



Siebel Assignment Manager Administration Guide

Version 7.8
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1

What's New in This Release

What's New in Siebel Assignment Manager Administration Guide, Version 7.8

Table 1 lists changes described in this version of the documentation to support release 7.8 of the software.

Table 1. New Product Features in Siebel Assignment Manager Administration Guide, Version 7.8

Topic	Description
New assignment object types and hierarchy See "About Assignment Manager Object Types" on page 46 and "About Assignment Manager Object Type Hierarchy and Relationships" on page 48.	New object types include: <ul style="list-style-type: none">■ Assignment Object Extension■ Dynamic Candidate Component■ Dynamic Candidate Component Col
Enhanced dynamic candidate capability See Chapter 7, "Working with Dynamic Candidates."	Added a new chapter to consolidate dynamic candidate functionality. The enhanced capability allows you to: <ul style="list-style-type: none">■ Create dynamic candidate teams■ Configure team-based and composite team-based criteria■ Specify n-level join specifications when creating the dynamic candidate definition NOTE: Before version 7.8, you could only assign dynamic candidates two levels deep from the assignment object primary table.
Reporting Mode See "About Running Assignment Manager in Reporting Mode" on page 235.	Allows for what-if scenarios for possible assignments before making actual assignments. NOTE: Before version 7.8, only the production mode was available.

Table 1. New Product Features in Siebel Assignment Manager Administration Guide, Version 7.8

Topic	Description
Expanded rule group support See "About Configuring Assignment Manager to Copy Columns" on page 261.	Allows you to retain position-specific data.
Assignment Load Splitter Configuration See Chapter 12, "Assignment Load Splitter Configuration."	Added a new chapter. A new view in the Assignment - Administration screen allows you to configure Assignment Manager to split objects for processing into separate batches and submit those batch requests to multiple servers.

Additional Changes

This version of the documentation also contains the following general changes:

- Most content in this guide was rewritten and reorganized to enhance usability.
- The following terms were changed throughout the book:
 - Siebel Business Applications replaces Siebel eBusiness Applications
 - Siebel Dedicated Web Client was renamed to Siebel Developer Web Client
- Several new server component job parameters were added.

For a list of all server component parameters available for use with Assignment Manager, see ["Modifying the Assignment Manager Server Component Parameters"](#) on page 198.
- The Dynamic Candidate assignment object type definitions and usage have changed. For example, as of version 7.8, the Dynamic Candidate Attribute object type is no longer used; use the Dynamic Candidate Component Col object type instead.

For information about the Dynamic Candidates object types, see ["About Assignment Manager Object Types"](#) on page 46.
- The following Dynamic Candidate object type properties are no longer used:
 - Attribute Id Column
 - Attribute Table
 - Object Id Column
 - Score Column
 - Team Table
 - Team Table Attribute Id Column
 - Team Table Candidate Id Column

However, these properties remain in the repository for upgrade purposes.
- Added a new chapter for availability-based assignment topics; however, there are only minor content changes. See [Chapter 11, "Availability-Based Assignment."](#)

2

Finding and Using Assignment Manager Information

This chapter covers how to find and use information in the *Siebel Assignment Manager Administration Guide* and in other sources relevant to Assignment Manager. It includes the following topics:

- [“How to Use the Siebel Assignment Manager Administration Guide” on page 13](#)
- [“Important Assignment Manager Resources” on page 14](#)
- [“Information on Assignment Manager Seed Data” on page 16](#)

How to Use the Siebel Assignment Manager Administration Guide

This guide provides information necessary to configure, administer, and implement Siebel Assignment Manager. Chapters are organized in a way that allows users to move throughout the guide for various tasks. Use [Table 2](#) as a guideline to determine which chapters you should review and familiarize yourself with before using Assignment Manager.

Table 2. *Siebel Assignment Manager Administration Guide* Organization

Chapter or Appendix	Administrator	Developer
Chapter 1, “What’s New in This Release”	X	X
Chapter 2, “Finding and Using Assignment Manager Information”	X	X
Chapter 3, “Overview of Siebel Assignment Manager”	X	X
Chapter 4, “Planning Your Assignment Manager Implementation”	X	X
Chapter 5, “Basic Assignment Manager Configuration”		X
Chapter 6, “Assignment Rule Administration”	X	
Chapter 7, “Working with Dynamic Candidates”	X	X
Chapter 8, “Assignment Rule Administration for Delegated Assignment”	X	
Chapter 9, “Running Assignment Manager”	X	
Chapter 10, “Advanced Assignment Manager Configuration”		X
Chapter 11, “Availability-Based Assignment”	X	X
Chapter 12, “Assignment Load Splitter Configuration”	X	
Appendix A, “Troubleshooting: Assignment Manager Error Messages”	X	

Important Assignment Manager Resources

Assignment Manager is just one of many server processes available in Siebel Business Applications. Several other server processes, not fully documented in this guide, contribute to Assignment Manager functionality. The resources described in this topic provide additional information relevant to Assignment Manager.

Technical Documentation

The following Siebel documentation should be used as additional references when using Assignment Manager with these processes:

- *Siebel Business Process Designer Administration Guide* for information about business processes and workflows
- *Object Types Reference* for descriptions of and usage comments for assignment object properties
- *Using Siebel Tools* for information about how to modify standard Siebel objects and create new objects to meet your organization's business requirements.
- Siebel Deployment Documentation Suite, including:
 - *Siebel System Administration Guide* for details on how to administer, maintain, and expand your Siebel servers
 - *Configuring Siebel Business Applications* for information about configuring Siebel Business Applications using Siebel Tools
 - *Deployment Planning Guide* to familiarize yourself with the basics of the underlying Siebel application architecture
 - *System Monitoring and Diagnostics Guide for Siebel eBusiness Applications*
 - *Going Live with Siebel Business Applications* for information about how to migrate customizations from the development environment to the production environment
 - *Security Guide for Siebel Business Applications* for information about built-in seed data in the enterprise database, such as employee, position, and organization records.
 - *Performance Tuning Guide* for information about tuning and monitoring specific areas of the Siebel applications architecture and infrastructure, such as the Siebel Server infrastructure and Siebel Workflow.
- *Siebel Data Model Reference* for information about how data used by Siebel applications is stored in a standard third-party relational DBMS such as DB2, Microsoft SQL Server, or Oracle as well as defines some of the data integrity constraints validated by Siebel Business Applications. Plan to use this guide for data entry, running limited scope queries, and managing processes like call scripting.
- *Siebel eScript Language Reference* for information about writing scripts to extend Assignment Manager functionary.
- *Siebel SmartScript Administration Guide* for information about one way of triggering assignments.

Siebel SupportWeb

This Siebel technical support Web site provides search-engine access to the Siebel Bookshelf, Technical Notes, Siebel Alerts, troubleshooting information, and other important information. SupportWeb is located at <http://ebusiness.siebel.com/supportweb>.

- *System Requirements and Supported Platforms* on Siebel SupportWeb. This document contains a definitive list of system requirements and supported platforms for the release, including the following:

- Information on supported third-party products
- A description of supported upgrade paths
- Lists of product and feature limitations; either unavailable in the release or in certain operating environments

It is located on the SupportWeb Knowledge Base at Product Documentation > System Requirements and Supported Platforms & Miscellaneous Documentation.

- *Release Notes* on Siebel SupportWeb. The Release Notes document contains only the most current information on known product anomalies and workarounds and may contain late-breaking information that the *Siebel Assignment Manager Administration Guide* may not yet contain. Release Notes are located on the SupportWeb Knowledge Base at Product Documentation > Release Notes.
- *Maintenance Release Guides*. Maintenance Release guides contain important information about updates to applications in maintenance releases. Maintenance release guides are located on SupportWeb at Product Documentation > Maintenance Release Guides.
- *Technical Notes*. Technical notes provide important information on specific Assignment Manager issues. Technical Notes related to Assignment Manager are located on SupportWeb at Technical Notes > Assignment Manager/Territory Assignment. Technical Notes of particular importance include:
 - Technical Note 527 provides information about setting up the Activity assignment object for availability-based assignment.
 - Technical Note 436 provides information about troubleshooting issues for Dynamic Assignment.
 - Technical Note 27 provides information about how to configure Siebel Sales Enterprise to support additional territory assignment options.
- *FAQs*. Frequently asked questions provide important information on various Assignment Manager topics. FAQs of particular importance include:
 - FAQ 2202
 - FAQ 1629
 - FAQ 1004
 - FAQ 1762
- *Siebel Alerts*. Alerts provide time-critical information on key product behaviors and issues. Siebel Alerts about Assignment Manager issues are located on SupportWeb at Siebel Alerts > Product Areas > Assignment Manager/Territory Assignment.

Information on Assignment Manager Seed Data

Siebel Business Applications include a sample database that contains example data of various kinds and that you can use in demonstrating, evaluating, or experimenting with the Siebel client and Siebel Tools. For more information about the sample database, see the *Siebel Installation Guide* for the operating system you are using.

The enterprise database of your default Siebel application contains some built-in seed data, such as employee, position, and organization records. You can use this seed data for training or testing, or as templates for the real data that you enter. For more information on seed data, including descriptions of seed data records, see *Security Guide for Siebel Business Applications*.

3

Overview of Siebel Assignment Manager

This chapter provides an overview of Siebel Assignment Manager concepts and functionality. It includes the following topics:

- ["Assignment Manager Terminology" on page 18](#)
- ["Assignment Concepts" on page 21](#)
- ["Essential Assignment Manager Building Blocks" on page 24](#)
- ["Optional Assignment Manager Building Blocks" on page 30](#)
- ["Assignment Manager Operating Modes" on page 32](#)
- ["Specialized Assignment Manager Features" on page 34](#)
- ["Modes for Processing Assignment Rules" on page 34](#)

Assignment Manager Terminology

Siebel Assignment Manager uses different terminology than what you may be accustomed to in standard business terminology. [Table 3](#) compares some of these terms and describes how they differ from standard business terminology and what they represent in the context of the Assignment Manager application. You should familiarize yourself with these terms before planning and creating your assignment rules.

Table 3. Differences Between Siebel Assignment Manager and Standard Business Terminology

Business Term	Siebel Assignment Manager Term	Description
Territories	Assignment Rules	<p>In standard business terminology, a <i>territory</i> is a collection of accounts, contacts, and or assets that are managed by a team of positions. Usually a territory is based on a geographic area: either a collection of postal codes or geographic zones.</p> <p>In Siebel Assignment Manager, an <i>assignment rule</i> is a collection of logical business boundaries. These business boundaries include:</p> <ul style="list-style-type: none"> ■ Geographic. ZIP Code, Province, City, State, Country, and so on. ■ Non-geographic. Named Accounts, Industries, Products and Product Lines, Revenue, Sales Stage, Lead Quality, Service Request Area, Service Request Subarea, and so on. <p>You can also enforce additional business rules using assignment rules. For example, you can define a rule so that a specific account manager manages a particular account and the account's related opportunities.</p> <p>NOTE: The word <i>territory</i> is used other places in the UI, where it is not related to the assignment territory features described in this guide. For example, the terms described in this table are not the same as the terms used with the Siebel Territory Management application.</p>
Territory Conditions	Assignment Criteria	<p>In standard business terminology, <i>territory conditions</i> constrain the accounts, contacts, and assets that can be assigned.</p> <p>In Siebel Assignment Manager, <i>assignment criteria</i> enforce business conditions when applied to assignment rules. An assignment rule can have one or more assignment criteria.</p> <p>For example, if a sales representative's territory is Northern California, but excludes City Y and Z for Products A, B, and C, then there are three territory conditions (assignment criteria) that define the sales representative's territory. The three conditions are:</p> <ul style="list-style-type: none"> ■ Province, City, or ZIP Code (to identify Northern California) ■ City Y and City Z (for exclusion) ■ Products A, B, and C

Table 3. Differences Between Siebel Assignment Manager and Standard Business Terminology

Business Term	Siebel Assignment Manager Term	Description
Territory Condition Values	Assignment Criteria Values	<p>In standard business terminology, <i>territory condition values</i> are applied to territory conditions to further constrain the accounts, contacts, and assets that can be assigned.</p> <p>In Siebel Assignment Manager, <i>assignment criteria values</i> are applied to a specific assignment criterion for a particular business condition. For example:</p> <ul style="list-style-type: none"> ■ A ZIP Code assignment criterion could have the following criteria values: 94401, 94402, 94403, or 94406. ■ A service request assignment criterion could have the following criteria values: CD-ROM, 401K Account, Billing, or so on.
Business Entity	Assignment Object	<p>In standard business terminology, <i>business entities</i> can be Accounts, Opportunities, Contacts, Sales Leads, Orders, Campaigns, Service Requests, Trouble Tickets, Activities, eMail, and so on. The business representatives for these entities include field service agents, telesales representatives, account executives, and so on.</p> <p>In Siebel Assignment Manager, business entities are known as <i>assignment objects</i>. An assignment rule is associated with one or more assignment objects.</p>
Territory Managers and Territory Teams	Assignment Candidates	<p>In standard business terminology, <i>territory managers and territory teams</i> are generic terms used mostly in sales organizations. For a given business boundary, territory managers and their teams manage accounts, opportunities, contacts, or other business entities (or a combination of any or all of these). They are associated with a particular sales business entity—Account, Opportunity, Contact, and Partner, and so on—because they satisfy or qualify for the business conditions enforced by their organizations.</p> <p>In Siebel Assignment Manager, <i>assignment candidates</i> apply not only to sales entities but to service entities as well. Service objects (entities) include Service Request, Product Defect, and so on. For sales organizations, candidates are positions or organizations. For example, a territory for a sales representative might be Northern California, with the exclusion of City Y and City Z for Products A, B, and C. For service organizations, candidates are employees or organizations. For example, a territory for a field service installation technician might be City A and City B.</p>

Assignment Concepts

Siebel Assignment Manager routes business entities and work items to the most appropriate candidates by enforcing business rules set by sales, service, and marketing organizations. Assignment Manager accomplishes this function by matching candidates (that is, employees, positions, and organizations) to predefined and user-configurable assignment objects. To assign the most qualified candidate to each object, Assignment Manager applies assignment rules that you define to each candidate.

To define assignment rules, you select:

- Objects to which each assignment rule applies
- Rule groups to which each assignment rule belongs
- Candidates—person (employee or position), organization, or both—for each assignment rule
- Criteria for each assignment rule
- (Optional) Values for assignment criteria

For rules that match attributes of an assignment object with attributes of candidates, you can optionally define:

- Skills to match assignment rules to candidate attributes

A *skill* is a generic row-level attribute that qualifies a person, organization, or assignment object row. For example, if an employee speaks English and Spanish, language is the skill he or she possesses, and English and Spanish are the *skill items*. Employee, position, and organization skills are used to store skills possessed; the skill tables for objects are used to store skills required. Assignment Manager uses skill tables to do skill matching by comparing the skills on the object with the skills of an employee, position, or organization to determine who passes the rule.

- Expertise levels to weigh skill scores (to measure competency in a certain area for each candidate)
- Scores for each assignment rule, criteria, and value and a personal score for each individual candidate

For example:

- In a sales organization, you can create an assignment rule that scores positions (candidates) based on territory definitions (criteria) for an opportunity (object).
- In a service organization, you can create an assignment rule that scores employees (candidates) based on product expertise (criteria) for a service request or product defect (object).

Using the sum of scores at the assignment rule level, Assignment Manager assigns the best candidate for each rule and the best candidates for the object.

- Defining workload distribution rules to balance work among the candidates

Define workload distribution rules if you want to distribute the workload rules evenly between the candidates or if your business logic includes limits on the maximum amount of work that can be handled at one time.

You can also customize the way Assignment Manager makes assignments by:

- Defining how attributes are matched by:
 - Using different comparison methods
 - Making criteria required (compulsory) or optional
 - Using inclusion and exclusion methods
 - Using workload distribution rules
 - Using wildcard values
- Defining how assignment rules are matched by using:
 - Assignment rule groups
 - Assignment rule sequencing
- Defining how candidates are assigned based on person and organization relationships using multitiered assignment
- Creating and configuring your own entities, including:
 - Assignment objects
 - Assignment criteria
 - Assignment attributes
 - Workload distribution rules to make assignments based on current workload
 - Dynamic candidates and candidate teams that are assigned dynamically depending on the object row assigned
- Running Assignment Manager in different operating modes to process assignments:
 - Interactively in real time
 - Dynamically when object rows are created or attributes on object rows are changed by connected or mobile users
 - Periodically assigning objects in batches
- Running Assignment Manager against reporting tables to test the desired behavior of assignment rules and rule groups before running against production tables
- Checking availability before assigning employees to objects
- Defining which servers are used to run selected groups of rules
- Delegating the task of creating business logic through rules and criteria to others

Summary of Assignment Manager Customization Tasks

Table 4 summarizes the Assignment Manager customization tasks and where you can find more information.

Table 4. Summary of Assignment Manager Customization Tasks

Task	For More Information, See ...
Define assignment rules	"Process of Defining Assignment Rules" on page 86
Match attributes of an assignment object with attributes of candidates	<ul style="list-style-type: none"> ■ "About Assignment Skills, Expertise Codes, and Weighting Factors" on page 112 ■ "Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 114
Defining workload distribution rules to balance work among the candidates	<ul style="list-style-type: none"> ■ "How Assignment Manager Balances Workload Among Candidates" on page 125 ■ "Process of Defining Assignment Workload" on page 127
Define how attributes are matched	Chapter 6, "Assignment Rule Administration"
Define how assignment rules are matched using rule groups and rule sequencing	<ul style="list-style-type: none"> ■ "Creating Assignment Rule Groups" on page 88 ■ "Adding a Sequence Number to Assignment Rules" on page 149
Define how candidates are assigned based on person and organization relationships using multitiered assignment	"Configuring Assignment Objects for Multitiered Assignment" on page 268
Create and configure your own entities	<ul style="list-style-type: none"> ■ Chapter 5, "Basic Assignment Manager Configuration" ■ Chapter 6, "Assignment Rule Administration" ■ Chapter 7, "Working with Dynamic Candidates" ■ Chapter 10, "Advanced Assignment Manager Configuration"
Run Assignment Manager in different operating modes to process assignments	Chapter 9, "Running Assignment Manager"
Running what-if analysis on possible assignments before making actual assignments	"About Running Assignment Manager in Reporting Mode" on page 235
Define which servers are used to run selected groups of rules	"How Assignment Manager Uses Server Key Maps to Load Rules to a Particular Siebel Server" on page 149

Table 4. Summary of Assignment Manager Customization Tasks

Task	For More Information, See ...
Delegate the task of creating business logic through rules and criteria to others	Chapter 8, "Assignment Rule Administration for Delegated Assignment"
Check availability before assigning employees to objects	Chapter 11, "Availability-Based Assignment"

Essential Assignment Manager Building Blocks

Siebel Assignment Manager consists of several essential building blocks. A brief description of each is provided in the following subtopics; each subtopic is described in greater detail in other chapters throughout this guide.

Assignment Rules

An assignment rule is a logical collection of business conditions, and Assignment Manager evaluates potential candidates based on these rules. For example, assume the US Western Sales Representative position is responsible for sales of Products A, B, and C in zip codes 944401, 94402, 94403. In Siebel Assignment Manager, this example translates as follows:

- An assignment rule exists for the US Western region.
- The assignment rule candidate is the US Western Sales Representative.
- One criteria for the assignment rule includes only those accounts with 94401, 94402, and 94403 Zip Codes.
- Another criteria for the assignment rule includes only products in the Product A, B, or C product line.

Siebel Assignment Manager uses assignment rules to match assignment objects to candidates. Multiple assignment rules can be active for each assignment object. An assignment rule can also apply to multiple objects.

Assignment rules use criteria and scores to rate candidates and select potential assignees. Candidates that qualify for an assignment rule have the assignment rule score added to their total score. For example, if you have an assignment rule with the Score field set to 20 points, each candidate that meets the rule's criteria has 20 points applied to his or her total score.

Each assignment rule also has a candidate passing score value. After the total score for a candidate is calculated, Assignment Manager compares this score with the candidate passing score for the assignment rule. If a candidate's score is less than the candidate passing score, the candidate does not meet the criteria and is not assigned.

Assignment Objects

In Siebel Assignment Manager, assignment objects represent assignment entities to which candidates are matched based on assignment rules. The concept is analogous to business objects in Siebel Business Applications. You must associate every assignment rule with at least one assignment object.

Assignment Criteria and Criteria Values

Assignment criteria are the fundamental building blocks for assignment rules. You translate the assignment business logic you determine into assignment criteria. Assignment rules use criteria to determine which candidates qualify as potential assignees. Criteria also determine which assignment rule should be evaluated in assigning an object. An assignment rule can include none (zero), one, or many criteria.

An assignment criterion is usually defined along with criteria values. For example, assume you want an assignment requirement that employees speak German. When you create your assignment rule, you select the predefined Language rule criterion and German (or DEU, which is the language code for German) as the criterion value.

You can have several criteria values for the same criterion. For example, [Figure 1](#) shows a Language rule criterion that uses four languages as criteria values: German, Spanish, Italian, and French. Assuming this assignment rule's candidate passing score is 10 points, and each language is worth 5 points, candidates for this assignment rule that possess expertise in at least two of these languages qualify for the assignment rule.

Criteria Employee Candidates Position Candidates Workload Distribution Organization Candidates Organization Workload Distribution						
Menu New Delete Query Create From Templates 1 - 1 of 1						
Rule Criterion	Comparison Method	Inclusion	Required	Score	Minimum Score	Description
> Language	Compare to Person	Include	Always			
Menu New Delete Query 1 - 4 of 4						
Score	Language Code	Expertise Code				
> 5	DEU					
5	ESP					
5	ITA					
5	FRA					

Figure 1. Sample Assignment Criterion with Multiple Criteria Values

Assignment Manager provides predefined criteria values that are available dynamically based upon the criterion you select, or you can create your own criteria values using Siebel Tools. For example, if you want activities of type Repair or Break-fix handled by a certain employee, create a rule criterion called Activity Type with two criteria values, Repair and Break-fix. For more information about creating new criteria with values, see [“Process of Creating Assignment Criteria for Use in Assignment Rules” on page 56](#).

Assignment Rule Groups

Assignment Manager allows you to group assignment rules, splitting them up by business function or other categories. An assignment rule group can include multiple assignment rules, however, an assignment rule can belong to only one rule group. You *must* associate each assignment rule with a rule group.

TIP: If you do not want to create your own rule groups, you can associate all assignment rules to the Default Rule Group. The Default Rule Group is provided in the Assignment Manager seed data. Rules upgraded from versions prior to version 7.7 and 7.8 Assignment Manager are automatically associated with the Default Rule Group, if you have not already assigned a specific rule group.

Before the introduction of rule groups, Assignment Manager processed all active rules, which required several administration tasks to execute Assignment Manager only on a subset of rules. For example, one of the tasks required was to expire all unwanted rules. With the introduction of rule groups in version 7.7, you can now split rules and execute a subset of rules at any time.

For example, you may have one set of business rules for assigning repair activities and another set of rules for assigning similar, but different, activities, such as appointment activities. In this situation, you could create two rule groups with five rules each. Then, when assigning a particular activity, you specify the rule group you want Assignment Manager to process. Only the five rules from the rule group you specified are processed during assignment of the activity, for example, the five repair activity rules.

NOTE: Typically, you want to split rules into rule groups based on business logic.

Assignment Candidates

In Siebel Assignment Manager, candidates represent the people or organizations who are evaluated as potential assignees for objects. Depending on the assignment rule you use, and the object to which a candidate is assigned, candidates can be positions, employees, or organizations, and can be assigned as individuals or as members of a team. Alternatively, you can associate all people or all organizations defined in the database as candidates for a rule. You can also specify a particular candidate or one member of a team as the primary assignee on a specific assignment rule.

Static Versus Dynamic Candidates

When processing rules, Assignment Manager determines potential candidates either statically or dynamically. Assignment Manager determines candidates statically when:

- Candidates are explicitly added to an assignment rule
- The All People or All Organizations flags are checked on an assignment rule
- When qualifying candidates based on their skills

Static candidates do not change as Assignment Manager processes rules (unless you intentionally associate other, different candidates) whereas dynamic candidates are identified during assignment.

Dynamic candidates can come from different, but related business entities. For example, Assignment Manager can assign an activity related to an asset and then dynamically generate a candidate list from the asset team.

Assignment Manager determines dynamic candidates as potential assignees for objects from an attribute on the object row. For example, assume you have an activity that is associated to an asset. The asset, in turn, is associated with a list of employees. You may want Assignment Manager to treat the list of employees associated with the asset as potential candidates for assignment of that activity. In this situation, the potential candidates are *dynamic candidates* because they are not statically associated with an assignment rule; instead, they are identified during assignment. In addition, if the activity gets associated with a different asset that is associated with a different set of employees, the list of potential candidates for the same activity can change during the next assignment.

In summary, the following points explain how static candidate assignment differs from dynamic candidate assignment:

- For static candidate assignment, candidates for each assignment rule are loaded when the server processes start up.
- For dynamic candidate assignment, candidates are retrieved from related business entities (attribute team table) with respect to the object row during an assignment.

Employee Candidates

Employees represent candidates distinguished by their skills and product expertise and are typically used as candidates in service organizations. For example, a service organization would want to assign employees with the proper skills and expertise to objects, because these employees possess specific skills that are related to the service request or activity. Assignment Manager can also take into account a specific employee's work schedule, calendar, and regional schedule when determining assignments by creating rules based on an employee's availability. For more information about availability-based assignment, see [Chapter 11, "Availability-Based Assignment."](#)

Position Candidates

Positions represent candidates distinguished by their job functions and are typically used as candidates in sales organizations. For example, a sales organization would want to assign positions to objects, because these positions are responsible for a region or territory.

By assigning objects to positions, you can have one sales representative inherit the opportunities, accounts, and contacts from another representative by reassigning the employee responsible for a specific position.

NOTE: An assignment object can be either position-based or employee-based, but not both. Assignment Manager does not support assignment of employees and positions to the same assignment object.

Organization Candidates

An organization represents a group of positions that has limited visibility to particular application data. For example, your company can create separate and distinct organizations to distribute specific information to organizational groups both inside and outside of your enterprise. Both internal and external users are granted access only to the information that they should see (such as accounts, opportunities, and contacts) and data they need to see (such as price lists, products, and literature).

By assigning objects to organizations, you can maintain better security and promote proper business practices by controlling data access and visibility between different organizations. For example, you can limit your distributors' data access by giving them visibility to product information, but restricting their visibility to price lists for the products. To restrict price list visibility, you can create a separate organization for your distributors that does not have access to the price list data. In this case, the price lists are not available to your distributors even if they are assigned to the products.

Some objects allow the assignment of a single organization, whereas other objects allow the assignment of multiple organizations to the same object. For more information about which candidates can be assigned to each of the predefined assignment objects, see [Table 5 on page 29](#).

Teams Versus Individual Candidates

A team represents a group of employees or positions. Assigning a team allows you to assign a group of individuals that possess various skills or job functions to a particular object.

In sales organizations, teams are typically assigned to objects. For example, you can assign a sales representative and a sales consultant to an opportunity. Alternately, you can assign a team of sales professionals—such as two district representatives, a regional manager, and a sales engineer—to work a single, large sales opportunity.

An individual represents a single employee or a position. Assigning individuals allows you to assign exclusive ownership to an individual who possesses a specific skill or expertise for a particular object.

In service organizations, individuals are typically assigned to objects. For example, you can assign a customer service representative with expertise in disk drives to all service requests that are marked for this area.

Assignment objects can be team-based, individual-based, or both. That is, the same assignment object can be team-based for employees and individual-based for organizations.

Table 5 shows which candidates can be assigned to some of the predefined assignment objects. This table also shows which assignment objects are restricted to a single assignee, and assignment objects that are capable of incorporating a team of assignees. *S* indicates the ability to allow only single owner assignments; *M* indicates the ability to allow multiple owners or team assignments.

Table 5. Individual Versus Team Assignments Listed by Assignment Object

Assignment Object	Employee Candidate	Position Candidate	Organization Candidate
Account		M	M
Activity	M		
Campaign		M	M
Campaign Contact		S	S
Contact		M	M
Opportunity		M	M
Product Defect	S		
Project	M		M
Project Team	M		
Service Request	S		M
TM Account		M	
TM Asset		M	
TM Contact		M	

NOTE: If you want to assign different candidates, such as assign accounts to employees or assign projects to positions, you must configure the assignment object using Siebel Tools. For more information about this, see [“Creating Assignment Objects”](#) on page 243.

Primary Assignees

A *primary* on an assignment rule represents the candidate (employee, position, or organization) that is assigned as the primary owner of an assignment object if the candidate passes the criteria for that object. The primary is the main owner, that is primary assignee, of an assignment object. This assigned primary is usually the highest-scoring assignee from the highest-scoring assignment rule.

Alternatively, you can configure Assignment Manager to assign one member of a team as the primary assignee. In addition, you can manually assign a particular candidate as the primary assignee on a specific assignment rule.

NOTE: For assignments that allow only single assignees, the single assignee also becomes the primary assignee.

Optional Assignment Manager Building Blocks

Siebel Assignment Manager provides several optional building blocks you can use with your assignment rules. A brief description of each is provided in the following subtopics; each subtopic is described in greater detail in other chapters throughout this guide.

Assignment Rule Sequencing

When you assign sequence numbers to assignment rules, Assignment Manager evaluates those rules in ascending order of the sequence numbers. Assignment rule sequencing provides a means for you to prioritize the rules that apply to any given assignment object by order of importance, thereby limiting the number of rules that Assignment Manager processes for assignment. For example, you might want to run Assignment Manager only for your higher priority rules first, and then if those rules pass, stop processing additional rules because candidates are already successfully matched.

Assignment Workload

Assignment Manager allows you to apply predefined workload distribution rules, or you can create your own, to assignment rules to balance workload among candidates. Candidates that have workloads in excess of the maximum workload are eliminated from the assignment rule. This workload distribution prevents employees from being overloaded. Each assignment rule can include multiple workload criteria.

Assignment Scoring

You can add scores to assignment rules to rate candidates and select potential assignees. Candidates that qualify for an assignment rule have the assignment rule score added to their total score. For example, if you have an assignment rule with the Score field set to 20 points, each candidate that meets the rule's criteria has 20 points applied to his or her total score.

You can also assign a candidate passing score value to each assignment rule. After the total score for a candidate is calculated, Assignment Manager compares this score with the candidate passing score for the assignment rule. If a candidate's score is less than the candidate passing score, the candidate does not meet the criteria and is not assigned.

Alternatively, you can add scores for the same candidate across multiple assignment rules.

Assignment Skills, Expertise Codes, and Weighting Factors

Skills are a special criteria type that you can use to minimize the number of assignment rules. One assignment rule can match different candidates to various objects based on the object characteristics and candidate skills.

Skills are the type of criteria you use most frequently for implementing assignments in a customer service environment. For optimal assignment, you determine the criteria that you want to evaluate for each candidate to make sure that the candidate possesses the proper skills to handle the task.

The Siebel application provides predefined skills, and you enable and configure those skills at the criteria level using Siebel Tools. However, you can also create new skills using Siebel Tools. After you enable skills, Assignment Manager matches skills based on an assignment criteria comparison method in the same manner in which attributes are matched. Assignment Manager then applies scores and other filters to find the best candidate after a match has been made.

You can apply expertise codes that define an employee's expertise level for a particular skill with weighting factors to weigh skill scores to measure competency in a certain area for each candidate. Assignment Manager uses expertise codes to rank skills to find the most suitable candidate. For example, assume you do not want to assign a novice to a service request that requires an expert. By using expertise codes, you can prevent assigning objects to underqualified candidates.

Server Key Maps

Server key maps allow you to define multiple rule groups that you want a specific server to load and process, thus allowing you to use different servers for different business purposes. Server key maps use an internal key-based routing mechanism to route requests to a particular server; however, this routing is done in the background and is not apparent. You can also specify multiple servers to load the same rule group.

Assignment Policies

Assignment policies are specialized workflow policies used to create dynamic assignment triggers. Assignment policies allow you to define policies that can act as triggers to execute a workflow process, such as dynamic assignment. A policy consists of one or more policy conditions. When the policy conditions are met, the policy action is executed. Assignment Manager provides preconfigured policies for each of the predefined assignment objects. To use assignment policies, you must first activate them using Siebel Tools.

Denormalization

Denormalization is an assignment mode in which Assignment Manager introduces duplicate data to facilitate specific visibility requirements. In Siebel Assignment Manager, you use the prebuilt contact denormalization and product denormalization features to denormalize positions or organizations.

Email Activity Assignment

Assignment Manager can assign or route inbound emails created by Siebel eMail Response to an appropriate agent. The Communications Server, that is the Communications Inbound Manager server component, works in conjunction with Siebel eMail Response to create inbound emails as activities.

To assign inbound emails, the assignment administrator creates assignment rules and criteria for the Activity assignment object. For more information about routing inbound emails, see *Siebel Email Response Administration Guide* (Workflow section) and *Siebel Communications Server Administration Guide*.

Multitiered Assignment

By default, Assignment Manager assigns people and organizations independently. Multitiered assignment allows Assignment Manager to consider the relationship between people and organizations when determining the proper assignment. This feature requires configuration of assignment objects using Siebel Tools before implementing.

Availability-Based Assignment

Assignment rules can be created for employee-based objects using availability-based assignment, which allows Assignment Manager to check an employee's calendar and to consider the employee's availability when determining assignment eligibility. This feature requires advanced configuration of assignment objects using Siebel Tools before implementing.

Assignment Manager Operating Modes

This topic explains the various operating modes available for running Assignment Manager. Depending on the operating mode, you invoke Assignment Manager using the server administration views, using the command-line interface to run server component jobs, or both.

About the Assignment Manager Operating Modes

There are three assignment operating modes:

- Batch Assignment
- Dynamic Assignment
- Interactive Assignment

Batch Assignment

You can use batch assignment to assign multiple records in a single batch. For example, you can assign orders that are created during the business day at the end of business using batch assignment so that the assignments are made before start of business the next morning. Another example of batch assignment is when you change assignment rule definitions—you can use batch assignment to reassign objects using the new assignment rules. Batch assignment is optimized to process a large number of items efficiently.

Dynamic Assignment

Dynamic assignment performs assignments automatically as other users and server programs create records or modify existing records. For example, if a user creates a new opportunity or changes the revenue amount or the address of an opportunity, dynamic assignment automatically detects the change and invokes Assignment Manager to reassign the opportunity to a different territory or sales team, as determined by the assignment rule.

Interactive Assignment

Interactive assignment allows end users to invoke Assignment Manager by a click of a button or menu selection, review the list of assignees generated by Assignment Manager, and then accept or override the assignees.

NOTE: Mobile users running Assignment Manager in interactive mode do not make real-time assignments, because interactive assignments made by mobile users are not applied to the server until they resynchronize.

About Different Modes of Running Assignment Manager

You can choose one of two ways—default mode or rule group mode—to run Assignment Manager depending on what rules you want processed.

- **Default mode.** In this mode, all active rules for all rule groups are loaded and processed. By default, interactive and dynamic assignment run in default mode. However, you can configure interactive assignment to run in rule Group mode.
- **Rule group mode.** In this mode, you can process rules of one particular rule group when you assign an object row.

Table 6 shows the supported operating modes and server components used for running each mode.

Table 6. Operating Modes for Running Assignment Manager

Operating Mode	Description	Mode		Server Component Used		
		Default	Rule Group	AsgnSrvr	AsgnBatch	GenTrig/ WorkMon
Batch	Assigns a set of rows in a single request.		X		X	
Dynamic	Uses database triggers to assigns objects as soon as they are created or when they are modified.	X				X
Interactive	Uses the Assignment Manager engine to filter out certain candidates (in the evaluation phase), outputs a list of potential candidates to the user, and then the user manually assigns.	X	X	X		

Specialized Assignment Manager Features

Assignment Manager provides several specialized features. A brief description of each is provided in the following subtopics; some features are also described in greater detail in other chapters of this guide.

Mobile Assignment

Mobile Assignment allows mobile users to make interactive and dynamic assignments. Changes to the mobile client's database are queued and are applied to the server the next time the client synchronizes.

Assignment Manager automatically performs interactive assignments made by the mobile user after synchronization. Changes to assignment rules and objects are updated, and affected objects are reassigned dynamically.

NOTE: Mobile users running Assignment Manager in interactive mode do not make real-time assignments, because interactive assignments made by mobile users are not applied to the server until they resynchronize.

Delegated Assignment

Delegated assignment provides assignment administrators (AAs) the ability to delegate rule administration to other administrators and partners to route leads, activities, accounts (and other assignment objects) to employees or positions. These delegates are known as *delegated administrators* (DAs). A DA can, in turn, delegate assignment rule administration to others.

This hierarchical assignment feature is well-suited to sales organizations and organizations that work closely with partners.

Assignment Load Splitter Configuration

The assignment load splitter configuration feature provides assignment administrators (AAs) a tool for performing batch assignment for a significant number of objects. It eliminates the need for AAs to plan and implement complex load distribution logic.

You can configure Assignment Manager to automatically split objects for processing into separate batches and submit those batch requests to multiple servers. This balances the task load across multiple servers, which in turn, improves processing performance.

Modes for Processing Assignment Rules

As of version 7.8, Assignment Manager supports two modes for processing assignment rules—the reporting mode and the production mode. By default, Assignment Manager processes assignment rules in the production mode.

NOTE: Before version 7.8, only the production mode was available.

Reporting Mode

Assignment Manager provides a special mode for processing assignment rules that allows Assignment Administrators (AAs) to run and preview trial assignments for what-if analysis before making actual assignments. Reporting mode stages the simulated assignments into a set of temporary results tables, known as *reporting tables*, rather than into the actual database tables. After this staging process is complete, AAs review the results and when satisfied, apply those changes by executing Assignment Manager in production mode.

Production Mode

The production mode is the mode in which actual assignments are made. Assignments are written into the team tables (account/position or contact/position tables) in the Siebel Enterprise database.

For example, an AA might want to perform trial runs to confirm new assignment rules in the reporting mode. After accomplishing satisfactory results, the AA can then apply the same changes in the production mode.

NOTE: Reporting assignment and regular assignment are mutually exclusive operations that you can perform in any combination, that is, in reporting mode alone, production mode alone, or both. Irrespective of whether reporting is turned on or off, Assignment Manager can write evaluation results to an actual assignment table.

4

Planning Your Assignment Manager Implementation

This chapter provides guidelines for planning your Siebel Assignment Manager deployment and scenarios for various types of implementation. It includes the following topics:

- [“Guidelines for Planning Your Assignment Manager Implementation” on page 37](#)
- [“Planning Your Assignment Manager Deployment” on page 38](#)
- [“Guidelines for Creating Assignment Rules” on page 39](#)
- [“Planning Optimal Assignment Rules” on page 39](#)
- [“Scenarios for Using Assignment Manager” on page 41](#)

Guidelines for Planning Your Assignment Manager Implementation

This topic provides high-level guidelines for planning your Assignment Manager implementation.

Your business or functional teams should verify and confirm the requirements before assignment administrators begin planning assignment rule creation. The requirements include:

- Ensure all the current business requirements and data routing (by way of Assignment Manager) is captured for the deployment.
- When applicable, define strategies to leverage the existing implementation when additional organizations decide to use Assignment Manager in the future.

For example, your current deployment may only include telesales, marketing, and customer care users, but you should plan ahead in case sometime in the future you want to include other users, such as quality assurance, email response, and so on.

- Identify the business requirements and map those requirements to Assignment Manager features, such as assignment rule groups, rule sequencing, exclusivity, scoring, multitiered assignment, workload distribution, dynamic candidates, delegated assignment, and so on.
- Map Assignment Manager deployment modes.

For example, your deployment mapping might include assigning service requests interactively, assigning opportunities dynamically, assigning accounts and assets using batch mode, assigning contacts using batch contact denormalization, and so on.

Assignment administrators should develop operational plans based on business requirements and frequency of assignment using Assignment Manager features, such as load splitter configuration, Reporting Mode, and so on.

Planning Your Assignment Manager Deployment

This topic provides a high-level overview for planning your Assignment Manager deployment. If appropriate time is invested in analyzing the incoming data and loading up appropriately for the first time, it can reduce performance and other problems moving forward.

Use the following points to help plan your deployment:

- Develop a migration path from an external source to Siebel Assignment Manager and, if using territory management, also carefully plan import of external alignment rules.

NOTE: This task is even more important if your implementation has mobile users.

- Use assignment rule groups to manage large numbers of rules.
- Use rule sequencing to prioritize rules by order of importance.

This can be helpful for newly-imported assignment manager rules from an external system because you can execute batch assignment against just the newly imported rules.

- Use server key mappings to run multiple instances of assignment manager with different groups of rules loaded.
- Create custom criteria for date fields (called date criteria).

Date criteria allow you to specify additional selectivity while assigning particular objects, such as creation date, expiration date, and so on.

- If your assignment rules are static—that is, less frequently changing—consider using dynamic assignment over batch assignment.
- Identify opportunities where you can reduce assignment rules, such as:
 - Reusing assignment rules across objects
 - Using skills
 - Setting up dynamic candidates

For more information about how to reduce assignment rules, see ["Planning Optimal Assignment Rules" on page 39](#).

Guidelines for Creating Assignment Rules

To use Assignment Manager effectively, assignment administrators (AAs) must develop and document a clear set of strategies that are consistently applied by Assignment Manager or system administrators.

For each assignment object, AAs should consider how to develop assignment rules that:

- **Optimally match the attributes of assignment objects to criteria values of the assignment rules.**
This is commonly used for traditional territory assignment where territories are managed exclusively through assignment administration. Employees, positions, or organizations associated with these rules are potential assignees. Sales organizations typically use this method.
- **Optimally match the attributes of assignment objects to employee skills.**
Expertise is managed using employee, position, or organization skills. Service organizations typically use this method.
- **Reflect a blend of the attributes outlined in the two methods previously described.**
For example, sales organizations can benefit from assignment rules using employee skills as well as territory rules.

Planning Optimal Assignment Rules

In general, the fewer assignment rules, the better. When you use fewer assignment rules, you achieve the following long-term gains:

- **Reduce Maintenance.** The assignment administrator (AA) has fewer rules to manage, thus reducing time spent on checking quality of assignment rules.
- **Scalability.** When new organizations or divisions require Assignment Manager capability, there is no need to rearchitect the existing rules to accommodate the new requirements.
- **Reduce System Resources.** Assignment Manager, like other processing applications, is resource intensive. By reducing the number of assignment rules, the amount of system resources required are minimized including database, Siebel Server, and the time window for territory alignments.
- **Enhance Performance.** Assignment processing and throughput is increased when there are fewer rules because the Assignment Manager engine has a limited dataset to work on.

For normalization purposes, use the following guidelines to optimize your assignment rules:

- **Avoid duplication of assignment rules across objects.**
For example, an account rule and a professional rule might have the same position assigned (within the same ZIP Code). In this case, you can collapse these two assignment rules into a single rule.

- For custom assignment criteria with similar values across multiple objects, build a single criteria so that you can consolidate assignment rules.
- Consolidate positions across multiple assignment rules.

After assignment rules are created, determine the top 10 positions used in assignment rules. If one or more positions are used in more than 90% of the assignment rules, you might want to consider alternate paths.

With a skills model, consider using the built-in Assignment Manager skills feature. Although it is typically used within a Call Center implementation, this feature can also be leveraged for a sales implementation.

NOTE: Although it is recommended that you keep your assignment rules to a minimum, you should continually weigh the advantages of ease of administration with loss of performance as they apply to your particular deployment.

Examples for Optimizing Assignment Rules

Use the following examples to assist you in determining the number of assignment rules for your implementation.

Sales Example

A telecommunications sales company is planning their Assignment Manager implementation based on the following data:

- There are 1,200 potential territories for the geographic and product lines served.
- There are 600 sales people working these territories.

Ideally, this company would define no more than 600 assignment rules, which is the lower of the two numbers. However, if this company plans to use additional Assignment Manager features, such as dynamic candidates, scoring, skills, and so on, the company should consider reducing their rule count even further.

Service Example

An appliance services company is planning their Assignment Manager implementation based on the following data:

- There are 100 potential geographic territories for their product line and different service products.

The product line includes refrigerators, washing machines, air conditioning units, and so on. The services the company provides include: preventive maintenance, extended warranty coverage, and so on.

- There are 1,600 field technicians working with customers in these territories.

Ideally, this company would define no more than 100 assignment rules, which is the lower of the two numbers. However, if this company plans to use additional Assignment Manager features, such as dynamic candidates, scoring, skills, and so on, the company should consider reducing their rule count even further.

In summary, when you create assignment rules, identify the logical territories, the people participating in these territories, and then determine how you can best optimize your Assignment Manager deployment.

Scenarios for Using Assignment Manager

Several scenarios are provided as examples of how you might use Assignment Manager. Your company may follow a different process according to its business requirements.

Scenario for Using Assignment Manager in Sales Organizations

This scenario gives one example of how you can use Assignment Manager in a sales organization. You may use Assignment Manager differently, depending on your business model.

Sales organizations typically need to distribute opportunities and accounts to the proper people within the organization. Assignment of sales opportunities must take place quickly so that sales representatives can respond to potential revenue-generating opportunities. Information must also be readily available to salespeople to close the maximum number of sales possible.

Assignments in sales organizations are commonly made to positions responsible for a territory. Mobile salespeople, who are not connected to a network, can share information and work as a collaborative sales force on sales opportunities. Sales organizations can therefore use the talents of their salespeople within their entire organization.

Siebel Assignment Manager allows you to create territories for positions using a wide variety of criteria. By assigning objects to positions, you can have one sales representative inherit the opportunities, accounts, and contacts from another sales representative by reassigning the employee responsible for a specific position.

After you have created the territories using assignment criteria, a major territory realignment can negatively affect your system resources. If the realignment is large, Assignment Manager may create a volume of transactions for mobile clients, which increases synchronization time drastically. To avoid this problem, you can run a database extract server task (DbXtract) again and have the mobile clients initialize their databases. Because the time required to run a database extract server task for multiple clients may be significant, try to coordinate territory realignments with database extracts to occur during a time of low system utilization.

Because sales organizations typically distribute their accounts and opportunities based on territories, create sales assignment rules based on these territories.

For more information about:

- Territory alignments, see *Siebel Territory Management Guide*.
- Database extracts, see *Siebel Remote and Replication Manager Administration Guide*.
- Running server tasks, see *Siebel System Administration Guide*.

Scenario for Using Assignment Manager in Service Organizations

This scenario gives one example of how you can use Assignment Manager in a service organization. You may use Assignment Manager differently, depending on your business model.

In a service organization, service requests can often be resolved by the first customer service representative (CSR) who services the customer. However, when the request cannot be resolved, or when the service request is logged through the Internet, ownership must be transferred to a service representative who possesses the expertise to handle the request.

In this environment, it becomes critical to assign employees with the proper expertise and skills to service requests. Therefore, you should assign employees to objects because some employees possess specific skills that are different from those of other CSRs or field service engineers. When service representatives are on vacation, are promoted, or assume different responsibilities, work assigned to these employees must be reassigned based on the skills and workloads of other employees in the service organization.

Scenario for Using Assignment Manager in Marketing Organizations

This scenario gives one example of how you can use Assignment Manager in a marketing organization. You may use Assignment Manager differently, depending on your business model.

In a marketing organization, you want to route responses from a new product campaign appropriately to the telesales team responsible for handling the campaign. In this case, the assignment administrator creates assignment rules using the Campaign assignment object, with Product and Workload criteria, to make sure there is a fair distribution of leads to telesales personnel.

5

Basic Assignment Manager Configuration

This chapter describes basic Siebel Assignment Manager configuration.

NOTE: If you plan to use the predefined Assignment Manager components, skip this chapter and proceed to [Chapter 6, "Assignment Rule Administration."](#)

This chapter includes the following topics:

- ["About Performing Basic Assignment Manager Configuration Tasks" on page 44](#)
- ["About Assignment Manager Object Type Hierarchy and Relationships" on page 48](#)
- ["About Assignment Objects" on page 50](#)
- ["Configuring Assignment Object Properties" on page 51](#)
- ["Configuring Assignment Objects for Interactive Assignment" on page 53](#)
- ["Process of Creating Assignment Criteria for Use in Assignment Rules" on page 56](#)
- ["Creating Assignment Attributes" on page 56](#)
- ["Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column" on page 61](#)
- ["Creating Assignment Criteria" on page 63](#)
- ["Creating Assignment Criteria Attributes for Assignment Criteria" on page 65](#)
- ["Disabling Assignment Attributes" on page 73](#)
- ["About Inactive Assignment Manager Workflow Policy Components" on page 74](#)
- ["Process of Using a Single Criterion for Multiple Objects" on page 67](#)
- ["Example of Using a Single Criterion for Two Objects" on page 69](#)
- ["About the Relationship Between Attributes and Skills" on page 75](#)
- ["Viewing Predefined Skills" on page 76](#)
- ["Enabling Assignment Objects for Skills" on page 77](#)
- ["Example of Enabling an Assignment Object for Skills" on page 79](#)
- ["Updating Your Assignment Manager Deployment with New Configurations" on page 80](#)

NOTE: Configuration tasks other than the basic topics are explained in a separate chapter. For those users already familiar with Assignment Manager basic features and who require further information on refining their Assignment Manager deployment, also see [Chapter 10, "Advanced Assignment Manager Configuration."](#)

About Performing Basic Assignment Manager Configuration Tasks

Using Siebel Tools, you can modify existing assignment object definitions or create new assignment object and assignment criteria definitions in the Siebel repository. After you compile the changes, these definitions appear as criteria in the Criteria view or as skills in the candidate skills picklists in your Siebel application for assignment object selection.

Assignment Manager features that you can custom configure using Siebel Tools include:

- List of assignment objects that can be assigned to assignment rules
- List of attributes that can be incorporated in assignment criteria
- Behavior of each available assignment object, including whether certain features are activated for the assignment object
- Table and column mappings of assignment objects and attributes
- Workflow policy component and workflow policy component column mappings of attributes used in assignment criteria
- List of dynamic candidate objects for each assignment object
- List of dynamic candidate component objects for each dynamic candidate (for team-based criteria)

NOTE: Criteria values, skills, and workload conditions are specialized. Do not attempt to reconfigure them.

Table 7 lists the various configuration tasks you may need to perform before creating your assignment rules. The steps are presented in no particular order, and some may not be applicable for your needs.

Table 7. Basic Assignment Configuration Tasks

Task	Required
"Configuring Assignment Object Properties" on page 51	X
"Process of Creating Assignment Criteria for Use in Assignment Rules" on page 56	X
1 "Creating Assignment Attributes" on page 56	
2 "Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column" on page 61	
3 "Creating Assignment Criteria" on page 63	
4 "Creating Assignment Criteria Attributes for Assignment Criteria" on page 65	
"Disabling Assignment Attributes" on page 73	
"Process of Using a Single Criterion for Multiple Objects" on page 67	
"Enabling Assignment Objects for Skills" on page 77	
"Updating Your Assignment Manager Deployment with New Configurations" on page 80	X

NOTE: In addition to the basic configuration tasks, you might find you need additional configuration to meet your particular business needs. Configuration tasks other than the basic topics are explained in a separate chapter and may require you to have additional knowledge or skills to perform. For more information about advanced configuration tasks, see [Chapter 10, "Advanced Assignment Manager Configuration."](#)

Requirements for Configuring Assignment Manager

Before you can successfully configure Assignment Manager, you need to have a thorough understanding of how to use Siebel Tools, Assignment Manager, and the Siebel data model. For information on Siebel Tools functionality, see *Using Siebel Tools* and *Configuring Siebel Business Applications*. You should also familiarize yourself with the basics of the underlying Siebel application architecture. For information on Siebel application architecture, see *Deployment Planning Guide*. Assignment Manager object types are related to Workflow Manager object types. For information on Workflow Manager functionality, see *Siebel Business Process Designer Administration Guide*. For information on the Siebel data model, see *Siebel Data Model Reference*.

About Assignment Manager Object Types

Siebel applications provide predefined definitions in the Siebel repository for several objects. Using Siebel Tools, you configure assignment object property values in the repository to control and customize the way objects are assigned. Some properties specify the basic definition of an assignment object, such as the name of the primary table in which object rows for the assignment object are stored, the name of the employee team table, the name of the employee primary column, and so on. Other properties control the behavior of Assignment Manager when processing rules. For example, the Add Team Members property controls whether candidates who no longer qualify for an assignment rule or rules should be removed from the team.

Table 8 provides the object types specific to Assignment Manager and that can be configured using Siebel Tools.

Table 8. Assignment Manager Object Types

Object Type	Description
Assignment Object	An assignment object specifies a business entity to which a candidate can be assigned, what is updated to accomplish that assignment, and other assignment behavior parameters. Assignment objects are assigned to assignment rules in the Objects to be Assigned field of assignment rule records. NOTE: The Objects to be Assigned field is a required field for assignment rules.
Assignment User Prop	Assignment user properties allow you to optionally specify additional run-time characteristics for each assignment object. Each assignment object has its own set of user property values.
Assignment Object Extension	This is a child of the Assignment Object object type that you can use to perform configuration related to Reporting mode.
Assignment Attribute	An assignment attribute object definition defines an attribute that can be referenced in assignment criteria records. It specifies a logical attribute that can be chosen from a picklist for defining comparisons.
Assignment Attribute Column	An assignment attribute column object definition assigns an assignment attribute to an assignment object and a workflow policy component column. These mappings set up value matching within the assignment object and workflow policy object.
Assignment Criteria	An assignment criteria object definition comprises multiple assignment attributes. Assignment criteria appear in the picklist in the Criteria list column when you are editing an assignment rule record.
Assignment Criteria Locale	This object type is used to store translated versions of localizable properties on the parent object type. For more information about the Locale object types, see <i>Using Siebel Tools</i> .

Table 8. Assignment Manager Object Types

Object Type	Description
Assignment Criteria Attribute	An assignment criteria attribute lists the assignment attributes that are part of an assignment criterion. Assignment criteria attributes make it possible for an assignment criteria to consist of multiple attributes, known as <i>composite criteria</i> .
Assignment Criteria Attribute Locale	This object type is used to store translated versions of localizable properties on the parent object type. For more information about the Locale object types, see <i>Using Siebel Tools</i> .
Dynamic Candidate	This object type is used to store a collection of joins from the base table to the team table that allows Assignment Manager to select potential candidates dynamically based on the current record.
Dynamic Candidate Component	A dynamic candidate component defines the tables and columns in an n-th level join. The first level defines the primary table, and the last level identifies the candidate table.
Dynamic Candidate Component Col	The Dynamic Candidate Component Col definition references a column within a particular level of a join that is used to evaluate assignment criteria or used to copy columns.
Dynamic Candidate Locale	This object type is used to store translated versions of localizable properties on the parent object type. For more information about the Locale object types, see <i>Using Siebel Tools</i> .

For descriptions of, usage comments, and property values for each of the predefined assignment objects, see *Object Types Reference*, and search for these object types.

About Assignment Manager Object Type Hierarchy and Relationships

Figure 2 illustrates the hierarchical (parent-child) relationships of Assignment Manager object types as well as two related object types in Workflow Manager configuration. You use the Object Explorer in Siebel Tools to view these relationships.

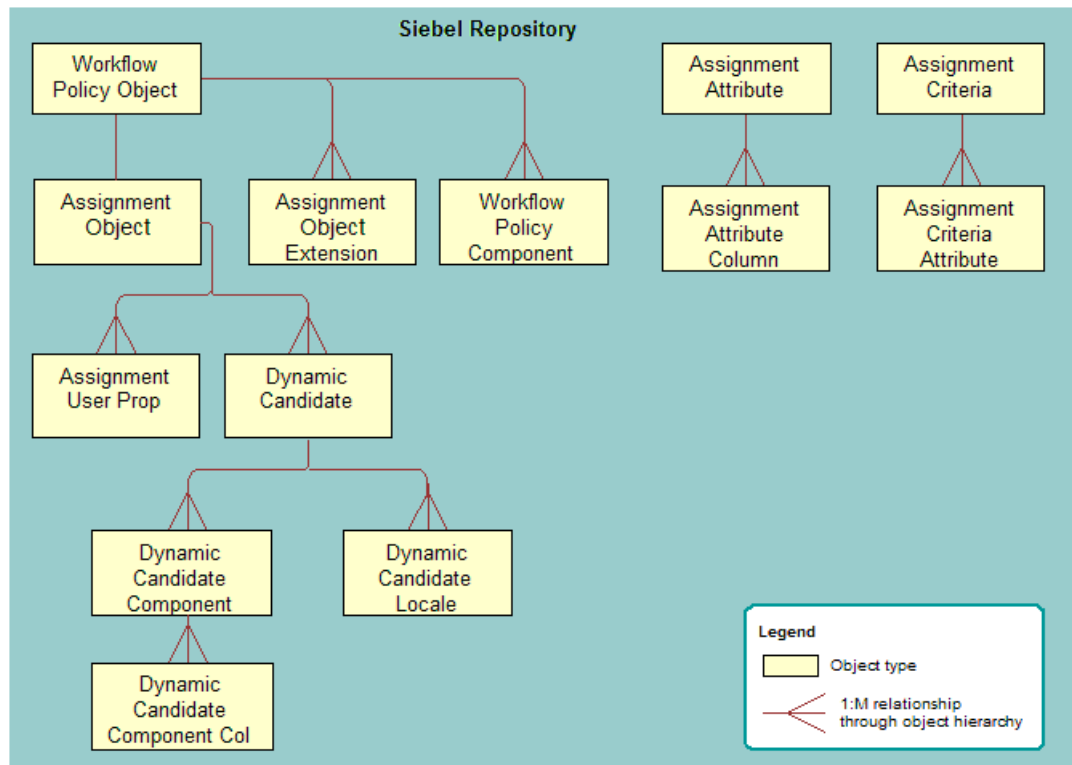


Figure 2. Parent-Child Relationships Between Assignment Manager Object Types

Figure 2 shows the following relationships:

- Assignment Object, Assignment Object Extension, and Workflow Policy Component are children of Workflow Policy Object.
- Dynamic Candidate and Assignment User Prop are children of Assignment Object.
- Dynamic Candidate Component and Dynamic Candidate Locale are children of Dynamic Candidate.
- Dynamic Candidate Component Col is a child of Dynamic Candidate Component.
- Assignment Attribute Column is a child of Assignment Attribute.
- Assignment Criteria Attribute is a child of Assignment Criteria.

In addition to the parent-child relationships between Assignment Manager object types, there are one-to-one and one-to-many relationships specified in property settings within the object definitions, as illustrated in [Figure 3](#).

