selected. Below it, the Employees view shows a single record for Andy Iyer, a Customer Service Representative. The Assignment Skills tab is selected in the sub-navigation. Under the Assignment Skills tab, there are two sections: 'Skill' and 'Comments'. The 'Skill' section contains 'Language' and 'Product', with 'Product' highlighted and a red box around it. A callout box labeled 'Areas of expertise' points to the 'Product' skill. The bottom section, 'Assignment Skill Items', shows three items under the 'Product' skill: '10/100 Network Interface Card', '10/100 Ethernet Card - Half Height', and '10Mbps Network Card', also with a red box around them. A callout box labeled 'Specific skills in the Product area' points to these items. The Oracle logo is at the bottom right.

### 6. Associate Skills with Candidates

**Screenshot:** The screenshot shows Administration - User > Employees, with the Assignment Skills view tab selected. In the Employees applet, Andy Iyer, a Customer Service Representative, is selected. In the Assignment Skills applet, skills of Language and Product have been added, which are Andy Iyer's areas of expertise. The Product skill is selected. In the bottom Assignment Skill Items applet, values for the Product skill have been added. These include 10/100 Network Interface Card, 10/100 Ethernet Card - Half Height, and 10Mbps Network Card. These are Andy Iyer's specific skills in the Product area.

## Test Assignment Rules

1. Release New or Modified Assignment Rules
2. Enable Detailed Logging
3. Run a Batch Assignment
4. Examine the Assigned Records
5. Inspect the Assignment Log Files

More 

## 1. Release New or Modified Assignment Rules

- Under Administration - Assignment > Assignment Rules List:
  - Verify that the rule has not expired
  - Click Release to update the list of rules used by Assignment Manager
    - A rule must be released again every time it is modified



The screenshot shows the Siebel Application Administration interface. The top navigation bar includes links for Home, Accounts, Contacts, Opportunities, Sales Orders, Service, and Administration - Assignment. Below the navigation bar, there are several tabs: Load Splitter Configuration, Server Key Mappings, Territories, Workload Distribution Rules, Assignment Policies, and Assignment Rules List. The Assignment Rules List tab is selected. The main content area displays a table titled "Assignment Rules List" with the following columns: Name, Objects to be Assigned, Rule Group, Sequence, and Activation. There are four rows of data:

Name	Objects to be Assigned	Rule Group	Sequence	Activation
Assign Service Request	Service Request	North America Assignment Rules		
Assign East Accounts	Account	Default Rule Group		
Campaign Contact - Northeast US	Campaign Contact	Default Rule Group		
Campaign Contact - Southeast US	Campaign Contact	Default Rule Group		

At the bottom of the screen, there is a red banner with the ORACLE logo. The footer contains the text "27 - 21" and "Copyright © 2010, Oracle. All rights reserved."

### 1. Release New or Modified Assignment Rules

**Screenshot:** The screenshot shows Administration - Assignment > Assignment Rules List. Several assignment rules are shown. The Release button is highlighted.

## 2. Enable Detailed Logging

- Navigate to Administration - Server Configuration > Servers > Components > Events
  - Set the Log Levels for Object Assignment and Rules Evaluation to 4

The screenshot shows a three-tiered Siebel application interface:

- Top Applet:** Shows a list of Siebel servers. One server, "OUSrvr", is selected. A callout box labeled "1. Select the appropriate Siebel Server" points to this selection.
- Middle Applet:** Shows a list of components. One component, "Batch Assignment", is selected. A callout box labeled "2. Select the Batch Assignment component" points to this selection.
- Bottom Applet:** Shows a list of events. The "Object Assignment" event is selected, and its log level is set to 4. Other events like "Assignment Manager Generic" and "Loading" have log levels set to 1. A callout box labeled "3. Set the Object Assignment and Rules Evaluation log levels to 4" points to the "Object Assignment" row.

Copyright © 2010, Oracle. All rights reserved.

### 2. Enable Detailed Logging

This step is optional, but can help you or your assignment specialist debug assignment rule issues.

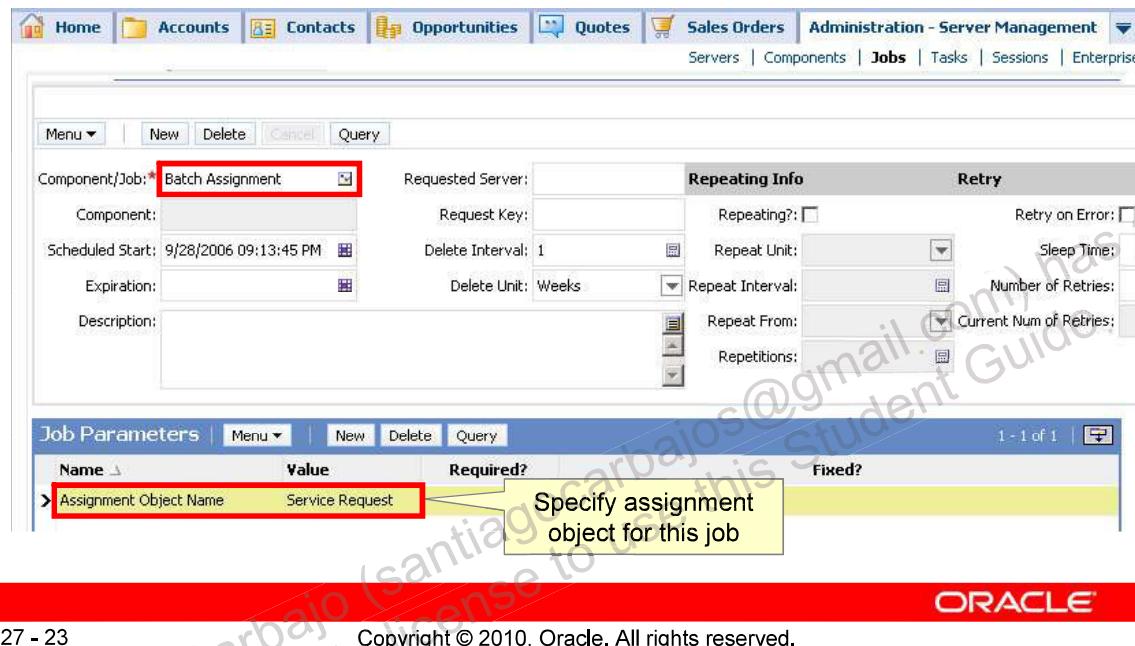
**Log Levels:** Log levels can range from 0 to 5 in order of increasing detail.