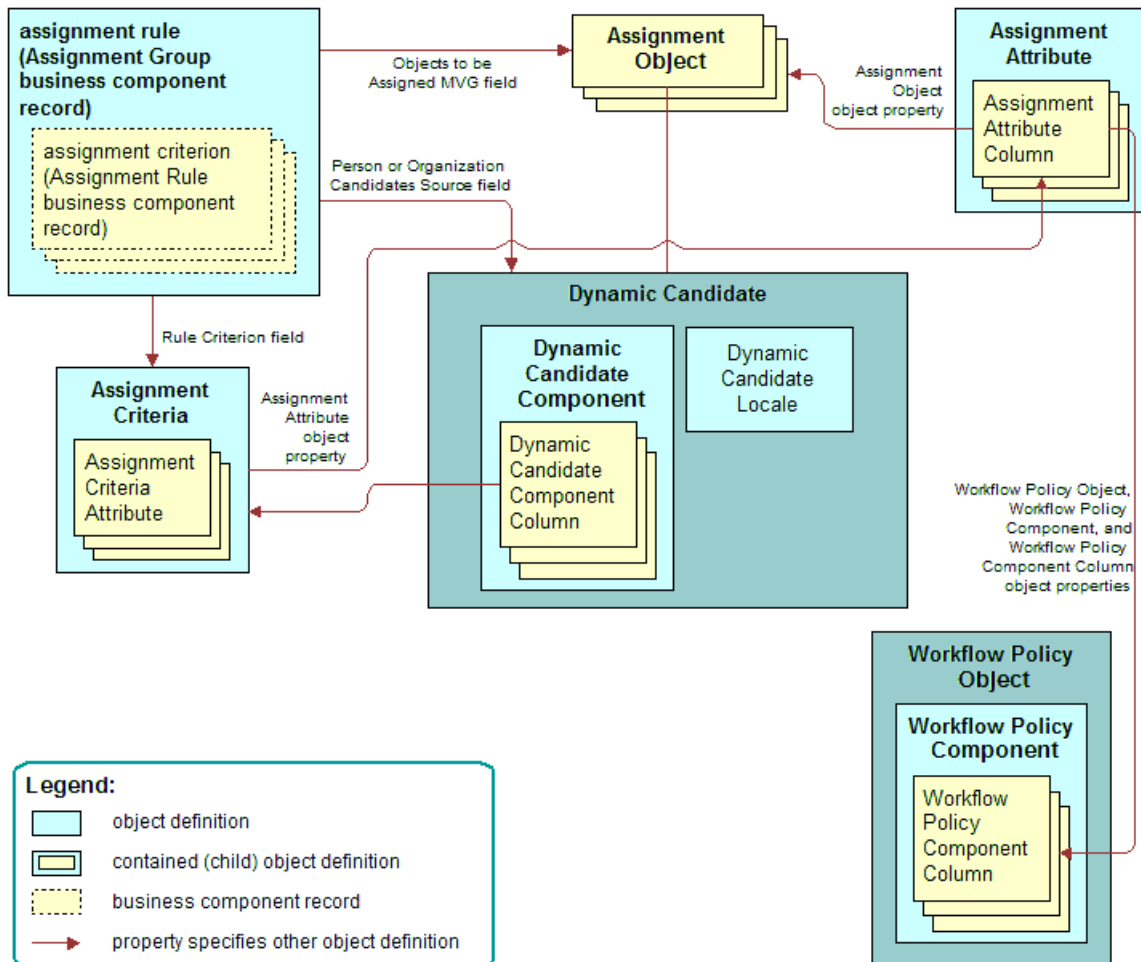


Figure 3. Field Value and Property Relationships Among Assignment Manager Object Types

[Figure 3 on page 49](#) shows the following relationships:

- The business component that holds assignment criteria is called Assignment Rule. The business component that holds assignment rules is called Assignment Group. Assignment rules have assignment criteria children. Assignment rules are actually records of the Assignment Group business component, and their child assignment criteria are records of the Assignment Rule business component.
- Each assignment rule points to one or more assignment object definitions, stored in the Assignment Objects multivalue group field (MVG) in the assignment rule record.

NOTE: Assignment Object is a required field for all assignment rules; however, Assignment Manager excludes rules that have no objects specified when upgrading.

- Dynamic Candidate is a child of Assignment Object and each assignment rule can point to one or more dynamic candidates.
- Dynamic Candidate Component is a child of Dynamic Candidate. It maintains the relationship between different components from which dynamic candidates are derived.
- Dynamic Candidate Component Col is a child of Dynamic Candidate Component and identifies component columns that need additional filtering.
- Each assignment criteria record points to an assignment criteria object definition, by means of the value in the Criteria field.
- Assignment attributes are attached to an assignment object through a property setting in each assignment attribute column object definition.
- An assignment attribute column object definition is mapped to a workflow policy component column object definition by means of a pair of property settings.
- If your rule has dynamic candidates, the Person Candidate Source, Organization Candidate Source fields, or both, point to a Dynamic Candidate object definition.

About Assignment Objects

An assignment object is a repository representation of a data item type. In Siebel Assignment Manager, objects represent assignment entities to which candidates are matched based on assignment rules. The concept is analogous to business objects in Siebel Business Applications. You must associate every assignment rule with at least one assignment object. A number of predefined assignment objects are available for use by Assignment Manager for the most commonly used business entities in Siebel Business Applications. Some of the predefined assignment objects are:

- Account
- Activity
- Campaign
- Campaign Contact
- Contact
- Opportunity
- Order (Sales Credit Assignment)
- Product Defect
- Project
- Project Team
- Service Request

NOTE: The predefined assignment objects are intended for use as a guide and may not be applicable to your business needs. It is recommended that you review, and change if needed, the configuration of these objects before using them using Siebel Tools.

Alternatively, if your deployment requires additional assignment objects, you can also create new objects using Siebel Tools. For information about creating new assignment objects, see [Chapter 10, "Advanced Assignment Manager Configuration."](#)

CAUTION: It is recommended that you contact Siebel Technical Support for assignment object creation. If you create your own assignment objects, you run the risk of Assignment Manager assigning incorrect assignments.

Configuring Assignment Object Properties

Siebel Assignment Manager uses definitions in the Siebel repository to assign objects to assignment rules and candidates.

An assignment object specifies a business entity to which a candidate can be assigned and the entities that are updated to accomplish that assignment. For example, an employee or position can be assigned ownership of an opportunity or account or made a member of the opportunity's or account's sales team. Similarly, an employee can be assigned ownership of a service request or product defect. Each of the corresponding business components has one or more fields that specify the owner or team. An assignment rule includes one or more assignment objects. When the rule is satisfied, specific columns underlying these fields are updated with replaced or added employee IDs appropriate for the settings in the assignment object.

As shown in [Figure 2 on page 48](#), an assignment object is a child object type of the Workflow Policy Object object. The parent workflow policy object provides a set of available column mappings through its child workflow policy component and grandchild workflow policy component column object types. These can be specified in Assignment Attribute Column object definitions as columns to test for value matches and to monitor in dynamic assignment for value changes.

NOTE: Workflow policy objects have a one-to-one or a one-to-zero relationship with assignment objects (the Order and Quote workflow policy objects do not have predefined child assignment objects). You cannot add more assignment objects to workflow policy objects that already have a child assignment object.

Siebel applications provides predefined definitions in the Siebel repository for several objects. The predefined Workflow Policy Object and Workflow Policy Component Column definitions include mappings for the most commonly used attributes for each object.

CAUTION: Siebel Tools allows the creation or configuration of an assignment object with both position- and employee-based assignment, but Assignment Manager does not correctly assign objects with this type of configuration. Only create or configure assignment objects for either position-based or employee-based assignment, not both.

To configure assignment object properties

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and select the object you want to configure.

Objects are listed alphabetically by parent name in the Workflow Policy Objects window.

TIP: Workflow policy objects are not included in the Object Explorer by default. Click View > Options > Object Explorer to add the workflow policy objects to the Object Explorer view.
- 3 With the assignment object selected, choose Tools > Lock Project (or Alt+L) to lock the project.
- 4 In the Object Explorer, select Assignment Object.

The property values of the assignment object appear in the Properties window as well as the Assignment Objects list applet, although naming conventions for the same property may differ.
- 5 In the Properties window, configure the assignment object by setting the appropriate values for each property.

NOTE: The default values provided in the Siebel repository for assignment objects are provided as a guide and may not be applicable to your business requirements. Therefore, it is recommended you review the configuration of the predefined objects before using them. For detailed information about assignment objects and their default values, see *Object Types Reference*.

- 6 Update your deployment with the new configurations.

For instructions, see [Step 2](#) and [Step 3 on page 81](#) in the procedure for "Updating Your Assignment Manager Deployment with New Configurations."

NOTE: It is not necessary to recompile the siebel.srf file when configuring an assignment object. For more information on when to recompile, see ["Updating Your Assignment Manager Deployment with New Configurations"](#) on page 80 and *Using Siebel Tools*.

TIP: If you are modifying the Default Employee, Default Position, or Default Organization properties, then make sure that the values specified exist in the appropriate base table. For example, if you change the default organization to My Organization, there must be an entry in the Administration - Group > Organizations view called My Organization.

Configuring Assignment Objects for Interactive Assignment

Interactive assignment allows users to invoke Assignment Manager immediately, view the list of assignees generated by Assignment Manager, and then override or confirm the assignees in the list. Users can invoke interactive assignment by clicking the appropriate object's form Menu button and choosing Assign as shown in Figure 4.

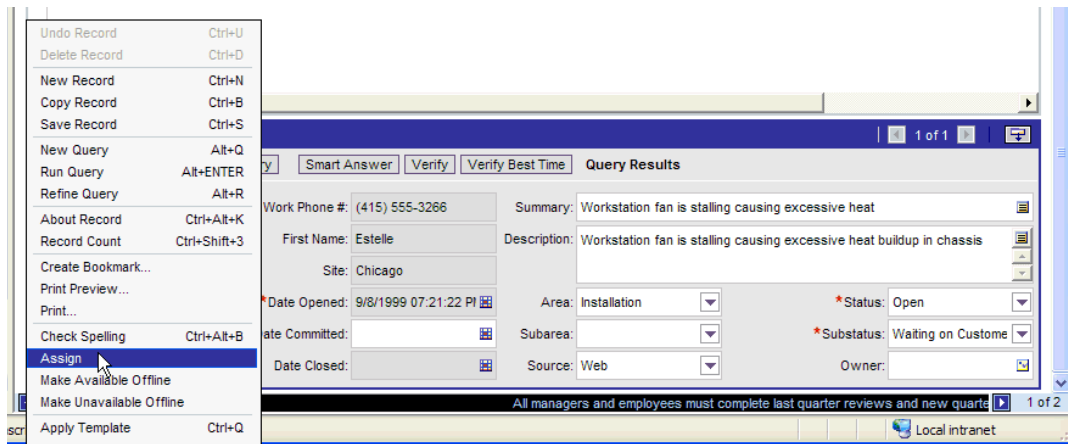


Figure 4. Example of Invoking Interactive Assignment

For example, you could choose the Assign option from the Menu button in the All Service Requests view after navigating to the Service screen > Service Requests > Service Requests List view, then choosing All Service Requests from the view drop-down list. When you click on the Assign applet menu item in the Service Request form to assign the current service request, the Siebel client contacts the assignment server and creates a list of qualified employees sorted by descending scores. The list of qualified employees appears to the user in the Employees window. Then, you can select an employee from the list as the service request owner.

Alternatively, you can allow SmartScript to have Assignment Manager select the most qualified candidate from the list. In this case, a list of qualified employees does not appear in the Employees window, and the most qualified candidate is assigned.

The Service Request assignment object is configured for Interactive Assignment by default. However, you can use Siebel Tools to configure Interactive Assignment for other assignment objects.

To configure interactive assignment for an assignment object

- 1 Verify that Assignment Manager is configured to perform assignment of values in the desired field, including the presence of the necessary assignment object and assignment rules and values.
- 2 Verify that the displayed business component is of the CSSBCBase class or one of its subclasses and add the Assignment Object business component user property to the business component.
 - a In the Object Explorer, select Business Component.

- b** In the Business Components window, select the business component.
- c** In the Class property for that business component, verify the value is CSSBCBase (such as in the Account business component).

NOTE: Business components based on other classes cannot be configured for interactive assignment. If the class is not CSSBCBase, note the class name and locate it in the Object Explorer for the Class object type. Note the value in the Super Class property for this class. If the Super Class is CSSBCBase, interactive assignment is permitted. If the Super Class is not CSSBCBase, check the Super Class property for that class.

- d** Set the Name property to Assignment Object.
 - e** Set the Value property to the name of the assignment object that is to be used in the assignment process.
- 3** Verify that the appropriate applet is of the CSSFrameBase class or one of its subclasses.
- a** In the Object Explorer, select Applet.
 - b** In the Applets window, select the applet you want to verify.
 - c** In the Class property for that applet, verify the value is CSSFrameBase (such as Account Entry Applet).

NOTE: Applets based on other classes (including CSSFrameListBase) cannot be configured for Interactive Assignment.

- 4** Add the Assignment Type business component user property to the business component.
- a** In the Object Explorer, select Business Component.
 - b** In the Business Components window, select the business component, and then click Business Component User Prop.
 - c** Set the Name property to Assignment Type.
 - d** Set the Value property to:
 - ☐ People if you are setting up an employee- or position-based assignment
 - ☐ Organizations if you are setting up an organization-based assignment

- 5** (Optional) If you want to enable SmartScript, add the Assignment Interactive business component user property to the business component.

- a** Set the Name property to Assignment Interactive.
- b** Set the Value property to TRUE.

- 6** Add the Assign selection to the applet menu button.

- a** In the Object Explorer, select Applet.
- b** In the Applets window, select the applet to which you want to add the Assign functionality.
- c** In the Object Explorer, select Applet Method Menu Item.
- d** Select the Applet Method Menu Items window, choose Edit > New Record and set the following values:
 - ☐ Command=Assign(SWE)

- Menu Text=Assign
- Position number = 1 (or to the number corresponding to the preferred placement in the menu)

7 Add the business component that holds assignment results records to the business object of the view in which the reconfigured applet is used.

This business component already exists, and is either:

- Assignment Results (Position) or Assignment Results (Employee), if Assignment Type is set to People (depending on whether you are setting up an employee- or position-based assignment)
- Assignment Results (Organizations), if Assignment Type is set to Organizations

8 In the Object Explorer, select Business Object.

- a** In the Business Objects window, select the Business Object for which you want to add a child business object component.
- b** In the Object Explorer, click Business Objects Components, and in the Business Objects Components window, choose Edit > New Record.
- c** In the new record, enter values in the appropriate fields with the BusComp name set to: Assignment Results (Position), Assignment Results (Employee), or Assignment Results (Organization).

9 (Optional) Define the business component user property called Assignment Results BusComp and the applet user property called Assignment Results Applet.

These user properties are desirable when you need to show additional information about the results. For example, the service request assignment results can be joined with the CTI tables, and query only qualified service people who are not currently using their telephone:

- The name of the business component used to hold data for the additional fields would be specified in an Assignment Results BusComp user property in the business component being assigned.
- The name of the applet used to display the assignment results would be specified in an Assignment Results Applet user property in the applet from which assignment is invoked.

10 Add one of the following Business Components (depending on what is being assigned) to the relevant Business Object: Assignment Group Position, Assignment Group Employee, or Assignment Group Organization.

11 Update your deployment with the new configurations.

For instructions, see [Step 1 on page 81](#) in “[Updating Your Assignment Manager Deployment with New Configurations](#).”

NOTE: Other than recompiling the siebel.srf file, there are no additional administrative tasks required for this procedure. For more information on when to recompile, see “[Updating Your Assignment Manager Deployment with New Configurations](#)” on [page 80](#) and [Using Siebel Tools](#).

Process of Creating Assignment Criteria for Use in Assignment Rules

Assignment criteria are the conditions that the candidates must satisfy in order to qualify for assignment to a particular work item. You usually define assignment criteria along with criteria values in assignment rules. Criteria values are the details associated with a criterion. There may be several criteria values for the same criterion.

Assignment Manager provides several predefined assignment criteria and criteria values. You can, however, create your own criteria and criteria values using Siebel Tools.

To create new assignment criteria for use in assignment rules, perform the following tasks in the order presented:

- 1 ["Creating Assignment Attributes" on page 56](#)
- 2 (Optional) ["Enabling Assignment Attributes for MLOV" on page 60](#)
- 3 ["Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column" on page 61](#)
- 4 ["Creating Assignment Criteria" on page 63](#)
- 5 ["Creating Assignment Criteria Attributes for Assignment Criteria" on page 65](#)

Creating Assignment Attributes

Assignment attributes are logical attributes of an object or candidate that can be used for matching. An assignment attribute allows you to associate a single attribute on an object or a person or an organization to multiple fields in the application. For example, you can define an assignment rule that matches candidates based on State. However, State is stored in a different field in the application for different objects. Assignment attributes map the places that State is defined into a single state attribute.

This task is one step in ["Process of Creating Assignment Criteria for Use in Assignment Rules" on page 56](#).

Assignment attributes can be either column-based or skill-based. Column-based attributes are stored as columns in the object (such as Opportunity). You can use existing columns in the object, or use Siebel Database Extensibility to add new extension columns to the object. Skills-based attributes are stored as rows in the object's skill tables (if any). For more information about Database Extensibility, see *Configuring Siebel Business Applications*.

Figure 5 shows a Product Line Wildcard assignment criterion that uses the Compare to Person comparison method. The assignment criterion also uses the Include All inclusion method and includes two criteria values, Monitors and Graphic Cards. Each criteria value includes two assignment attributes. In this example, only candidates that possess an Expert-level expertise in monitors and graphic cards qualify for the assignment criterion. Furthermore, 25 points are added to the qualifying candidates score.

Criteria Employee Candidates Position Candidates Workload Distribution Organization Candidates						
Menu New Delete Query Create From Templates 1 - 2 of 2						
Rule Criterion	Comparison Method	Inclusion	Required	Score	Minimum Score	Description
Service Request Priority	Compare to Person	Include	Always	50		
> Product Line Wildcard	Compare to Person	Include All	Always	25		
Menu New Delete Query 1 - 2 of 2						
Score	Product Line	Expertise Code				
> 0	Monitors	Expert				
0	Graphic Cards	Expert				

Figure 5. Sample Assignment Attributes

If you are adding an assignment attribute to a new table, you need to modify the existing Workflow Manager definitions in the Siebel repository. For more information on making modifications to Workflow Manager, see *Siebel Business Process Designer Administration Guide*.

An assignment attribute object definition defines an attribute that can be referenced in assignment criteria records. It specifies a logical attribute that can be chosen from a picklist for defining comparisons; it does not directly specify a particular database column or combination of columns. Column mapping is accomplished through the child assignment attribute column object definitions, one for each assignment object that uses the parent assignment attribute.

An assignment attribute also specifies the picklist that appears in the Values list in the Criteria subview when you are entering an attribute in a value record, as shown in [Figure 6](#).

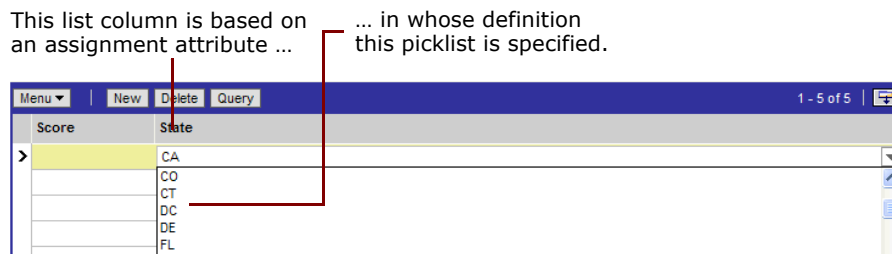


Figure 6. Picklist for Populating an Attribute in a Value Record

NOTE: Assignment criteria configured to include multiple assignment attributes cannot have these attributes based on columns in different tables.

An assignment criteria attribute object definition implements each list column in the Values applet, as described in ["Creating Assignment Criteria Attributes for Assignment Criteria" on page 65](#). The assignment criteria attribute is based on an assignment attribute, as specified in its assignment attribute property. The referenced assignment attribute identifies a picklist. This is the picklist that appears when you click the drop-down arrow to the right of the list column cell.

The Assignment Attribute object type functions as an intermediary between the assignment criteria on the one hand and the assignment objects on the other, as shown in [Figure 6 on page 58](#).

An assignment criteria attribute references an assignment attribute through its assignment attribute property. In turn, each of the assignment attribute's child assignment attribute columns specifies an assignment object and a workflow policy component and column combination.

An assignment attribute is a logical grouping of similar mappings to different assignment objects that can use the same picklist for value selection. For example, the Account State assignment attribute has several child assignment attribute column object definitions. Each of these assignment attributes is used for selection of the state in which an account is located, but five of them are used for different assignment objects (Activity, Account, Campaign Contact, and Order), and the other five are used for different account state attributes in the Opportunity assignment object (such as Primary Account State and Indirect Account Primary State).

NOTE: To generate a trigger based on an assignment attribute, a corresponding assignment attribute column must be configured. See ["Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column" on page 60](#).

To create an assignment attribute

- 1 Start Siebel Tools.
- 2 In the Object Explorer, select the Assignment Attribute object.

TIP: If the Assignment Attribute object is not visible in the Object Explorer, you can enable it in the Development Tools Options dialog box (View > Options > Object Explorer).

- 3** Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4** In the Assignment Attributes window, choose Edit > New Record and configure the assignment attribute object by setting values in the appropriate fields.
 - a** In the Name field, type the name of the new assignment attribute.
 - b** In the Project field, select a project.
 - c** (Optional) If the attribute supports a range of values (such as revenue), check the Use Range field.
 - d** In the Data Type field, select a data type for the attribute.
 - e** (Optional) If you want a picklist for the attribute to allow users to select values for the assignment attribute, enter a value in the Picklist field.
 - f** (Optional), Pick a field for the attribute to allow users to select values for the assignment attribute, enter a value in the Pick Field field.

For a description of these properties, see [Table 9 on page 59](#).
- 5** Update the siebel.srf file and run various server administration tasks.
For instructions on updating your deployment with the new configurations, see ["Updating Your Assignment Manager Deployment with New Configurations" on page 80](#).

[Table 9](#) shows some of the properties of the Assignment Attribute object type.

Table 9. Assignment Attribute Properties

Property	Description
Bounded	When checked, the picklist is bounded (you can select a value from the picklist). When unchecked, you can enter a value that does not appear in the list.
Data Type	Data type for the assignment attribute. Number, UtcDateTime, and Varchar are supported.
Name	Name of the assignment attribute. Must be unique within the repository.
Order By LOV Type	Not used.
Pick Field	Name of the field to select from the picklist.
Pick List	Name of the picklist that supplies the selection values for populating any list column in the Values list (in the Assignment Criteria view) that is based on this assignment attribute.

Table 9. Assignment Attribute Properties

Property	Description
Use Range	Specifies whether a single list column or a pair of list columns, indicating a range, appears for assignment criteria attributes based on this assignment attribute. For example, the Revenue assignment attribute, which has a TRUE value for Use Range, appears as two list columns, Revenue Low and Revenue High. You can enter 50000 in the former and 100000 in the latter in a value record to indicate the range \$50,000–100,000.
Translate	When checked, enables MLOV (multilingual list of values) capability for the attribute. For more information on enabling this feature, see “Enabling Assignment Attributes for MLOV” on page 60 .

Enabling Assignment Attributes for MLOV

Multilingual List of Values (MLOV) capability allows assignment attributes to be stored in a form that can be retrieved and displayed in a variety of supported client languages. To enable assignment attributes for MLOV, use the following procedure.

To enable an assignment attribute for MLOV

- 1 Start Siebel Tools.
- 2 In the Object Explorer, select the Assignment Attribute object.
- 3 In the Assignment Attributes list, select the assignment attribute for which you want to enable MLOV.
- 4 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 5 Locate the Translate property for this attribute, and set the value to TRUE.
- 6 Locate the Translate Pick Field for the assignment attribute, and select from the Translate Pick Field dialog box the field in the Pick List Business Component that stores the Language Independent Code (in most cases this is the Name field).
- 7 Locate the Pick Field for the assignment attribute, and select from the Pick Field dialog box the field in the Pick List Business Component that stores the Display Value (in most cases this is the Value field).

You can also configure the application to enable MLOV for workload criteria, criteria values, and skills. For more information on configuring MLOVs, see *Configuring Siebel Business Applications*.

Related Topics

[“About the Relationship Between Attributes and Skills” on page 75](#)

Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column

An assignment attribute column is a child object type of the Assignment Attribute object in Siebel Tools as shown in [Figure 2 on page 48](#). The parent assignment attribute is an abstract logical attribute to test for a value match, and attribute columns provide mapping of assignment attributes to workflow policy component columns. Workflow policy component columns define the column and the table name from where Assignment Manager retrieves the data for the attribute from the database. The same assignment attribute can be used for different assignment objects. For example, consider the Account State criterion. You can apply this criterion to many assignment objects. For account objects, it means the physical state in which the account resides. For opportunity objects, it might be the state value for the accounts associated with a specific opportunity. In these instances, you define multiple assignment attribute columns for the Account State attribute and define the assignment object and the workflow policy component column to indicate where to get the data.

An assignment attribute can have multiple attribute columns for the same assignment object. For example, for the Opportunity assignment object, Account City could either mean the primary city associated with the opportunity itself or the primary city associated with the account associated to the opportunity. In this instance, the Account City assignment attribute has two attribute column records for the Opportunity assignment object. You should also define the Sequence property on the assignment attribute column object. The sequence determines the order in which the data is retrieved in the event there are multiple attribute columns for the same attribute for the same assignment object.

An assignment attribute column object definition maps an assignment attribute to an assignment object and a workflow policy component column, as shown in [Figure 3 on page 49](#). These mappings set up value matching within the assignment object and workflow policy object for criteria that use the parent assignment attribute.

The parent assignment attribute is an abstract logical attribute to test for a value match, which you can specify in an assignment criteria. The child assignment attribute columns specify the actual mappings to assignment objects and workflow policy component columns. Each assignment attribute column can specify a different assignment object to search, or a different attribute within the same assignment object.

This task is one step in ["Process of Creating Assignment Criteria for Use in Assignment Rules" on page 56](#).

To map assignment attributes to an existing assignment object

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand the Assignment Attribute object, and select the Assignment Attribute Column object.
- 3 In the Assignment Attributes window, select the assignment attribute for which you want to map the logical location in the database schema.
- 4 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).

The pencil icon appears in the W field to indicate the project for the object is locked.

- 5 In the Assignment Attribute Columns window, choose Edit > New Record.
- 6 Configure the assignment attribute object by setting values in the appropriate fields.
 - a In the Name field, type the name of the new assignment attribute column.
 - b In the Assignment Object field, select an assignment object to which the assignment attribute is applied.
 - c In the Workflow Policy Component field, select a workflow policy component to which the workflow policy object is applied.
 - d In the Workflow Policy Component field, select a workflow policy component column to which the workflow policy component is applied.
 - e In the Sequence field, type in a sequence value.

For descriptions of these properties, see [Table 10 on page 62](#).

- 7 Update the siebel.srf file and run various server administration tasks.

For instructions on updating your deployment with the new configurations, see ["Updating Your Assignment Manager Deployment with New Configurations" on page 80](#).

[Table 10](#) shows some of the properties of the Assignment Attribute Column object type.

Table 10. Assignment Attribute Column Properties

Property	Description
Assignment Object	Assignment object that is checked for a value match with the parent assignment attribute.
Name	Name of the assignment attribute column. The typical format for the name is: <i>assignment_object: workflow_component_column</i> For example: Service Request: Account Area Code
Sequence	A unique sequence number for the assignment attribute column within the assignment attribute. If an assignment attribute has multiple assignment attribute columns, Assignment Manager searches for attribute values in the order of the values in this property.
Workflow Policy Component	Name of the workflow policy component, within the specified workflow policy object, with which this assignment attribute column is associated.
Workflow Policy Component Column	Name of the workflow policy component column, within the specified workflow policy component, with which this assignment attribute column is associated.
Workflow Policy Object	Name of the workflow policy object with which the assignment attribute column is associated. When an assignment object is selected, the workflow policy object defaults to this selection.

Creating Assignment Criteria

Assignment criteria define an object and are used in assignment criteria records in assignment rules. After you create and recompile an assignment criteria object definition in Siebel Tools, it becomes available for selection from the Criteria list column picklist in assignment criteria records in Siebel applications.

For static assignment, you use the Assignment Criteria object properties to specify the criteria name (internally and as displayed) and to configure skill tables. However, most of the behavior of assignment criteria is configured in the assignment criteria attribute children. For dynamic assignment, you use special team-based criteria. For more information about criteria for dynamic assignment, see [“Examples of Dynamic Candidate Assignment” on page 159](#).

An assignment criteria can consist of one or more assignment attributes, such as the criteria Account City, Account State, and Account Country. These assignment attributes are grouped as assignment criteria. In this case, a single criterion, called a composite criterion, includes three assignment attributes. To add or change drop-down fields that define assignment criteria in an assignment rule, you should define or modify assignment criteria. Assignment criteria attributes enumerate assignment attributes for the assignment criteria.

The Criteria list column in an assignment criteria record specifies the assignment criteria that is tested for a match against one or more attributes of the assignment object or candidate. For example, in an assignment criteria that determines whether the state is California, the assignment item would be State, Home State, or Account State, and the value California (CA) would be specified in a child value record.

When you click the drop-down arrow button in the Criteria list column for an assignment rule, a picklist appears for selection of an assignment criteria. The picklist lists the available assignment criteria (assignment criteria object definitions in the repository). When you select an assignment criteria, its name is stored in the Criteria Name field in the current Assignment Rule business component record.

This task is one step in [“Process of Creating Assignment Criteria for Use in Assignment Rules” on page 56](#).

To create assignment criteria

- 1** Start Siebel Tools.
- 2** In the Object Explorer, select the Assignment Criteria object.
- 3** Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4** In the Assignment Criteria window, choose Edit > New Record, and set values in the appropriate fields.
 - a** In the Name field, type the name of the new assignment criteria.
 - b** In the Project field, select the Assignment project.
 - c** In the Display Name field, type the name that appears for the assignment criteria.

- d** (Optional) If you want the assignment criteria stored in the skill table, check the Employee Skill field.

For information about skill tables, see [“Enabling Assignment Objects for Skills” on page 77](#).

- e** (Optional) If you want expertise codes stored for the skill, check the Use Expertise field.

If you check this field, Assignment Manager uses expertise codes to match objects to candidates.

- f** (Optional) If you do not want the assignment criteria to appear in the Criteria picklist, uncheck the Display Flag field.

- g** If this is a team-based criterion, check the Team flag. In this case, you define only one criteria attribute record and you do not define any attribute columns for the assignment attribute.

For more information about team-based criteria, see [“Examples of Dynamic Candidate Assignment” on page 159](#).

For descriptions of these properties, see [Table 11 on page 64](#).

- 5** Update the siebel.srf file and run various server administration tasks.

For instructions on updating your deployment with the new configurations, see [“Updating Your Assignment Manager Deployment with New Configurations” on page 80](#).

The assignment criteria object definition has two properties to specify the name (internally and as displayed) and two properties that are used to configure skill tables (Employee Skill and Use Expertise). Most of the behavior of an assignment criteria is configured in the assignment criteria attribute children. [Table 11](#) shows some of the properties of the assignment criteria object type.

Table 11. Assignment Criteria Properties

Property	Description
Display Flag	A check mark indicates the assignment criteria appears in the Criteria picklist.
Display Name	Name that appears for this assignment criteria in the picklist and the Criteria list column in the Criteria list in the Criteria view (Assignment Rule> Criteria). If not specified, the value in the Name property is used instead.
Employee Skill	A TRUE/FALSE property that specifies whether the attribute is actually stored in the skill and skill item tables for the candidate or object. For more information about skill tables, see “Enabling Assignment Objects for Skills” on page 77 .
Name	Name of the assignment criteria.
Use Expertise	A TRUE/FALSE property that applies to assignment criteria that are skills. It specifies whether expertise codes are stored for the skill. If so, Assignment Manager uses the expertise code to match the assignment object to people.

Creating Assignment Criteria Attributes for Assignment Criteria

An assignment criterion includes one or more assignment criteria attributes, stored as child assignment criteria attribute object definitions. Assignment criteria attributes are implemented as object definitions of the assignment criteria attribute object type. Assignment Criteria Attribute is a child object type of Assignment Criteria as shown in [Figure 3 on page 49](#).

The set of assignment criteria attributes in an assignment criterion determines the set of list columns that appear in the Values list. One list column appears in the Values list for each assignment criteria attribute in the assignment criteria. In Siebel Tools, as [Figure 7](#) shows, the Account Wildcard assignment criteria (the Account Name assignment criteria with a display name of Account Wildcard) has an Account Name and a Site Name list column in the display of its child Value records. Both the Account Name and Site Name list columns correspond to the Account Name assignment criteria attribute.

Account Name assignment criterion

Account Name assignment criteria attribute

Object Explorer

Project: ** All Projects **

Types: Detail Flat

Siebel Objects

- Applet
- Application
- Assignment Attribute
- Assignment Criteria
 - Assignment Criteria Attribute
 - Assignment Criteria Locale
- Business Component
- Business Object
- Business Service

Assignment Criteria

W	Name	Changed	Project	Display Flag	Display Name
>	Account Name		Assignment (SSE)	✓	Account Wildcard
	Account Organization		Sales Credit Assignment	✓	Account Organization
	Account Province		Assignment	✓	Account Province
	Account Ship To City		Collaborative Marketing	✓	Account Ship To City

Assignment Criteria Attributes

W	Name	Assignment Attribute	Store Column	Display Sequence
>	Account Name	Account Name	1	1
	Account Site	Account Site	2	2

Figure 7. Assignment Criterion with Child Assignment Criteria Attributes

If there were more assignment criteria attributes for this assignment criterion, each would have a list column in the Values list. The Score list column is automatically provided, and the Expertise Code list column appears in this instance because the assignment criteria has a Use Expertise property setting of TRUE.

Composite Criteria

Assignment criteria attributes make it possible for a single assignment criterion to consist of multiple attributes, known as composite criteria.

For composite criteria, all the attributes must have a 1:1 relationship and should refer to the same base table record. For example, the Account City-State-Country is a good composite criterion because San Mateo (city) resides in the state of California (state) and California resides in the USA (country). All of these attributes are stored on the same record in the same table.

NOTE: It is not possible to create composite criteria with attributes based on different tables.

This task is one step in [“Process of Creating Assignment Criteria for Use in Assignment Rules” on page 56.](#)

To create an assignment criteria attribute

- 1** Start Siebel Tools.
- 2** In the Object Explorer, expand the Assignment Criteria object, and select the Assignment Criteria Attribute object.
- 3** In the Assignment Criteria window, select the assignment criteria for which you want to enumerate assignment attributes.
- 4** Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 5** Select the Assignment Criteria Attributes window, then choose Edit > New Record.
- 6** Configure the assignment criteria attribute by setting values in the appropriate fields.
 - a** In the Name field, type the name of the new assignment criteria attribute.
 - b** In the Assignment Attribute field, select the assignment attribute for this assignment criteria.
 - c** In the Display Name field, type the name for the assignment criteria attribute.
 - d** In the Store Column field, specify the column in the assignment factor items table where the value for the assignment criteria attribute is stored.
 - e** In the Display Sequence field, specify the sequence in which the assignment criteria attribute appears.
 - f** (Optional) In the Pick Applet field, choose a pick applet for the assignment criteria attribute to allow users to view or select values for the assignment criteria attribute.

NOTE: For composite criteria, repeat Step 5 and Step 6 as many times as is necessary.

For more information on these properties, see [Table 12 on page 66.](#)

You also need to update the siebel.srf file and run various server administration tasks using the procedures in [“Updating Your Assignment Manager Deployment with New Configurations” on page 80.](#)

[Table 12](#) shows some of the properties of the assignment criteria attribute object type.

Table 12. Assignment Criteria Attribute Properties

Property	Description
Assignment Attribute	Name of the assignment attribute that this assignment criteria attribute is based on. Selected from a drop-down list.
Display Name	List column label that appears for this assignment criteria attribute in the Values list. If omitted, the Name is used in the list column label.
Display Sequence	Order in which the list column for this assignment criteria attribute appears in the list applet, relative to those of other assignment criteria attributes in the assignment item. A lower number places the list column further to the left.

Table 12. Assignment Criteria Attribute Properties

Property	Description
Name	Name of the assignment criteria attribute, for identification. This name must be unique within the parent assignment criteria.
Pick Applet	If a picklist is defined for the associated assignment attribute, you specify the name of a pick applet to display the picklist for selection of a value in the attribute's list column.
Store Column	Specifies the column in the assignment factor items table (S_ASGN_RULE_ITEM) in which to store the value for the assignment criteria attribute. There are four columns of each data type (Number, UtcDateTime, and Varchar) provided for storage of assignment criteria attribute values in each assignment criteria. You must specify a unique value, between 1 and 4 inclusive, for each assignment criteria attribute of the same data type. The data type can be determined from the Data Type property in the referenced assignment attribute object definition. NOTE: You can have up to four assignment criteria attributes for each assignment criterion (a composite criterion can have a maximum of four attributes).

Process of Using a Single Criterion for Multiple Objects

In some cases, you can create an assignment rule that assigns candidates to two or more objects while using only one of the object's criteria. For example, you may want the ability to assign both accounts and opportunities based on the criteria Opportunity Lead Quality. To configure Assignment Manager to assign accounts based on this criteria, you must first configure and expose the Opportunity Lead Quality column to the Account assignment object using Siebel Tools.

NOTE: The triggers for dynamic assignment are based on the workflow policy components and workflow policy component columns.

TIP: Assignment is based on data values in database fields. Therefore, configuration of the Assignment Attribute Column requires Workflow Policy Component and Workflow Policy Component Column information, and a Workflow Policy Component Column references a database table column.

Use the following process to create assignment rules that use a single criterion for multiple objects.

- 1 "Creating a Workflow Policy Component for Two Objects" on page 68.
- 2 "Mapping a Column to the Workflow Policy Component" on page 68.
- 3 "Mapping the Workflow Policy Component to the Assignment Attribute" on page 69.
- 4 Define an assignment rule for two objects using one object's criteria.

See "Process of Defining Assignment Rules" on page 86.

For procedures using a specific example, see "Example of Using a Single Criterion for Two Objects" on page 69.

For more information about workflows in general, see *Siebel Business Process Designer Administration Guide*.

Creating a Workflow Policy Component for Two Objects

Use the following procedure to create a workflow policy component for two assignment objects.

This task is a step in [“Process of Using a Single Criterion for Multiple Objects” on page 67](#).

To create a workflow policy component for two objects

- 1** Start Siebel Tools.
- 2** Select the workflow policy object for which you want to create a workflow policy component.
 - a** In the Object Explorer, select Workflow Policy Object.
 - b** In the Workflow Policy Objects window, select the object.
- 3** With the workflow policy object selected, choose Tools > Lock Project (or Alt+L) to lock the project.
- 4** Add a new workflow policy component record.
 - a** In the Object Explorer, expand Workflow Policy Component.
 - b** In the Workflow Policy Component window, choose Edit > New Record.
- 5** Enter information in the fields for the new record using the following substeps:
 - a** In the Name field, type the name of the workflow policy component.
 - b** In the Source Table Name field, select the source table for the workflow policy component.
 - c** In the Source Column Name field, select the source column for the workflow policy component.
 - d** In the Target Component Name field, select the target component for the workflow policy component.
 - e** In the Target Column Name field, select the target column for the workflow policy component.

Mapping a Column to the Workflow Policy Component

After you create the workflow policy components for both objects, you need to map the workflow policy component to the assignment criteria. You do this by mapping a column to one of the workflow policy components.

This task is a step in [“Process of Using a Single Criterion for Multiple Objects” on page 67](#).

To map a column to the workflow policy component

- 1** With the new record still selected, expand the Workflow Policy Component object in the Object Explorer, and then select the Workflow Policy Component Col object.
- 2** In the Workflow Policy Component Columns window, choose Edit > New Record.
- 3** In the Workflow Column Name field, select the workflow column for the workflow policy component.

Mapping the Workflow Policy Component to the Assignment Attribute

After you map a column to the workflow policy component, you map the workflow policy component to the assignment attribute.

This task is a step in [“Process of Using a Single Criterion for Multiple Objects” on page 67.](#)

To map the workflow policy component to the assignment attribute

- 1** In the Object Explorer, expand the Assignment Attribute object, and then select the Assignment Attribute Column object.
- 2** In the Assignment Attribute Columns window, choose Edit > New Record.
- 3** Enter information in the fields for the new record using the following substeps:
 - a** In the Name field, type the name of the assignment attribute column.
 - b** In the Assignment Object field, select the assignment object to which candidates are assigned for the assignment rule.
 - c** In the Workflow Policy Component field, select the workflow policy component to map to this assignment attribute.
 - d** In the Workflow Policy Component Column field, select the workflow policy component column to map to this assignment attribute.
 - e** In the Sequence field, specify the sequence of this assignment attribute.
- 4** Update the siebel.srf file and run various server administration tasks.

For instructions on updating your deployment with the new configurations, see [“Updating Your Assignment Manager Deployment with New Configurations” on page 80.](#)

NOTE: You must recompile the siebel.srf file whenever you add, inactivate, or delete any assignment object types, assignment criteria, and assignment attributes. Make sure all projects are recompiled—not only the locked projects—if you inactivate or delete a top-level object type or assignment criteria. For more information on when to recompile the siebel.srf file, see [“Updating Your Assignment Manager Deployment with New Configurations” on page 80.](#)

Example of Using a Single Criterion for Two Objects

This topic gives one example of configuring Assignment Manager to assign candidates to two objects—Account and Opportunity—using only one of the object’s criteria, Opportunity Lead Quality. You may use this feature differently, depending on your business model.

The example is divided into the following procedures; perform each procedure in the order provided.

- 1** [“Creating a Workflow Policy Component Using the Account and Opportunity Objects” on page 70](#)
- 2** [“Mapping the Opportunity Workflow Policy Component to the Opportunity Lead Contact Assignment Criteria” on page 71](#)

- 3 “Mapping the Account/Opportunity Workflow Policy Component to the Lead Quality Code Assignment Attribute” on page 71

Creating a Workflow Policy Component Using the Account and Opportunity Objects

Use the following procedure to create a workflow policy component for two assignment objects.

To create a workflow policy component using the Account and Opportunity objects

- 1 Start Siebel Tools.
- 2 Select the workflow policy object for which you want to create a workflow policy component.
 - a In the Object Explorer, select Workflow Policy Object.
 - b In the Workflow Policy Objects window, select the object.
For this example, select Account.
- 3 With the Account assignment object selected, choose Tools > Lock Project (or Alt+L) to lock the project.
- 4 Add a new workflow policy component record.
 - a In the Object Explorer, expand Workflow Policy Component.
 - b In the Workflow Policy Component window, choose Edit > New Record.
- 5 Enter information in the fields for the new record using the following steps:
 - a In the Name field, type the name of the workflow policy component.
For this example, type Account/Opportunity.
 - b In the Source Table Name field, select the source table for the workflow policy component.
For this example, select S_OPTY.
 - c In the Source Column Name field, select the source column for the workflow policy component.
For this example, select PR_DEPT_OU_ID.
 - d In the Target Component Name field, select the target component for the workflow policy component.
For this example, select Account.
 - e In the Target Column Name field, select the target column for the workflow policy component.
For this example, select ROW_ID.

Mapping the Opportunity Workflow Policy Component to the Opportunity Lead Contact Assignment Criteria

After you create the workflow policy components for both objects, you need to map the workflow policy component to the assignment criteria. You do this by mapping a column to one of the workflow policy components. In this example, you map the Opportunity workflow policy component to the Opportunity Lead Contact assignment criteria.

To map a column to the workflow policy component

- 1** With the Account/Opportunity record still selected, expand the Workflow Policy Component object in the Object Explorer, and then select the Workflow Policy Component Col object.
- 2** In the Workflow Policy Component Columns window, choose Edit > New Record.
- 3** In the Workflow Column Name field, select the workflow column for the workflow policy component.

For this example, select Opportunity Lead Quality.

Mapping the Account/Opportunity Workflow Policy Component to the Lead Quality Code Assignment Attribute

After you map a column to the workflow policy component, you map the workflow policy component to the assignment attribute. In this example, you map the Account/Opportunity workflow policy component to the Lead Quality Code assignment attribute.

To map the workflow policy component to the assignment attribute

- 1** In the Object Explorer, select the Assignment Attribute object.
- 2** In the Assignment Attributes window, select Lead Quality Code.
- 3** In the Object Explorer, expand the Assignment Attribute object and select the Assignment Attribute Column object.
- 4** In the Assignment Attribute Columns window, choose Edit > New Record.
- 5** Enter information in the fields for the new record as described in the following substeps:
 - a** In the Name field, type the name of the assignment attribute column.
For this example, type Account: Lead Quality.
 - b** In the Assignment Object field, select the assignment object to which candidates are assigned for the assignment rule.
For this example, select Account.
 - c** In the Workflow Policy Component field, select the workflow policy component to map to this assignment attribute.
For this example, select Account/Opportunity.

- d In the Workflow Policy Component Column field, select the workflow policy component column to map to this assignment attribute.

For this example, select Opportunity Lead Quality.

- e In the Sequence field, specify the sequence of this assignment attribute.

For this example, type 2.

- 6 Update the siebel.srf file and run various server administration tasks.

For instructions on updating your deployment with the new configurations, see [“Updating Your Assignment Manager Deployment with New Configurations” on page 80](#).

NOTE: You must recompile the siebel.srf file whenever you add, inactivate, or delete any assignment object types, assignment criteria, and assignment attributes. Make sure all projects are recompiled—not only the locked projects—if you inactivate or delete a top-level object type or assignment criteria. For more information on when to recompile the siebel.srf file, see [“Updating Your Assignment Manager Deployment with New Configurations” on page 80](#).

Figure 8 shows an example of defining an assignment rule for the Account and Opportunity objects using only the Lead Quality Code assignment criteria.

The screenshot shows the Siebel Assignment Manager configuration window for 'Account Opportunity'. The window has a menu bar with 'Menu', 'New', 'Delete', and 'Query'. Below the menu bar, there are fields for 'Name' (Account Opportunity), 'Rule Group' (FS_DISP_RULE GROUP), and 'Description'. To the right, there are fields for 'Objects to be Assigned' (Opportunity), 'Activation' (2/17/2004 08:26:30 PM), 'Expiration', 'Score', 'Sequence', and 'Exclusive'. Further right, there are 'Candidate Details' fields: 'Person Candidates Source', 'Organization Candidates Source', 'Assignee Filter' (One, Best Fit), 'Candidate Passing Score' (0), and 'Check Employee Calendar'. Below these fields, there are tabs for 'Criteria', 'Employee Candidates', 'Position Candidates', 'Workload Distribution', 'Organization Candidates', and 'Organization Workload Distribution'. The 'Criteria' tab is selected, showing a table with columns: Rule Criterion, Comparison Method, Inclusion, Required, Score, Minimum Score, and Description. The table contains one row: 'Lead Quality Code', 'Compare to Person', 'Include', 'Always', and empty cells for 'Score', 'Minimum Score', and 'Description'.

Rule Criterion	Comparison Method	Inclusion	Required	Score	Minimum Score	Description
Lead Quality Code	Compare to Person	Include	Always			

Figure 8. Example of Defining an Assignment Rule for Two Objects Using One Assignment Criteria

Figure 8 shows:

- An Account Opportunity assignment rule using the Opportunity and Accounts objects and One, Best Fit assignee filter

NOTE: Only the Opportunity object appears in the Objects to be Assigned field even though the Accounts object is also assigned.

- The Account Opportunity assignment rule has the Lead Quality Code rule criterion applied and uses the Compare to Person comparison method, the Include inclusion method, and is always required

Disabling Assignment Attributes

In some cases, you may want to eliminate assignment criteria that appear in the Assignment Criteria view. To do so, you need to remove the unwanted criteria from the Assignment Criteria view. If you want to prevent the criteria from being used in any rule, you must use Siebel Tools to also disable the corresponding assignment attribute, assignment attribute column, assignment criteria, and assignment criteria attribute object definitions.

Use the following procedure to disable an assignment attribute and avoid further use.

To disable an assignment attribute

- 1** In the UI, delete criteria you want removed from any assignment rules.
For a procedure, see ["Removing Assignment Criteria from Assignment Rules" on page 111](#).
- 2** Start Siebel Tools.
- 3** Disable the assignment attribute definition.
 - a** In the Object Explorer, select the Assignment Attribute object.
 - b** Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
 - c** In the Assignment Attributes window, select the assignment attribute you want to disable.
 - d** Check the Inactive field.
- 4** Disable the assignment attribute column definition.
 - a** In the Object Explorer, expand the Assignment Attribute object, and then select the Assignment Attribute Column object.
 - b** In the Assignment Attribute Columns window, select the assignment attribute column you want to disable.
 - c** Check the Inactive field.
- 5** Disable the assignment criteria definition.
 - a** In the Object Explorer, select the Assignment Criteria object.
 - b** In the Assignment Criteria window, select the assignment criteria you want to disable.
 - c** Check the Inactive field.
- 6** Disable the assignment criteria attribute definition.
 - a** In the Object Explorer, expand the Assignment Criteria object, and then select the Assignment Criteria Attribute object.
 - b** In the Assignment Criteria Attributes window, select the assignment criteria attribute you want to disable.
 - c** Check the Inactive field.

- 7 Recompile all projects (not just the locked projects) in the .srf file.

For instructions, see [Step 1 on page 81](#) of the “[Updating Your Assignment Manager Deployment with New Configurations](#).”

About Inactive Assignment Manager Workflow Policy Components

[Table 13](#) shows the Workflow Policy Components that are by default inactive for the Opportunity Workflow Policy Object for Assignment Manager.

Table 13. Inactive Assignment Manager Workflow Policy Components

Workflow Policy Object	Workflow Policy Component
Opportunity	Indirect Account
Opportunity	Indirect Account Address
Opportunity	Indirect Account Industry
Opportunity	Indirect Account Primary Address
Opportunity	Indirect Account Synonym
Opportunity	Indirect Account/Industry
Opportunity	Opportunity/Indirect Account
Opportunity	Primary Account Address

If these Workflow Policy Components are required for your deployment, activate the components by following the procedures that describe defining a Workflow Policy Component in *Siebel Business Process Designer Administration Guide*.

About the Relationship Between Attributes and Skills

When you define an assignment criterion, the data Assignment Manager uses for matching the object and candidate can come from two different types of sources, either attributes or skills.

- **Attribute.** An attribute is data that usually resides on a column on the base table. For example, Employee Salary resides on a column in the S_EMP_PER employee table and is an attribute. Similarly, Service Request Severity is an attribute on the Service Request object, because it is stored on the Service Request record.

Some attributes exist outside the base table. For example, Account Zip Code is an attribute on the account, but does not exist on the Account table itself. Instead, Account Zip Code exists on the common address table known as S_ADDR_ORG. It does not exist on the account table. However, there is a link between a given account record and all the addresses that belong to it.

- **Skill.** Skills are row-level extension attributes to objects (Opportunities, Service Requests, and so on) and candidates (employees, positions and organizations). These are data stored in special child and grandchild tables of the base tables known as skill and skill item tables. For example, Language is an employee skill defined in the S_EMP_SKILL employee skill table and the S_EMP_SK_IT employee skill item table. The S_EMP_SK_IT table is actually a child table of the S_EMP_SKILL table. You can define skill and skill item tables for every assignment object through properties using Siebel Tools.

Skills and skill items are defined in a similar manner to criteria and criteria values. If an employee has expertise for two products, Product A and Product B, you define one skill (Product) and define two skill items under the same skill (Product A and Product B). Skills provide a way to create new attributes for a candidate or an object without extending the database schema.

Objects also have skill and skill items. For example, you can define a Product skill with a Product A skill item for an activity to indicate that candidates must have the same product skill for assignment to that activity.

- **Attribute and skill.** Data could reside on an object or a candidate in the form of an attribute and a skill. For example, you can link an opportunity to a product using either of the following:
 - Products subtab and associating the product to the opportunity
 - Skills subtab and creating a product skill and a skill item for the product you want to associate

When matching assignment criteria, Assignment Manager looks for column-based attributes first, and if they are not found, Assignment Manager looks for a skill value in designated skill tables.

For example, if you have an assignment rule using an Account State criteria and the Compare Object to Person comparison method, Assignment Manager processes the rule in the following order:

- 1 Assignment Manager checks the assignment object.

If the object to be assigned is the Opportunity assignment object, Assignment Manager checks the value specified in Assignment Criteria > Assignment Criteria Attribute in Siebel Tools. Then, Assignment Manager checks the Assignment Attribute > Assignment Attribute Column value for the Opportunity object. In our case, this is Opportunity: Primary Account Primary State.

2 Assignment Manager checks the criteria attributes.

Since Opportunity is a team- and position-based, Assignment Manager checks the value specified in Assignment Criteria > Attribute in Siebel Tools. From the Attribute, Assignment Manager then checks the Assignment Attribute Column for that assignee, which in our case is Position: State.

3 If no Assignment Attribute Column exists for the person chosen, then Assignment Manager checks the Skills table.

Assignment Manager evaluates criteria by comparing two strings, numbers, or dates using a comparison method. One of these literals sets the requirement, and the other literal must match the first literal for the criterion to pass.

Table 9 shows an example of a sales assignment rule and how position, skills, and skill items relate to that rule.

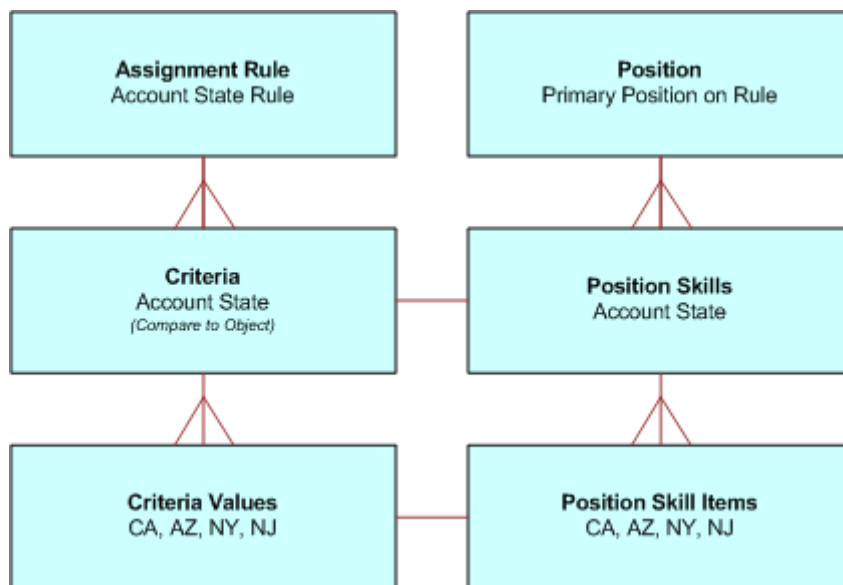


Figure 9. Example of a Relationship Between Assignment Criteria and Skills for a Sales Implementation

Viewing Predefined Skills

The Siebel application provides several predefined skills. The predefined skills for Assignment Manager are:

- Language Code
- Product Id
- Product Line Id
- Product Line Name
- Product Name

■ Revenue

For most deployments, the predefined skills are sufficient. However, you can create new skills using Siebel Tools. For more information about creating new skills, see ["Creating New Skills" on page 244](#).

To view predefined skills

- 1 Start Siebel Tools.
- 2 In the Object Explorer, click to select the Assignment Criteria object.
- 3 In the Assignment Criteria applet, query for criteria with Employee Skill equal to TRUE.

The predefined skills appear as well as any new skills you have created.

Enabling Assignment Objects for Skills

Assignment Manager uses skills to compare an object being assigned directly to person or other assignee's expertise when processing assignment rules. Assignment Manager criteria and skills are related transparently in the Siebel Data Model. Skills are extensions to attribute data stored in designated skill and skill item tables. At a very high level, you can think of an assignment criterion as a skill, and each criteria value as a skill item, as shown in [Figure 10](#).

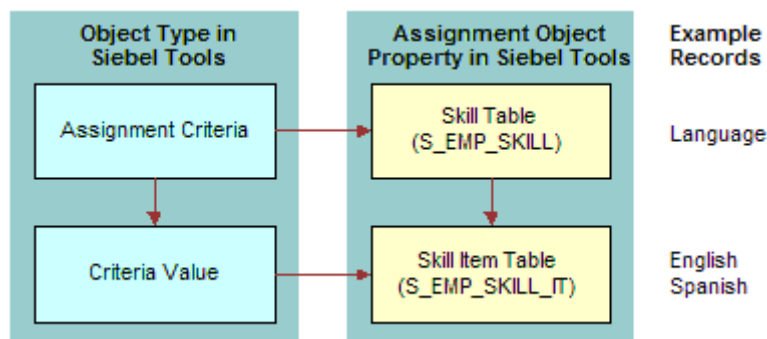


Figure 10. Assignment Criteria and Skills Comparison

The Skill Table and Skill Item Table properties are child and grandchild tables, respectively, of the assignment object used to store skills, and skill items for assignment objects that are not stored as columns in the parent table itself. The S_EMP_SKILL employee skill table is used to store skills possessed by employees, such as languages spoken, product expertise, and so on. For example, for an employee who speaks English and Spanish, there is one record in the employee skill table that specifies the skill name as Language. There are also two records in the child S_EMP_SK_IT employee skill item table that correspond to this skill record: one record for English, and another record for Spanish.

There are several objects preconfigured for skills—Account, Activity, Campaign, Employee, Opportunity (Revenue), Service Request, and so on. By default, sales objects do not use skills. Using Siebel Tools, you enable skills for other assignment objects by configuring the object's Skill Table and Skill Item Table properties.

NOTE: Before enabling skills for an assignment object, make sure the Skill Table assignment object property exists in the Siebel data model.

To enable assignment objects for skills

- 1 Start Siebel Tools.
- 2 Select the assignment object for which you want to enable skills.
 - a In the Object Explorer, click Workflow Policy Object, and then in the Workflow Policy Objects list, query for an object.
 - b In the Object Explorer, click Assignment Object.
- 3 Lock the project for the assignment object by choosing Tools > Lock Project (Alt+L).

A pencil icon appears next to the Name field to indicate that the object's project is locked.
- 4 In the Assignment Objects list (or Properties window), enter values for the fields in the following table.

Field	Description
Skill Item Table	The name of the skill item table.
Skill Table	The name of the skill table.

NOTE: Choose the table name from the drop-down menu. This LOV (list of values) is derived from tables specified in the Siebel repository.

- 5 Set the Employee Skill assignment criteria property to TRUE.
 - a In the Object Explorer, select Assignment Criteria.
 - b In the Assignment Criteria list, select the object you selected in [Step 2](#).
 - c Set the Employee Skill property to TRUE.

Example of Enabling an Assignment Object for Skills

This topic gives one example of enabling skills for an assignment object. You may use this feature differently, depending on your business model.

The following procedure explains how to enable skills for the Service Request assignment object.

To enable skills for the Contact assignment object

- 1** Start Siebel Tools.
- 2** Select the assignment object for which you want to enable skills.
 - a** In the Object Explorer, click Workflow Policy Object, and then in the Workflow Policy Objects list, query for Contact.
 - b** In the Object Explorer, click Assignment Object.
- 3** Lock the project for the Contact assignment object by choosing Tools > Lock Project (Alt+L).

A pencil icon appears next to the Name field to indicate that the object's project is locked.
- 4** In the Assignment Objects list (or Properties window), enter values for the fields in the following table.

Field	Description
Skill Table	S_CON_SKILL
Skill Item Table	S_CON_SKILL_IT

Updating Your Assignment Manager Deployment with New Configurations

After configuring Assignment Manager objects and attributes or altering assignment policies, it is often necessary to recompile the .srf file and restart various server components and tasks. [Table 14](#) required server tasks and components that must be restarted based on the type of configuration process.

NOTE: You must recompile the siebel.srf file whenever you add, inactivate, or delete any assignment object types, assignment criteria, and assignment attributes. Make sure all projects are recompiled—not only the locked projects—if you inactivate or delete a top-level object type or assignment criteria.

Table 14. Summarization of Server Administration After Configuring Assignment Manager

Configuration Process	Compile .srf File	Restart Assignment Manager	Regenerate Triggers	Restart Workflow Monitor Agent ¹
Add or inactivate assignment objects	Yes	Yes	Yes	Yes
Configure assignment objects	No	Yes	Yes	Yes
Add, configure, or inactivate assignment attributes	Yes	Yes	Yes	Yes
Configure assignment attribute columns	No	Yes	Yes	Yes
Add, configure, or inactivate assignment criteria	Yes	Yes	Yes	Yes
Add, configure, or inactivate assignment criteria attributes	Yes	Yes	Yes	Yes
Activate, inactivate, or modify assignment policies	No	No	Yes	Yes

1. Only for dynamic assignment.

NOTE: For information about checking out and checking in objects, see *Using Siebel Tools*.

Use the following procedure to update your deployment with new configurations.

CAUTION: Some steps in the following procedure may not be required for your particular deployment. Follow the steps as they apply (or do not apply) to the configuration process performed as shown in [Table 14 on page 80](#).

To update your deployment with new configurations

- 1** Compile changes to the siebel.srf file, if necessary, and deploy it to the server.
 - a** Choose Tools > Compile Projects.
 - b** In the Object Compiler dialog box, select the project (or projects) you want to compile.
 - c** Select the Siebel client repository file (default is siebel.srf) located in the Objects subdirectory within the Siebel client root directory.
 - d** Click Compile.

For more information on when to recompile the siebel.srf file, see [Table 14 on page 80](#) and *Using Siebel Tools*. For information on distributing the siebel.srf file, see *Siebel Anywhere Administration Guide*.

NOTE: It is not necessary to recompile the siebel.srf file whenever you configure an assignment object or an assignment attribute column, but you must recompile the siebel.srf file whenever you add, inactivate, or delete any assignment object types, assignment criteria, or assignment attributes.

Make sure all projects are recompiled—not only the locked projects—if you inactivate or delete a top-level object type or assignment criteria.

- 2** If you are running dynamic assignment, perform the following steps:
 - a** Stop the Workflow Monitor Agent server component.
 - b** Regenerate triggers by running the Generate Triggers server component.
 - c** Release assignment rules (if rules have changed) by clicking Release in the Assignment Rules view.

For more information on releasing assignment rules, see [“Releasing Assignment Rules” on page 153](#).

- d** Restart the Workflow Monitor Agent server component.

For more information on stopping and restarting server components, see *Siebel System Administration Guide*.

- 3** If you are running dynamic assignment, stop and restart the Assignment Manager server component for the changes to take effect.
 - a** Stop the Workflow Monitor Agent server component.
 - b** Stop the Assignment Manager server component.
 - c** Start the Assignment Manager server component.
 - d** Start the Workflow Monitor Agent server component.

For more information on stopping and restarting server components, see *Siebel System Administration Guide*.

You must stop and restart the Assignment Manager server component whenever you add, inactivate, or delete any assignment object types, assignment criteria, or assignment attributes.

6

Assignment Rule Administration

This chapter explains how to define assignment rules for Siebel Assignment Manager. The tasks explained in this chapter are for Assignment Administrators (AAs), and as such, the procedures are documented using the Administration - Assignment screen and views.

NOTE: Even if you intend to use predefined assignment objects, you must define assignment rules by completing the tasks in this chapter.

This chapter includes the following topics:

- [“About the Assignment Manager Administration Views” on page 84](#)
- [“Before Defining Assignment Rules” on page 85](#)
- [“Process of Defining Assignment Rules” on page 86](#)
- [“Creating Assignment Rule Groups” on page 88](#)
- [“About Some of the Assignment Rule Fields” on page 90](#)
- [“Creating Assignment Rules” on page 94](#)
- [“About Assignment Criteria” on page 98](#)
- [“Assignment Criteria Comparison Methods” on page 98](#)
- [“Assignment Criteria Inclusion Methods” on page 99](#)
- [“About Assignment Scoring” on page 101](#)
- [“About the Required Field for Assignment Criteria” on page 102](#)
- [“Process of Adding Criteria and Values to Assignment Rules” on page 104](#)
- [“Defining Assignment Rules to Use a Single Criterion for Multiple Objects” on page 110](#)
- [“Removing Assignment Criteria from Assignment Rules” on page 111](#)
- [“About Assignment Skills, Expertise Codes, and Weighting Factors” on page 112](#)
- [“Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors” on page 114](#)
- [“Example of Using Assignment Skills in Assignment Rules” on page 119](#)
- [“Adding Employees, Positions, and Organizations to Assignment Rules” on page 120](#)
- [“Choosing a Candidate as the Primary Assignee” on page 123](#)
- [“Associating Skills with Employees, Positions, and Organizations” on page 124](#)
- [“How Assignment Manager Balances Workload Among Candidates” on page 125](#)
- [“Process of Defining Assignment Workload” on page 127](#)
- [“Assignment Methodology and Examples for Creating Assignment Rules” on page 133](#)

- [“About Assignment Policies” on page 143](#)
- [“Process of Defining Assignment Policies for Dynamic Assignment” on page 144](#)
- [“Deactivating Assignment Policies to Disable Dynamic Assignment” on page 146](#)
- [“How Assignment Manager Determines the Sequence in Which Rules Are Evaluated” on page 147](#)
- [“Adding a Sequence Number to Assignment Rules” on page 149](#)
- [“How Assignment Manager Uses Server Key Maps to Load Rules to a Particular Siebel Server” on page 149](#)
- [“Defining Server Key Maps for Assignment Rule Groups” on page 151](#)
- [“Generating Assignment Reports” on page 152](#)
- [“Preparing to Release Assignment Rules” on page 153](#)
- [“Releasing Assignment Rules” on page 153](#)
- [“About Migrating Assignment Rules” on page 154](#)

About the Assignment Manager Administration Views

Assignment Manager functionality is administered with two administration screens, Administration - Assignment and Administration - Delegated Assignment.

Administration - Assignment Screen

Assignment administrators (AAs) use the assignment administration views (Navigate > Site Map > Administration - Assignment) to create and administer assignment rules and perform the following tasks:

- Create assignment rules
- Associate assignment rules to appropriate rule groups (or the Default Rule Group)
- Apply criteria to assignment rules
- Apply business-defined candidates to assignment rules

Territories List View

Within the Administration - Assignment screen, there is Territories List view, which was originally designed for sales organizations. However, this view functions exactly as the Assignment Rule List and Assignment Criteria views. The Territory List view has been simplified to allow users to define their sales territories. For this reason, some of the assignment options covered in this guide do not appear in the Territory List view.

NOTE: The Territory List view may eventually be phased out from the assignment administration screens. If your current configuration uses these views, they can migrate to the existing assignment views with no loss of functionality or data. For further information about Territory views, contact Siebel Technical Support.

TIP: The Territories List view has no relationship with the Territory Management screen and views. The data shown for each differs and how the data is used differs.

Administration – Delegated Assignment Screen

Delegated administrators (DAs) use the delegated assignment administration views (Navigate > Site Map > Administration - Delegated Assignment) to inherit and refine assignment rules and perform the following tasks:

- Inherit assignment rules and further specify assignment rule behavior and candidates
- Choose to delegate rule responsibility by creating child rule groups and making rules inheritable to the owners of those child rule groups
- DAs lower in the hierarchy can then inherit the refined rules, modify them, or choose to further delegate.

NOTE: Delegation and inheritance can go many levels deep within a single hierarchy.

In the Administration – Delegated Assignment screen, rule group owners have visibility for their rule groups (and subtrees). AAs also have visibility for rules only in their organizations but have unrestricted access to rule administration within those organizations.

For more information about delegated assignment, see [Chapter 8, "Assignment Rule Administration for Delegated Assignment."](#)

Before Defining Assignment Rules

There are several preparatory tasks you should perform before using Assignment Manager and creating your assignment rules.

Before defining your assignment rules, you should:

- 1 Review the Assignment Manager planning guidelines and best practice information. See [Chapter 4, "Planning Your Assignment Manager Implementation."](#)
- 2 Have a good understanding of how Assignment Manager assigns candidates to assignment objects. See ["Assignment Methodology and Examples for Creating Assignment Rules" on page 133.](#)
- 3 Modify assignment object property settings to suit your business requirements using Siebel Tools. See ["Configuring Assignment Object Properties" on page 51.](#)

Process of Defining Assignment Rules

The process of defining assignment rules varies depending on how much you reconfigure or customize Assignment Manager. This section provides a typical process flow for defining and releasing assignment rules that you can use as a guide. Your process may differ, depending on your business model.

Figure 11 provides a sample process flow for defining and releasing assignment rules.

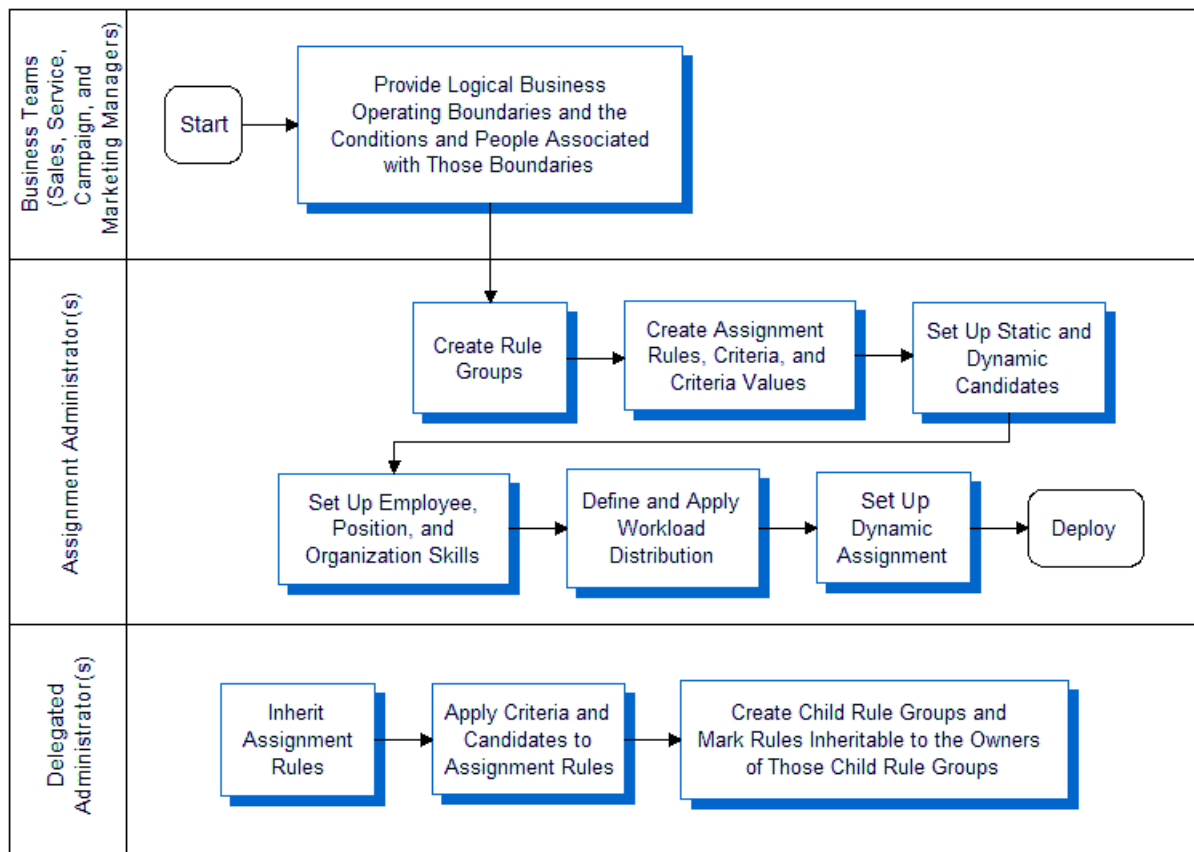


Figure 11. Sample Process Flow for Defining and Releasing Assignment Rules

Table 15 lists the various tasks you perform when defining new assignment rules. The steps represent a typical order of execution when defining a new assignment rule, however, many tasks are optional and may not be applicable for your deployment.

Table 15. Administrative Tasks for Defining Assignment Rules

Task	Required
1 "Creating Assignment Rule Groups" on page 88 NOTE: You must apply a rule group to each assignment rule. If you do not want to define your own rule groups, you can use the predefined rule groups or the Default Rule Group.	X
2 "Creating Assignment Rules" on page 94	X
3 "Adding Assignment Criteria to Assignment Rules" on page 104	
4 "Adding Criteria Values to Assignment Criteria" on page 108 or "Adding Criteria Values as Skills to Assignment Rules Using Expertise Codes" on page 116	
5 "Adding Employees, Positions, and Organizations to Assignment Rules" on page 120	
6 "Adding Dynamic Candidate Teams to Assignment Rules" on page 170 NOTE: The assignment seed data provides two dynamic candidate teams: Activity Account Team and Activity Asset Team. There is no organization dynamic team seed data provided. You may need to configure your own teams according to your business needs.	
7 "Choosing a Candidate as the Primary Assignee" on page 123	
8 "Associating Skills with Employees, Positions, and Organizations" on page 124	
9 "Creating Assignment Workload Distribution Rules" on page 128	
10 "Applying Assignment Workload Distribution to Employees, Positions, and Organizations" on page 130	
11 (Optional) "Process of Defining Assignment Policies for Dynamic Assignment" on page 144	

Creating Assignment Rule Groups

This topic explains how to create new assignment rule groups using the assignment administration views.

This task is a step in [“Process of Defining Assignment Rules” on page 86](#).

About Assignment Rule Groups

An assignment rule group is a logical grouping of assignment rules, and assignment rules are logical business boundaries associated with individuals or a team of people to achieve a business goal. Assigning rule groups to assignment rules allows you to partition rules based on organizational or corporate goals, or some other grouping, such as email response. [Table 16](#) provides sample rule groups and their descriptions.

Table 16. Sample Rule Groups

Assignment Rule Group Name	Description
North America-USA	Assignment rules related to USA are associated with the North America-USA rule group.
Service Products	Assignment rules related to service products are associated with a single rule group.
Email Response Group	Assignment rules related to email response are associated with a single rule group.

You can set up Assignment Manager to process only specific assignment rule groups and not others. See [“How Assignment Manager Uses Server Key Maps to Load Rules to a Particular Siebel Server” on page 149](#).

Prerequisites

Before applying rule groups to your assignment rules based on your particular business needs, you should:

- Decide whether you want to use rule groups.

Create rule groups if you want a separate set of assignment rules that you can apply to different business scenarios. Alternatively, you do not need to create rule groups if you want all rules processed every time you run Assignment Manager. In this case, use the Default Rule Group that is provided as part of the Assignment Manager seed data.

- Decide whether you need rule group hierarchies

If you plan to use delegated assignment, you need rule group hierarchies.

For more information about the Default Rule Group, see the description for assignment rule groups in [“Essential Assignment Manager Building Blocks” on page 24](#). For more information about delegated assignment and rule group hierarchies, see [Chapter 8, “Assignment Rule Administration for Delegated Assignment.”](#)

To create an assignment rule group

- 1 From the application-level menu, choose [Navigate > Site Map > Administration - Assignment > Rule Groups List](#).
- 2 In the Rule Groups List list, click [New](#).
- 3 In the new record, click in the available fields to enter relevant information.

The new rule group appears in the Rule Group List as well as in the Rule Group Explorer.

[Table 17](#) shows the predefined fields.

TIP: All fields may not be visible in the initial view. Use the [Columns Displayed](#) feature to make fields visible (right-click, select [Columns Displayed](#), use the arrows to move a field from [Available Columns](#) to [Selected Columns](#), and then click [Save](#)).

Table 17. Assignment Rule Group Fields

Field	Description
Name	Name of the assignment rule group.
Parent Rule Group	A rule group that appears directly above another rule group in the hierarchy.
Owner Position	The owner of the rule group. Each rule group has an owner (and potentially designees who also have owner rights). For more information about owners and designees as it relates to delegated assignment, see “About Assignment Rule Group Hierarchy” on page 176 .
Owner Login	The login of the owner position. The owner position has visibility from the delegated administration views for rule groups and each of the child rule groups.
Activation	Start date of the assignment rule group. By default, rules within a group inherit the activation date from the group date. However, if you specify an activation date for a particular rule, it overrides that date. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see Global Deployment Guide .

Table 17. Assignment Rule Group Fields

Field	Description
Expiration	<p>End date of the assignment rule group.</p> <p>By default, rules within a group inherit the expiration date from the group date. However, if you specify an activation date for a particular rule, it overrides that date.</p> <p>NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i>.</p>
Key Based	<p>Indicates the rule group is intended for key-based routing and usually has a corresponding server key mapping.</p> <p>By checking this flag, even if there is no server key mapping defined for the rule group, this makes sure that the rules that belong to this rule group are not processed when running the assignment server in default mode.</p> <p>NOTE: The Key Based field may be a hidden column on the Assignment Rule Groups list. You can enable the Key Based field by selecting it through the Columns Displayed feature.</p> <p>For more information about key-based routing and server key maps, see “How Assignment Manager Uses Server Key Maps to Load Rules to a Particular Siebel Server” on page 149.</p>
Organization	The organization in which this rule group belongs.

If you plan to use delegated assignment, see also [“Creating Child Assignment Rule Groups”](#) on page 180.

About Some of the Assignment Rule Fields

The subtopics in this section provide detailed descriptions of the following assignment rule fields:

- [“Assignee Filter Field”](#) on page 91
- [“Candidates Source Fields”](#) on page 91
- [“Check Employee Calendar Field”](#) on page 93
- [“Exclusive Field”](#) on page 94

Assignee Filter Field

The value in the Assignee Filter field of an assignment rule determines how candidates are evaluated as potential assignees to the object. [Table 18](#) shows the filters used by Assignment Manager to determine which potential assignees are assigned to the object for each assignment rule.

Table 18. Assignee Filter Field Values

Assignee Filter	Description
All, Above Minimum	Use assignees with an assignment score greater than or equal to the assignment rule's candidate passing score. Assigns one or more assignees.
All, Must Assign	Same as the All, Above Minimum value, except that the highest-scoring candidate is a potential assignee even if all candidates fail to meet the candidate passing score. Assigns one or more assignees.
One, Best Fit	Use the highest-scoring assignee with an assignment score greater than or equal to the candidate passing score. Assigns one assignee.
One, Random	Choose a random assignee whose score is greater than or equal to the candidate passing score required for this assignment rule. Assigns one assignee.

NOTE: If you do not use scores, the candidate passing score on the assignment rule and all qualifying candidate scores are treated as zero. Therefore, every qualifying candidate (every candidate that passes all required criteria) is assigned depending on the assignee filter.

Candidates Source Fields

For each assignment rule, the administrator determines whether Assignment Manager takes candidates directly from the assignment rule (statically) or dynamically from the object row by indicating the candidate source.

There are two candidate source fields:

- [“Person Candidates Source Field” on page 91](#)
- [“Organization Candidates Source Field” on page 92](#)

Person Candidates Source Field

- **From Rule.** The candidates are the people (positions and employees) defined for an assignment rule and are statically assigned. This is the default value for person candidates.
- **All People.** The candidates are all the people (positions and employees) in the database and are statically assigned.

- **Teams.** The candidates are the person dynamic candidate teams (positions and employees) you define in Siebel Tools. In Siebel Tools, you choose either positions or employees as the value of the Team Type property in the Dynamic Candidate object to indicate that the person candidates for the assignment rule should come dynamically from the relevant attribute on the object row. Two teams—Activity Account Team and Activity Asset Team—are provided as seed data, but you can add your own teams using Siebel Tools. In addition, several teams are predefined for use with territory management.

Organization Candidates Source Field

- **From Rule.** The candidates are the organizations defined for an assignment rule and are statically assigned. This is the default value for organization candidates.
- **All Organizations.** The candidates are all the organizations in the database and are statically assigned.
- **Teams.** The candidates are the organization dynamic candidates teams you define in Siebel Tools. In Siebel Tools, you choose organization as the value of the Team Type property in the Dynamic Candidate object to indicate that organization candidates for the assignment rule should come dynamically from the relevant attribute on the object row. There is no organization dynamic team seed data provided; you need to configure your own teams according to your business needs.

For dynamic candidates teams, the value (employee, position, or organization) of the Team Type property of the Dynamic Candidate object in Siebel Tools determines what appears in the candidates source LOV fields in the assignment rule as shown in [Figure 12](#).

The figure consists of two screenshots from the Siebel Tools interface. The top screenshot shows the 'Candidate Details' form for an assignment rule. It includes fields for 'Objects to be Assigned' (Activity), 'Activation' (4/4/2002 01:40:05 AM), 'Expiration' (7/4/2002 12:40:10 AM), 'Score' (30), 'Sequence', 'Exclusive' (checked), 'Person Candidates Source' (Activity Account Team), 'Organization Candidates Source' (From Rule), 'Assignee Filter' (All, Above Minimum), and 'Candidate Passing Score' (0). The bottom screenshot shows the 'AA_Territory3' form, which is a dynamic candidate object. It includes fields for 'Name' (AA_Territory3), 'Rule Group' (Default Rule Group), 'Description', 'Objects to be Assigned' (Activity), 'Activation' (4/4/2002 01:40:05 AM), 'Expiration' (7/4/2002 12:40:10 AM), 'Score' (30), 'Sequence', 'Exclusive' (checked), 'Person Candidates Source' (Activity Account Team), 'Organization Candidates Source' (From Rule), 'Assignee Filter' (All, Above Minimum), and 'Candidate Passing Score' (0). A red line connects the 'Team Type' dropdown in the top screenshot to the 'Team Type' dropdown in the bottom screenshot, illustrating how the Team Type property determines the values in the 'Person Candidates Source' and 'Organization Candidates Source' fields.

Figure 12. Relationship of Candidates Source Assignment Rule Fields to Team Type Property in Siebel Tools

Check Employee Calendar Field

For each assignment rule, the administrator can designate whether Assignment Manager checks the employees' calendars when determining assignment eligibility. By checking the Check Employee Calendar field in the Assignment Rules List view, Assignment Manager checks for employee availability.

This feature is used only for employee-based assignment objects, and requires the installation of the Siebel Field Service application as it depends on a field service component, the Appointment Booking System. You must first configure the Activity and Service Request assignment objects using Siebel Tools before this feature is available. For more information about the Check Employee Calendar feature, see ["About Availability-Based Assignment"](#) on page 277.

Exclusive Field

For each assignment rule, the administrator can designate whether that rule is exclusive.

If a rule is exclusive and has assignees, then all assignees from other rules are discarded. If there are no exclusive rules, then the primary rule is the rule with the highest-scoring assignee and the primary assignee is the highest-scoring assignee. In this case, no assignees from the other rules are discarded; however, if the assignment object does not allow for more than one assignee, then only the primary assignee is assigned.

If there are multiple exclusive rules, the exclusive rule with the highest-scoring assignee is chosen as the only exclusive rule. However, if multiple exclusive rules with equal scores qualify, the default default employee, default position, or default organization is assigned because Assignment Manager is unable to determine the winning rule. For more information about assigning a default employee, default position, or default organization, see [Step 7 on page 136](#) in ["Assignment Methodology."](#)

You make an assignment rule exclusive by checking the Exclusive flag for the assignment rule.

Related Topic

["Creating Assignment Rules" on page 94](#)

Creating Assignment Rules

Each assignment rule has an activation and an expiration date that you can use to denote a range of dates for when the rule should be active. If you specify an activation date and no expiration date, the rule is active from the date denoted by the activation date onwards. If you specify an expiration date and no activation date, the rule is active until the date denoted by the expiration date. If you do not specify neither the activation date or the expiration date, the rule is always active.

NOTE: Assignment Manager uses the database time to determine whether a rule is active or not.

Use the following procedure to create your assignment rules.

This task is a step in ["Process of Defining Assignment Rules" on page 86](#).

To create an assignment rule

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 In the Assignment Rules list, click New.
- 3 In the new record, click in the available fields to enter relevant information for the new rule.

Table 19 shows the predefined fields.

TIP: All assignment rule fields may not be visible in the initial view; use the Columns Displayed feature to make fields visible (right-click, select Columns Displayed, use the arrows to move a field from Available Columns to Selected Columns, and then click Save).

Table 19. Assignment Rule Fields

Field	Description
Name	Name of the assignment rule.
Objects to be Assigned	<p>A multivalue group (MVG) field that allows you to select one or more assignment objects to apply to the rule.</p> <p>NOTE: These objects are the business entities chosen by the assignment administrator, such as accounts, contacts, and so on.</p>
Rule Group	Assignment rule groups applied to this rule. Each rule must be associated to an assignment rule group.
Sequence	<p>Sequence number for this rule. Assignment Manager uses this number to prioritize the execution of a set of rules. By default, assignment rules do not have a sequence number—one must be assigned by the administrator, if needed.</p> <p>For more information on rule sequencing, see “How Assignment Manager Determines the Sequence in Which Rules Are Evaluated” on page 147.</p>
Activation	<p>Start date of the assignment rule.</p> <p>NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i>.</p>
Expiration	<p>End date of the assignment rule.</p> <p>NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i>.</p>
Score	<p>Score eligible for the assignment rule if qualifications are met.</p> <p>For more information on scoring, see “About Assignment Scoring” on page 101.</p>
Exclusive	<p>If selected, candidates for this assignment rule supersede candidates that qualify for any other nonexclusive assignment rules.</p> <p>For more information on the exclusive feature, see “About Some of the Assignment Rule Fields” on page 90.</p>
Person Candidates Source	<p>Determines whether the employee or position candidates for this rule are specified on the assignment rule (statically) or are chosen dynamically using predefined dynamic candidate object definitions.</p> <p>The choices are From Rule, All People, and whatever other dynamic person candidate team records you defined in the Dynamic Candidate object using Siebel Tools.</p> <p>For more information about this field, see “Candidates Source Fields” on page 91.</p>

Table 19. Assignment Rule Fields

Field	Description
Organization Candidates Source	<p>Determines whether the organization candidates for this rule are specified on the assignment rule (statically) or are chosen dynamically using predefined dynamic candidate object definitions.</p> <p>The choices are From Rule, All Organizations, and whatever other dynamic candidate team records you defined in the Dynamic Candidate object using Siebel Tools.</p> <p>For more information about this field, see “Candidates Source Fields” on page 91.</p>
Assignee Filter	<p>Filters used by Assignment Manager to determine which potential assignees are assigned. Choices for assignee filters are:</p> <ul style="list-style-type: none"> ■ All, Above Minimum ■ All, Must Assign ■ One, Best Fit ■ One, Random <p>Defaults to All, Above Minimum when creating new assignment rules.</p> <p>For more information this field, see “About Some of the Assignment Rule Fields” on page 90.</p>
Candidate Passing Score	<p>Minimum score required for candidates to qualify for this assignment rule. Defaults to 0 (zero) when creating new assignment rules.</p>
Check Employee Calendar	<p>If selected, activates Assignment Manager to check employees’ calendars when determining assignment eligibility. Used only for employee-based objects.</p> <p>For more information about this field, see “About Some of the Assignment Rule Fields” on page 90.</p>
Primary Employee	<p>Primary employee for this assignment rule if the rule passes and is the highest scoring rule for that object. Typically used for service-related assignments. Applicable only if this employee qualifies from the assignment rule (either from the rule itself or from dynamic candidates).</p> <p>However, if the AddScores server component parameter is set to TRUE, the primary employee is ignored. This parameter overrides primaries on the rule, merges scores for each candidate across the rules, and then calculates the primary based on highest total scoring employee that passes for that object.</p> <p>NOTE: If the assignee filter type is One, Best Fit, then do not select a primary employee, because the highest-scoring employee is still selected and the primary employee is excluded.</p> <p>For information about assigning a particular employee as the primary assignee on a specific assignment rule, see “Choosing a Candidate as the Primary Assignee” on page 123.</p>

Table 19. Assignment Rule Fields

Field	Description
Primary Organization	<p>Primary organization for this assignment rule if the rule passes and is the highest scoring rule for that object. Applicable only if this organization qualifies from the assignment rule (either from the rule itself or from dynamic candidates).</p> <p>However, if the AddScores server component parameter is set to TRUE, the primary organization is ignored. This parameter overrides primaries on the rule, merges scores for each candidate across the rules, and then calculates the primary based on highest total scoring organization that passes for that object.</p> <p>NOTE: If the assignee filter type is One, Best Fit, then do not select a primary organization, because the highest-scoring organization is still selected and the primary organization is excluded.</p> <p>For information about assigning a particular organization as the primary assignee on a specific assignment rule, see “Choosing a Candidate as the Primary Assignee” on page 123.</p>
Primary Position	<p>Primary position for this assignment rule if the rule passes and is the highest scoring rule for that object. Typically used for sales-related assignments. Applicable only if this position qualifies from the assignment rule (either from the rule itself or from dynamic candidates).</p> <p>However, if the AddScores server component parameter is set to TRUE, the primary position is ignored. This parameter overrides primaries on the rule, merges scores for each candidate across the rules, and then calculates the primary based on highest total scoring position that passes for that object.</p> <p>NOTE: If the Assignee Filter type is One, Best Fit, then do not select a primary position, because the highest-scoring position is still selected and the primary position is excluded.</p> <p>For information about assigning a particular position as the primary assignee on a specific assignment rule, see “Choosing a Candidate as the Primary Assignee” on page 123.</p>

Related Topics

[“About Some of the Assignment Rule Fields” on page 90](#)

[“Assignment Methodology and Examples for Creating Assignment Rules” on page 133](#)

About Assignment Criteria

Assignment criteria are sets of conditions describing the attributes of objects or candidates, or both, that are evaluated to determine optimal assignment. Assignment rules use criteria to determine which candidates qualify as potential assignees. Criteria also determine which assignment rule should be evaluated in assigning an object. An assignment rule can include none, one, or many criteria.

Assignment criteria define attributes that can be used in assignment criteria records. Assignment criteria appear in the picklist that is displayed when you click in the Criteria list column (in the Criteria subview) when editing an assignment criterion record in Siebel applications.

Assignment Criteria Comparison Methods

Assignment Manager uses criteria comparison methods to qualify objects or candidates, or both, for an assignment rule. Attributes (object or candidate) can be either attributes or skills depending on the criterion value.

[Table 20](#) lists the different requirements for each comparison method.

Table 20. Assignment Criteria Comparison Methods

Comparison Method	Description
Compare to Object	Compares criteria values to object attributes. The criterion passes if the objects possess the criteria values. For example, Account Zip Code = 94040.
Compare to Person	Compares criteria values to skills of person candidates (employees or positions). Person candidates that possess the skills required by the criterion qualify for this criterion. For example, Language = ENU.
Compare Object to Person	Compares object attributes to skills of person candidates (employees or positions). Person candidates that possess the skills required by the object qualify for this criterion. For example, product means compare the product of the opportunity and the product skills of the person or position.

Table 20. Assignment Criteria Comparison Methods

Comparison Method	Description
Compare to Organization	Compares criteria values to organization skills. Organizations that possess the skills required by the criterion qualify for this criterion. For example, type = gold-level partner.
Compare Object to Organization	Compares object attributes to organization skills. Organizations that possess the skills required by the object qualify for this criterion. For example, ZIP Code means compare the ZIP Code of the service request and the ZIP Code of the organization.

Depending on the comparison method, candidates that meet the criteria have the criteria score added to their total score as follows:

- The total score from all criteria of the Compare to Object type that pass is added to all qualifying person and organization candidates.
- The person candidates get the score from the Compare to Person and Compare Object to Person criteria and values they pass.
- The organization candidates get the score from the Compare to Organization and Compare Object to Organization criteria and values they pass.

NOTE: Assignment rules can be created with no criteria. A rule of this nature functions to make sure all data items of a particular object type are assigned, that is, all objects of the defined type pass. Use these rules carefully as a rule defined with no criteria can make assignments that are not required.

You should be especially careful creating rules with no criteria using batch assignment. This mode can produce a very large number of assignments, because all objects in the database that have rules with no criteria pass and are assigned in this mode. Such an increase can result in a backlog of requests that may cause the whole environment to stop working if the database or file system runs out of space. Therefore, assignment rules with no criteria should be used sparingly with batch assignment.

Assignment Criteria Inclusion Methods

You specify criteria inclusion methods for assignment rules to determine how criteria values and candidates will be matched.

Assignment criteria use inclusion methods to:

- Determine how many criteria values must be met to pass the criterion
- Determine how the score of the criterion values are added to the candidate's score

Table 21 shows the types of assignment criteria inclusion methods.

Table 21. Assignment Criteria Inclusion Methods

Inclusion Method	Comments
Include	<p>At least one value needs to match:</p> <ul style="list-style-type: none"> ■ For Compare to Object, the object attribute must match at least one listed criteria value. ■ For Compare to Person, the person attribute must match at least one listed criteria value. ■ For Compare Object to Person, at least one value of the person attribute must match one value of the object attributes. ■ For Compare to Organization, the organization attribute must match at least one listed criteria value. ■ For Compare Object to Organization, at least one value of the organization attribute must match one value of the object attributes. <p>Assignment Manager stops processing criteria when one value is matched and the score of the matching criterion value is added to the candidate's score.</p>
Include All	<p>All values must match:</p> <ul style="list-style-type: none"> ■ For Compare to Object, the object attribute must match all listed criteria values. ■ For Compare to Person, the person attribute must match all listed criteria values. ■ For Compare Object to Person, all values of the person attribute must match all values of the object attribute. ■ For Compare to Organization, the organization attribute must match all listed criteria values. ■ For Compare Object to Organization, all values of the object attribute must match all values of the organization attribute. <p>If the criterion is met, all the criteria value scores are added to the candidate's score. However, if just one of the criteria are not met, then Assignment Manager stops processing the rule.</p>

Table 21. Assignment Criteria Inclusion Methods

Inclusion Method	Comments
Include All Matching	<p>This inclusion method matches in the same manner as the Include inclusion method, that is, at least one value needs to match.</p> <p>However, unlike the Include method, Assignment Manager continues to process this criterion until all criterion values are exhausted. As a result, the scores from all passing criterion values are added to the candidate's score.</p> <p>TIP: The Include All Matching inclusion method matches like the Include inclusion method but scores like the Include All inclusion method.</p>
Exclude	<p>None of the values must match:</p> <ul style="list-style-type: none"> ■ For Compare to Object, the object attribute must not match any of the listed criteria values. ■ For Compare to Person, the person attribute must not match any of the listed criteria values. ■ For Compare Object to Person, no values of the person attribute can match any values of the object attribute. ■ For Compare to Organization, the organization attribute must not match any of the listed criteria values. ■ For Compare Object to Organization, no values of the organization attribute can match any values of the object attribute. <p>NOTE: This inclusion method excludes criterion value scores. If the criterion is met, only the criterion score is added to the candidate's score.</p>

About Assignment Scoring

Siebel Assignment Manager determines which candidates are assigned to objects by applying scores to potential candidates. Assignment Manager then ranks the candidates based on their scores and selects assignees based on the assignee filter.

Assignment Manager calculates the total score for each candidate from each assignment rule from the:

- Assignment rule score
- Assignment criteria score
- Assignment criteria values score (according to the appropriate inclusion method)
- Workload criteria score

- Employee, position, or organization score (depending on the candidate)

NOTE: Before implementing Assignment Manager, you should carefully consider the value for each score. Use scores to assign weights to your criteria. If there are multiple criteria, assign a higher score to the more important attributes. This is especially useful for finding the best match when not all criteria are required.

Using Siebel Tools, you can configure Assignment Manager to save the scores of candidates who are assigned to an object. Other Siebel application modules can then access the saved candidate scores for various purposes. For example, you might want to produce analysis reports for employee utilization. Alternately, you can expose the scores to users for review and sorting.

The scores of each candidate are stored in the appropriate team table by specifying the Employee Team Score Column, Position Team Score Column, and Organization Team Score Column for the assignment object. Team member scores are written independently for each type of candidate (employees, positions, and organizations).

You can also configure Assignment Manager to add scores across assignment rules. For more information about this, see the Add Scores across Rules (AddScores) parameter in ["Configuring Assignment Manager to Add Scores Across Rules" on page 273](#).

NOTE: Typically, you plan your scoring methodology during the design phase. However, you can add scores to assignment rules at any time, but you must release the rules in order for the changes to take affect.

About the Required Field for Assignment Criteria

The Required field on an assignment criterion gives you the ability to make certain criterion mandatory for the assignment rule. If candidates meet this criterion, the candidate's score is increased, providing that candidate a better chance of being assigned. You make assignment criteria required or not required by selecting one of the following choices from the picklist in the Required field in the Criteria list for the assignment rule: Always, Never, or When Available.

Required Assignment Criteria

A *required criterion* means that the criterion must be met. For the Compare To Object type criteria, if the object does not have the attribute to satisfy the criterion, the rule fails and none of the candidates from that rule qualify for assignment. For person-based criteria (criteria with either a Compare To Person or a Compare Object to Person comparison method), if the criterion is not met, that person candidate fails and does not qualify for that assignment rule. Therefore, further person-based criteria are not evaluated for that person candidate.

For organization-based criterion (criterion with a Compare To Organization or a Compare Object to Organization comparison method), if the criterion is not met, that organization candidate fails and does not qualify for that assignment rule. Therefore, further organization-based criteria is not evaluated for that Organization candidate.

For example, an assignment rule can have a required Service Request Severity assignment criterion with a Compare to Object comparison method and a criteria value of 1-Critical. In this case, if the object to be assigned has a service request severity of 1-Critical, the object qualifies for the assignment rule. An object without a service request severity value or one that has a different service request severity value does not qualify for the assignment rule.

Required When Available Assignment Criteria

In some cases, you may want to use Required When Available as the required property on the assignment criterion. Your requirements may dictate that a particular criterion should be applied only if the object or the candidate has the attribute available. If the attribute is available, the criterion should be satisfied mandatorily. It is in these instances you use Required When Available. You can make criteria required when available by selecting When Available from the picklist in the Required field.

For example, an assignment rule can have a required when available Service Request Severity assignment criteria with a Compare to Object comparison method and a criteria value of 1-Critical. In this case, if the object assigned has a service request severity of 1-Critical, the object qualifies for the assignment rule. An object that has a lower service request severity value does not qualify for the assignment rule. However, an object without a service request severity value qualifies for the assignment rule (because the criteria value is null, or not available).

NOTE: If an assignment criterion uses a Compare Object to Person or a Compare Object to Organization comparison method, and the attribute value is not found on person, the criterion fails.

Nonrequired Assignment Criteria

Use nonrequired assignment criteria to further determine a suitable match between candidates and assignment rules. You can make criteria nonrequired by selecting Never from the picklist in the Required field. Use nonrequired criteria that include scores to apply scores to candidates. These scores are added to the total scores of the candidates for this assignment rule if they pass the criteria. By using nonrequired criteria with scores, you can add a higher score to candidates that satisfy this criteria, while keeping candidates that do not satisfy the criteria.

If a candidate fails a nonrequired criterion, no score is added to the candidate; however, the candidate does not fail. Person candidates are evaluated for rest of the person-based criteria and organization candidates are evaluated for the rest of the organization-based criteria.

For example, you should use service-related criteria (such as Service Request Priority) for an assignment rule that are applied to service-related objects (such as Service Request). If you create an assignment rule with Server Request Priority as nonrequired criteria, Assignment Manager does not qualify any accounts for the criteria because Service Request Priority does not apply to accounts.

If an assignment rule uses only nonrequired assignment criteria, then the assignment rule passes even if the minimum score for the rule is not satisfied, because the assignment criteria are not required. To avoid this behavior, you can alter Assignment Manager so that assignment rules pass only when the minimum score for the rule is satisfied, even if the assignment criteria are not required.

To require that an assignment rule satisfies the minimum score for the rule to pass, you can use the `UseRuleMinScore` server parameter. If you set this parameter to `TRUE`, each assignment rule score must be equal to or greater than the rule minimum score to pass. Also, candidates must have a total score from the rule greater than or equal to the rule minimum score in order to qualify for that rule as well.

When using the `AsgnSrvr` and `AsgnBatch` commands from the command-line interface when running Assignment Manager, you can change the value for the `UseRuleMinScore` server parameter. For dynamic assignment, you change the default value of the `UseRuleMinScore` parameter in the Assignment Request (In Process) workflow policy program.

Process of Adding Criteria and Values to Assignment Rules

You can add criteria and criteria values to your assignment rules to evaluate and assign candidates.

CAUTION: Assignment rules can be created with no criteria. However, it is recommended that you use this type of rule carefully as a rule defined with no criteria can make unnecessary assignments.

To add criteria and criteria values to assignment rules, perform the following tasks:

1 ["Adding Assignment Criteria to Assignment Rules" on page 104](#)

2 ["Adding Criteria Values to Assignment Criteria" on page 108](#)

or

["Adding Criteria Values as Skills to Assignment Rules Using Expertise Codes" on page 116](#)

Adding Assignment Criteria to Assignment Rules

This topic explains how to add assignment criteria to assignment rules.

This task is a step in ["Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 114](#) as well as ["Process of Defining Assignment Rules" on page 86](#).

Criteria are sets of conditions describing the attributes of objects or candidates, or both, that are evaluated to determine optimal assignment. Criteria are the fundamental building blocks for assignment rules. An assignment rule can contain none, one, or many criteria. Assignment rules use criteria to determine which candidates qualify as potential assignees. Criteria also determine which assignment rule should be evaluated in assigning an object.

CAUTION: Assignment rules can be created with no criteria. A rule of this nature functions to make sure data items of a particular type are assigned, that is, objects of the defined type pass. Use these rules carefully as a rule defined with no criteria can make assignments that are not required.

To add an assignment criterion to an assignment rule

1 Navigate to the Administration - Assignment screen > Assignment Rules List view.

- 2 In the Assignment Rules List list, drill down on the assignment rule for which you want to create an assignment criterion, and then click the Criteria view tab (if not already active).
- 3 In the Criteria list, click New.
- 4 In the new criterion record, click in the available fields to enter the relevant information.

NOTE: If you want to query for an assignment criterion, you must use the name of the assignment criterion, not the display name for the assignment criterion object you configured using Siebel Tools. For example, if the name of the Account assignment criteria is ACCOUNT_ID, then you must use this name for your query, although the display name is Account. The queries for seed assignment criteria must also be made with their English names, that is, these queries do not accept non-English characters.

Table 22 shows the predefined fields.

Table 22. Assignment Criteria Predefined Fields

Field	Description	Example
Rule Criterion	The criteria evaluated for the assignment rule.	Product Defect Priority
Comparison Method	<p>Methods used by Assignment Manager to determine how objects and candidates are matched. Choices are:</p> <ul style="list-style-type: none"> ■ Compare to Object ■ Compare to Person ■ Compare Object to Person ■ Compare to Organization ■ Compare Object to Organization <p>For explanations of each method, see "Assignment Criteria Comparison Methods" on page 98.</p> <p>NOTE: For assignment criteria that use the Compare to Object, Compare to Person, or Compare to Organization comparison method, each criteria includes one or more values.</p>	Compare to Object
Inclusion	<p>Methods used by Assignment Manager to determine how criteria values and candidates are matched. Choices are: Include, Include All Matching, Include All, and Exclude.</p> <p>For more information about each inclusion method, see "Assignment Criteria Inclusion Methods" on page 99.</p> <p>NOTE: Depending on the Inclusion method, candidates that meet the criteria value have the criteria value score added to their total score. Criteria values can be defined as constants or can use wildcard characters to include a wider selection of potential matches between assignment rule and object.</p>	Include

Table 22. Assignment Criteria Predefined Fields

Field	Description	Example
Required	<p>Determines whether the criteria is required. Choices are:</p> <ul style="list-style-type: none"> ■ Always ■ Never ■ When Available <p>For detailed information about the required field, see "Adding Assignment Criteria to Assignment Rules" on page 104.</p>	Always
Score	<p>Score for this criteria. Candidates that satisfy this criteria have this score added to their total score.</p> <p>For more information how you can use the criteria score, see "Assignment Criteria Comparison Methods" on page 98.</p>	
Minimum Score	<p>Minimum score required to qualify for this criterion. This field can be left blank.</p> <p>If the total score from all matching criterion values (calculated based on the inclusion method for the rule) is greater than or equal to the minimum score specified for the criterion, then the criterion passes.</p>	
Inherited	<p>If selected, indicates the criterion was inherited from a parent rule. This is a read-only field.</p> <p>NOTE: If the Inherited flag for a criterion is true in the Administration - Assignment view, the Read Only flag is true in the Administration - Delegated Assignment views.</p> <p>TIP: If the Inherited field is not visible, use the Columns Displayed feature to make it visible (right-click, select Inherited, use the arrows to move Inherited from Available Columns to Selected Columns, and then click Save).</p>	

Table 22. Assignment Criteria Predefined Fields

Field	Description	Example
DA Read Only	<p>If selected, makes a criterion read-only for delegated administrators. By checking this field, the assignment administrator (AA) makes sure the criterion is read-only to all users who view the rule from the delegated assignment views, including the owner of that child rule group.</p> <p>For example, if the AA creates Rule A in a rule group and that rule gets inherited as Rule B in a child rule group, the AA can add a criterion to Rule B and make it read-only. The owner of the child rule group cannot change this setting. Without this flag, the owner of the child rule group could delete that criterion because it was not inherited from the parent rule.</p> <p>NOTE: If the DA Read Only field for a criterion is true in the Administration - Assignment view, the Read Only flag is true in the Administration - Delegated Assignment view.</p> <p>TIP: If the DA Read Only field is not visible, use the Columns Displayed feature to make it visible (right-click, select Columns Displayed, use the arrows to move DA Read Only from Available Columns to Selected Columns, and then click Save).</p>	
Template	<p>If selected, Assignment Manager excludes the criterion when processing rules.</p> <p>Assignment Manager does not process criteria templates until an inheritor chooses to apply a template to an assignment rule. For more information about applying criteria templates, see "Adding Criteria Templates to Assignment Rules" on page 182.</p> <p>NOTE: When a rule with a criterion using a template is inherited, the criterion is not automatically inherited with the other criteria. You must explicitly apply the criterion to the inherited rule. After the criterion is applied to the inherited rule, you can modify the criterion as you would any other criteria.</p> <p>TIP: If the Template field is not visible, use the Columns Displayed feature to make it visible (right-click, select Columns Displayed, use the arrows to move Template from Available Columns to Selected Columns, and then click Save).</p>	

Figure 13 shows an example of an assignment criterion using the values from Table 22. This example shows a required always Product Defect Priority rule criterion for an assignment rule that is compared to service objects using the Include inclusion method.

Criteria	Employee Candidates	Position Candidates	Workload Distribution	Organization Candidates	Organization	
Menu ▾	New	Delete	Query	Create From Templates		
Rule Criterion	Comparison Method	Inclusion	Required	Score ▲	Minimum Score	De
> Product Defect Priority	Compare to Object	Include	Always			

Figure 13. Example of an Assignment Criterion

Adding Criteria Values to Assignment Criteria

This topic explains how to add criteria values to assignment criteria. Each assignment criterion has one or more criteria attributes (values) that are shown as columns in the Values list applet.

This task is a step in [“Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors” on page 114](#) as well as a step in [“Process of Defining Assignment Rules” on page 86](#).

About Criteria Values

Criteria values are details associated with criteria that are compared to an object or candidate. For assignment criteria that use the Compare to Object, Compare to Person, or Compare to Organization comparison method, each criterion includes one or more criteria values. A value represents the actual string, number, or date that is used in matching. Criteria values can be based on MLOVs, picklists (a pop-up pick applet from where you can choose a record), or simple free text fields. Depending on the inclusion method, candidates that meet the criteria value have the criteria value score added to their total score. Criteria values can be defined as constants or can use wildcard characters to include a wider selection of potential matches between assignment rule and object.

There are predefined criteria values available dynamically based upon the criterion you select, or you can create your own criteria values using Siebel Tools. Each criteria value can include one or more attributes. For example, the Account City State Country criterion has three attributes: one each for City, State, and Country. This type of criterion is known as a composite criterion. Each of the assignment attributes appear as list columns in the criteria value applet.

For more information about assignment attributes, see [“Creating Assignment Attributes” on page 56](#).

To add criteria values to an assignment criterion

- 1 With the appropriate assignment criterion selected in the Criteria list (Navigate > Site Map > Administration - Assignment > Assignment Rules List > Criteria), scroll down to the Values subview.
- 2 In the Values list, click New.
- 3 In the new record, click in the available fields to enter the relevant information.

NOTE: The assignment attributes for criteria values that are available differ depending on the assignment criterion you select in [Step 1](#).

You define different types of criteria values depending on the assignment attribute. Some criteria values appear as list of value (LOV) fields from which you choose a value (such as Account State), some criteria values show a pick dialog box from which you choose a value (such as Account), and some criteria values are numbers which you choose using the calculator button, while other values are dates which you choose using the calendar select button.

Table 23 shows examples of assignment attributes for the assignment criterion created in [“Adding Assignment Criteria to Assignment Rules” on page 104](#).

Table 23. Available Assignment Attributes

Criteria Value	Example
Score	10 6
Product Defect Priority	1—Very High 2—High

Avoiding Duplicate Assignment Criteria Values

It is possible to create duplicate criteria values for an assignment criterion. If both criteria values use scores in this case, then both scores are added to the assignment criterion if the criteria value passes. This can happen when you create criteria values that use ranges, such as criteria values for the Revenue assignment criterion.

CAUTION: It is recommended that you do not create duplicate criteria values for the same assignment criterion, even though Assignment Manager allows this. If both criteria values use scores and you use the Include inclusion method, the score added to the passing candidate may be inconsistent. If you use the Include All or Include All Matching inclusion method, both the scores are added to the passing candidate.

Using Wildcard Characters When Defining Criteria Values

Wildcard characters can also be used when defining specific criteria values. This option allows for a greater range of assignment object matches. For example, if you create an assignment rule for Account objects with the Account City as assignment criteria, the corresponding criteria value City can be defined as A*. This setting matches Accounts in cities beginning with the letter A.

If a criteria value includes the special characters "?", "*", and "\" that are used as literals, the escape identifier character (\\) must be added before *each* special character in the value field. For example, the criteria value Tri*Laptop is entered into the Values field as "Tri*Laptop".

Criteria values that include alphanumeric entries are stored as string values. These values are sorted lexicographically, that is, in dictionary order, when determining specific ranges for assignment rules. For example, the value AB10 is sorted between AB1 and AB9 even though you may require AB10 placed greater than AB9.

Figure 14 shows an example of creating Product Defect Priority criteria values using the procedure in “Adding Criteria Values to Assignment Criteria” on page 108 and the values in Table 23 on page 109.

The screenshot displays the Siebel Assignment Manager Administration Guide interface. The top navigation bar includes tabs for 'Criteria', 'Employee Candidates', 'Position Candidates', 'Workload Distribution', 'Organization Candidates', and 'Organization Workload Distribution'. The 'Criteria' tab is active, showing a table with columns: Rule Criterion, Comparison Method, Inclusion, Required, Score, Minimum Score, and Description. The table contains one row: 'Product Defect Priority', 'Compare to Object', 'Include', 'Always'. Below this table, there is a section for 'Product Defect Priority' with a table showing 'Score' and 'Product Defect Priority' values. The table has two rows: '6' and '3-Medium', and '10' and '2-High'.

Rule Criterion	Comparison Method	Inclusion	Required	Score	Minimum Score	Description
Product Defect Priority	Compare to Object	Include	Always			

Score	Product Defect Priority
6	3-Medium
10	2-High

Figure 14. Example of Adding Criteria Values to an Assignment Criterion

Defining Assignment Rules to Use a Single Criterion for Multiple Objects

In some cases, you may want to create an assignment rule that assigns candidates to two or more objects while using only one object's criteria. This topic uses a specific scenario as an example in which you create an assignment rule to use only an Opportunity criteria to assign candidates to both the Opportunity and Account objects. This rule can be used to assign candidates to opportunities and their associated accounts.

To create assignment rules that assign two objects using only one object criteria, you need to create and map workflow policy components using Siebel Tools after defining the assignment rule.

To define an assignment rule to use a single criterion for multiple objects

- 1 Create an assignment rule and specify the assignment objects that are assigned using this rule.
For this example, create an assignment rule called Account/Opportunity and add the Account and Opportunity objects to this rule. For more information about creating assignment rules, see “Creating Assignment Rules” on page 94.
- 2 Create an assignment criteria that applies to only one of the assignment objects in this assignment rule.
For this example, configure the Lead Quality Code assignment criteria (an Opportunity object criteria). For more information on creating assignment criteria, see “Creating Assignment Rules” on page 94.

- 3** After the assignment rule is defined, create a workflow policy component that maps to both objects.
For information on creating a workflow policy component, see [“Process of Using a Single Criterion for Multiple Objects” on page 67](#).
- 4** Map the workflow policy component you created with the column.
For information on mapping a workflow policy column, see [“Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column” on page 61](#).
- 5** Map the workflow policy component you created to the assignment attribute.
For information on mapping a workflow policy component to assignment attributes, see [“Mapping Assignment Attribute Columns to an Assignment Object and a Workflow Policy Component Column” on page 61](#).

[Figure 8 on page 72](#) shows an example of defining an assignment rule for the Account and Opportunity objects using only the Lead Quality Code assignment criteria.

Removing Assignment Criteria from Assignment Rules

In some cases, you may want to eliminate assignment criteria that appear in the Assignment Criteria view. To do so, you need to remove the unwanted criteria from the Assignment Criteria view as well as use Siebel Tools to disable the corresponding assignment attribute, assignment attribute column, assignment criteria, and assignment criteria attribute object definitions.

Use the following procedure to remove unwanted criteria from the Assignment Criteria view.

To remove unwanted criteria from an assignment rule

- 1** Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2** Select the assignment rule for which you want to remove criteria.
- 3** Click the Criteria subview.
- 4** In the Criteria list, delete any criteria you want removed.
- 5** Perform the tasks described in [“Disabling Assignment Attributes” on page 73](#).

NOTE: If you want to remove criteria from the list of values (LOV) field, you must use Siebel Tools to perform [Step 5](#). However, removing the criteria from the rule itself is often sufficient to make certain the criteria is no longer used for the rule.

About Assignment Skills, Expertise Codes, and Weighting Factors

Assignment Manager provides predefined skills, expertise codes, and weighting factors. These optional building blocks allow you to determine the criteria that you want to evaluate for each candidate to make sure potential candidates possess the proper skillset to handle the task.

Assignment Skills

A skill is an attribute associated with a person, organization, or base table row. Assignment Manager can perform assignments based on skills by associating the skills with employee, position, and organization candidates. For example, if an employee speaks English and Spanish, language is the skill he or she possesses, and English and Spanish are the *skill items*. Employee, position, and organization skills are used to store skills possessed; the skill tables for objects are used to store skills required. Assignment Manager uses skill tables to do skill matching by comparing the skills on the object with the skills of an employee, position, or organization to determine who passes the rule.

The Siebel application provides predefined skills, however, you can create new skills using Siebel Tools. You enable and configure skills at the criteria level using Siebel Tools. After skills are enabled, Assignment Manager matches skills based on the assignment criteria comparison method in the same manner in which other attributes are matched. Assignment Manager applies scores and other filters to find the best candidate after a match is made.

Expertise Codes

Expertise codes define an employee's expertise level for a particular skill item. For example, an employee might have an *Expert* level expertise in networking products but only a *Novice* level expertise in printer products. You apply expertise codes to skills to eliminate underqualified candidates. Assignment Manager uses expertise codes to match an assignment object to people.

After you select an expertise code for a skill, Assignment Manager matches assignment rules based on the assignment criteria comparison method. [Table 24](#) shows the different results based on those methods.

Table 24. How Assignment Rules are Matched Based on Expertise Code and Comparison Methods

If the Criteria Comparison Method Is ...	The Assignment Rule Passes if the ...
Compare to Object	Skill's expertise code is equal to, or higher than, the object's expertise code.
Compare Object to Person	Candidate's expertise code is equal to, or higher than, the object's expertise code.
Compare Object to Organization	Organization's expertise code is equal to, or higher than, the object's expertise code.
Compare to Person	Candidate's expertise code is equal to, or higher than, the skill's expertise code
Compare to Organization	Organization's expertise code is equal to, or higher than, the skill's expertise code.

For more information about assignment criteria comparison methods, see ["Assignment Criteria Comparison Methods" on page 98](#).

Weighting Factors

Optionally, you can apply weighting factors to expertise codes. While you can use expertise codes to eliminate underqualified candidates, using weighted expertise codes allows you to weigh skill scores to find the most suitable candidate by further eliminating overqualified candidates. For example, you may not want to assign an expert to a service request that can be handled by a novice.

Using weighted expertise codes allows you to prevent assigning objects to overqualified candidates by applying a weight to the skill score. Each expertise code has a defined value, which is its weighting factor. The expertise code with the highest defined weighting factor represents the maximum weighting factor (Max Weighting Factor).

The weighting applied to a skill or criteria score is the percentage defined by an expertise code's weighting factor over the maximum weighting factor. For an example, see [Table 25 on page 117](#).

Weighted scores are calculated differently based on the comparison method chosen for the assignment rule:

- For the Compare to Person, Compare to Object, and Compare to Organization comparison methods, the weighted score is determined as follows:

$$\text{Score} = \text{Criteria Score} + \text{Skill Score} * (\text{Weighting Factor} / \text{Max Weighting Factor})$$

- For the Compare Object to Person and Compare Object to Organization comparison methods, because neither of these comparison methods can define skill scores, the weighted score is determined as follows:

$$\text{Score} = \text{Criteria Score} * (\text{Weighting Factor} / \text{Max Weighting Factor})$$

NOTE: When using the Compare Object to Person or the Compare Object to Organization comparison method, weighting factors are only applied if the expertise code is defined for both the object assignment skill item and the candidate skill item. If the expertise code is not defined for both, the weighting factors are excluded.

Assignment Manager applies the weighted skill scores and other scores to find the most suitable candidate when a match is made.

Related Topics

[“Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors” on page 114](#)

[“Scenario for Using Assignment Skills” on page 119](#)

[“Example of Using Assignment Skills in Assignment Rules” on page 119](#)

Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors

You define skills in the same manner as you define criteria values. Defining criteria values as skills with expertise codes is a preconfigured feature of assignment criteria values and works with assignment rules for service objects (or any other object you configure to use skills). By default, sales objects do not use skills.

To define criteria values as skills with expertise codes and weighting factors, perform the following tasks:

- 1 (Optional) [“Creating Expertise Codes for Skills” on page 115](#)
- 2 [“Adding Criteria Values as Skills to Assignment Rules Using Expertise Codes” on page 116](#)
- 3 (Optional) [“Defining Weighting Factors for Expertise Codes” on page 117](#)

These tasks are one step in [“Process of Defining Assignment Rules” on page 86](#).

NOTE: Criteria and skills need the *same* Assignment Criteria Attribute enabled for Assignment Manager to perform skill comparison. For more information about enabling Assignment Criteria Attributes, see [“Creating Assignment Criteria Attributes for Assignment Criteria” on page 65](#).