**Server Configuration:** You should not modify server configuration settings without first consulting a system administrator. Raising log levels can significantly impact performance. You may not have access to the Server Configuration screen, in which case you can ask a system administrator to make this modification for you for testing. For more detail on setting component parameters, consult the *Siebel System Administration Guide*, or consider taking Oracle University's Siebel System Administration course.

**Screenshot:** The screenshot shows Administration - Server Configuration > Servers > Components > Events. In the top applet, the Siebel Server OUSrvr is selected. You must first select the appropriate server. In the middle applet, the component Batch Assignment is selected. Next, you must select the Batch Assignment component.. In the bottom applet, the Object Assignment and Rules Evaluation events have their log levels set to 4, while the Assignment Manager Generic and Loading events have their log levels set to 1. You set the Object Assignment and Rules Evaluation log levels to 4 to obtain detailed information for them.

### 3. Run a Batch Assignment

- Navigate to Administration - Server Management > Jobs
- Create a Batch Assignment job and submit the request



### 3. Run a Batch Assignment

**Batch Assignment and Rule Groups:** By default, batch assignment runs all of the rule groups. To override this setting, set the Assignment Key job parameter to the Row ID (found using Help > About Record) of the Rule Group you wish to use.

**Multiple Rules:** It is not uncommon to have multiple assignment rules for a single assignment object; for example, Accounts. By default, all of the assignment rules are run. This does not cause any issues if the rules are mutually exclusive; for example, assign western sales reps to western accounts, and eastern sales reps to eastern accounts. However, if the rules have some overlap (for example, northeastern accounts versus eastern accounts), you might wish to specify the order in which the rules are run. In this case, specify a sequence number for each rule. If the rule with the lower sequence number succeeds in assigning the account, processing stops. If it fails, the next rule is tested. For more details, see "How Assignment Manager Determines the Sequence in which Rules are Evaluated" in the *Siebel Assignment Manager Administration Guide*.

**Screenshot:** The screenshot shows Administration - Server Management > Jobs, with the detail applet for a new Batch Assignment job. In the Job Parameters applet, a single job parameter has been created, with Name = Assignment Object Name, and Value = Service Request. You must specify the assignment object for this job.

## 4. Examine the Assigned Records

- Navigate to the list view for the data assigned
- Inspect the records and verify that the desired assignments were made

The screenshot shows a service request record with the following details:

- SR #: 6-7135517
- Last Name: [redacted]
- First Name: [redacted]
- Account: Ace Properties
- Site: Headquarters
- Email: [redacted]
- Date Opened: 9/28/2006 9:24:08 F
- Entitlement: [redacted]
- Date Committed: [redacted]
- Date Closed: [redacted]
- Product: 1U/1UU Network Interface Card (highlighted with a red box)
- Area: [redacted]
- Subarea: [redacted]
- Source: [redacted]
- Status: Open
- Substatus: Assigned
- Owner: AIYER (highlighted with a red box)

A yellow callout bubble points to the Product field with the text "Has expertise in this product".

27 - 24

Copyright © 2010, Oracle. All rights reserved.

ORACLE

### 4. Examine the Assigned Records

**Screenshot:** The screenshot shows a service request record. The product is 10/100 Network Interface Card and the Owner is AIYER. Recall that AIYER has expertise in this product. This implies that Assignment Manager worked correctly for this record.

## 5. Inspect the Assignment Log Files

- Navigate to the Siebel Server log directory to locate the log file generated by the Batch Assignment job
  - Detailed log files document:
    - How each rule is evaluated and why it failed or passed
    - Whether the candidates from each passed rule qualify
    - How the assignees are determined from the list of qualified candidates
- Alternatively, use the Administration - Server Management > Tasks > Log view to examine the log
  - Caveat: With the log levels set to 4, the log file may be too large to browse easily using the graphic interface

## Lesson Highlights

- Siebel Assignment Manager allows companies to automatically assign business data to the most appropriate positions, people, and organizations
- Assignment rules are used to assign candidates to objects
  - Rules include assignment objects, candidates, and criteria
- The general process to create assignment rules is:
  - Design the rule
  - Create the rule record
  - Define the criteria
  - Specify the candidates
- Use logging and batch assignment to test assignment rules

## Practice 27 Overview: Administering Assignment Manager

This practice covers the following topics:

- Creating assignment rules
- Testing the rules