Related Topics

[“About Assignment Skills, Expertise Codes, and Weighting Factors” on page 112](#)

[“Scenario for Using Assignment Skills” on page 119](#)

[“Example of Using Assignment Skills in Assignment Rules” on page 119](#)

Creating Expertise Codes for Skills

Expertise codes apply only to skills and are global; after they are defined, assignment criteria share the same set of expertise codes. Expertise codes are predefined for the following skill types (assignment criteria):

- Language Code
- Product
- Product Line
- Product Line Wildcard
- Product Wildcard

The three predefined expertise codes are Novice, Intermediate, and Expert. For most deployments, the predefined skills are sufficient, however, you can create new ones. Expertise codes are stored in—and can be modified, added to, or deleted from—the Administration - Data screen > List of Values view.

To create new expertise codes, use the following procedure.

NOTE: You should perform the procedures in this section only if the default expertise codes—Novice, Intermediate, and Expert—do not meet the requirements of your organization.

To create an expertise code

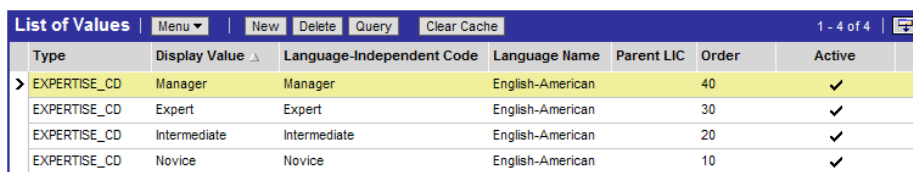
- 1** Navigate to the Administration - Data screen > List of Values view.
- 2** In the List of Values list, click New.
- 3** In the new record, click in the fields to enter the relevant information for the expertise code.
 - a** In the Type field, click the select button, query for EXPERTISE_CD in the Pick Value Type dialog box, and then click OK.
 - b** In the Display Value field, type the name of the expertise code as you want it to appear.
 - c** In the Language-Independent Code field, type in the exact value that you entered in [Step b](#).
 - d** In the Language Name field, click the select button to select the appropriate language in the Pick Language Name dialog box, and then click OK.
 - e** In the Translate field, click to place a check mark (if not already checked).

- f** In the Order field, type a numerical value for the rank of the expertise code.

The numerical value you type in this field determines the rank of the expertise code. Use a higher value to apply a greater rank to the expertise code, and a lower value to apply a lesser rank.

The new expertise value appears in the List of Values list and also becomes a valid expertise code selection in the criteria value drop-down menu when defining skills.

Figure 15 shows an example of creating a Manager expertise code that is ranked higher than the default expertise codes.



Type	Display Value	Language-Independent Code	Language Name	Parent LIC	Order	Active
EXPERTISE_CD	Manager	Manager	English-American		40	✓
EXPERTISE_CD	Expert	Expert	English-American		30	✓
EXPERTISE_CD	Intermediate	Intermediate	English-American		20	✓
EXPERTISE_CD	Novice	Novice	English-American		10	✓

Figure 15. Example of Creating a New Expertise Code

Adding Criteria Values as Skills to Assignment Rules Using Expertise Codes

To add a criteria value as a skill to an assignment rule using expertise codes, select the desired expertise from the Expertise Code field in the Value list applet as shown in [Figure 16 on page 117](#). The predefined expertise codes are: Novice, Intermediate, and Expert.

This task is a step in [“Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors” on page 114](#) as well as a step in [“Process of Defining Assignment Rules” on page 86](#).

To add a skill to an assignment rule using an expertise code

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 In the Assignment Rules list, drill down on the assignment rule for which you want to add a skill, and then click the Criteria view tab.
- 3 In the Criteria list, select New.
- 4 In the new criteria record, click in the available fields to enter the relevant information.
- 5 Scroll down to the Values subview, and then click New.
- 6 In the new values record, click in the available fields to enter the relevant information.

NOTE: The assignment attributes for criteria values that are available differ depending on the assignment criterion you select in [Step 4](#). In the example in [Figure 16 on page 117](#), the assignment attributes are: Score, Product Line, and Expertise Code.

Figure 16 on page 117 shows an example of creating a required Product Line Wildcard assignment criterion that is compared to candidates. This criterion requires a minimum score of 10 and the modem product line skill with an expertise level of intermediate or better.

The screenshot shows the 'Criteria' tab in the Siebel Assignment Manager Administration Guide. The top navigation bar includes tabs for 'Criteria', 'Employee Candidates', 'Position Candidates', 'Workload Distribution', 'Organization Candidates', and 'Organization Workload Distribution'. Below the navigation bar is a menu with 'New', 'Delete', 'Query', and 'Create From Templates'. The main table has columns: 'Rule Criterion', 'Comparison Method', 'Inclusion', 'Required', 'Score', 'Minimum Score', and 'Description'. A single criterion is listed: 'Product Line Wildcard' with a comparison method of 'Compare to Object', inclusion of 'Include', required status of 'Always', a score of '10', and a minimum score of '10'. Below this table is a detailed view of the criterion, showing a table with columns: 'Score', 'Product Line', and 'Expertise Code'. A single row is listed: '20', 'Modems', and 'Intermediate'.

Rule Criterion	Comparison Method	Inclusion	Required	Score	Minimum Score	Description
Product Line Wildcard	Compare to Object	Include	Always	10	10	

Score	Product Line	Expertise Code
20	Modems	Intermediate

Figure 16. Example of Adding a Skill with an Expertise Code

In this example, only candidates with an Intermediate- or Expert-level expertise qualify for this skill and receive 20 points.

If the predefined expertise codes are not sufficient for your needs, you can create new ones. To create new expertise codes, see ["Creating Expertise Codes for Skills" on page 115](#).

Defining Weighting Factors for Expertise Codes

Weighting factors for expertise codes apply only to skills and are global; after they are defined, assignment criteria share the same set of weighting factors for expertise codes. Weighting factors weigh expertise codes by applying a specified percentage to the skill score. [Table 25](#) shows sample weighting factors that can be used for the three types of predefined expertise codes.

Table 25. Sample Weighting Factors for Expertise Codes

Expertise Code	Weighting Factor	Percentage of Skill Score
Novice	2	If skill is matched, adds 40% of score for the skill (or criteria value)
Intermediate	5	If skill is matched, adds 100% of score for the skill (or criteria value)
Expert	3	If skill is matched, adds 60% of score for the skill (or criteria value)

In this example, candidates with an intermediate expertise for the matched skill are favored over other candidates, because they receive 100% of the skill score. This may be desired if your organization has many more service representatives with an intermediate expertise than service representatives with an expert expertise. In this case, you make sure that service requests that require only an intermediate expertise are assigned to service representatives with an intermediate expertise.

NOTE: Use weighting factors to adjust relative scoring for expertise; do not define separate criteria and scores for different expertise levels.

If you use weighting factors to weigh the expertise codes, candidates with different expertise receive different scores. For example, if you use the weighting factors described in [Table 25 on page 117](#) and the expertise code defined in [Figure 16 on page 117](#):

- Candidates who possess an intermediate-level expertise in the modem product skill receive 20 points and qualify for this criterion.
- Candidates who possess an expert-level expertise receive 10 points and qualify for this criterion.
- Candidates who possess a novice-level expertise fail this criteria (because an expertise level of intermediate or better is required), and fail the assignment rule (because the criterion is required).
- Candidates who possess an intermediate-level expertise are therefore favored, because they receive a higher score.

This task is a step in ["Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 114](#).

Weighting factors for expertise codes are stored in—and can be modified, added to, or deleted from—the Administration - Data screen > List of Values view.

To define weighting factors for expertise codes

- 1** Navigate to the Administration - Data screen > List of Values view.
- 2** Display the list of values of type EXPERTISE_CD.
 - a** In the List of Values list, click Query.
 - b** In the Type field, click the select button.
 - c** In the Pick Value Type dialog box, query for EXPERTISE_CD, click Go, and then click OK.
 - d** In the List of Values list, click Go to complete the query.
- 3** For each of the resulting display values (default values are Novice, Intermediate, and Expert), click in the Weighting Factor field and type in a numerical value.

The numerical value you type in this field, relative to the maximum weighting value defined, represents the percentage applied to the skill score.

TIP: If the Weighting Factor field is not visible when the List of Values appear, use the Columns Displayed feature to make it visible (right-click, select Columns Displayed, use the arrows to move Weighting Factor from Available Columns to Selected Columns, and then click Save).

Figure 17 shows an example of defining the weighting factors for the default expertise codes using the values listed in Table 25 on page 117.

List of Values Menu New Delete Query Clear Cache 1 - 3 of 3								
Type	Display Value	Language-Independent Code	Language Name	Parent LIC	Order	Weighting Factor	Active	Translate
EXPERTISE_CD	Novice	Novice	English-American	10	2		✓	✓
EXPERTISE_CD	Intermediate	Intermediate	English-American	20	5		✓	✓
EXPERTISE_CD	Expert	Expert	English-American	30	3		✓	✓

Figure 17. Example of Defining Weighting Factors

Related Topics

["Assignment Skills, Expertise Codes, and Weighting Factors" on page 30](#)

Scenario for Using Assignment Skills

This scenario provides an example of how Assignment Manager can automatically route an SR (service request) to the most qualified field service representative. Your company may follow a different process according to its business requirements.

A software application company places a call to your Call Center stating they have a malfunctioning cable modem. To handle the incoming request, a call center service agent creates an SR, and then associates that service request with the Cable Modem PL/12 product. Based on the predefined assignment rule, Assignment Manager automatically assigns the SR to the most qualified field service representative who has expertise with this cable modem product line.

Example of Using Assignment Skills in Assignment Rules

This topic gives one example of using skills to determine who passes an assignment rule. You may use this feature differently, depending on your business model.

The following procedure explains how to configure Assignment Manager so that only employees who speak Spanish are assigned a service request.

To configure Assignment Manager to assign a service request only to employees who speak Spanish

- 1** Create a service request with Language as the skill and Spanish as the skill item.
 - a** In the Service Request skill table for the service request, create one record and specify Language as the skill.
 - b** In the child Service Request skill item table, create one record and specify Spanish as the skill item.

- 2 Create an assignment rule that filters employees based on their language skills.
 - a Create an assignment rule and apply the Service Request assignment object.
 - b Create a criterion called Language and use the Compare to Person assignment rule comparison method.

This criterion, and therefore the rule, passes only employees who have the Spanish language skill.

NOTE: The previous example used the Compare to Person comparison method, however, skill matching can be used with other comparison methods. For more information about comparison methods, see ["Assignment Criteria Comparison Methods"](#) on page 98.

Assignment Manager can also do skill matching with expertise codes and can use weighting factors to assign weighted scores to different expertise codes. For more information about skill matching using expertise codes and weighting factors, see ["Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors"](#) on page 114.

Adding Employees, Positions, and Organizations to Assignment Rules

This topic provides procedures for adding employees, positions, and organizations to assignment rules.

This task is a step in ["Process of Defining Assignment Rules"](#) on page 86.

Assignment Manager can assign employees, positions, and organizations based on their association with their parent organization. For example, only employees or positions associated with a specific organization can be assigned to an assignment object even if other employees or positions associated with other organizations qualify. Positions assigned to an assignment object can also have their associated organizations assigned. This functionality is called multitiered assignment, and you must configure the appropriate assignment object before implementing. For information about configuring assignment objects for multitiered assignment, see ["Configuring Assignment Objects for Multitiered Assignment"](#) on page 268.

Alternatively, you can set a default employee, position, or organization for assignment objects. For example, if you want records for a given assignment object assigned to a certain employee, you can change the Default Employee property on the assignment object using Siebel Tools. For more information about the Default Employee, Default Position, and Default Organization properties, see *Object Types Reference*. For more information about setting these properties, see ["Configuring Assignment Object Properties"](#) on page 51.

NOTE: Assignment Manager does not prevent you from adding employees to an assignment rule that performs position assignments. If a particular rule is set for position assignment and the rule has employees associated with the assignment rule, Assignment Manager considers only the position candidates.

To add employees to an assignment rule

- 1 Drill down on the assignment rule for which you want to add employees (Navigate > Site Map > Assignment Rules List), and then click the Employee Candidates view tab.
- 2 In the Employee Candidates list, click New.
- 3 In the Add Employees dialog box, select the employees to include for this assignment rule, and then click OK.
- 4 In the new employee record, click in the available fields to enter or edit the relevant information.
- 5 If new candidates are added, make sure you release the assignment rules for the changes to take effect.

For more information about releasing assignment rules, see ["Releasing Assignment Rules" on page 153](#).

NOTE: If the All People value is selected in the Person Candidates Source field for the assignment rule, all candidates are evaluated even if they are not listed in the Employee Candidates list or the Position Candidates list.

Table 26 shows select predefined fields available.

Table 26. Employee Candidates List Fields

Field	Description
Activation	Start date of the assignment rule employee. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i> .
Expiration	End date of the assignment rule employee. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i> .
Score	An initial score for each employee is permitted in this field to differentiate between other employees for potential assignment.

NOTE: For assignment purposes, an employee's organization is the organization corresponding to the employee's primary position. For example, if Employee A holds Position A where Position A is in the Sales East organization, then Employee A's organization is the Sales East organization.

To add positions to an assignment rule

- 1 Drill down on the assignment rule for which you want to add positions (Navigate > Site Map > Assignment Rules List), and then click the Position Candidates view tab.
- 2 In the Position Candidates list, click New.
- 3 In the Add Positions dialog box, select the positions to include for this assignment rule, and then click OK.

- 4 In the new record in the Positions list, click in the available fields to enter or edit the relevant information.
- 5 If new candidates are added, make sure you release the assignment rules for the changes to take effect.

For more information about releasing assignment rules, see ["Releasing Assignment Rules" on page 153](#).

NOTE: If the All People value is selected in the Person Candidates Source field for the assignment rule, all candidates are evaluated even if they are not listed in the Employee Candidates list or the Position Candidates list.

Table 27 shows select predefined fields available for editing.

Table 27. Positions List Fields

Field	Description
Activation	Start date of the assignment rule position. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i> .
Expiration	End date of the assignment rule position. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i> .
Score	An initial score for each position is permitted in this field to differentiate between other positions for potential assignment.

After you add positions for an assignment rule, only the active employees for each position are available. If Assignment Manager assigns the position, employees for the position have visibility to the assigned object.

To delete system-assigned positions from individual assignment objects, or to manually assign other positions, see the procedure in ["Maintaining the Manually Assigned Primary Position" on page 251](#). You can configure Assignment Manager to define additional fields for Positions associated with an assignment rule. For more information on defining fields for Positions, see ["Configuring Assignment Objects to Copy Additional Columns to the Team Table" on page 255](#).

To add organizations to an assignment rule

- 1 Drill down on the assignment rule for which you want to add organizations (Navigate > Site Map > Assignment Rules List), and then click the Organization Candidates view tab.
- 2 In the Organization Candidates list, click New.
- 3 In the Add Organization dialog box, select the organizations to include for this assignment rule, and then click OK.
- 4 In the new record in the Organizations list, click in the available fields to enter or edit the relevant information.

- 5 If new candidates are added, make sure you release the assignment rules for the changes to take effect.

For more information about releasing assignment rules, see [“Releasing Assignment Rules” on page 153](#).

NOTE: If the All Organizations value is selected in the Organization Candidates Source field for the assignment rule, all candidates are evaluated even if they are not listed in the Organization Candidates list.

Table 28 shows select predefined fields available for editing.

Table 28. Organizations List Fields

Field	Description
Activation	Start date of the assignment rule organization. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i> .
Expiration	End date of the assignment rule organization. NOTE: By default, Siebel applications use the Universal Time Coordinated (UTC) standard. For more information about UTC, see <i>Global Deployment Guide</i> .
Score	An initial score for each organization is permitted in this field to differentiate between other organizations for potential assignment.

Choosing a Candidate as the Primary Assignee

Assignment Manager provides the ability to influence a particular candidate to act as a primary assignee for a specific assignment rule. You do so by picking an employee, position, or organization from the Primary Employee, Primary Position, or Primary Organization pick dialog box in the Assignment Rules List list. This primary assignee represents the candidate (employee, position, or organization) that is assigned as the primary owner of the assignment object if the candidate passes the criteria for that rule.

NOTE: Typically, you choose a primary assignee when creating an assignment rule, however, you can add a primary to an existing assignment rule at anytime. But, you must release the rule for the change to take effect.

This task is a step in [“Process of Defining Assignment Rules” on page 86](#).

To choose a candidate as the primary assignee

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 In the Assignment Rules List list, select the assignment rule for which you want to assign a particular candidate as the primary assignee.

3 In one of the following fields, click the select button.

- **Primary Employee.** If you want to assign a particular employee, query for that employee, and then click OK.
- **Primary Position.** If you want to assign a particular position, query for that position, and then click OK.
- **Primary Organization.** If you want to assign a particular organization, query for that organization, and then click OK.

TIP: The Primary Employee, Primary Position, and Primary Organization fields may not be visible in the initial view; use the Columns Displayed feature to make the fields visible (right-click, select Columns Displayed, use the arrows to move a field from Available Columns to Selected Columns, and then click Save).

Associating Skills with Employees, Positions, and Organizations

You use skills to find the best matching candidates to assign to assignment objects. Skills can be associated with individual employees, positions, or organizations. During the assignment process, Assignment Manager identifies candidates that have the relevant skills for assignment to a particular item. For example, a service request requiring an agent who has expertise for a particular product is routed to someone who has that product expertise as a part of their skill set.

This task is a step in ["Process of Defining Assignment Rules" on page 86](#).

You enable and configure skills at the criteria level by using Siebel Tools. For more information on defining criteria for skills, see ["Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 114](#).

NOTE: Assignment Manager caches employee, position, and organization skills when the Siebel Server is started. Every time rules are released, employee, position, and organization skills are updated and cached. If you want to automatically refresh employee, position, and organization skills at a periodic interval, set the value of Refresh people skills interval (the MaxSkillsAge AsgnSrvr component parameter) to the desired interval of update.

To associate skills with an employee

- 1** Navigate to the Administration - User screen > Employees > Assignment Skills view.
- 2** In the Employees list, select the employee for whom you want to define skills.
- 3** In the Assignment skills list, click New to add a new record.
- 4** In the Skill field, select a skill from the drop-down list.

- 5 In the Assignment Skill Items list, click New to add a new record, and then complete the necessary fields.

The columns that display in the Employee Skill Items list depend on the skill chosen from the drop-down list in the Assignment Skills list.

NOTE: Employees can also track and update their own skill profiles in the User Preferences Profile view (Navigate > User Preferences > User Profile > Assignment Skills).

To associate skills with a position

- 1 Navigate to the Administration - Group > Positions > Assignment Skills view.
- 2 In the Positions list, select the position for which you want to associate skills.
- 3 In the Assignment Skills list, click New.
- 4 In the Item field, select a skill from the drop-down list.
- 5 Scroll down to the Position Skill Items list, click New to add a new record, and then complete the necessary fields.

NOTE: The columns that display in the Position Skill Items list depend on the skill chosen from the drop-down list in the Assignment Skills list.

To associate skills with an organization

- 1 Navigate to the Administration - Group > Positions > Assignment Skills view.
- 2 In the Organizations list, select the organization for which you want to associate skills.
- 3 In the Assignment Skills list, click New.
- 4 In the Item field, select a skill from the drop-down list.
- 5 Scroll down to the Organization Skill Items list, click New to add a new record, and then complete the necessary fields.

NOTE: The columns that display in the Organization Skill Items list depend on the skill chosen from the drop-down list in the Assignment Skills list.

How Assignment Manager Balances Workload Among Candidates

Workload distribution is a special criteria type that balances the load between candidates. You create workload distribution by adding workload rules in the Assignment Workload view for employees and positions, or the Assignment Organization Workload view for organizations. Workload distribution is generally used with service assignments.

Optionally, you can also define your own workload rules using the Workload Distribution Rules view. For more information about defining assignment workload distribution rules, see ["Creating Assignment Workload Distribution Rules" on page 128](#).

How Workload Distribution Applies Workload Scores to Candidates

Workload distribution applies a workload score to candidates based on their current workload. The workload score is calculated as follows:

$$\text{Workload score} = \text{Score} * (1 - (\text{current workload}/\text{maximum workload}))$$

NOTE: The candidate's current workload excludes the workload of the current object being assigned.

Candidates with a lighter workload receive a higher score than candidates with a heavier workload. The workload score is then added to the candidate's score to generate a total score. Candidates that have workloads in excess of the maximum workload are eliminated from the assignment rule. This criteria prevents employees from being overloaded. Multiple workload distributions can be used for each assignment rule.

NOTE: As with criteria, workload distribution has a Required field, which functions in the same manner as it does for regular criteria.

Figure 18 shows a workload distribution rule that:

- Adds 100 points to candidates with a workload of 0 items ($100 * (1 - (0/2))$)
- Adds 50 points to candidates with a workload of 1 item ($100 * (1 - (1/2))$)
- Adds 0 points to candidates with a workload of 2 items ($100 * (1 - (2/2))$)
- Eliminates candidates with a workload of more than two items if the workload distribution rule is marked as Required

The screenshot displays the Siebel Assignment Manager interface for configuring a 'High Priority' rule. The 'Workload Distribution' tab is selected, showing a table with one rule: 'Critical Service Requests' for 'Service Request' objects, with a score of 100, required 'Always', and a maximum workload of 2. The top section contains fields for rule name, group, activation, expiration, score, sequence, and exclusivity. The right section contains fields for candidate sources, assignee filter, and passing score.

Workload Distribution Rule	Assignment Object	Score	Required	Maximum Workload	Description
> Critical Service Requests	Service Request	100	Always	2	

Figure 18. Sample Workload Distribution

Enabling MLOV Capability for Workload Distribution

Workload distribution can be enabled for multilingual list of values (MLOV) capabilities with additional configuration. MLOV allows you to store workload distribution in a form that can be retrieved and displayed in a variety of supported client languages. For more details on this feature, see *Configuring Siebel Business Applications*.

Process of Defining Assignment Workload

There are two methods for defining workload rules—using predefined workload rules or creating your own workload-rule definitions. This topic discusses how to use both options.

Assignment Manager provides a set of predefined workload rules that allows you to define workload distribution in assignment rules for employees, positions, or organization.

Table 29 lists the predefined assignment workload rules:

Table 29. Predefined Assignment Workload Rules

Workload Rule Name	Assignment Object
Critical Service Requests	Service Request
Excellent Leads	Opportunity
Open Opportunities	Opportunity
Total Open Service Requests	Service Request

Optionally, you can create your own workload rules. Use the following procedures to define assignment workload if you plan to create your own workload distribution rules.

NOTE: If you plan to use the predefined workload distribution rules, skip to [Step 2](#).

- 1 (Optional) [“Creating Assignment Workload Distribution Rules” on page 128](#)
- 2 [“Applying Assignment Workload Distribution to Employees, Positions, and Organizations” on page 130](#)

Creating Assignment Workload Distribution Rules

If you prefer to create your own workload distribution rules, in lieu of using the predefined rules, use the following procedure.

NOTE: When creating your own workload rules, keep in mind that performance may be affected if Assignment Manager is accessing a nonindex column or retrieving the total number of records.

This task is an optional step in “[Process of Defining Assignment Rules](#)” on page 86 and “[Process of Defining Assignment Workload](#)” on page 127.

To create assignment workload distribution rules

- 1 Navigate to the Administration - Assignment screen > Workload Distribution Rules view.

NOTE: If you plan to use the predefined workload rules, skip to [Step 4](#).

- 2 In the Workload Rules list, click New.
- 3 In the new record, click in the available fields to enter the relevant information for the workload rule.

a In the Name field, type a name for the workload rule.

b In the Assignment Object field, select the assignment object of the workload rule.

NOTE: The workload rule’s assignment object must match the assignment rule’s assignment object; otherwise, the assignment workload criteria is excluded or a run-time error occurs (dependent on the assignment rule assignment object’s Ignore Extra Attributes run-time parameter setting).

- 4 With the appropriate workload rule selected, in the Workload Conditions view, click New.

- 5 In the new record, click in the available fields to enter the relevant information for the workload conditions.

a In the Field field, select a value to define the workload condition.

The fields that are available depend on the assignment object selected in [Step 3 on page 128](#).

b In the Comparison field, select a comparison method.

NOTE: When specifying values for the comparison operands (LIKE, NOT LIKE, IN, NOT IN, and BETWEEN), the Value field must be in a form that the underlying database expects. For more information about operands, see *Siebel Developer’s Reference*.

- c In the Value field, select a value with which you want to compare the workload condition.

The values that are available depend on the workload condition selected in [Step 3 on page 128](#).

TIP: If the drop-down arrow does not appear when you select the Value field, you need to enter an appropriate value. For example, if you are creating a workload rule for an Opportunity object and using Position Id as the workload condition, you need to enter the physical ROW_ID of the positions.

NOTE: If the assignment object selected for the workload criteria is team-based, workload criteria using this workload rule should be associated with an assignment rule only if the workload rule object has the team table (or owner field) referenced by one of its workflow components.

Figure 19 shows an example of creating a workload rule called Example for the Account assignment object. The workload condition requires that the account state equal CA.

Workload Rules		
Menu ▾ New Delete Query		
Name ▲	Assignment Object	
> Example	Account	
Critical Service Requests	Service Request	
Excellent Leads	Opportunity	
Open Opportunities	Opportunity	
Total Open Service Requests	Service Request	

Conditions		
Menu ▾ New Delete Query		
Conditional Field	Comparison Operator	Value
> State	=	CA

Figure 19. Creating Workload Distribution Rules

Applying Assignment Workload Distribution to Employees, Positions, and Organizations

You balance workload among candidates by adding workload distribution rules for employees and positions, and organization workload distribution rules for organizations. For example, if your business logic includes limits on the maximum amount of work that can be handled at one time, you would apply assignment workload to your assignment rules.

The following tasks are one step in ["Process of Defining Assignment Workload" on page 127](#) and ["Process of Defining Assignment Rules" on page 86](#).

Applying Workload Distribution to Employees and Positions

Use the following procedure when defining workload distribution for employees or positions.

To apply workload distribution to employees and positions

- 1 Drill down on the assignment rule for which you want to define workload criteria (Navigate > Site Map > Administration - Assignment > Assignment Rules List), and then click the Workload Distribution view tab.
- 2 In the Workload Distribution list, click New.
- 3 In the new record, click in the available fields and enter the relevant information.

[Table 30](#) shows the available predefined fields.

Table 30. Workload Distribution Fields for Employees and Positions

Field	Description	Example
Workload Distribution Rule	Name of the workload rule to apply to the assignment rule.	Total Open Service Requests
Assignment Object	Type of assignment object related to this workload rule.	Service Request
Score	Score to apply for this workload rule. For more information on workload scores, see "Process of Defining Assignment Workload" on page 127 .	50
Required	Determines whether the workload rule is required for the assignment rule. The choices are Always and Never.	Always
Maximum Workload	The maximum workload allowed for this workload rule. For more information on how this value affects the workload score, see "Process of Defining Assignment Workload" on page 127 .	2

Figure 20 shows an example of defining a workload distribution rule for employees and positions using values specified in Table 30.

The screenshot displays the 'High Priority Modem Service' configuration window. It includes fields for Name, Rule Group, Description, Objects to be Assigned, Activation, Expiration, Score, Sequence, and Exclusive. The 'Candidate Details' section shows Person Candidates Source, Organization Candidates Source, Assignee Filter, and Candidate Passing Score. Below the configuration fields is a table with tabs for Criteria, Employee Candidates, Position Candidates, Workload Distribution, Organization Candidates, and Organization Workload Distribution. The 'Workload Distribution' tab is active, showing a table with columns: Workload Distribution Rule, Assignment Object, Score, Required, Maximum Workload, and Description. The table contains one row: 'Total Open Service Requests' for 'Service Request' with a score of 50, required 'Always', and a maximum workload of 2.

Workload Distribution Rule	Assignment Object	Score	Required	Maximum Workload	Description
Total Open Service Requests	Service Request	50	Always	2	

Figure 20. Example of Defining Workload Distribution for Employees and Positions

Applying Workload Distribution to Organizations

Use the following procedure when defining workload distribution for organizations.

To apply workload distribution to organizations

- 1 Drill down on the assignment rule for which you want to define workload criteria (Navigate > Site Map > Administration - Assignment > Assignment Rules List), and then click the Organization Workload Distribution view tab.
- 2 In the Organization Workload Distribution list, click New.
- 3 In the new record, click in the available fields and enter the relevant information.

Table 31 shows the available predefined fields.

Table 31. Workload Distribution Fields for Organizations

Field	Description	Example
Assignment Object	Type of assignment object related to this workload rule.	Opportunity
Maximum Workload	The maximum workload allowed for this workload rule. For more information on how this value affects the workload score, see "Process of Defining Assignment Workload" on page 127 .	3
Required	Determines whether the workload rule is required for the assignment rule. The choices are Always and Never.	Always
Score	Score to apply for this workload rule. For more information on workload scores, see "Process of Defining Assignment Workload" on page 127 .	10
Workload Distribution Rule	Name of the workload rule to apply to the assignment rule.	Excellent Leads

Figure 21 shows an example of adding a workload criteria for organizations using values specified in Table 31 on page 132.

The screenshot displays the Siebel Assignment Manager Administration Guide interface for defining workload distribution for organizations. The top section shows the configuration for a rule named 'US NW' under the 'FS_DISP_RULE GROUP'. The 'Objects to be Assigned' are set to 'Opportunity'. The 'Candidate Details' section includes fields for 'Person Candidates Source', 'Organization Candidates Source', 'Assignee Filter' (set to 'All, Above Minimum'), and 'Candidate Passing Score' (set to 0). The 'Check Employee Calendar' checkbox is unchecked. The bottom section shows a table with the following data:

Workload Distribution Rule	Assignment Object	Score	Required	Maximum Workload	Description
Excellent Leads	Opportunity	10	Always	3	

Figure 21. Example of Defining Workload Distribution for Organizations

Assignment Methodology and Examples for Creating Assignment Rules

It is recommended that you have a good understanding of how Assignment Manager evaluates candidates and determines assignments before you begin creating your assignment rules, or configure, administer, or use the various assignment features.

Figure 22 provides a high-level flowchart of Assignment Manager behavior.

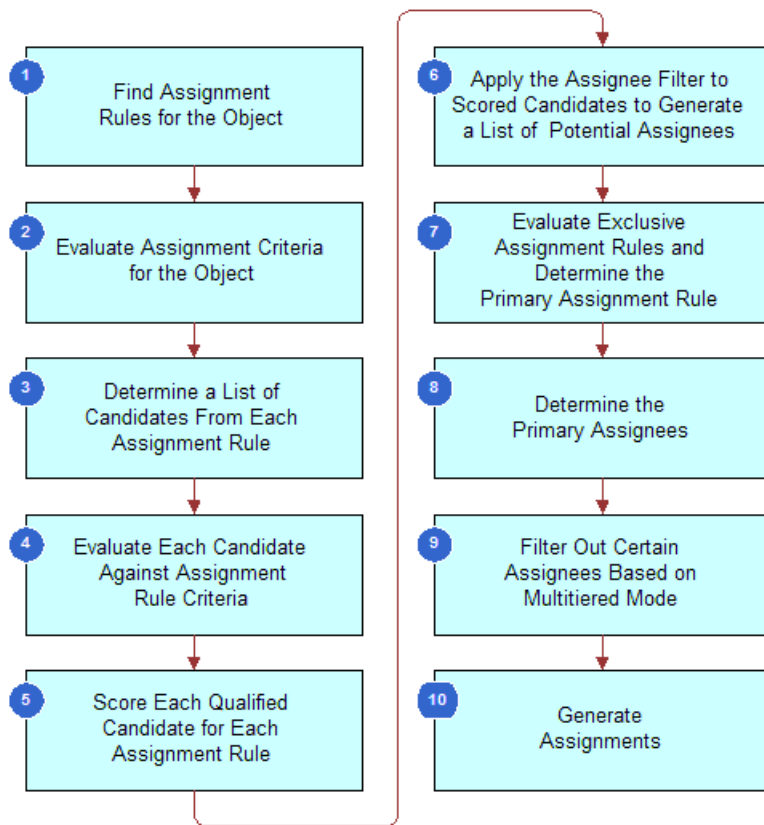


Figure 22. Assignment Methodology Flowchart

This topic explains assignment methodology and provides examples for creating different kinds of assignment rules. You may, however, use these features differently, depending on your business model. The topics are:

■ [“Example of Creating Sales Assignment Rules Based on Territories” on page 137](#)

An example of how a sales organization can strategically assign salespeople based on territories.

■ [“Example of Creating Sales Assignment Rules That Combine Criteria” on page 139](#)

An example of how a sales organization can distribute its salespeople in the same geographic location based on revenue potential.

- [“Example of Creating Assignment Rules for Service Organizations” on page 141](#)

An example of how to create assignment rules for a service organization.

Assignment Methodology

Siebel Assignment Manager uses the following methodology to assign candidates to assignment objects.

- 1 Assignment Manager finds assignment rules for an object.** Assignment Manager finds active assignment rules for evaluation for the object being assigned. If there are no active rules for the assignment object, default assignees are assigned. In rule group mode, all the active rules for the assignment object belonging to the rule group of the request are processed.

NOTE: The Default Employee, Default Position, and Default Organization properties for each assignment object are defined in Siebel Tools. For more information about these properties, see [“Adding Employees, Positions, and Organizations to Assignment Rules” on page 120](#).

- 2 Assignment Manager evaluates assignment criteria for the object.** After Assignment Manager determines the rules for processing, it processes rules in ascending sequence number order. For each rule, Assignment Manager first evaluates each criterion with the Compare to Object comparison method.

NOTE: If criteria marked as Required do not satisfy the object’s attributes, then Assignment Manager stops evaluating the assignment rule.

- 3 Assignment Manager determines a list of candidates from each assignment rule.** For each assignment rule that satisfies [Step 2](#), Assignment Manager determines a list of person and organization candidates relevant to the assignment rule, depending on the Person Candidate Source and Organization Candidate Source fields on the assignment rule.

- **Static candidates from rule.** If the Person Candidate Source is indicated as From Rule, then:
 - If the assignment object uses position-based assignment, the candidate list includes the positions registered in the Position Candidates view.
 - If the assignment object uses employee-based assignment, the candidate list includes the employees registered in the Employee Candidates view.
- **All People.** If the Person Candidate Source is indicated as All People, the candidate list includes all registered employees or positions in the Siebel database.
- **Dynamic candidates.** If the Person Candidate Source is the name of a team (such as Activity Account Team or Activity Asset Team), Assignment Manager obtains the candidate list from the team table related to the object row.

The list of organization candidates for each rule are determined using a similar method.

4 Assignment Manager evaluates each candidate against assignment rule criteria.

Assignment Manager evaluates each candidate against the criteria using the selected comparison method as described in ["Assignment Criteria Comparison Methods" on page 98](#). Workload distribution rules are also processed for each candidate.

NOTE: Candidates fail if they do not match any required criterion and are not evaluated further against this rule.

5 Assignment Manager scores each qualified candidate for each assignment rule.

Assignment Manager scores each candidate for an assignment rule based on the sum of:

- Assignment rule score of each assignment criterion that is satisfied
- Each assignment criterion value that is satisfied depending on the inclusion method as explained in ["Assignment Criteria Inclusion Methods" on page 99](#)
 - Some assignment criteria values (skills) are weighted by expertise.
 - To rank expertise codes, Assignment Manager uses the Order field in the List of Values view in the Administration - Data screen.
 - To define expertise weight, Assignment Manager uses the Weighting Factor field in the List of Values view in the Administration - Data screen.

- Score for the candidate

For static candidates, this value is specified in the Employees Candidates view, Position Candidates view, or Organization Candidates view. For dynamic candidates, this value is specified in the Score Column property in the Dynamic Candidate object.

- Criterion that is calculated as the prorated score

This is the score based on the current workload of candidates compared to the maximum workload allowed.

If the Assignment Rule form has the Check Employee Calendar box selected, Assignment Manager uses the availability-based assignment feature to submit employee availability information to the Field Service Appointment Booking System (ABS), which reviews qualified candidates' calendars and work schedules to see who is available to undertake the assignment at the required time. Employees who are not available at the requested time for the specified duration are eliminated.

At this point, the score for the assignment rule is calculated from either the highest-scoring person candidate or organization candidate depending on the value in the Assignment Scoring Mode property for the assignment object.

6 Assignment Manager applies the assignee filter to scored candidates to generate a list of potential assignees. Assignment Manager uses the assignee filters to eliminate candidates and determine a final list of assignees. The choices are:

- All, Above Minimum
- All, Must Assign
- One, Best Fit
- One, Random

- 7 Assignment Manager evaluates exclusive assignment rules and determines the primary assignment rule.** If no exclusive assignment rule exists or none of the exclusive rules passed, the assignment rule with the highest score is the primary assignment rule. If all assignment rules do not have a score or more than one rule has the same highest score, then the assignment rule with the lowest row ID is used to break the tie in the process of finding the primary assignment rule. If the AddScores property is set to TRUE, scores for each candidate are merged across rules, and the candidate primaries are calculated based on the total scores.

If at least one assignment rule marked as exclusive passes, the exclusive assignment rule with the higher score is chosen as the primary rule. Only the assignees in this assignment rule are kept and all the assignees from other assignment rules are excluded.

If no rules passed or more than one exclusive assignment rule yields the same highest score, Assignment Manager assigns the object to:

- The default employee for employee-based assignments
- The default position for position-based assignments
- The default organization for organization-based assignments

NOTE: When two or more exclusive assignment rules have the same score and the Keep Man Asgn Primary Position assignment property is set to TRUE on the object, then the manually assigned primary position is retained and the default position is added to the team as a nonprimary.

- 8 Assignment Manager determines the primary assignees.** Assignment Manager determines the primary assignees from the primary assignment rule:

- For objects that use employee-based assignments, set the primary assignee to the primary employee selected in the Primary Employee field of the Assignment Rule form applet for the primary assignment rule. If the selected primary employee is not an assignee that satisfies [Step 6 on page 135](#), or if there is no primary employee specified on the rule, then select the highest-scoring employee for the primary assignment rule that satisfies [Step 6 on page 135](#).
- For objects that use position-based assignment, set the primary assignee to the primary position selected in the Primary Position field of the Assignment Rule form applet for the primary assignment rule. If the selected primary position is not an assignee that satisfies [Step 6 on page 135](#), or if there is no primary position specified on the rule, then select the highest-scoring position for the primary assignment rule that satisfies [Step 6 on page 135](#).
- For objects that use organization-based assignments, set the primary organization to the primary organization selected in the Primary Organization field of the Assignment Rule form applet for the primary assignment rule. If the selected primary organization is not an assignee that satisfies [Step 6 on page 135](#), or if there is no primary organization specified on the rule, then select the highest-scoring organization for the primary assignment rule that satisfies [Step 6 on page 135](#).

NOTE: The primary employee, position, or organization must pass the minimum score required for this assignment rule for assignment as the primary assignee. The only exception is when the Assignee Filter is All, Must Assign, in which case the highest-scoring candidate is a potential assignee if all candidates fail to meet the minimum score. For more information about assignee filters, see ["About Some of the Assignment Rule Fields" on page 90](#).

9 Assignment Manager filters out certain assignees based on multitiered mode. By default, the assignment mode is set to independently assign qualifying people and organizations. If you set one of the other assignment modes—Person-Oriented, Organization-Oriented, Person and Organization-Oriented—Assignment Manager filters out unwanted, but qualifying, people and organizations based on the relationship that exists between them. Assignment Manager recalculates the primaries, if necessary; for example, if primaries were filtered out by multitiered filtering. See [“Configuring Assignment Objects for Multitiered Assignment” on page 268](#) for further information.

10 Assignment Manager generates assignments. Assignment Manager writes assignees to the database to finalize the assignment as follows:

- Writes the primary assignment rule and primary assignees to the object’s primary table.
- For team-based objects, writes assignees to the object’s team table.

NOTE: For interactive assignments, assignees appear in the appropriate list applet after calculation. The candidate that Assignment Manager determines as the primary appears highlighted. The user can then choose the candidate or candidates for assignment, or the user can override and assign a different primary by selecting a different record.

Related Topics

[“About Some of the Assignment Rule Fields” on page 90](#)

[“Creating Assignment Rules” on page 94](#)

Example of Creating Sales Assignment Rules Based on Territories

This topic gives one example of how a sales organization can strategically assign salespeople based on territories. You may use this feature differently, depending on your business model.

Your sales organization wants to create four territories based on geographic location. In this case, you may want to create four assignment rules: US NW, US NE, US SE, and US SW, as shown in [Figure 23](#). Assignment Manager then assigns your salespeople depending on the geographic location of the sales opportunity.

NOTE: For detailed instructions on performing each step in the following procedure, see [Chapter 6, “Assignment Rule Administration.”](#)

One of the assignment rules representing a sales territory (US NW) highlighted in the Assignment Rules List view.

Name	Objects to be Assigned	Rule Group	Activation	Expiration	Assignee Filter	Score	Candidate Passing
US Northeast	Opportunity	FS_DISP_RULE GROUP			All, Must Assign	0	
US Northwest	Opportunity	FS_DISP_RULE GROUP			All, Must Assign	0	
US Southeast	Opportunity	FS_DISP_RULE GROUP			All, Must Assign	0	
US Southwest	Opportunity	FS_DISP_RULE GROUP			All, Must Assign	0	

Figure 23. Example of Creating Sales Territories

To create sales assignment rules based on territories

1 Create assignment rules as sales territories.

In this example, in the Assignment Rule view you create four assignment rules, one for each territory as shown in [Figure 23](#).

2 Determine the assignment criteria.

In this example, in the Assignment Criteria view, you define Account State as the criteria for each assignment rule, because the assignment rules are based on territories.

3 Define the criteria values.

In this example, in the Assignment Criteria view, you use the states that make up each territory as criteria values.

The following figure shows an example of defining a sales territory using assignment criteria and values as described in [Step 2](#) and [Step 3](#).

Rule Criterion	Inclusion	Required	Score	Minimum Score	Description
> Account State	Include	Always			

Score	State
>	NM
	CO
	UT
	NV

4 Add the Positions.

In the Assignment Positions view, add the sales positions responsible for each territory. As an example, you add Division Manager - West and Field Sales Representative to the US NW assignment rule.

NOTE: To specify a primary position, you must set the primary at the rule level (in the Primary Position field in the Assignment Rule List view) and also assign a specific position within that rule (Assignment Rules > Positions).

5 Release the assignment rules.

In the Assignment Rules view, click the Release button. You can then run Batch Assignment to assign objects affected by the assignment rules. For more information about running Batch Assignment, see ["Running Batch Assignment" on page 228](#).

After these assignment rules are released, Assignment Manager assigns salespeople based on the geographic location of the sales opportunity. For example, a sales opportunity in California is assigned to a Western Field Sales Representative.

NOTE: After an account or opportunity has been assigned to a sales team, the list of Territory definitions used by Assignment Manager for this item is added to the item record in the Territories field. This list cannot be edited in the standard user Account or Opportunity detail views.

For an example of how a sales organization can strategically distribute salespeople by using assignment rules based on territories and revenue, see ["Example of Creating Sales Assignment Rules That Combine Criteria"](#) on page 139.

Assignment Manager Behavior When All Assignment Rules Fail

If no qualifying assignment rules are found, that is, all evaluations fail, then Assignment Manager replaces the team and assigns the default position as the primary position. For example, assume you run batch assignment on the Account assignment object without specifying an object WHERE clause. In this case, Assignment Manager processes all Account records. For each account, if no matching assignment rules are found, then Assignment Manager can potentially replace the account team with the default position. This can ultimately result in reassignment of all accounts.

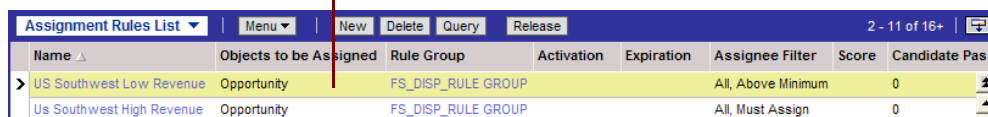
Example of Creating Sales Assignment Rules That Combine Criteria

This topic gives one example of how a sales organization can distribute its salespeople in the same geographic location based on revenue potential. You may use this feature differently, depending on your business model.

You can create territories that use the same geographic location but different revenue potentials. In this example, you may want to create two assignment rules: US SW High Revenue and US SW Low Revenue as shown in [Figure 24](#). Assignment Manager then assigns your salespeople, depending on both the geographic location and the revenue potential of the sales opportunity.

NOTE: For detailed instructions on performing each step in the following procedure, see [Chapter 6, "Assignment Rule Administration."](#)

Two assignment rules, one for each territory, created for opportunity objects.



Name ▲	Objects to be Assigned	Rule Group	Activation	Expiration	Assignee Filter	Score	Candidate Pass
> US Southwest Low Revenue	Opportunity	FS_DISP_RULE GROUP			All, Above Minimum	0	
Us Southwest High Revenue	Opportunity	FS_DISP_RULE GROUP			All, Must Assign	0	

Figure 24. Example of Creating Assignment Rules with Combined Criteria

To create sales assignment rules that combine criteria

1 Create assignment rules.

In this example, create two assignment rules, one for each territory, as shown in [Figure 24](#).

2 Determine the assignment criteria.

In this example, select Account State and Revenue as the criteria.

3 Define the criteria values.

In this example, use the states that make up each territory as the Account States criteria values. For the Revenue criteria values, select different assignment attributes for each assignment rule:

- For the US SW High Revenue assignment rule, type 100,001 in the Revenue Low assignment attribute.
- For the US SW Low Revenue assignment rule, type 100,000 in the Revenue High assignment attribute.

NOTE: The columns that appear in the Values list applet change dynamically depending on the criteria selected in the Criteria list applet.

The following figure shows an example of defining the US SW High Revenue assignment rule as described.

The screenshot displays two applets from the Siebel Assignment Manager. The top applet, titled 'Criteria', shows a table with columns: Rule Criterion, Inclusion, Required, Score, Minimum Score, and Description. It lists 'Revenue' and 'Account State' as criteria, both with 'Include' inclusion and 'Always' required status. The bottom applet, titled 'Values', shows a table with columns: Score, Revenue Low, Revenue High, and Currency. It displays values '100001' for Revenue Low and '100000' for Revenue High.

Rule Criterion	Inclusion	Required	Score	Minimum Score	Description
Revenue	Include	Always			
Account State	Include	Always			

Score	Revenue Low	Revenue High	Currency
	100001	100000	

4 Add the positions for this assignment rule.

In this example, you add a different sales position for each assignment rule:

- For the US SW High Revenue assignment rule, add Division Manager - West.
- For the US SW Low Revenue assignment rule, add Western Field Sales Representative.

The figure shown in [Step 3](#) shows an example of defining the US SW High Revenue assignment rule as described.

5 Release the assignment rules.

In the Assignment Rules view, click the Release button. You may then run Batch Assignment to assign objects affected by the assignment rules. For more information about running Batch Assignment, see ["Running Batch Assignment" on page 228](#).

After these assignment rules are released, Assignment Manager assigns salespeople based on the geographic location and revenue potential of the sales opportunity. For example, a sales opportunity in Nevada with a revenue potential of over \$100,000 is assigned to the western division manager. However, a sales opportunity in New Mexico with a revenue potential of \$100,000 or lower is assigned to a western field sales representative.

Example of Creating Assignment Rules for Service Organizations

This topic gives one example of how to create assignment rules for a service organization. You may use this feature differently, depending on your business model.

Use the following strategy to develop assignment rules for your service organization:

1 Determine the different assignment objects to be assigned.

Service organizations need to assign ownership of a wide variety of tasks. These tasks may include service requests, activities, and accounts. In addition, a product development organization may need to assign ownership of product defects to engineers. For instance, you may decide to assign only service requests and product defects, because the associated activities are manually assigned by owners of those objects.

2 Determine if multiple assignment objects are assigned using the same assignment rules.

Multiple assignment objects can be assigned using the same assignment rules. For example, if you are assigning accounts and service requests in the same manner, you can use the same assignment rules by associating those rules with multiple assignment objects.

3 For each assignment object, determine which of the objects is assigned using the same assignment rules.

The Compare to Object comparison method allows you to assign different groups of objects using different rules. Typically, complex service environments assign different groups of service requests using different rules, such as segmenting the service requests based on service request priority.

4 Determine the strategy for each group of objects to be assigned using the same assignment rules.

Use the skill criteria to minimize the number of assignment rules. One assignment rule can match different candidates to various objects based on the object characteristics and candidate skills. To determine optimal assignment, determine the criteria that you want to evaluate for each candidate to make sure that the candidate possesses the proper skills to handle the task. This is the primary type of criteria you use most frequently for implementing assignments in a customer service environment. These criteria are defined using the Compare Object to Person comparison method in the Assignment Criteria view.

5 Define workload rules.

Determine the various methods of calculating workloads for employees in your organization. Each workload rule is associated with a specific assignment object. For instance, you can define two workload rules to calculate:

- Open Service Requests for an employee
- Critical Service Requests submitted through Siebel eService

6 Define assignment rules, assignment criteria, assignment criteria values, and assignment workloads.

Using the strategy, rules, and criteria discussed previously, define the assignment rules and the corresponding detail using assignment administration views. In defining rules, criteria, values, and workloads, you can specify scores for each component. These scores are aggregated in determining the total score for each candidate of an assignment rule.

7 Define static and dynamic candidates.

For static candidates, use the assignment rule Employee, Position, or Organization Candidates view (or use the All People value in the Person Candidates Source field or the All Organizations value in the Organization Candidates Source field) to define eligible employees for assignment. For dynamic candidates, choose the appropriate value from the Person Candidates Source field.

You may further restrict or weight employees who have different skills using the Compare to Person assignment criteria.

8 Define employee skills.

After the assignment rules and the corresponding details have been defined, a customer service manager must update the employee skill information (such as product expertise, language skills, and geography). Assignment Manager uses these attributes when evaluating Compare to Person and Compare Object to Person assignment criteria.

9 Release assignment rules.

In the Assignment Rules view, click the Release button. You can then run batch assignment to assign objects affected by the assignment rules. For more information about running Batch Assignment, see ["Running Batch Assignment" on page 228](#).

Figure 25 shows a sample assignment rule for assigning support representatives to a service request.

Criteria	Employee Candidates	Position Candidates	Workload Distribution	Organization Candidates	Organization Workload Distribution
Menu	New	Delete	Query	Create From Templates	
1 - 2 of 2					
Rule Criterion	Inclusion	Required	Score	Minimum Score	Description
> Service Request Priority	Include	Always	10		
Product Wildcard	Include	Always	10		

Menu	New	Delete	Query
1 - 1 of 1			
Score	Service Request Priority		
>	2-High		

Figure 25. Assignment Rule for a Service Organization

The assignment rule shown in [Figure 25](#):

- Matches any service request:
 - For Pentium III 600 products
 - With a priority of High
- Uses two criteria with the following values:
 - **Product Wildcard.** A list of products that include the value CPU Pentium III 600
 - **Service Request Priority.** A list of service requests whose priority level is High

About Assignment Policies

Siebel applications include predefined assignment policies for each of the predefined assignment objects. You should use these predefined assignment policies, however, you can also create new assignment policies for dynamic assignment. If you plan to use the predefined assignment policies, you must first activate them.

A Workflow Monitor Agent detects when a user changes data related to objects, and each Workflow Monitor Agent can monitor one or more assignment policies. You can use a single Workflow Monitor Agent to monitor all assignment policies by placing all assignment policies in the same workflow group (the predefined assignment policies are defined this way). You can also place the assignment policies in separate workflow groups and dedicate Workflow Monitor Agents for each workflow group.

The Assignment Manager workflow policy actions you can use for an assignment policy are:

- **Assignment Request (In Process).** This action assigns rows in its own process and does not use the AsgnSrvr server component.

- **Assignment Request.** This action routes the requests to an AsgnSrvr process running in default mode.

If you want to use the rule group feature in dynamic assignment, create a workflow process that submits requests to the Assignment Server (AsgnSrvr) server component using a business service.

For more information about Workflow Monitor Agent, see [“About Running Dynamic Assignment” on page 220](#) and *Siebel Business Process Designer Administration Guide*.

Process of Defining Assignment Policies for Dynamic Assignment

To create new assignment policies for dynamic assignment, perform the following tasks:

- 1 [“Creating Assignment Policies for Dynamic Assignment” on page 144](#)
- 2 [“Activating Assignment Policies to Enable Dynamic Assignment” on page 146](#)

Creating Assignment Policies for Dynamic Assignment

Assignment policies are specialized workflow policies used for dynamic assignment. Siebel applications include predefined assignment policies for each of the predefined assignment objects. You should use these predefined policies for setting up dynamic assignment, however, you can create new assignment policies.

NOTE: If you create a new assignment object for dynamic assignment, you must also create a new assignment policy for that object.

The following tasks are one step in [“Process of Defining Assignment Rules” on page 86](#).

Use the following procedures to create new assignment policies for dynamic assignment.

To create an assignment policy for dynamic assignment

- 1 Navigate to the Administration - Assignment screen > Assignment Policies view.
- 2 In the Assignment Policies list, click New.
- 3 In the new assignment policy record, enter the relevant information.

Table 32 shows the predefined assignment policy fields.

Table 32. Assignment Policy Fields

Field	Description
Name	The name of the assignment policy.
Workflow Object	The assignment object to which the assignment policy belongs.
Policy Group	<p>The workflow group for the assignment policy. The default for the predefined assignment policies is Assignment Group. Any new policies you create for use with Assignment Manager should use the Assignment Group policy group.</p> <p>It is recommended that you do not change the policy group for assignment policies. However, if you find a need to do so, you should regenerate triggers after making the change. For more information about regenerating triggers, see <i>Siebel Business Process Designer Administration Guide</i>.</p> <p>CAUTION: Assign a policy group to only one Workflow Monitor Agent. Multiple Workflow Monitor Agents running the same policy group cause unpredictable completion times and possible multiple actions created for one trigger. For more information on Workflow Monitor Agents, see <i>Siebel Business Process Designer Administration Guide</i>.</p>
Activation	The start date of the assignment policy.
Expiration	The end date of the assignment policy.

NOTE: By default, every assignment policy has an action. Use the following procedure only if you accidentally remove an action or create a new assignment policy. In addition, you should not associate customized workflow actions with assignment policies. For more information about workflow actions, see *Siebel Business Process Designer Administration Guide*.

To create an action for an assignment policy for dynamic assignment

- 1 With the newly created assignment policy still selected, in the Actions list, click New.
- 2 In the Assignment Action field, click the drop-down arrow and select Assignment Request (In Process).

NOTE: It is recommended that you use the Assignment Request (In Process) workflow policy action because the Assignment Request action might cause performance problems. If you do choose to use the Assignment Request action, make sure the AsgnSrvr process is available and online.
- 3 In the Assignment Mode field, click the down-arrow button and select MatchAssign.
- 4 (Optional) Add a sequence number, if so desired.

Activating Assignment Policies to Enable Dynamic Assignment

To enable dynamic assignment for an assignment object, activate the assignment policy for that object.

This task is a step in [“Process of Defining Assignment Rules” on page 86](#).

To activate an assignment policy to enable dynamic assignment

- 1 Navigate to the Administration - Assignment screen > Assignment Policies view.
- 2 In the Assignment Policies list, select the assignment policy you want to activate.
- 3 In the Expiration field, click to either null the existing value or set the value to a later date.

Workflow components process only active assignment policies that have not expired.

NOTE: After activating an assignment policy, you must generate triggers again for the changes to take effect.

Deactivating Assignment Policies to Disable Dynamic Assignment

You may find at some point that you no longer need certain assignment rules. When this occurs, you can deactivate those assignment rules. To disable dynamic assignment for an assignment object, deactivate the assignment policy for that object.

NOTE: Assignment Manager uses the database time to determine whether a rule is active or not.

To deactivate an assignment policy to disable dynamic assignment

- 1 Navigate to the Administration - Assignment screen > Assignment Policies view.
- 2 In the Assignment Policies list, select the assignment policy you want to deactivate.
- 3 In the Expiration field, set the value to a date that has already passed.

Workflow components process only active assignment policies that have not expired; therefore, you can deactivate an assignment policy by expiring it.

NOTE: After deactivating an assignment policy, you must generate triggers again for the changes to take effect.

How Assignment Manager Determines the Sequence in Which Rules Are Evaluated

When you assign sequence numbers to assignment rules, Assignment Manager evaluates those rules in ascending order of the sequence numbers. Assignment rule sequencing provides a means for you to prioritize the rules that apply to any given assignment object by order of importance, thereby limiting the number of rules that Assignment Manager processes for assignment. For example, you might want to run Assignment Manager only for your higher priority rules first, and then if those rules pass, stop processing additional rules because candidates are already successfully matched.

If none of the rules have a sequence number, or if all of the rules have the same sequence number, then Assignment Manager processes all the rules. However, if some of the rules in the group have sequence numbers and other rules do not, the rules with no specified sequence number are considered to have a sequence number of 0 and are evaluated first. Therefore, it is recommended that you give every rule a sequence number if you use sequencing.

After processing every assignment rule within a sequence number, Assignment Manager checks to see if each rule was successfully assigned. When a rule results in successful assignment, Assignment Manager processes the rest of the rules having the same sequence number and then stops processing. Subsequently, the rules with higher sequence numbers do not get processed.

As shown in [Table 33](#), Assignment Manager identifies the beginning and end of a segment within a sequence by the change in sequence number. For example, Assignment Manager first evaluates rules with a sequence number of 1, then evaluates rules with a sequence number of 2, and so on. It does not matter, however, how rules within a segment are evaluated.

At run time, Assignment Manager evaluates the rules in the first segment (Segment 1) first, and then stops to find out whether an assignment has been made. If it has assigned, Assignment Manager does not continue. If it has not assigned, then Assignment Manager continues to the next sequence (Segment 2).

Table 33. Example of a Rule Sequence

Segment	Assignment Rule	Sequence #
1	Assign Sales Rep West	1
	Assign Sales Rep North	1
	Assign Sales Rep East	1
2	Assign Sales Rep West	2
	Assign Sales Rep North	2
3	Assign Sales Rep West	3
	Assign Sales Rep North	3
	Assign Sales Rep East	3

If Assignment Manager is running in default mode and there are multiple rule groups defined, then Assignment Manager evaluates the rules as if they are part of one big group.

For example, if there are two rule groups loaded by the same Assignment Manager server with the sequences shown in [Table 34](#).

Table 34. Example Group Rules A and B

Rule Group A	Rule Group B
1	1
1	1
1	2
2	2
2	3
3	3
3	3

Then, this is the order Assignment Manager evaluates those rules:

A1
A1
A1
B1
B1
A2
A2
B2
B2
A3
A3
B3
B3
B3

Sequence numbers can be assigned to assignment rules when creating new assignment rules or can be added to assignment rules at a later time.

Related Topic

[“Adding a Sequence Number to Assignment Rules” on page 149](#)

Adding a Sequence Number to Assignment Rules

This topic explains how to add sequence numbers to assignment rules.

To add a sequence number to an assignment rule

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 In the Assignment Rules List list, select the assignment rule for which you want to define rule sequencing.
- 3 In the Sequence field, enter a sequence number.

Related Topic

["How Assignment Manager Determines the Sequence in Which Rules Are Evaluated" on page 147](#)

How Assignment Manager Uses Server Key Maps to Load Rules to a Particular Siebel Server

For each Siebel Server, you use server key maps to define multiple rule groups that you want that server to load and process. This allows you to use different servers for different business purposes. After you define server key maps in the assignment administration views, each assignment server (AsgnSrvr) process looks for the server name in the key mappings during startup and only loads rules from those rule groups. The AsgnSrvr also registers the rule group row IDs as keys. When you submit a request to a server, you must submit the AsgnKey parameter as a row ID of one of the rule group row IDs assigned to that server.

The server key mapping process uses an internal key-based routing mechanism to route requests to a particular server, however, this is done in the background and is not apparent. You can specify multiple servers to load the same rule group. In this case, the Siebel Server Request Broker component routes requests, based on load balancing metrics, to one of the assignment servers that loaded that rule group.

You can mark certain rule groups for use only with server key maps. These rule groups are not loaded by any Assignment Manager component operating in default mode.

The server key mapping feature is supported only in certain environments when using specific functionality as follows:

- **Script or workflow process calling a business service.** You can invoke Assignment Manager through a business service from within a workflow process, or from a script, using one of the following predefined business services:
 - **Server Requests business service.** Use this generic business service to submit requests to a particular component using the server request broker. With this business service, you can use the Assignment Manager server mapping feature. If you are using this business service to invoke rules based on rule groups, pass the AsgnKey parameter as the input parameter, and pass the ReqKey parameter as a request parameter (in the child property set for the component). Then, set both the AsgnKey and ReqKey parameters to the rule group Id of the relevant rule group.
 - **Synchronous Assignment Manager Requests business service.** This business service has one method available: Assign. This method sends a request to the Assignment Manager server component using the AsgnObjName and ObjRowId parameters. All active rules in the database are processed.

Use this business service:

- To submit requests to assign a single object row
- With the Default Group (when no server key maps are defined)

For more information about business services, see *Siebel Business Process Designer Administration Guide*. For more information about scripting, see *Object Types Reference*.

- **Interactive assignment.** In the default configuration, interactive assignment runs in default mode. However, interactive assignment can be customized to use the server key mappings feature using the SetAsgnKey InvokeMethod on the business component base class CSSBCBase.

Using a script, a workflow process, or a business service, you call the InvokeMethod to pass the row ID of one of the rule groups as the parameter. The interactive assignment uses this parameter as the AsgnKey and ReqKey parameters when submitting requests to the AsgnSrvr component.

You call InvokeMethod only once for one session, but subsequent requests in the same session reuse the rule group row ID. However, when the session is logged out or the server is restarted, you must call InvokeMethod again to set the AsgnKey parameter. Otherwise, Assignment Manager reverts to running in default mode.

NOTE: When operating Assignment Manager in default mode, rules from rule groups that have the Key Based flag checked are not loaded.

- Batch assignment and dynamic assignment do not read server key mappings

NOTE: You cannot run Default Mode and Server Key Mappings mode on the same assignment server because the two tasks are mutually exclusive functionalities. For example, you cannot use the same assignment server to run resource assignment (used for professional service automation and does not use rule groups) and credit assignment (used for sales and does use rule groups). You should run assignment for each on different servers.

TIP: Siebel Incentive Compensation and Siebel Marketing are specifically designed to use the server key maps and rule group features. For more information about each of these Siebel products, see *Siebel Marketing Installation and Administration Guide*.

Related Topics

[“Defining Server Key Maps for Assignment Rule Groups” on page 151](#)

Defining Server Key Maps for Assignment Rule Groups

This topic explains how to define server key maps for assignment rule groups. You can at anytime change a server key mapping to another rule group or another Siebel Server.

To define a server key map

- 1 Navigate to the Administration - Assignment screen > Server Key Mappings view.
- 2 In the Assignment Server Key Mappings list, click New.
- 3 In the new record, click in the available fields to enter relevant information.

[Table 35](#) shows the predefined fields.

Table 35. Server Key Map Fields

Field	Description
Assignment Rule Group	The assignment rule group that you wish to associate with a particular Siebel Server running Assignment Manager.
Siebel Server Name	The name of the Siebel Server that is running that instance of Assignment Manager. Note that you should enter the logical Siebel Server name, not the machine name. For more information about Siebel Servers, see <i>Siebel System Administration Guide</i> .

If you want to exclusively mark certain rule groups for use with server key maps, you can set the Key Based flag to true for these rule groups (using the Key Based list column on the assignment Rule Groups List view). These rule groups are not loaded by any Assignment Manager component operating in default mode. For more information on rule group usage, see [“Creating Assignment Rule Groups” on page 88](#).

Related Topics

[“How Assignment Manager Uses Server Key Maps to Load Rules to a Particular Siebel Server” on page 149](#)

Generating Assignment Reports

Assignment rules are associated with many different elements, such as criteria, employees, positions, organization, workload rules, organization workload, activation date, expiration date, and so on. Because those elements are organized in different screens in the application, it is rather cumbersome to view all information linked to an assignment rule. Assignment reports make it easier to inspect assignment rule details.

NOTE: Assignment reports and Reporting Mode are mutually exclusive features.

Assignment Manager provides the ability to output and print the following reports:

- Assignment Manager Detail
- Territory Assignment Detail

NOTE: To generate reports, you must be connected to the Siebel Application Server and the Report Server must be running. In addition, you need to configure the Siebel Server before generating reports. For more information about working with reports, see *Siebel Reports Administration Guide*.

To generate an assignment report

- 1** On the toolbar, click the Reports icon.
- 2** From the popup list, select one of the following:
 - Assignment Manager Detail
 - Territory Assignment Detail
- 3** (Optional) Print the report.

Preparing to Release Assignment Rules

Table 36 lists the administrative tasks for preparing for and releasing assignment rules. Perform these tasks in the order provided, if they are applicable to your deployment.

Table 36. Tasks for Releasing Assignment Rules

Task	UI	Tools
1 (Optional) "Defining Server Key Maps for Assignment Rule Groups" on page 151	X	
2 (Optional) Set up Assignment Manager for availability-based assignment <ul style="list-style-type: none"> a In Siebel Tools, complete several tasks. See "Process of Configuring Assignment Objects for Availability-Based Assignment" on page 280. b In the UI, check the Check Employee Calendar field for each assignment rule you want to assign by availability. 	X	X
3 (Optional) Define load splitter configuration See "Setting Up Load Splitter Configuration" on page 293 .	X	
4 "Releasing Assignment Rules" on page 153	X	

Related Topic

["Releasing Assignment Rules" on page 153](#)

Releasing Assignment Rules

After you define your assignment rules or make any changes to the rules, criteria, values, or candidates (employee, position, or organization) for the assignment rules, you must release them to instruct Assignment Manager to use these rules. Releasing assignment rules also updates the rulecache.dat file. For more information about the rulecache.dat file, see ["About Assignment Manager Rule Cache Files" on page 237](#).

NOTE: The following procedure releases all assignment rules simultaneously. Do not release assignment rules while associated server tasks are running.

After you have defined your assignment rules, you need to release the rules and possibly perform a few additional administrative tasks.

To release assignment rules

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 In the Assignment Rules list, click the Release button.

A confirmation message appears indicating the rules have been released.

NOTE: You can also update the rule cache by deleting the rule cache files and restarting the Siebel Server. Search for **rulecache*.dat* in the *siebel_server\bin* folder.

TIP: If you want to verify the new or modified rules have been applied, check the timestamp of the *rulecache.dat* file or the *AsgnSrvr* log file.

When a new Siebel Server is installed—for instance, as part of an upgrade—pending assignment rules are released (the rule cache is recreated) on the first startup. It is recommended that you release assignment rules after installation so that servers in the deployment recreate the same rule cache.

Related Topic

[“Preparing to Release Assignment Rules” on page 153](#)

About Migrating Assignment Rules

You can use Siebel Enterprise Integration Manager (EIM) or Application Deployment Manager (ADM) to migrate assignment rules from one system to another, such as from a test environment to a production environment. If you add or change assignment objects, assignment attributes, or assignment criteria, you must also migrate the repository to the server production database.

When migrating, Assignment Manager automatically updates existing assignment rules as follows:

- If All People is selected in the Person Candidates Source field on the assignment rule, then the new value in the *PERSON_CAND_TYPE* column is All People.
- If All People is not selected in the Person Candidates Source field on the assignment rule, then the new value in the *PERSON_CAND_TYPE* column is From Rule.
- If All Organizations is selected in the Organization Candidates Source field on the assignment rule, then the new value in the *BU_CAND_TYPE* column is All Organizations.
- If All Organizations is not selected in the Organization Candidates Source field on the assignment rule, then the new value in the *BU_CAND_TYPE* column is From Rule.

For more information about migration, see *Siebel Enterprise Integration Manager Administration Guide* and *Going Live with Siebel Business Applications*.

7

Working with Dynamic Candidates

This chapter describes how to configure and administer dynamic candidate functionality in Siebel Assignment Manager. It includes the following topics:

- [“About Dynamic Candidates” on page 155](#)
- [“About Dynamic Candidate Types” on page 157](#)
- [“Examples of Dynamic Candidate Assignment” on page 159](#)
- [“Example of Assigning Dynamic Candidates to the Same Object” on page 162](#)
- [“Process of Defining Dynamic Candidates” on page 163](#)
- [“Configuring Assignment Objects for Dynamic Candidates” on page 164](#)
- [“Configuring Join Specifications for Dynamic Candidate Object Definitions” on page 166](#)
- [“Mapping Columns From Source Tables to Team-Based Criteria” on page 168](#)
- [“Copying Dynamic Candidate Attribute Columns to the Team Table” on page 169](#)
- [“Adding Dynamic Candidate Teams to Assignment Rules” on page 170](#)

About Dynamic Candidates

Dynamic candidates are potential assignees for objects and behave in the same manner as static candidates. When processing rules, Assignment Manager determines candidates based on the value in the Person Candidates Source or Organization Candidates Source field on the assignment rule.

For example, if you associate an activity with an asset, and that asset has a team of employees, you can configure Assignment Manager to automatically consider this team of employees for the activity and have the same employees available as potential candidates for other activities. The employees are connected to the activity through the asset and are known as *dynamic candidates*. The team of employees associated with the asset is known as the *candidate table* because this is the database table where the candidates are stored. In this example, the only potential candidates are the employees that are associated with the asset that is associated with the activity.

NOTE: Prior to version 7.8, Candidate Table was known as Team Table. The two terms are synonymous, that is, the table that contains the dynamic candidates. For example, the S_ASSET_EMP table is the candidate table (team table) for the dynamic candidate Activity Asset Team.

By default, the Activity assignment object is preconfigured for two dynamic candidate teams—Activity: Account Team and Activity: Asset Team. For the Activity Asset Team, Assignment Manager dynamically determines the potential activity assignees (candidates) from the dynamic candidate configuration, that is, it joins the activity to the asset and retrieves employees associated with that activity's asset. The potential candidates are the group of employees for that particular activity record. However, the potential candidates can change from activity to activity.

For example, if you have two activities with different assets and employees as shown in [Table 37](#), the resulting potential candidates for assignment are a union of the employees for each activity. In this example, the potential candidates are:

- Activity 1: Employee 1, 2, 3, and 4
- Activity 2: Employee 1, 2, and 5

Table 37. Example of Two Activities with Different Assets and Employees

Activity/Asset	Employee 1	Employee 2	Employee 3	Employee 4	Employee 5
Activity 1 with Asset 1	X	X			
Activity 1 with Asset 2	X		X	X	
Activity 2 with Asset 1	X	X			
Activity 2 with Asset 3					X

Using Siebel Tools, you can configure dynamic candidates for other assignment objects. For more information about configuring assignment objects for dynamic candidates, see ["Process of Defining Dynamic Candidates" on page 163](#).

About Dynamic Candidate Types

Depending on how an assignment object is configured, the object can be assigned as either single owner or multiple owner. Dynamic candidates are also assigned as single owner or multiple owner, as shown in [Figure 26](#).

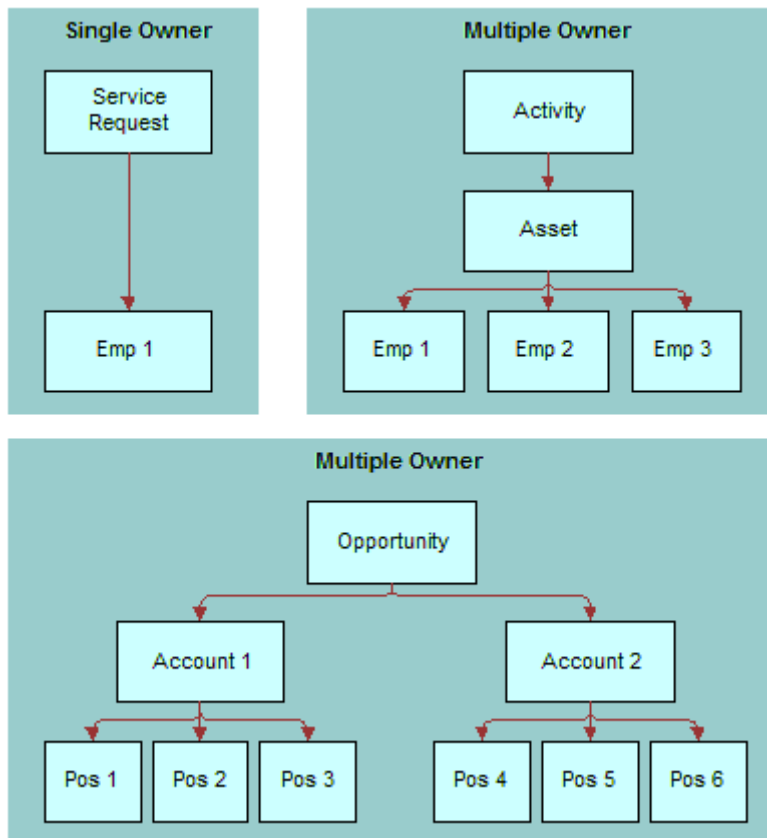


Figure 26. Example of Single- Versus Multiple-Owner Dynamic Candidate Types

[Figure 26](#) shows the following relationships:

- Candidates are of the single-owner type when you can associate only one candidate (employee, position, or organization) with an assignment object.

In this example, one employee is associated with a service request, as shown in the top left of [Figure 26](#). For a more detailed example, see the first example in ["Examples of Dynamic Candidate Assignment"](#) on [page 159](#).

- Candidates are of the multiple-owner type when you can associate many candidates (employees, positions, or organizations) with an assignment object.

In this example, multiple employees are associated with an activity, as shown in the top right of [Figure 26](#), and multiple positions are associated to an opportunity, as shown in the bottom half of [Figure 26](#).

The main difference between single- versus multiple-owner is that in single-owner situations, Assignment Manager can assign only one candidate, whereas in multiple-owner situations, Assignment Manager can assign many candidates. For information about which assignment objects are restricted to a single assignee and those objects that are capable of incorporating a team of assignees, see [Table 5 on page 29](#).

Using Siebel Tools, you configure dynamic candidates by modifying Dynamic Candidate object properties. For more information about configuring dynamic candidates, see ["Process of Defining Dynamic Candidates" on page 163](#).

In the UI, you define team-based criteria for assignment rules that have dynamic candidates as you would any other criteria, that is, you apply a comparison method and define the criteria values. Only the Compare to Person or the Compare to Organization comparison methods are supported for team-based criteria.

However, an assignment rule defined for dynamic candidates does not necessarily need team-based criteria. An assignment rule can have any of the following:

- Static candidates and regular criteria
- Dynamic candidates and regular criteria
- Dynamic candidates and team-based criteria
- Dynamic candidates and a combination of regular and team-based criteria

Scenario for Using Dynamic Candidates with Team-Based Objects

This scenario provides an example of assigning only Sales Team positions to an opportunity related to an account. You may use this feature differently, depending on your business model.

A large corporation has just identified a new opportunity for an existing account. The senior VP wants to make sure that only members of a specific sales team are assigned to this opportunity. The sales team for this account opportunity has the following positions:

Position Name	Role	Primary
VP, Global Services	Executive Sponsor	
Sales East - Manager	Sales Team	
Sales Rep 43	Sales Team	X

Examples of Dynamic Candidate Assignment

This topic gives two examples of how you might use dynamic candidate assignment. You may use this feature differently, depending on your business model.

Example 1: Dynamic Candidate Assignment for a Service Organization

Generally, in high-value machinery or asset-based service organizations, each asset is typically associated one or more field service engineers (FSEs). These preassigned FSEs are often the customer's first contact for service requests, onsite visits for preventive maintenance, break-fix type of activities, and so on. In addition, these FSEs are usually ranked as Primary, Secondary, or Tertiary based on their seniority, skills, and so on.

This scenario provides an example of a process performed by field service engineers (FSEs) in an x-ray manufacturing company. Your company may follow a different process according to its business requirements.

During a typical day in a field service organization, a group of FSEs responds to customer phone calls and prepares for onsite visits for preventative maintenance and break-fix type of activities. In this scenario, a hospital calls for preventative maintenance for their x-ray machine as per warranty conditions.

To handle the incoming request, the service center agent creates a service request, and then creates a preventative maintenance activity for that service request. Next, the agent assigns that activity (by clicking the Assign button in one of the service request views), and the results window appears with the potential assignees for the asset team. The agent can then choose the appropriate candidate to complete the assignment process. Typically, FSEs are ranked as primary, secondary, or tertiary based on their seniority, skills, and so on, and the agent bases his decision on this ranking.

Example 2: Dynamic Candidate Assignment Using Skills and Scoring

Table 38 provides sample data for a another example. The numbers at the top of the table correspond to the numbered text following the table. Because the resulting list of potential assignees is dependent on the assignee filter and other criteria stipulated in the assignment rule, a few resultant examples follow the table.

Table 38. Sample Data for Dynamic Candidates Assigned to an Activity

1		2		3	4
Asset Team Member	Type	Account Team Member	Type	Service Region	Skills
Employee 1	Primary	Employee 3	Primary	Employee 1	ENU
Employee 2	Secondary	Employee 6	Secondary	Employee 2	FRA
Employee 3	Tertiary	Employee 2	Tertiary	Employee 3	
Employee 4	Tech Support	Employee 4	Tech Support	Employee 7	
Employee 5	Never Send	Employee 7	Never Send	Employee 8	

- The asset has an asset team and each employee in that team has a type. All the employees in this team are eligible candidates for the activity. The employees are scored based on their type and the following assignment rules:

- If Organization = Americas, primary score = 100.
- If Organization = Europe, primary score = 50.

Based on the rules and their type, assume the asset team scores are:

Employee 1 = 100
 Employee 2 = 75
 Employee 3 = 50
 Employee 4 = 25
 Employee 5 = 0

- The activity has an account team and each employee in that team has a type. All the employees in this team are eligible candidates for this activity. The employees are scored based on their type.

The account team scores are:

Employee 3 = 80
 Employee 6 = 60
 Employee 2 = 30
 Employee 4 = 10
 Employee 7 = 0

- 3 The activity has a service region, and the service region has employees. All employees are eligible candidates for skill matching. You match activity skills and employee skills, but you can specify other matching criteria as well.

Employee 1= 100
Employee 2= 150
Employee 3= 75
Employee 7= 200
Employee 8 = 25

- 4 This step determines the final list of potential candidates for this activity. The following are two possible results:

- Given the AddScores server component parameter is set to *True*, the list is the *union* of the employees from all three previous lists, and employee scores are added if they exist in more than one list.

The final list of candidates for this activity with their corresponding scores is:

Employee 1=200 (100 + 100)
Employee 2=255 (75 + 30 + 150)
Employee 3=205 (50 + 80 + 75)
Employee 4=35 (25 + 10)
Employee 5=0
Employee 6=60
Employee 7=200 (0 + 200)
Employee 8=25

- Given the AddScores server component parameter is set to *False*, the scores are not added, so the highest-scoring employee (Employee 7) is selected.

The final list of candidates for this activity with their corresponding scores is:

Employee 1 = 100
Employee 2 = 150
Employee 3 = 80
Employee 3 = 75
Employee 4 = 25
Employee 5 = 0
Employee 6 = 60
Employee 7 = 200
Employee 8 = 25

Additional possible final results for this example include:

- If the assignment rules uses a One, Best Fit assignee filter, only the highest scoring employee is assigned, so Employee 2 is the only eligible candidate for assignment.
- If the assignment rule uses an All Above Minimum assignee filter and the minimum score for the rule is 200, then Employee 1, 2, and 3 are potential candidates for the assignment.

Example of Assigning Dynamic Candidates to the Same Object

This topic gives one example of configuring Assignment Manager to assign a manager of an existing team to an account, contact, or opportunity belonging to one of their subordinates. You may use this feature differently, depending on your business model.

To assign a manager to an account, contact, or opportunity record belonging to one of their subordinates

- 1** Start Siebel Tools.
- 2** Create a new symbolic string, and then apply this definition to the Display Name property for the Account Assignment Object.
 - a** In the Object Explorer, select Symbolic String.
 - b** Choose Edit > New Record to create a new symbolic string record.For more information about symbolic strings, see *Using Siebel Tools*.
- 3** Create a new Dynamic Candidate record.
 - a** In the Object Explorer, expand Workflow Policy Object, then expand Assignment Object, and then select Dynamic Candidate.
 - b** Choose Tools > Lock Project (or Alt+L) to lock the project.
 - c** In the Dynamic Candidates window, choose Edit > New Record to add a new record with the following property settings:
 - Display Name = Reporting Candidate
 - Team Type = Position
 - d** In the Object Explorer, expand Dynamic Candidate Component, and in the Dynamic Candidate Component list, choose Edit > New Record to add a new record with the following property settings:
 - Name= Account Position
 - Primary = Y
 - Source Table Name = S_ACCNT_POSTN
 - Source Column Name = OU_EXT_ID
- 4** Create another Dynamic Candidate record with the following property settings:
 - Name = Reporting Position
 - Candidate Table = TRUE
 - Source Table Name = S_PARTY_RPT_REL
 - Source Column Name = PARTY_ID
 - Target Component Name = Account Position
 - Target Column Name = POSITION_ID

- Candidate Id = SUB_PARTY_ID
- Set the Display Name - String Reference property to the symbolic string you created in [Step 2 on page 162](#).

NOTE: After configuration, the display name for the team appears in the Person Candidate Source or the Organization Candidate Source list of value (LOV) fields on the assignment rule (Administration - Assignment > Assignment Rule List).

- 5 Check in the configuration to the server database.
- 6 Navigate to the Administration - Assignment screen > Assignment Rule List view and select the assignment rule for which you want to apply this configuration.
- 7 Set the Person Candidates Source field to the dynamic candidate display name that you created [Step 3 on page 162](#).
- 8 Release the rules.

NOTE: For testing purpose, it is recommended that you run an AsgnBatch server component job to verify the assignees.

Process of Defining Dynamic Candidates

If you plan to create new dynamic candidate teams, you must first modify the Dynamic Candidate objects before the candidates are available for adding to your assignment rules. The process is similar to Workflow Policy Component and Workflow Policy Component Column configuration. Using Siebel Tools, you modify the following object types:

- Dynamic Candidate
- Dynamic Candidate Component
- Dynamic Candidate Component Col

Dynamic candidate configuration is a logical definition of the underlying team table, candidate column, and related joins to the assignment object. The Dynamic Candidate properties define the dynamic candidate name, team type, and so on. The Dynamic Candidate Component properties define the table and column names used in the join, and the Dynamic Candidate Component Col properties define columns used in the team-based criteria.

The process for defining dynamic candidate is a multi-step process and requires the following tasks. These tasks may vary according to your organization's business practices.

NOTE: If you plan to use only the predefined dynamic candidate teams—Activity Account Team or Activity Asset Team—for your assignment rules or you have already created other dynamic candidate teams, you can skip the first three configuration steps and proceed directly to [Step 5](#).

- 1 "Configuring Assignment Objects for Dynamic Candidates" on page 164
- 2 "Configuring Join Specifications for Dynamic Candidate Object Definitions" on page 166
- 3 "Mapping Columns From Source Tables to Team-Based Criteria" on page 168
- 4 (Optional) "Copying Dynamic Candidate Attribute Columns to the Team Table" on page 169
- 5 "Adding Dynamic Candidate Teams to Assignment Rules" on page 170

Configuring Assignment Objects for Dynamic Candidates

Dynamic candidates are the potential assignable candidates obtained from related business entities when assigning an object. The Dynamic Candidate Component object properties define the dynamic candidate name, team type, and so on.

Using Siebel Tools, you must first modify the properties of the Dynamic Candidate object type.

This task is a step in [“Process of Defining Dynamic Candidates” on page 163](#).

Use the following procedure to configure the Dynamic Candidate object type for dynamic candidates.

To configure an assignment object for dynamic candidates

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and in the Workflow Policy Objects window, select the object you want to configure.
TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it in the Development Tools Options dialog box (View > Options > Object Explorer).
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, expand Assignment Object, and then select Dynamic Candidate.
- 5 In the Dynamic Candidates window, choose Edit > New Record.
- 6 In the new record, enter values for the relevant information.

Table 39 provides descriptions of some of the Dynamic Candidate object properties.

Table 39. Dynamic Candidate Object Properties

Property	Description
Name	The name of the dynamic candidate team. For example, Activity: Asset Team.
Display Name	An alternative name to display to the Siebel Client. This property is optional. If no display name is provided, then the value in the Name field is used. By default, this is set to NULL.
Display Name - String Reference	The display name for this team appearing in the Person Candidate Source or the Organization Candidate Source list of value (LOV) fields on the assignment rule applet. NOTE: You must first create a string reference in the Symbolic String object, and then set the Display Name - String Reference to the symbolic string you created.
Display Name - String Override	This property allows users to enter a display name without entering a symbolic string. The value in this property is what is displayed in the UI, and it overrides any other display name entries. However, because this value has no symbolic string, it is not translatable. For this reason, use caution when assigning an override.
Inactive	Indicates if the object is active or inactive. By default, this value is set to FALSE.
Team Table Attribute Id Column	The name of the column in the team table that contains the attribute ID, that joins to the Attribute Id column.
Team Table Candidate Id Column	The name of the column in the team table that contains the candidate ID, the foreign key to the candidate base table.
Team Type	Indicates whether or not the candidate team is employee-, organization-, or position-based.

NOTE: As of version 7.8, the following Dynamic Candidate object type properties are no longer used: Attribute Id Column, Attribute Table, Object Id Column, Score Column, Team Table, Team Table Attribute Id Column, and Team Table Candidate Id Column. However, these properties remain for upgrade purposes.

Configuring Join Specifications for Dynamic Candidate Object Definitions

As of version 7.8, Assignment Manager supports complex joins to relate base table with other related entities. The Dynamic Candidate Component object properties define the table and column names used when performing a join from the assignment object primary table to the candidate table to retrieve the dynamic candidates.

Using the dynamic candidate feature, you can configure Assignment Manager to identify related business entities and retrieve potential candidates from these entities. For example, you use the dynamic candidate feature when:

- Assigning a position, such as Executive Sponsor, from the account team to a related child account
- Assigning account sales representative positions to a child account's opportunity
- Assigning an activity and you want to evaluate only employees who belong to that activity's service region, and if necessary, add more criteria for product skills, and so on.

Because potential assignees for dynamic candidates can be derived from various related business entities, you must configure the relationship between these entities.

This task is a step in ["Process of Defining Dynamic Candidates" on page 163](#).

Use the following procedure to configure join specifications for dynamic candidates.

NOTE: Before you can successfully use join specifications for creating dynamic candidate definitions, you need to have a thorough understanding of database administration and how to use Siebel Tools. You should also familiarize yourself with the basics of the underlying Siebel application architecture. For more information on these topics, see *Using Siebel Tools* and *Deployment Planning Guide*.

To configure join specifications for dynamic candidates

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and in the Workflow Policy Objects window, select the object you want to configure.

TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it in the Development Tools Options dialog box (View > Options > Object Explorer).
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).

The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, expand Assignment Object, and then expand Dynamic Candidate.
- 5 Expand the Dynamic Candidate object further, and then select Dynamic Candidate Component.
- 6 In the Dynamic Candidate Component window, choose Edit > New Record.
- 7 In the new record, enter values for the relevant information.

Table 40 provides descriptions of some of the Dynamic Candidate Component properties.

Table 40. Dynamic Candidate Component Object Properties

Property	Description
Additional Join Spec	Use this property to specify an additional join.
Candidate Id Column	The column in the Team table containing the Id of the candidate (employee, position, or organization).
Candidate Table	The name of the source table at the last level of a join. NOTE: Before version 7.8, this property was called Team Table.
Inactive	Indicates if the component is active or inactive.
Name	The name of the dynamic candidate component.
Primary	When checked, indicates whether the dynamic candidate component is the primary for the dynamic candidate selected for the assignment object.
Score Column	The column in the Team table containing scores of the candidates.
Source Column Name	The column in the source table that relates to another dynamic candidate component.
Source Table Name	The table that the dynamic candidate component is based on.
Target Column Name	The column in the source table that relates to another dynamic candidate component.
Target Component Name	The target dynamic candidate component that is related to this dynamic candidate component.

NOTE: Each dynamic candidate specified can have only one primary dynamic candidate component.

Mapping Columns From Source Tables to Team-Based Criteria

Using Siebel Tools, you create records in the Dynamic Candidate Component Col object to map columns in a source table, at a particular level in the join, to a team-based assignment criterion. You do so by specifying the attribute column name and the correct assignment criteria attribute name.

This task is a step in [“Process of Defining Dynamic Candidates” on page 163](#).

Use the following procedure to map columns from source tables to team-based criteria.

To map columns from a source table to team-based criterion

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and in the Workflow Policy Objects window, select the object you want to configure.
TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it in the Development Tools Options dialog box (View > Options > Object Explorer).
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, expand Assignment Object, and then expand Dynamic Candidate.
- 5 Expand the Dynamic Candidate object further, and navigate to Dynamic Candidate Component Col.
- 6 In the Dynamic Candidates Component Columns window, choose Edit > New Record.
- 7 In the new record, enter values for the relevant information.

[Table 41](#) provides descriptions of some of the Dynamic Candidate Component Col object properties.

Table 41. Dynamic Candidate Component Col Object Properties

Property	Description
Assignment Criteria Attribute Name	The name of the assignment criteria attribute.
Assignment Criteria Name	The name of the assignment criteria. NOTE: This property is automatically populated when you select the assignment criteria attribute name.
Inactive	Indicates if the component is active or inactive.
Name	The name of the dynamic candidate component column.
Parent Name	The name of the object definition's parent. This is a system-supplied value.

Copying Dynamic Candidate Attribute Columns to the Team Table

Assignment Manager supports copying of dynamic candidate attribute columns and stamping of attributes on each candidate obtained through a join on the team table by copying dynamic candidate attribute values at any level in an n-level join to the results team table.

You can create multiple entries to create joins. One of those entries you flag as the candidate table. The source table for that record is the team table for that dynamic candidate.

This task is an optional step in [“Process of Defining Dynamic Candidates” on page 163](#).

Use the following procedure to specify the column name in the results table where you want the attribute values stamped.

NOTE: You can write results to both reporting or operational tables.

To copy dynamic candidate attribute columns to the team table

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and in the Workflow Policy Objects window, select the object you want to configure.
TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it in the Development Tools Options dialog box (View > Options > Object Explorer).
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, expand Assignment Object, and then expand Dynamic Candidate.
- 5 Expand the Dynamic Candidate object further, and navigate to Dynamic Candidate Component Col.
- 6 In the Dynamic Candidates Component Columns window, choose Edit > New Record.
- 7 In the new record, enter values for the relevant information.

[Table 42](#) provides descriptions of some of the Dynamic Candidate Component Col object properties.

Table 42. Dynamic Candidate Component Col Object Properties Used for Stamping Attributes

Property	Description
Attribute Column Name	The name of the column in the source table.
Copy Column Name	The name of the column stamped on the team table when working in operational mode.
Reporting Copy Column Name	The name of the column stamped on the Name reporting table when working in reporting mode.

Adding Dynamic Candidate Teams to Assignment Rules

You can add dynamic candidates teams (position or employee) or organization dynamic candidate teams to assignment rules. You can use either the predefined dynamic candidate teams provided in the application or create your own teams using Siebel Tools.

This task is a step in ["Process of Defining Assignment Rules" on page 86](#).

Use one of the following procedures to add predefined dynamic candidate teams to your assignment rules.

NOTE: If you plan to create your own dynamic candidate teams, you must use Siebel Tools to configure the teams before implementing the following procedure. For more information about configuring dynamic candidate teams, see ["Configuring Assignment Objects for Dynamic Candidates" on page 164](#).

To add a person dynamic candidate team to an assignment rule

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 Drill down on the assignment rule for which you want to add a dynamic team.
- 3 Click the Person Candidates Source drop-down list and choose one of the following:
 - Activity Account Team
 - Activity Asset Team
 - All People
 - From Rule
 - Any team you predefined using Siebel Tools

NOTE: For territory management, you can choose from several other predefined values. For more information about these values, see *Siebel Territory Management Guide*.

You use a similar procedure for adding organization dynamic candidate teams to assignment rules. However, there are no predefined organization dynamic teams from which to choose in the seed data; you must create your own organization teams.

To add an organization dynamic candidate team to an assignment rule

- 1 Navigate to the Administration - Assignment screen > Assignment Rules List view.
- 2 Drill down on the assignment rule for which you want to add a dynamic team.
- 3 Click the Organization Candidates Source drop-down list and choose one of the following:
 - All Organizations
 - From Rule
 - Any team you predefined using Siebel Tools

8

Assignment Rule Administration for Delegated Assignment

This chapter explains how to delegate assignment rules to others, and how others can inherit and further define these delegated rules. The tasks explained in this chapter are for Delegated Administrators (DAs), and as such, the procedures are documented using the Administration - Delegated Assignment screen and views.

NOTE: Although the procedures in this chapter are written for the Administration - Delegated Assignment screen and views, you can also perform many of these same operations using the Rule Group Explorer views in the Administration - Assignment screen.

Topics in This Chapter

- "About Delegated Assignment" on page 172
- "Scenario for Delegated Assignment" on page 172
- "Sample Delegated Assignment Process Flowchart" on page 174
- "About Assignment Rule Group Hierarchy" on page 176
- "About Setting Up Assignment Rules for Delegation" on page 179
- "Process of Making an Assignment Rule Inheritable" on page 180
- "Process of Inheriting and Refining Delegated Assignment Rules" on page 183
- "Setting Up Assignment Responsibility for Designees" on page 184
- "Examples for Using Delegated Assignment" on page 185

The topics are organized to present information in a sequence roughly corresponding to the order in which you are likely to be concerned with the subjects described when using delegated assignment. However, your company may follow a different process according to its business requirements.

CAUTION: Before performing the tasks in this chapter, you should familiarize yourself with the assignment administration tasks explained in Chapter 6, "Assignment Rule Administration." Otherwise, you may find the procedures difficult to follow.

About Delegated Assignment

Delegated assignment provides people (positions) other than the assignment administrator the ability to create and manage assignment rules. The top assignment administrator (AA) position can delegate rule administration to other positions and partners to route leads, activities, accounts, and other objects to employees or positions. These delegates are known DAs. DAs can, in turn, delegate assignment rule administration to other DAs. This hierarchical assignment rule inheritance feature is well-suited to sales organizations and organizations that work closely with partners.

NOTE: Prior to version 7.7, the assignment administrator was the only person responsible for administering assignment rules.

Delegated assignment allows AAs the ability to enforce core business logic using rule inheritance, while allowing delegated administrators (DAs) the ability to further refine that logic and specialize their assignment rules for their unique circumstances.

However, DAs can only inherit rules from their parent rule group. When inheriting a rule, DAs are allowed to choose only from rules in the parent rule group in which the owner of their rule group is currently a candidate (employee or position). The logic specified on a rule is enforced on all inherited rules by making sure that the rule contains nonremovable and noneditable copies of all criteria from the parent rule. DAs can further refine the rule's logic, by adding new criteria to inherited rules by either creating new criteria or by adding and modifying criteria templates. DAs can also delete any rule they choose to inherit from the parent rule group. Candidates (employees and positions) of rules are not inherited, so users can choose anyone their organization visibility allows as a candidate. Workload criteria, organization workload criteria, and organizations are not inherited.

If you plan to use delegated assignment, the top AA position must first prepare the assignment rules for inheritance. After a rule is inherited and changes are made to the original rule—such as, adding criteria to, expiring, or deleting the rule—those changes are propagated down the hierarchy to all rules that were inherited from it.

Scenario for Delegated Assignment

This scenario gives one example of how you can dynamically assign candidates. You may use this feature differently, depending on your business model.

For this scenario, candidates are assigned to an activity based on the information provided in [Table 43](#). The numbers at the top of the table correspond to the numbered text following the table.

Table 43. Sample Data for Dynamic Candidates Assigned to an Activity

1		2		3	4
Asset Team Member	Type	Account Team Member	Type	Service Region	Skills
Employee 1	Primary	Employee 3	Primary	Employee 1	ENU
Employee 2	Secondary	Employee 6	Secondary	Employee 2	FRA
Employee 3	Tertiary	Employee 2	Tertiary	Employee 3	

Table 43. Sample Data for Dynamic Candidates Assigned to an Activity

1		2		3	4
Asset Team Member	Type	Account Team Member	Type	Service Region	Skills
Employee 4	Tech Support	Employee 4	Tech Support	Employee 7	
Employee 5	Never Send	Employee 7	Never Send	Employee 8	

- The activity has an asset team and each employee in that team has a type. All the employees in this team are eligible candidates for the activity. The employees are scored based on their type and the following assignment rules:

- If Organization = Americas, primary score = 100.
- If Organization = Europe, primary score = 50.

Based on the rules and their type, assume the asset team scores are:

Employee 1 = 100
 Employee 2 = 75
 Employee 3 = 50
 Employee 4 = 25
 Employee 5 = 0

- The activity has an account team and each employee in that team has a type. All the employees in this team are eligible candidates for this activity. The employees are scored based on their type.

The account team scores are:

Employee 3 = 80
 Employee 6 = 60
 Employee 2 = 30
 Employee 4 = 10
 Employee 7 = 0

- The activity has a service region, and the service region has employees. All employees are eligible candidates for skill matching. You match activity skills and employee skills, but you can specify other matching criteria as well.

Employee 1 = 100
 Employee 2 = 150
 Employee 3 = 75
 Employee 7 = 200
 Employee 8 = 25

- 4 This step determines the final list of candidates for this activity. This list is the *union* of the employees from all previous three lists, and employee scores are added if they exist in more than one list.

The final list of candidates for this activity with their corresponding scores is:

Employee 1=200 (100 + 100)
 Employee 2=255 (75 + 30 + 150)
 Employee 3=205 (50 + 80 + 75)
 Employee 4=35 (25 + 10)
 Employee 5=0
 Employee 6=60
 Employee 7=200 (0 + 200)
 Employee 8=25

All employees with a passing score pass the rule. In this example, if the minimum score for the rule is 200, Employee 1, 2, 3, and 7 pass and Employee 2 is set as the primary because that employee has the highest score.

Sample Delegated Assignment Process Flowchart

Figure 27 provides a sample process flowchart of the delegated assignment feature. Each of the process steps are explained in further detail later in this chapter.

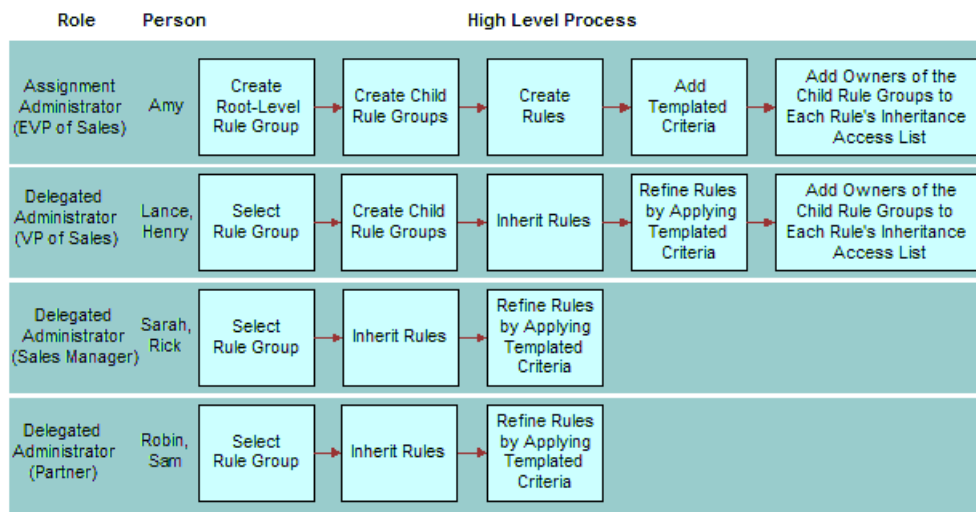


Figure 27. Sample Process Flowchart for Delegated Assignment

Figure 27 shows the following relationships:

- 1 Amy is the EVP of Sales and is the assignment administrator. Amy must first create root-level rule groups, child rule groups, and rules, and add criteria templates and owners of the child rule groups to the assignment rules before delegated assignment can be implemented.
- 2 Lance and Henry are sales VPs and are delegated administrators (2nd-tier). Lance and Henry must first inherit rules in the rule group Amy created for their respective areas, and can then further refine and delegate those rules further down the hierarchy.
- 3 Sarah and Rick are Sales Managers and are delegated administrators (3rd-tier). Sarah and Rick inherit the rules created by Lance for their respective areas, and then further refine those rules for their sales representatives.
- 4 Robin and Sam are Partners and are delegated administrators (3rd-tier, similar to Sarah and Rick). Robin and Sam inherit the rules created by Henry for their respective areas, and then further refine those rules for their sales representatives.

NOTE: After a rule is inherited in child rule groups and changes are made to the original rule, such as adding criteria to, expiring, or even deleting the rule, those changes are propagated down the hierarchy to all rules that were inherited from it.

About Assignment Rule Group Hierarchy

A *rule group* is a group of categorized assignment rules. You might think of a rule group as similar to a territory. The delegated assignment feature provides a hierarchical (tree) distribution of rule groups as shown in [Figure 28](#). The logic defined in the rules in rule groups at the top of the hierarchy is enforced down the hierarchy, but can be refined.

The following subtopics describe rule group hierarchy in further detail.

The Rule Group Explorer

The Rule Group Explorer is one of the views in the administration screens. The Rule Group Explorer (see [Figure 28](#)) is a graphical representation of the rule group hierarchy tree and provides a convenient way to navigate the entire rule group hierarchy. The relationships between parent and child rule groups is a hierarchy.

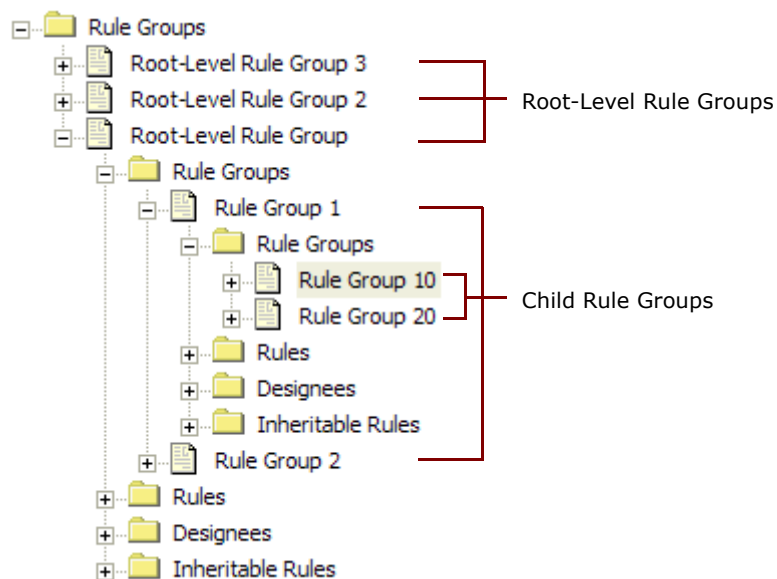


Figure 28. Sample Rule Group Explorer

[Figure 28](#) shows the following relationships:

- Root-level rule groups
- Child rule groups and their characteristics:
 - Rule Groups (lists all child rule groups for the current rule group)
 - Rules
 - Designees
 - Inheritable Rules

Rules in rule groups at the bottom of a hierarchy are processed first, moving up one level each time no rule in the previous level passes. Within each level in the hierarchy, the rules are processed by ascending order of sequence number.

Administrators (AAs and DAs) use the Rule Group Explorer to create and maintain rule group hierarchies. Assignment Administrators have organization visibility, so they see the rules for their specific organization or organizations. Typically, AAs use the Rule Group Explorer views in the assignment administration screen but can also use the views in the delegated assignment administration screen. Delegated Administrators must use the My Rule Group Explorer view in the delegated assignment screen and can see only rule groups for which they are an owner or designee, and the rule groups and rules that appear below (subtree).

DAs can only create a new rule group below one for which they are the owner or designee; this new rule group is a child rule group of the original rule. DAs can also create grandchild rule groups, great-grandchild rule groups, and so on.

Parent and Root-Level Rule Groups

A *parent rule group* is a rule group that appears directly above another rule group in the hierarchy. A root-level rule group is a rule group without a parent. For example, in [Figure 29 on page 177](#), RG 2 is the parent of RG 4, but RG 2 is not a root-level rule group. Only RG 1 is a root-level rule group—that is because it is the only rule group in the hierarchy that does not have a parent rule group (and, subsequently, is at the top of the hierarchy).

[Figure 29](#) provides a sample rule hierarchy that shows how parent and root rule groups relate to other rule groups in the same hierarchy.

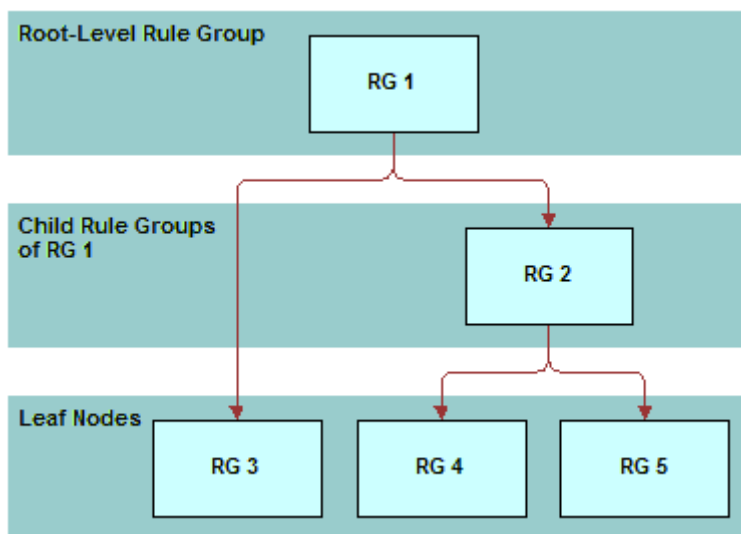


Figure 29. Relationships Between Parent and Child Rule Groups in a Hierarchy

Figure 29 show the following relationships:

- Rule groups that have no parent are root-level rule groups. There is only one root-level rule group for each hierarchy and that root-level rule group appears at the top of the hierarchy (RG1).
NOTE: Only assignment administrators (not delegated administrators) can create root-level rule groups.
- Rule groups that are parents to no other rule groups (rule groups with no child rule groups) are considered leaf rule groups and appear at the bottom of the hierarchy (RG3, RG4, and RG5).
- Rules at the leaf nodes are processed first by Assignment Manager. If none of those rules, pass Assignment Manager processes rules in the set of rule groups above the leaf nodes, and so on, until the root-level rule group is processed. This makes certain that if a rule is inherited from one rule group to another, the inherited rule is passed first.

NOTE: The Default Rule Group is a root-level rule group (has no parent) as well as a leaf node (has no child).

Assignment Owners and Designees

Assignment Manager uses ownership as a means to determine if a particular rule is eligible for inheritance by a rule group. Each rule group must have an *owner*, and a rule group defaults to the creator (as owner) when a new rule group is created.

NOTE: The concept of ownership is an integral part of delegated assignment functionality; however, if you do not use delegated assignment, ownership serves no functional role.

Owners can delegate their responsibility to designees with the same rights as an owner. A *designee* is an individual who can view and edit rule groups (and the rules within those rules groups) on behalf of an owner. The owner and the designees of a rule group are collectively known as delegated administrators (DAs).

Assignment Rule Inheritance

Rule inheritance allows assignment administrators (AAs) to enforce business logic, while allowing delegated administrators (DAs) to further refine that logic. In addition, inheritors of rules can refine those same rules and specialize them for their unique circumstances.

Criteria templates are special criteria that can be applied to inherited rules. Assignment Manager does not process criteria templates until an inheritor of an assignment rule chooses to apply a template to the inherited rule.

To use criteria templates, administrators (AA or DA) must first create criteria templates for inheritable rules by checking the Template field in the Criteria list for the criteria they want as templates. When an assignment rule is inherited, the inheritor has the option to either apply the criteria templates into an actual criterion--by checking the Create From Templates button in the Criteria view tab--or to create a new criterion for the inherited rule.

NOTE: Assignment Manager ignores criteria that have the Template field checked on an assignment rule until such time as that rule is inherited and the criteria template is applied to the inherited rule.

TIP: It is recommended that AAs create criteria templates to assist DAs in rule creation. This reduces the need for DAs to fully understand the steps required and implications of creating new logic.

Rule Group Visibility and Permissions

AAs have visibility only for the rule groups (and the rules within those rule groups) for their specific organization (unless given permission to the All Rule Groups Across Organizations view). DAs have visibility only to the rule groups for which they are an owner (or designee) and each of their rule groups' subtrees. An owner of a particular rule group cannot be the owner (or designee) of a rule group lower in the hierarchy (subtree), but can be an owner (or designee) for rule groups in other hierarchies.

TIP: DAs can only inherit rules from a parent rule group and can refine inherited rules to specialize them, but cannot remove any of the logic specified in the original rule.

About Setting Up Assignment Rules for Delegation

If you plan to use delegated assignment, the top AA position must first prepare the assignment rules for inheritance in addition to the tasks presented in [Chapter 6, "Assignment Rule Administration."](#)

The top AA position typically creates rules and rule criteria templates from which all other delegated rules and rule criteria are created using the Administration - Assignment views. DAs can then inherit these predefined rules and further refine those rules by adding new criteria or apply criteria templates criteria using the Administration - Delegated Assignment views. These refined rules can again be inherited and modified by other DAs at a lower level in the hierarchy, and so on. At each level in the hierarchy, administrators can assign designees to act on their behalf. Designees can view and edit rule groups (and the rules within those rules groups) on behalf of an AA or DA. [Figure 28 on page 176](#) shows an example of this n-tier hierarchical relationship.

Process of Making an Assignment Rule Inheritable

By associating positions to the inheritance access list for an assignment rule, you make that rule inheritable for use by child rule groups (accessible by the rule group's owners and designees). Assignment administrators (AAs and DAs) can make an assignment rule inheritable as long as they have access to the rule.

To make assignment rules inheritable, you perform the following tasks:

1 ["Creating Child Assignment Rule Groups" on page 180](#)

You must first create a child rule group from a parent rule group, setting the Parent Rule Group field to the current rule group.

2 ["Adding Owners to the Inheritance Access List" on page 181](#)

After creating the child rule group, you add the owner of the child rule group to the inheritance access list for the rule.

NOTE: Unless the owner of a rule group is on the inheritance access list, that owner (and his or her designees) cannot inherit a rule.

3 (Optional) ["Adding Criteria Templates to Assignment Rules" on page 182](#)

Optionally, you can *add* criteria templates to an assignment rule. DAs then have the option to *apply* the criteria templates to their inherited rules in lieu of creating new criteria.

Creating Child Assignment Rule Groups

This topic explains how to create a child assignment rule group using the delegated assignment administration views.

This task is a step in ["Process of Making an Assignment Rule Inheritable" on page 180](#).

To create a child rule group

- 1** From the application-level menu, choose Navigate > Site Map > Administration - Delegated Assignment > Rule Group Explorer.
- 2** In the Rule Group Explorer, expand the rule group folder for which you want to define a child rule group, and then click Rule Groups.
- 3** In the My Rule Group Explorer list, click New.
- 4** In the new rule group record, click in the available fields to enter relevant information for the new group rule.
 - a** In the Name field, type a name for the child rule group.

- b** In the Owner Position field, click the select button to query for an owner, and then click OK.

NOTE: You must specify an appropriate position for the owner. A position cannot be owner (or designee) for a rule group below one for which that position is already an owner or designee.

For field descriptions, see [“Creating Assignment Rule Groups” on page 88](#).

TIP: Activation and expiration dates are modifiable only at the root-level rule group level in the hierarchy. All other rule groups under the root-level rule group share the same dates and are read only.

Adding Owners to the Inheritance Access List

This topic explains how to add owners to the inheritance access list for an assignment rule using the delegated assignment administration views. After owners are added to the inheritance access list of an assignment rule, inheritors of that rule can further refine and specialize that rule.

This task is a step in [“Process of Making an Assignment Rule Inheritable” on page 180](#) and [“Setting Up Assignment Responsibility for Designees” on page 184](#).

To add an owner to the inheritance access list

- 1** From the application-level menu, choose Navigate > Site Map > Administration - Delegated Assignment > Rule Group Explorer.
- 2** In the Rule Group Explorer, expand the rule group in which the assignment rule resides, and then click Rules.
- 3** In the My Rule Group Explorer list, drill down on the assignment rule you want to make inheritable, and then click the Inheritance Access view tab.
- 4** In the Inheritance Access List, click Synchronize.
NOTE: This action first deletes anyone from the list who is not an owner of a child rule group and then adds back only the owners of the child rule group. To prevent deletion, check the Lock During Synchronization checkbox next to a position before clicking Synchronize.
- 5** Delete any positions from the list that you do not want to inherit rules.
- 6** Alternatively, you can add a single position:
 - a** In the Inheritance Access List, click New.
 - b** In the Pick Positions dialog box, query for the position you want to give access, and then click OK.

Adding Criteria Templates to Assignment Rules

This topic explains how assignment administrators (AAs) can add criteria templates to an assignment rule using the delegated administration views. After you create criteria templates, the criteria templates are available for use with inherited rules.

NOTE: It is recommended that assignment administrators create criteria templates to assist DAs in rule creation. This reduces the need for DAs to fully understand the steps required and implications of creating new logic.

This task is a step in [“Process of Making an Assignment Rule Inheritable” on page 180](#).

To add criteria templates to an assignment rule

- 1 From the application-level menu, choose [Navigate > Site Map > Administration - Delegated Assignment > Rule Group Explorer](#).

- 2 In the Rule Group Explorer, select the assignment rule for which you want to add criteria templates.

NOTE: Depending on the rule, you may need to navigate down the hierarchy.

- 3 In the My Rule Group Explorer list, drill down on the assignment rule, and then click the Criteria view tab (if not already active).

- 4 Add a new criterion.

For information about creating new criteria, see [“Process of Creating Assignment Criteria for Use in Assignment Rules” on page 56](#).

- 5 Check the Template checkbox for the new criterion.

The templated criterion is now available for use with inherited rules.

NOTE: Assignment Manager does not process criteria templates until an inheritor chooses to apply a template to an assignment rule. When someone inherits from that rule, that person has the option to apply a template into an actual criterion (by checking the Create From Templates button in the Criteria view tab) instead of creating a new criterion.

Process of Inheriting and Refining Delegated Assignment Rules

To inherit and refine delegated assignment rules, you perform the following tasks:

- 1** Inherit an assignment rule.
For a procedure, see [“Inheriting Delegated Assignment Rules” on page 183](#).
- 2** Add criteria to the inherited assignment rule by either creating new criteria or applying criteria templates.
For information about:
 - Creating new criteria, see [“Process of Creating Assignment Criteria for Use in Assignment Rules” on page 56](#)
 - Applying criteria templates, see [“Applying Criteria Templates to Inherited Assignment Rules” on page 184](#)
- 3** Add candidates to the assignment rule.
For information about adding candidates, see [“Adding Employees, Positions, and Organizations to Assignment Rules” on page 120](#).

Inheriting Delegated Assignment Rules

This topic explains how to inherit an assignment rule using the delegated assignment administration views.

This task is a step in [“Process of Inheriting and Refining Delegated Assignment Rules” on page 183](#).

To inherit a delegated assignment rule

- 1** From the application-level menu, choose Navigate > Site Map > Administration - Delegated Assignment > Rule Group Explorer.
- 2** In the Rule Group Explorer, expand the rule group for which you want to inherit rules, and then click Inheritable Rules.
- 3** Select one or more rules you want to inherit, and then click Inherit Rules.
The rule (or rules) now appear as rules in the Rule Group Explorer view under Rules.

Applying Criteria Templates to Inherited Assignment Rules

This topic explains how to apply predefined criteria templates to inherited assignment rules using the delegated assignment administration views.

This task is a step in [“Process of Inheriting and Refining Delegated Assignment Rules” on page 183](#) and an optional task in [“Process of Making an Assignment Rule Inheritable” on page 180](#).

To apply criteria templates to an assignment rule

- 1 From the application-level menu, choose Navigate > Site Map > Administration - Delegated Assignment > Rule Group Explorer.
 - 2 In the Rule Group Explorer, expand the rule group in which the assignment rule resides and you want to apply criteria templates, and then click Rules.
- NOTE:** Depending on the rule, you may need to navigate down the hierarchy.
- 3 In the My Rule Group Explorer list, drill down on the assignment rule for which you want to apply criteria templates, and then click Create From Templates.
 - 4 In the Pick Criteria Templates dialog box, select the rule criterion you want, and click OK.

A new criterion is added to the rule.

Setting Up Assignment Responsibility for Designees

This topic explains how to add designees to an assignment rule group using the delegated assignment administration views. Use the following procedure if you want to delegate assignment responsibility to someone else (a designee).

To add a designee to an assignment rule group

- 1 From the application-level menu, choose Navigate > Site Map > Administration - Delegated Assignment > Rule Group Explorer.
- 2 In the Rule Group Explorer, expand the rule group for which you want to assign designees, and then click Designees.
- 3 In the My Rule Group Explorer list, click New.
- 4 In the Pick Positions dialog box, query for the position you want to add to the rule group, and then click OK.

For more information about designees, see [“Process of Making an Assignment Rule Inheritable” on page 180](#).

Examples for Using Delegated Assignment

This topic provides an example of how delegated assignment might be used. You may use delegated assignment differently, depending on your business model. Your company may follow a different process according to its business requirements.

It covers the following topics:

- [“Scenario for Working with Delegated Administrators” on page 185](#)
- [“Delegated Assignment Example 1: Assignment Administrator Tasks” on page 187](#)
- [“Delegated Assignment Example 2: Second-Tier Delegated Administrator Tasks” on page 189](#)
- [“Delegated Assignment Example 3: Third-Tier Delegated Administrator Tasks” on page 190](#)
- [“Delegated Assignment Example 4: Third-Tier Delegated Administrator Tasks for Partners” on page 191](#)

Scenario for Working with Delegated Administrators

This scenario is one of the topics for [“About Assignment Rule Group Hierarchy” on page 176](#).

A sales organization for a high tech company wants to create assignment rules that are inheritable and configurable by several different levels in the organization. The requirements are:

- Handle large sales leads internally; handle small sales leads externally using partners
- Promptly assign sales leads to the most qualified representative
- Design complex assignment rules, making use of the delegated assignment inheritance and criteria templates features to allow for uncomplicated rule administration by persons at all levels

In this scenario, the Sales EVP, vice presidents, regional sales managers, partners, and sales representatives participate in delegated assignment for one rule group hierarchy as shown in [Figure 30](#).

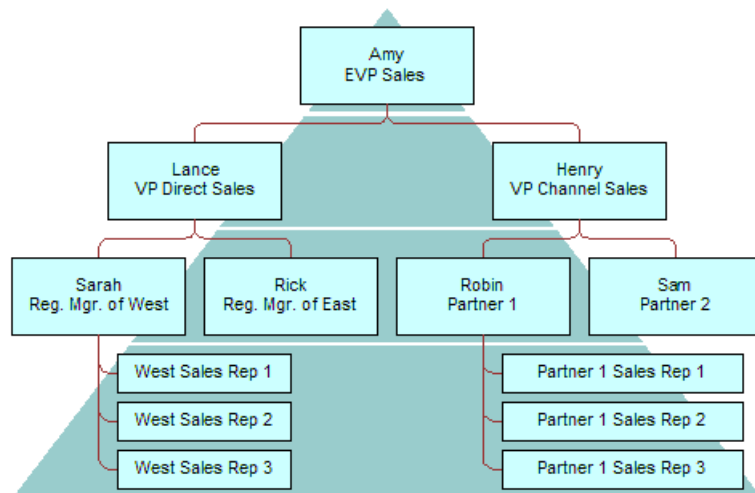


Figure 30. Sample Delegated Assignment Organization Chart

[Figure 30](#) shows the following relationships:

- Amy, Executive Vice President of Sales, is the assignment administrator (AA)
- Two vice presidents report to Amy:
 - Lance, VP Direct Sales
 - Henry, VP Channel SalesLance and Henry are 2nd-tier delegated administrators
- Two managers report to Lance:
 - Sarah, Western Regional Manager
 - Rick, Eastern Regional ManagerSarah and Rick are 3rd-tier delegated administrators (DAs)
- Two partners report to Henry:
 - Robin, Partner 1
 - Sam, Partner 2Robin and Sam are also 3rd-tier delegated administrators (DAs)
- Three western regional sales representatives report to Sarah
- Three partner sales representatives report to Robin

Table 44 provides sample responsibilities for each of the positions discussed previously.

Table 44. Sample Positions and Responsibilities for Delegated Assignment Scenario

Position	Responsible for ...
Executive Vice President (EVP) of Sales	Making sure large leads are handled by internal sales representatives and small leads are handled by partner sales representatives.
VP Direct Sales	Making sure leads are routed to the right regional manager.
VP Channel Sales	Making sure leads are routed to the right partner.
Regional Manager	Making sure leads are routed to the best sales representative.
Partner	Making sure leads are routed to best partner employee (because the high tech company cannot determine which partner employee is best suited for the lead).

Delegated Assignment Example 1: Assignment Administrator Tasks

This example is one of the topics for ["About Assignment Rule Group Hierarchy" on page 176](#).

The assignment administrator (AA) makes sure that large leads go to internal sales reps (by way of Lance, VP Direct Sales) and small leads go to channel partners (by way of Henry, VP Channel Sales).

Tasks for the assignment administrator

1 Create a root-level rule group.

In this example, Amy organizes her assignment rules into a logical grouping—rules that route leads are in one rule group.

For information about how to create a root-level rule group, see ["Creating Assignment Rule Groups" on page 88](#).

2 Create a child rule group (or groups) with the root-level rule group as the parent.

In this example, Amy creates two rules groups as follows:

- Rule Group 1 with Owner = Lance
- Rule Group 2 with Owner = Henry

This allows Henry and Lance the ability to manage their own lead assignment rules for their subordinates.

For information about how to create a child rule group, see ["Creating Child Assignment Rule Groups" on page 180](#).

3 Create an assignment rule (or rules).

- a** Add a new assignment rule.

- b** Assign candidates to the rule.

For information about adding candidates to assignment rules, see [“Adding Employees, Positions, and Organizations to Assignment Rules”](#) on page 120.

- c** Add criteria templates to the rule.

NOTE: It is recommended that assignment administrators create criteria templates to assist DAs in rule creation. This reduces the need for DAs to fully understand the steps required and implications of creating new logic.

For information about adding criteria templates to assignment rules, see [“Adding Criteria Templates to Assignment Rules”](#) on page 182.

- d** Add owners of the child rule groups to the inheritance access list for the assignment rule.

After owners are added to the inheritance access list, inheritors of those rules can refine and specialize the rules by adding criteria and candidates for their unique circumstances.

For information about adding owners to the inheritance access list for an assignment rule, see [“Adding Owners to the Inheritance Access List”](#) on page 181.

In this example, create the following assignment rules to route leads to Lance and Henry.

Task	Assignment Rule 1	Assignment Rule 2
Add criteria	Leads > \$100k	Leads < \$100k
Assign candidates	Lance (VP Direct Sales)	Henry (VP Channel Sales)
Add owners to inheritance access list	Lance	Henry

This makes sure that large leads are managed by internal sales and smaller leads are managed by partners.

- 4** (Optional) Create additional criteria templates.

- a** Create new criteria for the assignment rule.

- b** Click the Template flag for each new criteria created.

In this example, use the following criteria.

Add to Rule	Assignment Rule 1	Assignment Rule 2
Criteria Template 1	Product Line= Servers	
Criteria Template 2	Product Line = PCs	
Criteria Template 3	Product = Notebooks	State = NY, CT, NJ
Criteria Template 4	Product = Desktops	State = WA, CA, OR, NV
Criteria Template 5	Product = Peripherals	

This allows Lance and Henry the ability to refine rules with predefined criteria instead of creating new criteria.

Delegated Assignment Example 2: Second-Tier Delegated Administrator Tasks

This example is one of the topics for [“About Assignment Rule Group Hierarchy” on page 176](#).

The second-tier delegated administrators (DAs) make sure that the leads that are more than \$100K are routed to the correct sales manager based on geography and territories:

- Leads in the eastern states go to Rick
- Leads in the western states go to Sarah

Tasks for second-tier delegated administrators

- 1 In the Rule Group Explorer, select a rule group previously created by the assignment administrator.

In this example, Lance selects the rule group for which he is the owner (Rule Group 1).

- 2 Create a child rule group (or groups) with the current rule group as the parent.

In this example, Lance creates two rules groups as follows:

- Rule Group 10 with Owner = Rick; Parent Rule Group = Rule Group 1
- Rule Group 20 with Owner = Sarah; Parent Rule Group = Rule Group 1

This allows Rick and Sarah the ability to manage their own lead assignment rules for their subordinates.

For information about how to create a child rule group, see [“Creating Child Assignment Rule Groups” on page 180](#).

- 3 Inherit assignment rule (or rules).

In this example, Lance inherits Amy’s rule twice so that he can refine each rule to make sure leads in the western states go to Sarah and leads in the eastern states go to Rick.

For information about inheriting an assignment rule, see [“Inheriting Delegated Assignment Rules” on page 183](#).

4 Refine the inherited assignment rule (or rules).

a Apply criteria templates.

See [“Applying Criteria Templates to Inherited Assignment Rules” on page 184](#).

b Add candidates.

See [“Adding Employees, Positions, and Organizations to Assignment Rules” on page 120](#).

In this example, use the following information to refine the assignment rules.

Rule Data	Assignment Rule 10	Assignment Rule 20
Criteria	Leads > \$100k ¹	Leads > \$100k ¹
Criteria	State = WA, CA, OR, NV ²	State = NY, CT, NJ ²
Candidate	Sarah	Rick

1. Criteria inherited from the original rule and is read only.

2. Applied from criteria templates.

5 Add owners of the child rule groups to the inheritance access list for each assignment rule.

See [“Adding Owners to the Inheritance Access List” on page 181](#).

After you add Sarah and Rick to the inheritance access list for the appropriate assignment rule, Sarah and Rick can inherit the rules and further refine them by adding criteria and specifying candidates.

Henry follows the same steps as Lance, except Henry uses different criteria templates to route leads based on product line as follows:

- Leads for PCs go to Robin (employee of Partner 1)
- Leads for servers go to Sam (employee of Partner 2)

Delegated Assignment Example 3: Third-Tier Delegated Administrator Tasks

Sarah and Rick are third-tier delegated administrators in the rule group hierarchy.

Sarah and Rick follow the same steps as Lance in [“Delegated Assignment Example 2: Second-Tier Delegated Administrator Tasks” on page 189](#), except Sarah and Rick:

- Inherit Lance’s rules (Assignment Rule 10 and 20), and refine those rules so that the leads are routed directly to sales representatives.
- Do not need to create child rule groups (because they assign leads directly to representatives).

Delegated Assignment Example 4: Third-Tier Delegated Administrator Tasks for Partners

This example is one of the topics for [“About Assignment Rule Group Hierarchy” on page 176](#).

The 2nd-Tier partner delegated administrator makes sure that leads that have been assigned to Partner 1 are routed to the best sales representative and that no leads go unassigned.

- 1** In the Rule Group Explorer, select the rule group previously created by the 2nd-tier delegated administrator (Henry, in this example).

In this example, assuming Henry created Assignment Rule 30 for Robin and Assignment Rule 40 for Sam, Robin selects Rule Group 30.

- 2** Inherit the assignment rule (or rules).

In this example, Robin inherits Henry’s rule three times and refines each rule to make sure leads are routed to one of Partner 1’s three sales representatives.

For information about inheriting an assignment rule, see [“Inheriting Delegated Assignment Rules” on page 183](#).

- 3** Refine the inherited rule (or rules).

- a** Apply criteria templates.

See [“Applying Criteria Templates to Inherited Assignment Rules” on page 184](#).

- b** Add candidates.

See [“Adding Employees, Positions, and Organizations to Assignment Rules” on page 120](#).

- 4 Add owners to the inheritance access list for the assignment rule.

See [“Adding Owners to the Inheritance Access List” on page 181](#).

In this example, use the following information:

Apply to Rule	Assignment Rule 30A	Assignment Rule 30B	Assignment Rule 30C
Criteria	Leads > \$100k ¹	Leads > \$100k ¹	Leads > \$100k ¹
Criteria	Product Line = PCs ²	Product Line = PCs ¹	Product Line = PCs ¹
Criteria	Product = Desktops	Product = Notebooks ²	Product = Peripherals ²
Candidate	Partner 1 Sales Rep 1	Partner 1 Sales Rep 2	Partner 1 Sales Rep 3

1. This criteria is already inherited and is Read Only.

2. Applied from criteria templates.

Summary for Examples of Working with Delegated Administrators

This summary is one of the topics for [“About Assignment Rule Group Hierarchy” on page 176](#).

The following bullet points further summarize the delegated assignment activities as they pertain to the examples:

- The examples describe a four-level assignment model. However, this is no limit to the number of levels that the delegated assignment manager feature supports, and there is no limit to the number of branches in a level. In these examples, the levels are:

Level 1 = Amy

Level 2 = Lance, Henry

Level 3 = Sarah, Rick, Robin, Sam

Level 4 = West Sales Reps 1,2,3, and Partner 1 Sales Reps 1,2,3

- Rules group hierarchies are executed from the bottom up. For example, Assignment Manager attempts to use Robin’s rules to match a particular lead to a candidate before it tries to use Henry’s rules. However, if Robin’s rules fail, Assignment Manager then tries Henry’s rules, and assigns the lead to Robin, and so on up the hierarchy.
- Each rule group owner can assign a designee.

Designees have the same responsibilities as an owner. You may want to delegate your ownership to someone else, such as an administrative assistant, to perform the tasks.

- Each partner should assign one person as the delegated administrator—in these examples, either Robin or Sam—and that person should manage the partner’s rule group. This same person should receive all leads that are not assigned to the partner’s sales representatives.

- AAs and DAs can create new criteria (you are not required to use criteria templates). However, it is recommended that the AA create criteria templates for the most common criteria to ease the learning curve for the DAs.

9

Running Assignment Manager

This chapter provides preparatory considerations and tasks before running Assignment Manager and explains how to run Assignment Manager in several operating modes. It includes the following topics:

- [“Preparing to Run Assignment Manager” on page 196](#)
- [“Checking the State of the Assignment Manager and Server Request Broker Components” on page 197](#)
- [“Modifying the Assignment Manager Server Component Parameters” on page 198](#)
- [“Additional AsgnSrvr and BatchAsgn Parameter Information” on page 207](#)
- [“Setting the Log Level of Assignment Manager Events” on page 209](#)
- [“About Server Administration Requirements After Configuration” on page 211](#)
- [“About Server Administration Requirements for Assignment Modes” on page 212](#)
- [“About Running Assignment Manager in Denormalization Mode” on page 214](#)
- [“Running Interactive Assignment” on page 216](#)
- [“About Running Dynamic Assignment” on page 220](#)
- [“Process of Running Dynamic Assignment” on page 221](#)
- [“About Tuning Dynamic Assignment for Performance” on page 226](#)
- [“About Running Batch Assignment” on page 227](#)
- [“Running Batch Assignment” on page 228](#)
- [“About Tuning Batch Assignment for Performance” on page 233](#)
- [“Running Mobile Assignment” on page 234](#)
- [“About Running Assignment Manager in Reporting Mode” on page 235](#)
- [“About Assignment Manager Rule Cache Files” on page 237](#)
- [“About Using External Components to Invoke Assignment Manager” on page 238](#)
- [“About Tuning Assignment Manager for Performance in a DB2 Deployment” on page 239](#)

Preparing to Run Assignment Manager

Assignment Manager obtains information required for operation from the following sources:

- The assignment rules and criteria as well as employees, positions, and organizations that are read from the rule cache file.
- The properties of assignment objects and their property values, the list of values for the picklists, and assignment criteria, attributes, workflow policy components, workflow policy component columns, and other repository information from the database.
- Input parameters for the server component

NOTE: Assignment Manager uses many Siebel Server resources. It is recommended you monitor the Siebel Servers whenever Assignment Manager is invoked, especially if you run multiple instances at the same time. For more information about running multiple instances of Assignment Manager, see [“About Running Multiple Instances of Assignment Manager in Batch Mode” on page 231](#).

Before running Assignment Manager, you must perform several preparatory tasks. These tasks include:

- 1 Assigning Rules. See [“Process of Defining Assignment Rules” on page 86](#)
- 2 [“Updating Your Assignment Manager Deployment with New Configurations” on page 80](#)
- 3 [“Checking the State of the Assignment Manager and Server Request Broker Components” on page 197](#)
- 4 [“Modifying the Assignment Manager Server Component Parameters” on page 198](#)
- 5 [“Setting the Log Level of Assignment Manager Events” on page 209](#)

In addition to the preparatory tasks, there are server administration requirements that should be considered before running Assignment Manager. For a discussion of these requirements, see the following topics:

- [“About Server Administration Requirements After Configuration” on page 211](#)
- [“About Server Administration Requirements for Assignment Modes” on page 212](#)

Checking the State of the Assignment Manager and Server Request Broker Components

Before running Assignment Manager, you must first make sure that the Siebel Server can start one or more multithreaded assignment servers by checking the Assignment Manager and Server Request Broker server components.

To check the state of the Assignment Manager and Server Request Broker components

- 1 Navigate to the Administration - Server Management screen > Servers view.
- 2 In the Component Groups list, query for the Assignment Manager and Server Request Broker components, and check the Server field to verify these components are running on the appropriate Siebel Server.
TIP: If the Server field is not visible, use the Columns Displayed feature to make it visible (right-click, select Columns Displayed, use the arrows to move Server from Available Columns to Selected Columns, and then click Save).
- 3 In the State field in the Component Groups list, verify the state of each of the following components:
 - Assignment Manager component is Online.
 - Server Request Broker component is Running.

NOTE: If these components are not in their required state, check the log file for errors, and then make the necessary corrections.

Modifying the Assignment Manager Server Component Parameters

Before running Assignment Manager, you should configure the Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) server components to enhance their performance for your implementation by modifying the appropriate parameters.

To modify Assignment Manager server component parameters

- 1 Navigate to the Administration - Server Configuration screen > Servers > Components view.
- 2 In the Siebel Servers list, select your server (if more than one server appears) and make sure the Assignment Manager component is enabled on that server.
- 3 In the Components list, select one of the following:
 - Assignment Manager (AsgnSrvr)
 - Batch Assignment (BatchAsgn)
- 4 Click the Parameters subview (if not already active).
- 5 In the Parameters list, select the component parameters of interest, and adjust the values as required by your implementation to achieve optimal performance.

[Table 45 on page 199](#) provides the parameters used by Assignment Manager that you can change.
- 6 After you have determined the optimal settings, make sure that the MinMTServers parameter is set to a current value greater than 0, and then restart the Siebel Server.

This starts the specified number of Assignment Manager components. For more information about the MinMTServers parameter, see ["Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207](#). For more information about starting and restarting the Siebel Server, see *Siebel System Administration Guide*.

Table 45 lists the server component parameters used by Assignment Manager that you can change. Because many of the parameters function in the same manner for both server components, the parameters for each component are combined into one table.

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Active Employee Where Clause	ActiveEmpLOVCode	X	X	<p>Used to exclude inactive employees from assignment by specifying an SQL WHERE clause.</p> <p>NOTE: You must set the same values for the ActiveEmpLOVCode and ActivePosWhereClause parameters consistently among the assignment server (AsgnSrvr), batch assignment (AsgnBatch), and the workflow policy program (if used). Otherwise, you may encounter unexpected results.</p> <p>For more information, see the List of excluded person ids parameter in "Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207.</p>
Active Position Where Clause	ActivePosWhereClause	X	X	<p>Used to exclude inactive positions from assignment by specifying an SQL WHERE clause.</p> <p>NOTE: You must set the same values for the ActiveEmpLOVCode and ActivePosWhereClause parameters consistently among the assignment server (AsgnSrvr), batch assignment (AsgnBatch), and the workflow policy program (if used). Otherwise, you may encounter unexpected results.</p> <p>For more information, see the List of excluded person ids parameter in "Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207.</p>

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Actual Assignment Key	ActualAsgnKey	X	X	<p>The key value used when Assignment Manager is running in delta reporting mode to identify candidates by this key value in the actual result table.</p> <p>For more information about delta reporting mode, see "About Running Assignment Manager in Reporting Mode" on page 235.</p>
Add Scores across Rules	AddScores	X	X	<p>If True, scores for the same candidate are added across rules.</p> <p>Default value is False.</p> <p>See "Configuring Assignment Manager to Add Scores Across Rules" on page 273.</p>
Allow Duplicate Positions	AllowDupPostn	X	X	<p>Allows assignment of duplicate positions to the team.</p> <p>Default value is False.</p> <p>For more information about this parameter, see "Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207.</p>
Assignment History Cache	CacheSize	X		<p>Indicates the assignment history cache size in Kbytes.</p> <p>Default value = 300.</p>
Assignment Key	AsgnKey	X	X	<p>Indicates the rule set used for key-based routing, that is, the row ID of the assignment rule group that is associated with the rules you want to evaluate. The default value of the parameter is All AM Rule Set, in which case all active rules are evaluated.</p>

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Assignment Mode	AsgnMode	X	X	Indicates the assignment mode (Match, Assign, MatchAssign, Denorm, or Cancel). Default value = MatchAssign. For more information about AsgnMode, see "About Using External Components to Invoke Assignment Manager" on page 238 .
Assignment Object Name	AsgnObjName	X	X	Indicates the name of the assignment object.
Batch Size	BatchSize	X	X	Indicates the number of objects to be assigned before committing the transaction. Default value = 100.
Check if CandidateActive	CheckIfCandidateActive	X	X	Determines whether Assignment Manager checks candidate's activation and expiration date during evaluation of every rule. Default value is False.
Check version iterations	CheckVerIter	X		Defines the frequency of time Assignment Manager checks whether rule version has changed. This also represents the time lag the new rules take effect after clicking the Release button. Check version from database every N iterations. One integer value equals ten seconds (minimum value is 1). Default value = 6.
Copy Candidate Specific Data	CopyCandSpecData	X	X	Indicates whether Assignment Manager copies attribute values from dynamic candidate to the result table. Default value = No.

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Copy Person Specific Data	CopyPersonSpecData	X	X	Indicates whether Assignment Manager copies attribute values from dynamic candidates to the result table. Default value = No.
Default Tasks	DfltTasks	X	X	Indicates the default number of service tasks to start (server-mode only). NOTE: You must restart the component or server for this to take effect. Default value = 0.
Dynamic Candidate Parameters	DynCandParam	X	X	Semicolon-separated parameter, whose value pairs are used to substitute the variables in the Dynamic Candidate definitions in Siebel Tools. Format = Name of Param1:Value for param1; Name of Param2:Value for param2; and so on. NOTE: Before version 7.8, this parameter was comma-separated.
Ignore Calendar Criteria	IgnoreCalCrit	X	X	Allows a match to be made without taking into account calendar availability. Default value = False.
Ignore assignment rule cache	IgnoreCache	X	X	Indicates whether Assignment Manager ignores the assignment rule cache and reads from the database. Default value = False.
Indepedent Rule Group Cache	IndepRuleGroupCache		X	If True, the Batch Assignment server component maintains a separate cache file for this rule group for this request. Default value = True.

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Key Based Enable	KeyBasedEnabled	X		Enables key-based routing for a component that has been predefined for that attribute. Default value = True.
List of excluded organization ids	ExcludeOrgList	X	X	Indicates a comma-separated list of organization IDs to be excluded from assignment. For more information on excluding organization IDs, see "Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207.
List of excluded person ids	ExcludePersonList	X	X	Indicates a comma-separated list of employee or positions IDs to be excluded from assignment. For more information on excluding person IDs, see "Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207.

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Log txn only on change	LogTxnChgOnly	X	X	<p>Logs transaction only when the assignment has changed (for example, when the sales team is updated).</p> <p>By default, this parameter is set to TRUE. Setting this parameter to FALSE causes Assignment Manager to log a transaction in the S_DOCK_TXN_TABLE on reassignment even when there is no change in rules or assignees.</p> <p>NOTE: If there is a change in at least one of the primaries, or if there is a change in at least one of the team tables, Assignment Manager updates columns (primaries, ASGN_DT, and system columns) on the object row. However, if there is no net change, only the ASGN_DT column is updated.</p> <p>For information about how this parameter works with regard to merge conflicts, see <i>Siebel Remote and Replication Manager Administration Guide</i>.</p>
Maximum MT Servers	MaxMTServers	X		<p>Indicates maximum number of active servers for a multithreaded service.</p> <p>Default value = 1.</p>
Maximum Routing Keys	MaxRouteKeys	X		<p>Indicates the number of keys allocated for the routing. Used for interactive assignment.</p>
Maximum Tasks	MaxTasks	X	X	<p>Indicates maximum number of running tasks for a service.</p> <p>Default value = 20.</p>

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Minimum MT Servers	MinMTServers	X		Indicates a minimum number of active servers for a multithreaded service. Default value = 1. NOTE: Applies only to the Assignment Server and other multithreaded request-based servers.
Object Row Id	ObjectRowId	X		Indicates the row ID of the object to assign.
Object Row Sql Statement	ObjRowSqlStmt	X	X	Represents the SQL statement that when executed gives the object row IDs to be assigned. NOTE: You can use this parameter to specify the rows to be assigned in lieu of the ObjRowId or ObjWhereClause parameters.
Object Where Clause	ObjWhereClause	X	X	A WHERE clause of the object for use with interactive and batch assignment. For more information, see "About Using an Object Where Clause to Restrict the Number of Records Processed" on page 212.
Organization Key Value	OrgKeyVal	X	X	Used to stamp rows when assigning organizations and UseKeyValue = Key Value.
Person Key Value	PersonKeyVal	X	X	Used to stamp rows when assigning employees or positions and UseKeyValue = Key Value.
Primary Organization Id	PrOrganizationId	X		Indicates the ID of the organization to be assigned as the primary.
Primary Person Id	PrPersonId	X		Indicates the ID of the person to be assigned as the primary.
Primary Rule Id	PrRuleId	X		Indicates the ID of the rule to be assigned as the primary.

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Refresh people skills interval	MaxSkillsAge	X		Indicates the interval in which people skills are refreshed in seconds. Setting the value to 0 (zero) disables refresh. Default value = 0.
Regular Assignment	RegularAsgn	X		Indicates whether Assignment Manager should perform regular assignment. NOTE: Assignment Manager can also run in reporting mode. Default value = True.
Replace Key Values	ReplaceKeyVal	X	X	Indicates whether Assignment Manager should look for candidates in the team table that have a value stamped in the Key column. These candidates are then compared to those that qualify for the rule and are removed, updated, or inserted. This parameter is a comma-separated string and is dependent on what is passed in the UseKeyVal parameter.
Replace Team Members	ReplaceTeamMembers	X	X	Allows deletion of team members if they no longer qualify.
Reporting Mode	RptMode	X	X	Indicates what reporting mode Assignment Manager will run. Values are: None, Snapshot, and Delta. Default value = None.
Request Id	ReqId	X	X	Assignment Manager generates a request ID for each server component job. When AsgnMode = Match, passing candidates are stored in a temporary table with the request ID. Then, Assignment Manager uses this request ID to find (match) the correct entries in the table.

Table 45. Assignment Manager (AsgnSrvr) and Batch Assignment (BatchAsgn) Server Component Parameters

Parameter Name	Parameter Alias	Asgn Srvr	Batch Asgn	Description
Return Property Set	ReturnPropSet	X		If True, Assignment Manager returns a hierarchical property set containing qualified or assigned candidates. See "About Using External Components to Invoke Assignment Manager" on page 238.
Use FOR UPDATE	UseForUpdate	X	X	If True, Assignment Manager uses the FOR UPDATE SQL clause to lock primary table rows so that, during evaluation and assignment, no other process or user can make changes to this row.
Use Key Value	UseKeyVal	X	X	Indicates whether Assignment Manager uses the Key Value to filter and stamp the candidate. Values are: None, Rule Group, and Key Value. Default value = None.
Use Rule Minimum Score	UseRuleMinScore	X	X	If True, Assignment Manager filters out candidates who do not get at least the minimum score on the assignment rule. Default value = False.

Additional AsgnSrvr and BatchAsgn Parameter Information

The following subtopics provide further explanation for some of the server component parameters used with Assignment Manager and why you might want to use them. The name provided in parentheses is the alias for the parameter.

Allow Duplicate Positions (AllowDupPostn) Parameter

You can assign duplicate positions by setting the Allow Duplicate Positions server component parameter when you run an assignment request. By default, the Allow Duplicate Positions server parameter is set to False. When you set this parameter to True, Assignment Manager attempts to insert duplicate positions, that is, positions with the same ID in the team table, given those positions do not violate the user key constraints of the table.

You must also set the PositionTeamDenorm user property for the assignment object. The PositionTeamDenorm assignment object user property specifies which destination columns are part of the user key. Assignment Manager checks whether positions with the same ID that pass violate the uniqueness of these key columns. If Assignment Manager detects a violation, only the first position encountered is inserted into the team table, and the other position is ignored. Otherwise, Assignment Manager inserts both positions into the team table.

For example, if there is a violation of the user key when adding positions to the account team, then only the first duplicate position encountered is inserted into the S_ACCNT_POSTN table. For an example of using the PositionTeamDenorm assignment object user property, see [“Example of Copying Additional Columns to the Team Table” on page 256](#).

Check version iterations (CheckVerIter) Parameter

Changing this parameter to a small value, such as 1, reduces the potential for invalid assignment. For example, running interactive assignment before Assignment Manager detects that the Release button was recently clicked causes assignment based on the previous version of assignment rules. By having a small iteration value, Assignment Manager checks for a newer version of assignment rules more frequently. Test your deployment with this lower parameter value to make sure it does not interfere with any other database activity.

List of excluded person ids (ExcludePersonList) and List of excluded organization ids (ExcludeOrgList) Parameters

You can choose to exclude a specific candidate or candidates, even though you added the candidate or candidates to an assignment rule. You do so at run time by specifying the ExcludePersonList or the ExcludeOrgList server component parameter as comma-separated lists of candidate IDs from the Server Manager command line. Assignment Manager does not evaluate these candidates, and because of this, the candidates do not appear in log files even when Match or Assign logging is active.

For example, if an employee has not worked on a service request for several days, and if a request is submitted to assign the same service request, Assignment Manager assigns the service request to the same person again. That is because, given a set of assignment rules and criteria, Assignment Manager assigns the candidate with the highest score to the object row. By specifying the ExcludePersonList parameter for a particular run, you can exclude this particular candidate from assignment consideration.

In addition, you can choose to exclude certain employees for assignment rule evaluation. For example, you might want to exclude inactive employees or employees who are on a leave of absence from assignment consideration. You exclude employees using the Active Employee Where Clause server parameter (or use ActiveEmpLOVCode from the Server Manager command line) with an SQL WHERE clause that is based on any column (or columns) on the S_EMP_PER employee table. For example, you could use the EMP_STAT_CD column with the following value to indicate that you want only active employees considered for evaluation and assignment:

```
AND emp.EMP_STAT_CD='Active'
```

The employees are excluded even if they are explicitly added to an assignment rule as candidates.

Similarly, you can exclude inactive *positions* using the Active Position Where Clause component-level server parameter (or use ActivePosWhereClause from the Server Manager command line).

NOTE: If you make changes to either of these parameters, you must release rules for the them to take effect.

CAUTION: When specifying the parameters, you must use the *emp* SQL alias for the S_EMP_PER employee table and the *pos* alias for the S_POSTN position table. This is to differentiate from other columns by the same name in other tables that Assignment Manager might use in the same SQL. Otherwise, a SQL error (ambiguous reference to a column) may occur.

Maximum MT Servers (MaxMTServers) Parameter

This parameter controls the maximum number of Assignment Manager server processes that are running at any time (when MaxMTServers > MinMTServers). Generally, the default value is sufficient for most deployments as server processes and Assignment Manager have large resource requirements.

Maximum Tasks (MaxTasks) Parameter

This parameter controls the maximum number of server threads that can run at any time. For Assignment Manager, this controls the maximum number of assignments that can be processed concurrently. The value of this parameter should be set to the maximum anticipated concurrent requests (dependent on your server's capabilities).

Minimum MT Servers (MinMTServers) Parameter

This parameter controls the number of Assignment Manager server processes that are started when the Siebel servers starts up. If this value is set to zero, Assignment Manager is disabled. It is recommended that you use the default value of one, as server processes and Assignment Manager have large resource requirements.

Refresh people skills interval Parameter (MaxSkillsAge) Parameter

This parameter controls the interval in which people skills are refreshed in seconds. If you want to automatically refresh skills without restarting the Assignment Manager component, set the value of the MaxSkillsAge parameter to the desired update interval (the value must be greater than zero seconds). Then, when rules are released, Assignment Manager refreshes skills and recreates the rulecache.dat file at the periodic interval set.

Setting the Log Level of Assignment Manager Events

Before running Assignment Manager, you can set event logs to view results. The Assignment Manager, Batch Assignment, and Workflow Monitor Agent server components are configured to use events.

NOTE: The Trace Flags and Error Flags parameters are no longer used with Assignment Manager.

In addition to the events used for other server components, the Assignment Manager, Batch Assignment, and Workflow Monitor Agent server components use specific events to log information related to assignments:

- **Assignment Manager Generic (Generic).** Generic events specific to Assignment Manager.
- **Loading (Loading).** Logging of events that happen during loading.
- **Object Assignment (Assign).** Logging of events during the assignment phase.
- **Rules Evaluation (Match).** Logging of events during the evaluation phase
- **SQL Parse and Execute.** Traces all executed SQL and makes enhances debugging.

There are five levels in each of the events:

- Level 0: Used for fatal errors
- Level 1: Used for nonfatal errors and warnings
- Level 2-4: Used for different levels of logging detail
- Level 5: Used for detailed debug information

Assignment Manager uses two events for logging information when assigning object rows. For the evaluation phase, Assignment Manager uses the Rules Evaluation (Match) event. The following levels of information are logged for each level:

- Level 2 - Object row-level logging
- Level 3 - Rule-level logging
- Level 4 - Criterion-level logging
- Level 5 - Criterion value-level logging

NOTE: As of version 7.7, level 5 is necessary for you to see detailed criteria value-level logging.

For the assignment phase, Assignment Manager uses the Object Assignment (Assign) event. The following levels of information are logged for each level:

- Level 2 - Object row-level logging
- Level 3 - Passing rules-level logging
- Level 4 - Passing candidates-level logging

NOTE: You can set the log level of both event types to print a list with combined results. However, when assigning too many objects, these settings may create extremely large log files.

To set the log level of Assignment Manager events

- 1** Navigate to the Administration - Server Configuration screen > Servers > Components view.
- 2** In the Components list, select the Assignment Manager, Batch Assignment, or Workflow Monitor Agent component, depending on which component you want to set a log level; make sure the selected component is running on the correct server.
- 3** In the Log Level field in the Events list, adjust the values as required by your implementation as follows:

- a** Select Rules Evaluation; type in 3 if you want to print a list of assignment rules that were evaluated
- b** Select Object Assignment; type in 3 if you want to print a list of evaluated assignment rules that passed

For more information on event logs, see *System Monitoring and Diagnostics Guide for Siebel Business Applications*.

About Server Administration Requirements After Configuration

After configuring Assignment Manager objects and attributes or altering assignment policies, it is often necessary to stop and restart various server tasks and components. [Table 46](#) summarizes the required server tasks and components that must be restarted based on the type of configuration process. Detailed information on how and when to run these server tasks and components is provided in the remainder of this chapter.

Table 46. Summary of Server Administration After Configuration

Configuration Process	Restart Assignment Manager	Regenerate Triggers	Restart Workflow Monitor Agent
Adding or configuring an assignment object, assignment attribute, or assignment criteria	Yes	Yes	Yes
Changing assignment policies	Not applicable	Yes	Yes
Activating or deactivating assignment policies	Not applicable	Yes	Yes

NOTE: If you want to automatically refresh skills without restarting the Assignment Manager component, set the value of the Refresh people skills interval (MaxSkillsAge) server component parameter to the desired update interval (the value must be greater than zero seconds). Then, when rules are released, Assignment Manager refreshes skills and recreates the rulecache.dat file at the periodic interval set.

About Server Administration Requirements for Assignment Modes

Assignment Manager requires various functioning server components and tasks based on the selected assignment mode. [Table 47](#) summarizes the required server components and tasks that must be online or started when selecting a particular mode of assignment. When Mobile Assignment is selected, use the information provided for either interactive or batch assignment based on your deployment requirements. Detailed information on starting these components and tasks is covered in the remainder of this chapter.

Table 47. Summarization of Server Requirements for Assignment Modes

Assignment Mode	Set Assignment Manager Online	Start Workflow Monitor Agent	Server Request Broker Running ¹
Interactive Mode	Yes	No	Yes
Dynamic Assignment Mode	No ²	Yes	No ²
Batch Assignment Mode	No	No	No

1. For dynamic and batch assignment, you do not need to start the Server Request Broker when running your tasks using the SRVRMGR command-line interface (or an alternate method, such as setting Default Tasks for the server component).

2. This information is based on the default "Assignment Request (In Process)" seeded action.

Additionally, when using availability-based assignment, make sure the Field Service component group and the ApptBook component are online.

About Using an Object Where Clause to Restrict the Number of Records Processed

The Object WHERE Clause (ObjWhereClause) parameter can be used to restrict which records are retrieved and processed. Standard SQL WHERE statements are used for the Object WHERE Clause and can include up to 2048 characters when an assignment server job is started using the command-line interface. However, when you start an assignment server job from the UI, you can only specify up to 100 characters. Also, when using wildcards in the object WHERE clause, make sure you use the correct wildcard specific to your database.

The following object WHERE clause examples for the Account assignment object are provided as a guideline. Assignment administrators should work with their database administrator to generate optimal SQL for their implementation.

As an example, the following conditions for the Account assignment object can apply:

- Joins are allowed in the Object WHERE Clause.

An example of a join is as follows:

```
Object where clause = where pr_postn_id in (select row_id from s_postn where name = 'Sales Rep')
```

- The Object WHERE Clause assumes the base table is coming from the assignment object specified.

If you start batch assignment specifying the assignment object as Account and the Object WHERE Clause is where row_id = '1-232', then batch assignment attempts to assign only the row_id = '1-232' from the S_ORG_EXT table.

The following is an example of a batch assignment request using the command-line interface:

```
start task for component AsgnBatch with AsgnObjName= "Account",  
AsgnMode="MatchAssign", ObjWhereClause="where name like 'B%'"
```

This command batch assigns accounts starting with *B*.

Optionally, you can use the command-line interface and the Object WHERE Clause to run only a select number of assignment rule groups. The following is an example of this:

```
start task for comp asgnbatch with asgnobjname="Account", objwhereclause="where name  
like 'B%'", asgnkey="12-4DR56"
```

In this example, 12-4DR56 is the row ID of an assignment rule group, and only those rules belonging to this group are evaluated when this parameter is passed in the request.

NOTE: When using the command-line interface, use double quotation marks for the ObjWhereClause parameter; otherwise, it is treated as a SRVRMGR command option that changes the case.

About Running Assignment Manager in Denormalization Mode

Assignment Manager provides the ability to denormalize positions and organizations using the Contact Denormalization and Product Denormalization features.

Contact Denormalization and Product Denormalization modes do not require assignment rules to function. Assignment Manager does not evaluate the Contact object against any assignment rules in contact denormalization mode, nor does it evaluate the Product object against any assignment rules in product denormalization mode. And, neither mode assigns candidates to these objects. Instead, Assignment Manager gets positions from a related entity in these modes. For example, in Contact Denormalization mode, Assignment Manager gets a union of positions from related accounts and opportunities and assigns it to the contact.

NOTE: Contact Denormalization behavior differs among the various Siebel Industry Applications. See the appropriate industry-specific guide to learn more about this behavior.

About Contact Denormalization

You use Contact Denormalization when you want to allow assignees automatic access to detail contact information that is associated with an account or opportunity. In Contact Denormalization mode, Assignment Manager denormalizes positions from the Accounts and Opportunities team tables by copying these positions to the associated contacts in the Contact team table, even if the assignees are not assigned to the contacts:

- Positions from the team table of all accounts associated with the contact to the contact team.
- Positions from the team table of all Opportunities associated with the contact to the Contact team.

NOTE: The Contact Denormalization object is reserved to run Assignment Manager in Contact Denormalization mode. Assignment Manager does not evaluate the Contact object against any assignment rules in Contact Denormalization mode, and therefore does not assign candidates to objects. For this reason, do not create assignment rules for the Contact Denormalization object.

If you want the contact access list to reflect the positions in both the account and opportunity team tables, you must associate the contact with an account and then associate the contact with an opportunity. If a team member is removed from the account or opportunity's team table, then the position on the associated contact's access list can also be removed by Contact Denormalization (dependent on the properties of the Contact Denormalization assignment object). Similarly, if the account team has manually assigned team members and you want the same team members on both the contact team and account team, you must run Contact Denormalization after the account assignment.

NOTE: Positions marked Indirect by Contact Denormalization in Contact Access list are not dropped by contact assignment, that is, contact assignment does not drop the positions that were added by Contact Denormalization.

Contact Denormalization checks the Lock Assignment column on assignment objects before denormalizing. If this flag is checked, Contact Denormalization does not denormalize the contact record. For more information about the Lock Assignment feature, see [“Setting the Lock Assignment Default Value for Activity Assignment Objects” on page 254](#).

NOTE: Both Account and Contact and Contact and Opportunity have a many-to-many relationship. The Account and Contact many-to-many relationship is a feature available as of the version 7.0 release.

Assignment Manager also assigns a primary position to the contact when running in Contact Denormalization mode using the following methodology:

- 1 If the Set Primary Position property on the assignment object is TRUE (checked) and a primary position is not currently selected, then Assignment Manager sets the creator’s primary position as the new primary position.
- 2 If a primary position is not selected for the creator, then Assignment Manager sets the default position as the new primary position.
- 3 If a default position is not defined, then Assignment Manager does not set a primary position.

However, Contact Denormalization does not remove positions marked as the Primary, even if the positions no longer exist on an associated account or opportunity (with the Denorm Flag set).

Related Topic

[“Activating Contact Denormalization for Dynamic Assignment” on page 216](#)

About Product Denormalization

In product denormalization mode, Assignment Manager denormalizes organizations from the Price List table into the Product table by copying these organizations to the products associated with the price lists. You should run product denormalization only in batch mode.

NOTE: Product to price list is a many-to-many relationship.

Assignment Manager assigns a primary organization to the product when running in denormalization mode using the following methodology:

- 1 If the Set Primary Organization flag is checked and a primary organization is not currently selected, then Assignment Manager sets the creator’s primary organization as the new primary organization.
- 2 If a primary organization is not selected for the creator, then Assignment Manager sets the default organization as the new primary organization.
- 3 If a default organization is not defined, then Assignment Manager does not set a primary organization.

NOTE: The Product Denormalization object is reserved to run Assignment Manager in Product Denormalization mode. Assignment Manager does not evaluate the Product object against any assignment rules in Product Denormalization mode, and therefore does not assign organizations to objects. For this reason, do not create assignment rules for the Product Denormalization object.

Activating Contact Denormalization for Dynamic Assignment

For dynamic assignment, if you want to run Assignment Manager in contact denormalization mode, you must activate the Contact Denormalization assignment policy. By default, this policy is inactive.

NOTE: When Assignment Manager runs in contact denormalization mode, it does not evaluate assignment rules. Therefore, you do not need to select the Contact Denormalization object for the assignment rule to run Assignment Manager in contact denormalization mode.

Use the following procedure to activate contact denormalization for dynamic assignment.

To activate contact denormalization

- 1** Navigate to the Administration - Assignment screen > Assignment Policies view.
- 2** In the Assignment Policies list, select Contact Denormalization, and then perform the following:
 - a** In the Group field, click the select button.
 - b** In the Workflow Groups dialog box, select a workflow group (the default is Assignment Group), and then click OK.
 - c** In the Expiration field, either clear the existing value or set the value to a later date.

NOTE: If running batch assignment, you do not need to activate this policy.

Running Interactive Assignment

Running Assignment Manager in interactive mode allows end users to make real-time assignments. End users can review a list of potential assignees generated by Assignment Manager, then select and confirm, or override the assignment from the generated potential candidate list. For example, a call center agent might review potential candidates for an activity, then based on the candidates' assignment scores, expertise, or workload, assign the best candidate for the job.

The Activity and Service Request assignment objects are predefined to use interactive assignment, which allows you to assign employees to activities and service requests in real time. However, you can configure other assignment objects to use interactive assignment. For information about how to configure assignment objects to use interactive assignment, see ["Configuring Assignment Objects for Interactive Assignment" on page 53](#).

You can run interactive assignment using any of the following:

- Siebel Developer Web Client
- Siebel Web Client (also known as zero footprint client)
- Command-line Server Manager (srvrmgr) program

NOTE: Before running interactive assignment using the Siebel Developer Web Client, it is recommended that you verify that the correct parameter settings exist in your Siebel client configuration (.cfg) file. The parameters identified in this configuration file specify the location of the Siebel Server where Assignment Manager is running and are automatically created during installation of the Siebel client. For information about the Siebel client installation process and configuration file, see the *Siebel Installation Guide* for the operating system you are using.

NOTE: Mobile users running Assignment Manager in interactive mode do not make real-time assignments, because interactive assignments made by mobile users are not applied to the server until they resynchronize.

Requirements

Interactive assignment requires that the:

- Assignment Manager server component is Online
- Server Request Broker server component is Running

Running Interactive Assignment from the UI

The Activity and Service Request assignment objects are predefined to use interactive assignment, which allows you to assign employees to activities and service requests in real time.

To run interactive assignment from the UI

- 1 Navigate to either of the following locations:
 - Activities screen > Activity List > All Activities view
 - Service Requests screen > All Service Requests view
- 2 In the All Service Requests or All Activities list, select an open service request or activity for assignment.
- 3 In the More Info form, click the Menu button and select Assign to start interactive assignment.
For an example, see [Figure 4 on page 53](#).
- 4 Choose an assignee from the list of best candidates provided by Assignment Manager.

The Siebel client then:

- Communicates with the Siebel Assignment Manager on the Siebel Server and creates a list of qualified employees for the activity or service request.
- Displays the list of qualified employees to the Siebel user, sorted by the descending order of scores.
- Sets the activity or service request owner to the employee that is chosen when clicking the Assign button.

Example of Running Interactive Assignment for Service Requests from the UI

This topic gives one example of running interactive assignment from the user interface (UI). The example is applicable for use with the Siebel Developer Web Client as well as the Siebel Web Client. You may use this feature differently, depending on your business model.

To run interactive assignment for a service request

- 1 Navigate to the Service Requests screen > All Service Requests view.
- 2 In the Service Requests list, select an open Service Request for assignment.
- 3 In the More Info form, click the Menu button and select Assign to start interactive assignment.
For an example, see [Figure 4 on page 53](#).
- 4 Choose an assignee from the list of best candidates provided by Assignment Manager.

The Siebel client:

- Communicates with the Siebel Assignment Manager on the Siebel Server and creates a list of qualified employees for the service request.
- Displays the list of qualified employees to the Siebel user, sorted by the descending order of scores.
- Sets the service request owner to the employee that you choose.

About Running Interactive Assignment in Rule Group Mode

By default, interactive assignment submits requests to an assignment server that is running in default mode. However, you can use the Assignment Manager server component (AsgnSrvr) to run interactive assignment in rule group mode—with or without using server key mappings.

Using Server Key Mappings to Run Interactive Assignment

Use server key mappings when you want to split your rules across different servers. You can explicitly define what rule groups to load on what server, and only rules from that particular rule group are executed. At the time of the assignment request, you can specify one of the rule groups as the Assignment Key parameter (AsgnKey) along with the request.

If you use server key maps, when you click the Assign button, a request is sent to the Assignment Manager server component (AsgnSrvr) to evaluate and return the qualified candidates. To submit requests to a server that has server key mappings, one of the rule group IDs must pass because the AsgnKey parameter must pass. To accomplish this, the SetAsgnKey InvokeMethod is called on the CSSBCBase business component base class. Using a script, a workflow process, or a business service, this InvokeMethod is called and the row ID of one of the rule groups is passed as the parameter.

After this is complete, interactive assignment uses this parameter as the AsgnKey and ReqKey parameters when submitting requests to the AsgnSrvr component. Note that for one session, you only need call this InvokeMethod once. Subsequent requests in the same session reuse the rule group row ID. However, when the session is logged out or the server is restarted, you must call this InvokeMethod again to set the AsgnKey parameter. Otherwise, the assignment server reverts to running in default mode.

Without Using Server Key Mappings to Run Interactive Assignment

Assignment Manager supports the use of rule group mode even if you do not want to split your rules across multiple servers. In this case, you do not create server key mappings. Instead, you submit the request specifying the rule group in the AsgnKey parameter for AsgnSrvr. Even if there are no server key mappings, each AsgnSrvr process loads all active rules. AsgnSrvr determines at request time whether to execute all rules or only rules from a particular group based on whether or not the assignment key is passed.

About Running Dynamic Assignment

Dynamic assignment is a feature that works transparently as existing records change or new records are created. For example, you can set up dynamic assignment to automatically assign a service request to an owner when a new record is created or reassign a service request to another owner if the service request is updated.

Dynamic assignment is especially useful in a deployment where users and server programs make frequent changes to the assignment object records (such as service requests and activities) because dynamic assignment can automatically determine the changes and assign the objects to the appropriate people and organizations.

The dynamic assignment process uses the underlying database triggers feature. When a record is modified, either by a user or by another server process like EAI, workflow, and so on, the database trigger (setup by the Generate Triggers server component) captures the changes, and queues the assignment request into the S_ESCL_REQ (escalation request) table. The Workflow Monitor Agent then polls S_ESCL_REQ periodically and assigns the object by internally invoking Assignment Manager within its own process.

NOTE: By default, the Server Request Broker and the Assignment Manager server components are not explicitly used in dynamic assignment.

Requirements

Dynamic assignment requires that:

- Triggers are generated using Generate Triggers component
- Workflow Monitor Agent is running
- Assignment policies are set and activated
- (Optional) If you are using skills, make sure the MaxSkillsAge server component parameter is set to a value greater than 0 seconds

NOTE: Dynamic assignment can refresh employee, position, and organization skills from the database if changes are made to these items. The MaxSkillsAge program argument, if activated, forces Assignment Manager to reload this information. By default, this argument is not set. For more information about this parameter, see ["Modifying the Assignment Manager Server Component Parameters" on page 198](#).

Workflow Monitor Agent

To run dynamic assignment, a Workflow Monitor Agent task must be running. A Workflow Monitor Agent detects when a user changes data related to objects. For more information about Workflow Monitor Agent, see *Siebel Business Process Designer Administration Guide*.

Generate Triggers

The Generate Triggers server component generates the database triggers used by Workflow Manager to detect changes. Generate Triggers reads the Workflow Policy Object and Assignment Object definitions in the Siebel repository and generates the appropriate database triggers to monitor changes.

Process of Running Dynamic Assignment

You run dynamic assignment only in default mode, which means all active rules are loaded and processed. Rule group mode is not supported.

To set up dynamic assignment, perform the following tasks:

- 1 (Optional) [“Reviewing Triggers for Dynamic Assignment” on page 221](#)
- 2 Generating Triggers, using either of the following procedures:
 - [“Generating Triggers for Dynamic Assignment Using the UI” on page 222](#)
 - [“Generating Triggers for Dynamic Assignment Using the Command-Line Interface” on page 224](#)
- 3 [“Starting Workflow Monitor Agent for Dynamic Assignment Using the Command-Line Interface” on page 224](#)

Reviewing Triggers for Dynamic Assignment

The database triggers created by the Generate Triggers server component detect record changes in the Siebel database and place an assignment request in the S_ESCL_REQ (escalation request) table for the Workflow Monitor Agent to pick up the request and invoke the Assignment Server. However, triggers generated for Assignment Manager can reference other database columns not associated with assignment rules.

CAUTION: Make sure triggers are generated only for an assignment policy’s criteria. Large data loads can experience performance issues otherwise.

Do not modify the database triggers. However, before generating or applying triggers for dynamic assignment, you might want to review the trigger.sql file. It is recommended you work with your database administrator to do so.

NOTE: If you discover redundant triggers, you need to deactivate the appropriate assignment criteria and assignment attribute using Siebel Tools.

To review triggers for dynamic assignment

- 1 Use Siebel Tools, or view the trigger.sql file (/Siebel Root/Siebsrvr/trigger.sql), to examine the appropriate table columns.

For more information about using Siebel Tools, see *Using Siebel Tools*.

- 2 Disable the inappropriate columns by inactivating the assignment attribute column.

For detailed information, see [“Disabling Assignment Attributes” on page 73.](#)

If you inactivate only the assignment attribute column and leave the assignment attribute and assignment criteria active, then the assignment criteria appears in the user interface in the assignment administration views, which means you can create assignment rules based on that criteria. The following is the result of this action based on whether or not the Employee Skill field is checked:

- If the Employee Skill field is checked, then the assignment criteria is skill-based and, as such, should continue to work for assignment rules. For example, the criteria works if you run batch assignment because that mode does not rely on triggers.
- If the Employee Skill field is not checked, then the assignment criteria is object-based, and as such, relies on a valid assignment attribute column configuration. If you attempt to create assignment rules, you get an error message when the task is run.

- 3 Drop and regenerate new triggers.

See [“Generating Triggers for Dynamic Assignment Using the UI.”](#)

- 4 Recheck the trigger.sql file, to confirm that the trigger is no longer active.

NOTE: When dynamic assignment is running, due to the database concurrency feature, some users might receive the following error when attempting to modify a record: “The selected record has been modified by another user since it was received. Please continue.” This can occur because Assignment Manager updated the record by assigning it while an user was trying to edit it. In this situation, the user’s changes may be lost. The solution is to refresh the query and reenter the changes.

Generating Triggers for Dynamic Assignment Using the UI

Use the Generate Triggers server component to generate the database triggers used by Workflow Manager to detect changes in the database.

NOTE: You cannot create custom triggers on the Siebel database. The only supported triggers allowed on the Siebel database are those generated during installation or from running the Generate Triggers server component.

For dynamic assignment, you need to run the Generate Triggers server component after:

- Creating or changing an Assignment Object, Assignment Attribute, or Assignment Criteria object type in Siebel Tools
- Changing assignment policies
- Installing or upgrading the Siebel Server

TIP: When amending an assignment rule, criteria, or value, or when making changes to assignment positions in dynamic mode, you do not have to drop and regenerate database triggers.

To generate triggers for dynamic assignment using the UI

- 1** Navigate to the Administration - Server Management screen > Jobs view.
- 2** In the Jobs list, click New.
A new record appears with a system-defined ID automatically generated with a status of Creating.
- 3** In the Job Detail subview, enter the relevant information for the new component request record.
 - a** In the Requested Server field, type the name of the Siebel Server for which you want to run Generate Triggers.
 - b** In the Request Key field, type in the name of the request key.
 - c** Complete the rest of the fields, if needed.
- 4** In the Job Parameters list, click New to create a new record for the Privileged User, and enter the relevant parameter information.
 - a** In the Name field, click the select button.
 - b** In the Job Parameters dialog box, query for PrivUser, and then click OK.
 - c** In the Value field, type in the privileged user name.

NOTE: If you are using a Microsoft SQL Server database, you need to set the Privileged User Password value to the user password with tableowner privileges. Also make sure that the Table Owner value is set to dbo.
- 5** In the Job Parameters list, click New to create a new record for the Privileged User Password, and enter the relevant parameter information.
 - a** In the Name field, click the select button.
 - b** In the Job Parameters dialog box, query for PrivUserPass, and then click OK.
 - c** In the Value field, type in the privileged user password.
- 6** In the My Component Requests form, click the Menu button, and then click Submit request.

For more information generating database triggers, see *Siebel Business Process Designer Administration Guide*.

Generating Triggers for Dynamic Assignment Using the Command-Line Interface

You can run dynamic assignment using the Server Manager server component from the command-line interface using the Generate Triggers command and the parameters in [Table 48](#). The command-line interface of the Server Manager is the `srvmgr` program. For more information on using the command-line interface, see *Siebel System Administration Guide*.

Table 48. Generate Triggers Command-Line Interface Parameters

Parameter Name	Display Name	Description	Default Value
EXEC	EXEC	Install Triggers to DB directly	FALSE
Mode	Mode	Assignment Server and/or Workflow mode (ASGN, WORK, or ALL)	ALL
Remove	Remove	Remove All Triggers Mode	FALSE
TAMode	TAMode	All Territory or Contact Only mode	ALL
TrigFile	Trigger File Name	Output trigger script file name	trigger.sql

Starting Workflow Monitor Agent for Dynamic Assignment Using the Command-Line Interface

To run dynamic assignment, the Workflow Monitor Agent (the WorkMon server component) needs to be running. This server component monitors the `S_ESCL_REQ` table. Database triggers, when fired because of object changes, create records in the `S_ESCL_REQ` table. The Workflow Monitor Agent reads these new records and processes requests for Assignment Manager policies. Affected objects are then dynamically assigned.

NOTE: Dynamic assignment does not log information into `S_ESCL_LOG`. For more information about log files, see *System Monitoring and Diagnostics Guide for Siebel Business Applications*.

To start Workflow Monitor Agent from the command-line interface

- 1 Determine the workflow group that you want Workflow Monitor Agent to monitor.
 - a Navigate to the Administration - Assignment screen > Assignment Policies view.
 - b In the Policy Group field in the Assignment Policies list, choose the workflow group (the default group is Assignment Group).
- 2 Start the `srvmgr` program.

For detailed information on this process, see *Siebel System Administration Guide*. After the program starts, the prompt changes to:

```
srvmgr: server_name>
```

- 3** At the prompt, enter the following information to start the Workflow Monitor Agent server component task; use the Group information gathered from [Step 1](#) (Assignment Group used in this example):

```
start task for component workmon with GroupName="Assignment Group"
```

- 4** Configure other component parameters, if needed.

For more information about other configurable parameters, see [Table 49 on page 225](#).

NOTE: Separate the parameters and their values in the command-line statement with commas.

- 5** Alternatively, you can configure a Workflow Monitor Agent to start automatically to process assignment requests whenever the Siebel Server starts.

For more information on Workflow Monitor Agent, see *Siebel Business Process Designer Administration Guide*.

This command starts a new task running in the background and returns to the Server Manager immediately.

NOTE: It is possible to set up multiple Workflow Monitor Agents for dynamic assignment. For more information on setting up multiple Workflow Monitor Agents, see the "Starting Workflow Agent Processes Automatically with Siebel Server" topic of *Siebel Business Process Designer Administration Guide*.

[Table 49](#) shows the Workflow Monitor Agent command-line interface parameters.

Table 49. WorkMon Command-Line Interface Parameters

Parameter Name	Alias	Description	Default Value
Action Interval	ActionInterval	Do not reexecute actions within specified interval in minutes	3600
Cache size of Policy violations	CheckLogCacheSz	Number of policy violations to store in cache	100
Cache size of last user information	LastUsrCacheSz	Number of last user information items to cache	100
Group Name	GroupName	Group Name	
Ignore errors	IgnoreError	Ignore errors while processing requests	False
Mail Server	MailServer	Name of email server to send notification of abnormal termination	
Mailing Address	MailTo	Mail address to review notification of abnormal termination	
Number of days to keep violation information	KeepLogDays	Number of days worth of violation information that should be retained	30

Table 49. WorkMon Command-Line Interface Parameters

Parameter Name	Alias	Description	Default Value
Number of seconds to retry	GenReqRetry	Number of seconds to retry sending a Generic Request message	120
Processes the batch Policies	BatchMode	Process the batch policies	False
Reload Policy	ReloadPolicy	Reload Policy Interval in seconds	600
Request delete size	DeleteSize	Request delete size	500
Requests per iteration	Requests	Requests per iteration	5000
Sleep Time	SleepTime	Time to sleep between iterations (in seconds)—that is, the frequency of time the Workflow Monitor Agent polls the S_ESCL_REQ table (escalation request table) and assigns rows. For example, if SleepTime is set to 60 seconds, the Workflow Monitor Agent polls the S_ESCL_REQ table, then wait 60 seconds before it polls it again.	60
Use Action Agent	ActionAgent	Use Action Agent	False

For detailed information on starting, stopping, and monitoring server tasks, see *Siebel System Administration Guide*. For further information about the Workflow Monitor Agent, see *Siebel Business Process Designer Administration Guide*.

About Tuning Dynamic Assignment for Performance

If users experience slow response time while running Assignment Manager in dynamic mode, you can implement one or more of the following to improve dynamic assignment performance:

- Increase the Requests (Requests per iteration) workflow monitor parameter (the default is set to 5,000).
- Decrease the SleepTime workflow monitor parameter (the default is 60 seconds).
- Increase the ReloadPolicy workflow monitor parameter to a much larger number, for example, 86,400 seconds (the default is 600 seconds).
- Distribute each assignment policy into its individual group and then invoke several Workflow Monitor Agents concurrently (one on each Siebel Server, if available).

About Running Batch Assignment

Use batch assignment to assign multiple records of an object in a single batch. Typically, you want to run batch jobs periodically when you anticipate the least amount of database activity (such as daily or weekly after-hours).

Batch assignment runs only in rule group mode. At the time of the assignment request, you specify one of the rule groups as the Assignment Key parameter for the AsgnBatch server component job along with the request. You identify the records for batch assignment using an SQL WHERE clause. This WHERE clause is usually based on columns in the base table of the assignment object. For example, an example of a WHERE clause is:

```
WHERE OWNER_EMP_ID = NULL
```

You can use this clause to identify all service requests that are not as yet assigned to a owner.

You can have a batch assignment task load only a particular group of rules into memory by specifying the row ID of the rule group in the Assignment Key parameter when you start the task. If no rule group is specified for this parameter, the batch task loads all rules in the Default Rule Group into memory. If no rule groups have been defined in the application, then all active rules in the database load.

Reason to Not to Run Batch Assignment with Dynamic Assignment

For performance reasons, do not run dynamic assignment when running batch assignment. If you run both batch assignment and dynamic assignment in your environment, the batch assignment can activate dynamic assignment due to triggers created in the database required to run dynamic assignment. Before running batch assignment, you should deactivate all assignment policies and drop related triggers to prevent dynamic assignment from processing modified rules, objects, and candidates. After completing batch assignment, you can reactivate the assignment policies and reenables batch assignment.

Related Topic

["Running Batch Assignment" on page 228](#)

Running Batch Assignment

Batch assignment executes Assignment Manager in batch mode. In batch mode, Assignment Manager can take an Object WHERE Clause and other appropriate parameters that determine candidates for chosen objects

You typically use batch assignment for importing new records from a legacy system or when an assignment rule changes, such as when a sales representative no longer manages a specific ZIP CODE.

When You Must Run Batch Assignment

You *must* run Assignment Manager in batch mode if you change nonobject data that can affect assignments. Such situations occur whenever you:

- Modify assignment rules and want these changes to affect existing objects. You modify assignment rules when you:
 - Add or remove employees, positions, or organizations
 - Add, remove, or update assignment criteria or criteria values
 - Associate a rule with a different rule group or change the rule sequence number
 - Change scores
 - Change activation and expiration dates
 - Change exclusive mode
- Modify the list of employees, positions, or organizations and you want these changes to affect existing objects.
- Change the Assignment Manager configuration in Siebel Tools and you want your changes to affect existing objects. You change the Assignment Manager configuration when you:
 - Change Assignment Attribute definitions
 - Change Assignment Criteria definitions
 - Change Assignment Object definitions
 - Change Workflow Policy Object definitions
- Use EIM (Enterprise Integration Manager) to perform initial loads (if you do not run Generate Triggers to create the appropriate triggers).

NOTE: When using EIM to load assignment rules, make sure the column `ASGN_TYPE_CD` includes a value. If it is left NULL, which is permissible in EIM, the rules are loaded but Assignment Manager fails.

- Feel that existing assignments may not be accurate. Assignment Manager does not change assignments if the existing assignments are correct.

NOTE: When batch mode is run on correct assignments, although there are no changes to the team or primary, an update of the record occurs. This situation can disturb other workflow policies relying on various record fields. For example, a workflow policy relying on PR_POSTN_ID field to trigger an action does not work properly if this field is updated from a new batch assignment. If your deployment uses SQL Server, this note does not apply.

You can configure the Batch Assignment server component for your implementation by adjusting the appropriate parameters. [Table 45 on page 199](#) lists the batch server component parameters used by Assignment Manager that you can change.

Use the following procedure to run batch assignment.

CAUTION: For performance reasons, do not run batch assignment while running dynamic assignment. This is because batch assignment can activate dynamic assignment with adverse effect due to triggers created in the database required to run dynamic assignment. For more information, see [“About Running Batch Assignment” on page 227](#).

To run batch assignment

- 1 Navigate to the Administration - Server Management screen > Jobs view.
- 2 In the Jobs list, click New.
A new record appears with a system-defined ID automatically populated with a status of Creating.
- 3 In the new record, enter the relevant information for the new job.
 - a In the Component/Job field, select Batch Assignment.
 - b In the Requested Server field, type the name of the server on which you want to run this batch request.
 - c (Optional) If you want to run a specific rule group for this batch, type the row ID of the assignment rule group for which you want rules processed for the AsgnKey parameter.
 - d Complete the rest of the fields for the new record, if needed.
- 4 In the Job Parameters list, click New to create a new record, and enter relevant information for the assignment object that you want to assign as part of this batch request.
 - a In Name field, click the select button.
 - b In the Job Parameters dialog box, select Assignment Object Name, and then click OK.
 - c In the Value field, enter the name of the assignment object for the parameter.
Use the exact name found in Siebel Tools, such as Service Request or Order (Sales Credit Assignment).

NOTE: Because batch assignment cannot run more than one assignment object per batch, you should run batch assignment on only one assignment object for each batch.
- 5 While still in the Job Parameters list, click New to create a new record so that Assignment Manager uses the Object WHERE clause to limit the number of rows processed at one time.

- a** In Name field, click the select button.
- b** In the Job Parameters dialog box, query for ObjWhereClause, click Go, and then click OK.
- c** In the Value field, enter a WHERE clause to select the object instance that you want to process; the WHERE clause can include up to 100 characters.

For example, to select object instances beginning with ibm, type:

```
WHERE name like 'ibm%'
```

NOTE: If you leave the value field blank, all object instances are selected. However, it is strongly recommended that you limit the number of rows that Assignment Manager processes to make sure that sufficient rollback space is available.

For more information about using the Object WHERE clause, see ["Setting the Log Level of Assignment Manager Events" on page 209](#).

- 6** (Optional) If you want to enable Contact Denormalization for batch assignment, add two more component job parameter records with values from the following table.

Parameter Name	Value
Assignment Object Name	Contact Denormalization
Assignment Mode	Denorm

- 7** (Optional) If you want to save changes to the database during batch processing, add another component request parameter as follows:
 - a** In Name field, click the select button.
 - b** In the Job Parameters dialog box, query for Batch Size, and then click Go.
 - c** In the Value field, enter the number of objects to assign before committing each batch.
- 8** In the Job Detail form, click the menu button and choose Start Job.

NOTE: You should monitor the performance of batch assignment and increase or decrease the number of running tasks to obtain optimal performance.

Related Topics

["About Running Batch Assignment" on page 227](#)

["Running Batch Assignment Using the Command-Line Interface" on page 231](#)

["About Running Multiple Instances of Assignment Manager in Batch Mode" on page 231](#)

Running Batch Assignment Using the Command-Line Interface

You can run batch assignment from the command-line interface using the AsgnBatch command and the designated parameters in [Table 45 on page 199](#). The command-line interface of the Server Manager is the srvmgr program. For more information on using the command-line interface, see *Siebel System Administration Guide*.

You can have a batch assignment task load only a particular group of rules into memory by specifying two job parameters in the request:

- Use Key Value = <Rule Group>
- Actual Assignment Key = <Rule Group Id>

For example, the following command tells Assignment Manager to only look at or modify candidates on the team whose rule group id is 1-34XD4 and runs only those rules that are a part of that rule group.

```
start task for comp asgnbatch with asgnobjname="Activity", usekeyvalue = "Rule
Group", ActualAsgnKey = "1-34XD4"
```

Related Topics

["About Running Batch Assignment" on page 227](#)

["Running Batch Assignment" on page 228](#)

["About Running Multiple Instances of Assignment Manager in Batch Mode" on page 231](#)

About Running Multiple Instances of Assignment Manager in Batch Mode

When there are many objects that need to be assigned, you can run multiple instances of Assignment Manager in batch mode to improve performance. First, develop a strategy for specifying multiple batches using the Object Where Clause parameter in the Batch Assignment component. Then, start multiple instances of batch assignment specifying the appropriate Object Where Clause for each instance.

For example, you can run one instance of batch assignment for accounts that changed today and a different instance of batch assignment for accounts that changed yesterday. Use the Object Where Clause parameter to specify the following:

- For the batch that processes accounts changed today:

Object where Clause: `WHERE LAST_UPD = SYSDATE`

- For the batch that processes accounts changed yesterday:

Object where Clause: `WHERE LAST_UPD = SYSDATE - 1`

NOTE: These examples use a nonindexed field—LAST_UPD. It is recommended, however, that you use indexed fields for object WHERE clause statements. Also, use the appropriate database datetime functions to determine the current date and time depending on the database you are using. This example uses SYSDATE, which is specific to Oracle database datetime functions.

To process mutually exclusive sets of records when running multiple instances of Assignment Manager simultaneously for the same assignment object, you should specify an Object Where Clause for each assignment task. You can also distribute the tasks on multiple Siebel Servers to enhance performance.

When Not to Run Multiple, Simultaneous Batch Jobs

There are several instances where you should *not* run multiple, simultaneous batch jobs:

- If multiple Assignment batches are executed for the same object, then the results can potentially vary and may not be as desired
- If the batch jobs update rows on the same table or tables
- If one batch job updates records in a table or tables used by another batch job as input
- If the batch jobs use workload criteria to assign the same object

NOTE: If multiple assignment batches are executed for the same object using workload criteria, the results can potentially vary and may not be as desired.

Examples of when you should *not* run multiple simultaneous batch jobs include:

- Contact and Contact Denormalization because the same tables are updated
- Account and Contact Denormalization because Contact Denormalization uses Account team as input
- Opportunity and Contact Denormalization because Contact Denormalization uses Opportunity team as input

Related Topics

[“About Running Batch Assignment” on page 227](#)

[“Running Batch Assignment” on page 228](#)

[“Running Batch Assignment Using the Command-Line Interface” on page 231](#)

About Tuning Batch Assignment for Performance

If users experience slow response time while running Assignment Manager in batch mode, review the settings on virus software installed on the applicable server. Implement one or more of the following settings to improve batch assignment performance:

- Virus scan only program files.
- Exclude all outbound files from virus scanning.
- Exclude the RDBMS directory where all msb files are located from virus scanning.

Make sure to run a full virus scan on all files during the weekend or off-peak time if the preceding settings were used.

You can also implement one or more of the following to boost batch performance in batch mode:

- Increase the BatchSize parameter, for example, set the batch size to 500 (the default is set to 100).

This increases the number of records that are processed within a transaction before a commit occurs, resulting in less resources used and faster assignment.

NOTE: Only set large batch sizes when there are no or very few users on the system.

- Create multiple instances of batch assignment (using WHERE clause statements). See ["About Running Multiple Instances of Assignment Manager in Batch Mode" on page 231](#).
- Select a good filter.

Carefully choosing a filter reduces the time it takes to retrieve Object records.

NOTE: Use indexed field or fields for comparison in the object WHERE clause, such as Name for Account and Opportunity, or Last Name for Contacts.

■ Use better logic.

For example, if you want to run Account Assignment based on account name, you can create multiple batches so that the first batch starts with names beginning with the letter C through K, the second batch starts with the letter L through R, and so on.

Consider the following logic:

Object Where Clause: WHERE NAME > 'B' AND NAME < 'L'

Although this causes the database to retrieve account records with names starting with the letter C through K, the WHERE clause is specified in such a manner that if accounts starting with the letter M through Z are encountered, they are passed on the first round because the values are > B. They are then eliminated in the second round (< 'L') by the database. These records are not needed in the batch because there is a cap of account names less than L.

It is better logic to use:

Object Where Clause: WHERE NAME < 'L' AND NAME > 'B'

By switching the order of the conditions, the extra parsing required by the database in the second round is eliminated because most of the names start with a letter greater than B.

Running Mobile Assignment

Use Mobile Assignment to reassign people based on changes uploaded by mobile clients. Assignment Manager assigns objects after a mobile client synchronizes with the Siebel Server and uploads assignment requests or any changes to objects and assignment rules. Depending on the configuration of Generate Triggers, the Workflow Monitor detects these changes and activates Assignment Manager to dynamically reassign affected objects.

NOTE: If a disconnected client sends an assignment request to the Siebel Server while running Mobile Assignment, the request is sent as an asynchronous request. Because of this, the request does not override the Keep Manual Assign property.

To run mobile assignment

- 1 Be sure that you have run the Generate Triggers server component.

For instructions, see ["Generating Triggers for Dynamic Assignment Using the UI" on page 222](#).

- 2 Start the Workflow Monitor Agent.

For instructions, see ["Starting Workflow Monitor Agent for Dynamic Assignment Using the Command-Line Interface" on page 224](#).

NOTE: If running interactive assignment, make sure the Server Request Broker server component is running. For instructions on checking the status of a server component, see *Siebel System Administration Guide*.

About Running Assignment Manager in Reporting Mode

Reporting mode provides the assignment administrator the ability to perform trial assignments and what-if analysis. When running Assignment Manager in reporting mode, assignments are written into results tables, known as reporting tables, rather than into the actual database tables. This allows the administrator the opportunity to preview possible assignment before actual assignments are made.

You can run Assignment Manager in reporting mode either from the UI or using the Siebel Server Manager command-line interface, known as the `svrmgr` program. In either mode, you initiate a reporting mode request using either the Assignment Server (`AsgnSrvr`) or the Batch Assignment (`BatchAsgn`) server component. You pass the Reporting Mode (`RptMode`) parameter, specifying one of the following values:

- **Snapshot.** Reporting is turned on. Assignment Manager performs assignment validations and writes resulting candidates to the reporting team tables.
- **Delta.** Reporting is turned on. Assignment Manager performs assignments, compares existing assignment team table and writes the results to the reporting team tables.

For example, the following command tells Assignment Manager to read from and write to only the reporting tables where the reporting team tables store a snapshot of the results:

```
start task for comp asgnsrvr with asgnobjname="Opportunity", objwhereclause="where
name='James Opty'", rptmode = "Snapshot"
```

NOTE: By default, reporting is turned off. That is, when the Regular Assignment server component parameter is set to `False`, no assignment takes place. However, irrespective of whether reporting is turned on or off, Assignment Manager can write evaluation results to actual assignment tables.

Using Siebel Tools, you specify key columns through properties on the assignment object. Assignment Manager reads these key columns to differentiate between candidates. Assignment Manager stamps these key values; that is, Assignment Manager sets the key value for each record, to keep track of what employees, positions, or organizations are added in a specific assignment execution.

Then, when submitting an assignment request, you can pass one of the following values for stamping:

- Person Key Value (`PersonKeyVal`) for employees and positions
- Organization Key Value (`OrgKeyVal`) for organizations

For example, the following command tells Assignment Manager to execute in reporting delta mode where it merges the team from this run to the current team in the regular tables, and then writes the results to the reporting table. However, it only executes the rule against the Account 1 account, updates or changes positions who have the key value 12-RG2, and stamps all new positions with the value 12-RG2.

```
start task for comp asgnsrvr with asgnobjname="Account", objwhereclause="where NAME like
'Account 1'", UseKeyVal="Key Value", PersonKeyVal="12-RG2", RptMode="Delta"
```

The Key Column in the S_ACCNT_POSTN results table holds either the rule group ID or a key value to distinguish candidates. You use the UseKeyValue parameter to indicate whether Assignment Manager uses the key value to filter and stamp candidates and what the key value should be. The choices are:

- **Rule Group.** Assignment Manager automatically using the rule group from which a particular candidate passes and stamps that rule group ID on the key column you defined.
- **Key Value.** User supplies either a Person Key Value (for employees and positions), or an Organization Key Value (for organizations) along with the request, then Assignment Manager stamps that value.

For example, assume you run AsgnSrvr with rule group 1 (RG1), and the result is that Position 1 is added to Account1. Next, you run rule group 2 (RG2) and Position 2 is added to Account1. If you do not want a second AsgnSrvr run to touch or change anything from the first run, you run AsgnSrvr with the UseKeyValue server component parameter set to either Rule Group or Key Value.

- If UseKeyValue = Rule Group, Assignment Manager saves the rule group ID in the Key Column property in the Assignment Object Extension object. In addition, Assignment Manager does not delete any positions who's key column value does not match the rule group ID.
- If UseKeyValue = Key Value, you need to also pass along another parameter as well—either PersonKeyVal or OrgKeyVal.

In this case, because you are working with account positions, Assignment Manager passes the PersonKeyVal parameter.

When you run AsgnSrvr again, you might run the following command:

```
start task for comp asgnsrvr with asgnobjname="Account", objwhereclause="where NAME like ' Account 1'",UseKeyVal="Key Value", PersonKeyVal="12-RG2", RptMode="Delta"
```

Later on, if you make changes to RG2 and want to run another assignment request, you can use the same command. Only the positions on the account team with a key value of 12-RG2 change.

For more information on using the command-line interface, see *Siebel System Administration Guide*.

Related Topic

["Configuring Assignment Manager to Use Reporting Tables and Columns" on page 265](#)

About Assignment Manager Rule Cache Files

The rule cache file contains the most recent copy of assignment rule, criteria, candidates, skills, and skill items information before the last time assignment rules were released. A cache file is recreated every time assignment rules are released or when skills have expired.

Depending on the mode in which you run Assignment Manager, the following cache files are used:

■ **rulecache.dat**

This file contains information about all active rules in the database. When running Assignment Manager in default mode, this file is used by each of the three assignment operation modes—interactive, batch, and dynamic assignment.

■ **rulecache_SERVERNAME.dat**

This file (where *SERVERNAME* is the name of the Siebel Server) contains information about the rules in the rule groups assigned to a particular Siebel Server and is used when server key mappings are defined.

■ **batchrulecache_RULEGROUPID.dat**

When batch assignment runs in rule group mode, you can specify whether it uses the default mode cache file (*rulecache.dat*) or a separate cache file by way of the Independent Rule Group Cache server parameter.

- If you set this parameter value to FALSE, it uses the default mode cache file (see *rulecache.dat* previously described in this topic).
- If you set this parameter to TRUE, it creates a separate cache file, *batchrulecache_RULEGROUPID.dat* (where *RULEGROUPID* is the Assignment Key parameter you passed along with the request).

There can be multiple cache files of this type because you can use batch assignment in rule group mode for different rule groups. This rule group cache file is a smaller file, therefore providing better performance than the default mode cache file. The performance is better because the *batchrulecache_RULEGROUPID.dat* file only has information about some rules for some rule groups while the *rulecache.dat* file has information about all active rules for all rule groups.

NOTE: The default value of the Independent Rule Group Cache parameter is set to TRUE because this setting gives better performance. Thus, if batch assignment is running in default mode (that is, the Assignment Key parameter is not supplied), then the value of this parameter is excluded.

About Using External Components to Invoke Assignment Manager

You can make assignments by invoking Assignment Manager from within a Siebel workflow process, business service, or Siebel script interface.

Assignment Manager provides the ability of sharing inputs and outputs (supports rerouting of objects) with an external component. Assignment Manager can return qualified or assigned candidates along with their scores in the form of a hierarchical property set. A property set is a set of name-value pairs that are used by various Siebel components to pass information back and forth between them.

This feature is particularly useful in a workflow process. For example, a business service step in a workflow process might call on Assignment Manager (with the assignment mode set to Match) to evaluate potential candidates and return the set of qualified candidates in a property set along with their scores. Then, the workflow process can—based on other business logic—decide the set of candidates that are assigned.

NOTE: Before version 7.7, Assignment Manager could only write qualified or assigned candidates to the database.

Assignment Manager integration behavior is controlled by the ReturnPropSet server parameter (ReturnPropSet). [Table 50](#) lists the conditions for which Assignment Manager returns a property set or writes the results to the database.

Table 50. ReturnPropSet Server Parameter Behavior

AsgnMode	Writes to Database	Returns Property Set
Synchronous:	If ReturnPropSet is FALSE, writes to database	No property set returned
Match	If ReturnPropSet is TRUE, does not write to database	Qualified candidates returned
Assign	Writes to database	No property set returned
MatchAssign	Writes to database	If ReturnPropSet is TRUE
Asynchronous	Writes to database	No property set returned

Figure 31 illustrates the structure of the output property set that Assignment Manager returns from a synchronous request, given the input parameter AsgnMode = Match or MatchAssign.

The Output Property Set

```

1. PropertyName: "ReqID",           Value: The request id    Returned by SRM

2. Child Property Set
   Child Property SetType: "Employee", Value: "Row_Id"
       Name: "Score", Value: Score of employee with highest score
       Name: "ID",    Value: Row_Id of the employee
   Child Property Set    Type: "Employee", Value: "Row_Id"
       Name: "Score", Value: Score of the employee with 2nd highest score
       Name: "ID",    Value: Row_Id of the employee
   Child Property Set    Type: "Employee", Value: "Row_Id"
       Name: "Score", Value: Score of the employee with 3rd highest score
       Name: "ID",    Value: Row_Id of the employee
   ...

   Child Property SetType: "Position", Value: "Row_Id"
       Name: "Score", Value: Score of the employee
       Name: "ID",    Value: Row_Id of the employee
   Child Property Set    Type: "Position", Value: "Row_Id"
       Name: "Score", Value: Score of the employee
       Name: "ID",    Value: Row_Id of the employee
   ...
    
```

Figure 31. Example of Output Property Set Structure Returned from a Synchronous Request

About Tuning Assignment Manager for Performance in a DB2 Deployment

If you are using DB2, for performance reasons, you should periodically execute the REORG and update statistics utilities against all applicable tables for the assignment objects that you use. For example, to enhance Assignment Manager performance before running batch or dynamic assignment for contact territory realignment (assuming you are using the preconfigured Contact assignment object), you should execute REORG and update statistics against the related tables, such as the S_CON_TERR and S_POSTN_CON tables.

For the Account assignment object, consider evaluating the S_ORG_TERR and S_ACCNT_POST tables; and for the Opportunity assignment object, consider evaluating the S_OPTY_TERR and S_OPTY_POSTN tables; and so on. For applicable tables for other assignment objects—planned or in use—view the assignment object properties for those objects using Siebel Tools.

For more information about the REORG and update statistics utilities, see *Implementing Siebel Business Applications on DB2 UDB for z/OS* and the *Siebel Installation Guide* for the operating system you are using.

10 Advanced Assignment Manager Configuration

This chapter discusses advanced configuration techniques for Siebel Assignment Manager.

NOTE: Do not attempt to perform procedures in this chapter until you are well versed in basic assignment manager configuration and assignment rule creation. This chapter is intended for users already familiar with Assignment Manager basic features and who require further information on refining their Assignment Manager deployment.

This chapter includes the following topics:

- "About Performing Advanced Assignment Manager Configuration Tasks" on page 242
- "Creating Assignment Objects" on page 243
- "Creating New Skills" on page 244
- "Example of Using Skill Tables" on page 244
- "Assigning Objects Based on the Primary Address" on page 245
- "Assigning Child Accounts Based on Parent's Primary Address" on page 246
- "Reassigning Accounts to a Different Primary Position" on page 248
- "Routing of Assignments to Mobile Users" on page 250
- "Maintaining the Manually Assigned Primary Position" on page 251
- "Stopping Assignment of the Default Organization" on page 252
- "Stopping Assignment of Organizations for Accounts" on page 253
- "Setting the Lock Assignment Default Value for Activity Assignment Objects" on page 254
- "Configuring Assignment Objects to Copy Additional Columns to the Team Table" on page 255
- "Process of Configuring Assignment Objects for Team Scoring" on page 257
- "Extending an Object's Base Table for Team Scoring" on page 258
- "Configuring Assignment Objects for Team Scoring" on page 258
- "Example of Configuring the Opportunity Assignment Object for Team Scoring" on page 259
- "Configuring Assignment Manager to Use Reporting Tables and Columns" on page 265
- "Configuring Assignment Objects for Multitiered Assignment" on page 268
- "Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 270
- "Configuring Assignment Manager to Add Scores Across Rules" on page 273

About Performing Advanced Assignment Manager Configuration Tasks

Assignment Manager allows the creation of very advanced assignment configurations. The following lists the various configuration tasks you may need to know or perform before creating your assignment rules. The list is presented in no particular order, and some may not be applicable for your needs.

- [“Creating Assignment Objects” on page 243](#)
- [“Creating New Skills” on page 244](#)
- [“Example of Using Skill Tables” on page 244](#)
- [“Assigning Objects Based on the Primary Address” on page 245](#)
- [“Assigning Child Accounts Based on Parent’s Primary Address” on page 246](#)
- [“Reassigning Accounts to a Different Primary Position” on page 248](#)
- [“Routing of Assignments to Mobile Users” on page 250](#)
- [“Maintaining the Manually Assigned Primary Position” on page 251](#)
- [“Stopping Assignment of the Default Organization” on page 252](#)
- [“Stopping Assignment of Organizations for Accounts” on page 253](#)
- [“Setting the Lock Assignment Default Value for Activity Assignment Objects” on page 254](#)
- [“Configuring Assignment Objects to Copy Additional Columns to the Team Table” on page 255](#)
- [“Process of Configuring Assignment Objects for Team Scoring” on page 257](#)
 - [“Extending an Object’s Base Table for Team Scoring” on page 258](#)
 - [“Configuring Assignment Objects for Team Scoring” on page 258](#)
- [“About Configuring Assignment Manager to Copy Columns” on page 261](#)
- [“Configuring Assignment Objects to Copy Columns” on page 262](#)
- [“Configuring Assignment Manager to Use Reporting Tables and Columns” on page 265](#)
- [“Configuring Assignment Objects for Multitiered Assignment” on page 268](#)

Requirements for Completing Advanced Assignment Manager Configuration

Before beginning any advanced configuration procedures, you should have background knowledge in the Siebel software architecture, Siebel Tools, and Siebel Workflow Manager. Consult the following documentation for this information:

- *Going Live with Siebel Business Applications*
- *Using Siebel Tools*
- *Configuring Siebel Business Applications*
- *Siebel Business Process Designer Administration Guide*

Creating Assignment Objects

Using Siebel Tools, you can create new assignment objects by adding an assignment object to a workflow policy object. However, adding assignment objects can require the addition of skills or other tables and columns. Because of the complexity of this requirement, it is recommended that you contact Technical Support if you need to create new assignment objects.

CAUTION: It is recommended that you contact Siebel Technical Support for assignment object creation. If you create your own assignment objects, you run the risk of Assignment Manager assigning incorrect assignments.

To create an assignment object

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and select Assignment Object.
TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it by selecting View > Options > Object Explorer in the Development Tools Options dialog box.
- 3 In the Workflow Policy Objects window, select the workflow policy object type for which you want to add the new assignment object.
- 4 Select the Assignment Objects window and choose Edit > New Record.
- 5 Configure the assignment object by setting values in the appropriate fields for each property.
 For a list of assignment object properties and their default values, see *Object Types Reference*.
- 6 If you are running dynamic assignment, activate an assignment policy for the assignment object.
 For more information on dynamic assignment, see ["Process of Defining Assignment Policies for Dynamic Assignment" on page 144](#).
- 7 Update your deployment with the new configurations.
 For instructions, see ["Updating Your Assignment Manager Deployment with New Configurations" on page 80](#).

Creating New Skills

Skills are assignment criteria values attributed to specific assignment rules, objects, employees, positions, and organizations. Assignment Manager uses skills to match assignment rules, objects, employees, positions, and organizations.

The Siebel application provides several predefined skills, however, you can create new skills using Siebel Tools. This section explains how to view the predefined skills and create new skills.

For most deployments, the predefined skills are sufficient. However, you can create new skills using Siebel Tools. The following procedure explains how to create a new skill that can be used in any Siebel application.

To create a new skill

- 1 Create an assignment attribute.
- 2 Create an assignment criterion.

You must check the Employee Skill field because you are configuring the criterion as a skill.

- 3 Add the assignment attribute created in [Step 1](#) as a child object to the assignment criterion created in [Step 2](#).

For more information on creating assignment attributes, assignment criteria, and assignment criteria attributes, see ["Process of Creating Assignment Criteria for Use in Assignment Rules"](#) on page 56.

NOTE: To perform assignments based on skills, further configuration is required using Siebel Tools. For more information about configuring criteria as skills, see ["Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors"](#) on page 114.

Example of Using Skill Tables

The skill and skill item tables are child and grandchild tables, respectively, of the object used to store skills, and skill items for assignment objects that are not stored as columns in the parent table itself. The employee skill table is used to store skills possessed by employees, such as languages spoken, product expertise, and so on. For example, for an employee who speaks English and Spanish, there is one record in the employee skill table that specifies the skill name as Language. There are also two records in the child employee skill item table that correspond to this skill record: one record for English, and another record for Spanish. For more information on how to assign skills to candidate objects, see ["Scenarios for Using Assignment Manager"](#) on page 41.

For example, the following procedure explains how to configure Assignment Manager so that only employees who speak Spanish are assigned a service request.

To configure Assignment Manager to assign a service request only to employees who speak Spanish

- 1** Create a service request with Language as the skill and Spanish as the skill item.
 - a** In the Service Request skill table for the service request, create one record and specify Language as the skill.
 - b** In the child Service Request skill item table, create one record and specify Spanish as the skill item.

For more information about how to perform this step, see ["Process of Defining Criteria Values as Skills with Expertise Codes and Weighting Factors"](#) on page 114.

- 2** Create an assignment rule that filters employees based on their language skills.
 - a** Create an assignment rule and apply the Service Request assignment object.
 - b** Create a criterion called Language and use the Compare to Person assignment rule comparison method.

This criterion, and therefore the rule, passes only employees who have the Spanish language skill.

NOTE: You can also perform skill matching with other comparison methods. For more information about the comparison methods, see ["Assignment Criteria Comparison Methods"](#) on page 98.

Assignment Manager can also perform skill matching with expertise codes and can use weighting factors to assign weighted scores to different expertise codes. For more information on these topics, see ["About Assignment Skills, Expertise Codes, and Weighting Factors"](#) on page 112.

Assigning Objects Based on the Primary Address

An assignment rule with address criteria, by default, passes objects (Account, Contact, and Opportunities, for example) based on any one of the multiple addresses associated with the objects. However, Assignment Manager is configurable to assign based on only the primary address. This configuration is completed through Siebel Tools in the following procedure. The Account assignment object is used in this example.

NOTE: For Siebel Life Sciences, Assignment Manager can populate the Primary Address field for the system-assigned positions for the contacts on the intersection table (S_POSTN_CON).

To assign objects based on the primary address

- 1** Start Siebel Tools.
- 2** Select the assignment object.
 - a** In the Object Explorer, expand Workflow Policy Object.

- b** In the Workflow Policy Objects list, select Account.
- 3** Select the workflow policy component to change the Source Column and Target Column fields.
 - a** In the Object Explorer, select Workflow Policy Component.
 - b** In the Workflow Policy Component window, select Account Address.
 - c** Change Source Column Name to ROW_ID (from OU_ID).
 - d** Change Target Column Name to PR_ADDR_ID (from ROW_ID).
- 4** Repeat [Step 2](#) and [Step 3](#) for the Contact and Opportunity assignment objects.
- 5** Check in the projects to the server.

For more information about checking in projects, see *Using Siebel Tools*.
- 6** If using dynamic assignment or workflow policies, drop and regenerate triggers by running the Generate Triggers server component.

See ["Generating Triggers for Dynamic Assignment Using the UI" on page 222](#) or ["Generating Triggers for Dynamic Assignment Using the Command-Line Interface" on page 224](#) for more information on stopping and restarting this server component. Alternatively, see *Siebel System Administration Guide*.

Assigning Child Accounts Based on Parent's Primary Address

A common business requirement involves the configuration of Assignment Manager to assign child accounts based on the primary account's address. This configuration is completed through Siebel Tools using the following procedure.

To assign child account objects based on the parent's primary address

- 1** In the Object Explorer, select the Workflow Policy object, and click the Account record.
- 2** Expand the Workflow Policy object in the Object Explorer, and select the Workflow Policy Components object.
- 3** Create two new workflow policy components, Parent Account and Parent Account Address, with the following properties:

Name:	Parent Account	Parent Account Address
Source Table Name:	S_ORG_EXT	S_ADDR_ORG
Source Column Name:	ROW_ID	ROW_ID
Target Component Name:	Account	Parent Account
Target Column Name:	PAR_OU_ID	PR_ADDR_ID

- 4** While the new Parent Account Address record is selected, expand the Workflow Policy Component object, and click the Workflow Policy Component Column object.

- 5 Create a new record with the following properties:

Alias Parent Account State

- 6 In the Object Explorer, select the Assignment Attributes object, and create a new record with the following properties:

Data Type: Varchar

Pick List: PickList State

Pick Field: Value

- 7 While the new assignment attribute Parent Account State is selected, expand the Assignment Attributes object, and click the Assignment Attributes Column object.

- 8 Create a new record with the following properties:

Assignment Object Account

Workflow Object: Account

Workflow Component: Parent Account Address

Workflow Component Column: Parent Account State

Sequence: 1

- 9 In the Object Explorer, select the Assignment Criteria object and create a new record with the following properties:

Display Name Parent Account State

Use Expertise FALSE

- 10 While the new assignment criteria Parent Account State is selected, expand the Assignment Criteria object and click the Assignment Criteria Attribute object; create a new record with the following properties:

Assignment Parent Account State
Attribute:

Store Column: 1

Display Sequence: 1

Display Name: Parent Account State

After the configurations are complete, the project must be checked into the server, and various server administration procedures must be run. To update your deployment with these new configurations, see ["Updating Your Assignment Manager Deployment with New Configurations" on page 80](#).

For more information on compiling projects, see *Using Siebel Tools*. For information on distributing the siebel.srf file, see *Siebel Anywhere Administration Guide*.

An assignment rule can now be created that assigns child accounts based on the parent's primary address.

NOTE: Make sure the child account has a value in the PAR_OU_ID column pointing to a parent account that has the primary address.

Reassigning Accounts to a Different Primary Position

To reassign Account assignment objects to another position, use the following procedure. This procedure provides an example of mapping the PR_POSTN_ID column of the Account's base table (S_ORG_EXT) to a new assignment attribute named Account Primary Position. Configuration in Siebel Tools is required for this process.

NOTE: The following procedure can be employed anytime you want to use a base table column as an assignment attribute.

To reassign accounts to a different position

- 1 Start Siebel Tools.
- 2 In the Object Explorer, select the Workflow Column object and create a new record with the following properties:
 - Name: Account Primary Position Id
 - Table: S_ORG_EXT
 - Column: PR_POSTN_ID
- 3 Select Workflow Policy Object > Account > Workflow Policy Component > Account record; drill down to the Workflow Policy Component Column and add a new record called Account Primary Position Id.
- 4 In the Object Explorer, select Assignment Attribute and create a new record called Account Primary Position; drill down to Assignment Attribute Column and add a new record with the following properties:
 - Name: Account: Account Primary Position Id
 - Assignment Object: Account
 - Workflow Policy Object: Account
 - Workflow Component: Account
 - Workflow Policy Component Column: Account Primary Position Id
 - Sequence: 1

- 5 In the Object Explorer, select Assignment Criteria and create a new record called Account Primary Position; drill down to the Assignment Criteria Attribute and create a new record called Account Primary Position Id with the following properties:
 - Name: Account Primary Position Id
 - Assignment Attribute: Account Primary Position Id
 - Store Column: 1
 - Display Sequence: 1
 - Display Name: Id
- 6 Check in the project to the server, compile changes to the siebel.srf file, and distribute it to your users.
 - a Choose Tools > Compile.
 - b In the Object Compiler dialog box, select the Assignment project.
 - c Select the Siebel client repository file (default is siebel.srf file) located in the Objects subdirectory within the Siebel client root directory.
 - d Click Compile.
- 7 In the updated Client, create a new assignment rule based on the assignment object Account; add a new criterion for this rule, and select the Account Primary Position; under the values applet, select the ROW_ID of the position you want to reassign.
- 8 Navigate to the Positions view of this new Assignment Rule; select the new position that is to replace the previous position.
- 9 Release assignment rules by clicking Release in the Assignment Rules view.
- 10 Run a Batch Assignment against a test account that includes the old position; use the following parameters:
 - Object: Account
 - Object WHERE clause: WHERE ROW_ID='<your_value>'
- 11 Confirm that the test account is reassigned and then run a Batch Assignment to reassign the other accounts to the new position; use the following parameters:
 - Object: Account
 - Object WHERE clause: WHERE PR_POSTN_ID='<your_value>'

Thoroughly test this assignment rule before applying it to your production environment. After your Accounts have been reassigned, it is recommended that you expire this rule.
- 12 Depending on your situation, run Contact Denormalization to update the contact access list.

For information about running Assignment Manager in denormalization mode, see ["About Running Assignment Manager in Denormalization Mode" on page 214](#).
- 13 To set up Position in the Values applet as a picklist, select the appropriate picklist and applet when configuring the Workflow Column and Assignment Criteria Attribute for the Account Position Id.

Routing of Assignments to Mobile Users

The component parameter LogTxnChgOnly controls whether transactions with no change to Assignment primary or team members are routed to mobile or remote users. This parameter has a default setting of TRUE for Batch Assignment, Interactive Assignment (Assignment Manager), and implicitly Dynamic Assignment (Workflow Monitor Agent). As a result, transactions with no change to Assignment primary or teams are not routed to mobile users. To change the LogTxnChgOnly parameter for dynamic assignment, use the following steps. This procedure requires configuration in Siebel Tools.

To route assignments to mobiles users by changing the LogTxnChgOnly parameter

- 1 Stop the Workflow Monitor Agent processing the assignment policies.
- 2 Start Siebel Tools (see *Configuring Siebel Business Applications* for more information on proper Siebel Tools configuration procedures).
- 3 In the Object Explorer, select the Workflow Policy Program, and then select Assignment Request (In Process).
- 4 Drill down to Workflow Policy Program Arguments in the Object Explorer, and select the LogTxnChgOnly parameter.
- 5 Change the value to TRUE or FALSE.
If TRUE, transactions with no change to the assignment primary or teams are not routed to mobile users.
- 6 Check in the project to the server.
- 7 Restart the Workflow Monitor Agent.

NOTE: You do not need to recompile the .srf file.

Maintaining the Manually Assigned Primary Position

Assignment Manager maintains an object's manually assigned primary position when the Keep Manual Primary Position property in Siebel Tools for the object is set to TRUE. Assignment Manager identifies the manually assigned primary position when the PR_REP_MANL_FLG field = Y on the object. By default, the PR_REP_MANL_FLG value is set to N, which indicates the candidate is not a manually added primary.

When the primary is updated in the UI, the PR_REP_MANL_FLG flag is updated to Y. For this position to be recognized as the manually assigned primary by Assignment Manager, the Primary Assignment Manual flag, that is, PR_REP_MAN_FLG should be manually set in order to make that position the manually assigned primary.

To maintain the object's primary position

- 1 Start your Siebel application.
- 2 Navigate to the Administration - Data screen.
TIP: If this screen is not visible, check your responsibility.
- 3 Navigate to the Opportunity (or other assignment object) screen.
- 4 Query for and select the item of interest.
- 5 Click the Sales Team select button to launch the Team Members dialog box.
- 6 Click the Primary check box of another position in the list; then reselect the Primary check box of the original position and click OK.

This process changes the system PR_REP_MANL_FLG value to Y and updates PR_REP_SYS_FLG to N.

This procedure can also be used to add positions to the object or delete system-assigned positions from the object.

Stopping Assignment of the Default Organization

If you want to override the assignment of all organizations to an assignment object, you must remove the assignment property Org Primary Column from a selected assignment object. The default value is set to BU_ID. After this value is set to null, Assignment Manager does not assign any organization to the assignment object. The following procedure details this configuration. The account assignment object is used as an example.

To stop assignment of the default organization to Account object

- 1** Start Siebel Tools, and select the appropriate project.
- 2** In the Object Explorer, expand Workflow Policy Object.
- 3** Select Assignment Object.
- 4** Select the Account Record.
- 5** In the Properties Window, find the property called Org Primary Column.
- 6** Delete the value for this property. (The default value is BU_ID.)

After the assignment object is modified, various server administration procedures must be run to make sure your configurations are recognized by Assignment Manager.

- If you are using Batch Assignment, start a new task.
- If you are using Dynamic Assignment, stop and restart the Workflow Monitor Agent.
- If you are using Interactive Assignment, stop and restart the Assignment Manager Server Component.

NOTE: It is not necessary to recompile the .srf file when configuring an assignment object to stop assignment of the default organization.

Stopping Assignment of Organizations for Accounts

If you do not want Assignment Manager to reassign the organizations that you have setup for an account, you must change the default values for the Account assignment object properties in Siebel Tools.

To stop reassignment of organizations for accounts

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object.
- 3 In the Workflow Policy Object list, select Account.
- 4 In the Object Explorer, click Assignment Object.
- 5 In the Assignment Objects list, set the following values:
 - Default Organization = <blank>
 - Org Primary Column = <blank>
 - Org Table = <blank>
 - Set Primary Org = FALSE

NOTE: Where <blank> is a null value.

After these values are set, Assignment Manager does not reassign any organizations for accounts.

- 6 Run various server administration tasks.

For instructions, see [Step 2](#) and [Step 3](#) of the procedure in “Updating Your Assignment Manager Deployment with New Configurations” on page 80.

NOTE: It is not necessary to recompile the .srf file. However, you should check-in the changes to the server database.

Setting the Lock Assignment Default Value for Activity Assignment Objects

Assignment objects contain a lock assignment feature that, when activated by checking the Lock Assignment column on the object's list applet in Siebel Tools, prevents Assignment Manager from assigning or reassigning a position or candidate to that object. You can use this feature to exclude an object (such as Account or Opportunity object) from being reassigned by Assignment Manager. By setting the column defined in the Exclude Column for the assignment object, Assignment Manager excludes (ignores) the object for assignment.

The Lock Assignment parameter for activity objects is, by default, set to TRUE. This setting does not allow Assignment Manager to assign these objects. Therefore, Assignment Manager does not assign activity records. However, the Field Service Activity object is the one exception and is, by default, available for assignment (the Lock Assignment parameter is set to FALSE). Other activity objects must have the Lock Assignment parameter set to FALSE or null for assignment to occur. (The lock assignment feature for activity records in the Siebel application, except for Field Service activity records, defaults to "Y".) This behavior is due to a setting in the Post Default Value property for the Action business component's Assignment Excluded field (Business Component > Field > Assignment Excluded). The value in the property is:

```
Expr: "If ([Class] = LookupValue('FS_ACTIVITY_CLASS', 'Field Engineer Activity') OR  
[Class] = LookupValue('FS_ACTIVITY_CLASS', 'Repair Activity') OR [Class] =  
LookupValue('FS_ACTIVITY_CLASS', 'Preventive Maintenance'), 'N', 'Y')"
```

Using Siebel Tools, you can implement assignment of all types of activities by setting the default value of the Assignment Excluded field to FALSE at the business component level.

The following procedure explains how to set the Lock Assignment default value so that Assignment Manager assigns activity objects. A similar procedure can be used for other assignment objects.

To set the lock assignment default value to assign activity objects

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand the Business Component object.
- 3 In the Business Components list, select Action.
- 4 In the Object Explorer, click Field.
- 5 In the Fields list, select Assignment Excluded, and change the Post Default Value field to N.
- 6 Check-in the changes to the server.

For more information about checking in changes, see *Using Siebel Tools*.

- 7 Recompile the .srf file.

For more information about recompiling the .srf file, see ["Updating Your Assignment Manager Deployment with New Configurations" on page 80](#).

- 8 Make sure that all Siebel clients that create activity records have the new .srf file by copying the newly compiled .srf file to the:
 - ❑ Siebel client's object\<language> directory for the Siebel Developer Web Client, where <language> is the appropriate language code, such as ENU for American English
 - ❑ Siebel Server's objects\<language> directory for mobile clients, where <language> is the appropriate language code, such as ENU for American English.

NOTE: This step applies only to the mobile client or the Developer Web Client.

Assignment Manager now assigns activity records based on the defined assignment rules.

Configuring Assignment Objects to Copy Additional Columns to the Team Table

When an item, such as an account or opportunity, is assigned to a team of people, the team field (the actual name of the field varies depending on the view) for that record shows a list of the people assigned to that item. This list of names is known as the team table for the given record. When making assignments, Assignment Manager passes information about the team members to the team table, such as the name of the person, that person's position and user ID, and so on. This section explains how to configure assignment objects to add additional information about team members to the team table.

Using Siebel Tools, you configure assignment objects to copy additional columns to the team table. Use the PositionTeamDenormN user property (where N is any number) to copy additional columns from the S_ASGN_GRP_POSTN assignment rule position candidate table to the team table.

To configure an assignment object to copy additional columns to the team table

- 1 Start Siebel Tools.
- 2 Select the assignment object for which you want to copy additional columns to the team table.
 - a In the Object Explorer, expand Workflow Policy Object.
 - b In the Workflow Policy Object window, select the object.
 - c In the Object Explorer, expand Assignment Object, and then select Assignment User Prop.
- 3 In the Assignment User Properties window, choose Edit > New Record to define user properties for the assignment object.
 - a In the Name field, type a name for the property starting with PositionTeamDenorm followed by a digit (for example, PositionTeamDenorm1, PositionTeamDenorm2).
 - b In the Value field, use the following syntax to enter values:

`SrcCol, DestCol, UserKeyBool, DefaultValue`

Table 51 provides descriptions for each field these values.

Table 51. User Property Values for Copying Additional Columns to the Team Table

Value	Description
SrcCol	The name of the source column in the assignment rule group position table whose value is copied to the destination column of the team table. There are 7 Boolean columns, 19 string columns, 7 number columns, and 3 date columns available for copying.
DestCol	The name of the destination column in the team table where the values are copied. The destination column must be one of the user data columns in the team table of the assignment object.
UserKeyBool	If this flag is set to Y (True), indicates the respective destination column is part of the user key of the team table. Without this flag specified, duplicate positions cannot be inserted in the team table. For more information about duplicate positions, see the description for the AllowDupPostn server component parameter in "Additional AsgnSrvr and BatchAsgn Parameter Information" on page 207 .
DefaultValue	Specifies the values that are inserted in the destination columns if default position is assigned. In this case, you cannot specify the values to be copied in the ASGN_GRP_POSTN table. NOTE: This value is optional if the default position is not specified. That is, if the value for a position is NULL, the default value is set to NULL as well.

At runtime, Assignment Manager copies the user property values to the team table.

Example of Copying Additional Columns to the Team Table

The following procedure gives one example of copying additional columns to the team table. In this example, you copy data from the S_ASGN_GRP_POSTN rule group position table to the S_ORD_CRDT_ASGN team table of the Order (Sales Credit Assignment) assignment object.

You may use this feature differently, depending on your business model.

To configure the Order assignment object to copy the S_ORD_CRDT_ASGN column to the S_ASGN_GRP_POSTN team table

- 1** Start Siebel Tools.
- 2** Select the Order assignment object, which is the object for which you want to copy additional columns to the team table.
 - a** In the Object Explorer, expand Workflow Policy Object.
 - b** In the Workflow Policy Object window, select Order.
 - c** In the Object Explorer, expand Assignment Object, and then select Assignment User Prop.
- 3** In the Assignment User Properties window, choose Edit > New Record to define user properties for the assignment object.
 - a** In the Name field, type a name for the property starting with PositionTeamDenorm followed by a digit (for example, PositionTeamDenorm1, PositionTeamDenorm2).
 - b** In the Value field, use the following syntax to enter values (for value descriptions, see [Table 51 on page 256](#)):

SrcCol, DestCol, UserKeyBool, DefaultValue

For this example, SrcCol copies values come from the S_ASGN_GRP_POSTN table. The following table shows some of the valid user properties for the Order (Sales Credit Assignment) assignment object:

Name	Value
PositionTeamDenorm1	DATE1,START_DT,N
PositionTeamDenorm2	CHAR2,SLS_TERR_ID,Y
PositionTeamDenorm3	CHAR1,CRDT_RULE_ID,N
PositionTeamDenorm5	CHAR3,FROM_BTM_NODE_FLG,N
PositionTeamDenorm6	NUM2,ROLLUP_PCT,N
PositionTeamDenorm8	CHAR5,ROLLUP_FRMLA,N
PositionTeamDenorm21	BOOL5,QTA_RLP_ACNTED_FLG,N

Process of Configuring Assignment Objects for Team Scoring

You can configure Assignment Manager to save candidates' scores to the team table for those candidates who are assigned to an assignment object. These scores can be then used by other Siebel applications or exposed through the user interface.

To configure an assignment object for team scoring, perform the following tasks:

- 1** ["Extending an Object's Base Table for Team Scoring" on page 258](#)
- 2** ["Configuring Assignment Objects for Team Scoring" on page 258](#)

Extending an Object's Base Table for Team Scoring

Before configuring an assignment object for team scoring, make sure the object has the necessary columns in its database table.

This task is a step in ["Process of Configuring Assignment Objects for Team Scoring" on page 257](#).

NOTE: You must review the sections on extension tables and columns in *Configuring Siebel Business Applications* before completing this procedure.

To extend an object's base table for team scoring

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand the Table object, and then query for the table you want to configure.
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, select Column.
- 5 In the Columns window, choose Edit > New Record to add new records.
For more information about adding new column records, see *Using Siebel Tools*.
- 6 Select each new record and click the Apply button.
- 7 Enter the appropriate value for tableowner password.
The table is now extended.

NOTE: There are specific considerations depending on the platform you are using. For more information about this, see the note in [Step 7 on page 282](#) of the procedure in ["Extending an Assignment Object's Base Table for Availability-Based Assignment."](#)

After the necessary base table columns are in place, you can configure the assignment object for team scoring.

Configuring Assignment Objects for Team Scoring

After extending an assignment object's base table for team scoring (see ["Extending an Object's Base Table for Team Scoring" on page 258](#)), you can then configure the assignment object.

This task is a step in ["Process of Configuring Assignment Objects for Team Scoring" on page 257](#).

To configure an assignment object for team scoring

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and select the object you want to configure.

- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, select Assignment Object.
- 5 In the Assignment Objects window, set values for the properties in the following table.

Column	Value
Employee Team Score Column	The table column that references a Number column in the assignment object's employee team table.
Org Team Score Column	The table column that references a Number column in the assignment object's organization team table.
Position Team Score Column	The table column that references a Number column in the assignment object's position team table.

For information on modifying the appropriate components that expose the scoring information to the user interface, see *Configuring Siebel Business Applications*.

Example of Configuring the Opportunity Assignment Object for Team Scoring

This topic gives one example of configuring the Opportunity assignment object for team scoring. You may use this feature differently, depending on your business model. Use the following procedures to extend the Opportunity assignment object for team scoring.

To extend the Opportunity object's base table for team scoring

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand the Table object, and then query for the S_OPTY table.
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, select Column.

- 5 In the Columns window, add the records shown in the following table.

	Record 1	Record 2
Name	X_POS_SCORE	X_ORG_SCORE
Cascade Clear	Ignore	Ignore
Physical Type	Data(Public)	Data(Public)
Precision	22	22
Scale	7	7
Text Length	22	22
Txn Log Code	TRUE	TRUE

NOTE: The values and records shown are examples and can be modified, as appropriate, for your deployment.

- 6 Select each new record and click the Apply button.
- 7 In the Apply Schema dialog box, enter the appropriate value for database user password, and click Apply.

The S_OPTY table is now extended with the following columns: X_POS_SCORE and X_ORG_SCORE.

To configure the Opportunity assignment object for team scoring

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and select the Opportunity object.
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, select Assignment Object.
- 5 In the Assignment Objects window, set values for the properties in the following table.

Column	Value
Employee Team Score Column	The name of the column that stores the score for each member of an employee team.
Org Team Score Column	The name of the column that stores the score for each member of an organization team.
Position Team Score Column	The name of the column that stores the score for each member of a position.

About Configuring Assignment Manager to Copy Columns

Assignment Manager allows you to copy position- and employee-specific columnar data so that you can replace one position or employee with another and have the position or employee data stay intact. For example, you might have a sales representative who has been working on an account or contact for several days but find you need another person to take on that work. To enable this feature, you must first configure an assignment object's user properties so that Assignment Manager can find the lists of columns in the position or employee team tables. Then, you submit a component job request so that Assignment Manager retains the position- or employee-specific data in the team table for the new person. During assignment processing, the data from one position (or employee) is copied to the extension columns for the new position (or employee) before deleting the original position (or employee).

NOTE: Prior to version 7.8, Assignment Manager could only delete a record for a position that no longer qualified without copying any data.

The logic that Assignment Manager uses to copy position- or employee-specific data is as follows:

- 1 Checks to see if the position or employee already exists in the account team.
 - If yes, do nothing
 - If no, skip to [Step 2](#)
- 2 Searches to find:
 - Any positions with position-specific data for the same rule group (or list of rule groups when merging sales forces) on the team.or
 - Any employees with employee-specific data for the same rule group on the team.
- 3 If:
 - No, do nothing
 - If yes, then:
 - Find the position that has the latest updated position-specific data and copy that position's data and assign it to the new positionor
 - Find the employee that has the latest updated employee-specific data and copy that employee's data and assign it to the new employee

Process of Configuring Assignment Manager to Copy Columns

By default, the TM Account assignment object is configured to copy columnar position or employee data. However, you can make this feature available for other assignment objects by configuring user properties using Siebel Tools, then initiating a server component job to process the information.

To copy columns for positions or employees, perform the following tasks:

- 1 [“Configuring Assignment Objects to Copy Columns” on page 262](#)
 - 2 [“Copying Columns Using the UI” on page 264](#)
- or
- [“Copying Columns Using the Command-Line Interface” on page 265](#)

Configuring Assignment Objects to Copy Columns

Using Siebel Tools, you can configure assignment objects to copy position-specific or employee-specific data. Typically, you configure sales objects to copy position-specific data and you configure service objects to copy employee specific data.

This task is one step in [“Process of Configuring Assignment Manager to Copy Columns” on page 262](#).

By default, the TM Account assignment object is predefined to copy position-specific data. [Figure 32](#) shows the TM Account assignment object configured to copy only a single column—ROLE_CD.

The screenshot displays the Siebel Tools interface for configuring assignment objects. It is divided into three main sections:

- Assignment Objects:** A table listing assignment objects. The 'TM Account' object is selected, showing its configuration: Primary Table (S_ORG_EXT), Skill Table (S_ORG_SKILL), and Skill Item Table (S_ORG_SKILL_I).
- Assignment User Properties:** A table listing user properties for the selected object. The 'Position Specific Columns' property is selected, showing its value as 'ROLE_CD'.
- Properties:** A panel on the right showing the properties of the selected user property. The 'Value' property is set to 'ROLE_CD'.

Name	Changed	Primary Table	Skill Table	Skill Item Table
TM Account		S_ORG_EXT	S_ORG_SKILL	S_ORG_SKILL_I

W	Name	Changed	Value
	Position Specific Columns		ROLE_CD

Properties	
Assignment User Prop [Position Specific Columns]	
Alphabetic	Categorized
Comments	
Inactive	FALSE
Module	
Name	Position Specific Columns
Parent Name	TM Account
Value	ROLE_CD

Figure 32. The TM Account Assignment Object Configured to Copy Position-Specific Data

Use the following procedure to add either the Position Specific Columns or Employee Specific Columns user property to an assignment object for which you want to enable copying of data.

To configure an assignment object to copy position- or employee-specific data

- 1** Start Siebel Tools.
- 2** In the Object Explorer, expand Workflow Policy Object, and then query for the object you want to configure.

TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it by selecting View > Options > Object Explorer in the Development Tools Options dialog box.
- 3** Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4** In the Object Explorer, expand Assignment Object, and then select Assignment User Prop.
- 5** In the Assignment User Properties window, choose Edit > New Record.
- 6** In the new record, enter values for the relevant information.
 - In the Name field, type either Position Specific Columns OR Employee Specific Columns.
 - In the Parent Name field, type the name of the parent object.
 - In the Value field, type the names of the columns you want copied.
For example, if you want to copy multiple columns, type: ROLE_CD, ROW_ID.
 - In the Inactive field, click the drop-down arrow, and select FALSE.

After the assignment object is modified, you must run various server administration procedures to make sure your configurations are recognized by Assignment Manager.

- If you are using Batch Assignment, start a new task.
- If you are using Dynamic Assignment, stop and restart the Workflow Monitor Agent.
- If you are using Interactive Assignment, stop and restart the Assignment Manager Server Component.

After the assignment object is configured, you can then instruct Assignment Manager to copy position- or employee-specific data using the UI or by submitting a server component job from the command-line interface.

Copying Columns Using the UI

You can set up Assignment Manager to copy columnar position or employee data using the UI or by submitting a server component job from the command-line interface. This topic explains how to copy columns using the UI.

This task is one step in [“Process of Configuring Assignment Manager to Copy Columns” on page 262](#).

Prerequisites

The following procedure assumes the Position Specific Columns and Employee Specific Columns properties are preconfigured for the assignment object and the Copy Candidate Specific Data (CopyCandSpecData) server component parameter is set to Yes. For information on how to configure these properties and parameter, see [“Configuring Assignment Object Properties” on page 51](#) and [“Modifying the Assignment Manager Server Component Parameters” on page 198](#), respectively.

To copy columns using the UI

- 1 Navigate to the Administration - Server Management screen > Jobs view.
- 2 In the Jobs list, click New.

A new record appears with a system-defined ID automatically generated with a status of Creating.

- 3 In the Requested Server field in the Job Detail subview, type the name of the Siebel Server on which you want to run the copy columns feature.

NOTE: Assignment Manager copies position- or employee-specific data only if the Use Key Value server component parameter value is set to either Rule Group or None. If None, position-specific data is copied from any position in the ACCNT_POSTN table that was updated last, given every position in the team is for the same business reason.

TIP: When merging sales forces in production mode, Assignment Manager takes into account the list of key values, that is, Assignment Manager gets the latest updated position in all the rule groups in the Replace Key Values list with position-specific data.

Copying Columns Using the Command-Line Interface

After configuring an assignment object to copy columns, Assignment Manager can copy columnar position- and employee-specific data by initiating a server component job from the command-line interface using the `AsgnSrvr` command and the parameters described in [Table 45 on page 199](#). The command-line interface of the Server Manager is the `svrvmgr` program.

This task is one step in [“Process of Configuring Assignment Manager to Copy Columns” on page 262](#).

For more information on using the command-line interface, see *Siebel System Administration Guide*.

To copy columns using the command-line interface

- From the command-line interface, submit an assignment request using the `CopyCandSpecData` server component parameter to instruct Assignment Manager to retain the position- or employee-specific data in the team table.

For example:

```
start task for comp asgnbatch with asgnobjname="Account", objwhereclause="where  
row_id='88-1FC68'", CopyCandSpecData = "Y"
```

or

```
start task for comp asgnsrvr with asgnobjname="Account", objwhereclause="where  
row_id='88-1FC68'", CopyCandSpecData = "Y"
```

Configuring Assignment Manager to Use Reporting Tables and Columns

Assignment Manager provides a special set of tables to which you can write assignment results for what-if analysis. These tables are known as reporting tables, and the environment in which you work with these tables is known as the reporting environment. When you work in the reporting environment, you work in reporting mode. By default, reporting mode is turned off; Assignment Manager does not write to the reporting tables. Using Siebel Tools, you can configure Assignment Manager to use reporting tables and columns (in lieu of actual assignment tables) by defining Assignment Object and Assignment Object Extension object properties.

NOTE: You can retrieve Reporting mode table data by using native database utilities, such as SQL*Plus, Query Analyzer, and so on. You should not modify or delete this data. Rather, assignment administrators should use the Reporting tables to preview the temporary reporting results before executing Assignment Manager in actual production tables.

About Reporting Tables

You can think of the reporting tables as temporary draft tables that allow you to preview the results of Assignment Manager processing to see the changes that are going to be made before committing those changes to the actual database. Reporting allows you to run Assignment Manager multiple times without impacting current assignment. Assignment Manager can write to the reporting tables independently of whether results are written to actual assignment tables or not.

The reporting tables are especially useful when you want to filter and operate on a subset of candidates.

About Reporting Mode

When merging records in reporting mode, Assignment Manager runs in one of the following modes:

- **Snapshot mode.** Assignment Manager reads from and writes to the reporting team tables only.

This is similar to running in production mode except that the result tables are different. Assignment Manager stores the results tables in the Assignment Object Extension object in Siebel Tools. In snapshot mode, the reporting team tables store a snapshot of the results.

- **Delta mode.** Assignment Manager reads from the current actual assignments but writes to the reporting team tables.

In delta mode, Assignment Manager stores the delta as compared with current actual assignments to the reporting tables. Assignment Manager also stores the delta information about whether a particular candidate was added or dropped as compared with the same account or contact in actual assignments. You can later use this information to run reports.

NOTE: The values in the Assignment Object Extension object properties determine what columns are used to determine which candidates were added or dropped, which tables to use for reporting, which column to use as the key column, and which columns to use as the position, employee, or organization column.

Reporting mode is supported in default mode, that is, when Assignment Manager operates on one rule group at a time.

To configure an assignment object to use reporting tables and columns

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and in the Workflow Policy Objects list, query for the object for which you want to enable reporting tables and columns.
TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it by selecting View > Options > Object Explorer in the Development Tools Options dialog box.
- 3 Lock the project for the object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.
- 4 In the Object Explorer, select Assignment Object Extension.
- 5 In the Assignment Object Extensions list, choose Edit > New Record, and then click in the available fields to enter relevant information.

Table 52 shows some of the properties of the Assignment Object Extension object type.

Table 52. Properties of Assignment Object Extension

Property	Description
Name	The name of the assignment object extension. This name should always match the assignment object name.
Inactive	Indicates if the object extension is active or inactive. By default, this is set to FALSE.
Position Reporting Table	The name of the position reporting intersection table. If the assignment object can be assigned to multiple positions, this intersection table stores the set of position IDs that are assigned to the assignment object IDs.
Position Reporting Column	The name of the column in the position reporting intersection table that points to rows in the S_POSTN position table. Required if Position Table property is non-NULL.
Position Reporting Insertion Column	This column marks the positions that are added to the team. Applicable in both snapshot and delta reporting modes.
Position Reporting Deletion Column	This column marks the positions that are removed from the team. Applicable in both snapshot and delta reporting modes.
Position Reporting Key Column	Stores the key values of the positions assigned to the team at runtime. NOTE: The UseKeyValue server component parameter must also be set to True.
Employee Reporting Table	The name of the employee reporting intersection table. If the assignment object can be assigned to multiple employees, this intersection table stores the set of employee IDs that are assigned to the assignment object IDs.
Employee Reporting Column	The name of the employee reporting intersection table that points to rows in the S_POSTN position table. Required if Employee Table property is non-NULL.
Employee Reporting Insertion Column	This column marks the employees that are added to the team. Applicable in both snapshot and delta reporting modes.
Employee Reporting Deletion Column	This column marks the employees that are removed from the team. Applicable in both snapshot and delta reporting modes.
Employee Reporting Key Column	Stores the key values of the employees assigned to the team at runtime. NOTE: The UseKeyValue server component parameter must also be set to True.
Org Reporting Table	The name of the organization reporting intersection table. If the assignment object can be assigned to multiple organizations, this intersection table stores the set of organization IDs that are assigned to the assignment object IDs.

Table 52. Properties of Assignment Object Extension

Property	Description
Org Reporting Column	The name of the organization reporting intersection table that points to rows in the S_POSTN position table. Required if Organization Table property is non-NULL.
Org Reporting Insertion Column	This column marks the organizations that are added to the team. Applicable in both snapshot and delta reporting modes.
Org Reporting Deletion Column	This column marks the organizations that are removed from the team. Applicable in both snapshot and delta reporting modes.
Org Reporting Key Column	Stores the key values of the organizations assigned to the team at runtime. NOTE: The UseKeyValue server component parameter must also be set to True.

Configuring Assignment Objects for Multitiered Assignment

By default, Assignment Manager independently matches people and organizations to assignment objects. Activating Assignment Manager to use multitiered assignment, however, allows assignments based on the relationship between a person and their organization or an organization and its people.

NOTE: Without multitiered assignment—or appropriate assignment rules—it is possible for Assignment Manager to assign an unrelated organization or person to an assignment object.

Table 53 shows the multitiered assignment modes.

Table 53. Multitiered Assignment Modes

Multitier Mode	Description
Independent	Assigns people and organizations that qualify, regardless of whether they are related or not.
Person-Oriented	Assigns people that qualify, then assigns only qualified organizations that the assigned people belong to.
Organization-Oriented	Assigns organizations that qualify, then assigns qualified people from those organizations.
Organization and Person-Oriented	Identifies qualified people and organizations, then assigns only those that have both a qualified person and related qualified organization.

NOTE: Use caution when the Organization and Person-Oriented mode is used with assignment rules that use the One, Best Fit assignee filter because inconsistencies can occur. The One, Best Fit assignee filter assigns only the highest-scoring position or organization. If the highest-scoring position does not have a qualifying organization, or if the highest-scoring organization does not have a qualifying position, the object remains unassigned, even if a lower-scoring position and its related organization both qualify for the assignment rule.

This logical assignment feature is well-suited to sales organizations.

You use Siebel Tools to activate multitiered assignment by setting the Assignment Mode property for an assignment object.

NOTE: You should not configure multitiered assignment to assign people and corresponding organizations when running interactive assignment. This is because when using interactive assignment, you manually choose assignees and only the person *or* the organization candidates are shown, not both.

To configure an assignment object for multitiered assignment

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object, and in the Workflow Policy Objects list, query for the assignment object for which you want to enable multitiered assignment.
TIP: If Workflow Policy Object is not visible in the Object Explorer, you can enable it by selecting View > Options > Object Explorer in the Development Tools Options dialog box.
- 3 In the Object Explorer, select Assignment Object.
- 4 Lock the project for the assignment object by choosing Tools > Lock Project (or Alt+L).
The pencil icon appears in the W field to indicate the project for the object is locked.

- 5 For the assignment object, change the Assignment Mode property to the multitiered assignment mode operation of interest.

Choices are:

- Independent
- Org & Person-oriented
- Organization-oriented
- Person-oriented

Related Topics

["Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 270](#)

Scenarios for Using Multitiered Assignment with Sales Assignment Rules

This topic gives one example of how multitiered assignment may be used with sales assignment rules. You may use multitiered assignment differently, depending on your business model.

Multitiered assignment is a logical assignment feature that considers the relationships between people and organizations before assigning an object, which makes this feature well-suited to sales organizations. To activate multitiered assignment, you must first use Siebel Tools to configure assignment objects. Then, after assignment objects are configured, multitiered assignment can function in various modes.

The following scenarios show how multitiered assignment functions in various modes. Each scenario is based on the same sales opportunity and the same assignment rules.

Independent Assignment. If multitiered assignment is disabled, Assignment Manager assigns the object independently, resulting in the following scenario:

- All people and organizations not matching assignment rule criteria are filtered out.
- For each person that matches, assign that person to the object.
- For each organization that matches, assign that organization to the object.

- The European and Asian sales representatives independently are assigned to the same opportunity as well as the Europe and North America organizations, as shown in the following table:

Person	Match	Organization	Match	Assigned Person	Assigned Organization
European Sales Representative	Y	Europe	Y	European Sales Representative	Europe
North American Sales Representative	N	North America	Y		North America
Asian Sales Representative	Y	Asia	N	Asian Sales Representative	

Person-Oriented Assignment. If multitiered assignment is set to person-oriented mode the following situation occurs:

- All organizations and people not matching assignment rule criteria are filtered out.
- For each person that matches, assign that person to the object.
- Evaluate organization candidates for the assigned people's organizations. If the organization matches, assign that organization to the object.
- The European and Asian sales representatives are assigned, but only the Europe organization is assigned, as shown in the following table:

Person	Match	Organization	Match	Assigned Person	Assigned Organization
European Sales Representative	Y	Europe	Y	European Sales Representative	Europe
North American Sales Representative	N	North America	Y		
Asian Sales Representative	Y	Asia	N	Asian Sales Representative	

Organization-Oriented Assignment. If multitiered assignment is set to organization-oriented mode the following situation occurs:

- All organizations and people not matching the assignment rule criteria are filtered out.
- For each organization that matches, assign it to the object.
- Evaluate each person candidate for the assigned organization's people. If a person matches, assign that person to the object.

- The Europe and North America organization are assigned, but only the “European Sales Representative” is assigned, as shown in the following table:

Person	Match	Organization	Match	Assigned Person	Assigned Organization
European Sales Representative	Y	Europe	Y	European Sales Representative	Europe
North American Sales Representative	N	North America	Y		North America
Asian Sales Representative	Y	Asia	N		

Organization and Person-Oriented Assignment. If multitiered assignment is set to organization and person-oriented mode, the following situation occurs:

- All organizations and people not matching the assignment rule criteria are filtered out.
- For people and organizations that satisfy the assignment rule criteria, assign only those that have both a corresponding organization and person that meet the criteria (similar to a logical AND statement).
- Only the European sales representative and the Europe organization are assigned, as shown in the following table:

Person	Match	Organization	Match	Assigned Person	Assigned Organization
European Sales Representative	Y	Europe	Y	European Sales Representative	Europe
North American Sales Representative	N	North America	Y		
Asian Sales Representative	Y	Asia	N		

Related Topics

[“Configuring Assignment Objects for Multitiered Assignment” on page 268](#)

Configuring Assignment Manager to Add Scores Across Rules

You can configure Assignment Manager so that the same candidate (employee, position, or organization) can qualify from different assignment rules with different scores. By default, Assignment Manager treats passing candidates from different rules as if they were different candidates. However, it is possible for Assignment Manager to merge (add) the scores for the same candidate across rules and take the total score in the calculation of the primaries.

How you configure Assignment Manager to add scores across rules differs for each operating mode. You specify the Add scores across rules (AddScores) server component parameter to determine Assignment Manager scoring behavior by way of the:

- AsgnSrvr component for interactive assignment
- AsgnBatch component for batch assignment
- Assignment Request (In Process) workflow policy program for dynamic assignment

The following subtopics describe configuration for each mode in detail.

NOTE: The AddScores parameter is applicable to static and dynamic candidates, but only if no rules are marked as exclusive. That is because you explicitly define the rule from which you want the primaries to come for exclusive rules.

Adding Scores Across Rules for Interactive Assignment

If you set the AddScores component parameter to TRUE, all requests sent to AsgnSrvr add scores for the candidates. However, when interactive assignment is used, the <Assign> menu method by default sets AddScores to FALSE, and subsequently passes AddScores = FALSE to the AsgnSrvr task. To override this behavior so that interactive assignment passes AddScores = TRUE for the assignment, you need to add a user property to the respective business component on which interactive assignment is running.

Alternatively, for requests sent to AsgnSrvr using a script or the Server Request business service, you can pass AddScores = TRUE as an input parameter to the AsgnSrvr task.

To configure Assignment Manager to add scores across rules for interactive assignment

- 1 Start Siebel Tools.
- 2 Configure the Action business component to add scores across rules.
 - a In the Object Explorer, expand Business Component.
 - b In the Business Components list, select Action.
 - c Choose Tools > Lock Project (or Alt+L) to lock the project.

- d** In the Object Explorer, click Business Component User Prop, and add a new record with the following information:
 - ☐ Name = AddScores
 - ☐ Value = TRUE
- 3** Compile the .srf file.
- 4** Copy the .srf file to the Siebel client\objects\<language> directory, where language is the appropriate language code, such as ENU for American English.
- 5** Copy the .srf file to the Siebel server\objects\<language> directory, where language is the appropriate language code, such as ENU for American English.

This allows control of AddScores = TRUE for interactive assignment based on the object being assigned.

Adding Scores Across Rules for Batch Assignment

If you set the AddScores component parameter to TRUE, all tasks for batch assignment add the scores across rules for the candidates. Alternatively, you can also set Add Scores across Rules = TRUE at the task-level when starting a batch assignment task. For more information about running batch assignment, see ["Running Batch Assignment" on page 228](#).

Adding Scores Across Rules for Dynamic Assignment

To add scores across rules for dynamic assignment, you must set the Add Scores program argument to TRUE for the Assignment Request (In Process) workflow policy program.

To configure Assignment Manager to add scores across rules for dynamic assignment

- 1** Start Siebel Tools.
- 2** Configure the Assignment Request (In Process) workflow policy program to add scores across rules.
 - a** In the Object Explorer, expand Workflow Policy Program.
 - b** In the Workflow Policy Programs list, select Assignment Request (In Process).
 - c** Choose Tools > Lock Project (or Alt+L) to lock the project.
 - d** In the Object Explorer, click Workflow Policy Program Arg, select AddScores, and change the Default Value to TRUE.
- 3** Check in the changes to the server.

How the AddScores Server Component Parameter Affects Primaries

By default, if an assignment rule has a primary employee, primary position, or primary organization set and one of these people pass, they are assigned as the primary if that rule passes and is the highest scoring rule for that object. However, if the AddScores server component parameter is set to True, the primaries are ignored because the AddScores parameter overrides the primaries on the rule. The AddScores parameter assigns the highest scoring employee, position, or organization across all the rules that pass for that object and has more weight than the primaries.

For example, assume you have two rules—Rule 1 and Rule 2—that pass for a specific Account Z. Each rule has two positions that qualify with scores as shown the following table:

	Position A Score	Position B Score
Rule 1	100	120
Rule 2	50	20
Total Score	150	140

If the AddScores parameter is not applied (set to False), position B is the highest-scoring position with a score of 120 and becomes the primary. However, if the AddScores parameter is applied (set to True), then position A with a score of 150 is the highest-scoring position and becomes the primary.

11 Availability-Based Assignment

This chapter describes how to make availability-based assignments in Siebel Assignment Manager. It includes the following topics:

- [“About Availability-Based Assignment” on page 277](#)
- [“About Assigning Employees to Assignment Rules Based on Availability” on page 278](#)
- [“How Assignment Manager Creates Activities for Employees During Availability-Based Assignment” on page 279](#)
- [“Process of Configuring Assignment Objects for Availability-Based Assignment” on page 280](#)
- [“Extending an Assignment Object’s Base Table for Availability-Based Assignment” on page 281](#)
- [“Configuring Assignment Object Properties for Availability-Based Assignment” on page 282](#)
- [“Configuring Assignment Object User Properties for Availability-Based Assignment” on page 284](#)
- [“Example of Configuring the Service Request Assignment Object for Availability-Based Assignment” on page 286](#)

About Availability-Based Assignment

Assignment Manager has the ability to assign employees based on their calendar availability and can find out whether candidates are working at the required time—and whether their calendar is free or not—before assigning an item to a candidate or team. This feature is used on employee-based assignment objects only, and requires the installation of the Field Service option as it depends on a Field Service component, the Appointment Booking System (ABS), to check employee availability. It is, however, not limited to use in the Field Service application and can be used in any application that has employee-based objects. In general, this feature is meant for use with employee-based objects that have an associated time duration, such as Activities and Service Requests.

To use this feature, certain properties of the assignment object require configuration in Siebel Tools. The Activity object is, by default, partially preconfigured for use with availability assignment; the Service Request object, however, is not. Both objects require configuration in Siebel Tools to activate availability-based assignment. See [“Process of Configuring Assignment Objects for Availability-Based Assignment” on page 280](#) for further information on these procedures. Assignment Manager can also be configured to create an Activity in the calendar of the candidate assigned to the object.

After an object is configured for availability-based assignment, an assignment rule activates this feature by means of a check box on the Assignment Rule detail applet. You can further customize Assignment Manager for availability-based assignment, by configuring assignment object user properties.

Related Topic

[“About Assigning Employees to Assignment Rules Based on Availability” on page 278](#)

About Assigning Employees to Assignment Rules Based on Availability

You can create assignment rules for employee-based objects using availability-based assignment, which allows Assignment Manager to check an employee's calendar and to consider the employee's availability when determining assignment eligibility. Assignment objects must be preconfigured before using the assignment availability criteria feature.

When an assignment object is configured for availability, a user specifies the following three times for the assignment object:

- **Early Start Time.** (Optional) The earliest time the assignment object can be scheduled (specified in the Calendar Early Start Time Column property of the assignment object).

If this time is specified, Assignment Manager looks for an available slot for the specified duration in the employees' schedules with the starting time anywhere between the Early Start Time and the Start Time. If this time is not specified, it defaults to the Must Start Time which means that Assignment Manager looks for an available slot for the specified duration starting exactly at the start time.

- **Latest Start Time.** The latest time the assignment object can be started (specified in the Calendar Start Time Column property of the assignment object).
- **Duration.** The time in minutes required to finish the assignment object's task (specified in the Calendar Duration Column property of the assignment object).

Each of these times is accessed by Assignment Manager when determining the availability of an employee. Assignment Manager then uses the availability information like other criteria when evaluating employees for the assignment object.

NOTE: If the Calendar Early Start Time Column is not defined, but the Calendar Start Time Column is defined, the Appointment Booking System (ABS) checks to see whether employees are available or not at the exact Calendar Start Time. If both columns are defined, ABS checks to see whether employees are available or not during the period from Calendar Early Start Time Column to Calendar Start Time Column. For more information about ABS, see *Siebel Field Service Guide*.

Assignment Manager can also be configured to add an activity to the calendar of the employee who is assigned the assignment object. For example, if a service request is created with times indicating a service duration of four hours, Assignment Manager evaluates the object's times and employees' schedules, and selects only employees who are available for the four hours indicated by the service object. Assignment Manager then selects the highest-scoring employee available and creates an activity for the employee (given the object is configured to assign activities). Employees can manually insert activities into their calendar to block assignments during specific periods. Similarly, an employee can delete activities created by the original assignment so further assignments can be made.

Assignment Manager functions for both single employees and teams. If an object is assigned to a team, every employee within the team is assigned an activity for the duration of the assignment (given the object is configured to assign activities). Assignment Manager can assign activities for the same object at different times based on the calendars of individual team members. A calendar activity, however, cannot be split up across multiple dates and times.

When administrators define a new rule, selecting the Check Employee Calendar box activates the assignment availability criteria.

Related Topics

[“About Assigning Employees to Assignment Rules Based on Availability” on page 278](#)

[“How Assignment Manager Creates Activities for Employees During Availability-Based Assignment” on page 279](#)

How Assignment Manager Creates Activities for Employees During Availability-Based Assignment

If an assignment rule has the Check Employee Calendar flag checked, availability for each employee is evaluated before assignment. If the Calendar Create Activity property is also set for the assignment object, make sure that an activity exists in the employee's calendar for that duration to block the schedule. [Figure 33](#) shows a high-level flowchart of this process.

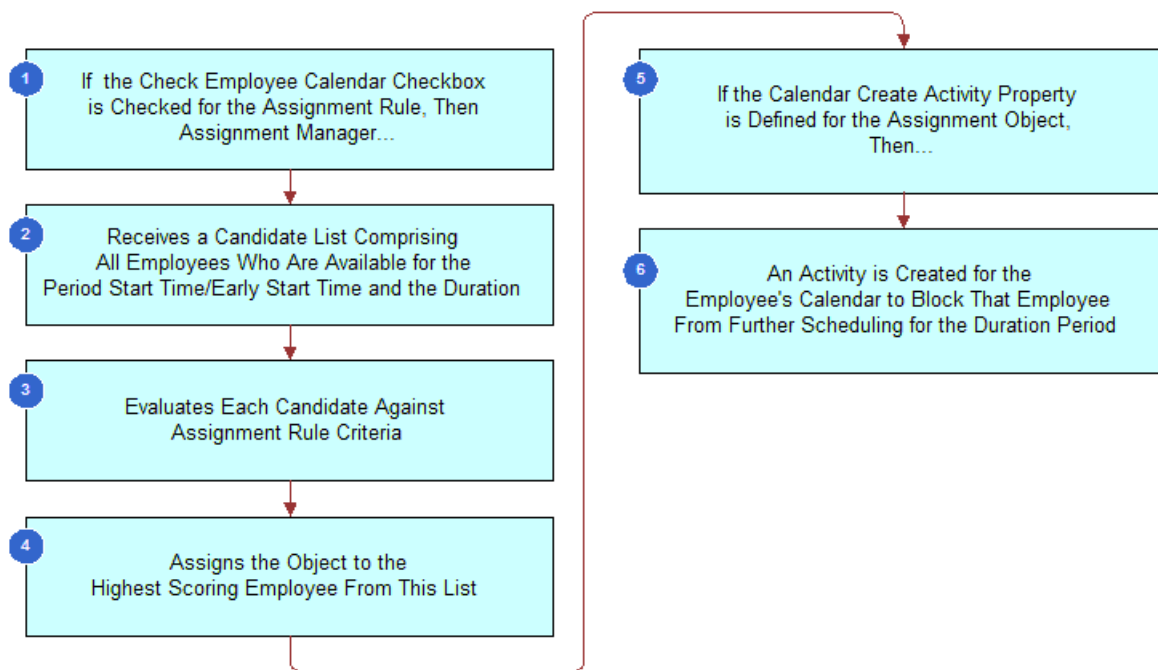


Figure 33. High-Level Flowchart of Availability-Based Assignment

Assignment Manager evaluates whether the Check Employee Calendar flag is checked (calendar rules) or not (noncalendar rules) and processes the rules differently based on this indication. If Assignment Manager is assigning activities, and if only one employee passes and that employee is from a calendar rule, the original activity is reused and the employee is added to the owners list for that activity. This action blocks the employee's schedule. If more than one employee passes, separate activities are created for each employee. In this case, the parent activity of all these additional activities is set to the original activity to make sure that all are related to each other.

If Assignment Manager is not assigning activities, separate activities are created for each employee who passes and blocks their schedules.

Related Topic

["Process of Configuring Assignment Objects for Availability-Based Assignment" on page 280](#)

Process of Configuring Assignment Objects for Availability-Based Assignment

When you configure assignment objects for availability-based assignment, Assignment Manager can review an employee's calendar as a criterion for assignment. If the employee's calendar has no activities booked at the time required by the object, and has a sufficient time period available for the object's duration, the employee qualifies for assignment.

Requirements

Before configuring the assignment object, make sure the following information is satisfied:

- The Field Service component group is enabled.
For more information on the Field Service component group, see *Siebel System Administration Guide*.
- A mapping of the server to the Field Service components and region exists.
For more information on Field Service components and regions, see *Siebel Field Service Guide*.
- Employees are associated with service regions.
For more information on Field Service regions, see *Siebel Field Service Guide*.
- The object that you are configuring for assignment availability has the necessary columns in its database table.
For more information on configuring for availability, see ["Extending an Assignment Object's Base Table for Availability-Based Assignment" on page 281](#).

By default, the Activity assignment object has the required columns in its database table for Start Time and Duration; however, one column must be extended if the Early Start Time property is desired. All other assignment objects must have their base tables extended if you want them enabled for availability-based assignment.

To configure assignment objects for availability-based assignment, you need to perform the following tasks:

- 1 ["Extending an Assignment Object's Base Table for Availability-Based Assignment" on page 281](#)
- 2 ["Configuring Assignment Object Properties for Availability-Based Assignment" on page 282](#)

3 “Configuring Assignment Object User Properties for Availability-Based Assignment” on page 284

NOTE: It is recommended that you review the sections on extension tables and columns in *Configuring Siebel Business Applications* before completing this process.

Extending an Assignment Object’s Base Table for Availability-Based Assignment

Using Siebel Tools, you extend an assignment object’s base table for availability-based assignment by performing the following tasks.

This task is a step in “Process of Configuring Assignment Objects for Availability-Based Assignment” on page 280.

To extend an assignment object’s base table for availability-based assignment

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand the Table object, and then select Column.
- 3 In the Tables window, query for the appropriate table.
For example, if you are extending the Service Request assignment object, query for the S_SRV_REQ table.
- 4 With the table selected, choose Tools > Lock Project (or Alt+L) to lock the project.
- 5 In the Columns list, choose Edit > Add New Record to add the records as described in the following table.

	Record 1 (Required)	Record 2 (Required)	Record 3 (Optional)
Name	X_DURN_MIN	X_START_TIME	X_EARLY_START_TIME
Physical Type	Number	UTC Date Time	UTC Date Time
Length	22	7	7
Precision	22		
Scale	7		
LOV Type	APPOINTMENT_DURATION		
Cascade Mode	Ignore	Ignore	Ignore
TxnLog Code	TRUE	TRUE	TRUE

- 6 In the Table column window and after you have created the new records you need, click Apply.
This sends the new columns to the appropriate tables in the database.

7 Complete the fields in the Apply Schema dialog box.

a In the Tables field, click the select button, and choose one of the following:

- ☐ All
- ☐ Current Query
- ☐ Current Row

b In the Table owner password field, enter the appropriate value.

c Click Apply.

The base table is now extended with the following three columns: X_DURN_MIN, X_EARLY_START_TIME, and X_START_TIME.

NOTE: If using DB2 390 database, you must create a storage control file to accommodate the table space. You provide the location of the control file in the Apply Schema dialog box accordingly. You must create the storage control file from the siebsrvr/bin directory and the bufferpool size should be either 16k or 32k. If the Siebel Server is running on the UNIX platform, then the storage control file generation is command driven. If the Siebel Server is running on the Windows platform, then you generate the storage control file using the UI.

With the appropriate columns in place, use can now configure availability criteria for the assignment object.

Configuring Assignment Object Properties for Availability-Based Assignment

Using Siebel Tools, you configure an assignment object for availability-based assignment by setting the assignment object property and user property values and exposing some of those values in the user interface.

This task is a step in ["Process of Configuring Assignment Objects for Availability-Based Assignment" on page 280](#).

To configure an assignment object for availability-based assignment

- 1** Start Siebel Tools.
- 2** In the Object Explorer, expand Workflow Policy Object and select the assignment object.
- 3** With the object selected, choose Tools > Lock Project (or Alt+L) to lock the project.
- 4** In the Assignment Objects list, set the property values as shown in [Table 54](#).
- 5** After the properties are configured for the assignment object, they must be made visible to the end user by adding them to the appropriate business component and applets.

For information on how to make the properties visible to the end user, see *Using Siebel Tools*.

- 6** Configure certain assignment user properties to come from either the object row itself or through constants.

For a procedure on how to do this, see [“Configuring Assignment Object User Properties for Availability-Based Assignment” on page 284](#).

Table 54 shows the assignment object property values you set for availability-based assignment.

Table 54. Assignment Object Property Settings for Availability-Based Assignment

Property ¹	Description
Calendar Activity Additional Fields	(Optional) When this property is specified, Assignment Manager sets the field value to the row ID of the assignment object when it creates the activity. Assignment Manager also sets the additional fields to the specified field values. For example, for the Service Request object, you can specify the following fields: Activity SR Id, Type, To Do.
Calendar Early Start Time Column	(Optional) The table column that references the early start time of the object. For example, X_EARLY_START_TIME.
Calendar Start Time Column	The table column that references the start time of the object. For example, X_START_TIME.
Calendar Duration Column	The table column that references the duration of the object. For example, X_DURATION.
Calendar Create Activity	<p>(Optional) Check this column if you want an activity created for the assigned employee.</p> <p>TRUE = Activity <i>is</i> created in employee’s calendar FALSE = Activity <i>is not</i> created in employee’s calendar</p> <p>Note: You must configure this property if you plan to use the Appointment Booking System to detect conflicts. For more information about the Appointment Booking System, see “About Availability-Based Assignment” on page 277 in this guide and <i>Siebel Field Service Guide</i>.</p>

1. Properties are specified as one value string for that property.

If a value is not specified in the Calendar Start Time Column property for an assignment object, Assignment Manager does not check calendars when assigning that object, even if the Check Employee Calendar flag is checked on the assignment rule. Instead, Assignment Manager assigns all candidates who meet the criteria for the rule. For example, if you don't specify the Start Date or Due Date for an activity, Assignment Manager does not check calendars when assigning this activity, even if the assignment rule has the Check Employee Calendar flag checked. Instead, Assignment Manager assigns all candidates who meet the criteria for the rule.

Configuring Assignment Object User Properties for Availability-Based Assignment

Using Siebel Tools, you configure the values of the Activity Type, Activity Priority, and Breakable Flag user properties for an assignment object to come from either the object row itself or through constants.

This task is a step in [“Process of Configuring Assignment Objects for Availability-Based Assignment” on page 280](#).

To configure assignment object user properties for availability-based assignment

- 1 Start Siebel Tools.
- 2 In the Object Explorer, expand Workflow Policy Object and select the assignment object.
- 3 With the object selected, choose Tools > Lock Project (or Alt+L) to lock the project.
- 4 In the Assignment Objects list, choose Edit > New Record to add the property values as shown in [Table 55](#).
- 5 After the user properties are configured for the assignment object, they must be made visible to the end user by adding them to the appropriate business component and applets.

NOTE: Configure the views and applets with Start Time and Duration fields, such as is the case with Activity.

For information on how to make the properties visible to the end user, see *Using Siebel Tools*.

Table 55 shows the assignment object user property values you set for availability-based assignment.

NOTE: A *column* user property takes precedence over the corresponding *value* user property. For example, if you define a Breakable Flag Column user property and a Breakable Flag Value user property, the Breakable Flag Column user property takes precedence. As an alternate method, you can configure the Calendar Activity Additional Fields property on the assignment object to specify the values of certain fields. Assignment Manager assigns in this order: column user property, then value user property, and then Calendar Activity Additional Fields property.

Table 55. Assignment Object User Property Settings for Availability-Based Assignment

Property	Description
Breakable Flag Column	<p>The name of the column in the assignment object primary table that stores the value of the Breakable Flag property. When this property is defined and the Check Employee Calendar flag is checked on the assignment rule, Assignment Manager queries for the Breakable Flag Column column when it retrieves data from the object row and passes this value to the Appointment Booking System (ABS) when evaluating employee availability.</p> <p>For example, you can create a user property for the Activity assignment object with name=Breakable Flag Column and value=ALLOW_BREAK_FLG.</p>
Breakable Flag Value	<p>The constant value that is passed to the ABS for the Breakable Flag field in availability-based assignment. For example, you can create a user property for the Service Request assignment object with name=Breakable Flag Value and value=TRUE.</p>
Activity Priority Column	<p>The name of the column in the assignment object primary table that stores the value of the Activity Priority. When this property is defined and the Check Employee Calendar flag is checked on the assignment rule, Assignment Manager queries for the Activity Priority Column column when it retrieves data from the object row and passes this value to ABS when evaluating employee availability.</p> <p>For example, you can create a user property for the Activity assignment object, with name=Activity Priority Column and value=ALLOW_BREAK_FLG.</p>
Activity Priority Value	<p>The constant value that is passed to the ABS for the Activity Priority field in availability-based assignment. For example, you can create a user property for the Service Request assignment object with name=Activity Priority Value and value=TRUE.</p>

Table 55. Assignment Object User Property Settings for Availability-Based Assignment

Property	Description
Activity Type Column	The name of the column in the assignment object primary table that stores the value of the Activity Type. When this property is defined and the Check Employee Calendar flag is checked on the assignment rule, Assignment Manager queries for this column when it retrieves data from the object row and passes this value to the ABS when evaluating employee availability. For example, you can create an Activity assignment object with name=Activity Type Column and value=ALLOW_BREAK_FLG.
Activity Type Value	The constant value that is passed to the ABS for the Activity Type field in availability-based assignment. For example, you can create a Service Request assignment object with name=Activity Type Value and value=TRUE.

Example of Configuring the Service Request Assignment Object for Availability-Based Assignment

This topic gives one example of creating an assignment rule that evaluates a service request object and assigns the object to the highest-scoring employee based on the employee's skill level and availability. You may use this feature differently, depending on your business model.

The service request object—which is often associated with a job, a finite time period, and a specific owner—is an example of an object that can be assigned using Assignment Manager's availability-based assignment feature.

To use the availability assignment feature, certain setup procedures must be performed in the Field Service application before creating the assignment rule. For more information about this feature and its requirements, see ["About Availability-Based Assignment" on page 277](#). Several configurations must also be made to the assignment object before using the availability feature. See ["Process of Configuring Assignment Objects for Availability-Based Assignment" on page 280](#).

Requirements

The following procedures assumes that a service region (California Service Region), employees (West Coast Service Representative and West Coast Service Manager), and a product (Pentium III Desktop) are already defined.

For information about defining service regions, see *Siebel Field Service Guide*.

To set up the Field Service application for availability assignment

- 1 Verify a schedule exists with valid hours by navigating to the All Schedules view (Administration - Service > Schedules).

For this example, select the 12x5 Support schedule in the Schedules List, and click the Schedule Hours view tab. Make sure the hours listed are valid. The following figure shows this view.

Start Day	Start Time	End Time	Type	Shift Start Flag
Monday	07:00 AM	07:00 PM	Normal	✓
Tuesday	07:00 AM	07:00 PM	Normal	✓
Wednesday	07:00 AM	07:00 PM	Normal	✓
Thursday	07:00 AM	07:00 PM	Normal	✓
Friday	07:00 AM	07:00 PM	Normal	✓
Saturday	07:00 AM	07:00 PM	Overtime	✓

- 2 Set up a Service Region.

Navigate to the Administration - Scheduling screen Service Regions view. For this example, select the California Service Region. In the Schedule field, select 12x5 Support.

- 3 Set up the parameter set for the Service Region.

With California Service Region selected, navigate to the Parameters Sets view (in the Scheduling Administration screen). For this example, select the West Coast Parameters used by the California Service Region and click the Parameters tab. Update the following parameter records:

- ABS Days to Start = 0
- ABS Days to End = 20
- ABS Logging Level= 4

- 4 Set up server key mappings by navigating to the Server Key Mappings view in the Scheduling Administration screen.

For this example, create a new record and save it with the following field values:

- Server = Siebel Server
- Process # = 0
- Service Region = California Service Region
- Component = ApptBook

- 5 Associate employees to the service region by navigating to Administration - User > Employees. For this example, select the West Coast Service Representative and the West Coast Service Manager and click the Field Service Details tab. Edit the Schedule and Service Region fields with 12x5 Support and California Service Region, respectively.

NOTE: If service regions are modified or deleted, you must release assignment rules to update the rulecache.dat file.

After the Field Service application is configured, create the assignment rule that uses the assignment availability feature.

To create a field service assignment rule

- 1 Create the assignment rule by navigating to the Administration - Assignment screen > Assignment Rules List view.
 - a In the Assignment Rules List, choose Edit > New Record.
 - b In the new record, enter the following settings:
 - Name = West Coast Service
 - Assignment object = Service Request
 - Assignee filter = One, Best Fit
 - c Click on the Check Employee Calendar checkbox to enable the rule for availability-based assignment.
- 2 Determine assignment criteria.

Navigate to the Criteria view tab and create Product criteria for the assignment rule. For this example, service representatives are evaluated with the Compare Object to Person based on an employee's product knowledge.
- 3 Determine assignment criteria values.

Navigate to the Values view and create a new record with Pentium III desktop.
- 4 Define employees for the assignment rule.

Navigate to the Assignment Employee view and add the West Coast Service Representative and the West Coast Service Manager to the assignment rule.
- 5 Release the assignment rule.

When a service request is created with attributes that match both West Coast service representatives, Siebel Assignment Manager, through the Field Service Appointment Booking System (ABS), assigns the employee who has available time in his or her calendar and work schedule. Optionally, the ABS can create an activity in the assigned employee's calendar. For more information about ABS, see *Siebel Field Service Guide*.

Figure 34 shows the assignment rule described in the previous procedure.

The screenshot displays the 'West Coast Service' configuration window in the Siebel Assignment Manager. The window has a title bar with 'West Coast Service' and a status bar showing '95 of 97'. Below the title bar is a menu bar with 'Menu', 'New', 'Delete', and 'Query'. The main area is divided into several sections:

- Name:** West Coast Service
- Rule Group:** FS_DISP_RULE GROUP
- Description:** (Empty text area)
- Objects to be Assigned:** Service Request
- Candidate Details:**
 - Activation:** 2/18/2004 08:54:36 AM
 - Expiration:** (Empty date field)
 - Score:** (Empty numeric field)
 - Sequence:** (Empty numeric field)
 - Exclusive:** ☐
 - Person Candidates Source:** (Dropdown menu)
 - Organization Candidates Source:** (Dropdown menu)
 - Assignee Filter:** One, Best Fit
 - Candidate Passing Score:** 0
 - Check Employee Calendar:** ☒

Figure 34. A Field Service Assignment Rule with the Check Employee Calendar Field Activated

Related Topic

["Process of Configuring Assignment Objects for Availability-Based Assignment" on page 280](#)

12 Assignment Load Splitter Configuration

This chapter describes Siebel Assignment Manager load splitter configuration. It includes the following topics:

- [“How Load Splitter Configuration Works” on page 292](#)
- [“Scenarios for Load Splitter Configuration” on page 293](#)
- [“Setting Up Load Splitter Configuration” on page 293](#)
- [“Examples for Administering the Load Splitter” on page 295](#)
- [“Load Splitter Operating Modes” on page 296](#)
- [“Distribute Data Method” on page 297](#)

How Load Splitter Configuration Works

Using load splitter configuration, you can run multiple application servers concurrently within the Siebel Enterprise as shown in [Figure 35](#). This behavior can enhance assignment throughput by reducing the amount of time required to complete assignment requests.

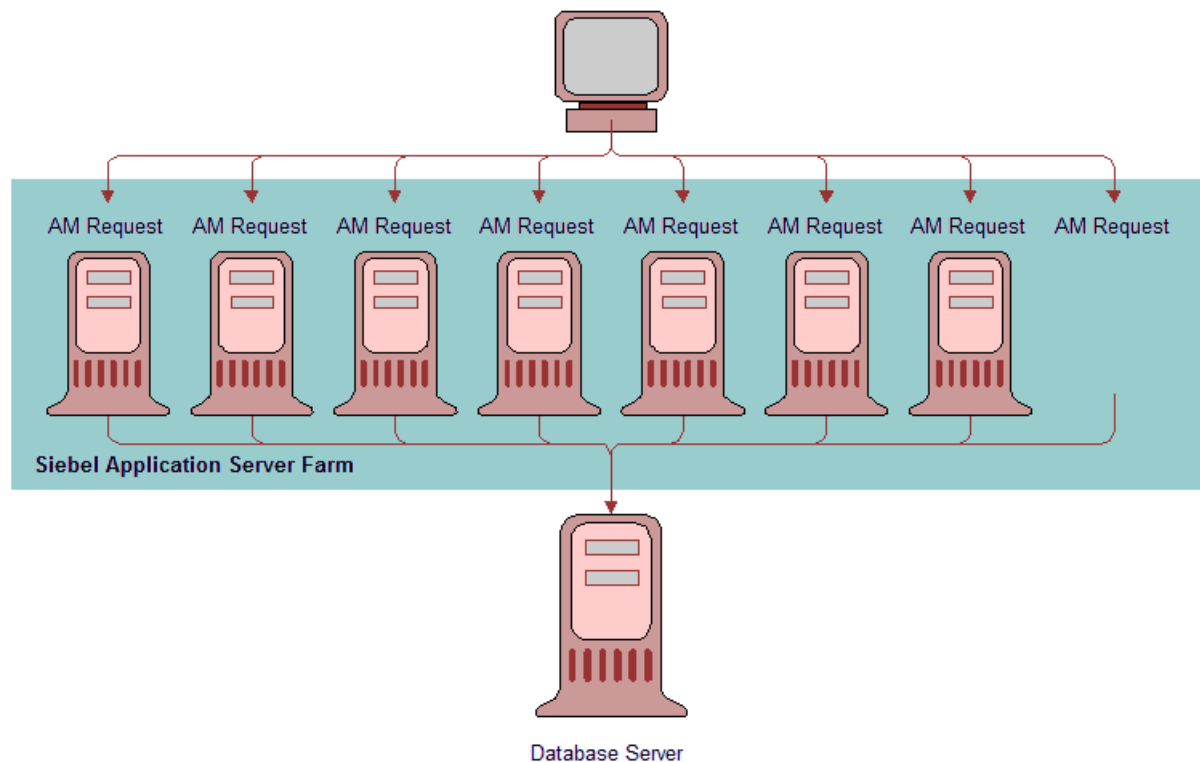


Figure 35. High-Level Process Flow for Load Splitter Configuration

[Figure 35](#) shows that when a batch request is submitted, the Load Splitter divides the objects into multiple assignment requests across multiple machines. Assignment Manager then executes according to the predefined load splitter configurations and outputs to the database server.

Load splitter configuration is especially useful for batch assignment or when you need to reassign large amounts of data, launch new product lines, change territory coverage or routing definitions, and so on. This feature is a great tool for processing major reassignments because load splitter configuration can automatically determine the load and share it evenly across multiple servers.

Load splitter configuration works in two modes—write mode and read mode—depending on where it finds the object row IDs to process. For more information about these modes, see ["Distribute Data Method" on page 297](#).

NOTE: You can use Load Splitter Configuration in both Production and Reporting modes.

Scenarios for Load Splitter Configuration

This topic provides scenarios for how you might use load splitter configuration and how you can use threshold and batch size to manage your tasks. You may use this feature differently, depending on your business model.

You can use load splitter configuration when you perform:

- Bulk import of accounts, contacts, or other data from a legacy system or data feeds

A software company periodically imports several thousands of accounts, contacts, and other data (for example, assets, products, and so on) from a legacy system. The company uses load splitter configuration to make sure this newly imported information has correct visibility to the right people using the Siebel application. In this case, the assignment administrator is spared the responsibility of load balancing because load splitter configuration automatically identifies how to distribute the imported data evenly among the available application servers.

- Periodic assignment rule changes

A consumer goods company periodically makes changes to assignment rules. The company uses load splitter configuration to make sure all accounts and contacts are reassigned in optimal time. In this case, the assignment administrator is spared the time-consuming responsibility of planning and determining what resources are available for the realignment.

Setting Up Load Splitter Configuration

Load splitter configuration provides Assignment Manager the ability to balance job load when processing object rows. The Assignment Administrator (AA) specifies a list of servers, the number of tasks each of those servers can run, and the priority for each server for a given configuration.

Use the following procedure to set up load splitter configuration for your needs.

NOTE: Make sure the Assignment Manager server component is enabled on all the specified servers. For more information about checking the status of this component, see ["Checking the State of the Assignment Manager and Server Request Broker Components"](#) on page 197.

To set up load splitter configuration

- 1 From the application-level menu, navigate to the Assignment - Administration screen > Load Splitter Configuration view.
- 2 In the Load Splitter Configuration list, click New to add a new record.
NOTE: Notice the Configuration ID field automatically populates.
- 3 In the new record, enter values for the relevant information.
 - a In the Name field, type the name of the configuration.
 - b In the Threshold field, click the calculator button to enter a number.

- c** In the Minimum Batch Size field, click the calculator button to enter a positive number.

Field	Description
Threshold	Identifies the maximum number after which the splitting will occur
Minimum Batch Size	This field determines the minimum number of rows processed within a single task.

- 4** In the Server Configuration list, click New to add a new record.
- a** In the Priority field, click the calculator button to enter a number.
- b** In the Server Name field, enter the name of the Siebel Server.
- c** In the Number of Tasks field, click the calculator button to enter a positive number.

Field	Description
Priority	<p>Determines which server should be picked up first for processing over others. The priority is determined in ascending order, that is, 1 is a higher priority than 2. For example, if you have dedicated Assignment Manager servers that require a higher priority than another server running EIM. In this case, you would set a higher priority for the Assignment Manager servers than the EIM server.</p> <p>NOTE: It is recommended that you set your first priority number fairly high, such as 100 and provide sufficient gaps between priority numbers. This is helpful when new servers are added for processing load splitting tasks. It keeps you from having to reset your entire priority arrangement. For example, if you start with two servers, you could set one priority at 100, and the other at 200. Then, when you need to add an additional third server, you can set that priority to 150.</p>
Number of Tasks	Determines the number of tasks that can be executed on that particular server.

Figure 36 shows a sample Align configuration that uses two servers—Server A and Server B—to process multiple tasks. In this configuration, Server A has a higher priority than Server B.

Load Splitter Configuration			
Menu ▾ New Delete Query			
Configuration ID	Name	Threshold	Minimum Batch Size
> 42-4WUUB	Align	1,000	500

Server Configuration		
Menu ▾ New Delete Query		
Priority ▲	Server Name	Number of Tasks
> 1	Server A	10
2	Server B	13

Figure 36. Example of Load Splitter Configuration

Examples for Administering the Load Splitter

The following three examples show how the Assignment Administrator might use threshold, batch size, and load splitter configuration to split a batch request into multiple, manageable tasks. You may use this feature differently, depending on your business model.

Example 1: Load Splitter Less Than Threshold

In this example, the load splitter receives 900 ROW_IDS for the account assignment object. Because this is less than the threshold, which is 1000, no load splitting occurs. All rows are passed to the server with the lowest priority number.

Example 2: Load Splitter Using Minimum Batch Size

In this example, the load splitter receives 1001 ROW_IDS for the account assignment object, which is greater than the threshold of 1000. The total number of tasks is 10, and minimum batch size is 500. Load Splitter tries to split the rows into even tasks. The default calculation for batch size calculates $1001/10$, or ~ 100 rows as the batch size. Due to the ramp-up time for different server components, this processing is actually more inefficient than just running two separates batches of 500 and 501 ROW_IDS. Therefore, Load Splitter takes the minimum batch size of 500 into account and splits the rows into two tasks of 500 and 501.

Example 3: Load Splitter When Batch Size is Greater Than Minimum Batch Size

In this example, the load splitter receives 6023 ROW_IDs for the account assignment object. Because this is greater than the threshold of 1000, Load Splitter tries to split the rows into batches. The default calculation for batch size calculates $6023/10$, or ~ 600 rows as the batch size. Because this is greater than the minimum batch size of 500, Load Splitter splits the rows into 8 tasks of 600 and one task of 623.

Load Splitter Operating Modes

Load splitter configuration uses the Configuration ID parameter to query against the configuration and configuration server business components and gets the threshold, minimum batch size, list of servers, the server task number, and the maximum number of tasks. However, if certain conditions exist, load splitter configuration passes all the objects as one batch onto the server component. Those conditions are:

- If there is no configuration data
- If configuration is incorrect
- If the server cannot be found

There are two operating modes for load splitter configuration—write mode and read mode—depending on where load splitter configuration finds the object row IDs to process. Write mode writes to the S_ASGN_LB_DATA table, whereas read mode expects the data to already be loaded into the table.

Write Mode. By default, load splitter configuration runs in write mode. This mode takes a property set of WHERE clauses—one for each object type—and inserts the rows into the S_ASGN_LB_DATA table, then groups the object row IDs into several tasks and passes them to Assignment Manager.

In write mode, the Load Splitter Business Service takes two inputs—object to be assigned and search specification (in SQL format)—to identify the records that need to be assigned. Based on the Load Splitter Configuration parameters, the Load Splitter engine splits the data, computes the resources available, and then distributes the assignment load among the configured Siebel Application Servers.

Read Mode. Load splitter configuration runs in read mode based on a request ID. If the Mode input argument is Read, then load splitter configuration separates the object rows into separate tasks and submits a request to a server component job to the appropriate server or servers.

In this mode, the assignment administrator (AA) determines the records that need to be assigned in the S_ASGN_LB_DATA staging table, and then invokes Load Splitter in read mode. The Load Splitter business service bypasses the identifying phase and reads the predetermined set of records that need to be assigned. Based on Load Splitter Configuration parameters, the Load Splitter engine computes the resources available (similar to write mode), and then distributes the assignment load among the configured Siebel Application Servers.

For information about invoking the Load Splitter, see [“Distribute Data Method” on page 297](#).

Distribute Data Method

The Distribute Data business service method is part of the Load Splitter Service business service that allows you to configure Assignment Manager to run multiple application servers concurrently within the Siebel Enterprise. This method consists of a complex hierarchical input property set.

Arguments

Argument	Description
Configuration Id	The load splitter uses the configuration ID to get the configuration for the servers, threshold, minimum batch size, list of servers to run on, and so on.
Mode	Determines whether Load Balancer runs in Write or Read mode. Read mode is the default.
Object Types	A property set that identifies the types of objects in a run and a child property set which contains a WHERE clause and the table name of each object type. For example: Object Type = Contact WHERE Clause = Specialty LIKE Cardiology TableName = S_PARTY
Request Id	Identifies the rows in the S_ASGN_LB_DATA table for a specific assignment request.
Server Component	Identifies the server component—AsgnSrvr or AsgnBatch—that the load splitter uses to pass the object rows for subsequent processing. This parameter also contains a child property set that has the input arguments used by a particular server component. For example: AsgnSrvr can take in the following input arguments: AsgnKey, Copy-postn-specific data, and so on.
Server Component Parameters	The property set that contains all the parameters for the specified server component.
Set Server Component Object Type Parameter	Indicates which server component parameter to populate with the object type.
Set Server Component SQL Parameter	Indicates which server component parameter to populate with the load balanced SQL statement.

Usage

The input for load splitter configuration comes from any service that intends to use it, such as Target Object Selector (TOS), a business service, and so on. Load splitter configuration splits the objects that need processing into separate batches and submits those batches to a target process, such as Assignment Manager.

Invoked From

You can invoke Load Splitter using a workflow process, business service, scripting, and so on.

Example

The following is sample code for invoking load splitter configuration using a business service and AsgnSrvr.

```
function LoadSplitterCreateInputs()
{
    var psInputArgs;
    var psOutputArgs;
    var psObjTypes;
    var psSrvrCompParams;
    var pService;

    psInputArgs = TheApplication().NewPropertySet();
    psInputArgs.SetProperty ("Request Id", "LoadSplitterTest");
    psInputArgs.SetProperty ("Configuration Id", "42-4VPGT");
    psInputArgs.SetProperty ("Mode", "Write");
    psInputArgs.SetProperty ("Server Component", "AsgnSrvr");
    psInputArgs.SetProperty ("Set Server Component Object Type Parameter",
    "AsgnObjName");
    psInputArgs.SetProperty ("Set Server Component SQL Parameter", "ObjRowSqlStmt");

    psObjTypes = TheApplication().NewPropertySet();
    psObjTypes.SetType ("Object Type");
    psObjTypes.SetValue ("Account");
    psObjTypes.SetProperty("SQL", "SELECT ROW_ID FROM SIEBEL.S_ORG_EXT WHERE NAME
    LIKE 'K%TEST%'");
    psInputArgs.AddChild (psObjTypes);

    psObjTypes = TheApplication().NewPropertySet();
    psObjTypes.SetType ("Object Type");
    psObjTypes.SetValue ("Opportunity");
    psObjTypes.SetProperty ("SQL", "SELECT ROW_ID FROM SIEBEL.S_OPTY WHERE NAME LIKE
    'K%TEST%'");
    psInputArgs.AddChild (psObjTypes);

    psSrvrCompParams = TheApplication().NewPropertySet();
    psSrvrCompParams.SetType ("Server Component Parameters");

    psInputArgs.AddChild (psSrvrCompParams);

    psOutputArgs = TheApplication().NewPropertySet();

    pService = TheApplication().GetService("Load Splitter Service");
    pService.InvokeMethod ("DistributeData", psInputArgs, psOutputArgs);
}
```

A

Troubleshooting: Assignment Manager Error Messages

This appendix explains how to view Assignment Manager error messages using Siebel Tools and provides a description for many of the error messages.

Topics in This Appendix

- ["Viewing Assignment Manager Error Messages" on page 299](#)
- ["Assignment Manager Error Messages" on page 299](#)

Viewing Assignment Manager Error Messages

Using Siebel Tools, you can view Assignment Manager error message descriptions and suggested resolutions. You must be connected to the server database to retrieve this information.

To view Assignment Manager error messages

- 1 Start Siebel Tools and connect to the server.
- 2 From the Screen Menu, select System Administration submenu > Strings view.
- 3 Enter a query using the Message Key column with *ASG* OR ERR_ASG*. The Assignment Manager error messages appear.
- 4 (Optional) Sort by error message number.

Assignment Manager Error Messages

[Table 56](#) lists some of the error codes, the message text, and a description of each error that Assignment Manager may generate during processing. For each error, Assignment Manager writes this information to the Assignment Manager log file (if you specified that one be used).

Table 56 provides some of the Assignment Manager error codes.

NOTE: When dynamic assignment is running, some users may receive the following error when attempting to modify a record: “The selected record has been modified by another user since it was received. Please continue.” This may occur because Assignment Manager updated the record by assigning it while the user was trying to edit it. In this situation, the user’s changes may be lost. The solution is to refresh the query and reenter the user’s changes.

Table 56. Assignment Manager Error Codes

Error Code	Error Text ¹	Resolution ²
ERR_ASG_ALREADY_ASSIGNED	Assigned this object %1 (more recently than requested %2).	This is just information.
ERR_ASG_ASSIGN_REPLY	Selected %3 rules, %5 organizations, and %4 people for %1 (%2).	This is just information.
ERR_ASG_BASSIGN_REPLY	Assigned %1 rows for %2.	This is just information.
ERR_ASG_LOADING_OBJECT	Unable to load assignment object %1.	The configuration of the assignment object is not correct. Use Siebel Tools to check the configuration of the assignment object.
ERR_ASG_BDENORM_REPLY	Denormalized %1 rows for %2.	This is just information.
ERR_ASG_CANNOT_ASSIGN_LOCKED_ROW	Cannot assign this item because it is in a locked state. (Object Name = %1, Object Row Id = %2.)	If you want to assign this object, please uncheck the Lock Assignment field for the object being assigned. Otherwise, this is just information.
ERR_ASG_DENORM_REPLY	Denormalized %1 rows for %2.	This is just information.
ERR_ASG_DUP_CONFLICT	Unable to update row (%1) because updated values violate unique index with an existing row (%2).	Check the data on your team table on the object row_ID where it failed.
ERR_ASG_INVALID_BU_DFLT_NAME	Default organization %1 for assignment object %2 is not found in the organizations table. Please check that Default Organization - %1 is a valid organization.	Use Siebel Tools to set the Default Organization parameter for the assignment object to a valid organization in the database.

Table 56. Assignment Manager Error Codes

Error Code	Error Text ¹	Resolution ²
ERR_ASG_INVALID_EMP_DFLT_NAME	Default employee %1 for assignment object %2 is not found in the employees table.	Use Siebel Tools to set the Default Employee parameter for the assignment object to a valid employee in the database.
ERR_ASG_INVALID_POSTN_DFLT_NAME	Default position %1 for assignment object %2 is not found in the positions table.	Use Siebel Tools to set the Default Position parameter for the assignment object to a valid position in the database.
ERR_ASG_INVALID_STORE_COL_NUM	Assignment criteria attribute %1 has an invalid store column.	Check the Store Column value for your assignment criteria attribute and make sure it lies between 1 and 4.
ERR_ASG_INVALID_WF_LINK_COL	Assignment attribute column (%1) references invalid workflow component column (%2).	Check the Workflow Policy Component Column property of the assignment attribute column, and make sure it points to a valid and active workflow policy component column.
ERR_ASG_ITEM_ATTR_HAS_NO_ATTR	Assignment Criteria %1, Assignment Criteria Attribute %2 has no attribute defined. Verify in Siebel Tools that the Assignment Criteria %1 has an assignment criteria attribute defined and active. Recompile the server repository file to apply changes made on assignment criteria configuration if necessary.	
ERR_ASG_ITEM_ATTR_HAS_NO_ITEM	Item(%2) not found for item attribute (%1). Please make sure that the item(%2) is active.	Make sure that the Parent Assignment Item Type of the Assignment Criteria Attribute(%1), points to a valid and active assignment criteria.

Table 56. Assignment Manager Error Codes

Error Code	Error Text ¹	Resolution ²
ERR_ASG_ITEM_NOT_FOUND	Assignment Criteria %1 has an invalid assignment attribute. Please check the assignment criteria configuration on Siebel Tools using the Validate tool, and note that it is a requirement to recompile the server SRF after adding or deleting assignment criteria records.	
ERR_ASG_LOADING_GROUP	Unable to load assignment rule %1 from the database. Please check the assignment rule definitions to make sure that all the required information is correct and press the Release button to recreate the rule cache data file.	
ERR_ASG_LOADING_OBJECT	Unable to load assignment object %1."	Check the configuration of the assignment object.
ERR_ASG_LOV_VALUE_NOT_FOUND	No LOV value found for Type [%1], Value [%2].	Make sure expertise values for skills are valid, belonging to LOV type EXPERTISE_CD (defined through Application Administration screens).
ERR_ASG_MATCHASSIGN_REPLY	Qualified and selected %3 rules, %5 organizations, and %4 people for %1 (%2).	This is just information.
ERR_ASG_MATCH_REPLY	Qualified %3 rules, %5 organizations, and %4 people for %1 (%2).	This is just information.
ERR_ASG_NO_OBJ_COL_FOUND	Assignment object %1 has no columns.	

Table 56. Assignment Manager Error Codes

Error Code	Error Text ¹	Resolution ²
ERR_ASG_NOT_EMP_POSTN	Employee or Position not specified for assignment object %1.	If person-based assignment, make sure that at least one of the four properties (Position Table, Position Primary Column, Employee Table, Employee Primary Column) for assignment object %1 has a valid non-null value. If organization-based assignment, make sure that at least one of the two properties (Org Table, Org Primary Column) for assignment object %1 has a valid non-null value.
ERR_ASG_NO_WF_COLS_IN_ATTR	Assignment attribute %1 has no workflow columns.	
ERR_ASG_NO_WF_OBJECT	No workflow object available for assign object = %1.	Make sure that the Parent Workflow Object property of the Assignment Object % points to a valid workflow object.
ERR_ASG_OBJECT_NOT_FOUND	Assignment object %1 is not registered in the Siebel repository. Please make sure that %1 is a valid assignment object name and the value you input is identical to what you see in the application. Please review the Assignment Manager documentation for details on the required parameters before running an Assignment Manager task.	
ERR_ASG_PERSON_OBJECT_NUM_ATTR_MISMATCH	Number of attributes do not match with assignment object for person object %1.	
ERR_ASG_PR_TBL_ROW_NOT_FOUND	RowId [%1] in table [%2] not found.	Make sure that request submitted is for a valid Row Id in table (%2).
ERR_ASG_UPDATE_FAILED	Unable to update row %1 (%2).	Check the log file for database related error, and correct the error.

Table 56. Assignment Manager Error Codes

Error Code	Error Text ¹	Resolution ²
ERR_ASG_PARSING_VALUE	Unable to parse criteria value %1.	
ERR_ASGN_KEY_NO_MATCH	Assignment Key %1 does not match the Request Key.	Make sure that the AsgnKey parameter is set to the Row Id of one of the assignment groups mapped to the server.

1. The error text that appears in [Table 56](#) is generic. However, for most errors, Assignment Manager generates more specific information about the exact cause of the error. Both the generic and the specific error messages appear in the Server Process Log; while only the specific error message appears in the Assignment Manager log file.
2. If the Resolution column is blank, this means either the error code is no longer applicable or the text of the error code is informative enough not to warrant a separate explanation for resolution.

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